MAGNA PARK
LUTTERWORTH

IDI Gazeley
Brookfield Logistics Properties

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Magna Park Extension: Hybrid Application

Transport Assessment

Final Report

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Jon Ashcroft Associate	Paget Fulcher Technical Director	28 September 2015	1

CONTENTS

1 INTRODUCTION 1
General 1
Scope of Assessment 2
Report Layout 4
2 REVIEW OF POLICY 5
National Planning Policy Framework 5
Planning Practice Guidance 7
Local Planning Policy 7
Other Guidance 8
3 DEVELOPMENT PROPOSAL 10
The Application Site 10
Zone 1 – Site Description and Surrounding Land Uses 10
Zone 1 – Access Proposals 11
Zone 1 - General Description and Layout Arrangements 12
Zone 1 – Road Layouts and Parking Proposals 14
Zone 2 – Site Description and Surrounding Land Uses 15
Zone 2 – Access Proposals 16
Zone 2 – General Description and Layout Arrangements 16
4 EXISTING TRANSPORT FACILITIES 19
Public Transport Facilities 19
Pedestrian and Cycle Facilities 19
5 LOCAL HIGHWAY NETWORK 21
General Description 21
Review of Collision Statistics 23
Existing Traffic Conditions 40
Existing Network Performance 41
6 TRIP GENERATION AND DISTRIBUTION 50
General 50
Trip Generation – B8 Storage and Distribution 50
Trip Distribution – B8 Storage and Distribution 51
Trip Generation – B1 Innovation Centre 54
Trip Distribution - B1 Innovation Centre 54
Trip Generation – B1 Holovis 55
Trip Distribution – B1 Holovis 55
Trip Generation and Distribution – Logistics Institute of Technology 56
Trip Generation – Students 56
Trip Generation – Staff 57
Trip Distribution – Students 57
Trip Distribution – Staff 62
Trip Generation & Distribution for Railfreight Shuttle Terminal 63
7 COMMITTED DEVELOPMENT 64
General 64

Daventry International Rail Freight Terminal 64
Rugby Gateway 66
Rugby Radio Station Urban Extension 66
Land Bounded by the Ashby Canal, Hinckley 67
Land North of Lutterworth Road, Lutterworth 67
Land North of Bill Crane Way, Lutterworth 68
Land East of Leicester Road, Lutterworth 68
Leaders Farm, Coventry Road, Lutterworth 68
Former George House, Hunter Boulevard, Magna Park 69
Plot 7300, Watling Street, Magna Park 69
Cawston Extension Site 69
Land South of Coventry Road and North East of Cawston Lane 70
Land off Crowfoot Way, Broughton Astley 70
Sutton Lodge Farm, Broughton Astley 70
Land at Mere Road, Bitteswell 70
8 HIGHWAY IMPACT ASSESSMENT 72
Assessment Framework 72
Results of 2017 Opening Year Capacity Assessments 73
Proposed Roundabout on Mere Lane 73
A5/ Mere Lane Junction 73
A4303/ Hunter Boulevard 74
Cross In Hand Roundabout 75
A4303/ Shackleton Way Junction 76
A4303/ Coventry Road 77
A4303/ A426 78
M1 Junction 20 78
M69 Junction 1 80
Gibbet Hill Roundabout 82
M6 Junction 1 83
Results of 2026 Capacity Assessments 84
Proposed Roundabout on Mere Lane 84
Proposed Roundabout on the A5 85
A5/ Mere Lane Junction 86
A4303/ Hunter Boulevard 87
Cross In Hand Roundabout 87
A4303/ Shackleton Way Junction 88
A4303/ Coventry Road 89
A4303/ A426 90
M1 Junction 20 92
M69 Junction 1 94
Gibbet Hill Roundabout 96
M6 Junction 1 98
Summary of Impact 100
9 IMPACT OF SYMMETRY PARK – SENSITIVITY TEST 105
General 105

Proposed Roundabout on Mere Lane 106
Proposed Roundabout on the A5 106
A5/ Mere Lane Junction 107
A4303/ Hunter Boulevard 107
Cross In Hand Roundabout 107
A4303/ Shackleton Way Junction 108
A4303/ Coventry Road 109
A4303/ A426 109
M1 Junction 20 110
M69 Junction 1 111
Gibbet Hill Roundabout 112
M6 Junction 1 114
10 IMPACT ON NON CAR MODES 115
Travel Plan and Sustainable Travel Modes 115
11 IMPACT OF CONSTRUCTION 119
General 119
Travel to Work by Construction Staff 119
Working Hours 119
Site Access 120
Construction Traffic 120
12 SUMMARY AND CONCLUSIONS 123

APPENDICES

Appendix A – Site Location Plan

Appendix B – Agreed Scope of Capacity Assessments

Appendix C – Red Line Plan

Appendix D – Proposed Southern Access Arrangements and Highway Improvements (Drawing No. 47066811/A008/SK12)

Appendix E - Proposed Northern Access Arrangements and Highway Improvements (Drawing No. 47066811/A008/SK13)

Appendix F – Proposed Site Masterplan

Appendix G – Site Parameter Plan

Appendix H – Railfreight Shuttle Terminal Proposed Site Layout

Appendix I – Bus Timetable and Route Plan

Appendix J – Magna Park Footway and Cycle Plan

Appendix K – Existing and Proposed Public Access Routes

Appendix L – Location of Highway Collisions

Appendix M – Traffic Survey Data

Appendix N – Traffic Flow Diagrams

Appendix O – Queue Validation Exercise

Appendix P – ATC Survey Report

Appendix Q – M6 J1/M69 J1 Traffic Signal Information

Appendix R – TRANSYT Link/Node Diagrams

Appendix S – Output from Capacity Assessments

Appendix T – Extracts from Trip Generation Report

Appendix U – LLITM Trip Distribution Data

Appendix V – B1 Trip Rates for Innovation Centre

Appendix W – The Gravity Model

Appendix X – Proposed Improvements at A4303/A426 Roundabout (Drawing No. 47066811/A008/SK14)

Appendix Y – Improvement scheme at Gibbet Hill Roundabout as Part of DIRFT III

1 INTRODUCTION

General

1.1 IDI Gazeley has commissioned URS to prepare a Transport Assessment (TA) to be submitted to Harborough District Council (HDC) as part of the supporting documentation for a hybrid planning application for the proposed extension of Magna Park near Lutterworth onto 220 hectares of land adjoining Magna Park to the north west and onto 7 hectares of land adjoining Magna Park to the south of the A4303. The larger area to the north is the subject of an outline planning application while a detailed planning application is being prepared to promote the smaller site to the south. Both sites are shown on a plan in **Appendix A**.

1.2 The site to the north, referred to as Zone 1, comprises the following uses and maximum quanta:

- Distribution warehousing and ancillary office space (Use Classes B8 and B1a): up to 427,350m^2 (including 100,844m^2 for DHL Supply Chain that is the subject of a detailed planning application – reference 15/009/FUL – that was submitted in June 2015)
- Logistics Institute of Technology (Use Class D1): up to 3,700m^2 together with its campus
- Estate office with heritage exhibition centre and conference facility (Use Class D1): up to 300m^2
- Holovis expansion building (Use Class B1a, B1b): up to 7,000m^2
- Innovation Centre (Use Class B1a): up to 2,325m^2
- Public park and meadowland: approximately 70 hectares

1.3 The site to the south, referred to as Zone 2, comprises the following uses:

- Railfreight shuttle terminal
- 134 HJGV parking spaces
- HGV driver training centre
- LPG or GNP fuel island and vehicle wash facility

1.4 Magna Park is one of Europe's largest dedicated distribution parks. The town of Lutterworth is 1.7km to the east beyond which is located Junction 20 of the M1. Junction 1 of the M69 and Junction 1 of the M6 can be reached in less than 10 minutes to the north west and south west respectively, emphasising the site's excellent connections to the strategic highway network.

1.5 Magna Park does not benefit from a direct rail connection and to address this, a railfreight shuttle terminal is being proposed. It is envisaged that over time the shuttle would employ gas or electrically powered vehicles which would largely eliminate carbon emissions from the road leg and put Magna Park on a level playing field with rail connected locations from an environmental perspective.

1.6 There are two points of access proposed for Zone 1. The first is a new roundabout on Mere Lane that will connect the site to Magna Park to the south and the A5 to the west and forms

part of the DHL application. The second is a new roundabout on the A5 at the northern end of the development approximately 260 metres south of White House Farm.

1.7 Access to Zone 2 will be taken from the southern arm of the existing roundabout on the A4303 that serves the main part of Magna Park. The southern arm currently serves two existing plots occupied by Culina and George, the latter being the clothing division of ASDA.

Scope of Assessment

1.8 Pre-application discussions with LCC began in July 2014 and since then URS has been in regular contact with the County Highway Authority to agree the approach to the Transport Assessments prepared for DHL and the larger expansion of Magna Park that is the subject of this TA. Throughout these discussions it has been agreed that the impact of the larger expansion would be assessed using LLITM and IDI Gazeley has commissioned LCC to undertake runs of the model to test the impact of the development. The final results will be available towards the end of September 2015.

1.9 In advance of receipt of the LLITM results, IDI Gazeley is committed to submitting the planning application for the proposed development. This is to ensure that there is an overlap with the symmetry park planning application that was submitted to HDC on 5 June 2015.

1.10 To ensure that there is an overlap between the two applications, IDI Gazeley has instructed URS to prepare a Transport Assessment based on a manual assessment of the traffic impact for the larger scheme. This report has been prepared on that basis and the scope that was agreed for DHL has been used as the basis for the assessment. The agreed scope is set out below in paragraphs 1.13 to 1.19.

1.11 Once the LLITM results are available a Supplementary Transport Assessment will be prepared. This approach has been discussed with LCC and while the rationale behind the timing of a submission of a TA based on a manual assessment is acknowledged, LCC has confirmed in its response to the ES Scoping document, its requirement for the impact to be tested using LLITM.

1.12 In its response to the ES Scoping document, AECOM, representing Highways England made no mention of LLITM implying that it has no preference regarding the approach to the assessment. It did however confirm that it was satisfied with the proposed approach subject to URS addressing the issues that have been raised post application in relation to the DHL Transport Assessment.

1.13 The scope of the TA that was prepared for the DHL Supply Chain and submitted in support of a detailed planning application in June 2015 was agreed with Highways England, Leicestershire County Council (LCC) and Warwickshire County Council (WCC) and is summarised below.

1.14 In terms of the highway impact all three authorities agreed that capacity assessments should be undertaken at the following junctions:

- M1 Junction 20

- A4303/ A426 roundabout
- A4303/ Coventry Road roundabout
- A4303/ Shackleton Way junction
- A4303/ Hunter Boulevard roundabout
- A5/ A4303 (Cross in Hand) roundabout
- A5/ Mere Lane junction
- M69 Junction 1
- A5/ A426 (Gibbet Hill) roundabout
- M6 Junction 1

1.15 The location of these junctions is shown on a plan in **Appendix B**.

1.16 Other key elements of the TA that were agreed included:

- A manual spreadsheet based approach to represent the traffic forecasts;
- Trip distribution based on output from the Leicester and Leicestershire Integrated Transport Model (LLITM);
- Trip generation based on local trip rate information collected at Magna Park during 2013; and
- An assessment year of 2026.

1.17 It was agreed that the traffic flow forecasts would include the impact from a number of key committed development sites including, DIRFT III, Rugby Radio and Rugby Gateway and that the TA should review the accessibility of the site for public transport, cyclists and pedestrians.

1.18 It was also agreed that a Travel Plan would be prepared alongside the TA and that it would set out the overall delivery of alternative transport arrangements and establish the overall management framework for how these will be implemented and monitored.

1.19 At the request of Highways England a Supplementary Transport Assessment has been submitted for the DHL application. This presented an opening year (2017) assessment and made adjustments to the 2026 traffic forecasts as there was considered to be a risk of double counting when using a combination of TEMPRO to factor background traffic flows as well as manually adding committed development flows.

1.20 Accordingly the 2026 traffic flows include committed development flows but have not been factored using TEMPRO. These requests have been incorporated into this assessment.

1.21 Since the DHL application was submitted, LCC has also been reviewing the supporting TA and has asked for clarification and/or additional information on several issues that have resulted in small changes to the background, committed and development traffic flows. These changes have also been incorporated into this assessment.

1.22 The symmetry park development has been considered as a sensitivity test on top of the list of consented schemes that have been agreed with all the highway authorities.

Report Layout

1.23 Following this introduction, Section 2 outlines the planning policy context in which the proposed development is set while Section 3 describes the current use of the site and provides details of the proposed development.

1.24 Section 4 describes the existing public transport, cycle and pedestrian networks in the vicinity of the site while Section 5 sets out the characteristics of the local highway network including the existing traffic conditions and a review of road traffic accidents that have occurred during the last five years.

1.25 Section 6 presents the trip generation and modal split associated with the proposed development and provides details of the trip distribution that is applied to traffic related to the development.

1.26 Details of committed developments in the area and trips generated by these developments are presented in Section 7.

1.27 The impact of the proposed development on the highway network is presented in Section 8 while the impact of symmetry park is presented as a sensitivity test in Section 9.

1.28 Details of sustainable transport modes and an introduction to the Travel Plan are presented in Section 10.

1.29 Section 11 describes the impact during construction while the TA is summarised and concluded in Section 12.

2 REVIEW OF POLICY

National Planning Policy Framework

2.1 National planning policy in England is contained within the National Planning Policy Framework (NPPF) which was published in March 2012. The specific policies of the NPPF that relate to issues of transport and access are set out below.

2.2 There are three dimensions to sustainable development: economic, social and environmental. These dimensions give rise to the need for the planning system to perform a number of roles:

- **an economic role** – contributing to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation; and by identifying and coordinating development requirements, including the provision of infrastructure;
- **a social role** – supporting strong, vibrant and healthy communities, by providing the supply of housing required to meet the needs of present and future generations; and by creating a high quality built environment, with accessible local services that reflect the community's needs and support its health, social and cultural well-being; and
- **an environmental role** – contributing to protecting and enhancing our natural, built and historic environment; and, as part of this, helping to improve biodiversity, use natural resources prudently, minimise waste and pollution, and mitigate and adapt to climate change including moving to a low carbon economy.

2.3 At the heart of the NPPF is a presumption in favour of sustainable development, which the Government states should be seen as a golden thread running through both plan-making and decision-taking. The Framework identifies a set of core land-use planning principles that should underpin both plan-making and decision-taking. The most relevant to transport is that planning should, *'actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable*'.

2.4 In paragraph 29 of the NPPF the Government states that transport policies have an important role to play in facilitating sustainable development. It also states that the transport system needs to be balanced in favour of sustainable transport modes. In the following paragraph the document says that encouragement should be given to solutions which support reductions in greenhouse gas emissions and reduce congestion. Local Authorities are advised that in preparing Local Plans they should support a pattern of development which, where reasonable to do so, facilitates the use of sustainable modes of transport.

2.5 All developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether:

- the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;
- safe and suitable access to the site can be achieved for all people; and

- improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.

2.6 In paragraph 35 of the NPPF guidance is given that plans should protect and exploit opportunities for the use of sustainable transport modes for the movement of goods or people. It then goes on to provide the following series of bullet points where developments should be located and designed where practical to:

- accommodate the efficient delivery of goods and supplies;
- give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;
- create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones;
- incorporate facilities for charging plug-in and other ultra-low emission vehicles; and
- consider the needs of people with disabilities by all modes of transport.

2.7 Under the general heading, 'Delivering sustainable development', the NPPF has a section on building a strong, competitive economy and in paragraph 18 it states that the Government is committed to securing economic growth in order to create jobs and prosperity, building on the country's inherent strengths and to meeting the twin challenges of global competition and of a low carbon future.

2.8 In paragraph 19 the NPPF goes on to say that the Government is committed to ensuring that the planning system does everything it can to support sustainable economic growth and that planning should operate to encourage not act as an impediment to sustainable growth. Paragraph 19 concludes that significant weight should be placed on the need to support economic growth through the planning system.

2.9 In paragraph 21 the NPPF recommends that investment in business should not be over-burdened by the combined requirements of planning policy expectations. Planning policies should recognise and seek to address potential barriers to investment, including a poor environment or any lack of infrastructure, services or housing. In drawing up Local Plans, local planning authorities should:

- Set out a clear economic vision and strategy for their area which positively and proactively encourages sustainable economic growth;
- Set criteria, or identify strategic sites, for local and inward investment to match the strategy and to meet anticipated needs over the plan period; and
- Support existing business sectors, taking account of whether they are expanding or contracting and, where possible, identify and plan for new or emerging sectors likely to locate in the area. Policies should be flexible enough to accommodate needs not anticipated in the plan and to allow a rapid response to changes in economic circumstances.

2.10 In paragraph 28 there is a section on supporting a prosperous rural economy and that to achieve this, planning policies should support economic growth in rural areas in order to

create jobs and prosperity by taking a positive approach to sustainable new development. To promote a strong rural economy, local and neighbourhood plans should amongst other things, *'support the sustainable growth and expansion of all types of business and enterprise in rural areas, both through conversion of existing buildings and well designed new buildings'*.

Planning Practice Guidance

2.11 In March 2014, the Government announced the launch of the Planning Practice Guidance (PPG) website. The PPG is intended to be read alongside the NPPF and we set out below the guidance that is most relevant to considerations of transport and access.

2.12 Part ID42 of the PPG provides more detailed guidance in respect of the use of travel plans, transport assessments and statements in decision-taking. Paragraph 002 (ID: 42-002-20140306) states travel plans, transport assessments and statements are all ways of assessing and mitigating the negative transport impacts of development in order to promote sustainable development. They are required for all development which generate significant amount of movements.

2.13 Paragraph 014 (ID: 42-014-20140306) states that the need for, scale, scope and level of detail required of a Transport Assessment or Statement should be established as early in the development management process as possible. Key issues to consider at the start of preparing a Transport Assessment or Statement may include the context of the proposal, the study parameters, assessment of public transport capacity, road trip generation and trip distribution, promotion of sustainable travel, safety implications and (where applicable) mitigation measures.

Local Planning Policy

2.14 The development plan comprises the adopted Harborough District Core Strategy (2011) and the saved policies of the Harborough District Local Plan (2001). Set out below is the relevant local planning policy in respect of transport and access.

Harborough District Core Strategy

2.15 Policy CS5 of the Core Strategy states that future development in the District will seek to maximise the use and efficiency of existing transport facilities and seek to achieve the best overall effect for transport for the district as it looks to a lower carbon future. All significant development proposals should provide for the co-ordinated delivery of transport improvements outlined in the place-based policies of the Strategy. The type of transport enabling and mitigation works provided by each development should be geared to transport improvements that are beneficial to the wider area and which can complement works to be provided by other developments.

2.16 **Policy CS14** states that transport interventions associated with additional development in and around Lutterworth will focus on improving air quality and reducing the adverse impacts of traffic flow in the town centre. This will be achieved by measures including resisting development that would result in additional HGVs passing through the town centre and supporting routeing schemes for Magna Park.

Harborough District Local Plan (Saved Policies)

2.17 **Policy TR/3** of the Local Plan states that the Council will refuse planning permission for new development where the traffic flow generated by the development would create a substantial adverse effect on the existing road network unless satisfactory and environmentally acceptable improvements can be implemented to alleviate the impacts of the development.

2.18 **Policy TR/10** states that parking provision in new development will be kept to the necessary minimum and will be considered against the safety of road users and effects on the character or appearance of the locality.

2.19 **Policy TR/11** states the Council will seek to enter into a legal agreement with applicants for planning permission to cover the costs of parking, cycling, pedestrian and/or public transport facilities.

Other Guidance

2.20 There are two documents that are particularly relevant to development of this site:

- Department for Transport – Circular 02/2013 'The Strategic Road Network and the Delivery of Sustainable Development'
- A Strategy for the A5 2011-2026 A449 Gailey (Staffordshire) to A508 Old Stratford (Northamptonshire) (December 2013) – Produced by the A5 Transport Group in conjunction with 18 county, district and borough councils including the HA, LCC, Warwickshire County Council and Harborough District Council.

Circular 02/2013 'The Strategic Road Network and the Delivery of Sustainable Development'

2.21 In Circular 02/2013, the two paragraphs that are of particular relevance are 9 and 43.

2.22 Paragraph 9 states:

Development proposals are likely to be acceptable if they can be accommodated within the existing capacity of a section (link or junction) of the strategic road network, or they do not increase demand for use of a section that is already operating at over-capacity levels, taking account of any travel plan, traffic management and/or capacity enhancement measures that may be agreed. However, development should only be prevented or refused on transport grounds where the residual cumulative impacts are severe.

2.23 Paragraph 43 states:

The Highways Agency will adopt a graduated and less restrictive approach to the formation or intensification of use of access to the remainder of the strategic road network (i.e. not motorway or routes of near motorway standard). However, the preference will always be that new development should make use of existing junctions. Where a new junction or direct means of access is agreed, the promoter will be expected to secure all necessary consents, and to fund all related design and construction works.

A Strategy for the A5 2011-2026

2.24 In recent years there has been a growing concern from local planning authorities in the East and West Midlands regarding the performance and future role of the A5. This has led

to the establishment of an A5 Transport Group of which the principal output is the document 'A Strategy for the A5 2011-2026'. The strategy is designed to set out a clear way forward regarding the future role and the priorities for investment in the A5 over the next 15 years.

2.25 The objectives of the A5 Strategy report are:

- To ensure that the A5 is fit for purpose in terms of its capacity and safety, both now and in the future;
- To allow the A5 to play its full and proper role in supporting and facilitating economic activity and growth at a local and national level;
- To promote and facilitate access to leisure and tourism within the area covered by the strategy;
- To assist in identifying the priority improvements along the A5 corridor that are needed to enable growth, reduce congestion, improve safety, improve air quality and deliver a sustainable transport system; and
- To reduce where possible, the impact of traffic on communities along the A5.

2.26 The Strategy suggests that the role of the A5 has diminished to more of a distributor role with the opening of the M1, M6 and M6 Toll. It is also recognised that the A5 remains a key artery of movement that supports and provides access to economic activity and growth.

3 DEVELOPMENT PROPOSAL

The Application Site

3.1 The application site comprises approximately 227 hectares of land in two zones. Together the two zones form the site of the hybrid planning application. The red line site boundary plans is presented in **Appendix C**.

3.2 Zone 1 comprises approximately 220 hectares in a triangular parcel of predominantly agricultural land to the north and north west of Magna Park, Lutterworth. Zone 1 is the site of the outline proposals for distribution warehousing, the Logistics Institute and its campus, the small business space and the new estate office, together with the related access, SUDS, country park and service facilities.

3.3 Zone 2, situated approximately 1.0 km to the south east of Zone 1, is a 6.7 hectare parcel of agricultural land to the rear of the George Headquarters building to the south of the A4303. Zone 2 is the site of the detailed proposals for the dedicated Magna Park railfreight shuttle terminal and HGV parking facility.

Zone 1 – Site Description and Surrounding Land Uses

3.4 Zone 1 is linked to and extends Magna Park. Its boundaries are created by the A5 to the south and west, Mere Lane to the south and east and prominent ridgeline hedgerows following the parish boundary to the north.

3.5 The nearest local settlement to Zone 1 is Willey which is 850m away beyond the A5. To the north are the villages of Ullesthorpe and Claybrooke Parva which are located, at the closest point from the site, 1.0 km and 1.3 km respectively. Bitteswell is located 2.0 km to the east of the site and the town of Lutterworth a little further to the east at 2.2 km.

3.6 Public Rights of Way Bridleways and Public Footpaths cross the site connecting the village of Willey to Ullesthorpe and Claybrooke Parva and the Lutterworth Road. These rights of way intersect and connect with the permissible routes that currently allow a variety a walking and riding routes around the site.

3.7 To the south of Mere Lane is Magna Park, one of the largest dedicated distribution parks in Europe. Magna Park occupies some 200 hectares, and provides approximately 8 million sq.ft. of distribution floorspace. The site has been established for more than 20 years, comprises over 30 units and now provides in the region of 9,300 jobs.

3.8 Magna Park is home to a diverse range of occupiers and many of the units function as national or regional distribution centres though some perform a combination of other functions including operating as Headquarters or administrative centres. Occupiers include Argos, ASDA, Britvic, BT, DHL, Disney, Nissan and other top UK, European and Global businesses.

3.9 Magna Park benefits from a central location within the UK and has excellent connections to the Motorway network with Junction 20 of the M1, Junction 1 of the M69 and Junction 1 of the M6 reachable in less than 10 minutes.

3.10 All HGV movements generated by Magna Park are subject to a routing agreement between IDI Gazeley and HDC. Details of the agreement are set out in the Section 106 Agreement and are provided to all occupiers at Magna Park. The routing agreement is strictly applied and as far as practicable ensures that all HGVs avoid sensitive routes through local villages and Lutterworth town centre.

3.11 The routing agreement will be extended to include all the proposed units in Zone 1. IDI Gazeley has indicated a willingness to fund a permanent position at LCC to create and implement a robust HGV enforcement strategy. Discussions have already been held with officers at LCC and there is a determination on both sides to secure the position at the earliest opportunity.

3.12 Discussions regarding details of the proposals are in the very early stages but it is considered that a cornerstone of the scheme will be to set up permanent monitoring sites at sensitive locations to measure any increase in HGVs that can be attributed to Magna Park. Monitoring reports will be prepared on a regular basis and the results will be shared with all interested parties with a view to implementing further enforcement measures if necessary.

Zone 1 – Access Proposals

3.13 There are two points of access proposed to Zone 1. The first is a new roundabout on Mere Lane that will connect the site to Magna Park to the south and the A5 to the west. The connection to Magna Park is achieved by extending Argosy Way between existing plots 1400 and 1500. A new roundabout is proposed on the A5 to replace the existing priority junction at Mere Lane. This provides a safer and more efficient connection with the A5. As part of the scheme the dual carriageway on the A5 will be extended from Emmanuel/ Lodge Cottages to the new roundabout over a distance of approximately 500 metres.

3.14 The section of Mere Lane between the A5 and the new access roundabout will be realigned and upgraded to a 7.3m carriageway. The redundant section of Mere Lane will be stopped-up under Section 247 of the Town and Country Planning Act 1990. The proposal is for it to be reclassified as a public footpath providing an informal link to an existing public footpath on the west side of the A5.

3.15 Between the A5 and the proposed site access, the existing 7.5 tonne weight restriction on Mere Lane will be removed to allow HGVs to access Zone 1 and the existing Magna Park from the A5. The weight restriction will be relocated to the north east of the new roundabout on Mere Lane to prevent HGVs from using Mere Lane as an alternative route to Lutterworth and the A426.

3.16 New employees and the Park's existing employees will be discouraged from using the minor road network to the north and north east of Magna Park for the journey to and from work and this message will be reinforced in the Travel Plan, on the Magna Park website and through a formal request by Magna Park Management to individual occupiers. A recommended routing plan has been prepared to help employees identify routes that are considered acceptable and those that where practicable should be avoided. This is presented in the Travel Plan.

3.17 A new roundabout is also proposed on the A5 to replace the existing priority junction at Mere Lane. As part of the scheme the dual carriageway on the A5 will be extended from Emmanuel/ Lodge Cottages to the new roundabout over a distance of approximately 500 metres. The Emmanuel and Lodge Cottages are within the application boundary, and on the grant of planning permission will be demolished to make way for the widening of the A5 and the associated landscape works. The access proposals and associated highway improvements are shown on a drawing presented in **Appendix D** (Drawing No. 47066811/A008/SK12).

3.18 The second point of access is a new roundabout on the A5 approximately 260 metres south of White House Farm. This is shown on a drawing presented in **Appendix E** (Drawing No. 47066811/A008/SK13).

3.19 The provision of two points of access, one at both ends of the development, will allow an internal highway connection to be provided within the site. This is beneficial for a number of reasons. Firstly it provides flexibility in terms of access and egress options allowing the impact of the development to be dispersed more evenly across the external highway network. Secondly it provides the opportunity for bus services to divert into the site without having to duplicate sections of the route which is inefficient and unpopular with passengers. Finally it allows dedicated cycle and pedestrian routes to be provided within the site providing safe access to the new development and a connection to the existing Magna Park to the south east of Mere Lane.

Zone 1 - General Description and Layout Arrangements

3.20 The development within Zone 1 comprises the following uses and maxima quanta. The description should be read within the context of the Illustrative Masterplan presented in **Appendix F** and the Parameter Plan presented in **Appendix G**.

- Distribution warehousing and ancillary office space (Use Classes B8 and B1a): up to 427,350m^2 (including 100,844m^2 for DHL Supply Chain that is the subject of a detailed planning application – reference 15/009/FUL – that was submitted in June 2015)
- Logistics Institute of Technology (Use Class D1): up to 3,700m^2 together with its campus
- Estate office with heritage exhibition centre and conference facility (Use Class D1): up to 300m^2
- Holovis expansion building (Use Class B1a, B1b): up to 7,000m^2
- Innovation Centre (Use Class B1a): up to 2,325m^2
- Public park and meadowland: approximately 70 hectares
- Access corridor, structural landscaping, SUDS systems
- Demolition of existing buildings on the site

3.21 The number of jobs associated with each use has been estimated and is set out in the table below.

Table 3-1: Zone 1 – Estimated Job Numbers	
Proposed Land Use	**Number of Jobs**
B1 Innovation Centre	145
B1 Holovis	438
B8 Logistics & Warehousing	5,342
The Logistics Institute	83
Park Management/Security	9
Total	**6,017**

3.22 The Logistics Institute is partnered by IDI Gazeley, Aston University and the Leicestershire Colleges – and will likely include the logistics sector's professional institute (Chartered Institute of Logistics and Technology). It will work closely with industry partners, and cater for up to 400 students, drawn from the same approximate 45 minute catchment as Magna Park's workforce, providing a range of bespoke training and qualifications across all NQF levels 2-7 as well as linked professional accreditations. The Institute has five broad objectives:

- contributing to the rising skills needs of the industry;
- raising the awareness of people at school, college and university levels of the career opportunities in logistics;
- collaborating with the industry to contribute to its needs for applied research to drive innovation, productivity and increased environmental sustainability in the industry;
- creating new small businesses that will apply commercially the research output of the Institute and its collaborating university and college partners; and
- providing Harborough District with a flagship further and higher education institution – taking advantage of IDI Gazeley's commitment to driving this pioneering concept for the extension to Magna Park and what it is to achieve, socially as well as economically and environmentally, Magna Park's pre-eminence in the logistics property market and Magna Park's location in Lutterworth at the heart of the UK's logistics industry.

3.23 The Innovation Centre will provide high quality serviced office space, co-located with the Institute and the concentration of logistics employers, on easy-in, easy-out licenced terms for small businesses – following exactly the model of the Harborough Innovation Centre (which is full) and plugging a significant gap in Lutterworth's commercial property. The building will be up to 2,325m^2 in size (broadly the size of the Centre in Harborough) – and, like the institute, will be designed to high standard, visually and environmentally, and tucked into the landscape. There are cluster advantages of co-location with the Institute, its University and College partners (faculty, students) and Magna Park's occupiers – as a stimulus to the development of spin-out and supplier opportunities and the growth locally of small and medium enterprises.

3.24 The extended estate will continue to be managed from the existing site. The new estate office will be a more substantial building, designed to complement the Institute and Innovation Centre – the other main built uses in the Magna Park hub.

3.25 The estate office will contain a marketing suite; an IT-equipped conferencing facility that will be available for community use; and a "heritage centre" – a living exhibition space that will account the history of the Magna Park site – and exhibit and interpret its Scheduled Monument, its other archaeology, its built development including the historic record of Bittesby House and the other buildings on the site, and the Bitteswell Aerodrome. It will also include exhibition space to educate people on the logistics industry and, if partners wish, the business operations of the site.

3.26 The Bittesby Country Park and Meadowland, centred on the rail embankment at the heart of Zone 1, performs a number of functions: informal recreation open space – with its own system of tracks and paths connected to the wider network on the site and beyond – for employees, students, faculty and the wider community – for their health and wellbeing, and a means of bringing these communities together; enriched habitat and biodiversity; the sustainable water management of the whole site, including the preservation of the archaeological resource and the maintenance of the water regime for Claybrook Mill (with the other water management measures beyond the site); the protection in perpetuity of the Deserted Bittesby Scheduled Ancient Monument and the setting for it; a very large green physical, visual and noise buffer between the settlements around the extension site; and a centrepiece for the whole of the extended Magna Park.

3.27 The meadowland provides a means of managing the country park's landscape, both of which will be grazed from time to time – as the means of tending its landscape and ensuring a habitat rich, biodiverse resource for the area

Zone 1 – Road Layouts and Parking Proposals

3.28 Although the internal road network will not be adopted by the Highway Authority, it will be designed to adoptable standards in accordance with Section DG2 of the 6Cs Design Guide.

3.29 In terms of car, HGV and cycle parking standards the 6Cs Design Guide also contains the relevant standards for the land uses proposed in Zone 1.

3.30 The standards are presented in Table DG11 in Section DG14 of the Design Guide and are taken from RPG8 (Regional Planning Guidance for the East Midlands to 2021). For the purposes of applying the parking standards, Magna Park is considered to be a development located 'out of any town' where the maximum parking standards for each of the proposed land uses is:

- B1 Office – 1 car parking space per 30m^2
- B1 Office – 1 lorry space per 500m^2
- B1 Office – 1 cycle space per 400m^2
- B8 Warehousing – 1 car parking space per 120m^2
- B8 Warehousing – 1 lorry space per 400m^2
- B8 Warehousing – 1 cycle space per 400m^2

- Higher Education – 1 car parking space per 2 staff plus 1 space per 15 students

3.31 There are no specific standards for cycle or HGV parking at higher educational establishments and an appropriate number of spaces will be provided under a future reserved matters application.

3.32 The standards also state that cycle parking should be under cover, well-lit and secure and conveniently located at entrances to buildings.

3.33 Whilst the development details are only in outline at this stage, the development proposals will accord with the above parking guidance. The details for each land use and specific unit can be approved under future reserved matters applications.

3.34 Notwithstanding, the table below summarises the quantity of spaces that would be permitted in Zone 1 based on the parking standards and the maximum quanta of development set out in paragraph 3.20.

Table 3-2: Zone 1 – Maximum Parking Provision

Proposed Land Use	Car Spaces	Lorry Spaces	Cycle Spaces
B1 Innovation Centre	78	5	6
B1 Holovis	233	14	18
B8 Warehousing	3,561	1,068	1,068
Logistics Institute	35 staff + 27 students	No standards - TBC	No standards - TBC

3.35 All roads at Magna Park are privately owned and parking is not allowed at any time on the Park's road network. This applies to all vehicles and non-compliance may result in wheel clamping and future entry to the Park may be refused. The restrictions are controlled by Magna Park Management and their main purpose is to allow ease of delivery and maintain congestion free roads. The restrictions also ensure that the approved level of parking provision at each unit is not exceeded. This management function will be extended to the new development within Zone 1 to ensure that overspill parking does not occur.

Zone 2 – Site Description and Surrounding Land Uses

3.36 Zone 2 forms part of the developed southern edge of Magna Park. Immediately to the zone's north is a distribution building occupied by Culina (Plot 7100) and the George House office building. Zone 2 is located approximately 1.6 km from Willey to the north west, 1.6 km from Lutterworth to the east and 2.5 km from Cotesbach to the south east.

3.37 Zone 2 benefits from an extant planning permission for 140 HGV parking spaces, 170 car parking spaces and several ancillary uses including a gatehouse, a small office, a vehicle maintenance unit, a fuel island and vehicle wash (planning reference: 12/00851/Ful). IDI Gazeley is in the process of discharging the pre-commencement conditions relating to the approved HGV parking scheme and will begin the development once the requisite approvals have been secured.

3.38 Zone 2 consists of two fields, neither of which are in agricultural use. There are no Public Rights of Way Bridleways or Public Footpaths crossing or abutting Zone 2.

Zone 2 – Access Proposals

3.39 Access to Zone 2 will be taken from the southern arm of the roundabout on the Lutterworth Bypass that serves the main part of Magna Park. The southern arm currently serves two existing plots occupied by Culina and George, the latter being the clothing division of ASDA.

3.40 Two further units that are occupied by Notts Sport UK and Semelab and that lie outside the boundary of Magna Park, can also be reached from the southern arm of the roundabout via an access road that passes behind the George office building before running parallel with the A4303. These buildings can also be accessed directly from the A4303 via a left in/ left out arrangement just to the east of Shackleton Way.

3.41 To reach the site the existing access road serving Culina and George will be extended through the provision of a southern arm on the existing internal roundabout. A simple junction, approximately 80 metres south of the roundabout, will maintain access to Semelab. The access road to the rail freight terminal will have a width of 11 metres with a 3 metre wide footpath/ cycleway on its east side. As with other parts of Magna Park the road will be constructed to adoptable standards. The access road is currently subject to an advisory 10mph speed limit and this will be maintained on the new section of road.

3.42 The access road continues along the northern and eastern perimeter of the plot until it reaches a gatehouse. The gatehouse will control movements into and out of the rail freight terminal where 134 HGV parking spaces are proposed. A fuel island and vehicle wash will be located in the south east corner of the plot.

Zone 2 – General Description and Layout Arrangements

3.43 The development within Zone 2 comprises the following uses. The description should be read within the context of the Proposed Site Layout presented in **Appendix H**. Development within Zone 2 is the subject of a detailed planning application.

- Railfreight shuttle terminal
- 134 HGV parking spaces
- HGV driver training centre
- LPG or GNP fuel island and vehicle wash facility

3.44 It is expected that the Shuttle Terminal will generate around 12 jobs consisting of six shuttle drivers, four terminal staff and two traffic clerks.

3.45 Magna Park does not benefit from a direct rail connection and to address this a dedicated shuttle to nearby railheads is being proposed. Rugby is the closest suitable location where a railhead could be provided and preliminary discussions with DB Schenker have confirmed its feasibility.

3.46 Alternatively the shuttle could run to DIRFT, where the opening of new rail facilities for Sainsbury's and Stobart has created spare capacity at the original railport. DIRFT is situated approximately 13 kms south of Magna Park at the junctions of the M1 (Junction 18), the A5 and the A428. The DIRFT railhead is an open access facility and all users are welcome.

3.47 Promoting a connection with DIRFT would build on an existing relationship that exists with Magna Park whereby approximately 16% of all HGVs using the DIRFT railhead have an origin or destination at Magna Park.

3.48 It is envisaged that over time the Magna Park shuttle would employ gas or electrically powered lorries which would largely eliminate carbon emissions from the road leg and put Magna Park on a level playing field with rail connected locations from an environmental perspective.

3.49 Referring to the plan in **Appendix H** it can be seen that the railfreight shuttle terminal would be located along the southern edge of Zone 2. The area would have the capacity to accommodate 88 containers in two rows separated by a 25m area where the reach stacker would operate.

3.50 The shuttle would collect containers from the railhead and if the customer required the consignment immediately would deliver it directly to the warehouse but if not the container would be placed in the railfreight shuttle terminal until required. The customer could then call in the container at short notice and not have to wait for it to arrive from the railhead with consequent benefits to warehouse operations.

3.51 Similarly, empty boxes could be placed in the railfreight shuttle terminal if a shuttle lorry was not immediately available. This would allow the shuttle to run loaded both ways on almost all trips to the railhead and maximise efficiency.

3.52 The railfreight shuttle terminal would only be available to Magna Park occupiers. It would therefore not generate any additional HGV movements although there would be a small increase in north/south movements at the A4303/ Hunter Boulevard roundabout as a result of containers being moved between Magna Park and the shuttle terminal.

3.53 In addition to the shuttle terminal, there is a HGV parking facility proposed in the north west corner of Zone 2. This will provide 134 parking spaces and will only be available to vehicles that have serviced a Magna Park occupier. As with the shuttle terminal it will therefore not generate any additional HGV movements. Access will be controlled by a security gatehouse and the driver will need to provide evidence of a visit to Magna Park to authorise entry.

3.54 Within Zone 2 there is also a HGV training area proposed between the gatehouse and the HGV parking area. There are 16 car park spaces associated with this use and there will be a small two-storey office within the gatehouse to administer and manage the training facility.

3.55 The fuel island and vehicle wash will be located to the south and west of the HGV parking area respectively.

3.56 The HGV Park will be for Magna Park HGV drivers only – both those for the existing park and for the extension. The HGV park is equipped with electric charging points – one of the options for the traction units for the Railfreight Shuttle – and the fuelling station includes for a carbon-free compressed natural gas fuel option (CNG) and, if needed, also, low-carbon, liquid petroleum gas. The HGV industry is rapidly moving to lower and zero emission

vehicles and these options anticipate and provide for those trends. Electric and CNG-fuelled engines are also quieter than their petrol and diesel counterparts.

3.57 The HGV Driver Training Centre will be operated by an industry leader who is in advanced discussions with IDI Gazeley – with the aim of contributing to alleviating the existing and intensifying shortage of qualified HGV drivers. The Centre also has the potential for collaboration with the Logistics Institute – taking advantage of Aston University's research programmes in the transport aspects of logistics and providing a test bed for the application of early prototypes.

4 EXISTING TRANSPORT FACILITIES

Public Transport Facilities

4.1 Magna Park is served by a single bus service operated by Arriva (Hinckley Bus). Route 8 operates between Hinckley and Lutterworth via Magna Park where there are bus stops on Hunter Boulevard and Wellington Parkway. From Lutterworth there are connections to Market Harborough as Route 58 and to Leicester as Route X44. Through tickets are available on all services. As part of Route X44, there are also limited school services to Rugby.

4.2 Route 8 provides one service per hour between 6am and 7pm. The journey time between Magna Park and Lutterworth is around 10 minutes and between Magna Park and Hinckley is around half an hour. The service operates on a Monday to Saturday basis. There is no service on a Sunday or on Bank Holidays.

4.3 Route 58 takes just over half an hour to travel between Lutterworth and Market Harborough. There are six services per day operating approximately every two hours between 7am and 5pm. The service operates on a Monday to Saturday basis. There is no service on a Sunday or on Bank Holidays.

4.4 Route X44 takes an hour to travel between Lutterworth and Leicester. There are six services per day to Leicester and four making the return to Lutterworth. The service operates on a Monday to Saturday basis. There is no service on a Sunday or on Bank Holidays.

4.5 The timetables and a route plan are in **Appendix I**.

4.6 The terminating point for Route 8 in Hinckley is convenient for a number of connecting services and these together with the location of the bus stops in the centre of the town are shown on the Hinckley Bus Map and Guide presented in **Appendix I.**

Pedestrian and Cycle Facilities

4.7 The location of Magna Park limits its potential to attract large numbers of pedestrians or cyclists and based on the 2001 Census Journey to Work Data for the daytime population in the Ullesthorpe Ward, only around 1% chose either of these modes to travel to work.

4.8 The equivalent 2011 information is currently only available at the middle layer super output area (MSOA). The MSOA that includes Magna Park is Harborough 006 which extends to junction 19 of the M1 to the south and to areas east of the M1. Magna Park represents only a very small part of Harborough 006 and therefore its reliability for estimating the method of travel to work for existing Magna Park employees is questionable.

4.9 Notwithstanding, based on the 2011 Census Journey to Work Data for the daytime population in Harborough 006 MSOA, around 1.2% and 2.2% choose to cycle or walk to work respectively.

4.10 The greatest potential for cycling is to encourage trips to and from Lutterworth and there is a segregated shared footway/ cycleway that runs along the north side of the A4303 between Coventry Road and Magna Park. At the access to Magna Park there are

uncontrolled crossings together with dropped kerbs and tactile paving on all but the western arm of the roundabout. A sign on Coventry Road just to the north of the A4303, informs cyclists that Magna Park can be reached in 2kms.

4.11 Local Transport Note 1/86 suggests an average cycling speed of 24.14 km/hr (15mph). With this assumption it is clear that Magna Park is within easy cycling distance of Lutterworth, which can be reached in around five minutes.

4.12 The distance from the centre of Lutterworth to the site is around 4km while the main residential part of the town, which has grown up to the west of the centre, and some of the surrounding villages are a little closer at around 3km.

4.13 An inventory of the existing cycle and footway facilities between Lutterworth and Magna Park has been undertaken and is shown on a plan contained within **Appendix J**.

4.14 The most direct route for pedestrians from Lutterworth is via the shared footway/ cycleway that runs on the north side of the A4303.

4.15 There are a number of footpaths and bridleways crossing the site, some of which are permissive under the Higher Level Stewardship scheme, which under the current agreement runs until 31 October 2017.

4.16 An important component of the proposed Green Infrastructure Strategy is the retention of existing permissible bridleways, and the creation of new permanent footpath and bridleway connections to facilitate access to the countryside. These new connections provide access to the wider network of existing Public Rights of Way between the villages of Ullesthorpe and Willey to the north and west of the site.

4.17 A new visitor's car park at the north east of the site facilitates access to the existing Mere Lane Lagoon and proposed wetland habitat as well as to the circuitous routes around the site. The former route of Mere Lane equally creates footpath access to connect to the Public Rights of Way that emanate from Willey and terminate at the A5 providing improved connectivity.

4.18 There are a number of footpaths and minor roads that provide direct links from Magna Park to Lutterworth and Bitteswell. Woodby Lane is a narrow lightly trafficked road that connects the north east corner of Magna Park to Ullesthorpe Road just to the west of Bitteswell. Woodby Lane is not open to through traffic but cyclists and pedestrians can access Magna Park at its western end. Although not lit, it is part of an attractive route for these modes particularly during the summer months.

4.19 A plan showing existing and proposed public access routes around the site is contained within **Appendix K**.

5 LOCAL HIGHWAY NETWORK

General Description

5.1 The location of the highway network described in this section can be found in the Site Location Plan within **Appendix A**.

5.2 Magna Park benefits from a central location within the UK and has excellent connections to the motorway network with Junction 20 of the M1, Junction 1 of the M6 and Junction 1 of the M69, reachable in less than 10 minutes.

5.3 The Daventry International Rail Freight Terminal (DIRFT) is situated approximately 13 kilometres (kms) south of Magna Park at the junctions of the M1 (Junction 18), the A5 and the A428. The significance of this is that approximately 16% of all HGVs using the railhead at DIRFT have an origin or destination at Magna Park emphasising the existing relationship between Magna Park and the railhead at DIRFT.

5.4 The proposed development site lies to the north west of Mere Lane which is a rural road with a carriageway width of approximately 5.5 metres. It is subject to the National Speed Limit and is unlit. It is also subject to a 7.5 tonne weight restriction except for access prohibiting its use as a through route for HGVs.

5.5 There are four existing points of access on the section of Mere Lane that passes to the north west of Magna Park. They are all simple junctions. Travelling in a north easterly direction from the A5, the first is an access to Bittesby House which is currently occupied by Creative Bridge, a small marketing, public relations and communication business employing around 30 people.

5.6 The second is an access to the services farm for Magna Park. This is gated and in occasional use by maintenance vehicles and for environmental inspections.

5.7 The third is an access to Bittesby Cottages and the Brick Barn. The Brick Barn is occupied by Holovis International, a sensory experience design company specialising in the entertainment, industrial, retail and military sectors. Holovis currently has around 50 employees. Although the Brick Barn is adjacent to Bittesby House there is no vehicular connection between the two sites.

5.8 The fourth is a private means of access to Springfields Farm.

5.9 At its eastern end Mere Lane forms a crossroads with Lutterworth Road and Ullesthorpe Road. These roads are also rural in nature and to the north west, north and south east provide direct routes to the villages of Ullesthorpe, Ashby Parva and Bitteswell respectively.

5.10 At its western end Mere Lane forms a ghost island priority junction with the A5(T). Historically the A5 has provided a strategic route between London and Holyhead through large parts of southern and central England. This role has diminished to more of a distributor role with the opening of the M1, M6 and M6 Toll. However, the corridor remains a key artery of movement which supports and provides access to economic activity and growth.

5.11 The A4303 provides a link between the M1 and the A5 and provides a bypass of Lutterworth to the south of the town. The Lutterworth bypass was provided by IDI Gazeley as part of the original Magna Park development.

5.12 The A4303 is a dual carriageway and is subject to the National Speed Limit. At its eastern end it forms a grade separated junction with the M1 at Junction 20. To the east of the motorway the road becomes reclassified as the A4304 and continues as a single carriageway to Market Harborough.

5.13 Between the Motorway and the A5 there are four further roundabouts. Travelling in a westerly direction from the Motorway, the first is a four-arm roundabout with the A426. To the south the A426 is a single carriageway which crosses the A5 at the Gibbet Hill roundabout before continuing to provide a direct link to the M6 Motorway at Junction 1.

5.14 To the north of the A4303 the A426 is also a single carriageway and provides access to Lutterworth town centre before continuing to provide an alternative to the M1 as a route to Leicester. To the north of the town centre, between the A426 and the M1, there are several industrial estates. These generate a significant number of commercial vehicles including HGVs through Lutterworth town centre.

5.15 The next roundabout on the A4303 also has four arms although the southern arm is an access to a mobile home park and is therefore lightly trafficked. Coventry Road/ Brookfield Way forms the northern arm and provides a route to the residential areas that have developed to the west of Lutterworth and also provides an alternative route to the town centre. There is a 7.5 tonne weight restriction on Coventry Road/ Brookfield Way.

5.16 The third roundabout is the main access to Magna Park. It has four arms with the northern arm, Hunter Boulevard, providing access to the main part of the Park. At its northern end Hunter Boulevard is renamed Argosy Way and provides access to Plots 1400 and 1500. Argosy Way is currently a cul-de-sac and terminates at the access to the service yard of Plot 1400.

5.17 Approximately 400 metres to the east of Hunter Boulevard, there is a secondary access to Magna Park via Shackleton Way. This forms a left in/ left out junction with the A4303.

5.18 The southern arm of the Magna Park access roundabout provides access to the Headquarters of George Clothing and to a separate unit occupied by Culina. This would also provide the only access to a consented HGV trailer park that was granted planning permission in 2012 and to the proposed railfreight shuttle terminal.

5.19 Two further units that are occupied by Notts Sport UK and Semelab and that lie outside the boundary of Magna Park, can also be reached from the southern arm of the roundabout via an access road that passes behind the George building before running parallel with the A4303. These buildings can also be accessed directly from the A4303 via a left in/ left out arrangement just to the east of Shackleton Way.

5.20 The final roundabout on the A4303 is the Cross in Hand roundabout, which is where the A4303 forms a junction with the A5. This roundabout has five arms with the A5 forming the northern and southern arms and the A4303 the eastern arm. Two minor roads, the B4207 (Lutterworth Road) and Coal Pit Lane form the other arms at the junction. On the approach

to the roundabout, the A5 is a single carriageway although both to the north and to the south of the junction there are sections of dual carriageway that provide overtaking opportunities.

5.21 Approximately 4 kms to the south of the Cross in Hand roundabout is the Gibbet Hill roundabout. This also has five arms and is at the junction of the A5 and the A426. On the approach to the roundabout both roads are single carriageway. Some 2 kms to the south west of the roundabout, the A426 provides a direct link to Junction 1 of the M6 Motorway. This is a large four-arm grade separated junction which has traffic signals on the motorway off-slips and associated circulatory carriageways. The final arm at the Gibbet Hill roundabout is Gibbet Lane, a local route that provides access to a large aggregates plant.

5.22 To the north of the A4303, the A5 is a combination of dual and single carriageway. There are two sections of dual carriageway, one between Emmanuel and Lodge Cottages and White House Farm with a length of 2.1 kms and the other between the settlements of Wibtoft and Smockington with a length of 2.6 kms.

5.23 Junction 1 of the M69 is approximately 10.5 kms to the north of the A4303. It is a large six-arm grade separated junction which with the exception of the B4109 in the south west corner of the junction, is controlled by traffic signals. The on and off-slips of the M69, the A5 and the B4109 make up the six arms at the junction. To the north of the junction, the B4109 (Rugby Road) provides one of the main routes into Hinckley from the south.

Review of Collision Statistics

5.24 To examine the existing collision record, Personal Injury Accident (PIA) data was requested from LCC, WCC and Highways England for the highway network surrounding the Application Site.

5.25 LCC's data presents collisions that occurred between 1 January 2009 and 6 June 2015; WCC's data covers the period 1 January 2009 to 18 March 2015 and the Highways England data is from 1 January 2008 until 31 December 2013. In total there were 262 collisions recorded between these dates, of which six were fatalities, 44 were classified as serious and 212 were classified as slight.

5.26 Plans showing the location of all reported collisions within the study area are presented in **Appendix L.**

5.27 Of the 262 collisions recorded, 26% occurred in dark conditions and 37% occurred during wet weather. There were 33 collisions involving HGVs and 41 involving motor cyclists; there were only six collisions involving cyclists and three involving pedestrians. The remaining collisions were all either single or multi-vehicle incidents.

5.28 To examine the collision pattern, the highway network has been split into a series of links and junctions. This approach helps to identify any sensitive locations. The collision data has been analysed at the following locations:

- M6 Junction 1;
- M6 near to Junction 1;
- A426 between the A5 and the M6;

- Gibbet Hill roundabout;
- A426 Rugby Road (between the A5 and the A4303);
- M69 Junction 1;
- A5 Between M69 and B4114 Smockington Lane (Inc. Smockington Lane Junction)
- A5 Between B4114 Smockington Lane and Fosse Way (Inc. Fosse Way Junction)
- A5 Between B4455 Fosse Way and A4303 Lutterworth Road
- A5 Between the A4303 and the A426;
- A4304 Lutterworth Road Between M1 Junction 20 and South Kilworth Road;
- M1 Junction 20;
- A4303 Lutterworth Road Between the A5 and the M1;
- A4303 Coventry Road;
- B4027 Coventry Road Between Fosse Way junction and the Rugby Road Junction;
- Coal Pit Lane;
- Coal Pit Lane/Fosse Way/Mere Lane Junction;
- B4027 Lutterworth Road Between the A5 and Pailton Village;
- B578 Lutterworth Road Between the A5 and Burbage Village;
- Lutterworth Road in Ullesthorpe Village;
- Ullesthorpe Road;
- Mere Lane
- Dunton Bassett Village;
- B4114 Coventry Road;
- Bill Crane Way; and
- Bitteswell Road.

M6 Junction 1

5.29 There were 18 accidents recorded at Junction 1 of the M6. Of these, one was classified as serious and 17 as slight and a summary is provided in the table below.

Table 5-1: Summary of Accidents Occurring at M6 Junction 1

Severity and Number	Light	Dark	Wet	Dry	Single Veh	Veh to Veh	Veh to Ped	Cycle	M/cycle
Serious (1)	-	1	1	-	-	1	-	-	-
Slight (17)	12	5	6	11	6	8	-	-	3
Total (18)	**12**	**6**	**7**	**11**	**6**	**9**	**-**	**-**	**3**

5.30 The one serious accident at this junction was a rear shunt involving two vehicles in dark and wet conditions.

5.31 Of the accidents categorised as slight, three were rear shunts, three were collisions during a turning movement involving two or more vehicles and two occurred when a vehicle

overshot the junction and ended up in the middle of it (one in dark and wet conditions and one slipped on ice). Three accidents occurred when a single vehicle lost control and crashed and another when a car lost control and hit a second vehicle. A car and an HGV collided during an overtaking manoeuvre and another HGV accident happened when the vehicle toppled over while negotiating the junction. The final three collisions involved motorcycles. The first of these was when a motorcycle was hit from behind by a car in wet conditions, the second occurred when a motorcyclist lost control and crashed and the third when a motorcycle clipped a car while pulling away.

M6 Main Carriageway Near to Junction 1

5.32 There were three serious and 10 slight accidents reported on the M6 main carriageway in the vicinity of Junction 1 and these have been summarised in the table below.

Table 5-2: Summary of Accidents Occurring on M6 Main Carriageway

Severity and Number	Light	Dark	Wet	Dry	Single Veh	Veh to Veh	Veh to Ped	Ped Cycle	M/cycle
Serious (3)	3	-	2	1	-	3	-	-	-
Slight (10)	8	2	5	5	4	6	-	-	-
Total (13)	**11**	**2**	**7**	**6**	**4**	**9**	**-**	**-**	**-**

5.33 The first serious accident occurred when a car ran into the rear of a HGV in heavy traffic. Both of the other serious accidents occurred in wet weather, one when a HGV crashed into the back of another and pushed it into a third and the final serious accident was a rear shunt incident involving seven vehicles.

5.34 Four of the accidents classified as slight were single vehicle incidents when a car lost control and crashed. There were a further five collisions involving two or more vehicles. One of these was a rear shunt involving four cars, another was when a car lost control and collided with two others, the third occurred when two cars collided while changing lanes and in another incident a car drove into a HGV for no known reason. A collision occurred when a car hit another in the rear and spun it into the path of a HGV, which overturned. The final accident on this section of the M6 occurred when a car cut up another car forcing it into the safety barrier by the off-slip road.

A426 between the A5 and the M6

5.35 The table below summarises the collisions that took place on the A426 between its junction with the A5 and the M6. Three collisions were recorded as serious and five were classified as slight.

Table 5-3: Summary of Accidents Occurring on the A426 between the A5 and the M6									
Severity and Number	**Light**	**Dark**	**Wet**	**Dry**	**Single Veh**	**Veh to Veh**	**Veh to Ped**	**Cycle**	**M/cycle**
Serious (3)	3	-	-	3	-	3	-	-	-
Slight (5)	3	2	1	4	1	4	-	-	-
Total (8)	**6**	**2**	**1**	**7**	**1**	**7**	**-**	**-**	**-**

5.36 The first of the serious accidents recorded along this section of road occurred when a car lost control on an icy road and hit a HGV, throwing debris onto a second HGV. The second occurred when a car overtook an agricultural vehicle and hit an oncoming car. The third was a three vehicle rear end shunt involving an HGV.

5.37 Of the accidents classified as slight, the first was when a goods vehicle pulled out from a layby to perform U-turn across path of car, another three were rear shunts and the final accident occurred when a driver pulled onto the roadside and hit a road sign. It is reported that the driver was feeling unwell.

Gibbet Hill Roundabout - A5/A426 Junction

5.38 The table below summarises the collisions that took place at the Gibbet Hill roundabout. One collision was recorded as fatal, one as serious and nine as slight.

Table 5-4: Summary of Accidents Occurring at the A5/A426 Junction									
Severity and Number	**Light**	**Dark**	**Wet**	**Dry**	**Single Veh**	**Veh to Veh**	**Veh to Ped**	**Cycle**	**M/cycle**
Fatal (1)	1	-	1	-	1	-	-	-	-
Serious (1)	1	-	-	1	-	-	-	-	1
Slight (9)	8	1	5	4	2	5	-	1	1
Total (11)	**10**	**1**	**6**	**5**	**3**	**5**	**-**	**1**	**2**

5.39 The one fatality happened in foggy and wet conditions when a car hit the junction and rolled. The one serious accident occurred when a car hit a stationary motorcycle on the roundabout.

5.40 Of the slight accidents, four were rear shunts involving two or more vehicles (three of these occurred in wet weather), one was when a car braked suddenly to avoid queuing traffic, lost control in wet condition and left the carriageway and another occurred when a goods vehicle overturned while circulating the roundabout. There was a three car collision as one attempted to overtake at night and another incident when a car hit a motorcyclist while turning. The final collision occurred when a car hit a cyclist in wet weather during a turning manoeuvre.

A426 Rugby Road between the A5 and the A4303

5.41 The table below summarises the collisions that took place on the section of the A426 known as Rugby Road, between its junction with the A5 and the A4303. Five collisions were recorded as serious and 14 as slight.

Table 5-5: Summary of Accidents Occurring on the A426 Rugby Road Between the A5 and the A4303

Severity and Number	Light	Dark	Wet	Dry	Single Veh	Veh to Veh	Veh to Ped	Cycle	M/cycle
Serious (5)	5	-	1	4	1	4	-	-	-
Slight (14)	10	4	5	9	-	12	-	1	1
Total (19)	**15**	**4**	**6**	**13**	**1**	**16**	**-**	**1**	**1**

5.42 The first serious accident's exact location is not specified and occurred when a car lost control, left the carriageway and hit a tree. Another occurred 1km south of the junction with the A4303 when a driver lost control, crossed the carriageway and collided with another car. It is reported that the driver was above the legal alcohol limit. There was a similar incident approximately 200 metres north of the A5 although in this incident neither driver was over the legal alcohol limit. Another serious accident occurred at the access to a garden centre when a car pulled into the road in front of another vehicle. The final serious accident occurred at the A426/ A4303 roundabout. No details are provided.

5.43 Five slight accidents occurred at the A426/ A4303 junction. The first occurred when a HGV pulled in front of a car on the roundabout and forced it off road. The second occurred when a car pulled in front of a HGV causing another car and a HGV to collide with the rear of the first car. Another slight accident involved a collision between a car and a goods vehicle during a turning movement at the junction and the final two were rear shunts involving two cars (one of these was a hit and run incident).

5.44 There were two slight accidents at the junction with Main Street. The first occurred when a car drove into the rear of goods vehicle. It is reported that the brake lights on the goods vehicles were not working. The second was a rear shunt involving four cars caused by sudden braking.

5.45 There were slight accidents 255 metres north and 550 metres north of the junction with Main Street. The first of these was when a car was overtaking a HGV on a bend causing another car to hit the HGV, while the second was a rear shunt involving five cars as one car was turning right.

5.46 A slight accident occurred 85 metres north of the junction with the A5 when a car lost control and crossed the carriageway resulting is a collision with another car. Another occurred at the A426/ Shawell Road Junction when two cars collided during a turning movement. Near Cotesbach Village on the A426 there was a hit and run when a car knocked over a cyclist. Another slight incident was at the South Lodge entrance when a car overtook an agricultural vehicle. The collision occurred as the agricultural vehicle was turning right. The final slight accident was at a layby on the southbound carriageway. It

occurred when a motorcyclist braked to avoid a collision with a car, skidded and fell from his motorcycle. It occurred in dark and wet conditions.

M69 Junction 1

5.47 There were seven accidents classified as slight at M69 Junction 1 and these are summarised in the table below.

Table 5-6: Summary of Accidents Occurring at the M69 Junction 1

Severity and Number	Light	Dark	Wet	Dry	Single Veh	Veh to Veh	Veh to Ped	Cycle	M/cycle
Slight (7)	5	2	2	5	1	6	-	-	-

5.48 Four of the accidents summarised above were rear end shunts, another was when a car lost control on a slip road, left the carriageway, hit a tree and overturned, while another collision at this junction was when two cars that were racing, collided with another car and then fled scene. The final accident was when two cars collided while one was overtaking in wet weather.

A5 between M69 and B4114 Smockington Lane (Including the Smockington Lane Junction)

5.49 There were three serious and ten slight accidents recorded on the A5 between the M69 and the B4114 Smockington Lane (including the Smockington Lane junction). The table below summarises these accidents.

Table 5-7: Summary of Accidents Occurring on the A5 Between M69 and B4114 Smockington Lane

Severity and Number	Light	Dark	Wet	Dry	Single Veh	Veh to Veh	Veh to Ped	Cycle	M/cycle
Serious (3)	1	2	2	1	1	1	-	-	1
Slight (10)	8	2	3	7	-	8	-	-	2
Total (13)	**9**	**4**	**5**	**8**	**1**	**9**	**-**	**-**	**3**

5.50 Two of the serious accidents occurred at the junction with the A5 and Smockington Lane. One occurred when a car and van collided during a turning movement and the other when a light goods vehicle turned right in dark and wet conditions and hit a motorcycle. The light goods vehicle fled the scene. The third serious accident occurred just south of the M69 on the A5 when a car lost control and hit a tree on a wet night.

5.51 Of the accidents that were classified as slight, three occurred at the access to Hinckley Island Hotel. The first of these was when a motorcycle failed to give way and was hit by a car, the second was when a car turned right causing a motorcyclist to brake hard and fall in wet weather and the third was when a car and van collided during a turning movement. There was a further slight accident recorded on the A5 280 metres south east of the same access point when a fatigued car driver crossed the carriageway and hit two other vehicles.

5.52 There was a two car rear shunt at the junction with Hinckley Road that was classified as slight and a three vehicle rear shunt just south of the M69 junction. The final four slight accidents all occurred at the junction with Smockington Lane. All of these involved two vehicles colliding during turning movements.

A5 between B4114 Smockington Lane and B4455 Fosse Way (including Fosse Way Junction)

5.53 The table below summarises the collisions that took place on the section of the A5 between the B4114 Smockington Lane and B4455 Fosse Way (including the Fosse Way Junction). There were two fatalities, three serious and 17 slight accidents on this section of road.

Table 5-8: Summary of Accidents Occurring on the A5 Between B4114 Smockington Lane and B4455 Fosse Way

Severity and Number	Light	Dark	Wet	Dry	Single Veh	Veh to Veh	Veh to Ped	Cycle	M/cycle
Fatal (2)	2	-	2		-	2	-	-	-
Serious (3)	3	-	1	2	-	2	-	-	1
Slight (17)	10	7	6	11	1	14	-	1	1
Total (22)	**15**	**7**	**9**	**13**	**1**	**18**	**-**	**1**	**2**

5.54 The first fatality occurred at the junction with the B4114 Wigston Parva Road when a car pulled into the path of a HGV and the second occurred 200 metres northwest of this point when a car crossed the carriageway and hit a HGV. Both of these were in wet road conditions.

5.55 All three of the accidents classified as serious occurred at the junction with High Cross Road. One of these occurred when a car pulled into the path of two other cars and another occurred when a car turned right across the path of a motorcycle. The third serious accident occurred in wet weather, but no further accident description was provided.

5.56 The first slight accident recorded on this section of road occurred in dry and fine conditions, but no further information was provided. Two slight accidents were recorded at the junction with Fosse Way, one when a car hit a vehicle at night time which had run out of fuel. The second was a three vehicle collision during an overtaking manoeuvre. At the junction with High Cross Road, a car failed to give way to another car resulting in a collision. There was a further accident on the A5, 380 metres south of the B4114 Wigston Parva Road when a car hit a vehicle during an undertaking manoeuvre in dark and wet conditions.

5.57 Another nine collisions that were recorded as slight all occurred at the junction with the B4114 Wigston Parva Road and in two of these instances no accident description was provided. Three of the accidents at this junction were collisions involving two or more vehicles during a turning movement, one was when a car failed to give way and hit another car, one when a car turned right across the path of a light goods vehicles and another when a driver, who was above the legal alcohol limit, lost control. The final incident at this junction

occurred when a light goods vehicles was hit by a car. The driver of the light goods vehicle had braked suddenly to avoid a HGV that was turning.

5.58 The final three slight accidents on this stretch of road had no accident descriptions provided by Highways England. Two of these occurred at the junction with Fosse Way (one of these in dark and wet conditions), while one was to the north west of this junction. Two of these accidents involved more than one vehicle, while the other was an accident involving a cyclist.

A5 between B4455 Fosse Way and A4303 Lutterworth Road including the Cross in Hand Roundabout

5.59 The table below summarises the collisions that took place on the section of the A5 between the B4455 Fosse Way and the A4303. There was one fatality, five serious and 18 slight accidents on this section of the A5.

Table 5-9: Summary of Accidents Occurring on the A5 between B4455 Fosse Way and A4303 Lutterworth Road

Severity and Number	Light	Dark	Wet	Dry	Single Veh	Veh to Veh	Veh to Ped	Cycle	M/cycle
Fatal (1)	-	1	1	-	-	1	-	-	-
Serious (5)	5	-	1	4	-	-	-	-	5
Slight (18)	12	6	7	11	3	15	-	-	-
Total (24)	**17**	**7**	**9**	**15**	**3**	**16**	**-**	**-**	**5**

5.60 The fatality occurred when two cars collided head on in dark and wet conditions.

5.61 Of the five serious accidents, one was in light and dry conditions but no other information was provided. Another happened outside Emmanuel Lodge when a motorcycle hit the rear of a car as it was changing lanes. There was one serious accident recorded at the junction with Woodway Lane when a car hit a motorcycle while turning in traffic and this occurred in wet weather.

5.62 The final two serious accidents happened at the Cross in Hand roundabout. The first was when a car failed to give way and hit a motorcyclist that was circulating on the roundabout and the other occurred when a motorcycle lost control, left the carriageway and hit a road sign.

5.63 The first accident to be classified as slight was on the A5, approximately 60 metres north of White House Farm Kennels when a car braked, skidded and hit the rear of a parked HGV on a dark night. There was a two vehicle rear shunt at an unspecified location on this section of the A5, as well as a six vehicle rear shunt in wet weather outside Peach Tree Cottage.

5.64 400 metres north of Penn Lane on the A5, a two car rear shunt occurred when one car stopped for a police vehicle. At the junction with Penn Lane, a car lost control and left the carriageway. At the junction with Green Lane a car was attempting to overtake a vehicle, skidded on the wet road surface and hit a building. 50 metres south of the same junction a

light goods vehicle swerved, crossed the carriageway and hit a HGV. Another slight accident was recorded 450 metres north west of Willey Fields Farm when six vehicles collided when one skidded on ice at night.

5.65 Three accidents classified as slight occurred at the junction with Woodway Lane. The first of these was in wet weather when a car hit the rear of a HGV waiting to turn right, the second was when four cars collided while one was turning across their path and the third was when a light goods vehicle swerved, crossed the carriageway and hit two cars.

5.66 Another four accidents classified as slight occurred at the Cross in Hand roundabout. Two were rear shunts that occurred at night. One of these was attributed to an icy road surface. One accident occurred when a HGV overturned on the roundabout and the final collision occurred when a car hit the rear of another car that had slowed for a tractor. This was a hit and run incident.

5.67 A final three accidents were provided without accident descriptions and all of these involved more than one vehicle. Two of these were at the junction with Woodway Lane, one in wet weather, while another was to the south east of this junction.

A5 between the A4303 and the A426

5.68 The table below summarises the collisions that took place on the section of the A5 between its junctions with the A426 and the A4303. Five collisions were recorded and of these one was classified as serious and eight as slight.

Table 5-10: Summary of Accidents Occurring on the A5 between the A4303 and the A426

Severity and Number	Light	Dark	Wet	Dry	Single Veh	Veh to Veh	Veh to Ped	Cycle	M/cycle
Serious (1)	1	-	1	-	-	1	-	-	-
Slight (8)	5	3	2	6	-	7	-	-	1
Total (9)	**6**	**3**	**3**	**6**	**-**	**8**	**-**	**-**	**1**

5.69 The serious accident occurred when a car hit standing water and left the carriageway.

5.70 One of the slight accidents occurred when a car overtook a HGV and hit car head on in the opposite lane. Another occurred when a car overtook a HGV and hit the rear of car in stationary traffic. Another slight collision occurred when a car U-turned into the path of a motorcycle and one slight accident was when a light goods vehicle attempted a U-turn and cut across the path of an oncoming car.

5.71 The final four collisions classified as slight all involved two or more vehicles and no accident descriptions were provided. Three of these accidents were at the junction with the A426, while another was in dark and wet conditions to the north west of this location.

A4304 Lutterworth Road between M1 Junction 20 and South Kilworth Road

5.72 There were three slight accidents on the A4304 Lutterworth Road between M1 Junction 20 and South Kilworth Road and these are summarised in the table below.

Table 5-11: Summary of Accidents Occurring on the A4304 Lutterworth Road between M1 J20 and South Kilworth Road									
Severity and Number	**Light**	**Dark**	**Wet**	**Dry**	**Single Veh**	**Veh to Veh**	**Veh to Ped**	**Cycle**	**M/cycle**
Slight (3)	3	-	-	3	-	2	-	-	1

5.73 The first accident occurred when a car swerved to avoid a pheasant and hit oncoming car, the second when a car changed lanes and hit a motorcycle and a third was a rear shunt involving two cars when one braked for a passing milk float.

M1 J20 Junction

5.74 The table below outlines the accidents that occurred at Junction 20 of the M1. There was one fatal, one serious and 19 slight collisions that occurred at this junction.

Table 5-12: Summary of Accidents Occurring at M1 J20 Junction									
Severity and Number	**Light**	**Dark**	**Wet**	**Dry**	**Single Veh**	**Veh to Veh**	**Veh to Ped**	**Cycle**	**M/cycle**
Fatal (1)	1	-	-	1	-	-	1	-	-
Serious (1)	1	-	-	1	-	-	-	-	1
Slight (19)	17	2	3	16	5	11	-	1	2
Total (21)	**19**	**2**	**3**	**18**	**5**	**12**	**-**	**1**	**3**

5.75 The fatal accident involved a car and an HGV and was in dry and light conditions. The car was parked and the HGV hit the car driver as he left his vehicle. No further accident descriptions were provided by Highways England.

5.76 The one serious accident was when a car was turning right at the roundabout and struck a motorcycle.

5.77 There were two slight accidents involving collisions between a car and a motorcyclist one of which occurred in wet conditions. There was also a collision between a car and a pedal cyclist that occurred when the car pulled onto the roundabout.

5.78 There was a two car rear shunt and a three car rear shunt at the approach to the junction. The three car incident occurred in the dark. A further collision occurred when two cars came together while exiting the junction. Another occurred when a car lost control on fuel spillage and struck a safety barrier, while another car pulled into the path of circulating traffic on the roundabout.

5.79 A police car on call caused a car to brake suddenly and a badly secured child seat resulted in an injury to the child. There was a further slight accident when a HGV hit a car in the rear. Another slight incident was when a HGV allowed another goods vehicle to overtake and then this turned right into a car, forcing it off the carriageway.

5.80 The final eight collisions at this junction had no accident descriptions or exact locations provided by Highways England. Three of these were single vehicle accidents (one of which was at night) and five involved more than one vehicle (one of these was in wet weather).

A4303 Lutterworth Road between the A5 and the M1

5.81 There were two serious and three slight accidents recorded on the A4303 Lutterworth Road between the A5 and the M1 and these are summarised below.

Table 5-13: Summary of Accidents Occurring on the A4303 Lutterworth Road between the A5 and the M1

Severity and Number	Light	Dark	Wet	Dry	Single Veh	Veh to Veh	Veh to Ped	Cycle	M/cycle
Serious (2)	2	-	1	1	-	2	-	-	-
Slight (3)	2	1	1	2	-	2	-	-	1
Total (5)	**4**	**1**	**2**	**3**	**-**	**4**	**-**	**-**	**1**

5.82 The first of the serious accidents occurred when a car drove into the rear of a HGV, which was parked with its hazard lights on to assist with an earlier collision. The HGV was concealed by the brow of a hill. The second accident classified as serious was when a car lost control and crossed the carriageway causing it to collide with two oncoming cars.

5.83 One of the accidents classified as slight involved a motorcycle, but no Stats 19 Form with details of the incident was provided to LCC by the police. Another accident occurred when a car changed lane into path of another car causing a collision, while the final accident on this section of road occurred when a HGV and car collided when exiting a roundabout.

A4303 Coventry Road

5.84 There were a total of 15 accidents recorded along the section of the A4303 known as Coventry Road. Of these one was classified as serious and 14 as slight. A summary is provided in the table below.

Table 5-14: Summary of Accidents Occurring on the A4303 Coventry Road

Severity and Number	Light	Dark	Wet	Dry	Single Veh	Veh to Veh	Veh to Ped	Cycle	M/cycle
Serious (1)	-	1	-	1	-	1	-	-	-
Slight (14)	12	2	5	9	-	12	-	-	2
Total ()	**12**	**3**	**5**	**10**	**-**	**13**	**-**	**-**	**2**

5.85 The serious accident occurred when a HGV struck the rear of another HGV at night.

5.86 Of the slight accidents, there were four recorded at the roundabout junction with Coventry Road and A4303 Lutterworth Road and the first of these was when a car hit a HGV in wet weather. Two cars also collided during a turning movement, there was a rear shunt involving two cars and a motorcyclist lost control and fell off at this junction. A rear shunt

involving two cars occurred near to the A5 and another at the junction with Shackleton Way.

5.87 A slight accident occurred when a HGV collided with a car while changing lanes at the access to Magna Park and another HGV caused an accident on a straight section of road when it attempted to overtake two cars and hit both of them. There were a further two collisions near to Woodbridge House Farm, both in wet conditions. The first of these was when a car swerved to avoid a breakdown lorry in the road and left the carriageway and the second was when a HGV crashed with a parked tractor and forced it off the road.

5.88 A HGV and a motorcycle collided in wet weather at the access to Magna Park and two HGVs collided during a turning movement at the same location. 70 metres east of the access to Magna Park, a HGV changed lanes into the path of a car that was overtaking forcing it off the carriageway. The final slight accident on this road occurred when a car crashed while attempting to overtake a HGV that was parked some 250 metres west of Glebe Farm Cottage.

B4027 Coventry Road between the Fosse Way junction and the Rugby Road Junction

5.89 There were two serious and three slight accidents recorded along the B4027 Coventry Road between the Fosse Way junction and the Rugby Road junction and these are summarised below.

Table 5-15: Summary of Accidents Occurring on B4027 Coventry Road between the Fosse Way junction and the Rugby Road Junction

Severity and Number	Light	Dark	Wet	Dry	Single Veh	Veh to Veh	Veh to Ped	Cycle	M/cycle
Serious (2)	1	1	-	2	-	2	-	-	-
Slight (3)	2	1	1	2	-	2	-	-	1
Total (5)	**3**	**2**	**1**	**4**	**-**	**4**	**-**	**-**	**1**

5.90 A car failed to give way at the Coventry Road/Fosse Way junction and struck a car resulting in a serious accident. The other accident classified as serious was when a car lost control on a bend and hit an oncoming car.

5.91 The first slight accident occurred when a car failed to give way at the Main Street junction and struck a car, the second when a car skidded in wet weather and hit an oncoming car and the third when a motorcyclist misjudged their speed on a corner and fell off.

Coal Pit Lane

5.92 There were a total of 20 accidents along Coal Pit Lane and of these three were classified as serious and 17 as slight. These are summarised in the table below.

Table 5-16: Summary of Accidents Occurring on Coal Pit Lane									
Severity and Number	**Light**	**Dark**	**Wet**	**Dry**	**Single Veh**	**Veh to Veh**	**Veh to Ped**	**Cycle**	**M/cycle**
Serious (3)	1	2	-	3	1	-	-	1	1
Slight (17)	11	6	7	10	8	6	1	-	2
Total (20)	**12**	**8**	**7**	**13**	**9**	**6**	**1**	**1**	**3**

5.93 The first serious accident occurred when a car overtook a light goods vehicle and hit a motorcycle and the second when a car was travelling too fast, overshot the Monks Kirby Lane junction and crashed. The third was when a cyclist fell over.

5.94 Two of the slight accidents also occurred at the Monks Kirby Lane junction, the first when a car skidded on ice and hit a car travelling in the opposite direction and the second when two cars collided while one was overtaking.

5.95 Two accidents were classified as slight at the junction with Wood Farm. The first of these was when a car failed to give way and collided with another and the second occurred when a car skidded on ice and overturned into a field. A further accident occurred at the junction with Main Street when a car overtook a HGV and turned right into the path of an oncoming car.

5.96 A taxi cut up a motorcycle at the junction with Main Street and two cars also collided in a turning movement at the Brockhurst Lane junction. In dark and wet conditions a car left the carriageway between Willey and Wolvey, so as to avoid an animal. A car also hit another in Willey while trying to overtake in wet weather.

5.97 There was a hit and run incident when a car clipped a pedal cyclist while overtaking and another accident occurred when a car collided with a motorcycle, also during an overtaking manoeuvre.

5.98 The remaining six accidents were single vehicle incidents when the driver lost control. Two of these occurred during icy conditions, one on a bend in the road, one on a loose road surface and one when the driver was above the legal alcohol limit.

Coal Pit Lane/Fosse Way/Mere Lane Junction

5.99 There was one serious and seven slight accidents reported at the junction with Coal Pit Lane/Fosse Way/Mere Lane and these are summarised below.

Table 5-17: Summary of Accidents Occurring at the Coal Pit Lane/Fosse Way/Meer Lane Junction									
Severity and Number	**Light**	**Dark**	**Wet**	**Dry**	**Single Veh**	**Veh to Veh**	**Veh to Ped**	**Cycle**	**M/cycle**
Serious (1)	1	-	-	1	-	1	-	-	-
Slight (7)	5	2	2	5	-	7	-	-	-
Total (8)	**6**	**2**	**2**	**6**	**-**	**8**	**-**	**-**	**-**

5.100 The serious accident was a collision during an overtaking manoeuvre as a car was turning right.

5.101 All of the slight accidents were collisions involving two or more cars when one failed to give way at the junction. One of these was in dark, one in wet and another in dark and wet conditions.

B4027 Lutterworth Road between the A5 and Pailton Village

5.102 There were two serious and three slight accidents recorded on the B4027 Lutterworth Road between the A5 and Pailton village and these are summarised below.

Table 5-18: Summary of Accidents Occurring on the B4027 Lutterworth Road between the A5 and Pailton Village									
Severity and Number	**Light**	**Dark**	**Wet**	**Dry**	**Single Veh**	**Veh to Veh**	**Veh to Ped**	**Cycle**	**M/cycle**
Serious (2)	2	-	1	1	-	1	-	-	1
Slight (3)	3	-	3	-	-	2	-	-	1
Total (5)	**5**	**-**	**4**	**1**	**-**	**3**	**-**	**-**	**2**

5.103 The first serious accident at this junction occurred when a car crossed the carriageway into the path of an oncoming car and the second was when three motorcycles collided and fell in wet weather.

5.104 The three slight accidents all occurred in wet conditions, one when a car skidded on black ice and a second car stopped to assist; a third car then hit the second car. Another occurred when a moped lost control, skidded across the road and ended up in a ditch. The third was when two cars collided on an icy road while one was overtaking.

B578 Lutterworth Road between the A5 and Burbage Village

5.105 There were four accidents classified as slight along the B578 Lutterworth Road between the A5 and Burbage village and these are summarised below.

Table 5-19: Summary of Accidents Occurring on the B578 Lutterworth Road between the A5 and Burbage Village

Severity and Number	Light	Dark	Wet	Dry	Single Veh	Veh to Veh	Veh to Ped	Cycle	M/cycle
Slight (4)	2	2	2	2	3	1	-	-	-

5.106 Three of these accidents were single vehicle incidents when the driver lost control on a bend, one in wet weather and one at night. In the third of these incidents, it was dark and wet and the driver was above the legal alcohol limit. The final accident at this junction was a two car rear shunt.

Lutterworth Road in Ullesthorpe Village

5.107 There were two accidents classified as slight along Lutterworth Road in Ullesthorpe village and these are summarised below.

Table 5-20: Summary of Accidents Occurring on Lutterworth Road in Ullesthorpe Village

Severity and Number	Light	Dark	Wet	Dry	Single Veh	Veh to Veh	Veh to Ped	Cycle	M/cycle
Slight (2)	1	1	2	-	-	1	-	1	-

5.108 One accident occurred when a car tried to overtake a pickup truck with a trailer, failed to see the trucks indication for turning and collided. The other accident on this road was when a car collided with the rear of pedal cycle on a wet night.

Ullesthorpe Road

5.109 The table below contains details of the four serious and four slight accidents that occurred on Ullesthorpe Road.

Table 5-21: Summary of Accidents Occurring on Ullesthorpe Road

Severity and Number	Light	Dark	Wet	Dry	Single Veh	Veh to Veh	Veh to Ped	Cycle	M/cycle
Serious (4)	4	-	2	2	-	2	-	-	2
Slight (4)	3	1	3	1	3	-	-	-	1
Total (8)	**7**	**1**	**5**	**3**	**3**	**2**	**-**	**-**	**3**

5.110 The first serious accident on Ullesthorpe Road occurred when a car collided head on with a bus/coach on a bend and left the carriageway. Another occurred when a car lost control on a bend and hit an oncoming car. One occurred when a car moved off at the junction with

Mere Lane and collided with a motorcycle and the last serious accident occurred when a motorcycle lost control and crashed at the junction with Elms Lodge.

5.111 Of the accidents classified as slight, the first was when a car lost control on a bend and crashed 50 metres south east of the junction with Elms Lodge and a second was a similar incident in wet weather at the Woodby Lane junction. A car also skidded on a bend and left the carriageway near the entrance to the Elms Farm Industrial Estate. The final slight accident happened 30 metres east of the Woodby Lane junction as a motorcycle clipped the verge and hit a car travelling in the opposite direction.

Mere Lane

5.112 There were three accidents classified as slight along Mere Lane and these are summarised in the table below.

Table 5-22: Summary of Accidents Occurring on Mere Lane

Severity and Number	Light	Dark	Wet	Dry	Single Veh	Veh to Veh	Veh to Ped	Cycle	M/cycle
Slight (3)	3	-	-	3	-	1	-	-	2

5.113 The first of the accidents occurred when a motorcycle collided with a goods vehicle on a bend and the second when a motorcycle lost control and crashed. The final accident on Mere Lane occurred when a car lost control on a bend and hit a car that was travelling in the opposite direction.

Dunton Bassett Village

5.114 There was one serious and five slight accidents in Dunton Bassett. The table below summarises the details of these collisions.

Table 5-23: Summary of Accidents Occurring in Dunton Bassett Village

Severity and Number	Light	Dark	Wet	Dry	Single Veh	Veh to Veh	Veh to Ped	Cycle	M/cycle
Serious (1)	-	1	1	-	1	-	-	-	-
Slight (5)	3	2	2	3	2	-	2	-	1
Total (6)	**3**	**3**	**3**	**3**	**3**	**-**	**2**	**-**	**1**

5.115 The one serious accident in Dunton Bassett village occurred on Leire Lane in dark and wet conditions when a car lost control and hit a tree.

5.116 A further two slight accidents also occurred on the same road when cars also lost control on a bend and left the carriageway. At the junction with Broughton Lane and Main Street a drive who was over the legal alcohol limit lost control and ended up in a ditch. On Main Street, near to St Mary's Church, a bus skidded on ice and mounted the kerb, hitting some children waiting for a school bus. On Coopers Lane, a pedestrian stepped off a bus and stepped in front of a car, also resulting in a slight accident.

B4114 Coventry Road

5.117 There was one fatality, one serious and six slight accidents on the B4114 Coventry Road. These accidents are summarised in the table below.

Table 5-24: Summary of Accidents Occurring on the B4114 Coventry Road

Severity and Number	Light	Dark	Wet	Dry	Single Veh	Veh to Veh	Veh to Ped	Cycle	M/cycle
Fatal (1)	1	-	-	1	-	-	-	-	1
Serious (1)	1	-	-	1	-	1	-	-	-
Slight (6)	2	4	3	3	3	2	-	-	1
Total (8)	**4**	**4**	**3**	**5**	**3**	**3**	**-**	**-**	**2**

5.118 The only fatal accident occurred when a motorcycle did not notice a car in front slowing to overtake a parked goods vehicle. The motorcycle attempted to overtake the car on its nearside and collided with both the goods vehicle and the car.

5.119 The one serious accident occurred when a car lost control on a bend and hit an oncoming car.

5.120 Of the slight accidents, a car lost control in standing water and hit an oncoming car, another car lost control on a bend and left the carriageway and a car also lost control on black ice, left the carriageway and overturned.

5.121 There were two accidents at the junction with Bumblebee Lane, one when a motorcyclist fell off trying to avoid a car and tractor turning and another for which no Stats 19 Form was received by LCC. The final accident occurred near to the A5 and was a rear shunt involving two cars in snowy conditions.

Bill Crane Way

5.122 There were three slight accidents reported on Bill Crane Way and these are summarised below.

Table 5-25: Summary of Accidents Occurring on Bill Crane Way

Severity and Number	Light	Dark	Wet	Dry	Single Veh	Veh to Veh	Veh to Ped	Cycle	M/cycle
Slight (3)	2	1	2	1	-	2	-	-	1

5.123 There was a rear shunt involving two cars in dark and wet conditions at the junction with Leicester Road and a two car collision in wet weather at the same junction. A car hit a motorcycle during a turning manoeuvre at the junction with Lutterworth Road.

Bitteswell Road

5.124 There was one serious and one slight accident on Bitteswell Road. These collisions have been summarised in the table below.

Table 5-26: Summary of Accidents Occurring on Bitteswell Road									
Severity and Number	**Light**	**Dark**	**Wet**	**Dry**	**Single Veh**	**Veh to Veh**	**Veh to Ped**	**Cycle**	**M/cycle**
Serious (1)	-	1	-	1	-	-	-	-	1
Slight (1)	1	-	1	-	-	-	-	-	1
Total (2)	**1**	**1**	**1**	**1**	**-**	**-**	**-**	**-**	**2**

5.125 The serious accident happened at night when a car cut a corner and hit a motorcycle at the Macauley Road junction.

5.126 The slight accident was when a motorcycle turned right at the Brookfield Way junction and was hit from behind by a car.

Existing Traffic Conditions

5.127 The impact of the development has been assessed at the following junctions as agreed with Highways England, LCC and WCC:

- M1 Junction 20
- A4303/ A426 roundabout
- A4303/ Coventry Road roundabout
- A4303/ Shackleton Way junction
- A4303/ Hunter Boulevard roundabout
- A5/ A4303 (Cross in Hand) roundabout
- A5/ Mere Lane junction
- M69 Junction 1
- A5/ A426 (Gibbet Hill) roundabout
- M6 Junction 1

5.128 Traffic counts were undertaken on Thursday 15 May 2014. The surveys were conducted by Traffic Survey Partners (TSP) using combination of high mast video equipment and manual counts allowing full classified turning movements to be established. Surveys were conducted from 7am to 10am and 4pm to 7pm and the morning and evening peak hour were found to be 7.30am to 8.30am and 5pm to 6pm. The traffic count data is presented in **Appendix M**.

5.129 A separate traffic count was undertaken by K&M Traffic Surveys at the A5/ Mere Lane junction on Tuesday 3 June 2014. This manual count was undertaken from 7.30am to 9.30am and 4.30pm and 6.30pm. This data is also presented in **Appendix M.**

5.130 To supplement the traffic counts, queue length surveys were also undertaken at each junction. Queues were recorded at 5-minute intervals to ensure that the counts provided a true reflection of demand. The base traffic flows have been adjusted to reflect any excess queuing at the end of the modelled period and the resultant 2014 base peak hour traffic

flows are presented in Figures 5.1 and 5.2. All traffic flow diagrams referenced throughout this report are presented in **Appendix N.**

5.131 In July 2015 URS prepared a Supplementary Transport Assessment in response to a request for further information set out in a Technical Note (TN2) prepared by AECOM on behalf of Highways England. The original Transport Assessment was submitted in support of a detailed planning application for the DHL Supply Chain. One of the items requested was to undertake a validation exercise against observed queue lengths to ensure that model outputs replicated existing conditions.

5.132 At each junction queues were recorded by lane on each approach arm. Queues were recorded in metres and have been converted into pcus[1] to enable a comparison to be made between observed queues and those predicted by the various traffic models. The average queue over all lanes on each approach has been calculated for the modelled period (7.30am to 8.30am and 5pm to 6pm) and the results of this exercise are presented in **Appendix O**.

5.133 In order to validate the results of the modelling the observed queue lengths are shown in brackets in Table 5-27 to Table 5-36 below which summarise the main performance indicators at the modelled junctions in the base year 2014.

5.134 Both Highways England and LCC have accepted that the model outputs replicate the existing conditions and as a result there have been no adjustments made to the original models. A full explanation of the validation exercise is provided in the Supplementary Transport Assessment (dated 20 July 2015) prepared for the DHL detailed planning application.

5.135 In June 2013, IDI Gazeley commissioned URS to undertake Automatic Traffic Counts at a variety of locations surrounding Magna Park. The ATCs recorded continuous traffic volumes between Monday 3 June 2013 and Sunday 30 June 2013. The purpose of the surveys was to establish whether the shift changeover at Magna Park coincides with an increase in traffic volumes on roads that pass through some local villages, particularly those situated to the north and east that are perceived to be sensitive to traffic increases.

5.136 The results indicated that on the minor road network to the north and east of Magna Park, there is no evidence of a significant increase in traffic flows to coincide with the shift changeover at Magna Park. This suggests that Magna Park employees do not routinely use the minor roads to the north of the Park to travel to and from work. A copy of the survey report is presented in **Appendix P**.

Existing Network Performance

5.137 To provide a base against which to test the impact of the development, junction capacity analysis has been undertaken at the 10 junctions identified in paragraph 5.127 using the 2014 base flows presented in Figures 5.1 and 5.2. The assessment tools ARCADY, PICADY and TRANSYT have been used.

[1] Passenger car unit (pcu) is equivalent to 5.75 metres

5.138 ARCADY calculates queues and delays at roundabouts. The critical outputs are the Ratio of Flow to Capacity (RFC) and the maximum queue predicted for each arm. If the RFC is below 1.00 then the junction is operating within capacity and little or no queuing will result. In order to allow for a performance margin, a value of 0.85 is more typically considered to represent the desirable maximum value.

5.139 Within ARCADY the O-D Table option has been used to assess the performance of the roundabouts. This generates a synthesised profile from the full turning count data and creates a peak half hour period within the middle of the modelled period to represent an increase in demand during the peaks.

5.140 On site measurements have been taken at each junction to determine the key geometric parameters for input to the ARCADY models including the approach half width and the entry width. For those parameters that cannot easily be measured on site such as the effective flare and entry radius, measurements have been taken from Ordnance Survey mapping.

5.141 PICADY calculates queues and delays at priority junctions. The critical outputs are the Ratio of Flow to Capacity (RFC) and the maximum queue predicted for each movement that is opposed by a priority traffic stream. In common with ARCADY, a maximum RFC value of 0.85 is considered to represent the desirable maximum value.

5.142 Within PICADY, the O-D Table option has been used to assess the performance of the junctions.

5.143 On site measurements have been taken at the junctions to determine the key geometric parameters for input to the PICADY models. At priority junctions this includes the major road width, the width of the right turn lane, the minor road width at 5 metre increments up to a distance of 20 metres back from the give line and visibility from the minor road to the left and the right measured at distance of 10 metres back from the give line.

5.144 TRANSYT 12 has been used to test the capacity of M69 Junction 1 and M6 Junction 1, which are both partially signalised roundabouts. The TRANSYT programme is the most commonly used method for optimising signal timings in signal networks where benefits can be obtained by co-ordination between adjacent junctions. The method is suitable for roundabouts where some or all of the arms are signalled. By using various facilities available within TRANSYT, such as link weightings and queue penalties, the program can be used to model traffic behaviour on the roundabout, control queue lengths and find signal timings such that queues do not form to block upstream junctions.

5.145 The method of applying TRANSYT to signalised roundabouts has been designed to arrive at timings that keep the circulating sections of the roundabout free flowing without resulting in significant congestion on entry arms. The method results in entry links running at high degrees of saturation, ideally 85 to 95 per cent, which should result in circulatory links having lower degrees of saturation, ideally below 80 per cent.

5.146 Junction 1 of the M69 has six arms and, with the exception of the B4109 to Wolvey, they are controlled by traffic signals. The method of control is a simple two-stage arrangement with the green signal alternating between approach and circulatory carriageways. The junction operates under MOVA control.

5.147 Traffic signal information has been provided by A-one+ Integrated Highway Services who is Highways England's service provider for Area 7 – East Midlands. The information that has been provided includes a scaled drawing of the junction, stage, phase and intergreen information. These have been input directly to the TRANSYT model. A copy of the traffic signal information is contained within **Appendix Q**. A TRANSYT link/ node diagram is presented in **Appendix R**.

5.148 Junction 1 of the M6 has four arms. Both motorway off-slips are controlled by traffic signals while the A426 arms are standard roundabout entries. At the off-slips the method of control is a simple two-stage arrangement with the green signal alternating between approach and circulatory carriageways. The junction operates under MOVA control.

5.149 Traffic signal information has been provided by Warwickshire County Council (WCC) and includes a scaled drawing of the junction, stage, phase and intergreen information. A copy of the traffic signal information is contained within **Appendix Q**. A TRANSYT link/ node diagram for this junction is presented in **Appendix R**.

5.150 The results of the junction modelling for the existing peak hour traffic flows are summarised in the tables below. Printouts of the full analysis are presented in **Appendix S**.

M1 Junction 20

5.151 The results of the ARCADY assessment in the existing peak hours are summarised in the table below. Full model printouts from this analysis are presented in **Appendix S**.

Table 5-27: Summary of the Main Performance Indicators at M1 Junction 20 – 2014 Base Flows

	AM Peak		PM Peak	
Approach Arm	**RFC**	**Queue**	**RFC**	**Queue**
M1 Southbound off-slip	0.417	1 (10)	0.396	1 (9)
A4304	0.651	2 (7)	0.394	1 (2)
M1 Northbound off-slip	0.377	1 (10)	0.284	0 (8)
A4303	0.536	1 (4)	0.586	1 (5)

5.152 Table 5.27 indicates that M1 Junction 20 currently operates within capacity during both peaks.

A4303/ A426 Roundabout

5.153 The results of the ARCADY assessment in the existing peak hours are summarised in the table below. Full model printouts from this analysis are presented in **Appendix S**.

Table 5-28: Summary of the Main Performance Indicators at the A4303/ A426 Roundabout – 2014 Base Flows

	AM Peak		PM Peak	
Approach Arm	**RFC**	**Queue**	**RFC**	**Queue**
A426 North	0.873	6 (9)	0.870	6 (7)
A4303 East	0.820	4 (8)	0.638	2 (9)
A426 South	0.719	2 (17)	0.718	2 (10)
A4303 West	0.482	1 (8)	0.678	2 (13)

5.154 Table 5.28 indicates that the A4303/ A426 junction currently operates within capacity albeit with RFCs above the desirable threshold of 0.85 on the A426 north during both peaks. The results indicate that this roundabout is beginning to come under pressure.

A4303/ Coventry Road Roundabout

5.155 The results of the ARCADY assessment in the existing peak hours are summarised in the table below. Full model printouts from this analysis are presented in **Appendix S**.

Table 5-29: Summary of the Main Performance Indicators at the A4303/ Coventry Road Roundabout – 2014 Base Flows

	AM Peak		PM Peak	
Approach Arm	**RFC**	**Queue**	**RFC**	**Queue**
Coventry Road	0.603	2 (6)	0.348	1 (7)
A4303 East	0.562	1 (4)	0.345	1 (2)
Mobile Home Park	0.040	0 (1)	0.015	0 (0)
A4303 West	0.310	0 (0)	0.613	2 (0)

5.156 Table 5.29 indicates the A4303/ Coventry Road roundabout currently operates within capacity during both peaks.

A4303/ Shackleton Way

5.157 This is a left in/ left out junction and therefore there is only one opposed movement – the left turn from Shackleton Way onto the A4303.

5.158 The results of the PICADY assessment in the existing peak hours are summarised in the table below. Full model printouts from this analysis are presented in **Appendix S**.

Table 5-30: Summary of the Main Performance Indicators at the A4303/ Shackleton Way Junction – 2014 Base Flows				
	AM Peak		PM Peak	
Movement	RFC	Queue	RFC	Queue
B - C	0.185	0	0.495	1
Where B is Shackleton Way and C is A4303 East				

5.159 Table 5.30 indicates the A4303/ Shackleton Way junction currently operates within capacity during both peaks.

A4303/ Hunter Boulevard Roundabout

5.160 The results of the ARCADY assessment in the existing peak hours are summarised in the table below. Full model printouts from this analysis are presented in **Appendix S**.

Table 5-31: Summary of the Main Performance Indicators at the A4303/ Hunter Boulevard Roundabout – 2014 Base Flows				
	AM Peak		PM Peak	
Approach Arm	RFC	Queue	RFC	Queue
Hunter Boulevard	0.209	0 (5)	0.429	1 (5)
A4303 East	0.599	1 (6)	0.328	0 (5)
Access to George	0.020	0 (2)	0.203	0 (7)
A4303 West	0.623	2 (6)	0.403	1 (4)

5.161 Table 5.31 indicates that the A4303/ Hunter Boulevard roundabout currently operates within capacity during both peaks.

Cross In Hand Roundabout

5.162 The results of the ARCADY assessment in the existing peak hours are summarised in the table below. Full model printouts from this analysis are presented in **Appendix S**.

Table 5-32: Summary of the Main Performance Indicators at the Cross In Hand Roundabout – 2014 Base Flows				
	AM Peak		PM Peak	
Approach Arm	RFC	Queue	RFC	Queue
A5 North	0.784	4 (8)	0.400	1 (3)
A4303	0.552	1 (10)	0.560	1 (6)
A5 South	0.495	1 (8)	0.557	1 (9)
B4027 Lutterworth Rd	0.194	0 (3)	0.372	1 (7)
Coal Pit Lane	0.396	1 (6)	0.256	0 (5)

Table 5.32 indicates that the Cross In Hand roundabout currently operates within capacity during peaks.

A5/ Mere Lane Junction

5.163 The results of the PICADY assessment in the existing peak hours are summarised in the table below. Full model printouts from this analysis are presented in **Appendix S**.

Table 5-33: Summary of the Main Performance Indicators at the A5/ Mere Lane Junction – 2014 Base Flows

	AM Peak		PM Peak	
Movement	**RFC**	**Queue**	**RFC**	**Queue**
B - C	0.260	0	0.081	0
B – A	0.066	0	0.050	0
C – B	0.091	0	0.134	0
Where A is A5 North; B is Mere Lane and; C is A5 South				

5.164 Table 5.33 indicates that the A5/ Mere Lane junction currently operates within capacity during both peaks.

M69 Junction 1

5.165 The results of the TRANSYT assessment in the existing peak hours are summarised in the table below. Approach links are shown in italics. A TRANSYT link/node diagram is presented in Appendix N. Full model printouts from this analysis are presented in **Appendix S.**

Table 5-34: Summary of the Main Performance Indicators at M69 Junction 1 – 2014 Base Flows

Link		AM Peak		PM Peak	
No.	**Description**	**Sat %**	**Queue**	**Sat %**	**Queue**
10	*M69 eastbound off-slip – inside/middle lanes*	71	10 (8)	83	16 (6)
11	*M69 eastbound off-slip – outside lane*	48	3 (5)	63	6 (5)
12	Circulating – inside lane	50	3	43	4
13	Circulating – middle lane	40	1	44	4
14	Circulating – outside lane	31	2	38	3
20	*A5 North – inside lane*	64	6 (9)	57	5 (6)
21	*A5 North – middle/outside lanes*	91	17 (9)	91	17 (7)
22	Circulating – Inside/middle lane	32	6	53	8
23	Circulating – outside lane	17	0	28	0
30	*B4109 Rugby Rd – inside lane*	24	2 (3)	22	1 (2)
31	*B4109 Rugby Rd – middle/outside lanes*	97	32 (9)	88	11 (5)
32	Circulating – inside lane	56	3	34	2
33	Circulating – middle lane	68	12	59	6
34	Circulating – outside lane	25	0	19	0
40	*M69 westbound off-slip – inside lane*	77	5 (4)	94	10 (4)
41	*M69 westbound off-slip – middle/outside lanes*	72	8 (5)	51	5 (3)
42	Circulating – inside lane	95	20	83	12
43	Circulating – outside lane	70	15	37	2
50	*A5 South – inside lane*	72	5 (7)	44	3 (4)
51	*A5 South – middle/outside lanes*	86	14 (8)	88	14 (6)
52	Circulating – inside lane	38	3	37	3
53	Circulating – middle lane	69	5	36	6
54	Circulating – middle/outside lanes	18	0	13	0
60	*B4109 Hinckley Road – inside/outside lanes*	35	1 (6)	33	1 (3)
61	Circulating – all lanes	39	0	28	0

5.166 Table 5.34 indicates that Junction1 of the M69 currently operates within capacity during both peaks. It is apparent however that the junction is beginning to come under pressure with high degrees of saturation on certain links, most notably links 21, 31 and 42 in the AM peak and links 21 and 40 in the PM peak.

Gibbet Hill Roundabout

5.167 The results of the ARCADY assessment in the existing peak hours are summarised in the table below. Full model printouts from this analysis are presented in **Appendix S**.

Table 5-35: Summary of the Main Performance Indicators at the Gibbet Hill Roundabout – 2014 Base Flows

	AM Peak		PM Peak	
Approach Arm	**RFC**	**Queue**	**RFC**	**Queue**
A5 North	0.718	3 (9)	0.517	1 (7)
A426 North	0.662	2 (10)	0.573	1 (6)
Gibbet Lane	0.278	0 (3)	0.164	0 (2)
A5 South	0.508	1 (14)	0.574	1 (9)
A426 South	0.795	4 (6)	0.891	7 (7)

5.168 Table 5.35 indicates that the Gibbet Hill roundabout currently operates within capacity albeit with RFCs above the desirable threshold of 0.85 on the A426 south during the PM peak. The results indicate that this roundabout is beginning to come under pressure.

M6 Junction 1

5.169 The results of the TRANSYT assessment in the existing peak hours are summarised in the table below. Approach links are shown in italics. A TRANSYT link/node diagram is presented in Appendix N. Full model printouts from this analysis are presented in **Appendix S**.

Table 5-36: Summary of the Main Performance Indicators at M6 Junction 1 – 2014 Base Flows

Link		AM Peak		PM Peak	
No.	**Description**	**Sat %**	**Queue**	**Sat %**	**Queue**
10	*M6 eastbound off-slip – inside lane*	69	6 (5)	73	6 (6)
11	*M6 eastbound off-slip – middle/outside lanes*	78	13 (5)	77	12 (3)
12	Circulating – inside/middle lanes	31	6	34	7
13	Circulating – outside lane	23	3	20	2
20	*A426 north – inside/outside lanes*	72	10 (10)	56	4 (7)
21	Circulating – all lanes	25	1	22	0
30	*M6 westbound off-slip – inside lane*	90	8 (6)	52	3 (4)
31	*M6 westbound off-slip - middle/outside lanes*	45	5 (3)	31	3 (2)
32	Circulating – inside/middle lanes	65	9	50	5
33	Circulating – outside lane	23	2	22	2
40	*A426 south – inside/outside lanes*	75	2 (5)	76	2 (4)
41	Circulating – all lanes	10	0	10	0

5.170 Table 5.36 indicates that Junction 1 of the M6 currently operates within capacity during both peaks.

6 TRIP GENERATION AND DISTRIBUTION

General

6.1 The trip generation and distribution to the four main land uses at the proposed development has been calculated separately and is set out below. The four main uses are:

- B8 storage and distribution, total gfa 427,351m^2 of which 52% (222,223m^2) is north of the Magna Park Hub and 48% (205,128m^2) is south of the Magna Park Hub.
- B1 (a & b) Innovation Centre, total gfa 2,325m^2 within Magna Park Hub
- B1 (a & b) Holovis, total gfa 7,000m^2
- Logistics Institute of Technology, 400 students, 40 teaching staff and 30 maintenance staff within Magna Park Hub

6.2 The provision of two points of access, one at both ends of the development, will allow an internal highway connection to be provided within the site. This is beneficial in highway terms as it provides flexibility in terms of access and egress options allowing the impact of the development to be dispersed more evenly across the external highway network.

6.3 However for the purposes of distributing development trips onto the network it is assumed that all traffic generated by development that is situated within and to the south of the Magna Park Hub will use the southern access route, while all traffic generated by the four B8 units to the north of the Magna Park Hub will use the northern access route.

6.4 This is considered to present the worst case as in practise some development related traffic will use the internal road network within Magna Park (both proposed and existing) rather than joining the external highway network at the access that is closest to the point of origin/destination.

Trip Generation – B8 Storage and Distribution

6.5 IDI Gazeley has considerable experience in the provision, operation and management of medium to large employment parks throughout the country and Magna Park Lutterworth is one of its largest sites. Over the past 25 years the site has developed to become one of Europe's largest dedicated distribution parks and during this time a considerable amount of work has been done to determine the traffic impact from the site on the surrounding highway network.

6.6 Traffic counts have been undertaken at regular intervals to establish the amount of traffic entering and leaving the Park in order that a reliable trip rate could be calculated. Previously these have been accepted by Highways England and Leicestershire County Council as providing a reliable estimate of traffic generation for further B8 use on the site.

6.7 The most recent survey was completed during June 2013 when ATCs were in place for a continuous four week period. Vehicles were classified based on axle length into motorcycles, cars, light goods vehicles, heavy goods vehicles and buses. For the purposes of calculating trip rates, cars and light goods vehicles were combined to establish the total number of light vehicles. Flows on Hunter Boulevard and Shackleton Way were combined to establish the total number of arrivals and departures at the Park. The data excluded trips

to and from the Toyota building at the southern end of Shackleton Way because the ATCs were located to the north of the access to this unit.

6.8 The ATC data was then related to the occupied floor area to derive the peak hour trip generation rates. Trips rates were calculated per 100m^2 and the results are shown in the tables below. The range of occupiers and unit sizes that have been used to calculate the trip rate reinforces the reliability of the data and should provide a robust estimate of trip generation at units involved in B8 distribution.

6.9 Use of these trip rates has been agreed with both Highways England and LCC for the purposes of calculating trip generation to the proposed B8 units. Extracts from the Trip Generation Report are presented in **Appendix T**.

Table 6-1: Average Trip Generation Rates per 100m^2

	AM Peak		PM Peak	
Vehicle Type	**Arrivals**	**Departures**	**Arrivals**	**Departures**
Light Vehicles	0.129	0.032	0.036	0.100
HGVs	0.012	0.016	0.009	0.012
Total	**0.141**	**0.048**	**0.045**	**0.112**

6.10 Using the information presented in the tables above the traffic generation for the proposed development has been calculated and is presented in the tables below. Based on the size of the development, the use of average trip rates is considered appropriate and has been agreed with both Highways England and LCC.

Table 6-2: Average Trip Generation for Proposed B8 Units

	AM Peak		PM Peak	
Vehicle Type	**Arrivals**	**Departures**	**Arrivals**	**Departures**
Light Vehicles – North of Hub	287	71	80	222
HGVs – North of Hub	27	36	20	27
Sub Total	*314*	*107*	*100*	*249*
Light Vehicles – South of Hub	265	66	74	205
HGVs – South of Hub	25	33	18	25
Sub Total	*290*	*99*	*92*	*230*
Total	**604**	**206**	**192**	**479**

Trip Distribution – B8 Storage and Distribution

6.11 The Leicester and Leicestershire Integrated Transport Model (LLITM) has been used to provide pre-existing highway assignments to establish the trip distribution for the proposed development. The use of LLITM for this purpose has been agreed with both Highways England and LCC.

6.12 AM and PM peak hour distributions to/from existing zones 5807 and 5808 have been provided. These are the main Magna Park zones to the north of the A4303 in LLITM and therefore the distribution will be representative of the proposed development. The data provides details of the traffic flows for all vehicles and HGVs in the forecast year 2021.

6.13 The relevant output from LLITM is presented in **Appendix U** while a summary of the distribution is set out in the tables below.

Table 6-3: AM Peak Trip Distribution from LLITM

	Arrivals		Departures	
Route	**All Vehicles**	**HGV**	**All Vehicles**	**HGV**
Coventry Road/ Brookfield Way	14.57%	0.00%	13.11%	0.00%
A426/ Lutterworth High Street	6.43%	18.52%	7.01%	15.15%
M1 North	14.17%	2.96%	17.07%	36.36%
M1 South	5.91%	0.74%	3.35%	2.02%
A4303 Market Harborough	2.62%	0.00%	1.22%	0.00%
Subtotal towards M1	***43.70%***	***62.22%***	***41.77%***	***53.54%***
High Cross Road	4.59%	0.00%	1.52%	0.00%
B578 Burbage/ Barwell/ Hinckley	5.77%	0.74%	3.05%	1.01%
B4109 Hinckley	5.25%	2.96%	3.05%	3.03%
A5 North of M69	7.87%	20.00%	8.23%	10.10%
M69 East	0.00%	0.00%	0.00%	0.00%
M69 West	0.00%	0.00%	0.00%	0.00%
Subtotal north on A5	***23.49%***	***23.70%***	***15.85%***	***14.14%***
A5 South of Gibbet Hill	5.64%	3.70%	8.84%	10.10%
A426 South of M6 Junction 1	1.84%	8.89%	6.40%	18.18%
M6 West	1.31%	0.00%	1.52%	0.00%
Subtotal south on A5	***8.79%***	***12.59%***	***16.77%***	***28.28%***
Coal Pit Lane	11.94%	0.00%	7.93%	0.00%
B4027 to Pailton	9.84%	1.48%	15.55%	4.04%
Mere Lane	2.23%	0.00%	2.13%	0.00%
Total	**100%**	**100%**	**100%**	**100%**

Table 6-4: PM Peak Trip Distribution from LLITM				
	Arrivals		Departures	
Route	**All Vehicles**	**HGV**	**All Vehicles**	**HGV**
Coventry Road/ Brookfield Way	13.69%	0.00%	15.38%	0.00%
A426/ Lutterworth High Street	4.78%	15.00%	4.87%	12.70%
M1 North	12.42%	45.00%	17.44%	65.08%
M1 South	2.23%	2.50%	3.33%	0.00%
A4303 Market Harborough	1.59%	0.00%	2.18%	0.00%
Subtotal towards M1	***34.71%***	***62.50%***	***43.21%***	***77.78%***
High Cross Road	5.41%	0.00%	4.23%	0.00%
B578 Burbage/ Barwell/ Hinckley	4.78%	0.00%	5.90%	1.59%
B4109 Hinckley	3.82%	5.00%	2.44%	0.00%
A5 North of M69	4.14%	15.00%	8.46%	4.76%
M69 East	0.00%	0.00%	0.00%	0.00%
M69 West	0.00%	0.00%	0.00%	0.00%
Subtotal north on A5	***18.15%***	***20.00%***	***21.03%***	***6.35%***
A5 South of Gibbet Hill	9.87%	7.50%	6.67%	1.59%
A426 South of M6 Junction 1	1.27%	7.50%	2.82%	12.70%
M6 West	1.27%	0.00%	0.51%	0.00%
Subtotal south on A5	***12.42%***	***15.00%***	***10.00%***	***14.29%***
Coal Pit Lane	13.06%	0.00%	7.44%	0.00%
B4027 to Pailton	16.88%	2.50%	15.90%	1.59%
Mere Lane	4.78%	0.00%	2.44%	0.00%
Total	**100%**	**100%**	**100%**	**100%**

6.15 The peak hour trips associated with the proposed B8 development are shown in Figures 6.1 to 6.4. Figures 6.1 and 6.2 show the traffic flows generated by the units to the north of the Magna Park Hub while Figures 6.3 and 6.4 show the flows generated by the units to the south of the Hub.

6.16 For the units to the north of the Hub it is assumed that all vehicles will enter and leave the site via the new roundabout on the A5 at the northern end of the development.

6.17 For the units to the south of the Hub it is assumed that all vehicles to/from the east (i.e. towards Lutterworth and the M1) will enter and leave the site via the existing access roundabout on the A4303 (Hunter Boulevard) while all vehicles to/from the north, south and west will use the proposed new roundabout at the A5/ Mere Lane junction. The traffic flow diagrams are presented in **Appendix N**.

Trip Generation – B1 Innovation Centre

6.18 The objective of the Innovation Centre is to help new start-up companies to develop by providing services such as office space and training facilities. The proposed floor area is 2,325m^2 and it will be located within the Magna Park Hub.

6.19 The trip generation to the proposed Innovation Centre has been based on the TRICS database, version 7.2.1. Sites in the B1 office land use category have been used with the selection refined to only include sites with a suburban location. Sites in Ireland, Scotland and Greater London have been excluded and the data has been further refined to only include developments with a floor area ranging from 186m^2 to 5,000m^2. TRICS identified six sites matching these criteria and the trip rates are shown in the table below. For employment development, trip rates are expressed as trips per 100m^2. The TRICS data is presented in **Appendix V**. The trip rates have been agreed with LCC.

Table 6-5: Vehicle Trip Rates Using TRICS - B1 Office Use

	AM Peak		PM Peak	
Vehicle Type	**Arrivals**	**Departures**	**Arrivals**	**Departures**
All Vehicles	2.302	0.400	0.204	1.796

6.20 The trip rates presented in the table above have been applied to the floor area of the proposed Innovation Centre (2,325m^2) and the trip generation is set out in the table below.

Table 6-6: Vehicle Trip Generation at Proposed Innovation Centre

	AM Peak		PM Peak	
Vehicle Type	**Arrivals**	**Departures**	**Arrivals**	**Departures**
All Vehicles	54	9	5	42

Trip Distribution - B1 Innovation Centre

6.21 Output from LLITM presented in Table 6-3 and Table 6-4 has been used to establish the trip distribution for the proposed Innovation Centre.

6.22 The peak hour trips associated with the proposed Innovation Centre are shown in Figures 6.5 and 6.6.

6.23 Being located within the Magna Park Hub it is assumed that all vehicles will enter and leave the site via the new roundabout on Mere Lane at the southern end of the development.

6.24 It is assumed that all vehicles to/from the east (i.e. towards Lutterworth and the M1) will enter and leave the site via the existing access roundabout on the A4303 (Hunter Boulevard) while all vehicles to/from the north, south and west will use the proposed new roundabout at the A5/ Mere Lane junction. The traffic flow diagrams are presented in **Appendix N**.

Trip Generation – B1 Holovis

6.25 There is a proposal for Holovis to relocate to a new building on the extended Magna Park to replace its existing premises at the Brick Barn adjacent to Bittesby House both of which will be demolished. The new Holovis building is proposed for a narrow strip of land between Parcel G (proposed for DHL) and Parcel D (the meadow land). The proposal includes an increase in floor area from 2,787m^2 to 7,000m^2.

6.26 Holovis is a sensory experience design company specialising in the entertainment, industrial, retail and military sectors. Given its bespoke nature and out of town location, there are no sites in the TRICS database with similar characteristics. Therefore the trip generation has been based on first principles using a traffic count that was undertaken at the site access on Tuesday 21 April 2015. During the traffic count, vehicles were recorded arriving and departing from Holovis between 7am and 7pm. Movements recorded during the peak hours are set out in the Table below. The trip rates for Holovis have been agreed with LCC.

Table 6-7: Recorded Peak Hour Traffic Movements at Holovis

	AM Peak		PM Peak	
Vehicle Type	**Arrivals**	**Departures**	**Arrivals**	**Departures**
All Vehicles	27	3	4	18

6.27 Based on the existing floor area (2,787m^2) peak hour trip rates can be calculated and these are presented in the table below.

Table 6-8: Recorded Vehicle Trip Rates at Holovis

	AM Peak		PM Peak	
Vehicle Type	**Arrivals**	**Departures**	**Arrivals**	**Departures**
All Vehicles	0.97	0.11	0.14	0.65

6.28 Trips associated with the existing Holovis unit would have been included in the traffic count undertaken at the site access in April 2015 and in the traffic counts undertaken in May 2014 at all the key junctions on the network. Therefore to avoid double counting, the trip rates presented in Table 6-8 have only been applied to the proposed increase in floor area at Holovis (4,213m^2). The resultant additional trip generation is set out in the table below.

Table 6-9: Trip Generation at Holovis

	AM Peak		PM Peak	
Vehicle Type	**Arrivals**	**Departures**	**Arrivals**	**Departures**
All Vehicles	41	5	6	27

Trip Distribution – B1 Holovis

6.29 Output from LLITM presented in Table 6-3 and Table 6-4 has been used to establish the trip distribution for the proposed increase in floor area at Holovis and the peak hour trips are shown in Figures 6.7 and 6.8.

6.30 Being located to the south of the Magna Park Hub it is assumed that all vehicles will enter and leave the site via the new roundabout on Mere Lane at the southern end of the development.

6.31 It is assumed that all vehicles to/from the east (i.e. towards Lutterworth and the M1) will enter and leave the site via the existing access roundabout on the A4303 (Hunter Boulevard) while all vehicles to/from the north, south and west will use the proposed new roundabout at the A5/ Mere Lane junction.

6.32 Figures 6.9 and 6.10 show the total employment trips associated with the Innovation Centre, Holovis and the B8 units. The traffic flow diagrams are presented in **Appendix N**.

Trip Generation and Distribution – Logistics Institute of Technology

6.33 The trip generation and distribution for the Logistics Institute has been calculated separately for staff and students. Because of its bespoke nature, the calculation is based on first principles. The approach is set out below.

Trip Generation – Students

6.34 It is anticipated that there will be 400 students attending the Logistics Institute. The age range for the students will be 16 to 22.

6.35 For the purpose of this assessment it has been assumed that all students arrive during the morning peak and depart in the evening peak. The principal mode of travel for students will be either by coaches running contract services or by scheduled bus for those living along the route of Arriva service 8/58. The target for participation in coach/bus travel is 75%.

6.36 Car parking for students will be limited to 20 spaces and permits will only be provided to student drivers who commit to participating in a car sharing arrangement that guarantees that no car will arrive or depart with less than three students on board. For the purpose of this assessment it has been assumed that the remaining students, which could be up to 40, will be driven to and from the Logistics Institute and that leg of the journey will be part of a linked or return trip.

6.37 The resultant number of vehicle trips associated with student travel is set out in the following table.

Table 6-10: Vehicle Trip Generation at Proposed Logistics Institute

Mode of Travel	Students (Proportion)	AM Peak				PM Peak			
		Arrive		Depart		Arrive		Depart	
		Car	Coach	Car	Coach	Car	Coach	Car	Coach
Coach/Bus	300 (75%)	0	10	0	10	0	10	0	10
Car Driver	20 (5%)	20	0	0	0	0	0	20	0
Car Passenger (car share)	40 (10%)	0	0	0	0	0	0	0	0
Car Passenger (other)	40 (10%)	40	0	40	0	40	0	40	0

Trip Generation – Staff

6.38 The expectation is that there will be 40 teaching staff and 30 maintenance staff employed at the Logistics Institute. It is assumed that the vast majority will remain on site all day and therefore there will be no morning peak departures or evening peak arrivals.

6.39 Based on experience of similar facilities it has been assumed that 80% of teaching staff will travel to and from work during the peak hours and that they will all travel by car at an occupancy rate of 1.2. Typically teachers are required to transport large amounts of paperwork to and from work on a daily basis making it impracticable in most cases to travel by any other mode than by car. Car sharing is however feasible and it is considered that staff will seek to maximise this opportunity to reduce travel costs. Car sharing will be particularly attractive amongst staff who live reasonable distances from the Logistics Institute.

6.40 The expectation is that one third of maintenance staff will travel to and from work during the peak hours and that they will all travel to work by car as single occupants.

6.41 The table below presents the predicted trip generation based on the assumptions set out above.

Table 6-11: Trip Generation of Staff at Logistics Institute

	AM Peak		PM Peak	
	Arrivals	**Departures**	**Arrivals**	**Departures**
Teaching Staff	27	0	0	27
Maintenance Staff	10	0	0	10
Total	**37**	**0**	**0**	**37**

Trip Distribution – Students

6.42 By its nature the Logistics Institute will have a wider catchment area than a secondary school. The distribution of the students has been based on a gravity model.

6.43 For the purpose of identifying the spread of students it has been assumed that the maximum journey time by car would be in the order of 50 minutes. On that basis the catchment area has been assumed to include the following districts,

- Harborough
- Rugby
- Nuneaton and Bedworth
- North West Leicestershire
- Kettering
- Northampton
- Warwick
- Tamworth
- Coventry
- Blaby
- Oadby and Wigston
- North Warwickshire
- Charnwood
- Daventry
- South Northamptonshire
- Hinckley and Bosworth
- Leicester
- Solihull

6.44 The essence of a gravity model is that the amount of travel between two areas can be considered as being proportional to their population, numbers of jobs, schools, factories, offices etc. but inversely proportional to the distance (or some measure of the separation or deterrence) between them. For the purpose of this model the population is the number of children who are the age that is catered for by the Logistics Institute and the deterrence is a function of the journey time and distance. The model is based on wards. This produces a Gravity Model Factor (GMF) for each ward. The model has been set up as an EXCEL spreadsheet and an extract from the spreadsheet is included as **Appendix W**.

6.45 The first two columns are the District and ward name. For each ward the number of people in the age range 16 to 22 has been identified from the 2011 census data (the population) and this is shown in the third column. This essentially establishes a pool of young people who are in the age for students studying at the Logistics Institute.

6.46 While developing the model it was noted that some wards had a much higher attraction than expected. On closer inspection it became apparent that in those wards there were a disproportionate number of people in the age range 16 to 22 when the age profile was compared with the average profile for all of the wards in the model. The explanation for this in all cases was that the ward was close.to a university and the numbers were boosted by the student population. Using the average age profile, the number of people in those wards were adjusted down.

6.47 The ‘deterrence function’ is based on the distance (fourth column) and journey time (fifth column) for each ward which has been taken from the route planning tool in Google Maps. Recognising that time and distance are measured in different units they have been added together with an equalising factor so that the average time and the average distance are the same numerical value. This equalising factor which is approximately 1.18 has been applied to the travel time.

6.48 In order to represent the overall journey time an additional five minutes has been added to all journeys to reflect the time between the house and car at the origin and between the car and the Logistics Institute building at the destination. The deterrence function also includes a constant that is a power function that reduces the attractiveness of travel at a greater rate as distance/time increase. The value chosen for this gravity model is 2. The GMF for each ward is set out in the sixth column. The students are assigned by ward on the basis of the proportion of the GMF for that ward to the total of all GMFs. This proportion is shown in the seventh column.

6.49 In order to avoid an unrealistically high proportion of the population being assigned to any one ward, a cap of 5% of the population in the age range has been applied to each ward. The proportions and numbers for each local authority are presented in Table 6-12.

Table 6-12: Distribution of Students by Local Authority		
Local Authority	**Number of Students**	**Proportion**
Blaby	37	9.25%
Charnwood	20	5.00%
Coventry	57	14.25%
Daventry	11	2.75%
Harborough	40	10.00%
Hinckley and Bosworth	30	7.50%
Kettering	3	0.75%
Leicester	55	13.75%
North Warwickshire	5	1.25%
North West Leicestershire	4	1.00%
Northampton	12	3.00%
Nuneaton and Bedworth	33	8.25%
Oadby and Wigston	10	2.50%
Rugby	48	12.00%
Solihull	13	3.25%
South Northamptonshire	0	0.00%
Tamworth	9	2.25%
Warwick	13	3.25%

6.50 The distribution of students is also shown on a plan of the local authority wards which is also included in **Appendix W**.

6.51 Figure 6-1 shows the accumulation of trips by distance travelled. This shows that the model reflects the fall in demand as the distance and time of travel discourages potential students.

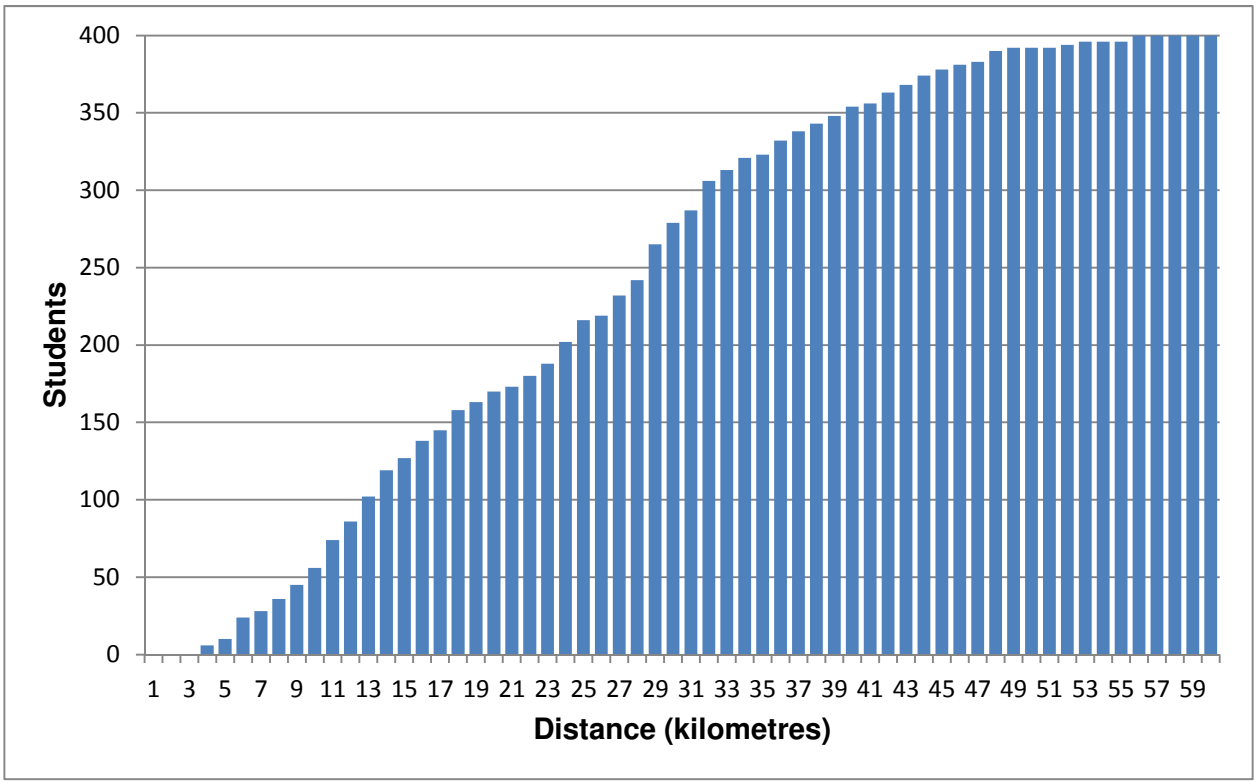


Figure 6-1: Accumulation of Distance travelled by Students

6.52 The final column in the spreadsheet shows the point at which those travelling by car from each of the wards would enter the area where the impact on junction operation is being assessed. A plan showing these points is included in **Appendix W**. The resultant distribution of trips in the AM peak is set out in Table 6-13. The pattern is reversed in the PM peak and the table is therefore not repeated.

6.53 The peak hour trips for students at the Logistics Institute are shown in Figures 6.11 and 6.12. These include all car trips (drop off and student car share) and the bus/coach trips that are set out below in Table 6-14.

Table 6-13: AM Peak Trip Distribution for Students Attending the Logistics Institute			
Route	**Proportion**	**Arrivals**	**Departures**
Coventry Road/ Brookfield Way	8.2%	5	3
A426/ Lutterworth High Street	1.0%	1	0
M1 North	25.5%	15	10
M1 South	6.0%	4	2
A4303 Market Harborough	3.1%	2	1
Subtotal towards M1	***43.8%***	***26***	***18***
High Cross Road	5.3%	3	2
B578 Burbage/ Barwell/ Hinckley	5.8%	3	2
B4109 Hinckley	4.1%	2	2
A5 North of M69	5.8%	3	2
M69 East	0.0%	0	0
M69 West	0.0%	0	0
Subtotal north on A5	***20.9%***	***13***	***8***
A5 South of Gibbet Hill	0.0%	0	0
A426 South of M6 Junction 1	9.4%	6	4
M6 West	11.5%	7	5
Subtotal south on A5	***20.9%***	***13***	***8***
Coal Pit Lane	7.0%	4	3
B4027 to Pailton	7.0%	4	3
Mere Lane	0.5%	0	0
Total	***100.0%***	***60***	***40***

6.54 It would not be appropriate to define routes for the contract coach services at this stage but for the purpose of this assessment it has been assumed that there will be up to ten services with an average load in the order of 30 per vehicle. This allows for a mix of minibuses, coaches and double-deck buses to be used depending on the number of students in the catchment area of each route. The distribution of the services and the assumed route approaching the Logistics Institute is set out in Table 6-14.

Table 6-14: Distribution of Contract Coach Services		
Catchment	**Number of Services**	**Route**
Leicester	3	M1 north
Coventry	3	M69 west
Tamworth/Hinckley	1	B4109 north
Northampton/Market Harborough	1	A4304
Daventry/Rugby	1	A426 south of M6
Nuneaton/Bedworth	1	A5 north of M69

6.55 In order to provide a robust assessment in the light of the lack of any evidence relating to the distribution of the homes of students, this section and the section that considers the trip generation for students, has concentrated on trips by car and contract coach services. However it is likely that there will be some students that will choose to travel by bicycle or motorcycle/scooter while others may use the existing public transport services which it is intended will operate with an enhanced frequency.

6.56 The distribution that is predicted by the gravity model includes 35 students who live within eight kilometres (five miles) of the Logistics Institute. On that basis it is likely that some will travel by bicycle. It is also considered that travel by motorcycle or scooter may be an attractive and affordable means of travel for those not living in a convenient location for the contract coach services. These modes of travel are recognised in the preliminary targets that have been incorporated into the Interim Travel Plan for the Logistics Institute.

6.57 Arriva Service 8 provides an hourly link between the site and Hinckley. The gravity model has identified the potential for 21 students to be living in the four wards that cover Hinckley and the two wards that cover Burbage. In addition there are a number of bus services that operate between Nuneaton and Hinckley that could make that an area from which students could travel on a scheduled bus service. In the other direction the gravity model identified the potential for eighteen students to live in the four wards that cover Lutterworth.

Trip Distribution – Staff

6.58 Output from LLITM presented in Table 6-3 and Table 6-4 has been used to establish the trip distribution for staff at the Logistics Institute and the peak hour trips are shown in Figures 6.13 and 6.14.

6.59 Being located within the Magna Park Hub it is assumed that all vehicles will enter and leave the site via the new roundabout on Mere Lane at the southern end of the development.

6.60 It is assumed that all vehicles to/from the east (i.e. towards Lutterworth and the M1) will enter and leave the site via the existing access roundabout on the A4303 (Hunter Boulevard) while all vehicles to/from the north, south and west will use the proposed new roundabout at the A5/ Mere Lane junction.

6.61 Figures 6.15 and 6.16 show the total trips associated with the Logistics Institute while Figures 6.17 and 6.18 show all development related trips in Zone 1. The traffic flow diagrams are presented in **Appendix N.**

Trip Generation & Distribution for Railfreight Shuttle Terminal

6.62 The railfreight shuttle terminal would only be available to Magna Park occupiers. It would therefore not generate any additional HGV movements although there would be a small increase in north/south movements at the A4303/ Hunter Boulevard roundabout as a result of containers being moved between Magna Park and the shuttle terminal.

6.63 The HGV parking facility will also only be available to vehicles that have serviced a Magna Park occupier. As with the shuttle terminal it will therefore not generate any additional HGV movements. Access will be controlled by a security gatehouse and the driver will need to provide evidence of a visit to Magna Park to authorise entry.

6.64 There are 16 car park spaces associated with the HGV training area and there will be a small two-storey office within the gatehouse to administer and manage the training facility. This may generate a small number of additional peak hour movements but not on a scale that would have a material impact on the performance of the surrounding highway network.

6.65 Furthermore, the 2026 'with development' forecast traffic flows include traffic associated with the consented HGV parking facility on the site of the proposed shuttle terminal. The consented development was predicted to generate 86 and 103 trips in the morning and evening peaks respectively of which around 40% were HGVs. This is significantly higher than the number of trips that are likely to be generated by the shuttle terminal in the peak hours and therefore the results of the 'with development' junction analysis set out in Section 8 present a robust assessment of the impact of the shuttle terminal.

7 COMMITTED DEVELOPMENT

General

7.1 It is a requirement of Transport Assessments to identify committed developments particularly where their impact could have a bearing on the operation of the proposed development site or the surrounding highway network. For the purposes of this assessment, the definition of a committed development is a development that has the benefit of planning permission that is yet to be implemented. At some developments the permission may have been only partially implemented and where this is the case, the impact from the unimplemented part of the development is also included.

7.2 Any committed highway or transport improvements are also included as they can have a significant bearing on the operation of the highway network both with and without development. As part of this assessment, two significant highway improvements have been identified, one at the Gibbet Hill roundabout and one at Junction 1 of the M6. These are discussed and analysed in more detail in the following section.

7.3 A number of development sites have been identified as being significant enough to be included as committed development as part of this assessment. These include:

- Daventry International Rail Freight Terminal
- Rugby Radio Station
- Rugby Gateway
- Land Bounded by the Ashby Canal, Hinckley
- Leaders Farm, Coventry Road, Lutterworth
- Land North of Lutterworth Road, Lutterworth
- Land North of Bill Crane Way, Lutterworth
- Land East of Leicester Road, Lutterworth
- Former George House, Hunter Boulevard, Magna Park
- Plot 7300, Watling Street, Magna Park
- Cawston Extension Site
- Land off Crowfoot Way, Broughton Astley
- Sutton Lodge Farm, Broughton Astley
- Land at Mere Road, Bitteswell

7.4 Each of the above sites is discussed in more detail below.

Daventry International Rail Freight Terminal

7.5 DIRFT is located at the junctions between the M1 Motorway, A5 and A428 roads, 6 km east of Rugby and 10 km north of Daventry. It has a rail connection from the Northampton Loop of the West Coast Main Line.

7.6 The DIRFT I site, which first became operational in 1997, provides approximately 354,351m^2 of distribution warehousing and a Rail Port.

7.7 Permission exists for the construction of a further 180,741m^2 of rail served distribution warehouses to the west of DIRFT I, known as DIRFT II. Construction of DIRFT II is on-going, with the first unit occupied by Tesco in 2011.

7.8 As part of DIRFT II there are currently two units that have been constructed but are currently unoccupied. The first is a unit of 39,020m^2 for Eddie Stobart and the second a unit of 92,903m^2 for Sainsbury's.

7.9 The potential traffic impact from these units has been included in this Transport Assessment as committed development using the trip generation rates that were used for the proposed DHL unit at Magna Park and the trip assignment assumptions set out in Appendix 7.1 of the TA prepared by Vectos in October 2012 for the DIRFT III development.

7.10 Appendix 7.1 indicates that during the AM peak 11.4% and 9.5% of DIRFT related traffic would arrive and depart via the A5 north respectively. The corresponding percentages during the PM peak are 11.2% and 9.5%. All other DIRFT related traffic is assigned to routes that do not form part of the study area for the proposed Magna Park expansion.

7.11 Using the trip generation rates presented in Table 6.2 of the TA that was prepared for DHL (repeated below for ease of reference) and the trip distribution assumptions set out above, the impact on the A5 north from the two unoccupied units at DIRFT II has been calculated for the peak hours and is shown in the tables below. The traffic flows are presented as Figure 7.1 and 7.2 of this TA.

Table 7-1: 85th Percentile Trip Generation rates per 100m2 (repeat of Table 6.2 in DHL TA)

	AM Peak		PM Peak	
Vehicle Type	**Arrivals**	**Departures**	**Arrivals**	**Departures**
Light Vehicles	0.140	0.042	0.043	0.104
HGVs	0.015	0.021	0.010	0.013
Total	**0.155**	**0.063**	**0.053**	**0.116**

Table 7-2: Total Trip Generation to Unoccupied Floorspace at DIRFT II

	AM Peak		PM Peak	
Vehicle Type	**Arrivals**	**Departures**	**Arrivals**	**Departures**
Light Vehicles	185	55	57	137
HGVs	20	28	13	17
Total	**205**	**83**	**70**	**154**

Table 7-3: DIRFT II Trips to and from A5 North				
	AM Peak		PM Peak	
Vehicle Type	Arrivals	Departures	Arrivals	Departures
Light Vehicles	21	5	6	13
HGVs	2	3	2	2
Total	**23**	**8**	**8**	**15**

7.12 In March 2013 a Development Consent Order (DCO) application for the development of DIRFT III was accepted for examination by the Planning Inspectorate. The proposals include a replacement Intermodal Freight Terminal along with up to 731,000m^2 of distribution floorspace, which is anticipated to come forward over approximately a 17 year period. DIRFT III is now fully consented and the first building is expected to be completed by the end of 2016.

7.13 The predicted traffic impact from DIRFT III has been included in this Transport Assessment and is set out below in the section describing the Rugby Radio Station Urban Extension.

Rugby Gateway

7.14 Planning consent was approved to redevelop a parcel of land to the north west of Rugby town centre on 20 August 2013. The development is a residential and employment led mixed use scheme with up to 1,300 residential units and 30 hectares of employment along with a range of community facilities including a primary school, a health facility and retail units. Access will be taken from the A426 Leicester Road.

7.15 The predicted traffic impact from Rugby Gateway has been included in this Transport Assessment and is set out below in the section describing the Rugby Radio Station Urban Extension.

Rugby Radio Station Urban Extension

7.16 This site is located approximately 5 km to the east of Rugby town centre and extends to some 800 hectares. The site is bound by the Northampton Loop of the West Coast Main Line railway to the south west, the Clifton Brook tributary to the north, the M1 motorway to the east and DIRFT to the south east. The A5 runs through the overall land control.

7.17 Planning consent was approved for a residential and employment led mixed use urban extension to Rugby on 21 May 2014. The development will deliver up to 6,200 residential units, and 31 hectares (up to 106,000m^2) of B class employment along with associated retail, community, education and leisure facilities.

7.18 Traffic flows for this development have been taken from Appendix 14.1 of a Transport Assessment prepared by Vectos in August 2013. The traffic flows in Appendix 14.1 are the output from a Paramics model which was used to assess the impact of the development. The comparison is shown between the 2033 Reference Case and the 2033 Reference Case plus All Development, which includes traffic from the Radio Station Urban Extension, Rugby Gateway and DIRFT III developments.

7.19 2033 represents the completion year for all three developments and therefore a factor has been applied to the traffic flows to represent the assessment year (2026) for the proposed expansion at Magna Park. The assumption has been made that Rugby Radio, Rugby Gateway and DIRFT III will be two thirds complete in 2026 and therefore a factor of 0.67 has been applied to the 2033 flows presented in the Vectos TA.

7.20 The combined impact in 2026 from Rugby Radio, Rugby Gateway and DIRFT III is presented as Figures 7.3 and 7.4 of this TA.

Land Bounded by the Ashby Canal, Hinckley

7.21 This is a mixed use development within Hinckley. The site is located to the south west of the town centre approximately 2 kms from Junction 1 of the M69. The site has two distinct elements with an 'urban village' featuring on the eastern end of the site and a commercial area on the western end. There are existing uses on the site and the traffic generation associated with these has been taken into account in the trip generation calculation.

7.22 BWB Consulting prepared a Transport Assessment for the development in January 2009 that contained details of the proposed development and the anticipated traffic that would be generated by the development.

7.23 The 'urban village' consists of 360 residential units, retail units, offices and a medical centre while the commercial area is proposed for a mix of B1c (9,959m^2), B2 (7,618m^2) and B8 (47,381m^2).

7.24 A detailed explanation of the trip generation, distribution and route assignment is presented in Sections 4, 5 and 8 of the BWB Transport Assessment while the net weekday AM and PM traffic flows are presented in Figures 37 and 38.

7.25 Flows from Figures 37 and 38 of the BWB TA have been extracted and are presented as Figures 7.5 and 7.6 of this TA.

Land North of Lutterworth Road, Lutterworth

7.26 This is an employment development in the B1 office land use category. The site is situated to the south east of Lutterworth and is bounded to the east by the northbound on-slip of Junction 20 of the M1, to the south by the A4303, to the west by a dismantled railway line and to the north by open fields. The site has planning consent for 11,348m^2 of B1 office land use with access via a left in/ left out junction on the north side of the A4303 between the A426 and the M1.

7.27 Brookbanks prepared a Transport Assessment in July 2014 that contained details of the proposed trip generation and distribution is Section 8. Traffic flow diagrams are presented in Appendix F and the development flows are presented in Figure 6.

7.28 The development flows have been extracted and are presented as Figures 7.7 and 7.8 of this TA.

Land North of Bill Crane Way, Lutterworth

7.29 This is a residential development on land to the north of Lutterworth. The site is bounded to the south by Bill Crane Way, to the east by the A426 Leicester Road, and to the north and west by open fields. The site has planning consent for 147 residential dwellings with two points of access from Bill Crane Way.

7.30 Peter Brett Associates prepared a Transport Assessment in January 2011 that contained details of the proposed trip generation and distribution in Sections 6.2 and 6.4 respectively. AM and PM development traffic flow diagrams were presented in Figures 14A and 14B. The TA presented the impact for a scheme of 170 dwellings whereas the reserved matters consent that was approved in January 2014 was for 147 dwellings. An adjustment has therefore been made to reflect the reduction in the number of units.

7.31 The resultant development flows have been extracted and are presented as Figures 7.9 and 7.10 of this TA.

Land East of Leicester Road, Lutterworth

7.32 This is a residential development on land to the north Lutterworth. The site is bounded to the north by open fields, to the east by the M1, to the south by Bilton Way Industrial Estate and to the west by the A426 Leicester Road. The site has planning consent for 84 dwellings with a single point of access from the A426.

7.33 BWB Consulting Ltd. prepared a Transport Assessment in May 2014 that contained details of the proposed trip generation and distribution in Sections 4.2 and 4.7 respectively. The proposed development trips are presented in Figure 12. It is stated that the generation and distribution of development related trips is based on the TA that was prepared for Land North of Bill Crane Way details of which are set out above in Section 7.7.

7.34 The resultant development flows have been extracted and are presented as Figures 7.11 and 7.12 of this TA.

Leaders Farm, Coventry Road, Lutterworth

7.35 This is a residential development within Lutterworth. The site lies to the north of the A4303 Lutterworth Bypass and is bounded to the north and west by Coventry Road. To the east is Cunningham Drive, an existing residential area. The site has planning consent for 130 residential units with access taken from Coventry Road.

7.36 WSP prepared a Transport Assessment for the development in June 2012 that contained details of the proposed trip generation and distribution in Sections 5.6 and 5.7 respectively. Traffic flow diagrams are presented in Figures 5.1 to 5.14 and the development flows can be extracted from Figure 5.7 to 5.10 by comparing the base plus committed flows with the base plus committed plus development flows.

7.37 The resultant development flows have been extracted and are presented as Figures 7.13 and 7.14 of this TA.

Former George House, Hunter Boulevard, Magna Park

7.38 This site is located at Magna Park and until the early part of 2009 was the Head Office of George, the clothing division of ASDA. In March 2009, George relocated to a new office building to the south of the Lutterworth Bypass and since then the plot has been vacant. The site has planning permission for a warehouse and a small ancillary office with a floor area of 10,790m^2.

7.39 To assess the impact of the development, URS prepared a Transport Statement in September 2013. Sections 4.3 and 4.4 of the TA presented details of the trip generation and distribution respectively and the predicted development related flows were presented as Figures 4.1 and 4.2 in Appendix D.

7.40 These flows have been extracted and are presented as Figures 7.15 and 7.16 of this TA.

Plot 7300, Watling Street, Magna Park

7.41 The site is located to the south of the Lutterworth Bypass and to the rear of buildings occupied by Culina and George. It has planning consent for 140 HGV parking spaces, 170 car parking spaces and several ancillary uses including a gatehouse, a small office, a vehicle maintenance unit, a fuel island and vehicle wash.

7.42 To assess the impact of the development, URS prepared a Transport Assessment in May 2012. Sections 4.3 and 4.4 of the TA presented details of the trip generation and distribution respectively and the predicted development related flows were presented as Figures 4.1 and 4.2 in Appendix E.

7.43 These flows have been extracted and are presented as Figures 7.17 and 7.18 of this TA.

Cawston Extension Site

7.44 The Cawston Extension development site is located north of Coventry Road some 4 km south west of Rugby town centre and some 16 km south of Magna Park. It has planning consent for up to 600 residential units.

7.45 To assess the impact of the development, Brookbanks Consulting Ltd. prepared a Transport Assessment in January 2012. Details of the trip generation and distribution were presented in Section 8 of the TA and the development flows can be extracted by comparing the 2026 Reference Flows and the 2016 Reference Flows plus Development Flows which are presented in Appendix E.

7.46 Upon inspection of the traffic flow diagrams it is apparent that the main impact from this development is expected on the A45, the A4071 and on other roads to the south west of Rugby town centre. The impact on the network in the vicinity of Magna Park is expected to be minimal and therefore the direct traffic impact of this development has not been included.

Land South of Coventry Road and North East of Cawston Lane

7.47 This site lies to the south of Coventry Road and north east of Cawston Lane and is a similar distance to Rugby town centre and Magna Park as the Cawston Extension site. It has planning consent for up to 300 residential units.

7.48 To assess the impact of the development, Phil Jones Associates prepared a Transport Assessment in September 2013. Details of the trip generation and distribution were presented in Section 4. Traffic flow diagrams were not available as part of the information presented on the Rugby Borough Council Planning Portal and therefore it was not possible to establish the geographic extent of the impact.

7.49 However given the site is smaller than the Cawston Extension site and adjacent to it, there is unlikely to be any direct impact on the network in the vicinity of Magna Park

Land off Crowfoot Way, Broughton Astley

7.50 This site lies 2 km south east of the centre of Broughton Astley at the edge of the village and is approximately 15 km north east of Magna Park. It has planning consent for 50 residential units.

7.51 The Transport Assessment is not available on the Harborough District Council Planning Portal. However a Travel Plan prepared by Bancroft Consulting is available and this set out the predicted trip generation that was presented in the Transport Assessment. The Travel Plan predicted 37 vehicle movements in the morning peak and 36 in the evening peak.

7.52 Given the scale and location of the development, the impact on the network in the vicinity of Magna Park is expected to be minimal and therefore the direct traffic impact of this development has not been included.

Sutton Lodge Farm, Broughton Astley

7.53 This site is located at Sutton Lodge Farm, Frolesworth Road near Broughton Astley. Planning consent was granted in June 2012 for a single wind turbine.

7.54 Due to the scale of the development, formal transport documents were not produced to support the application. There was however a Design Access Statement prepared by Fisher German that set out the expected traffic movements associated with the development. It identified the need for three HGVs to deliver the turbine and eight further trips generated by construction staff.

7.55 Given the scale and location of the development, the impact on the network in the vicinity of Magna Park is expected to be minimal and therefore the direct traffic impact of this development has not been included.

Land at Mere Road, Bitteswell

7.56 This site is located at Mere Road approximately 1 km to the south of the village of Ullesthorpe. Planning consent was granted in August 2011 for a single wind turbine.

7.57 Due to the scale of the development, formal transport documents were not produced to support the application. An Environmental document was produced by Watson Haynes Ltd.

and this set out the predicted vehicle movements associated with both the delivery of the infrastructure and the construction phase.

7.58 During the delivery and construction stages, 111 HGV deliveries are expected, totalling 222 movements including the return trip. The construction period is expected to take four months and deliveries will be well spaced throughout that period. The highest level of traffic would be for a single day when the foundation is cast, which would require nine HGV deliveries, totalling 18 movements including the return trip.

7.59 Given the scale of the development, the impact on the network in the vicinity of Magna Park is expected to be minimal and therefore the direct traffic impact of this development has not been included.

7.60 The combined impact from all the committed developments set out in this section is presented as Figures 7.19 and 7.20.

8 HIGHWAY IMPACT ASSESSMENT

Assessment Framework

8.1 In this section the impacts of the additional traffic movements on the existing highway network following the opening of the proposed development are assessed. Assessments have been undertaken in 2017 to reflect the opening year and in 2026 when the development is expected to be complete and fully operational.

8.2 The approach to the 2017 and 2026 assessments was set out in a Technical Note (TN2) prepared by AECOM on behalf of Highways England. TN2 was a review of the original Transport Assessment that was submitted in support of the detailed planning application for the DHL Supply Chain. It resulted in the submission of a Supplementary Transport Assessment dated 20 July 2015.

8.3 The expectation is that in 2017 only the unit identified on the Parameter Plan as Parcel G will be occupied. This parcel is the subject of a separate detailed planning application prepared for the DHL Supply Chain that was submitted to HDC on 16 June 2015 (planning ref: 15/00919/Ful).

8.4 The request for an opening year assessment is in line with Department for Transport Circular 02/2013 '*The Strategic Road Network and the Delivery of Sustainable Development*'. Paragraph 27 of the Circular states that:

"Where the overall forecast demand at the time of opening of the development can be accommodated by the existing infrastructure, further capacity mitigation will not be sought".

8.5 Highways England's requirements for the opening year assessment are that background traffic flows are factored to 2017 using TEMPRO but do not include any traffic associated with the list of committed developments identified in Section 7.

8.6 Conversely Highways England's requirement for the 2026 assessment is to include all committed development traffic without factoring the background traffic flows. This is because there is considered to be a risk of double counting when using a combination of TEMPRO to factor background traffic flows as well as manually adding committed development flows.

8.7 In order to factor the base traffic flows to 2017, traffic growth factors have been calculated using TEMPRO version 6.2. The average of rural trunk and principal roads in the East Midlands District has been used to factor all traffic flows. To calculate the adjusted local growth figure, NTM traffic growth calculations have been used. The calculated growth rates are shown in the table below.

Table 8-1: TEMPRO/ NTM Growth Rates for East Midlands District

Year	AM Peak	PM Peak
2014 – 2017	1.0441	1.0451

8.8 The base and base plus development flows for 2017 are shown in Figures 8.1 to 8.4 while the corresponding flows for 2026 are shown in Figures 8.5 to 8.8.

Results of 2017 Opening Year Capacity Assessments

8.9 As stated above the opening year assessments are based on occupation of Parcel G for the DHL Supply Chain and assume that background traffic flows are factored to 2017 using TEMPRO but do not include any traffic associated with the list of committed developments identified in Section 7.

Proposed Roundabout on Mere Lane

8.10 Access to the development is proposed via a new roundabout on Mere Lane that will connect the site to Magna Park to the south and the A5 to the west. The connection to Magna Park is achieved through an extension to Argosy Way between existing plots 1400 and 1500. To access the site, a new access road will be constructed to form the north western arm of the roundabout

8.11 A drawing showing the proposed roundabout is presented in **Appendix D** (Drawing No. 47066811/A008/SK12).

8.12 The results of the ARCADY assessment in 2017 with development are summarised in the table below. Full model printouts from this analysis are presented in **Appendix S**.

Table 8-2: Summary of the Main Performance Indicators at New Roundabout on Mere Lane – 2017 With Development

	AM Peak		PM Peak	
Approach Arm	**RFC**	**Queue**	**RFC**	**Queue**
Site Access Road	0.051	0	0.079	0
Mere Lane East	0.087	0	0.041	0
Hunter Boulevard	0.082	0	0.083	0
Mere Lane West	0.159	0	0.076	0

8.13 Table 8-2 indicates that the new roundabout on Mere Lane would operate well within capacity in 2017 with no queues predicted on any arm.

A5/ Mere Lane Junction

8.14 This is currently a ghost island priority junction and the junction form is considered appropriate for the existing traffic volume and composition. To accommodate the proposed development the proposal is to upgrade the A5/ Mere Lane junction to a roundabout. It is considered that this would provide safety and operational benefits particularly as there will be a significant increase in the number of HGV turning movements at the junction.

8.15 Therefore without development the junction is modelled as a priority junction using PICADY and with development it is modelled as a roundabout using ARCADY.

8.16 The results of the PICADY assessment in 2017 without development is summarised in the table below. Full model printouts from this analysis are presented in **Appendix S**.

Table 8-3: Summary of the Main Performance Indicators at the A5/ Mere Lane Junction – 2017 Without Development				
	AM Peak		PM Peak	
Movement	RFC	Queue	RFC	Queue
B - C	0.264	0	0.079	0
B – A	0.065	0	0.043	0
C – B	0.097	0	0.137	0
Where A is A5 North; B is Mere Lane and; C is A5 South				

8.17 Table 8-3 indicates that the A5/ Mere Lane junction would operate within capacity in the opening year without development.

8.18 The results of the ARCADY assessment in 2017 with development are summarised in the table below. Full model printouts from this analysis are presented in **Appendix S**.

Table 8-4: Summary of the Main Performance Indicators at New Roundabout A5/ Mere Lane – 2017 With Development				
	AM Peak		PM Peak	
Approach Arm	RFC	Queue	RFC	Queue
A5 North	0.617	2	0.317	0
Mere Lane	0.158	0	0.143	0
A5 South	0.411	1	0.571	1

8.19 Table 8-4 indicates that the proposed roundabout at the A5/ Mere Lane junction would operate within capacity in 2017 with development.

A4303/ Hunter Boulevard

8.20 The results of the ARCADY assessment in 2017 both with and without development are summarised in the tables below. Full model printouts from this analysis are presented in **Appendix S**.

Table 8-5: Summary of the Main Performance Indicators at the A4303/ Hunter Boulevard Roundabout – 2017 Without Development				
	AM Peak		PM Peak	
Approach Arm	RFC	Queue	RFC	Queue
Hunter Boulevard	0.222	0	0.457	1
A4303 East	0.631	2	0.347	1
Access to George	0.021	0	0.218	0
A4303 West	0.658	2	0.425	1

8.21 Table 8-5 indicates that the A4303/ Hunter Boulevard junction would operate within capacity in 2017 without development.

Table 8-6: Summary of the Main Performance Indicators at the A4303/ Hunter Boulevard Roundabout – 2017 With Development

	AM Peak		PM Peak	
Approach Arm	**RFC**	**Queue**	**RFC**	**Queue**
Hunter Boulevard	0.221	0	0.438	1
A4303 East	0.657	2	0.348	1
Access to George	0.022	0	0.211	0
A4303 West	0.595	1	0.411	1

8.22 Table 8-6 indicates that the A4303/ Hunter Boulevard junction would continue to operate within capacity with the addition of the development traffic. The improvement in the performance of Hunter Boulevard and the A4303 west arm is a result of some traffic from the existing Magna Park using the new access route via Mere Lane thus avoiding this roundabout completely.

Cross In Hand Roundabout

8.23 The results of the ARCADY assessment in 2017 both with and without development are summarised in the tables below. Full model printouts from this analysis are presented in **Appendix S**.

Table 8-7: Summary of the Main Performance Indicators at the Cross In Hand Roundabout – 2017 Without Development

	AM Peak		PM Peak	
Approach Arm	**RFC**	**Queue**	**RFC**	**Queue**
A5 North	0.831	5	0.424	1
A4303	0.585	1	0.588	1
A5 South	0.525	1	0.592	1
B4027 Lutterworth Rd	0.209	0	0.406	1
Coal Pit Lane	0.426	1	0.278	0

8.24 Table 8-7 indicates that the Cross In Hand roundabout would operate within capacity in the opening year without development. An RFC of 0.831 is predicted on the A5 north in the morning peak which implies that this arm will be operating close to capacity in 2017. The maximum RFC during the evening peak is 0.592 predicted on the A5 south.

Table 8-8: Summary of the Main Performance Indicators at the Cross In Hand Roundabout – 2017 With Development				
	AM Peak		PM Peak	
Approach Arm	RFC	Queue	RFC	Queue
A5 North	0.753	3	0.429	1
A4303	0.569	1	0.548	1
A5 South	0.533	1	0.586	1
B4027 Lutterworth Rd	0.226	0	0.402	1
Coal Pit Lane	0.450	1	0.276	0

8.25 Table 8-8 indicates that there would be capacity improvements at the Cross In Hand roundabout with the proposed development. The most significant improvement is expected at the A5 north approach during the morning peak where the RFC is predicted to fall from 0.831 without development to 0.753 with development. The corresponding impact on the queue length is for it to reduce from five vehicles to three vehicles. During the evening peak there are small improvements predicted on four of the five arms at the junction.

8.26 The improvement in the performance of this junction is a result of some traffic from the existing Magna Park using the new access route via Mere Lane thus avoiding the Cross In Hand roundabout completely. The improvement is particularly evident in the morning peak on the basis that all traffic approaching Magna Park from the north is assumed to use the new access route via Mere Lane and Argosy Way. The improvements at the Cross In Hand roundabout demonstrate the potential wider benefits of the proposed access arrangements.

A4303/ Shackleton Way Junction

8.27 This is a left in/ left out junction and therefore there is only one opposed movement – the left turn from Shackleton Way onto the A4303.

8.28 The results of the PICADY assessment in 2017 both with and without development are summarised in the table below. Full model printouts from this analysis are presented in **Appendix S**.

Table 8-9: Summary of the Main Performance Indicators at the A4303/ Shackleton Way Junction – 2017 Without Development				
	AM Peak		PM Peak	
Movement	RFC	Queue	RFC	Queue
B - C	0.196	0	0.537	1
Where B is Shackleton Way and C is A4303 East				

8.29 Table 8-9 indicates that the A4303/ Shackleton Way junction would operate within capacity in 2017 without development.

Table 8-10: Summary of the Main Performance Indicators at the A4303/ Shackleton Way Junction – 2017 With Development				
	AM Peak		PM Peak	
Movement	RFC	Queue	RFC	Queue
B - C	0.200	0	0.562	4
Where B is Shackleton Way and C is A4303 East				

8.30 Table 8-10 indicates that the A4303/ Shackleton Way junction would continue to operate within capacity with the addition of the development traffic.

A4303/ Coventry Road

8.31 The results of the ARCADY assessment in 2017 both with and without development are summarised in the tables below. Full model printouts from this analysis are presented in **Appendix S**.

Table 8-11: Summary of the Main Performance Indicators at the A4303/ Coventry Road Roundabout – 2017 Without Development				
	AM Peak		PM Peak	
Approach Arm	RFC	Queue	RFC	Queue
Coventry Road	0.639	2	0.371	1
A4303 East	0.594	1	0.368	1
Mobile Home Park	0.044	0	0.016	0
A4303 West	0.325	0	0.644	2

8.32 Table 8-11 indicates that the A4303/ Coventry Road roundabout would operate within capacity in 2017 without development.

Table 8-12: Summary of the Main Performance Indicators at the A4303/ Coventry Road Roundabout – 2017 With Development				
	AM Peak		PM Peak	
Approach Arm	RFC	Queue	RFC	Queue
Coventry Road	0.666	2	0.386	1
A4303 East	0.632	2	0.377	1
Mobile Home Park	0.048	0	0.016	0
A4303 West	0.342	1	0.671	2

8.33 Table 8-12 indicates that the A4303/ Coventry Road roundabout would continue to operate within capacity in the opening year with the addition of development related traffic.

A4303/ A426

8.34 The results of the ARCADY assessment in 2017 both with and without development are summarised in the tables below. Full model printouts from this analysis are presented in **Appendix S**.

Table 8-13: Summary of the Main Performance Indicators at the A4303/ A426 Roundabout – 2017 Without Development

	AM Peak		PM Peak	
Approach Arm	**RFC**	**Queue**	**RFC**	**Queue**
A426 North	0.933	11	0.939	11
A4303 East	0.865	6	0.674	2
A426 South	0.829	5	0.800	4
A4303 West	0.516	1	0.730	3

8.35 Table 8-13 indicates that the A4303/ A426 roundabout would be operating close to capacity in 2017 without development. The critical arm is the A426 north with queues in excess of 10 vehicles predicted during both peaks. RFC values in excess of the maximum desirable threshold of 0.85 are also expected on the A4303 east during the morning peak.

Table 8-14: Summary of the Main Performance Indicators at the A4303/ A426 Roundabout – 2017 With Development

	AM Peak		PM Peak	
Approach Arm	**RFC**	**Queue**	**RFC**	**Queue**
A426 North	0.956	13	0.963	14
A4303 East	0.887	7	0.680	2
A426 South	0.854	5	0.806	4
A4303 West	0.537	1	0.761	3

8.36 Table 8-14 indicates that with the addition of the development traffic the A4303/ A426 roundabout would continue to operate within capacity during both peaks albeit with RFCs above the 0.85 threshold on two arms. The impact of the development is however relatively minor with only small increases in RFCs and queue lengths on the critical arms.

8.37 There are no improvements proposed at this junction in the opening year.

M1 Junction 20

8.38 The results of the ARCADY assessment in 2017 both with and without development are summarised in the tables below. Full model printouts from this analysis are presented in **Appendix S**.

Table 8-15: Summary of the Main Performance Indicators at M1 Junction 20 – 2017 Without Development				
	AM Peak		PM Peak	
Approach Arm	RFC	Queue	RFC	Queue
M1 Southbound off-slip	0.445	1	0.425	1
A4304	0.694	2	0.425	1
M1 Northbound off-slip	0.381	1	0.300	0
A4303	0.569	1	0.620	2

8.39 Table 8-15 indicates that M1 Junction 20 would be operating within capacity during both peaks in the opening year.

Table 8-16: Summary of the Main Performance Indicators at M1 Junction 20 – 2017 With Development				
	AM Peak		PM Peak	
Approach Arm	RFC	Queue	RFC	Queue
M1 Southbound off-slip	0.459	1	0.434	1
A4304	0.711	2	0.429	1
M1 Northbound off-slip	0.394	1	0.302	1
A4303	0.578	1	0.633	2

8.40 Table 8-16 indicates that M1 Junction 20 would continue to operate within capacity with the addition of the development traffic.

M69 Junction 1

8.41 The results of the TRANSYT assessment in 2017 both with and without development are summarised in the table below. Approach links are shown in italics. A TRANSYT link/node diagram is presented in **Appendix R**. Full model printouts from this analysis are in **Appendix S.**

Table 8-17: Summary of the Main Performance Indicators at M69 Junction 1 – 2017 Without Development

Link		AM Peak		PM Peak	
No.	**Description**	**Sat %**	**Queue**	**Sat %**	**Queue**
10	*M69 eastbound off-slip – inside/middle lanes*	75	11	87	17
11	*M69 eastbound off-slip – outside lane*	50	4	66	6
12	Circulating – inside lane	52	3	45	6
13	Circulating – middle lane	42	1	46	6
14	Circulating – outside lane	32	2	40	6
20	*A5 North – inside lane*	46	5	53	5
21	*A5 North – middle/outside lanes*	74	12	88	16
22	Circulating – Inside/middle lane	42	7	59	8
23	Circulating – outside lane	23	0	32	0
30	*B4109 Rugby Rd – inside lane*	26	2	23	1
31	*B4109 Rugby Rd – middle/outside lanes*	107	74	92	13
32	Circulating – inside lane	57	6	36	5
33	Circulating – middle lane	69	6	62	6
34	Circulating – outside lane	25	0	19	0
40	*M69 westbound off-slip – inside lane*	80	5	98	12
41	*M69 westbound off-slip – middle/outside lanes*	75	8	53	6
42	Circulating – inside lane	96	23	87	14
43	Circulating – outside lane	70	9	38	2
50	*A5 South – inside lane*	75	6	43	3
51	*A5 South – middle/outside lanes*	90	15	84	14
52	Circulating – inside lane	39	3	40	3
53	Circulating – middle lane	69	5	39	7
54	Circulating – middle/outside lanes	19	0	14	1
60	*B4109 Hinckley Road – inside/outside lanes*	38	1	35	2
61	Circulating – all lanes	40	0	29	0

8.42 Table 8-17 indicates that M69 Junction 1 would be operating above capacity during the morning peak without development. The critical part of the junction is the B4109 Rugby Road approach where a degree of saturation of 107% and a queue of 74 pcus is predicted.

8.43 In the evening peak, the junction is predicted to be operating within capacity albeit with a degree of saturation of 98% on the M69 westbound off-slip.

Table 8-18: Summary of the Main Performance Indicators at M69 Junction 1 – 2017 With Development

Link		AM Peak		PM Peak	
No.	**Description**	**Sat %**	**Queue**	**Sat %**	**Queue**
10	*M69 eastbound off-slip – inside/middle lanes*	75	11	87	17
11	*M69 eastbound off-slip – outside lane*	50	4	66	6
12	Circulating – inside lane	53	6	45	5
13	Circulating – middle lane	42	4	46	6
14	Circulating – outside lane	33	2	41	6
20	*A5 North – inside lane*	56	6	53	5
21	*A5 North – middle/outside lanes*	87	15	88	16
22	Circulating – Inside/middle lane	37	7	59	8
23	Circulating – outside lane	20	0	32	0
30	*B4109 Rugby Rd – inside lane*	23	2	23	1
31	*B4109 Rugby Rd – middle/outside lanes*	92	27	92	14
32	Circulating – inside lane	63	5	36	3
33	Circulating – middle lane	78	8	62	9
34	Circulating – outside lane	28	0	19	0
40	*M69 westbound off-slip – inside lane*	80	5	98	12
41	*M69 westbound off-slip – middle/outside lanes*	75	8	53	6
42	Circulating – inside lane	101	44	87	13
43	Circulating – outside lane	73	10	38	2
50	*A5 South – inside lane*	75	6	43	3
51	*A5 South – middle/outside lanes*	91	16	86	14
52	Circulating – inside lane	40	5	40	4
53	Circulating – middle lane	72	11	39	7
54	Circulating – middle/outside lanes	19	1	14	1
60	*B4109 Hinckley Road – inside/outside lanes*	39	1	35	2
61	Circulating – all lanes	41	0	29	0

8.44 Comparing the results in Table 8-17 with those set out in Table 8-18 above indicates that the impact of the development at junction 1 of the M69 would be negligible. On the majority of links the degree of saturation is predicted to remain unchanged and on some links a slight improvement is expected.

8.45 The most notable improvement is on link 31, the B4109 Rugby Road approach, where the degree of saturation during the morning peak is predicted to decrease from 107% without development to 92% with development.

8.46 On the links that are predicted to be operating above capacity the impact of the development on the queue length is as follows:

- Link 31 (B4109 Rugby Road) AM peak – decrease by 47 pcus
- Link 42 (circulating at M69 westbound off-slip) AM peak – increase by 21 pcus

Gibbet Hill Roundabout

8.47 The results of the ARCADY assessment in 2017 both with and without development are summarised in the tables below. Full model printouts are presented in **Appendix S**.

Table 8-19: Summary of the Main Performance Indicators at the Gibbet Hill Roundabout – 2017 Without Development

	AM Peak		PM Peak	
Approach Arm	**RFC**	**Queue**	**RFC**	**Queue**
A5 North	0.767	3	0.550	1
A426 North	0.717	2	0.611	2
Gibbet Lane	0.324	0	0.184	0
A5 South	0.555	1	0.614	2
A426 South	0.845	5	0.948	13

8.48 Table 8-19 indicates that the Gibbet Hill roundabout would operate within capacity during both peaks in the opening year albeit with an RFC in excess of the 0.85 threshold on the A426 south during the evening peak.

Table 8-20: Summary of the Main Performance Indicators at the Gibbet Hill Roundabout – 2017 With Development

	AM Peak		PM Peak	
Approach Arm	**RFC**	**Queue**	**RFC**	**Queue**
A5 North	0.779	3	0.561	1
A426 North	0.723	3	0.615	2
Gibbet Lane	0.331	0	0.186	0
A5 South	0.565	1	0.620	2
A426 South	0.854	5	0.952	13

8.49 Table 8-20 indicates that the Gibbet Hill roundabout would continue to operate within capacity with the addition of the development traffic. Comparing the results in Table 8-19 with those set out in Table 8-20 above indicates that the impact of the development at this junction would be negligible.

8.50 As part of the Development Consent Order (DCO) for DIRFT III there is a commitment to provide capacity improvements at the Gibbet Hill roundabout. The scheme includes carriageway widening, improved carriageway markings and the signalisation of the approach and circulatory carriageways of the A426 north, A5 north and A5 south. However this improvement will not have been implemented by 2017 and therefore the assessment of the impact of the proposed development in the opening year is based on the existing roundabout.

M6 Junction 1

8.51 The results of the TRANSYT assessment in 2017 both with and without development are summarised in the tables below. Approach links are shown in italics. A TRANSYT link/node diagram is presented in **Appendix R**. Full model printouts from this analysis are presented in **Appendix S**.

Table 8-21: Summary of the Main Performance Indicators at M6 Junction 1 – 2017 Without Development

Link		AM Peak		PM Peak	
No.	**Description**	**Sat %**	**Queue**	**Sat %**	**Queue**
10	*M6 eastbound off-slip – inside lane*	72	6	76	6
11	*M6 eastbound off-slip – middle/outside lanes*	81	14	81	13
12	Circulating – inside/middle lanes	32	6	35	7
13	Circulating – outside lane	23	3	21	2
20	*A426 north – inside/outside lanes*	76	13	59	5
21	Circulating – all lanes	26	1	23	0
30	*M6 westbound off-slip – inside lane*	85	7	55	3
31	*M6 westbound off-slip - middle/outside lanes*	42	5	33	3
32	Circulating – inside/middle lanes	69	14	52	5
33	Circulating – outside lane	25	3	23	2
40	*A426 south – inside/outside lanes*	79	3	80	3
41	Circulating – all lanes	11	0	10	0

8.52 Table 8-21 indicates that M6 Junction 1 would be operating within capacity during both peaks in the opening year without development.

Table 8-22: Summary of the Main Performance Indicators at M6 Junction 1 – 2026 With Development

Link		AM Peak		PM Peak	
No.	**Description**	**Sat %**	**Queue**	**Sat %**	**Queue**
10	M6 eastbound off-slip – inside lane	72	6	76	6
11	M6 eastbound off-slip – middle/outside lanes	81	14	81	13
12	Circulating – inside/middle lanes	32	7	35	7
13	Circulating – outside lane	23	3	21	2
20	A426 north – inside/outside lanes	77	13	60	5
21	Circulating – all lanes	26	1	23	0
30	M6 westbound off-slip – inside lane	85	7	55	3
31	M6 westbound off-slip - middle/outside lanes	42	5	33	3
32	Circulating – inside/middle lanes	69	16	52	5
33	Circulating – outside lane	25	3	23	2
40	A426 south – inside/outside lanes	79	3	80	3
41	Circulating – all lanes	11	0	10	0

8.53 Table 8-22 indicates that M6 Junction 1 would continue to operate within capacity with the addition of the development traffic. Comparing the results in Table 8-21 with those set out in the table above indicates that the impact of the development at this junction 1 would be negligible. On the majority of links the degree of saturation is predicted to remain unchanged.

Results of 2026 Capacity Assessments

8.54 The approach to the 2026 assessment as agreed with Highways England is to include all committed development traffic without factoring the background traffic flows. This is because there is considered to be a risk of double counting when using a combination of TEMPRO to factor background traffic flows as well as manually adding committed development flows.

Proposed Roundabout on Mere Lane

8.55 Access to the southern part of the development is proposed via a new roundabout on Mere Lane that will connect the site to Magna Park to the south and the A5 to the west. The connection to Magna Park is achieved through an extension to Argosy Way between existing plots 1400 and 1500. To access the site, a new access road will be constructed to form the north western arm of the roundabout

8.56 A drawing showing the proposed roundabout is presented in **Appendix D** (Drawing No. 47066811/A008/SK12).

8.57 The results of the ARCADY assessment in 2026 with development are summarised in the table below. Full model printouts from this analysis are presented in **Appendix S**.

Table 8-23: Summary of the Main Performance Indicators at New Roundabout on Mere Lane – 2026 With Development

	AM Peak		PM Peak	
Approach Arm	**RFC**	**Queue**	**RFC**	**Queue**
DHL Access Road	0.122	0	0.263	0
Mere Lane East	0.100	0	0.048	0
Hunter Boulevard	0.197	0	0.123	0
Mere Lane West	0.288	0	0.113	0

8.58 Table 8-23 indicates that the new roundabout on Mere Lane would operate well within capacity in 2026 with no queues predicted on any arm.

Proposed Roundabout on the A5

8.59 Access to the northern part of the development is proposed via a new roundabout on the A5 approximately 260 metres south of White House Farm. The provision of two points of access, one at both ends of the development, will allow an internal highway connection to be provided within the site. This is beneficial in highway terms as it provides flexibility in terms of access and egress options allowing the impact of the development to be dispersed more evenly across the external highway network.

8.60 However for the purposes of this assessment it is assumed that all traffic generated by development that is situated within and to the south of the Magna Park Hub, including the Logistics Institute, the Innovation Centre, Holovis and four B8 units, will use the southern access route, while all traffic generated by the four B8 units to the north of the Magna Park Hub will use the northern access route.

8.61 This is considered to present the worst case as in practise some development related traffic will use the internal road network within Magna Park (both proposed and existing) rather than joining the external highway network at the access that is closest to the point of origin/destination.

8.62 The results of the ARCADY assessment in 2026 with development are summarised in the table below. Full model printouts from this analysis are presented in **Appendix S**.

Table 8-24: Summary of the Main Performance Indicators at New A5 North Access – 2026 With Development

	AM Peak		PM Peak	
Approach Arm	**RFC**	**Queue**	**RFC**	**Queue**
A5 North	0.846	5	0.392	1
Proposed Access	0.210	0	0.281	0
A5 South	0.528	1	0.632	2

8.63 Table 8-24 indicates that the new roundabout on the A5 would operate within capacity in 2026 albeit with an RFC of just below the 0.85 threshold on the A5 north during the morning peak.

A5/ Mere Lane Junction

8.64 The results of the PICADY assessment in 2026 without development are summarised in the tables below. Full model printouts from this analysis are presented in **Appendix S**.

Table 8-25: Summary of the Main Performance Indicators at the A5/ Mere Lane Junction – 2026 Without Development

	AM Peak		PM Peak	
Movement	**RFC**	**Queue**	**RFC**	**Queue**
B - C	0.267	0	0.080	0
B – A	0.094	0	0.053	0
C – B	0.091	0	0.135	0
Where A is A5 North; B is Mere Lane and; C is A5 South				

8.65 Table 8-25 indicates that the A5/ Mere Lane junction would operate within capacity without development in 2026.

8.66 Although the existing priority junction is predicted to be operating within capacity in 2026, a new roundabout is proposed on the A5 to replace the existing priority junction. As part of the scheme the dual carriageway on the A5 will be extended from Emmanuel/ Lodge Cottages to the new roundabout over a distance of approximately 500 metres. The access proposals and associated highway improvements are shown on the drawing presented in **Appendix D.**

8.67 It is considered that the proposed roundabout would provide safety and operational benefits particularly as there will be a significant increase in the number of HGV turning movements at the junction.

8.68 The results of the ARCADY assessment in 2026 with development are summarised in the table below. Full model printouts from this analysis are presented in **Appendix S**.

Table 8-26: Summary of the Main Performance Indicators at New Roundabout A5/ Mere Lane – 2026 With Development

	AM Peak		PM Peak	
Approach Arm	**RFC**	**Queue**	**RFC**	**Queue**
A5 North	0.783	4	0.512	1
Mere Lane	0.233	0	0.301	0
A5 South	0.671	2	0.710	2

8.69 Table 8-26 indicates that the proposed roundabout at the A5/ Mere Lane junction would operate within capacity in 2026 with development.

A4303/ Hunter Boulevard

8.70 The results of the ARCADY assessment in 2026 both with and without development are summarised in the tables below. Full model printouts from this analysis are presented in **Appendix S**.

Table 8-27: Summary of the Main Performance Indicators at the A4303/ Hunter Boulevard Roundabout – 2026 Without Development

	AM Peak		PM Peak	
Approach Arm	**RFC**	**Queue**	**RFC**	**Queue**
Hunter Boulevard	0.225	0	0.457	1
A4303 East	0.659	2	0.377	1
Access to George	0.064	0	0.262	0
A4303 West	0.692	2	0.460	1

8.71 Table 8-27 indicates that the A4303/ Hunter Boulevard junction would operate within capacity in 2026 without development.

Table 8-28: Summary of the Main Performance Indicators at the A4303/ Hunter Boulevard Roundabout – 2026 With Development

	AM Peak		PM Peak	
Approach Arm	**RFC**	**Queue**	**RFC**	**Queue**
Hunter Boulevard	0.256	0	0.535	1
A4303 East	0.820	4	0.423	1
Access to George	0.078	0	0.265	0
A4303 West	0.700	2	0.513	1

8.72 Table 8-28 indicates that the A4303/ Hunter Boulevard junction would continue to operate within capacity with the addition of the development traffic.

Cross In Hand Roundabout

8.73 The results of the ARCADY assessment in 2026 both with and without development are summarised in the tables below. Full model printouts from this analysis are presented in **Appendix S**.

Table 8-29: Summary of the Main Performance Indicators at the Cross In Hand Roundabout – 2026 Without Development				
	AM Peak		PM Peak	
Approach Arm	RFC	Queue	RFC	Queue
A5 North	0.881	7	0.501	1
A4303	0.613	2	0.623	2
A5 South	0.570	1	0.659	2
B4027 Lutterworth Rd	0.211	0	0.427	1
Coal Pit Lane	0.453	1	0.336	1

8.74 Table 8-29 indicates that the Cross In Hand roundabout would operate within capacity in the morning peak without development albeit with an RFC above the desirable maximum value of 0.85 on the A5 north. The junction is predicted to be operating below the 0.85 threshold during the evening peak.

Table 8-30: Summary of the Main Performance Indicators at the Cross In Hand Roundabout – 2026 With Development				
	AM Peak		PM Peak	
Approach Arm	RFC	Queue	RFC	Queue
A5 North	0.908	9	0.713	2
A4303	0.708	2	0.650	2
A5 South	0.668	2	0.711	2
B4027 Lutterworth Rd	0.351	1	0.489	1
Coal Pit Lane	0.679	2	0.392	1

8.75 Table 8-30 indicates that the Cross In Hand roundabout would continue to operate within capacity with the proposed development. The relatively small increase in the RFC on the A5 north during the morning peak is a result of some traffic from the existing Magna Park using the new access route via Mere Lane thus avoiding the Cross In Hand roundabout completely. This effect is particularly evident in the morning peak on the basis that all traffic approaching Magna Park from the north is assumed to use the new access route via Mere Lane and Argosy Way

8.76 During the evening peak the junction is predicted to be operating below the 0.85 threshold.

A4303/ Shackleton Way Junction

8.77 This is a left in/ left out junction and therefore there is only one opposed movement – the left turn from Shackleton Way onto the A4303.

8.78 The results of the PICADY assessment in 2026 both with and without development are summarised in the table below. Full model printouts from this analysis are presented in **Appendix S**.

Table 8-31: Summary of the Main Performance Indicators at the A4303/ Shackleton Way Junction – 2026 Without Development				
	AM Peak		PM Peak	
Movement	RFC	Queue	RFC	Queue
B - C	0.195	0	0.536	1
Where B is Shackleton Way and C is A4303 East				

8.79 Table 8-31 indicates that the A4303/ Shackleton Way junction would operate within capacity in 2026 without development.

Table 8-32: Summary of the Main Performance Indicators at the A4303/ Shackleton Way Junction – 2026 With Development				
	AM Peak		PM Peak	
Movement	RFC	Queue	RFC	Queue
B - C	0.211	0	0.688	2
Where B is Shackleton Way and C is A4303 East				

8.80 Table 8-32 indicates that the A4303/ Shackleton Way junction would continue to operate within capacity with the addition of the development traffic.

A4303/ Coventry Road

8.81 The results of the ARCADY assessment in 2026 both with and without development are summarised in the tables below. Full model printouts from this analysis are presented in **Appendix S**.

Table 8-33: Summary of the Main Performance Indicators at the A4303/ Coventry Road Roundabout – 2026 Without Development				
	AM Peak		PM Peak	
Approach Arm	RFC	Queue	RFC	Queue
Coventry Road	0.700	2	0.396	1
A4303 East	0.617	2	0.399	1
Mobile Home Park	0.047	0	0.017	0
A4303 West	0.347	1	0.659	2

8.82 Table 8-33 indicates that the A4303/ Coventry Road roundabout would operate within capacity in 2026 without development.

Table 8-34: Summary of the Main Performance Indicators at the A4303/ Coventry Road Roundabout – 2026 With Development				
	AM Peak		PM Peak	
Approach Arm	RFC	Queue	RFC	Queue
Coventry Road	0.846	5	0.489	1
A4303 East	0.819	4	0.453	1
Mobile Home Park	0.090	0	0.018	0
A4303 West	0.414	1	0.801	4

8.83 Table 8-34 indicates that the A4303/ Coventry Road roundabout would continue to operate within capacity with the addition of development related traffic.

A4303/ A426

8.84 The results of the ARCADY assessment in 2026 both with and without development are summarised in the tables below. Full model printouts from this analysis are presented in **Appendix S.**

Table 8-35: Summary of the Main Performance Indicators at the A4303/ A426 Roundabout – 2026 Without Development				
	AM Peak		PM Peak	
Approach Arm	RFC	Queue	RFC	Queue
A426 North	1.063	44	0.964	14
A4303 East	0.877	7	0.729	3
A426 South	0.915	8	0.893	7
A4303 West	0.567	1	0.751	3

8.85 Table 8-35 indicates that the A4303/ A426 roundabout would be operating above capacity during the morning peak in 2026 without development. The critical arm is the A426 north where a queue of 44 vehicles is expected. High RFC values are also expected on the A4303 east and A426 south. During the evening peak the junction is predicted to be operating within capacity albeit with high RFC values on the A426 north and A426 south.

Table 8-36: Summary of the Main Performance Indicators at the A4303/ A426 Roundabout – 2026 With Development				
	AM Peak		PM Peak	
Approach Arm	RFC	Queue	RFC	Queue
A426 North	1.157	86	1.084	46
A4303 East	0.978	23	0.760	3
A426 South	1.074	34	0.936	10
A4303 West	0.639	2	0.917	9

8.86 Table 8-36 indicates that with the addition of the development traffic the A4303/ A426 roundabout would be operating above capacity during both peaks. During The morning peak the A426 north and south arms are predicted to be operating above capacity with queues of 86 and 34 vehicles respectively. During the evening peak the A426 north is predicted to be operating above capacity with a queue of 46 vehicles.

8.87 To offset the impact of the development improvements are proposed at the A4303/ A426 junction. A drawing showing the proposed roundabout improvements is presented in **Appendix X** (Drawing No. 47066811/A008/SK14).

8.88 In summary each entry has been increased to three lanes and road markings have been added to the circulatory carriageway to help guide vehicles through the roundabout. This should improve the lane discipline on the circulatory carriageway and minimise the potential for side swipe collisions.

8.89 A further benefit of the proposed improvements is the entry path radius of each arm is below 100m whereas the existing roundabout has three arms where the entry path radius exceeds 100m.

8.90 TD16/07 'Geometric Design of Roundabouts, states that 'The entry path radius is a measure of the deflection to the left imposed on vehicles entering a roundabout. It is the most important determinant of safety at roundabouts because it governs the speed of vehicles through the junction and whether drivers are likely to give way to circulating vehicles'.

8.91 The proposed improvements to the A4303/ A426 roundabout provide the required deflection on all arms and therefore achieve the most important determinant of safety at the roundabout.

8.92 The results of the revised ARCADY assessment in 2026 with development and the proposed roundabout improvements are summarised in the table below. Full model printouts from this analysis are presented in **Appendix S**.

Table 8-37: Summary of the Main Performance Indicators at the A4303/ A426 Roundabout – 2026 With Development and Junction Improvements

	AM Peak		PM Peak	
Approach Arm	**RFC**	**Queue**	**RFC**	**Queue**
A426 North	0.819	4	0.738	3
A4303 East	0.980	23	0.754	3
A426 South	0.709	2	0.648	2
A4303 West	0.524	1	0.735	3

8.93 Table 8-37 indicates that the proposed improvements at the A4303/A426 roundabout would provide substantial capacity enhancements during both peaks. Comparing the results in the without development scenario (Table 8-35) to those set out in the table above, it is apparent that the proposed improvements would offset the impact of the development on all arms

with the exception of the A4303 east during the morning peak where a small reduction in capacity is predicted.

8.94 Referring to the table at the bottom of the ARCADY output which provides information on the queuing delay over the whole modelled period, it can be seen that in the AM peak the inclusive queuing delay on all arms of the junction will reduce from 0.32 minutes/ vehicle without improvements and without development to 0.18 minutes/ vehicle with improvements and with development. The corresponding reduction in delay during the PM peak is 0.18 minutes/ vehicle to 0.09 minutes/ vehicle.

8.95 It is apparent therefore that improvements to this junction would provide significant relief to a capacity issue that would occur even if the development were not to proceed.

M1 Junction 20

8.96 The results of the ARCADY assessment in 2026 both with and without development are summarised in the tables below. Full model printouts from this analysis are presented in **Appendix S**.

Table 8-38: Summary of the Main Performance Indicators at M1 Junction 20 – 2026 Without Development

	AM Peak		PM Peak	
Approach Arm	**RFC**	**Queue**	**RFC**	**Queue**
M1 Southbound off-slip	0.459	1	0.464	1
A4304	0.711	2	0.455	1
M1 Northbound off-slip	0.389	1	0.328	1
A4303	0.591	1	0.672	2

8.97 Table 8-38 indicates that M1 Junction 20 would be operating within capacity during both peaks.

Table 8-39: Summary of the Main Performance Indicators at M1 Junction 20 – 2026 With Development

	AM Peak		PM Peak	
Approach Arm	**RFC**	**Queue**	**RFC**	**Queue**
M1 Southbound off-slip	0.529	1	0.505	1
A4304	0.809	4	0.482	1
M1 Northbound off-slip	0.466	1	0.346	1
A4303	0.626	2	0.740	3

8.98 Table 8-39 indicates that the junction would continue to operate within capacity with the addition of the development traffic. There would be small increases in the RFC and the queue length on the A4304 during the morning peak. The junction would continue to operate within capacity during the evening peak. It is significant that during both peaks,

both off-slips of the M1 would be operating comfortably within capacity with a maximum queue of only one vehicle.

8.99 At the third formal pre-application meeting with HDC on 14 April 2015, AECOM representing Highways England requested that the knock on effects of the proposed capacity improvements at the A4303/ A426 roundabout are considered at M1 Junction 20.

8.100 When the traffic counts were undertaken, queue lengths were also recorded at each junction. Referring to the queue length data, which is presented in **Appendix M**, it can be seen that at the end of the modelled peak periods, the residual queues at the A4303/ A426 roundabout and at M1 Junction 20 were negligible. It is apparent therefore that the base traffic flows upon which all future year capacity assessments at both junctions are based represented demand flows and therefore there is no requirement to adjust the flows at M1 Junction 20 as a result of the proposed improvements at the A4303/ A426 roundabout.

M69 Junction 1

8.101 The results of the TRANSYT assessment in 2026 both with and without development are summarised in the table below. Approach links are shown in italics. A TRANSYT link/node diagram is presented in **Appendix R**. Full model printouts from this analysis are in **Appendix S**.

Table 8-40: Summary of the Main Performance Indicators at M69 Junction 1 – 2026 Without Development

Link		AM Peak		PM Peak	
No.	**Description**	**Sat %**	**Queue**	**Sat %**	**Queue**
10	*M69 eastbound off-slip – inside/middle lanes*	80	12	87	17
11	*M69 eastbound off-slip – outside lane*	50	4	69	7
12	Circulating – inside lane	56	6	48	4
13	Circulating – middle lane	45	5	48	4
14	Circulating – outside lane	33	3	45	4
20	*A5 North – inside lane*	55	6	54	5
21	*A5 North – middle/outside lanes*	87	16	92	20
22	Circulating – Inside/middle lane	39	7	64	12
23	Circulating – outside lane	20	0	36	0
30	*B4109 Rugby Rd – inside lane*	27	2	23	1
31	*B4109 Rugby Rd – middle/outside lanes*	93	28	84	11
32	Circulating – inside lane	63	5	40	3
33	Circulating – middle lane	80	8	69	8
34	Circulating – outside lane	29	0	23	1
40	*M69 westbound off-slip – inside lane*	77	5	106	18
41	*M69 westbound off-slip – middle/outside lanes*	84	10	69	7
42	Circulating – inside lane	103	56	93	20
43	Circulating – outside lane	75	10	41	3
50	*A5 South – inside lane*	71	6	42	3
51	*A5 South – middle/outside lanes*	90	16	87	16
52	Circulating – inside lane	38	4	39	4
53	Circulating – middle lane	76	12	44	7
54	Circulating – middle/outside lanes	21	1	16	1
60	*B4109 Hinckley Road – inside/outside lanes*	40	2	36	2
61	Circulating – all lanes	43	0	32	0

8.102 Table 8-40 indicates that M69 Junction 1 would be operating above capacity during both peaks without development. During both peaks the critical part of the junction is the westbound off-slip of the M69 where a degree of saturation above 100% is predicted on the circulatory carriageway during the morning peak and on the off-slip during the evening peak.

Table 8-41: Summary of the Main Performance Indicators at M69 Junction 1 – 2026 With Development

Link		AM Peak		PM Peak	
No.	**Description**	**Sat %**	**Queue**	**Sat %**	**Queue**
10	*M69 eastbound off-slip – inside/middle lanes*	80	12	87	17
11	*M69 eastbound off-slip – outside lane*	50	4	70	7
12	Circulating – inside lane	55	7	50	5
13	Circulating – middle lane	46	6	51	6
14	Circulating – outside lane	34	4	47	5
20	*A5 North – inside lane*	50	5	61	6
21	*A5 North – middle/outside lanes*	88	18	102	36
22	Circulating – Inside/middle lane	42	6	61	14
23	Circulating – outside lane	22	2	34	4
30	*B4109 Rugby Rd – inside lane*	44	3	23	1
31	*B4109 Rugby Rd – middle/outside lanes*	156	286	86	12
32	Circulating – inside lane	49	4	40	6
33	Circulating – middle lane	69	8	70	11
34	Circulating – outside lane	23	0	22	3
40	*M69 westbound off-slip – inside lane*	77	5	106	18
41	*M69 westbound off-slip – middle/outside lanes*	84	10	69	7
42	Circulating – inside lane	95	26	95	16
43	Circulating – outside lane	55	4	40	0
50	*A5 South – inside lane*	72	6	39	3
51	*A5 South – middle/outside lanes*	94	20	89	18
52	Circulating – inside lane	33	5	40	4
53	Circulating – middle lane	57	5	44	9
54	Circulating – middle/outside lanes	20	5	17	1
60	*B4109 Hinckley Road – inside/outside lanes*	35	2	37	2
61	Circulating – all lanes	39	0	34	0

8.103 Table 8-41 indicates that the development is predicted to have the most significant impact on the B4109 Rugby Road during the morning peak where on link 31 the degree of saturation is expected to increase from 93% without development to 156% with development. The corresponding impact on the queue length is to increase it from 28 pcus to 286 pcus.

8.104 During the evening peak the most significant impact is expected on the A5 north approach where on link 21 the degree of saturation is expected to increase from 92% without development to 102% with development. The corresponding impact on the queue length is to increase it from 20 pcus to 36 pcus.

8.105 A knock-on effect of the capacity problems on Rugby Road during the morning peak is an apparent improvement in the performance of the M69 westbound off-slip which with development is predicted to be operating within capacity. The most likely explanation for this is that traffic held back on Rugby Road reduces the flow on the circulatory carriageway passing the M69 westbound off-slip resulting in capacity improvements on this part of the roundabout.

Gibbet Hill Roundabout

8.106 As part of the Development Consent Order (DCO) for DIRFT III there is a commitment to provide capacity improvements at the Gibbet Hill roundabout. The scheme includes carriageway widening, improved carriageway markings and the signalisation of the approach and circulatory carriageways of the A426 north, A5 north and A5 south. The improvements are shown on a drawing prepared by Vectos (Drawing No. 110041/PD/08 Rev D). The drawing was provided by Highways England and is presented in **Appendix Y**.

8.107 The improved layout has been modelled using TRANSYT and the TRANSYT link/node diagram is presented in **Appendix R**. The results of the assessment in 2026 both with and without development are summarised in the tables below. Approach links are shown in italics. Full model printouts from this analysis are presented in **Appendix S**.

Table 8-42: Summary of the Main Performance Indicators at Gibbet Hill Roundabout – 2026 Without Development					
Link		**AM Peak**		**PM Peak**	
No.	**Description**	**Sat %**	**Queue**	**Sat %**	**Queue**
10	*A5 north – inside lane*	86	11	90	11
11	*A5 north – outside lane*	80	10	81	8
12	Circulating – inside lane	69	8	68	10
13	Circulating – outside lane	19	1	16	1
20	*A426 north – inside lane*	80	8	68	7
21	*A426 north – outside lane*	75	7	63	6
22	Circulating – inside lane	62	8	56	6
23	Circulating – outside lane	47	8	38	6
30	*Gibbet Lane – all lanes*	22	1	15	0
31	Circulating – all lanes	31	0	27	0
40	*A5 south – inside lane*	87	11	86	12
41	*A5 south – outside lane*	28	2	29	3
42	Circulating – inside lane	44	3	40	4
43	Circulating – outside lane	67	9	68	6
50	*A426 south – all lanes*	74	9	82	13
51	Circulating – all lanes	16	0	20	0

8.108 Table 8-42 indicates that the Gibbet Hill roundabout would be operating within capacity during both peaks without development.

Table 8-43: Summary of the Main Performance Indicators at Gibbet Hill Roundabout – 2026 With Development					
Link		**AM Peak**		**PM Peak**	
No.	**Description**	**Sat %**	**Queue**	**Sat %**	**Queue**
10	*A5 north – inside lane*	90	13	93	13
11	*A5 north – outside lane*	86	12	85	10
12	Circulating – inside lane	69	10	70	11
13	Circulating – outside lane	19	2	17	1
20	*A426 north – inside lane*	75	7	77	7
21	*A426 north – outside lane*	70	7	72	7
22	Circulating – inside lane	66	9	57	7
23	Circulating – outside lane	51	9	40	7
30	*Gibbet Lane – all lanes*	24	1	16	0
31	Circulating – all lanes	32	0	29	0
40	*A5 south – inside lane*	89	13	89	14
41	*A5 south – outside lane*	26	2	29	3
42	Circulating – inside lane	48	5	43	2
43	Circulating – outside lane	71	6	71	6
50	*A426 south – all lanes*	78	10	84	14
51	Circulating – all lanes	17	0	21	0

8.109 Table 8-43 indicates that the Gibbet Hill roundabout would continue to operate within capacity with the addition of the development traffic. It is apparent therefore that the roundabout improvements in support of DIRFT III would provide the necessary capacity to accommodate the traffic associated with all committed development and the proposed development.

M6 Junction 1

8.110 The results of the TRANSYT assessment in 2026 both with and without development are summarised in the table below. Approach links are shown in italics. A TRANSYT link/node diagram is presented in **Appendix R.** Full model printouts from this analysis are presented in **Appendix S**.

Table 8-44: Summary of Main Performance Indicators at M6 J1 – 2026 No Development					
Link		**AM Peak**		**PM Peak**	
No.	**Description**	**Sat %**	**Queue**	**Sat %**	**Queue**
10	*M6 eastbound off-slip – inside lane*	70	6	74	6
11	*M6 eastbound off-slip – middle/outside lanes*	79	14	80	13
12	Circulating – inside/middle lanes	35	7	37	8
13	Circulating – outside lane	24	3	21	2
20	*A426 north – inside/outside lanes*	76	12	60	5
21	Circulating – all lanes	26	1	23	0
30	*M6 westbound off-slip – inside lane*	91	8	55	3
31	*M6 westbound off-slip - middle/outside lanes*	46	5	32	3
32	Circulating – inside/middle lanes	67	11	53	6
33	Circulating – outside lane	24	2	23	2
40	*A426 south – inside/outside lanes*	84	5	84	4
41	Circulating – all lanes	10	0	10	0

8.111 Table 8-44 indicates that M6 Junction 1 would be operating within capacity during both peaks without development.

Table 8-45: Summary of Main Performance Indicators at M6 J1 – 2026 No Development					
Link		**AM Peak**		**PM Peak**	
No.	**Description**	**Sat %**	**Queue**	**Sat %**	**Queue**
10	*M6 eastbound off-slip – inside lane*	74	6	76	6
11	*M6 eastbound off-slip – middle/outside lanes*	79	14	80	13
12	Circulating – inside/middle lanes	36	8	38	8
13	Circulating – outside lane	24	3	21	2
20	*A426 north – inside/outside lanes*	78	13	63	6
21	Circulating – all lanes	26	1	23	0
30	*M6 westbound off-slip – inside lane*	91	8	55	3
31	*M6 westbound off-slip - middle/outside lanes*	46	5	32	3
32	Circulating – inside/middle lanes	68	14	55	6
33	Circulating – outside lane	24	2	24	2
40	*A426 south – inside/outside lanes*	85	6	84	5
41	Circulating – all lanes	11	0	10	0

8.112 Table 8-45 indicates that M6 Junction 1 would continue to operate within capacity with the addition of the development traffic. Comparing the results both with and without development it can be seen that the impact of the development at this junction would be small with the degree of saturation and queue lengths on the majority of links predicted to remain unchanged..

8.113 It is understood that as part of the Rugby Gateway development there is a proposal to upgrade Junction 1 of the M6 to full signalisation. URS has requested details of the scheme from both Highways England and WCC. However at the time of writing, neither authority has provided a scheme drawing. An assessment of capacity at the improved junction has therefore not been undertaken at this stage.

Summary of Impact

8.114 In order to quantify the impact of the development, summary tables have been prepared at junctions that are predicted to be operating close to or above capacity to compare the traffic flows on each approach both with and without development. The impact of the development can then be calculated to allow a judgement to be made as to whether the impact is material. The calculation has been undertaken in 2026 using the traffic flows in Figures 8.5 to 8.8 in **Appendix N.**

Cross In Hand Roundabout

8.115 Table 8-46 and Table 8-47 show the percentage impact of the development at the Cross In Hand roundabout in the AM and PM peaks respectively.

Table 8-46: Impact of Development at Cross in Hand Roundabout – AM Peak

Approach Arm	Flow No Dev	Flow + Dev	Flow Difference	% Impact
A5 North	1213	1226	+13	+1.07%
A4303	948	1057	+109	+11.50%
A5 South	733	810	+77	+10.50%
B4027 Lutterworth Rd	159	236	+77	+48.43%
Coal Pit Lane	321	412	+91	+22.35%

Table 8-47: Impact of Development at Cross in Hand Roundabout – PM Peak

Approach Arm	Flow No Dev	Flow + Dev	Flow Difference	% Impact
A5 North	731	1043	+312	+42.68%
A4303	1102	1055	-47	-4.45%
A5 South	847	877	+30	+3.54%
B4027 Lutterworth Rd	278	309	+31	+11.15%
Coal Pit Lane	195	224	+29	+14.87%

8.116 The tables above indicate that the proposed development would have a material impact on most arms at this junction. The most significant impact is predicted on the B4027 Lutterworth Road during the morning peak and on the A5 north during the evening peak. However referring to the ARCADY results in Table 8-29 and Table 8-30 these arms are predicted to be operating within capacity during these peaks.

8.117 The reduction in traffic flows on the A4303 during the evening peak demonstrates the potential wider benefits of the proposed access arrangements.

A4303/ A426

8.118 Table 8-48 and Table 8-49 show the percentage impact of the development at the A4303/ A426 roundabout in the AM and PM peaks respectively.

Table 8-48: Impact of Development at A4303/A426 Roundabout – AM Peak

Approach Arm	Flow No Dev	Flow + Dev	Flow Difference	% Impact
A426 North	999	1047	+48	+4.80%
A4303 East	1743	1931	+188	+10.79%
A426 South	691	691	0	0.00%
A4303 West	656	734	+78	+11.89%

Table 8-49: Impact of Development at A4303/A426 Roundabout – PM Peak

Approach Arm	Flow No Dev	Flow + Dev	Flow Difference	% Impact
A426 North	871	881	+10	+1.15%
A4303 East	1459	1514	+55	+3.77%
A426 South	777	777	0	0.00%
A4303 West	899	1086	+187	+20.80%

8.119 The tables above indicate that the development would have the greatest impact on the A4303 west with an increase of 11.89% and 20.80% predicted during the morning and evening peaks respectively. A significant impact is also predicted on the A4303 east during the morning peak.

8.120 Reference to the ARCADY results presented in Table 8-35 and Table 8-36 indicate that both arms of the A4303 would be operating within capacity during both peaks.

8.121 Significantly the impact on the critical arms at the junction is expected to be small as a result of the development. For example the maximum increase in traffic on the A426 north is 4.8% during the morning peak while there is no increase in traffic predicted on the A426 south during either peak as a result of the development.

8.122 Notwithstanding the low impact of the development on the critical arms at this junction, capacity improvements are being proposed and the results are reported in Table 8-37. The modelling indicates that the proposed improvements would provide a significant level of improvement at this junction.

M1 Junction 20

8.123 Table 8-50 and Table 8-51 show the percentage impact of the development at Junction 20 of the M1 in the AM and PM peaks respectively.

Table 8-50: Impact of Development at M1 Junction 20 – AM Peak

Approach Arm	Flow No Dev	Flow + Dev	Flow Difference	% Impact
M1 Southbound off-slip	927	1049	+122	+13.16%
A4304	825	846	+21	+2.55%
M1 Northbound off-slip	493	540	+47	+9.53%
A4303	1366	1427	+61	+4.47%

Table 8-51: Impact of Development at M1 Junction 20 – PM Peak

Approach Arm	Flow No Dev	Flow + Dev	Flow Difference	% Impact
M1 Southbound off-slip	832	870	+38	+4.57%
A4304	597	602	+5	+0.84%
M1 Northbound off-slip	506	516	+10	+1.98%
A4303	1687	1841	+154	+9.13%

8.124 The tables above indicate that the development would have a significant impact on both motorway off-slips and the A4303 during the morning peak and on the M1 southbound off-slip and the A4303 during the evening peak.

8.125 Reference to the ARCADY results in Table 8-38 and Table 8-39 indicate that the motorway slip roads and the A4303 would operate within capacity in the design year during both peaks.

M69 Junction 1

8.126 Table 8-52 and Table 8-53 show the percentage impact of the development at Junction 1 of the M69 in the AM and PM peaks respectively.

Table 8-52: Impact of Development at M69 Junction 1 – AM Peak

Approach Arm	Flow No Dev	Flow + Dev	Flow Difference	% Impact
A5 North	1127	1189	+62	+5.50%
B4109 Rugby Road	1570	1610	+40	+2.55%
M69 Westbound Off-Slip	624	624	0	0.00%
A5 South	965	993	+28	+2.90%
B4109 Hinckley Road	359	359	0	0.00%
M69 Eastbound Off-Slip	778	781	+3	+0.39%

Table 8-53: Impact of Development at M69 Junction 1 – PM Peak				
Approach Arm	**Flow No Dev**	**Flow + Dev**	**Flow Difference**	**% Impact**
A5 North	1172	1186	+14	+1.19%
B4109 Rugby Road	598	609	+11	+1.84%
M69 Westbound Off-Slip	624	624	0	0.00%
A5 South	912	983	+71	+7.79%
B4109 Hinckley Road	429	429	0	0.00%
M69 Eastbound Off-Slip	1220	1223	+3	+0.25%

8.127 The tables above indicate that the impact of the development at Junction 1 of the M69 would be small. On three of the arms, including both M69 off-slips, there is no or very little impact predicted. The only arms where the traffic flows are expected to increase by more than 5% are the A5 north during the morning peak and the A5 south during the evening peak. On these arms the flow is predicted to increase by 62 and 71 vehicles respectively.

8.128 Reference to the TRANSYT results in Table 8-40 and Table 8-41 indicate that the critical arms at this junction are the B4109 Rugby Road in the morning peak and the A5 north and M69 westbound off-slip in the evening peak. The impact of the development on all these arms is small and not considered to be material.

Gibbet Hill Roundabout

8.129 Table 8-54 and Table 8-55 show the percentage impact of the development at the Gibbet Hill roundabout in the AM and PM peaks respectively.

Table 8-54: Impact of Development at Gibbet Hill Roundabout – AM Peak				
Approach Arm	**Flow No Dev**	**Flow + Dev**	**Flow Difference**	**% Impact**
A5 North	981	1025	+44	+4.49%
A426 East	656	656	0	0.00%
Gibbet Lane	91	91	0	0.00%
A5 South	562	603	+41	+7.30%
A426 West	973	1008	+35	+3.60%

Table 8-55: Impact of Development at Gibbet Hill Roundabout – PM Peak				
Approach Arm	**Flow No Dev**	**Flow + Dev**	**Flow Difference**	**% Impact**
A5 North	752	839	+87	+11.57%
A426 East	694	694	0	0.00%
Gibbet Lane	90	90	0	0.00%
A5 South	769	785	+16	+2.08%
A426 West	1021	1034	+13	+1.27%

8.130 The tables above indicate that the impact of the development at the Gibbet Hill roundabout would be most significant on the A5 north and south during the morning peak and on the A5 north during the evening peak.

8.131 Reference to the TRANSYT results in Table 8-42 and Table 8-43 indicate that the committed junction improvements as part of DIRFT III will provide the necessary capacity to accommodate all committed development and the proposed development.

M6 Junction 1

8.132 Table 8-56 and Table 8-57 show the percentage impact of the development at Junction 1 of the M6 in the AM and PM peaks respectively.

Table 8-56: Impact of Development at M6 Junction 1 – AM Peak

Approach Arm	Flow No Dev	Flow + Dev	Flow Difference	% Impact
A426 North	1113	1139	+26	+2.34%
M6 Westbound Off-Slip	471	471	0	0.00%
A426 South	1519	1538	+19	+1.25%
M6 Eastbound Off-Slip	986	1003	+17	+1.72%

Table 8-57: Impact of Development at M6 Junction 1 – PM Peak

Approach Arm	Flow No Dev	Flow + Dev	Flow Difference	% Impact
A426 North	946	988	+42	+4.44%
M6 Westbound Off-Slip	253	253	0	0.00%
A426 South	1583	1590	+7	+0.44%
M6 Eastbound Off-Slip	891	897	+6	+0.67%

8.133 The tables above indicate that the impact of the development at junction 1 of the M6 would be small with a maximum impact of 4.40% on the A426 north in the evening peak. In the morning peak the maximum impact is only 2.34% also on the A426 north. There is no impact predicted on the westbound off-slip of the M6 and a maximum impact of only 1.72% on the eastbound off-slip during the morning peak.

9 IMPACT OF SYMMETRY PARK – SENSITIVITY TEST

General

9.1 In the Environmental Statement Scoping Document for traffic and transport URS stated that the impact of Land adjacent to Glebe Farm, Coventry Road, Lutterworth (db symmetry application – planning ref: 15/00865/OUT) will be considered as a sensitivity test on top of the list of consented schemes set out in Section 7 of this report.

9.2 LCC has provided comments to HDC on the scope of the Environmental Statement Scoping Opinion for the proposed development on land adjacent to Magna Park. In its response LCC stated that consideration of the symmetry park proposals as a sensitivity test is welcomed. In its response to HDC, AECOM, acting on behalf of Highways England, also found this to be a suitable approach.

9.3 The symmetry park proposal comprises 278,709m^2 of B8 (storage and distribution), B2 (General Industrial) and B1(c) (Offices) on land adjacent to Glebe Farm, Coventry Road, Lutterworth.

9.4 The symmetry park scheme is being promoted by db symmetry (formerly Barwood Developments Limited). An outline planning application was submitted on 5 June 2015. At the time of writing this report the planning application had not been determined and is therefore not considered to be a committed scheme. The access proposals consist of a new roundabout on the A4303 opposite Woodbrig House Farm and an emergency only access onto the A5 to the south of the Cross In Hand roundabout.

9.5 A Transport Assessment has been produced by Peter Brett Associates (PBA) containing details of the proposed trip generation and distribution. AM and PM peak development traffic flow diagrams are presented in Appendix 5.3 and these have been extracted and are presented as Figures 9.1 and 9.2 of this TA.

9.6 Figures 9.3 and 9.4 show the total 2026 traffic flows that include all the committed developments set out in Section 7, the proposed development (Magna Park Extension) and symmetry park. As part of this sensitivity test all the junctions have been tested for capacity using the traffic flows presented in Figures 9.3 and 9.4.

9.7 Where mitigation measures have been proposed by PBA to accommodate the symmetry park development, the junction models have been updated to reflect the proposed improvements. Details of these improvements are provided below.

Proposed Roundabout on Mere Lane

9.8 The results of the ARCADY assessment in 2026 for the sensitivity test are summarised in the table below. Full model printouts from this analysis are presented in **Appendix S**.

Table 9-1: Summary of Main Performance Indicators at New Roundabout on Mere Lane – 2026 Sensitivity Test

	AM Peak		PM Peak	
Approach Arm	**RFC**	**Queue**	**RFC**	**Queue**
DHL Access Road	0.122	0	0.265	0
Mere Lane East	0.105	0	0.050	0
Hunter Boulevard	0.198	0	0.123	0
Mere Lane West	0.289	0	0.122	0

9.9 Table 9-1 indicates that the new roundabout on Mere Lane would operate within capacity in 2026 with no queues predicted on any arm.

Proposed Roundabout on the A5

9.10 The results of the ARCADY assessment in 2026 for the sensitivity test are summarised in the table below. Full model printouts from this analysis are presented in **Appendix S**.

Table 9-2: Summary of Main Performance Indicators at New A5 North Access – 2026 Sensitivity Test

	AM Peak		PM Peak	
Approach Arm	**RFC**	**Queue**	**RFC**	**Queue**
A5 North	0.897	8	0.408	1
Proposed Access	0.222	0	0.285	0
A5 South	0.541	1	0.666	2

9.11 Table 9-2 indicates that the new roundabout on the A5 would operate within capacity in 2026 albeit with an RFC above the 0.85 threshold on the A5 north during the morning peak.

A5/ Mere Lane Junction

9.12 The results of the ARCADY assessment in 2026 for the sensitivity test are summarised in the table below. Full model printouts from this analysis are presented in **Appendix S**.

Table 9-3: Summary of the Main Performance Indicators at New Roundabout A5/ Mere Lane – 2026 Sensitivity Test

	AM Peak		PM Peak	
Approach Arm	**RFC**	**Queue**	**RFC**	**Queue**
A5 North	0.826	5	0.528	1
Mere Lane	0.250	0	0.307	0
A5 South	0.685	2	0.756	3

9.13 Table 9-3 indicates that the proposed roundabout at the A5/ Mere Lane junction would operate within capacity in 2026.

A4303/ Hunter Boulevard

9.14 PBA has proposed the following improvements at this junction to accommodate the symmetry park development. The ARCADY model has been updated accordingly.

- A4303 West – entry width increased to 11.0m
- Flare length increased to 45.0m

9.15 The results of the ARCADY assessment in 2026 for the sensitivity test are summarised in the table below. Full model printouts from this analysis are presented in **Appendix S**.

Table 9-4: Summary of the Main Performance Indicators at the A4303/ Hunter Boulevard Roundabout – 2026 Sensitivity Test

	AM Peak		PM Peak	
Approach Arm	**RFC**	**Queue**	**RFC**	**Queue**
Hunter Boulevard	0.302	0	0.576	1
A4303 East	0.881	7	0.523	1
Access to George	0.094	0	0.313	1
A4303 West	0.678	2	0.452	1

9.16 Table 9-4 indicates that the A4303/ Hunter Boulevard junction would operate within capacity albeit with an RFC in excess of the 0.85 threshold on the A4303 east during the morning peak.

Cross In Hand Roundabout

9.17 PBA has proposed the following improvements at this junction to accommodate the symmetry park development. The ARCADY model has been updated accordingly.

- A5 north – entry width increased to 8.6m

- A5 north – flare length increased to 60.0m
- A4303 – entry width increased to 8.6m

9.18 The results of the ARCADY assessment in 2026 for the sensitivity test are summarised in the table below. Full model printouts from this analysis are presented in **Appendix S**.

Table 9-5: Summary of the Main Performance Indicators at the Cross In Hand Roundabout – 2026 Sensitivity Test

	AM Peak		PM Peak	
Approach Arm	**RFC**	**Queue**	**RFC**	**Queue**
A5 North	0.883	7	0.643	2
A4303	0.740	3	0.752	3
A5 South	0.832	5	0.861	6
B4027 Lutterworth Rd	0.361	1	0.494	1
Coal Pit Lane	0.841	5	0.465	1

9.19 Table 9-5 indicates that the Cross In Hand roundabout would operate within capacity albeit with an RFC in excess of the 0.85 threshold on the A5 north in the morning peak.

A4303/ Shackleton Way Junction

9.20 The results of the PICADY assessment in 2026 for the sensitivity test are summarised in the table below. Full model printouts from this analysis are presented in **Appendix S**

Table 9-6: Summary of the Main Performance Indicators at the A4303/ Shackleton Way Junction – 2026 Sensitivity Test

	AM Peak		PM Peak	
Movement	**RFC**	**Queue**	**RFC**	**Queue**
B - C	0.245	0	0.740	3
Where B is Shackleton Way and C is A4303 East				

9.21 Table 9-6 indicates that the A4303/ Shackleton Way junction would operate within capacity in 2026.

A4303/ Coventry Road

9.22 The results of the ARCADY assessment in 2026 for the sensitivity test are summarised in the table below. Full model printouts from this analysis are presented in **Appendix S**.

Table 9-7: Summary of the Main Performance Indicators at the A4303/ Coventry Road Roundabout – 2026 Sensitivity Test

	AM Peak		PM Peak	
Approach Arm	**RFC**	**Queue**	**RFC**	**Queue**
Coventry Road	0.917	9	0.560	1
A4303 East	0.962	16	0.489	1
Mobile Home Park	0.197	0	0.019	0
A4303 West	0.447	1	0.890	8

9.23 Table 9-7 indicates that the A4303/ Coventry Road roundabout would operate within capacity in 2026 albeit with RFC values in excess of 0.85 on the A4303 east and Coventry Road during the morning peak and on the A4303 west during the evening peak.

A4303/ A426

9.24 Both PBA and URS have proposed improvements to this roundabout to mitigate the impact of symmetry park and Magna Park Extension respectively. Both proposals involve widening of the A4303 entries to three lanes and increases to the flare lengths. The URS proposal also proposes three lane entries on the A426 whereas the PBA proposal maintains the existing two lane entries.

9.25 The sensitivity test has been undertaken on the URS design as this provides a direct comparison with earlier assessments presented in this report.

9.26 The results of the ARCADY assessment in 2026 for the sensitivity test are summarised in the table below. Full model printouts from this analysis are presented in **Appendix S**

Table 9-8: Summary of the Main Performance Indicators at the A4303/ A426 Roundabout – 2026 Sensitivity Test and URS Junction Improvements

	AM Peak		PM Peak	
Approach Arm	**RFC**	**Queue**	**RFC**	**Queue**
A426 North	0.852	5	0.793	4
A4303 East	1.020	46	0.780	4
A426 South	0.733	3	0.667	2
A4303 West	0.556	1	0.827	5

9.27 Table 9-8 indicates that A4303/A426 roundabout would operate above capacity in 2026 with an RFC of 1.020 and a queue of 46 vehicles predicted on the A4303 east during the morning peak. All other arms are shown to be operating within capacity although an RFC in excess of 0.85 is predicted on the A426 north also during the morning peak.

M1 Junction 20

9.28 PBA has proposed the following improvements at this junction to accommodate the symmetry park development. The ARCADY model has been updated accordingly.

- A4304 – entry width increased to 9.0m
- A4304 – flare length increased to 150m

9.29 The results of the ARCADY assessment in 2026 for the sensitivity test are summarised in the table below. Full model printouts from this analysis are presented in **Appendix S**.

Table 9-9: Summary of the Main Performance Indicators at M1 Junction 20 – 2026 Sensitivity Test

	AM Peak		PM Peak	
Approach Arm	**RFC**	**Queue**	**RFC**	**Queue**
M1 Southbound off-slip	0.752	3	0.698	2
A4304	0.750	3	0.421	1
M1 Northbound off-slip	0.591	1	0.393	1
A4303	0.717	3	0.877	7

9.30 Table 9-9 indicates that M1 junction 20 would operate within capacity in 2026 albeit with an RFC in excess of the 0.85 threshold on the A4303 during the evening peak.

M69 Junction 1

9.31 The results of the TRANSYT assessment in 2026 for the sensitivity test are summarised in the table below. Approach links are shown in italics. A TRANSYT link/node diagram is presented in **Appendix R**. Full model printouts from this analysis are in **Appendix S**.

Table 9-10: Summary of the Main Performance Indicators at M69 Junction 1 – 2026 Sensitivity Test

Link		AM Peak		PM Peak	
No.	**Description**	**Sat %**	**Queue**	**Sat %**	**Queue**
10	*M69 eastbound off-slip – inside/middle lanes*	80	12	87	17
11	*M69 eastbound off-slip – outside lane*	50	4	70	7
12	Circulating – inside lane	55	4	51	5
13	Circulating – middle lane	47	2	52	6
14	Circulating – outside lane	35	2	50	5
20	*A5 North – inside lane*	48	5	54	5
21	*A5 North – middle/outside lanes*	88	18	96	24
22	Circulating – Inside/middle lane	44	8	67	16
23	Circulating – outside lane	23	0	36	4
30	*B4109 Rugby Rd – inside lane*	48	3	23	1
31	*B4109 Rugby Rd – middle/outside lanes*	174	345	88	12
32	Circulating – inside lane	48	3	40	6
33	Circulating – middle lane	70	9	72	12
34	Circulating – outside lane	22	0	23	3
40	*M69 westbound off-slip – inside lane*	77	5	106	18
41	*M69 westbound off-slip – middle/outside lanes*	84	10	69	7
42	Circulating – inside lane	96	18	97	21
43	Circulating – outside lane	51	8	40	0
50	*A5 South – inside lane*	67	5	39	3
51	*A5 South – middle/outside lanes*	90	17	95	22
52	Circulating – inside lane	32	2	40	4
53	Circulating – middle lane	55	5	45	9
54	Circulating – middle/outside lanes	20	0	17	1
60	*B4109 Hinckley Road – inside/outside lanes*	35	2	38	2
61	Circulating – all lanes	39	0	35	0

9.32 Table 9-10 indicates that Junction 1 of the M69 would be operating above capacity during both peaks. The critical link during the morning peak is the B4109 Rugby Road where a degree of saturation of 174% and a queue of 345 pcus is predicted.

9.33 The critical link during the evening peak is the M69 westbound off-slip where a degree of saturation of 106% and a queue of 18 pcus is predicted.

Gibbet Hill Roundabout

9.34 As part of the Development Consent Order (DCO) for DIRFT III there is a commitment to provide capacity improvements at the Gibbet Hill roundabout. The scheme includes carriageway widening, improved carriageway markings and the signalisation of the approach and circulatory carriageways of the A426 north, A5 north and A5 south. The improvements are shown on a drawing prepared by Vectos (Drawing No. 110041/PD/08 Rev D). The drawing was provided by Highways England and is presented in **Appendix X**.

9.35 PBA has proposed the following additional improvements at this junction to accommodate the symmetry park development. The TRANSYT model has been updated accordingly.

- A426 south – converted to traffic signal control with 2 lane flared entry and 2 lane circulatory
- A426 north – flare lengthened by 20m
- A5 north – flare lengthened by 15m

9.36 The improved layout has been modelled using TRANSYT and the TRANSYT link/node diagram is presented in **Appendix R**. The results of the assessment in 2026 for the sensitivity test are summarised in the table below. Approach links are shown in italics. Full model printouts from this analysis are presented in **Appendix S**.

Table 9-11: Summary of the Main Performance Indicators at Gibbet Hill Roundabout – 2026 Sensitivity Test

Link		AM Peak		PM Peak	
No.	**Description**	**Sat %**	**Queue**	**Sat %**	**Queue**
10	*A5 north – inside lane*	86	12	84	10
11	*A5 north – outside lane*	85	12	87	11
12	Circulating – inside lane	71	7	74	5
13	Circulating – outside lane	19	1	18	1
20	*A426 north – inside lane*	80	8	77	7
21	*A426 north – outside lane*	75	7	72	7
22	Circulating – inside lane	64	9	58	7
23	Circulating – outside lane	52	10	47	8
30	*Gibbet Lane – all lanes*	24	1	17	1
31	Circulating – all lanes	33	0	30	0
40	*A5 south – inside lane*	91	13	89	14
41	*A5 south – outside lane*	26	2	29	3
42	Circulating – inside lane	51	5	49	6
43	Circulating – outside lane	70	6	73	6
50	*A426 south – all lanes*	96	28	96	28
51	Circulating – inside lane	69	2	83	3
52	Circulating – outside lane	30	3	33	2

9.37 Table 9-11 indicates that the Gibbet Hill roundabout would operate within capacity during both peaks in 2026.

M6 Junction 1

9.38 The results of the TRANSYT assessment in 2026 for the sensitivity test are summarised in the table below. Approach links are shown in italics. A TRANSYT link/node diagram is presented in **Appendix R**. Full model printouts from this analysis are presented in **Appendix S**.

Table 9-12: Summary of the Main Performance Indicators at M6 Junction 1 – 2026 Sensitivity Test

Link		AM Peak		PM Peak	
No.	**Description**	**Sat %**	**Queue**	**Sat %**	**Queue**
10	*M6 eastbound off-slip – inside lane*	80	8	10	7
11	*M6 eastbound off-slip – middle/outside lanes*	73	13	80	13
12	Circulating – inside/middle lanes	39	8	38	8
13	Circulating – outside lane	24	3	21	2
20	*A426 north – inside/outside lanes*	80	14	67	8
21	Circulating – all lanes	26	1	23	0
30	*M6 westbound off-slip – inside lane*	91	8	55	3
31	*M6 westbound off-slip - middle/outside lanes*	46	5	32	3
32	Circulating – inside/middle lanes	68	16	56	6
33	Circulating – outside lane	25	3	27	3
40	*A426 south – inside/outside lanes*	87	7	86	6
41	Circulating – all lanes	11	0	11	0

9.39 Table 9-12 indicates that M6 Junction 1 would operate within capacity during both peaks in 2026.

10 IMPACT ON NON CAR MODES

Travel Plan and Sustainable Travel Modes

10.1 Magna Park is a well-established distribution park that has evolved over many years and as such there is an existing level of infrastructure that is available to new or expanding companies locating at the site. For instance, there is an existing bus service that provides one service per hour throughout the day between Lutterworth and Hinckley. From Lutterworth connecting services to Leicester, Rugby and Market Harborough are also available. Bus stops are provided within Magna Park on Hunter Boulevard and on Wellington Parkway.

10.2 As part of the DHL application, bus stops were proposed to the south east of the new roundabout on Argosy Way. Shelters, seating and timetable information will be provided and the potential to provide real-time information is being discussed with LCC.

10.3 Providing a connection into Magna Park from Mere Lane will allow the existing bus route to divert into Magna Park from Mere Lane thus avoiding the need to join the A5 and negotiate the Cross in Hand roundabout. This will shorten the route and provide journey time savings.

10.4 Footways will be provided to enable direct pedestrian routes into the site and at-grade uncontrolled crossings will be provided at the splitter islands of the new roundabout to ensure that pedestrians can cross Mere Lane and the extension to Argosy Way safely.

10.5 Further discussions have taken place with LCC in relation to the hybrid application and there is a willingness from IDI Gazeley to contribute towards improving bus services as the development evolves. One proposal is to extend the operating hours of Route 8 to cover the shift changeovers and increase the frequency to two services per hour. Route 8 is operated by Arriva between Hinckley and Lutterworth. The potential to enhance connections to other towns such as Rugby, Nuneaton and Coventry is also being explored.

10.6 The current position is that the public transport officer at LCC has agreed to arrange a meeting with Arriva to explore further the opportunity of improving bus services at Magna Park. Until this meeting has taken place there can be no firm commitment to specific service improvements as any proposals will need the support of an operator to maximise the chances of commercial viability.

10.7 Parking for students at the Logistics Institute will be restricted to 20 spaces with each car required to carry a minimum of three students. In exceptional circumstances, for example where a student can demonstrate that there is no viable alternative, a parking space will be allocated. Any student that is registered disabled will automatically be offered a parking space.

10.8 Given the limited availability of on-site parking the vast majority of students will be required to travel to and from the Logistics Institute by bus and the intention is to provide up to 10 bespoke services covering the major conurbations located within an approximate 45-minute catchment. The expectation at this stage is that there will be:

- 3 services from Leicester
- 3 services from Coventry

- 1 service from Tamworth/ Hinckley
- 1 service from Northampton/ Market Harborough
- 1 service from Daventry/ Rugby
- 1 service from Nuneaton/ Bedworth

10.9 The spatial distribution for the place of residence of students attending the Logistics Institute is based on a gravity model. The details of the gravity model are set out in Section 6. In summary the model is based on the number of students living within the 45-minute catchment who are within the age range that is catered for by the Logistics Institute. The model is based at ward level and the accessibility of each ward to the Logistics Institute is proportional to the travel distance and journey time calculated from the route planning tool in Google Maps.

10.10 The gravity model has been used as the basis for the public transport services set out in the bulleted list above. The details of each route will evolve as the place of residence of students attending the Logistics Institute is confirmed.

10.11 Although its setting limits the potential to encourage large numbers of cyclists, all occupiers located at the site will promote cycling as a viable mode through the provision of changing and shower facilities together with covered, secure and well lit cycle parking areas.

10.12 The greatest potential for cycling is for trips to and from Lutterworth and there is a segregated signed route that runs on the north side of the A4303. Via this route Magna Park can be reached in less than five minutes, which is within comfortable cycling distance.

10.13 There are also a number of footpaths and minor roads that provide direct links from Magna Park to Lutterworth and Bitteswell. Woodby Lane is a narrow lightly trafficked road that connects the north east corner of Magna Park to Ullesthorpe Road just to the east of Bitteswell. Woodby Lane is not open to through traffic but cyclists and pedestrians can access Magna Park at its western end. Although not lit, it is part of an attractive route for these modes particularly during the summer months.

10.14 Walking is also a possibility for some people and within Magna Park there is an integrated network of footways with regular crossing points, dropped kerbs and tactile paving. These also provide safe and direct pedestrian routes to bus stops and other areas of Magna Park. The showers and changing facilities would be available to those who choose to walk to work.

10.15 Plans showing existing pedestrian and cycle connections between Magna Park and Lutterworth and existing and proposed public access routes in the vicinity of the site have been prepared are contained within **Appendices J and K**.

10.16 To offset the impact of the development on the surrounding highway network two travel plans have been prepared; a site wide travel plan for the proposed development as a whole and a bespoke travel plan for the Logistics Institute.

10.17 At this stage both Travel Plans has been prepared in outline as details of the occupiers and the workforces are unknown. The Travel Plans are presented as separate volumes as supporting documents to this Transport Assessment.

10.18 Travel plans represent an opportunity to raise awareness within organisations and their employees about the consequences of their transport choices and the benefits of choosing sustainable alternatives. The expectation is that a culture of sustainable travel can be cultivated by making people aware of opportunities for travel by sustainable modes at an early stage.

10.19 The introduction of a travel plan is often a combination of 'carrots' and 'sticks'. The carrots acting as incentives to encourage changes in travel habits, such as giving priority parking to car sharers and the sticks forcing changes such as restricting the number of car parking spaces.

10.20 The principal aim of any plan is to minimise the impact of travel on the environment by:

- Reducing the level of unnecessary travel;
- Encouraging those who have to travel to do so in a way that minimises the environmental impact.

10.21 The site wide Travel Plan is primarily aimed at the journey to and from work and has the overriding objective of reducing the number of single occupancy car trips.

10.22 A site wide Travel Plan Co-ordinator will be appointed. One of the key areas of responsibility for the Co-ordinator will be to administer the car-sharing scheme. Upon occupation, questionnaires will be issued to all staff members to determine the likely travel patterns of the new workforce. This will enable home postcodes and shift patterns to be entered into a database in advance of travel commencing and provide the scope to search for opportunities to car-share.

10.23 At a site like this where the opportunities for public transport, cycle and pedestrian journeys are limited, car sharing will provide a practicable measure to help meet the Government's objectives to reduce the number of single occupancy car trips.

10.24 The potential to expand the opportunities for car sharing to include existing businesses at Magna Park will be explored; this would provide a more comprehensive database and maximise the possibility of making car sharing more viable for some people.

10.25 The Travel Plan for the Logistics Institute will have similar aims and will have its own Travel Plan Co-ordinator. The emphasis will be on student travel and in particular on the organisation of the Centre's bus services. There are 10 bespoke bus services proposed and given the limited availability of on-site student parking, it will be integral to ensure that the majority of students have easy access to one of the services. Opportunities for car sharing between staff at the Academy and other employees at Magna Park (proposed and existing) will also be explored.

10.26 IDI Gazeley has recently implemented the Magna Park website in part to encourage and enable employees to communicate to identify car sharing opportunities and other forms of transport sharing. As it evolves the website will also include information on public transport services, ticketing arrangements and links to maps showing recommended cycle and pedestrian routes.

10.27 IDI Gazeley is also working closely with the Sustainable Travel Team at LCC with the objective of promoting sustainable transport opportunities at Magna Park. Several meetings

have already taken place and LCC attended the Magna Park community fun day on 12 September 2015 in particular to promote cycling but also to promote the general principles of travel planning and the benefits to businesses and their employees of making sustainable transport choices.

10.28 Arrangements are also being made for LCC to attend one of the regular 'drop in' sessions that are organised by IDI Gazeley for the Magna Park businesses. These sessions are well attended and allow representatives of the businesses to discuss a broad range of topics and express any concerns that they might have.

10.29 Towards the end of October 2015, LCC will deliver a presentation on travel planning at one of these sessions with the objective of encouraging as many businesses as possible to participate in a site wide employee travel survey and to complete a site audit. The latter helps to identify any shortfalls in facilities that help to encourage sustainable travel like for example the availability of priority car share parking spaces, cycle parking and showering facilities.

10.30 The expectation is that as a result of the travel surveys and site audits a range of initiatives can be promoted to maximise the potential for sustainable travel at Magna Park. These initiatives could include the establishment of a site wide car share scheme, the provision of cycle courses to develop skills and confidence to travel to work by bike, businesses and employees joining LCC's Sustainable Travel Challenge and raising awareness of the potential of introducing tailored bus services to meet the very specific travel requirements of people employed in the logistics sector.

10.31 These events are helping to foster a culture of collaboration between LCC and IDI Gazeley and demonstrate the shared determination that exists to improve the opportunities for sustainable travel at Magna Park.

11 IMPACT OF CONSTRUCTION

General

11.1 A detailed analysis of the construction phase has been undertaken and is presented in 'Chapter 2: 'The Proposed Development' of the Environmental Statement (ES). It includes an indicative construction programme, predicted construction traffic flows, vehicle routing and access and compound locations.

11.2 It is envisaged that at the start of the construction period there will be a need for three site compounds, one for the construction of Parcel G (DHL) and two for the proposed highway works. The position of the compounds has not been finalised although it is expected that the one for Parcel G will be on the area allocated for car parking while the compounds for the highway works will be adjacent to the A5 and Mere Lane.

11.3 Temporary haul roads will be required to provide access to the compounds from the existing highway network. It is envisaged that for the construction of development within and to the south of the Magna Park Hub (Parcels E to I), all construction related traffic will access the compounds from Mere Lane.

11.4 There is a 7.5 tonne weight restriction on Mere Lane although the Traffic Regulation Order has an exemption for loading. LCC has acknowledged that subject to an acceptable Construction and Environmental Management Plan (CEMP) there is no reason in principle why Mere Lane should not be used for access to the site compounds.

11.5 For development to the north of the Hub (Parcels J, K and L) it is envisaged that access will be taken from the proposed roundabout on the A5 at the northern end of the development. This will require the A5 roundabout to be constructed prior to work commencing on these parcels for which a temporary site compound and haul road will be required. It is assumed that the haul road would extend northwards from the Hub allowing access to the compound for the A5 highway works. Once the roundabout is complete, construction traffic for Parcels J, K and L would access the site at this point avoiding the need for it to pass the Hub and the units to the south that will by that time be fully operational.

11.6 Access to the site of the rail freight shuttle terminal will be from the southern arm of the existing roundabout on the Lutterworth Bypass that serves the main part of Magna Park. The southern arm currently serves two existing plots occupied by Culina and George.

Travel to Work by Construction Staff

11.7 A Construction Phase Travel Plan will be prepared and submitted to HDC for approval prior to the start of works on site. This will set out how travel to and from the site will be managed and measures that will be introduced to encourage employees to travel by modes other than the private car. These documents are normally prepared by the appointed contractor.

Working Hours

11.8 It is anticipated that the core working hours for construction will be as follows:

- 07:30 - 18:30 hours weekdays;

- 08:30 - 14:30 hours Saturday; and
- No working normally undertaken on Sundays or Bank Holidays.

11.9 The core construction working hours will ensure that most construction employee traffic will generally arrive and depart outside the peak hours.

11.10 Where out of hours working is unavoidable for emergency / safety reasons, consent to proceed will be sought from the relevant authorities in the first instance. Following this, other community/ neighbour representatives will be notified.

Site Access

11.11 The preferred traffic routes for construction traffic are set out in 'Chapter 2: 'The Proposed Development' of the ES. It is anticipated that the main access route for vehicles to and from development within and to the south of the Magna Park Hub will be via the A5 and Mere Lane. For development to the north of the Hub (Parcels J, K and L) it is envisaged that access will be taken from the proposed roundabout on the A5 at the northern end of the development. Access to the site of the rail freight shuttle terminal will be from the southern arm of the existing roundabout on the Lutterworth Bypass that serves the main part of Magna Park.

11.12 Permitted routes for construction traffic will be agreed with LCC prior to the commencement of construction on site. The relevant authorities will be consulted about providing direction signage on the surrounding roads to avoid vehicles using inappropriate routes to reach the Site. Appointed contractors will be required to adhere to the existing Magna Park routing agreement to ensure that all construction related traffic uses principal and strategic routes to access the site.

Construction Traffic

11.13 Predicted levels of construction traffic are set out in 'Chapter 2: 'The Proposed Development' of the ES.

11.14 Construction of the Proposed Development is expected to commence in 2016 and be completed in 2026. Construction will begin in 2016 at Parcel G (DHL) including the associated highway works on the A5 and Mere Lane. This will be followed in 2017 by construction at Parcel F (Holovis) and in 2018 at Parcel E (Magna Park Hub).

11.15 From 2019 it is expected that one development parcel will be completed per year starting in the south west corner at Parcel H and moving progressively north westwards towards Parcel L which is programmed for completion towards the end of 2025.

11.16 Construction of the rail freight shuttle terminal is programmed to start in 2019 at the same time as Parcel H. This will represent the worst case in terms of traffic impact during the construction phase and therefore 2019 has been selected as the assessment year for the purposes of the ES.

11.17 Construction of the structural landscaped area (Parcels A1, A2 and A3), the principal access corridor (Parcel B), Bittesby Country Park (Parcel C), the Meadowland (Parcel D) and the reed beds and bio discs (Parcels M1 and M2) is programmed to continue

throughout the entire construction period. However work on these elements of the development will not be continuous and will occur at the appropriate time as the development progresses. For example the southern end of the principal access corridor will need to be in place to coincide with the opening of the Magna Park Hub in 2019 whereas the northern end will not be required until the latter stages to serve Parcels J, K and L. Consequently the traffic movements associated with these elements of the development will be spread out throughout the construction period and will not have a significant impact on the external highway network.

11.18 Estimated construction traffic movements are set out in Table 6.5 of the Traffic and Transport Chapter in the ES. Light and heavy vehicle movements are identified separately.

11.19 The likely peak level of HGVs will be in the order of 200 HGVs per day, split equally between Parcel H on the main part of the site and the rail freight shuttle terminal to the south of the A4303.

11.20 Over an 11 hour working day this results in an average two-way flow of 18 HGVs per hour with 9 accessing the site via Mere Lane and 9 via the southern arm of the existing roundabout on the A4303 that serves the main part of Magna Park. This level of activity is expected to continue for a period of eight weeks (weeks 23 to 30). This is expected to have a minimal impact on the surrounding highway network.

11.21 A reasonable proportion of construction traffic movements will be generated by construction workers travelling to/from work and by the delivery of materials. These trips will mainly occur in cars and light goods vehicles (LGV).

11.22 The likely peak level of traffic will be in the order of 220 cars/ LGVs per day. This level of activity is expected to continue for a period of one week (week 35). During the previous four weeks (weeks 31 to 34) the level of activity will be in the order of 120 cars/LGV movements per day.

11.23 Based on the anticipated working hours, the vast majority of journeys to/ from work will avoid the peak hours on the highway network. Deliveries will be evenly spread throughout the day and will therefore have a minimal impact on the surrounding highway network.

11.24 The peak periods of activity for cars/LGVs and HGVs will not coincide, with the peak period of activity for cars and LGVs occurring towards the end of the construction period once the number of HGVs has reduced by a half. By this time most of the structural work is complete and the emphasis switches from the delivery of large structural components by HGV to a requirement for large numbers of skilled tradesmen for the internal works most of who typically travel by car or LGV. However for the purposes of the ES it has been assumed that the peak periods of activity for the different vehicle types will coincide ensuring a robust assessment of the construction impacts.

11.25 A Construction Environmental Management Plan (CEMP) will be prepared and submitted to HDC with sufficient time for it to be approved before the commencement of the works. The details of the CEMP will demonstrate that the following have been considered and any impacts mitigated:

- The access arrangements for vehicles;

- Proposed routes of vehicles to and from the Application Site;
- Sizes of all vehicles and a schedule of when they will need access to the Application Site;
- Swept path drawings for the vehicle routes for all vehicle sizes;
- Details of any highway works that might be necessary to enable construction to take place;
- Parking and loading arrangements for vehicles and delivery of material and plant to the Site;
- Details of any proposed temporary Traffic Management Orders;
- Proposed overhang (if any) of the public highway (scaffolding, cranes, etc.);
- Details of how pedestrian and cyclist safety will be maintained, including any proposed alternative routes (if necessary), and any banksman arrangements;
- Confirmation of the proposed working hours;
- Start and end dates for each phase of construction;
- Details of how traffic associated with the development will be managed in order to minimise congestion;
- Details of any other measures designed to reduce the impact of associated traffic (such as the use of construction material consolidation centres);
- Details of how the spread of dirt or dust onto the public highway will be prevented;
- Details of any Construction Working Group that may be required, addressing the concerns of surrounding residents and tenants; and
- How the approach to servicing takes into consideration the cumulative effects of other developments local to the Site with regard to traffic and transport.

11.26 The need for abnormal loads is not anticipated but if a need is identified the contractor would liaise with the highway authorities and the police to identify the most appropriate route and timing for the delivery to minimise the impact on other road users and neighbouring properties.

12 SUMMARY AND CONCLUSIONS

12.1 This report has been prepared in support of a hybrid planning application for the proposed expansion of Magna Park near Lutterworth onto 220 hectares of land adjoining Magna Park to the north west and onto 7 hectares of land adjoining Magna Park to the south of the A4303.

12.2 The larger area to the north is the subject of an outline planning application for the following uses and maximum quanta:

- Distribution warehousing and ancillary office space (Use Classes B8 and B1a): up to 427,350m^2 (including 100,844m^2 for DHL Supply Chain that is the subject of a detailed planning application – reference 15/009/FUL – that was submitted in June 2015)
- Logistics Institute of Technology (Use Class D1): up to 3,700m^2 together with its campus
- Estate office with heritage exhibition centre and conference facility (Use Class D1): up to 300m^2
- Holovis expansion building (Use Class B1a, B1b): up to 7,000m^2
- Innovation Centre (Use Class B1a): up to 2,325m^2
- Public park and meadowland: approximately 70 hectares

12.3 The smaller area to the south is the subject of a detailed planning application for the following uses:

- Railfreight shuttle terminal
- 134 HGV parking spaces
- HGV driver training centre
- LPG or GNP fuel island and vehicle wash facility

12.4 Magna Park is one of Europe's largest dedicated distribution parks. The town of Lutterworth is located 1.7 km to the east beyond which is located Junction 20 of the M1. Junction 1 of the M69 and Junction 1 of the M6 can be reached in less than 10 minutes to the north west and south west respectively, emphasising the site's excellent connections to the strategic highway network.

12.5 Magna Park does not benefit from a direct rail connection and to address this, a railfreight shuttle terminal is being proposed. It is envisaged that over time the shuttle would employ gas or electrically powered vehicles which would largely eliminate carbon emissions from the road leg and put Magna Park on a level playing field with rail connected locations from an environmental perspective.

12.6 There are two points of access proposed to the larger area to the north west. The first is a new roundabout on Mere Lane that will connect the site to Magna Park to the south and to the A5 to the west and forms part of the DHL application. The second is a new roundabout on the A5 at the northern end of the development approximately 260m south of White House Farm.

12.7 Access to the railfreight shuttle terminal will be taken from the southern arm of the existing roundabout on the A4303 that serves the main part of Magna Park.

12.8 To ensure that there is an overlap with the symmetry park planning application, this Transport Assessment is based on a manual assessment of the traffic impact using the scope that was agreed with Highways England, LCC and WCC for the DHL application.

12.9 URS has however agreed that the impact of the proposed development will be assessed using LLITM and IDI Gazeley has commissioned LCC to undertake runs of the model to test the impact of the development. The final results will be available towards the end of September 2015.

12.10 Once the LLITM results are available a Supplementary Transport Assessment will be prepared. This requirement was confirmed in LCC's response to the ES scoping document.

12.11 In its response to the ES Scoping document, AECOM, representing Highways England made no mention of LLITM implying that it has no preference regarding the approach to the assessment. It did however confirm that it was satisfied with the proposed approach subject to URS addressing the issues that have been raised post application in relation to the DHL Transport Assessment.

12.12 All HGV movements generated by Magna Park are subject to a routing agreement between IDI Gazeley and HDC. Details of the agreement are set out in the Section 106 Agreement and are provided to all occupiers at Magna Park. The routing agreement is strictly applied and as far as practicable ensures that all HGVs avoid sensitive routes through local villages and Lutterworth town centre.

12.13 The routing agreement will be extended to include the proposed development. IDI Gazeley has indicated a willingness to fund a permanent position at LCC to create and implement a robust HGV enforcement strategy. It is considered that a cornerstone of the scheme will be to set up permanent monitoring sites at sensitive locations to measure any increase in HGVs that can be attributed to Magna Park.

12.14 The impact of the proposed development has been tested at ten key junctions on the highway network in the opening year (2017) and a future year (2026). In 2026, a sensitivity test to include the impact of symmetry park has also been undertaken.

12.15 The traffic forecasts include the impact from 14 committed development sites including DIRFT II and III, Rugby Gateway and Rugby Radio. To minimise the risk of double counting, the 2026 forecast traffic flows include committed development but have not been factored using TEMPRO. This approach was agreed with Highways England.

12.16 The 2017 opening year assessments indicate that the network would generally be operating within capacity with the addition of the development traffic albeit with several junctions predicted to be operating at or close to capacity. These include the A4303/ A426 roundabout, M69 Junction 1 and the Gibbet Hill roundabout. However the impact of the development in the opening year is expected to be small and as a result no highway mitigation is proposed.

12.17 The 2026 assessments indicate that the network would generally be operating within capacity with the addition of the development traffic with the exception of the A4303/ A426 roundabout and M69 Junction 1.

12.18 Capacity improvements are proposed at the A4303/ A426 junction and these are predicted to restore capacity at the junction. It can be concluded therefore that improvements to this junction would provide significant relief to a capacity issue that would occur even if the development were not to proceed.

12.19 As part of the Development Consent Order for DIRFT III there is a commitment to provide capacity improvements at the Gibbet Hill roundabout. The scheme includes carriageway widening, improved carriageway markings and the signalisation of the approach and circulatory carriageways of the A426 north, A5 north and A5 south. The scheme will provide a significant level of improvement compared with the existing layout and the improved junction is predicted to be operating within capacity in 2026 with the addition of the development traffic.

12.20 The highway network will generally be operating within capacity in both 2017 and 2026 with the addition of the proposed development traffic. Junctions that are predicted to be operating at or close to capacity will either be improved as part of this application (A4303/ A426) or are set to be improved as part of other committed developments (Gibbet Hill). At other junctions predicted to be operating above capacity (M69 J1) the impact of the development is small and therefore not considered to be material.

12.21 The results of the sensitivity test indicate that in general the network could accommodate both developments without a severe residual traffic impact. The exception is Junction 1 of the M69 where symmetry park is expected to increase the queue by 60 pcus on the critical arm (B4109 Rugby Road) in the morning peak. This assessment includes mitigation measures that have been proposed by PBA to accommodate the symmetry park development.

12.22 In order to reduce the number of single occupancy car trips, two Travel Plans have been prepared with the overriding aim of encouraging the workforce to be responsible in their travel habits and promoting more environmentally sustainable and less polluting methods of transport. The objective is to foster a culture of sustainable travel by formally encouraging a reduction in single occupant car journeys through the promotion of public transport, by identifying opportunities for car sharing and by encouraging those for whom it is practicable to cycle and walk.

12.23 IDI Gazeley is working closely with the Sustainable Travel Team at LCC with the objective of promoting sustainable transport opportunities at Magna Park. Several meetings have already taken place and recently LCC attended the Magna Park community fun day.

12.24 Arrangements are also being made for LCC to attend one of the regular ‘drop in’ sessions at Magna Park where LCC will deliver a presentation on travel planning to encourage as many businesses as possible to participate in a site wide employee travel survey and to complete a site travel plan audit.

12.25 The expectation is that as a result of the travel surveys and site audits a range of initiatives can be promoted to maximise the potential for sustainable travel at Magna Park.

12.26 These events are helping to foster a culture of collaboration between LCC and IDI Gazeley and demonstrate the shared determination that exists to improve the opportunities for sustainable travel at Magna Park.

12.27 Magna Park is served by bus with one service per day throughout the day between Hinckley and Lutterworth with connecting services to Leicester, Market Harborough and Rugby available from Lutterworth.

12.28 In relation to this development there is a willingness from IDI Gazeley to provide contributions towards further improvements to bus services. One proposal is to extend the operating hours of the existing service at Magna Park to cover the shift changeovers and increase the frequency to two services per hour. The potential to enhance connections to other towns such as Rugby, Nuneaton and Coventry is also being explored.

12.29 The intention is for LCC to facilitate a meeting with Arriva in the near future to discuss specific service improvements as it is recognised that any proposals will need the support of an operator to maximise the chances of any new or extended services becoming commercial viable.

12.30 An important part of the proposed Green Infrastructure Strategy is the retention of existing permissible bridleways, and the creation of new permanent footpath and bridleway connections to facilitate access to the countryside. These new connections provide access to the wider network of existing Public Rights of Way between the villages of Ullesthorpe and Willey to the north and west of the site.

12.31 Car sharing is seen as a practicable measure to help meet the Government's objectives to reduce the number of single occupancy car trips. The potential to extend the scheme to include other businesses at Magna Park will be explored. This would maximise the possibility of making car sharing more viable for some people.

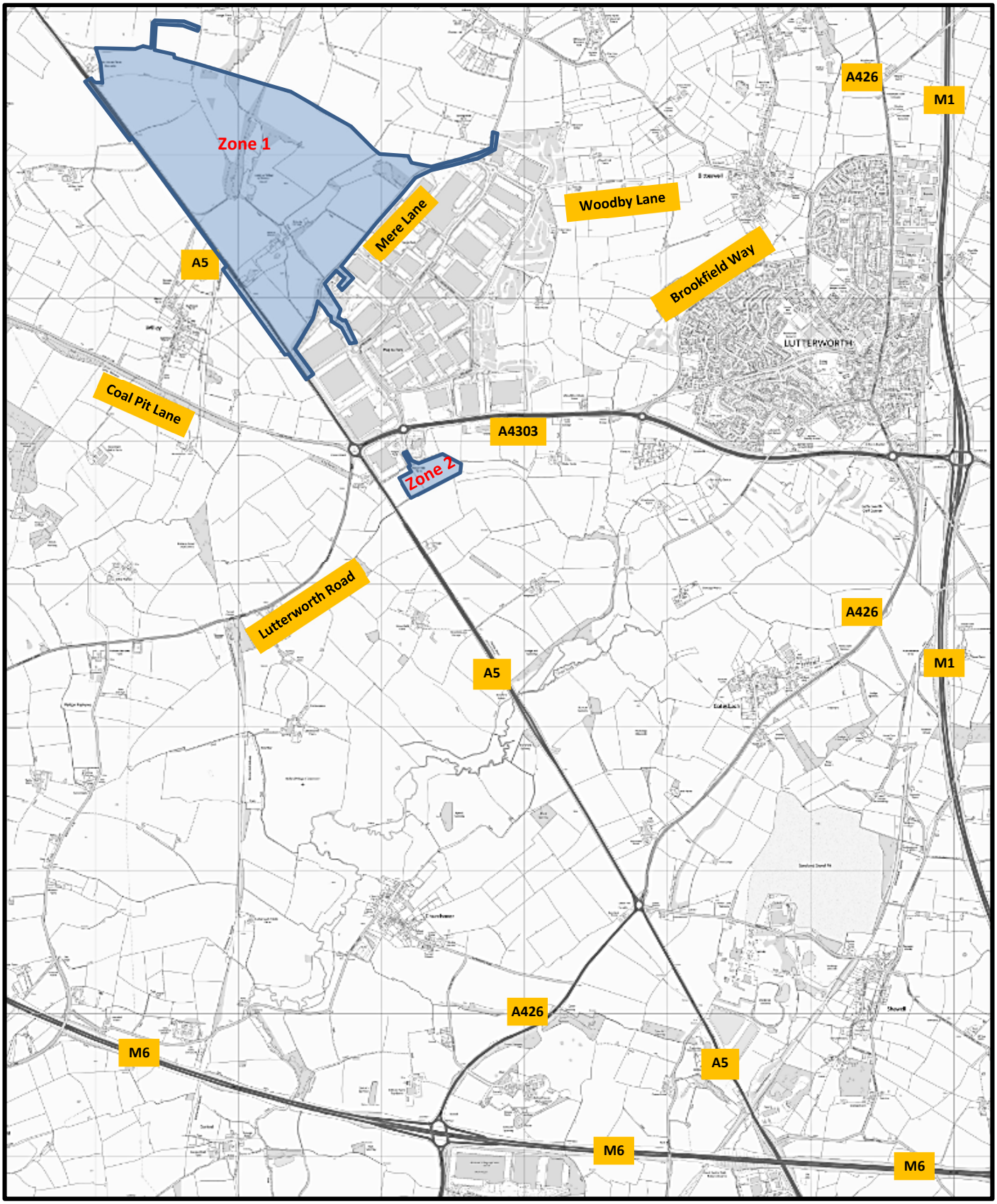
12.32 IDI Gazeley has recently implemented the Magna Park website in part to encourage and enable employees to communicate to identify car sharing opportunities and other forms of transport sharing. As it evolves the website will also include information on public transport services, ticketing arrangements and links to maps showing recommended cycle and pedestrian routes.

12.33 The impact during construction will be managed by a Construction Environmental Management Plan and a Construction Workers Travel Plan. Both documents will be agreed with LCC prior to the start of construction and will be the formal documents that manage the movement of all construction traffic to and from the site. A routing plan will be agreed. Appointed contractors will be required to adhere to the existing Magna Park routing agreement to ensure that all construction related traffic uses principal and strategic routes to access the site.

12.34 In summary it is considered that the proposed development will provide a catalyst to encourage and maintain modal shift with less environmental impact in accordance with the Government's ley aims and objectives promoted at central and local level.

Magna Park Extension: Hybrid Application
Transport Assessment

Appendix A – Site Location Plan



Appendix A- Site Location Plan

Magna Park Extension: Hybrid Application
Transport Assessment

Appendix B – Agreed Scope of Capacity Assessments

N NUNEATON

Legend

- Magna Park Phase4
- Junctions
- Harborough District
- Leicestershire County
- Warwickshire County

ID	Site
1	M1 Junction 20
2	A4303/ A426 roundabout
3	A4303/ Coventry Road roundabout
4	A4303/ Shackleton Way junction
5	A4303/ Hunter Boulevard roundabout
6	A5/ A4303 (Cross in Hand) roundabo
7	A5/ Mere Lane junction
8	M69 Junction 1
9	A5/ A426 (Gibbet Hill) roundabout
10	M6 Junction 1

0 1.25 2.5 5 7.5 10 km

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Magna Park Extension: Hybrid Application
Transport Assessment

Appendix C – Red Line Plan

ZONE 1

ZONE 2

Notes:
Contractors must verify all dimensions on site before commencing any work or shop drawings. This drawing is not to be scaled. Use figured dimensions only.

Subject to statutory approvals and survey.

AREAS
Building areas are liable to adjustment over the course of the design process due to the ongoing construction detailing developments.

PLANNING RED LINE	
ZONE 1	232.10 Ha
ZONE 2	6.74 Ha
TOTAL	**238.84 Ha**

05	Acre totals omitted.	26.08.15 mb
04	Red line revised. Area updated accordingly.	19.08.15 mb
03	Red line revised. Area updated accordingly.	28.07.15 mb
02	Drawing amended to Red Line Drawing.	08.07.15 mb
01	Road network amended according to URS Infrastructure changes, Unit A, C & D repositioned.	15.08.14 RS

revisions

PROPOSAL

chetwoods®
architects
32 Frederick street, Birmingham B1 3HH
T: +44 (0) 121 234 7500 F: +44 (0) 121 234 7501

Project Job Number 3657

MAGNA PARK EXTENSION:
HYBRID PLANNING APPLICATION

IDI Gazeley
Brookfield Logistics Properties

Drawing Title Drawing Size A1

RED LINE BOUNDARY PLAN

Drawn MB	Date 08.07.15	Scale A1@1:5000	Cadfile 3657-30
Reviewed by KL	Drawing No. 3657-30		Rev. 05

Magna Park Extension: Hybrid Application
Transport Assessment

Appendix D – Proposed Southern Access Arrangements and Highway Improvements

Security Gates

Non Signalled Controlled Pedestrian Crossing

Non Signalled Controlled Pegasus Crossing with Corral

NTS

Inset A Location

NTS

INSET A

NOTES

1. Please refer to Capita drawings for bund details.
2. Please refer to Grant Associates drawings for outline planting proposals.

This drawing is for preliminary purposes only and is subject to amendment during design development. UNDER NO CIRCUMSTANCES MUST THIS DRAWING BE USED FOR CONSTRUCTION PURPOSES

Revision Details	By	Check	Date	Suffix
A3 roundabout central hatching added + WS extended A5 S'bound. Mere Lane car park entrance moved north.	SDW		Aug 15	A

Purpose of issue

For Information

Client

IDI Gazeley
Brookfield Logistics Properties™

Project Title

MAGNA PARK EXTENSION
HYBRID APPLICATION

Drawing Title

Proposed Access Arrangements

Designed	Drawn	Checked	Approved	Date
SDW	SDW	JRA	SCFF	Feb 15

URS Internal Project No.	Suitability
47066811	
Scale @ A3 1:1250	Zone / Mileage

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URS House
Horne Lane
Bedford
MK40 1TS
www.ursglobal.com

Drawing Number	Rev
47066811/A008/SK12	A

Magna Park Extension: Hybrid Application
Transport Assessment

Appendix E – Proposed Northern Access Arrangements and Highway Improvements

NOTES

This drawing is for preliminary purposes only and is subject to amendment during design development. UNDER NO CIRCUMSTANCES MUST THIS DRAWING BE USED FOR CONSTRUCTION PURPOSES

Revision Details	By / Check	Date	Suffix

Purpose of issue

For Information

Client

IDI Gazeley

Brookfield Logistics Properties™

Project Title

MAGNA PARK EXTENSION HYBRID APPLICATION

Drawing Title

Proposed Access Arrangements

Designed	Drawn	Checked	Approved	Date
SDW	SDW	JRA	SCFF	Jan 15

URS Internal Project No.	Suitability
47066811	
Scale @ A0 1:1250	Zone / Mileage

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Drawing Number	Rev
47066811/A008/SK13	

Magna Park Extension: Hybrid Application
Transport Assessment

Appendix F – Proposed Site Masterplan

Notes:
Contractors must verify all dimensions on site before commencing any work or shop drawings. This drawing is not to be scaled. Use figured dimensions only.

Subject to statutory approvals and survey.

AREAS
Building areas are liable to adjustment over the course of the design process due to the ongoing construction detailing developments.

N

REED BEDS AND
BIO-DISCS M2

UNIT L

UNIT K2

UNIT K1

UNIT J

UNITS
F1, F2 etc

UNIT G

UNITS
E1, E2 etc.

UNIT I

UNIT H2

UNIT H1

REED BEDS AND
BIO-DISCS M1

0m 50m 100m 200m 500m

revisions

PLANNING

c h e t w o o d s ®
a r c h i t e c t s
32 Frederick street, Birmingham B1 3HH
T: +44 (0) 121 234 7500 F: +44 (0) 121 234 7501

Project Job Number 3657
MAGNA PARK EXTENSION:
HYBRID PLANNING APPLICATION

IDI Gazeley
Brookfield Logistics Properties

Drawing Title Drawing Size A1
ILLUSTRATIVE MASTERPLAN

Drawn RDN	Date 18.07.14	Scale A1@1:4000	Cadfile 3657-33
Reviewed by TW	Drawing No. 3657-33		Rev. 09

Magna Park Extension: Hybrid Application
Transport Assessment

Appendix G – Site Parameter Plan

ZONE 1
MAIN SITE

NEW ACCESS ROUNDABOUT ON A5

NEW ROUNDABOUT TO REPLACE EXISTING PRIORITY JUNCTION AT A5 / MERE LANE

EXTENSION OF ARGOSY WAY TO MERE LANE

NEW ACCESS ROUNDABOUT ON MERE LANE

REALIGNMENT OF MERE LANE

PARAMETER SCHEDULE - ZONE 1

PARCELS A1, A2, A3 - STRUCTURAL LANDSCAPE
- Parcel Area: up to 32.51 Ha
- to include: footpaths, bridleways, cyclepaths, service routes, verges, swales/ watercourses/ ponds and supporting landscape
- landscape corridor widths: 10m min between Parcel L&M2 and from 20m to >25m elsewhere

PARCEL B - PRINCIPAL ACCESS CORRIDOR
- Parcel Area: up to 34.67 Ha
- to include: main road, footpaths, bridleways, service routes, verges, swales/ watercourses/ ponds and supporting landscape

PARCEL C - BITTESBY COUNTRY PARK
- Parcel Area: up to 42.32 Ha
- to include: public footpaths/bridleway (with some sections repostitioned), watercourses, wetlands, strategic attenuation basins and Medieval Village of Bittesby

PARCEL D - THE MEADOW LAND
- Parcel Area: up to 28.12 Ha
- to include: existing permissive and a public bridleway

PARCEL E - MAGNA PARK HUB
- Parcel Area: up to 6.58 Ha
- Proposed Use: D1 Logistics Institute of Technology + B1(a) & D1 Estate Office + B1 (a) & (b) Innovation Centre
- Maximum floor area - National Centre for Logistics Qualifications (D1): up to 3,700 sqm (GIA)
- Maximum floor area - Innovation Centre (B1a, B1b): up to 2,325 sqm (GIA)
- Maximum floor area - Estate office (B1a, D1): up to 300 sqm (GIA)
- Max unit height: up to 125.00m AOD
- Unit FFL: up to 110.5m(NW) and up to 113.00m (NE)

PARCEL F - SMALL BUSINESS
- Parcel Area: up to 2.68 Ha
- Use: B1 (a) & (b) - Holovis
- Maximum floor area: up to 7,000 sqm (GIA)
- Max unit height: up to 122.5m AOD
- Unit FFL: up to 111.5m

PARCEL G
- Parcel Area: up to 21.86 Ha
- Use: B8 Storage & Distribution and ancillary office (B1)
- Maximum floor area: up to 101,000sqm (GIA)
- Max unit height: up to 142.6m AOD
- Unit FFL: up to 119.6m

PARCEL H
- Parcel Area: up to 13.85 Ha
- Use: B8 Storage & Distribution and ancillary office (B1)
- Maximum floor area: up to 69,850 sqm (GIA)
- Max unit height: up to 139.00m AOD
- Unit FFL: up to 120.5m

PARCEL I
- Parcel Area: up tp 6.03 Ha
- Use: B8 Storage & Distribution and ancillary office (B1)
- Maximum floor area: up to 30,500sqm (GIA)
- Max unit height: up to 135.50m AOD
- Unit FFL: up to 119.00m

PARCEL J
- Parcel Area: up to 5.19 Ha
- Use: B8 Storage & Distribution and ancillary office (B1)
- Maximum floor area: up to 28,000sqm (GIA)
- Max unit height: up to 130.70m AOD
- Unit FFL: up to 114.20m

PARCEL K
- Parcel Area: up to 28.57 Ha
- Use: B8 Storage & Distribution and ancillary office (B1)
- Maximum floor area: up to 163,000 sqm (GIA)
- Max unit height: up to 132.70m AOD
- Unit FFL: up to 114.20m

PARCEL L
- Parcel Area: up to 8.01 Ha
- Use: B8 Storage & Distribution and ancillary office (B1)
- Maximum floor area: up to 35,000 sqm (GIA)
- Max unit height: up to 132.20m AOD
- Unit FFL: up to 115.70m

PARCEL M1 - Reed beds and Bio-discs
- Existing Rees beds and Bio-discs plot expanded
- Parcel Area: up to 0.58 Ha

PARCEL M2 - Reed beds and Bio-discs
- Parcel Area: up to 1.13 Ha

Legend:
- Planning Boundary
- Parcel Boundary
- Redirected Watercourse
- Existing Watercourse
- Water attenuation Zones / Wetlands

ZONE 1: B8, B1, D1 AND PUBLIC OPEN SPACE (OUTLINE)
- Structural Landscape - Parcels A1, A2, A3
- Principal Access Corridor - Parcel B
- Bittesby Country Park - Parcel C
- Bittesby Deserted Medieval Village Schedule Monument
- The Meadow Land - Parcel D
- Magna Park Hub - Parcel E
- Small Business - Parcel F
- B8 Storage & Distribution and ancillary office (B1) - Parcels G, H, I, J, K, L
- Reed beds & Bio-discs - Parcels M1 & M2
- Trees to be retained

ZONE 2 - RAILFREIGHT SHUTTLE TERMINAL, HGV PARKING AND HGV TRAINING CENTRE (DETAILED)
- Railfreight Shuttle Terminal

AREA SUMMARY - ZONE 1 (GIA)

- RED LINE AREA: 232.10 Ha
- Bittesby Country Park: 42.32 Ha
- Meadow Land: 28.12 Ha
- Other open space, structural landscaping and access: 67.18 Ha
- Storage & Distribution (B8): up to 427,350 sqm
- Logistics Institute of Technology and campus(D1): up to 3,700 sqm
- Estate Office, conference facility and heritage exhibition(B1a, D1): up to 300 sqm
- Innovation Centre (B1a, B1b): up to 2,325 sqm
- Holovis (B1a, B1b): up to 7,000 sqm

ZONE 2
- RAILFREIGHT SHUTTLE TERMINAL
- HGV PARKING
- HGV TRAINING CENTRE
- SUBJECT TO DETAILED PLANNING APPLICATION

0m 50m 100m 200m 500m

PLANNING

chetwoods architects
32 Frederick Street, Birmingham B1 3HH
T: +44 (0) 121 234 7500 F: +44 (0) 121 234 7501

Project: MAGNA PARK EXTENSION: HYBRID PLANNING APPLICATION
Job Number: 3657
IDI Gazeley
Brookfield Logistics Properties
Drawing Title: PARAMETER PLAN (1 of 2)
Drawing Size: A0

Drawn	Date	Scale	Castle
RS	06.07.15	1/4000	3657
Reviewed by	Drawing No.		Rev.
KL	3657-34		13

Magna Park Extension: Hybrid Application
Transport Assessment

Appendix H – Railfreight Shuttle Terminal – Proposed Site Layout

Notes:
Contractors must verify all dimensions on site before commencing any work or shop drawings. This drawing is not to be scaled. Use figured dimensions only.

Subject to statutory approvals and survey.

AREAS:
Building areas are liable to adjustment over the course of the design process due to the ongoing construction detailing developments.

Walkers Road

El Sub Sta

Drain

Offices

New 11m wide road with 3m wide footpath / cycleway to adoptable standards

Current Semelab access

Existing sub-station (Primary)

El Sub Sta

20m

134 No. HGV PARKING BAYS

All HGV parking bays 17m x 3.5m

10m

1No.VEHICLE WASH

HGV TRAINING AREA 0.427ha

Carparking spaces

GATEHOUSE & TRAINING CENTRE

20m

FUEL ISLAND

Container stack area - 2 rows, 2 high, 6m maximum height

RAILFREIGHT SHUTTLE TERMINAL

REACH STACKER MANEUVERING AREA

25m

12m

Container stack area - 2 rows, 2 high, 6m maximum height

Surface water detention basin

40m

Landscape bund

Perimeter to be bunded and / or landscaped.

123.5m

04	Wash and Fuel revised.	15.09.15 mb
03	Layout amended to suit requirements.	08.09.15 RS
02	Layout amended to suit requirements.	26.08.15 RS
01	Layout amended to suit requirements.	14.08.15 RS

revisions

PLANNING

chetwoods®
architects
32 Frederick street, Birmingham B1 3HH
T: +44 (0) 121 234 7500 F: +44 (0) 121 234 7501

Project Job Number 3657

MAGNA PARK EXTENSION:
HYBRID PLANNING APPLICATION
Zone 2, Railfreight Shuttle Terminal

IDI Gazeley
Brookfield Logistics Properties

Drawing Title

Proposed Site Layout

Drawing Size A1

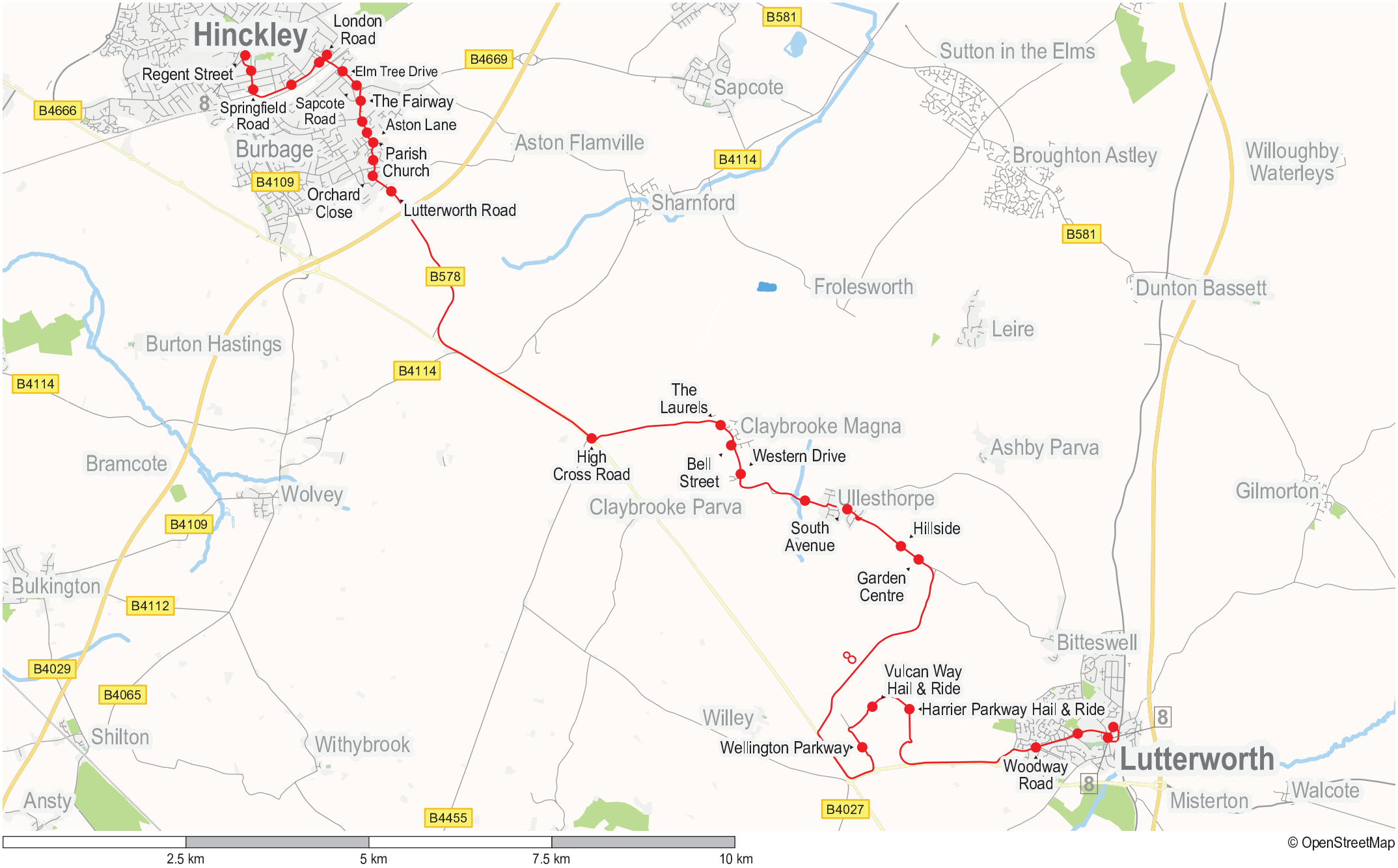
Drawn AD	Date 14.05.12	Scale A1@1:750	Cadfile 3657-91
Reviewed by KL	Drawing No. 3657-91		Rev. 04

Magna Park Extension: Hybrid Application
Transport Assessment

Appendix I – Bus Timetable and Route Plan

traveline
public transport info
0871 200 22 33

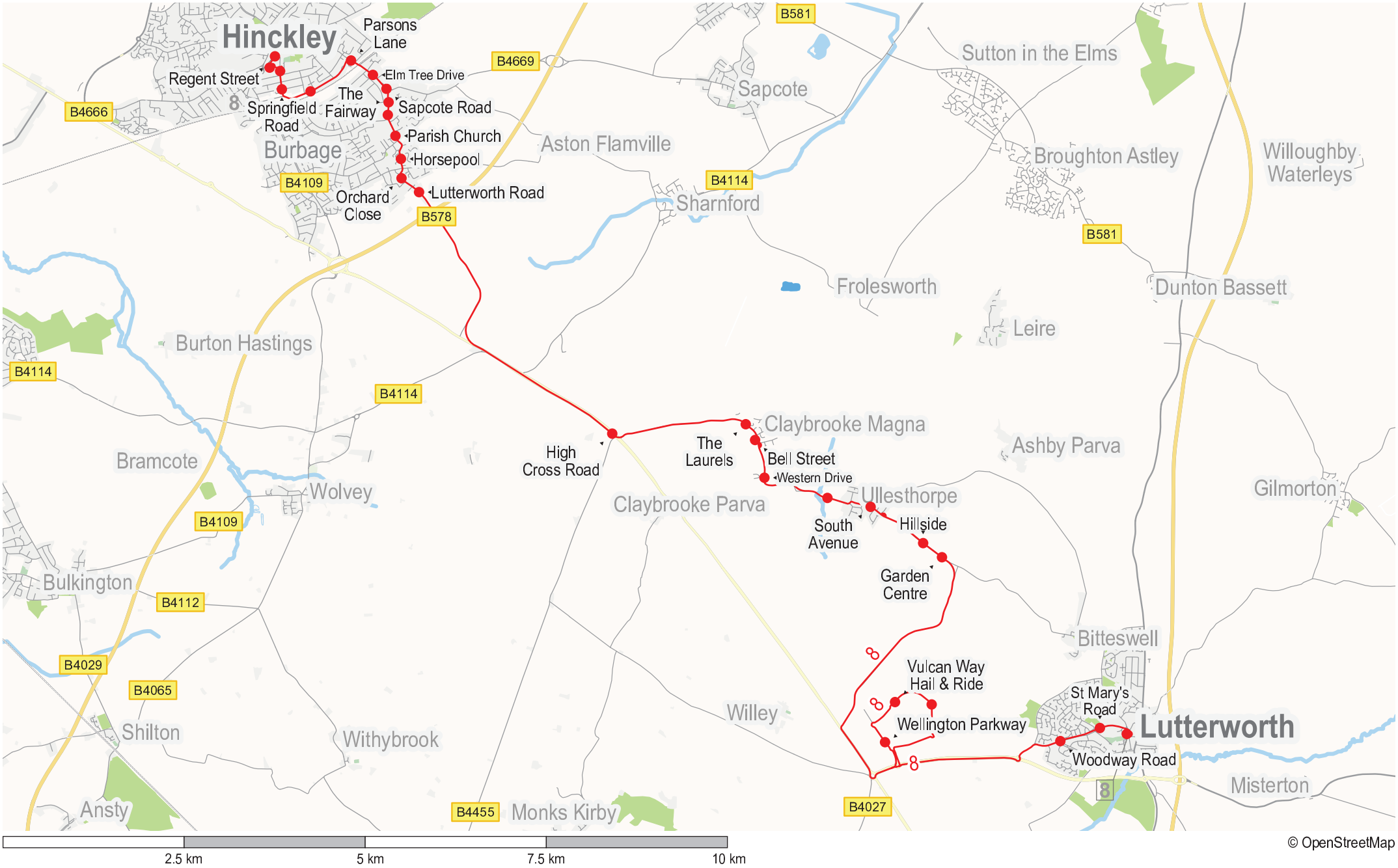
Route map for Hinckley Bus service 8 (outbound)



em-12008_(-1).y08 (outbound)

traveline
public transport info
0871 200 22 33

Route map for Hinckley Bus service 8 (inbound)



em-12008_(-1).y08 (inbound)

8 Hinckley - Magna Park - Lutterworth

Hinckley Bus

The information on this timetable is expected to be valid until at least 15th April 2015. Where we know of variations, before or after this date, then we show these at the top of each affected column in the table.

Direction of stops: where shown (eg: W-bound) this is the compass direction towards which the bus is pointing when it stops

Mondays to Fridays

Hinckley, Regent Street (Stand R3)	0628	0718	0828	0928	1028	1128	1228	1328	1428	1528	1628	1728	1838
Burbage, opp Horsepool	0636	0726	0836	0936	1036	1136	1236	1336	1436	1536	1636	1736	1846
Sharnford, adj High Cross Road	0643	0733	0843	0943	1043	1143	1243	1343	1443	1543	1643	1743	1853
Claybrooke Magna, The Laurels (SE-bound)	0646	0736	0846	0946	1046	1146	1246	1346	1446	1546	1646	1746	1856
Claybrooke Parva, opp Western Drive	0648	0738	0848	0948	1048	1148	1248	1348	1448	1548	1648	1748	1858
Ullesthorpe, opp South Avenue	0650	0740	0850	0950	1050	1150	1250	1350	1450	1550	1650	1750	1900
Magna Park, opp Wellington Parkway	0658	0748	0858	0958	1058	1158	1258	1358	1458	1558	1658	1758	1908
Magna Park, adj Harrier Parkway Hail & Ride	0700	0750	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1910
Lutterworth, o/s Morrisons	0709	0759	0909	1009	1109	1209	1309	1409	1509	1609	1709	1809	1919
Lutterworth, o/s George Street Car Park	—	—	0910	—	1110	1210	—	1410	—	1610	—	—	—

Saturdays

Hinckley, Regent Street (Stand R3)	0628		28		1828	▸▸▸
Burbage, opp Horsepool	0636	then	36		1836	
Sharnford, adj High Cross Road	0643	at	43		1843	
Claybrooke Magna, The Laurels (SE-bound)	0646	these	46		1846	
Claybrooke Parva, opp Western Drive	0648	mins	48	until	1848	more
Ullesthorpe, opp South Avenue	0650	past	50		1850	trips
Magna Park, opp Wellington Parkway	0658	each	58		1858	below
Magna Park, adj Harrier Parkway Hail & Ride	0700	hour	00		1900	
Lutterworth, o/s Morrisons	0709		09		1909	▸▸▸

Sundays

no service

Good Friday

Hinckley, Regent Street (Stand R3)	0628	0718	0728	0828	0828	0928	1028	1028	1128	1128	1228	1328	1328	1428	1528	1528	1628	1728
Burbage, opp Horsepool	0636	0726	0736	0836	0836	0936	1036	1036	1136	1136	1236	1336	1336	1436	1536	1536	1636	1736
Sharnford, adj High Cross Road	0643	0733	0743	0843	0843	0943	1043	1043	1143	1143	1243	1343	1343	1443	1543	1543	1643	1743
Claybrooke Magna, The Laurels (SE-bound)	0646	0736	0746	0846	0846	0946	1046	1046	1146	1146	1246	1346	1346	1446	1546	1546	1646	1746
Claybrooke Parva, opp Western Drive	0648	0738	0748	0848	0848	0948	1048	1048	1148	1148	1248	1348	1348	1448	1548	1548	1648	1748
Ullesthorpe, opp South Avenue	0650	0740	0750	0850	0850	0950	1050	1050	1150	1150	1250	1350	1350	1450	1550	1550	1650	1750
Magna Park, opp Wellington Parkway	0658	0748	0758	0858	0858	0958	1058	1058	1158	1158	1258	1358	1358	1458	1558	1558	1658	1758
Magna Park, adj Harrier Parkway Hail & Ride	0700	0750	0800	0900	0900	1000	1100	1100	1200	1200	1300	1400	1400	1500	1600	1600	1700	1800
Lutterworth, o/s Morrisons	0709	0759	0809	0909	0909	1009	1109	1109	1209	1209	1309	1409	1409	1509	1609	1609	1709	1809
Lutterworth, o/s George Street Car Park	—	—	—	—	0910	—	—	1110	—	1210	—	—	1410	—	—	1610	—	—

Good Friday

Hinckley, Regent Street (Stand R3)	1828	1838
Burbage, opp Horsepool	1836	1846
Sharnford, adj High Cross Road	1843	1853
Claybrooke Magna, The Laurels (SE-bound)	1846	1856
Claybrooke Parva, opp Western Drive	1848	1858
Ullesthorpe, opp South Avenue	1850	1900
Magna Park, opp Wellington Parkway	1858	1908
Magna Park, adj Harrier Parkway Hail & Ride	1900	1910
Lutterworth, o/s Morrisons	1909	1919

Easter Monday

no service

8 Lutterworth - Magna Park - Hinckley

Hinckley Bus

The information on this timetable is expected to be valid until at least 15th April 2015. Where we know of variations, before or after this date, then we show these at the top of each affected column in the table.

Direction of stops: where shown (eg: W-bound) this is the compass direction towards which the bus is pointing when it stops

Mondays to Fridays

Lutterworth, o/s George Street Car Park	0622	then at these mins past each hour	22	until	1322	1422	1522	1632	1722	1822
Magna Park, opp Wellington Parkway	0628		28		1328	1428	1528	1638	1728	1828
Magna Park, adj Harrier Parkway Hail & Ride	0630		30		1330	1430	1530	1640	1730	1830
Ullesthorpe, adj South Avenue	0640		40		1340	1440	1540	1650	1740	1840
Claybrooke Parva, adj Western Drive	0642		42		1342	1442	1542	1652	1742	1842
Claybrooke Magna, opp The Laurels	0644		44		1344	1444	1544	1654	1744	1844
Sharnford, opp High Cross Road	0647		47		1347	1447	1547	1657	1747	1847
Burbage, adj Horsepool	0654		54		1354	1454	1554	1704	1754	1854
Hinckley, Regent Street (Stand R3)	|		|		|	1502	|	|	|	|
Hinckley, Regent Street (Stand R2)	0702		02		1402	—	1602	1712	1802	1902

Saturdays

Lutterworth, o/s George Street Car Park	0622	then at these mins past each hour	22	until	1322	1422	1522	1622	1722	1822
Magna Park, opp Wellington Parkway	0628		28		1328	1428	1528	1628	1728	1828
Magna Park, adj Harrier Parkway Hail & Ride	0630		30		1330	1430	1530	1630	1730	1830
Ullesthorpe, adj South Avenue	0640		40		1340	1440	1540	1640	1740	1840
Claybrooke Parva, adj Western Drive	0642		42		1342	1442	1542	1642	1742	1842
Claybrooke Magna, opp The Laurels	0644		44		1344	1444	1544	1644	1744	1844
Sharnford, opp High Cross Road	0647		47		1347	1447	1547	1647	1747	1847
Burbage, adj Horsepool	0654		54		1354	1454	1554	1654	1754	1854
Hinckley, Regent Street (Stand R3)	|		|		|	1502	|	|	|	|
Hinckley, Regent Street (Stand R2)	0702		02		1402	—	1602	1702	1802	1902

Sundays

no service

Good Friday

Lutterworth, o/s George Street Car Park	0622	then at these mins past each hour	22	until	1322	1422	1522	1622	1632	1722	1822
Magna Park, opp Wellington Parkway	0628		28		1328	1428	1528	1628	1638	1728	1828
Magna Park, adj Harrier Parkway Hail & Ride	0630		30		1330	1430	1530	1630	1640	1730	1830
Ullesthorpe, adj South Avenue	0640		40		1340	1440	1540	1640	1650	1740	1840
Claybrooke Parva, adj Western Drive	0642		42		1342	1442	1542	1642	1652	1742	1842
Claybrooke Magna, opp The Laurels	0644		44		1344	1444	1544	1644	1654	1744	1844
Sharnford, opp High Cross Road	0647		47		1347	1447	1547	1647	1657	1747	1847
Burbage, adj Horsepool	0654		54		1354	1454	1554	1654	1704	1754	1854
Hinckley, Regent Street (Stand R3)	|		|		|	1502	|	|	|	|	|
Hinckley, Regent Street (Stand R2)	0702		02		1402	—	1602	1702	1712	1802	1902

Easter Monday

no service

8 Hinckley - Magna Park - Lutterworth

For times of the next departures from a particular stop you can use **traveline-txt** - by sending the SMS code to **84268**. Add the service number after the code if you just want a specific service - eg: **buctdgtd 60**. The return message from **traveline-txt** will show the next three departures, and it currently costs 25p plus any message sending charge. However it is free for all stops in Lincolnshire & in the SW region. Departure times will be real-time predictions where available, or scheduled departure times if not.

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NOTE: SMS codes are different in each direction. Make sure you choose the right direction from these lists.

SMS Code	Stop Name	Street	ATCO Code
leijajpm	Hinckley, Regent Street (Stand R3)	Regent Street	260010358
leijajpt	Hinckley, adj St Mary's Road	Station Road	260010359
leijwgjp	Hinckley, adj Springfield Road	Station Road	260070129
leimawtj	Hinckley, adj Thornfield Way Hail & Ride	Southfield Road	260010421
leijamat	Hinckley, adj London Road	Park Road	260010379
leijajgm	Hinckley, opp Parsons Lane	London Road	260010343
leijadtj	Burbage, adj Elm Tree Drive	Burbage Road	260010232
leijadtm	Burbage, adj Sapcote Road	Burbage Road	260010233
leijagdj	Burbage, opp The Fairway	Hinckley Road	260010252
leijadwa	Burbage, opp Forresters Road	Hinckley Road	260010236
leijadwd	Burbage, adj Parish Church	Hinckley Road	260010237
leijagaw	Burbage, adj Aston Lane	Church Street	260010249
leijagdp	Burbage, opp Horsepool	Church Street	260010254
leijagdm	Burbage, opp Orchard Close	Lutterworth Road	260010253
leidmgmj	Burbage, Lutterworth Road (S-bound)	Lutterworth Road	260010267
leidtmdt	Sharnford, adj High Cross Road	Watling Street	260004907
leijmdgp	Claybrooke Magna, The Laurels (SE-bound)	Main Road	260018400
leijmdja	Claybrooke Magna, adj Bell Street	Main Road	260018403
leijmdjg	Claybrooke Parva, opp Western Drive	Main Road	260018501
leimatdw	Ullesthorpe, opp Allotments	Lutterworth Road	260025611
leijpdwm	Ullesthorpe, opp South Avenue	Main Street	260025601
leimatga	Ullesthorpe, opp Hillside	Lutterworth Road	260025612
leimagwt	Ullesthorpe, opp Garden Centre	Lutterworth Road	260025609
leijmapt	Magna Park, opp Wellington Parkway	Hunter Boulevard	260017600
leijwjwj	Magna Park, adj Vulcan Way Hail & Ride	Hunter Boulevard	260070205
leijwjwm	Magna Park, adj Harrier Parkway Hail & Ride	Wellington Parkway	260070206
leijwamd	Lutterworth, opp Woodway Road	Coventry Road	260070023
leijmtdj	Lutterworth, opp St Mary's Road	Coventry Road	260022411
leidjdtd	Lutterworth, o/s Morrisons	George Street	260022410
leidjamt	Lutterworth, o/s George Street Car Park	George Street	260022408

8 Lutterworth - Magna Park - Hinckley

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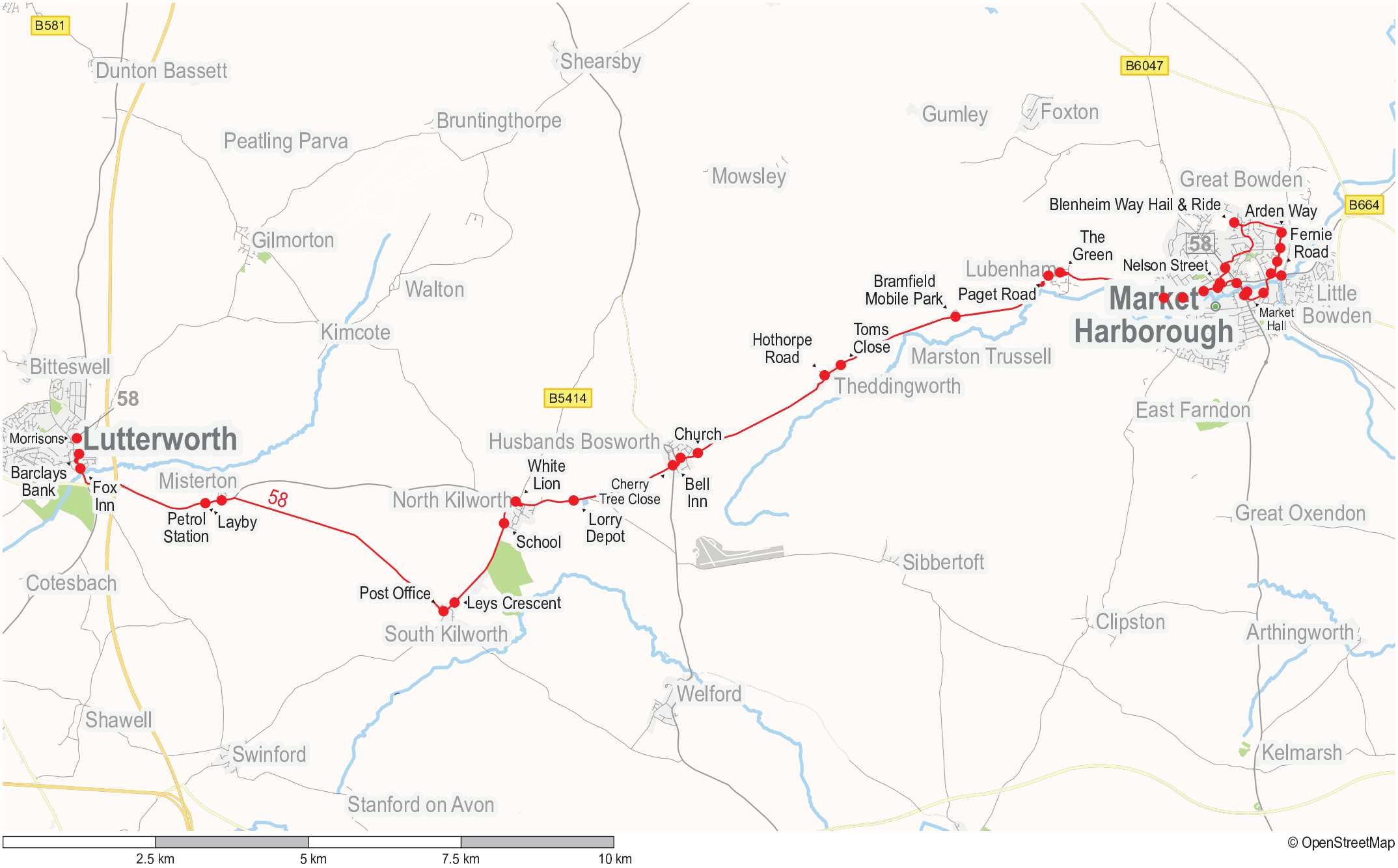
NOTE: SMS codes are different in each direction. Make sure you choose the right direction from these lists.

SMS Code	Stop Name	Street	ATCO Code
leidjamt	Lutterworth, o/s George Street Car Park	George Street	260022408
leijmtgj	Lutterworth, adj St Mary's Road	Coventry Road	260022426
leijmtdg	Lutterworth, adj Woodway Road	Coventry Road	260022409
leijmapt	Magna Park, opp Wellington Parkway	Hunter Boulevard	260017600
leijwjwj	Magna Park, adj Vulcan Way Hail & Ride	Hunter Boulevard	260070205
leijwjwm	Magna Park, adj Harrier Parkway Hail & Ride	Wellington Parkway	260070206
leimagwp	Ullesthorpe, o/s Garden Centre	Lutterworth Road	260025608
leimatgd	Ullesthorpe, adj Hillside	Lutterworth Road	260025613
leijpdwj	Ullesthorpe, adj South Avenue	Main Street	260025600
leimatdt	Ullesthorpe, adj Allotments	Lutterworth Road	260025610
leijmdjd	Claybrooke Parva, adj Western Drive	Main Road	260018500
leijmdgw	Claybrooke Magna, opp Bell Street	Main Road	260018402
leijmdgt	Claybrooke Magna, opp The Laurels	Main Road	260018401
leidtmdp	Sharnford, opp High Cross Road	Watling Street	260004906
leidmgpg	Burbage, Lutterworth Road (N-bound)	Lutterworth Road	260010268
leijawjt	Burbage, adj Orchard Close	Lutterworth Road	260010967
leijagda	Burbage, adj Horsepool	Church Street	260010250
leijagdg	Burbage, opp Parish Church	Hinckley Road	260010251
leijadwg	Burbage, adj Forresters Road	Hinckley Road	260010238
leijadwj	Burbage, adj The Fairway	Hinckley Road	260010239
leijadtp	Burbage, opp Sapcote Road	Burbage Road	260010234
leijadtw	Burbage, opp Elm Tree Drive	Burbage Road	260010235
leijajgp	Hinckley, adj Parsons Lane	London Road	260010344
leijwgjt	Hinckley, opp Thornfield Road Hail & Ride	Southfield Road	260070130
leijajgd	Hinckley, opp Springfield Road	Station Road	260010341
leijajpw	Hinckley, opp St Mary's Road	Station Road	260010360
leijajwt	Hinckley, o/s Library	Lancaster Road	260010373
leijajpm	Hinckley, Regent Street (Stand R3)	Regent Street	260010358
leijajpj	Hinckley, Regent Street (Stand R2)	The Borough	260010357

traveline
public transport info
0871 200 22 33

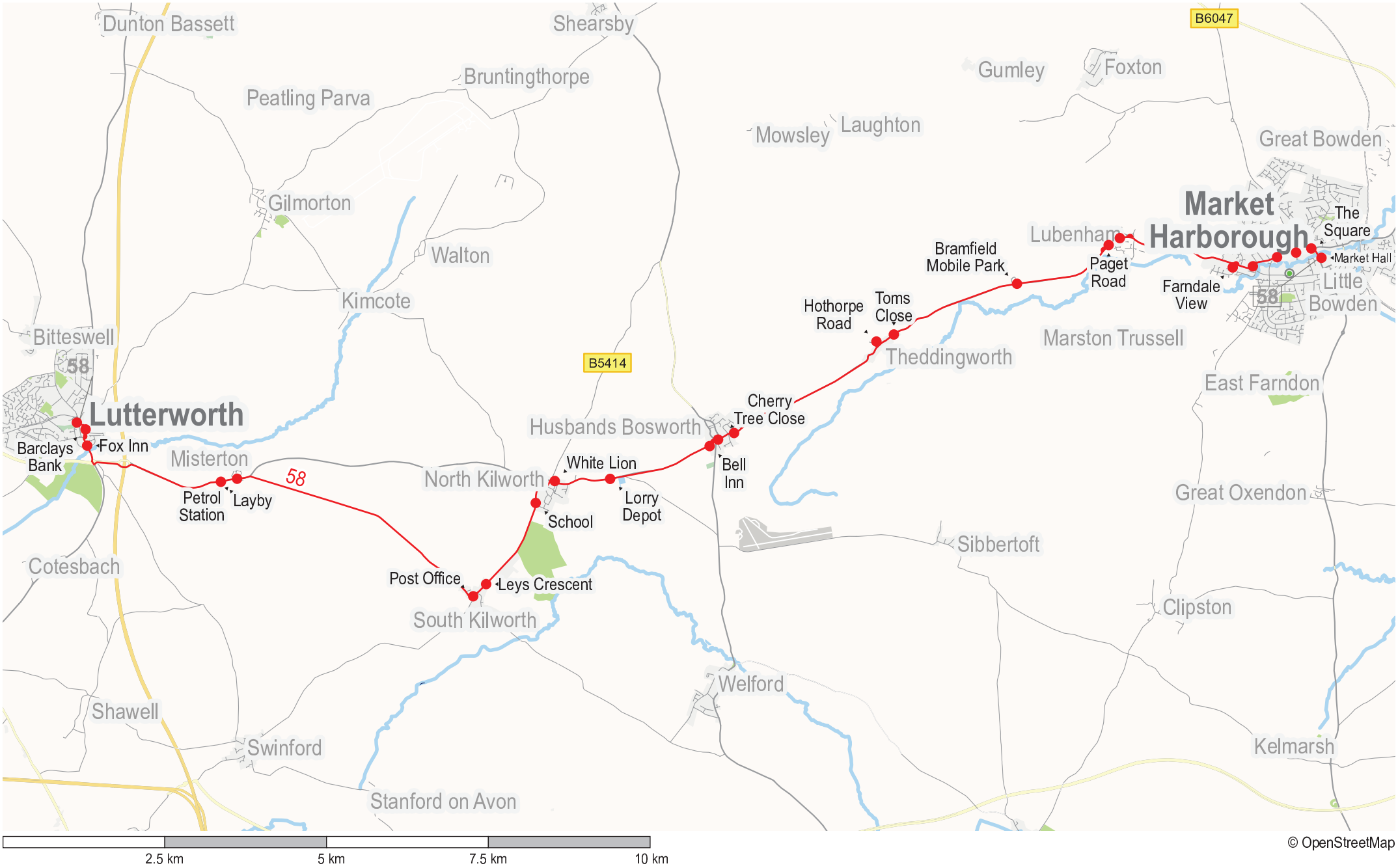
Route map for Hinckley Bus service 58 (outbound)



em-12058A(-1).y08 (outbound)

traveline
public transport info
0871 200 22 33

Route map for Hinckley Bus service 58 (inbound)



em-12058A(-1).y08 (inbound)

58 Lutterworth - Husbands Bosworth - Market Harborough

Hinckley Bus

The information on this timetable is expected to be valid until at least 15th April 2015. Where we know of variations, before or after this date, then we show these at the top of each affected column in the table.

Direction of stops: where shown (eg: W-bound) this is the compass direction towards which the bus is pointing when it stops

Mondays to Fridays

Service Restrictions	1	2	3	4			4	1	
Notes		SH	SCH						
Lutterworth, o/s Morrisons	0710	0800	0800	0810	1010	1310	1510	1520	1710
Walcote, opp Petrol Station	0715	0805	0805	0815	1015	1315	1515	1525	1715
South Kilworth, adj Leys Crescent	0720	0810	0810	0820	1020	1320	1520	1530	1720
North Kilworth, opp White Lion	0723	0813	0813	0823	1023	1323	1523	1533	1723
Husbands Bosworth, opp Cherry Tree Close	0727	0817	0817	0827	1027	1327	1527	1537	1727
Theddingworth, opp Hothorpe Road	0731	0821	0821	0831	1031	1331	1531	1541	1731
Lubenham, o/s Paget Road	0736	0826	0826	0836	1036	1336	1536	1546	1736
Market Harborough, opp Bowden Lane	|	|	0832	|	|	|	|	|	|
Market Harborough, opp Blenheim Way Hail & Ride	|	|	0834	|	|	|	|	|	|
Market Harborough, Market Hall (Stand M1)	0742	0832	0840	0842	1042	1342	1542	1552	1742

Saturdays

Lutterworth, o/s Morrisons	0810	1010	1310	1510	1710
Walcote, opp Petrol Station	0815	1015	1315	1515	1715
South Kilworth, adj Leys Crescent	0820	1020	1320	1520	1720
North Kilworth, opp White Lion	0823	1023	1323	1523	1723
Husbands Bosworth, opp Cherry Tree Close	0827	1027	1327	1527	1727
Theddingworth, opp Hothorpe Road	0831	1031	1331	1531	1731
Lubenham, o/s Paget Road	0836	1036	1336	1536	1736
Market Harborough, Market Hall (Stand M1)	0842	1042	1342	1542	1742

Sundays

no service

Good Friday

same as Saturdays

Easter Monday

no service

Service Restrictions:
1 - not 7.4.15
2 - from 30.3.15 to 29.5.15, not 7.4.15, 13.4. to 22.5.
3 - to 10.7.15, not 30.3.15 to 10.4., 26.5. to 29.5.
4 - only 7.4.15

Notes:
SCH - Operates on Schooldays Only
SH - School Holidays

58 Market Harborough - Husbands Bosworth - Lutterworth

Hinckley Bus

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Direction of stops: where shown (eg: W-bound) this is the compass direction towards which the bus is pointing when it stops

Mondays to Fridays

Service Restrictions	1	1	4	1	4	1	4	4	1	1	4
Market Harborough, Market Hall (Stand M1)	0749	0849	0849	1149	1149	1349	1349	1549	1559	1749	1749
Lubenham, opp The Green	0755	0855	0855	1155	1155	1355	1355	1555	1605	1755	1755
Theddingworth, adj Hothorpe Road	0800	0900	0900	1200	1200	1400	1400	1600	1610	1800	1800
Husbands Bosworth, Cherry Tree Close (SW-bound)	0804	0904	0904	1204	1204	1404	1404	1604	1614	1804	1804
North Kilworth, adj White Lion	0808	0908	0908	1208	1208	1408	1408	1608	1618	1808	1808
South Kilworth, opp Leys Crescent	0811	0911	0911	1211	1211	1411	1411	1611	1621	1811	1811
Walcote, adj Petrol Station	0816	0916	0916	1216	1216	1416	1416	1616	1626	1816	1816
Lutterworth, o/s George Street Car Park	0821	0921	0922	1221	1222	1421	1422	1622	1631	1821	1822

Saturdays

Market Harborough, Market Hall (Stand M1)	0849	1149	1349	1549	1749
Lubenham, opp The Green	0855	1155	1355	1555	1755
Theddingworth, adj Hothorpe Road	0900	1200	1400	1600	1800
Husbands Bosworth, Cherry Tree Close (SW-bound)	0904	1204	1404	1604	1804
North Kilworth, adj White Lion	0908	1208	1408	1608	1808
South Kilworth, opp Leys Crescent	0911	1211	1411	1611	1811
Walcote, adj Petrol Station	0916	1216	1416	1616	1816
Lutterworth, o/s George Street Car Park	0922	1222	1422	1622	1822

Sundays

no service

Good Friday

same as Saturdays

Easter Monday

no service

Service Restrictions: **1** - not 7.4.15
4 - only 7.4.15

58 Lutterworth - Husbands Bosworth - Market Harborough

Hinckley Bus

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SMS Code	Stop Name	Street	ATCO Code
leidjdtd	Lutterworth, o/s Morrisons	George Street	260022410
leijmtat	Lutterworth, adj Barclays Bank	High Street	260022405
leijmtaw	Lutterworth, opp Fox Inn	Rugby Road	260022406
leijmwpa	Walcote, adj Layby	Lutterworth Road	260022801
leijmwmw	Walcote, opp Petrol Station	Lutterworth Road	260022800
leijpatp	South Kilworth, opp Post Office	Walcote Road	260024501
leimajag	South Kilworth, adj Leys Crescent	North Kilworth Road	260024505
leimapwp	North Kilworth, opp School	South Kilworth Road	260023107
leijmwpt	North Kilworth, opp White Lion	Lutterworth Road	260023100
leimatgw	North Kilworth, adj Lorry Depot	Station Road	260023109
leijwpwp	Husbands Bosworth, adj Bell Inn	Kilworth Road	260080007
leijmjtm	Husbands Bosworth, opp Cherry Tree Close	High Street	260020902
leijmjtw	Husbands Bosworth, adj Church	Theddingworth Road	260020904
leijpdad	Theddingworth, opp Hothorpe Road	Main Street	260025000
leimajpa	Theddingworth, opp Toms Close	Harborough Road	260025004
leijmtag	Lubenham, o/s Bramfield Mobile Park	Theddingworth Road	260022307
leijmpwd	Lubenham, o/s Paget Road	Main Street	260022300
leijmpwj	Lubenham, adj The Green	Main Street	260022302
leijmwat	Market Harborough, opp Farndale View	Lubenham Hill	260022636
leijmwda	Market Harborough, adj Gardiner Street	Coventry Road	260022638
leijmwdj	Market Harborough, Logan Street (E-bound)	Coventry Road	260022640
leijmamt	Market Harborough, o/s St Josephs School	Coventry Road	260017103
leijmwgp	Market Harborough, adj Nelson Street	Fairfield Road	260022649
leijmtjw	Market Harborough, The Square (Stand S1)	The Square	260022609
leijmtmj	Market Harborough, opp Bowden Lane	High Street	260022613
leijwtjd	Market Harborough, opp Blenheim Way Hail & Ride	Ridgeway West	260080043
leijmtgw	Market Harborough, opp Arden Way	Great Bowden Road	260022602
leijmtjd	Market Harborough, opp The Headlands	Great Bowden Road	260022604
leijmtjg	Market Harborough, adj Middlebrook Green	Great Bowden Road	260022605
leijmtjm	Market Harborough, opp Fernie Road	Great Bowden Road	260022606
leijmwjt	Market Harborough, o/s Railway Station	Rockingham Road	260022657
leimajmp	Market Harborough, opp Kettering Road	Springfield Street	260022664
leijmtpa	Market Harborough, opp Springfield Street	Northampton Road	260022617
leijmtmw	Market Harborough, Market Hall (Stand M1)	Northampton Road	260022616

58 Market Harborough - Husbands Bosworth - Lutterworth

Hinckley Bus

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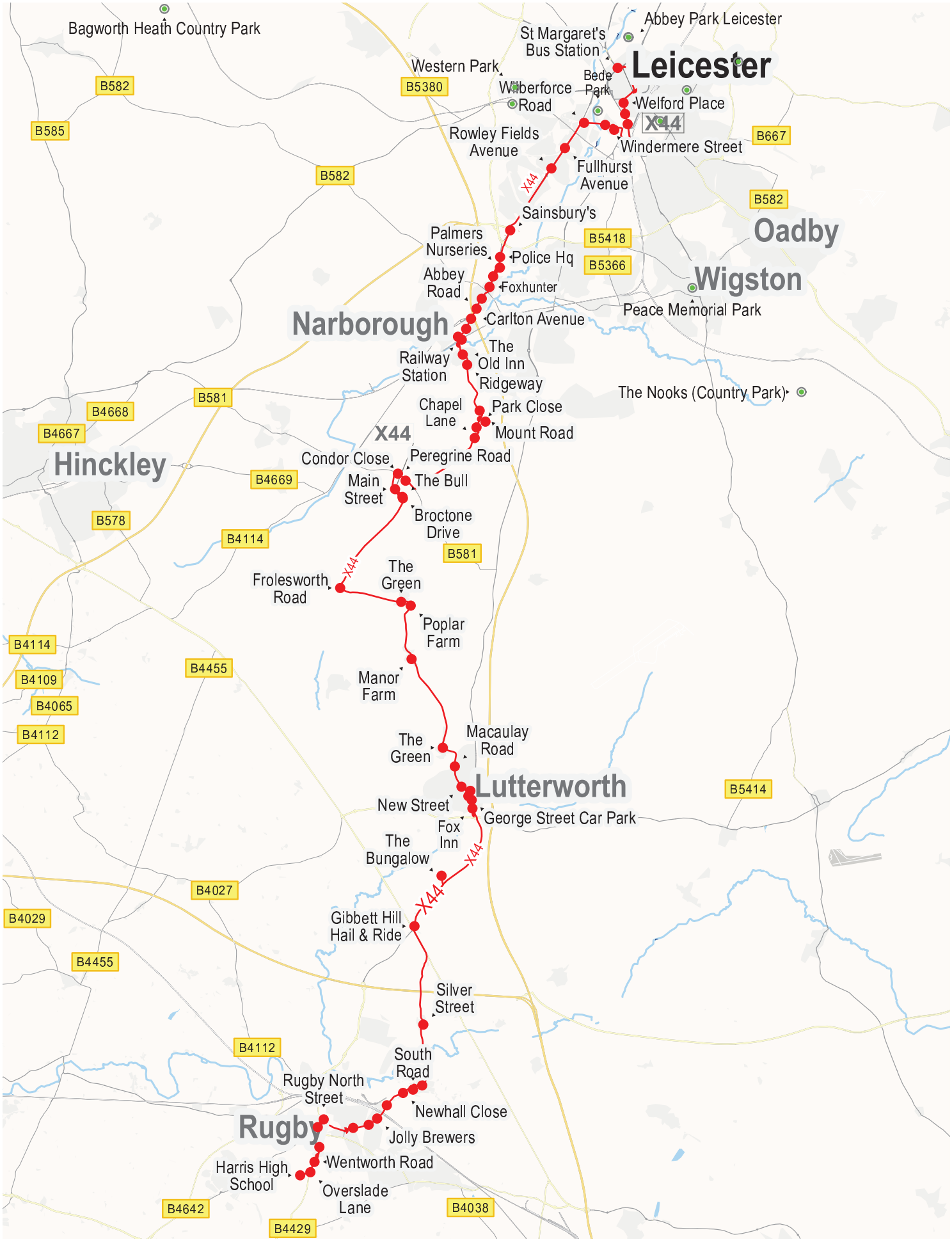
SMS Code	Stop Name	Street	ATCO Code
leijmtmw	Market Harborough, Market Hall (Stand M1)	Northampton Road	260022616
leijmtmd	Market Harborough, The Square (Stand S4)	The Square	260022611
leijmwdm	Market Harborough, opp Petrol Station	Coventry Road	260022641
leijmwdg	Market Harborough, opp Logan Street	Coventry Road	260022639
leijmwaw	Market Harborough, opp Gardiner Street	Coventry Road	260022637
leijmwap	Market Harborough, adj Farndale View	Lubenham Hill	260022635
leijmpwg	Lubenham, opp The Green	Main Street	260022301
leijmpwt	Lubenham, opp Paget Road	Main Street	260022305
leijmtad	Lubenham, opp Bramfield Mobile Park	Theddingworth Road	260022306
leimajaj	Theddingworth, adj Toms Close	Harborough Road	260025002
leijpdag	Theddingworth, adj Hothorpe Road	Main Street	260025001
leijmjwa	Husbands Bosworth, opp Church	Theddingworth Road	260020905
leijmjtp	Husbands Bosworth, Cherry Tree Close (SW-bound)	High Street	260020903
leimagpd	Husbands Bosworth, opp Bell Inn	Kilworth Road	260080273
leimatja	North Kilworth, opp Lorry Depot	Station Road	260023110
leijmwpw	North Kilworth, adj White Lion	Lutterworth Road	260023101
leimapwt	North Kilworth, adj School	South Kilworth Road	260023108
leimajad	South Kilworth, opp Leys Crescent	North Kilworth Road	260024504
leijpatm	South Kilworth, adj Post Office	Walcote Road	260024500
leijmwpd	Walcote, adj Petrol Station	Lutterworth Road	260022802
leijmdap	Walcote, opp Layby	Lutterworth Road	260018006
leijmtda	Lutterworth, o/s Fox Inn	Rugby Road	260022407
leidjdtj	Lutterworth, opp Barclays Bank	High Street	260022420
leidjamt	Lutterworth, o/s George Street Car Park	George Street	260022408

traveline
public transport info
0871 200 22 33

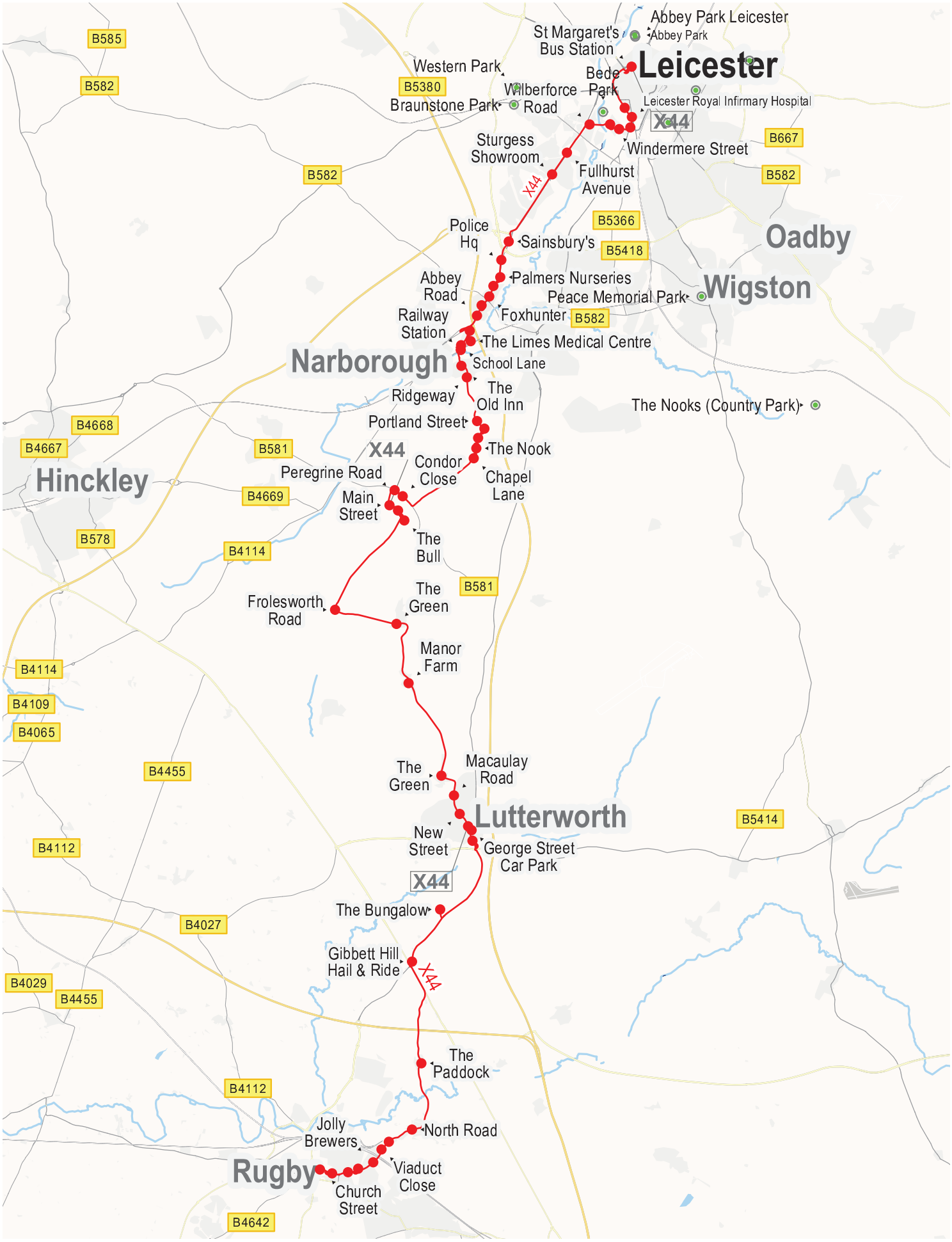
Route map for Hinckley Bus service X44 (outbound)



em-12X44_(-1).y08 (outbound)

traveline
public transport info
0871 200 22 33

Route map for Hinckley Bus service X44 (inbound)



em-12X44_(-1).y08 (inbound)

X44 Leicester - Fosse Park - Broughton Astley - Lutterworth - Rugby

Hinckley Bus

The information on this timetable is expected to be valid until at least 15th April 2015. Where we know of variations, before or after this date, then we show these at the top of each affected column in the table.

Direction of stops: where shown (eg: W-bound) this is the compass direction towards which the bus is pointing when it stops

Mondays to Fridays

Service Restrictions	1	2	3	4	2	2	1			2	1		2	1		2	1	1
Notes			SH	SCH														
Leicester, St Margaret's Bus Station (Bay 12)	—	—	0705	0705	0715	0820	0820	0920	1020	1120	1120	1220	1320	1320	1420	1520	1520	1625
Leicester, Nelson Mandela Park (Stand 3)	—	—	0710	0710	0720	0826	0826	0926	1026	1126	1126	1226	1326	1326	1426	1526	1526	1633
West End, opp Fullhurst Avenue	—	—	0717	0717	0727	0834	0834	0934	1034	1134	1134	1234	1334	1334	1434	1534	1534	1643
Fosse Park, opp Sainsbury's	—	—	0722	0722	0732	0841	0841	0941	1041	1141	1141	1241	1341	1341	1441	1541	1541	1651
Narborough, o/s The Limes Medical Centre	—	—	0728	0728	0738	0847	0847	0947	1047	1147	1147	1247	1347	1347	1447	1547	1547	1657
Littlethorpe, adj The Old Inn	—	—	0731	0731	0742	0851	0851	0951	1051	1151	1151	1251	1351	1351	1451	1551	1551	1701
Cosby, adj Park Close	—	—	0735	0735	0745	0855	0855	0955	1055	1155	1155	1255	1355	1355	1455	1555	1555	1705
Broughton Astley, adj Main Street	0657	0702	0742	0742	0752	0902	0902	1002	1102	1202	1202	1302	1402	1402	1502	1602	1602	1712
Frolesworth, opp Frolesworth Road	0701	0706	0746	0746	0756	0906	0906	1006	1106	1206	1206	1306	1406	1406	1506	1606	1606	1716
Leire, opp The Green	0704	0709	0749	0749	0759	0909	0909	1009	1109	1209	1209	1309	1409	1409	1509	1609	1609	1719
Ashby Parva, o/s Manor Farm	0707	0712	0752	0752	0802	0912	0912	1012	1112	1212	1212	1312	1412	1412	1512	1612	1612	1722
Bitteswell, o/s The Green	0711	0716	0756	0756	0806	0916	0916	1016	1116	1216	1216	1316	1416	1416	1516	1616	1616	1726
Lutterworth, o/s Morrisons	0716	0721	0803	0804	0810	0920	0921	1019	1119	1220	1221	1319	1420	1421	1519	1620	1621	1731
Lutterworth, o/s George Street Car Park	|	|	|	|	|	|	|	1020	1120	|	|	1320	|	|	1520	|	|	|
Cotesbach, o/s The Bungalow	0721	0726	0808	0810	0816	0926	0926	—	—	1226	1226	—	1426	1426	—	1626	1626	1735
Newton, opp Silver Street	0728	0733	0815	0818	0823	0932	0933	—	—	1233	1233	—	1433	1433	—	1633	1633	1742
Clifton upon Dunsmore, adj Post Office	0732	0737	0819	0822	0827	0936	0937	—	—	1237	1237	—	1437	1437	—	1637	1637	1746
Rugby, North Street (Stand G)	0740	0745	0827	0832	0835	0944	0945	—	—	1245	1245	—	1445	1445	—	1645	1645	1754
Rugby, opp Harris High School	—	—	—	0838	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mondays to Fridays

Service Restrictions	2	1	2
Leicester, St Margaret's Bus Station (Bay 12)	1630	1730	1735
Leicester, Nelson Mandela Park (Stand 3)	1636	1738	1741
West End, opp Fullhurst Avenue	1644	1748	1749
Fosse Park, opp Sainsbury's	1651	1756	1756
Narborough, o/s The Limes Medical Centre	1657	1802	1802
Littlethorpe, adj The Old Inn	1701	1806	1806
Cosby, adj Park Close	1705	1810	1810
Broughton Astley, adj Main Street	1712	1817	1817
Frolesworth, opp Frolesworth Road	1716	1821	1821
Leire, opp The Green	1719	1824	1824
Ashby Parva, o/s Manor Farm	1722	1827	1827
Bitteswell, o/s The Green	1726	1831	1831
Lutterworth, o/s Morrisons	1730	1836	1835
Cotesbach, o/s The Bungalow	1735	1840	1840
Newton, opp Silver Street	1742	1847	1847
Clifton upon Dunsmore, adj Post Office	1746	1851	1851
Rugby, North Street (Stand G)	1754	1859	1859

Saturdays

Leicester, St Margaret's Bus Station (Bay 12)	—	0715	0820	0920	1020	1120	1220	1320	1420	1520	1630	1735
Leicester, Nelson Mandela Park (Stand 3)	—	0720	0826	0926	1026	1126	1226	1326	1426	1526	1636	1741
West End, opp Fullhurst Avenue	—	0727	0834	0934	1034	1134	1234	1334	1434	1534	1644	1749
Fosse Park, opp Sainsbury's	—	0732	0841	0941	1041	1141	1241	1341	1441	1541	1651	1756
Narborough, o/s The Limes Medical Centre	—	0738	0847	0947	1047	1147	1247	1347	1447	1547	1657	1802
Littlethorpe, adj The Old Inn	—	0742	0851	0951	1051	1151	1251	1351	1451	1551	1701	1806
Cosby, adj Park Close	—	0745	0855	0955	1055	1155	1255	1355	1455	1555	1705	1810
Broughton Astley, adj Main Street	0702	0752	0902	1002	1102	1202	1302	1402	1502	1602	1712	1817
Frolesworth, opp Frolesworth Road	0706	0756	0906	1006	1106	1206	1306	1406	1506	1606	1716	1821
Leire, opp The Green	0709	0759	0909	1009	1109	1209	1309	1409	1509	1609	1719	1824
Ashby Parva, o/s Manor Farm	0712	0802	0912	1012	1112	1212	1312	1412	1512	1612	1722	1827
Bitteswell, o/s The Green	0716	0806	0916	1016	1116	1216	1316	1416	1516	1616	1726	1831
Lutterworth, o/s Morrisons	0721	0810	0920	1019	1119	1220	1319	1420	1519	1620	1730	1835
Lutterworth, o/s George Street Car Park	|	|	|	1020	1120	|	1320	|	1520	|	|	|
Cotesbach, o/s The Bungalow	0726	0816	0926	—	—	1226	—	1426	—	1626	1735	1840
Newton, opp Silver Street	0733	0823	0932	—	—	1233	—	1433	—	1633	1742	1847
Clifton upon Dunsmore, adj Post Office	0737	0827	0936	—	—	1237	—	1437	—	1637	1746	1851
Rugby, North Street (Stand G)	0745	0835	0944	—	—	1245	—	1445	—	1645	1754	1859

Sundays

no service

Good Friday

same as Saturdays

Easter Monday

no service

Service Restrictions:
1 - not 7.4.15
2 - only 7.4.15
3 - from 30.3.15 to 29.5.15, not 7.4.15, 13.5. to 22.5.
4 - to 17.7.15, not 30.3.15 to 10.4., 26.5. to 29.5.

Notes:
SCH - Operates on Schooldays Only
SH - School Holidays

X44 Rugby - Lutterworth - Broughton Astley - Fosse Park - Leicester

Hinckley Bus

The information on this timetable is expected to be valid until at least 15th April 2015. Where we know of variations, before or after this date, then we show these at the top of each affected column in the table.

Direction of stops: where shown (eg: W-bound) this is the compass direction towards which the bus is pointing when it stops

Mondays to Fridays

Service Restrictions	1	2	1	2							2	1	4	2	1		2	1
Notes													SCH					
Rugby, Church Street (Stand J)	—	—	0744	0749	—	0949	—	—	1249	—	1449	1449	1549	—	—	1654	—	1755
Rugby, Clifton Road (Stand M)	—	—	0746	0751	—	0951	—	—	1251	—	1451	1451	1551	—	—	1656	—	1757
Clifton upon Dunsmore, adj North Road	—	—	0752	0757	—	0957	—	—	1257	—	1457	1457	1557	—	—	1702	—	1803
Newton, adj The Paddock	—	—	0755	0800	—	1000	—	—	1300	—	1500	1500	1600	—	—	1705	—	1806
Cotesbach, opp The Bungalow	—	—	0803	0808	—	1008	—	—	1308	—	1508	1508	1608	—	—	1713	—	1813
Lutterworth, o/s George Street Car Park	0709	0714	0809	0814	0914	1014	1114	1214	1314	1414	1514	1514	1613	1614	1614	1719	1814	1819
Bitteswell, opp The Green	0713	0718	0813	0818	0918	1018	1118	1218	1318	1418	1518	1518	—	1618	1618	1723	1818	1823
Ashby Parva, opp Manor Farm	0717	0722	0817	0822	0922	1022	1122	1222	1322	1422	1522	1522	—	1622	1622	1727	1822	1827
Leire, o/s The Green	0720	0725	0820	0825	0925	1025	1125	1225	1325	1425	1525	1525	—	1625	1625	1730	1825	1830
Frolesworth, adj Frolesworth Road	0723	0728	0823	0828	0928	1028	1128	1228	1328	1428	1528	1528	—	1628	1628	1733	1828	1833
Broughton Astley, opp Main Street	0727	0732	0827	0832	0932	1032	1132	1232	1332	1432	1532	1532	—	1632	1632	1737	1832	1837
Cosby, opp The Nook	0735	0740	0835	0840	0940	1040	1140	1240	1340	1440	1540	1540	—	1640	1640	1745	—	—
Littlethorpe, opp The Old Inn	0739	0744	0839	0844	0944	1044	1144	1244	1344	1444	1544	1544	—	1644	1644	1749	—	—
Narborough, adj School Lane	0743	0748	0843	0848	0948	1048	1148	1248	1348	1448	1548	1548	—	1648	1648	1753	—	—
Fosse Park, adj Sainsbury's	0750	0755	0850	0855	0955	1055	1155	1255	1355	1455	1555	1555	—	1655	1655	1800	—	—
West End, o/s Fullhurst Avenue	0757	0800	0857	0900	1000	1100	1200	1300	1400	1500	1600	1602	—	1700	1702	1805	—	—
Leicester, Royal Infirmary Hospital (Stand 1)	0806	0807	0906	0907	1007	1107	1207	1307	1407	1507	1607	1611	—	1707	1711	1812	—	—
Leicester, St Margaret's Bus Station	0812	0812	0912	0912	1012	1112	1212	1312	1412	1512	1612	1617	—	1712	1717	1817	—	—

Saturdays

Rugby, Church Street (Stand J)	—	0749	—	0949	—	—	1249	—	1449	—	1654	—
Rugby, Clifton Road (Stand M)	—	0751	—	0951	—	—	1251	—	1451	—	1656	—
Clifton upon Dunsmore, adj North Road	—	0757	—	0957	—	—	1257	—	1457	—	1702	—
Newton, adj The Paddock	—	0800	—	1000	—	—	1300	—	1500	—	1705	—
Cotesbach, opp The Bungalow	—	0808	—	1008	—	—	1308	—	1508	—	1713	—
Lutterworth, o/s George Street Car Park	0714	0814	0914	1014	1114	1214	1314	1414	1514	1614	1719	1814
Bitteswell, opp The Green	0718	0818	0918	1018	1118	1218	1318	1418	1518	1618	1723	1818
Ashby Parva, opp Manor Farm	0722	0822	0922	1022	1122	1222	1322	1422	1522	1622	1727	1822
Leire, o/s The Green	0725	0825	0925	1025	1125	1225	1325	1425	1525	1625	1730	1825
Frolesworth, adj Frolesworth Road	0728	0828	0928	1028	1128	1228	1328	1428	1528	1628	1733	1828
Broughton Astley, opp Main Street	0732	0832	0932	1032	1132	1232	1332	1432	1532	1632	1737	1832
Cosby, opp The Nook	0740	0840	0940	1040	1140	1240	1340	1440	1540	1640	1745	—
Littlethorpe, opp The Old Inn	0744	0844	0944	1044	1144	1244	1344	1444	1544	1644	1749	—
Narborough, adj School Lane	0748	0848	0948	1048	1148	1248	1348	1448	1548	1648	1753	—
Fosse Park, adj Sainsbury's	0755	0855	0955	1055	1155	1255	1355	1455	1555	1655	1800	—
West End, o/s Fullhurst Avenue	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1805	—
Leicester, Royal Infirmary Hospital (Stand 1)	0807	0907	1007	1107	1207	1307	1407	1507	1607	1707	1812	—
Leicester, St Margaret's Bus Station	0812	0912	1012	1112	1212	1312	1412	1512	1612	1712	1817	—

Sundays

no service

Good Friday

same as Saturdays

Easter Monday

no service

Service Restrictions:
1 - not 7.4.15
2 - only 7.4.15
4 - to 17.7.15, not 30.3.15 to 10.4., 26.5. to 29.5.

Notes: **SCH** - Operates on Schooldays Only

X44 Leicester - Fosse Park - Broughton Astley - Lutterworth - Rugby

Hinckley Bus

For times of the next departures from a particular stop you can use **traveline-txt** - by sending the SMS code to **84268**. Add the service number after the code if you just want a specific service - eg: **buctdgtd 60**. The return message from **traveline-txt** will show the next three departures, and it currently costs 25p plus any message sending charge. However it is free for all stops in Lincolnshire & in the SW region. Departure times will be real-time predictions where available, or scheduled departure times if not.

You can also get the same information by using the SMS code at www.nextbuses.mobi (only normal browsing charges apply) or through several iPhone or Android apps that offer access to **NextBuses**.

NOTE: SMS codes are different in each direction. Make sure you choose the right direction from these lists.

SMS Code	Stop Name	Street	ATCO Code
lecdgpja	Leicester, St Margaret's Bus Station (Bay 12)		269030083
lecdjwpd	Leicester, Welford Place (Stand EP)	Welford Road	269034018
lecdjwpm	Leicester, Regent Road (Stand 3)	Welford Road	269034021
lecdjwta	Leicester, Nelson Mandela Park (Stand 3)	Welford Road	269034024
lecdjwgt	Leicester, adj Burnmoor Street	Walnut Street	269034056
lecdjwgw	Leicester, opp Windermere Street	Walnut Street	269034057
lecdjpwa	West End, Wilberforce Road (W-bound)	Upperton Road	269055024
lecdgmwj	West End, opp Fullhurst Avenue	Narborough Road	269046001
lecdgmwt	Leicester, adj Rowley Fields Avenue	Narborough Road	269046004
leidtdaw	Fosse Park, opp Sainsbury's	Narborough Road South	260003735
leidtdgd	Enderby, o/s Police HQ	St. Johns	260003737
leidtatw	Enderby, o/s Palmers Nurseries	St Johns	260003721
leidtatm	Narborough, adj Trinity Road	St Johns	260003719
leidtatd	Narborough, Foxhunter (S-bound)	St Johns	260003716
leidtawt	Narborough, adj Sparsis Gardens	Leicester Road	260003728
leidtatj	Narborough, adj Abbey Road	Leicester Road	260003718
leidtjdt	Narborough, opp Carlton Avenue	Leicester Road	260004610
leidtjdj	Narborough, o/s The Limes Medical Centre	Leicester Road	260004607
leidtjda	Narborough, opp School Lane	Leicester Road	260004605
leidtjat	Narborough, adj Railway Station	Station Road	260004603
leidtjtj	Littlethorpe, adj The Old Inn	The Square	260004636
leijwmtj	Littlethorpe, adj Ridgeway Hail & Ride	Cosby Road	260070248
leijwmtd	Cosby, adj Mount Road	Narborough Road	260070246
leidjadj	Cosby, opp Victory Park	Park Road	260003306
leidjadm	Cosby, adj Park Close	Park Road	260003308
leidjadt	Cosby, adj Chapel Lane	Broughton Road	260003310
leidjdjg	Broughton Astley, adj Condor Close	Broughton Way	260017905
leidjadw	Broughton Astley, adj Peregrine Road	Broughton Way	260017930
leidjaga	Broughton Astley, adj Main Street	Orchard Road	260017921
leidjagd	Broughton Astley, opp Broctone Drive	Main Street	260017919
leidjagj	Broughton Astley, adj The Bull	Main Street	260017918
leijmgjg	Frolesworth, opp Frolesworth Road	Leire Road	260019600
leijmpmj	Leire, opp The Green	Frolesworth Road	260021900
leijmpmt	Leire, opp Poplar Farm	Leire Lane	260021902
leijmapd	Ashby Parva, o/s Manor Farm	Main Street	260017300
leijmata	Bitteswell, o/s The Green	Ashby Road	260017602
leijmtdw	Lutterworth, adj Macaulay Road	Bitteswell Road	260022417
leijmtdm	Lutterworth, adj New Street	Bitteswell Road	260022413
leidjdtd	Lutterworth, o/s Morrisons	George Street	260022410
leidjamt	Lutterworth, o/s George Street Car Park	George Street	260022408
leijmtat	Lutterworth, adj Barclays Bank	High Street	260022405
leijmtaw	Lutterworth, opp Fox Inn	Rugby Road	260022406
leijmdpt	Cotesbach, o/s The Bungalow	Main Street	260018700
leijpamw	Cotesbach, Gibbett Hill Hail & Ride (S-bound)	Rugby Road A426	260024005
waratpjt	Newton, opp Silver Street	Main Street	4200F131410
waramtjm	Clifton upon Dunsmore, adj Post Office	Main Street	4200F016200
waramwmg	Clifton upon Dunsmore, adj South Road	Main Street	4200F016202
warapwpt	Clifton upon Dunsmore, adj Newhall Close	Rugby Road	4200F123301
warapwmt	Rugby, opp Butlers Leap	Clifton Road	4200F123102
warapwmd	Rugby, opp Jolly Brewers	Clifton Road	4200F123002
wardgamj	Rugby, opp Rokeby Street	Clifton Road	4200F131532
waratjga	Rugby, adj Paradise Street	Clifton Road	4200F117001
warapjgt	Rugby, North Street (Stand G)	North Street	4200F174807
wardmdga	Rugby, adj ASDA	Corporation Street	4200F156471
wardgtad	Rugby, adj St Maries RC Infant School	Dunchurch Road	4200F225101
wardgpwm	Rugby, opp Wentworth Road	Dunchurch Road	4200F224901
wardgpjw	Rugby, opp Overslade Lane	Dunchurch Road	4200F223201
wardajtg	Rugby, opp Harris High School	Overslade Lane	4200F122402

X44 Rugby - Lutterworth - Broughton Astley - Fosse Park - Leicester

Hinckley Bus

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NOTE: SMS codes are different in each direction. Make sure you choose the right direction from these lists.

SMS Code	Stop Name	Street	ATCO Code
waragaja	Rugby, Church Street (Stand J)	Church Street	4200F058001
wardgajp	Rugby, Clifton Road (Stand M)	Clifton Road	4200F055704
waratjgd	Rugby, adj Claremont Road	Clifton Road	4200F117002
wardajtd	Rugby, opp Windsor Street	Clifton Road	4200F122401
warapwma	Rugby, adj Jolly Brewers	Clifton Road	4200F123001
warapwmp	Rugby, adj Viaduct Close	Clifton Road	4200F123101
warapwpj	Clifton upon Dunsmore, opp Avon Street	Vicarage Hill	4200F123202
waramtjp	Clifton upon Dunsmore, adj North Road	Main Street	4200F016201
waramadj	Newton, adj The Paddock	Main Street	4200F045700
leijpamt	Cotesbach, Gibbett Hill Hail & Ride (N-bound)	Rugby Road	260024004
leijmdpw	Cotesbach, opp The Bungalow	Main Street	260018701
leijmtda	Lutterworth, o/s Fox Inn	Rugby Road	260022407
leidjdtj	Lutterworth, opp Barclays Bank	High Street	260022420
leidjamt	Lutterworth, o/s George Street Car Park	George Street	260022408
leidjamw	Lutterworth, opp New Street	Bitteswell Road	260022412
leijmtga	Lutterworth, opp Macaulay Road	Bitteswell Road	260022418
leijmapw	Bitteswell, opp The Green	Ashby Lane	260017601
leijmapg	Ashby Parva, opp Manor Farm	Main Street	260017301
leijmpmw	Leire, o/s The Green	Frolesworth Road	260021903
leijmgjm	Frolesworth, adj Frolesworth Road	Leire Road	260019601
leidjdjw	Broughton Astley, opp The Bull	Main Street	260017917
leidjdjt	Broughton Astley, adj Broctone Drive	Main Street	260017920
leidjdjp	Broughton Astley, opp Main Street	Orchard Road	260017922
leidjdjm	Broughton Astley, opp Peregrine Road	Broughton Way	260017904
leimatpw	Broughton Astley, opp Condor Close	Broughton Way	260017937
leidjdjd	Cosby, opp Chapel Lane	Broughton Road	260003311
leidjdgw	Cosby, opp The Nook	Croft Road	260003309
leidjdgt	Cosby, o/s Park Close	Park Road	260003307
leidjdgp	Cosby, adj Victory Park	Park Road	260003305
leidtagd	Cosby, opp Portland Street	Narborough Road	260003304
leijwmtg	Littlethorpe, opp Ridgeway	Cosby Road	260070247
leidtjaj	Littlethorpe, opp The Old Inn	The Square	260004600
leidtjaw	Narborough, opp Railway Station	Station Road	260004604
leidtjdg	Narborough, adj School Lane	Leicester Road	260004606
leidtjdm	Narborough, opp The Limes Medical Centre	Leicester Road	260004608
leidtjdp	Narborough, adj Carlton Avenue	Leicester Road	260004609
leidtatg	Narborough, opp Abbey Road	Leicester Road	260003717
leidtdad	Narborough, opp Sparsis Gardens	Leicester Road	260003729
leidtata	Narborough, Foxhunter (N-bound)	St Johns	260003715
leidtatp	Narborough, opp Trinity Road	St Johns	260003720
leidtawa	Enderby, opp Palmers Nurseries	St Johns	260003722
leidtawd	Enderby, opp Police HQ	Narborough Road South	260003723
leidtdga	Fosse Park, adj Sainsbury's	Narborough Road South	260003736
lecdmjdm	Leicester, adj Sturgess Showroom	Narborough Road	269046006
lecdmjdw	West End, o/s Fullhurst Avenue	Narborough Road	269046009
lecdjpwd	West End, Wilberforce Road (E-bound)	Upperton Road	269055025
lecdjwja	Leicester, adj Windermere Street	Walnut Street	269034058
lecdjwjd	Leicester, opp Burnmoor Street	Walnut Street	269034059
lecdgdtp	Leicester, adj Walnut Street	Aylestone Road	269034040
lecdgdtw	Leicester, Royal Infirmary Hospital (Stand 1)	Infirmary Road	269034041
lecdgdwd	Leicester, adj Bonners Lane	Oxford Street	269034043
lecdptdt	Leicester, St Margaret's Bus Station		269030126

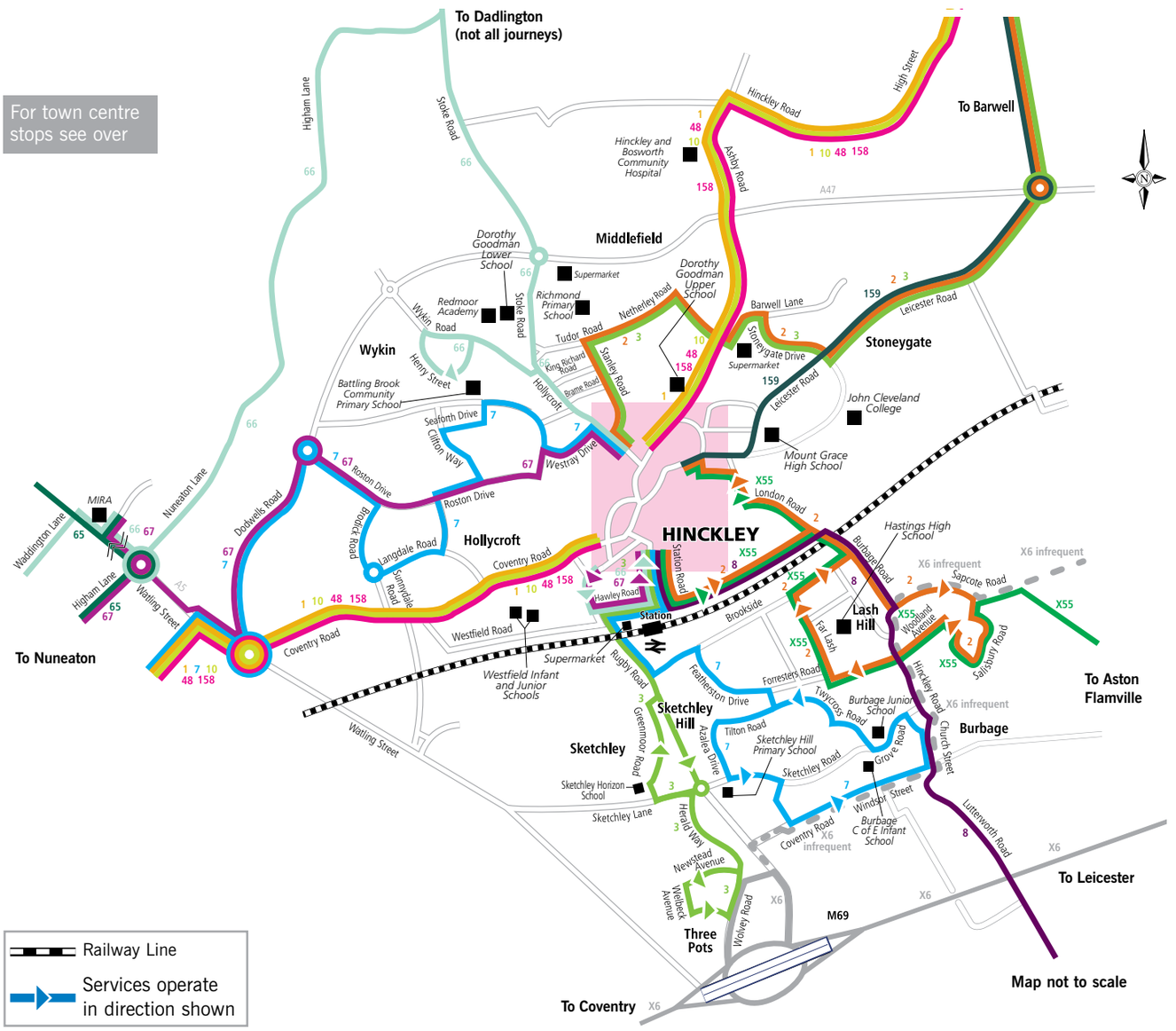
Hinckley
Bus map & guide
September 2015

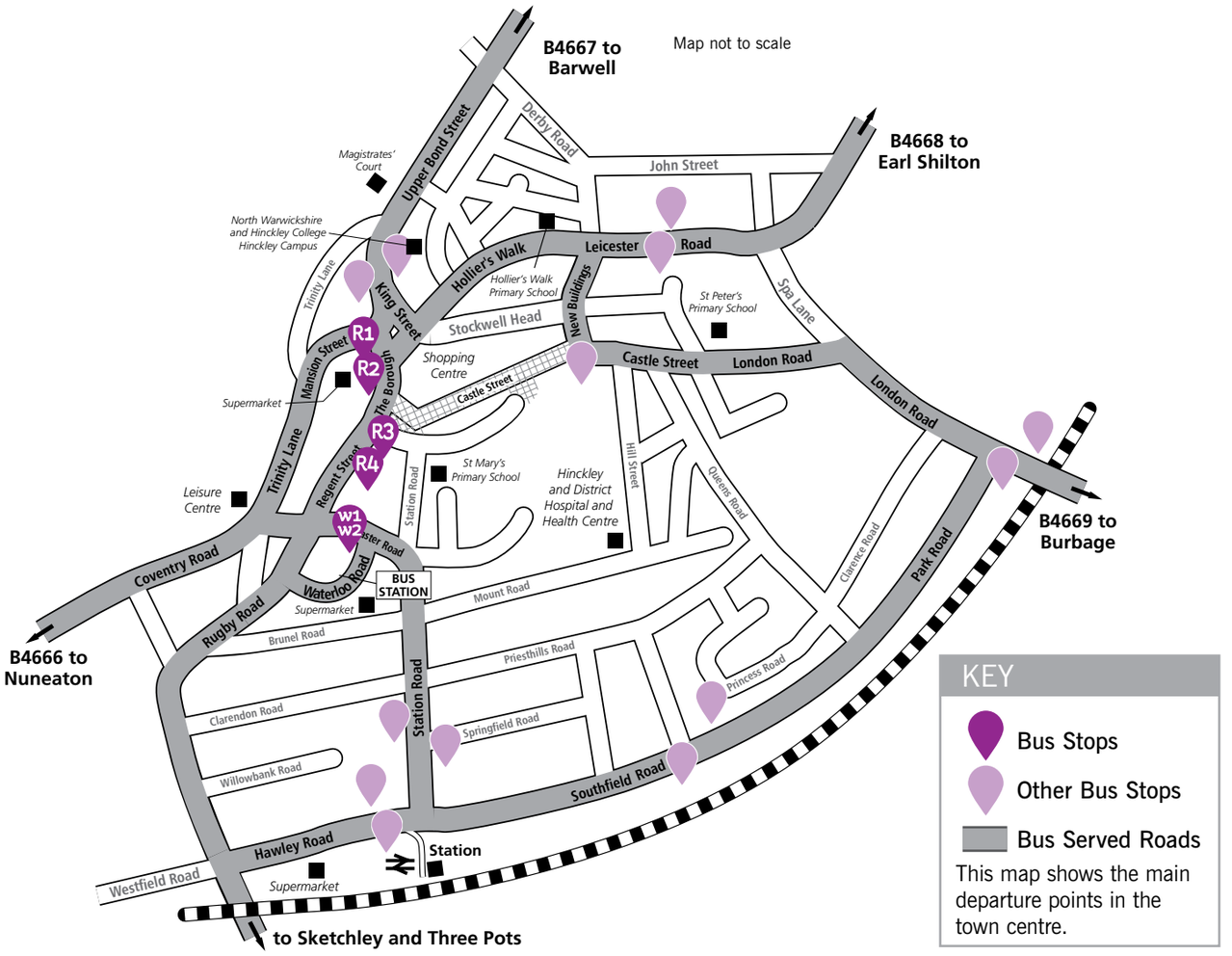
www.Choose how you move.co.uk

Service	Operator(s)	Route	FREQUENCY		
			Monday – Saturday Daytime	Monday – Saturday Evenings	Sunday and Bank Holidays
1	Hinckley Bus	Earl Shilton – Barwell – **HINCKLEY** – Nuneaton	30 mins	no service	no service
2	Hinckley Bus	Barwell – **HINCKLEY** – Burbage (Meadows / Far Lash)	hourly ● (Hinckley - Burbage 2 hourly)	no service	no service
3	Hinckley Bus	Barwell – **HINCKLEY** – Burbage (Three Pots)	hourly ●	no service	no service
7	Hinckley Bus	Burbage – **HINCKLEY** – Hollycroft – Nuneaton	30 mins (Hinckley Town Centre - Nuneaton hourly in pm)	no service	no service
8	Hinckley Bus	**HINCKLEY** – Lutterworth	hourly ■	no service	no service
10	Stagecoach	Grove Farm – Nuneaton – **HINCKLEY** – Hinckley Campus – Earl Shilton	25/35 mins	no service	no service
48	Stagecoach	Leicester – **HINCKLEY** – Nuneaton – Bedworth – Coventry	20 mins	varying frequency check timetable/ traveline for details	hourly Leicester - Nuneaton
65	Arriva	Tamworth – Polesworth – Atherstone – MIRA Technology Park – Nuneaton	hourly	no service	no service
66	Hinckley Bus	Rail Station – **HINCKLEY** – Wykin Road – Stoke Golding – Higham on the Hill – MIRA Technology Park – Nuneaton	hourly	no service	no service
67	Hinckley Bus	Rail Station – **HINCKLEY** – Hollycroft – MIRA Technology Park – Nuneaton	Monday to Friday, morning and evening peak time journeys only. Check timetable/traveline for details	no service	no service
158	Arriva	Leicester – **HINCKLEY** – Nuneaton	30 mins	hourly Hinckley - Leicester	hourly Hinckley - Leicester
159	Roberts Coaches	**HINCKLEY** – Market Bosworth – Coalville	hourly	no service	no service
X6	Travel de Courcey	Coventry – Burbage (Three Pots) – Leicester (Limited Stop)	hourly Monday - Friday 90 mins Saturday (via Hinckley Road infrequent)	no service	infrequent
X55	Hinckley Bus	**HINCKLEY** – Fosse Park – Leicester	2 hourly	no service	no service

Underlined services are supported by Leicestershire County Council

KEY: ● Services 2 and 3 provide a combined frequency of 30 mins between Barwell and Hinckley
■ On some journeys service continues to Market Harborough from Lutterworth as Service 58. In these instances please stay on the bus for through journey.


For town centre stops see over
To Dadlington (not all journeys)
To Barwell
To Nuneaton
To Aston Flamville
To Leicester
To Coventry
Map not to scale
Railway Line
Services operate in direction shown
HINCKLEY
Middlefield
Wykin
Hollycroft
Stoneygate
Lash Hill
Burbage
Sketchley
Sketchley Hill
Three Pots
Higham Lane
Stoke Road
Hinckley Road
High Street
Ashby Road
A47
Barwell Lane
Leicester Road
Netherley Road
Tudor Road
Stanley Road
Hollycroft
Coventry Road
Station Road
Brookside
Rugby Road
Westfield Road
Supermarket
Westfield Infant and Junior Schools
Dorothy Goodman Lower School
Dorothy Goodman Upper School
Richmond Primary School
Redmoor Academy
Wykin Road
Henry Street
Battling Brook Community Primary School
Hinckley and Bosworth Community Hospital
Stoneygate Drive
John Cleveland College
Mount Grace High School
London Road
Hastings High School
Burbage Road
Sapcote Road
Far Lash
Westland Avenue
Salisbury Road
Forresters Road
Featherstone Drive
Twycross Road
Burbage Junior School
Church Street
Lutterworth Road
Tilton Road
Sketchley Hill Primary School
Sketchley Road
Grove Road
Windsor Street
Burbage C of E Infant School
Azalea Drive
Greenmoor Road
Sketchley Horizon School
Sketchley Lane
Herald Way
Newstead Avenue
Wolvey Road
Welbeck Avenue
M69
Coventry Road
Waitling Street
Nuneaton Lane
Dodwells Road
Roston Drive
Clifton Way
Seaforth Drive
Westray Drive
Langdale Road
Brodick Road
Sunnydale Road
Hawley Road
Waddington Lane
MIRA
Higham Lane
Waiting Street
Battle Road
King Richard Road
Brame Road
Wykin Road
Higham Lane
Stoke Road
Ashby Road
Hinckley Road
Leicester Road
Coventry Road
Station Road
Brookside
Rugby Road
Westfield Road
Hollycroft
Stanley Road
Tudor Road
Netherley Road
Barwell Lane
Stoneygate Drive
Leicester Road
London Road
Burbage Road
Hawley Road
Sapcote Road
Far Lash
Westland Avenue
Salisbury Road
Forresters Road
Featherstone Drive
Twycross Road
Church Street
Lutterworth Road
Tilton Road
Grove Road
Windsor Street
Azalea Drive
Greenmoor Road
Herald Way
Newstead Avenue
Wolvey Road
Welbeck Avenue
Coventry Road
Waiting



Waterloo Road

W1 10 to Nuneaton, 48 to Nuneaton, 66 to Nuneaton, 67 to Nuneaton
SMS code: leijajtp

W2 10 to Earl Shilton, 48 to Leicester, 66 to Hinckley Railway Station, 67 to Hinckley Railway Station, 159
SMS code: leijajtm

Three Pots

X6

The Borough

R1 2 to Barwell, 3 to Barwell, 7 to Nuneaton, 10 to Earl Shilton
SMS code: leijajpg

R2 1 to Earl Shilton, 66 to Nuneaton, 67 to Nuneaton, 158 to Leicester
SMS code: leijajpj

Regent Street

R3 2 to Burbage, 3 to Three Pots, 7 to Burbage, 8, 10 to Nuneaton, X55
SMS code: leijajpm

R4 1 to Nuneaton, 66 to Hinckley Railway Station, 67 to Hinckley Railway Station, 158 to Nuneaton
SMS code: leijamga

For the next timetabled departures from a specific bus stop, text the 8 letter SMS code to 84268. Normal text message rates apply and the return text message costs 25p.

A large print version of this guide is available upon request. Please contact the Helpline on 0116 305 0002.

www.Choosehowyoumove.co.uk
@CHYMLeics ChooseHowYouMove
View other local bus guides and sign up for email updates at www.choosehowyoumove.co.uk/publictransport

Further information

Concessionary travel for older people and for disabled people
The English National Concessionary Travel Scheme offers free off-peak travel on local bus services in all parts of England. For more information please call **0116 305 0002**.

Community Transport in and around Hinckley and Bosworth
For older or disabled people who cannot use ordinary buses, Hinckley and Bosworth Community Transport offers a social car scheme and accessible minibus services. Further details may be obtained by telephoning **01455 250 462.**

traveline public transport info
www.traveline.info
0871 200 22 33
calls cost 12p per minute plus your phone company's access charge

ARRIVA	0344 800 4411 www.arrivabus.co.uk
Hinckleybus	0344 800 4411 www.arrivabus.co.uk/hinckleybus
Roberts COACHES	01530 816 421 www.robertstravelgroup.co.uk
Stagecoach	01604 67 60 60 www.stagecoachbus.com
Travel de Courcey	024 7630 2656 www.traveldecourcey.com
	08457 48 49 50 www.nationalrail.co.uk

This guide shows the bus services in Hinckley and the main departure points in the town centre. You will find a summary of the services and frequencies in the timetable overleaf. Some single directional or infrequent services may exist but might not be included. For a comprehensive timetable or more information call Traveline on the number provided (07.00 – 22.00). You can also visit local libraries, tourist information centres, local council offices and bus company travel shops.

Visit **www.choosehowyoumove.co.uk/publictransport** to see our other bus guides and to sign up for email notifications. Online updates will only occur if services change.

Leicestershire County Council
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Sustainable Travel Group, Environment and Transport, Leicestershire County Council, Glenfield, Leicester, LE3 8RJ

The information contained in this leaflet is correct at time of printing, but may be subject to change. Every effort will be made to maintain these services. However, no liability can be accepted for failure to operate the services as specified.

P0381

Magna Park Extension: Hybrid Application
Transport Assessment

Appendix J – Magna Park Footway and Cycle Plan

1 Suggested cycle route on Woodby Lane

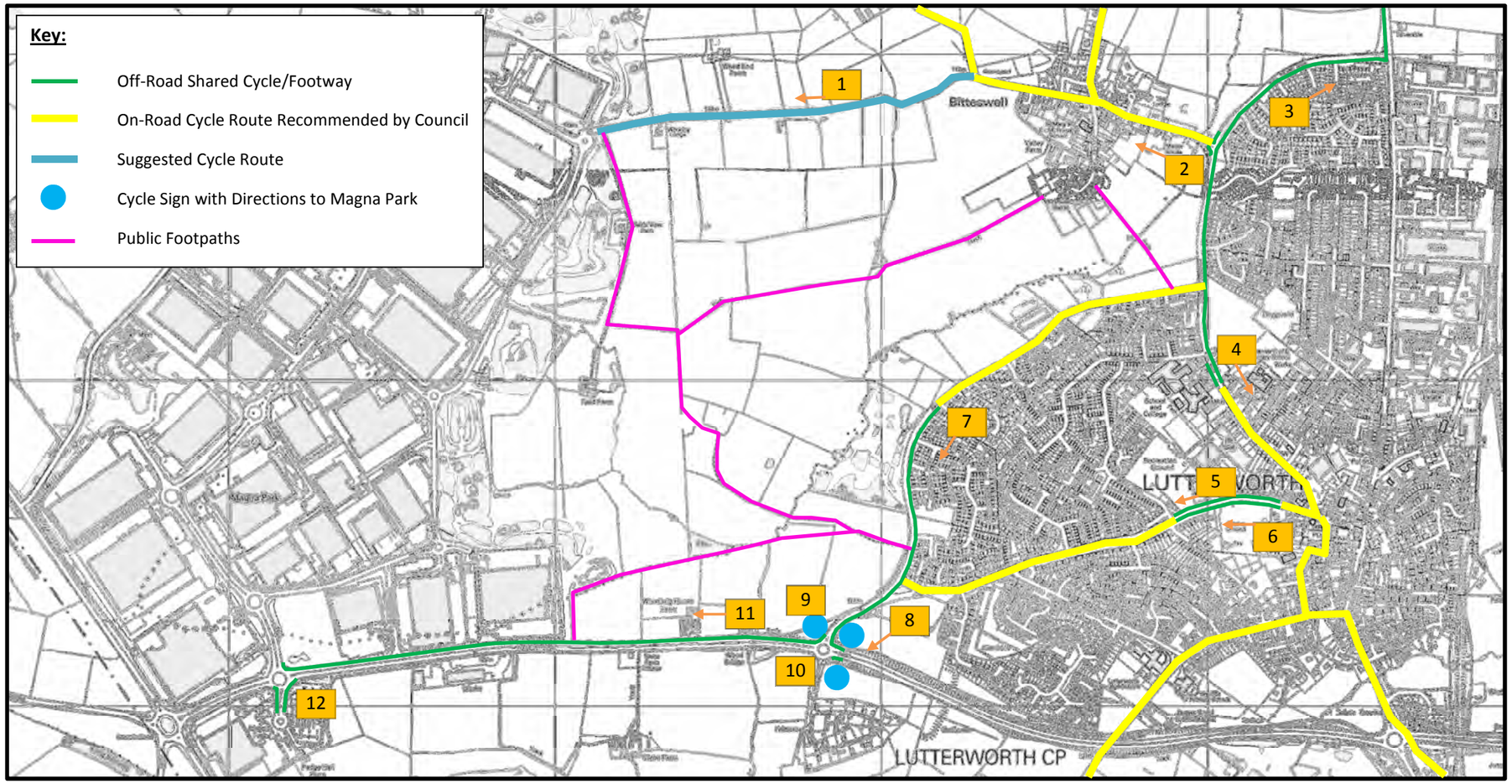
2 Route into Bitteswell Village

3 Foot/Cycleway on Bitteswell Rd

4 End of Foot/Cycleway on Bitteswell Rd

5 Foot/Cycleway on Coventry Rd (north)

6 Foot/Cycleway on Coventry Rd (south)



7 Foot/Cycleway on Brookfield Way

8 Foot/Cycleway on Coventry Rd

9 Signs to Magna Park

10 Crossing at A4303/Coventry Rd Roundabout

11 Foot/Cycleway on A4303 Coventry Rd

12 Crossing at A4303/Hunter Boulevard Roundabout

Appendix J: Magna Park Footway and Cycle Plan

Magna Park Extension: Hybrid Application
Transport Assessment

Appendix K – Existing and Proposed Public Access Routes

0.5 The Illustrative Proposals

0.5.3 PROW Bridleway and Footpath connectivity strategy

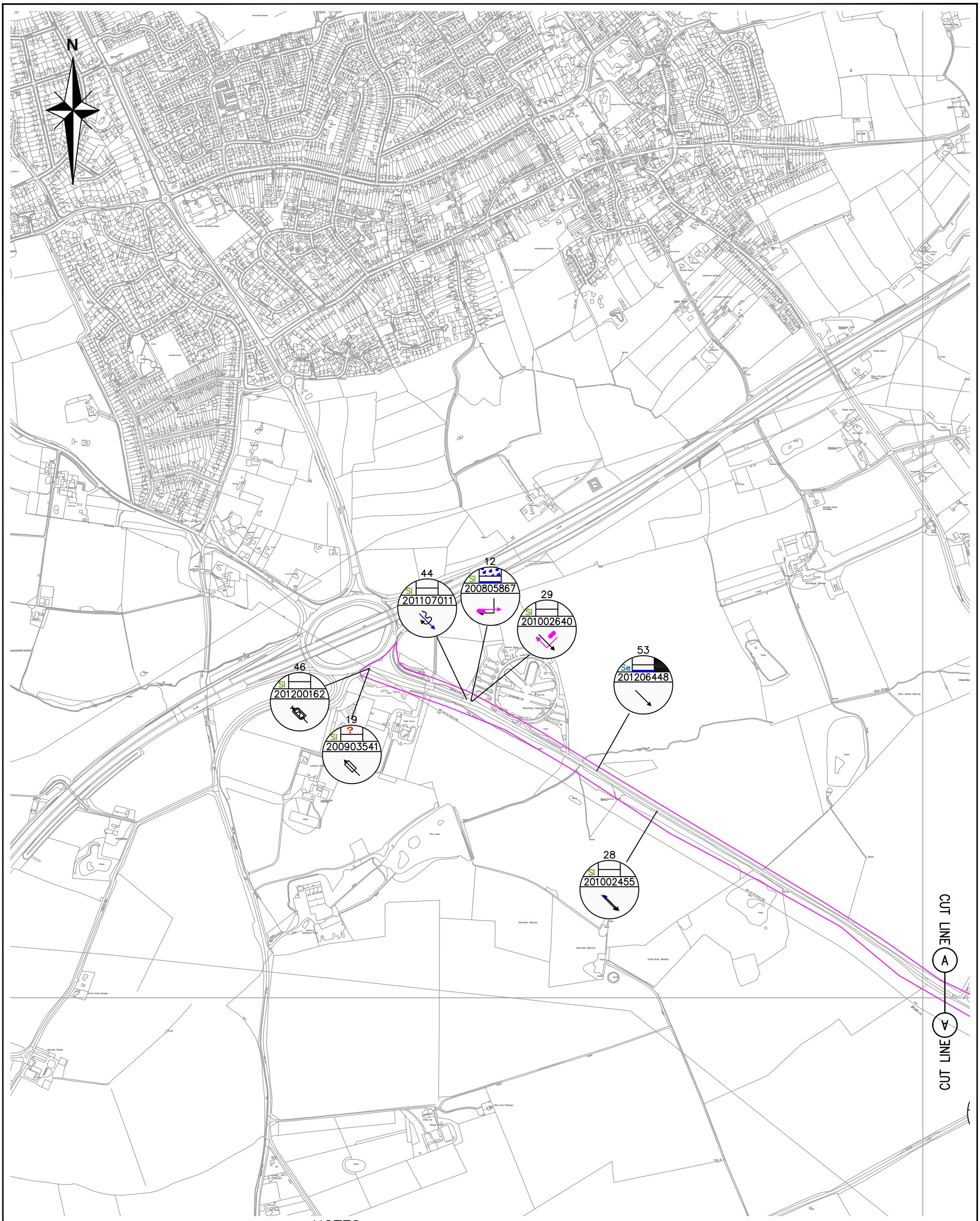
LEGEND

- Development Boundary
- Public bridleway
- Public footpath
- Proposed footpath
- Proposed permissive bridleway and footpath
- Existing permissive bridleway and footpath
- Proposed cycle routes
- Proposed access road
- Proposed roundabout
- S.A.M (open access)

Magna Park Extension: Hybrid Application
Transport Assessment

Appendix L – Location of Highway Collisions

Highways England Accident Plot Maps



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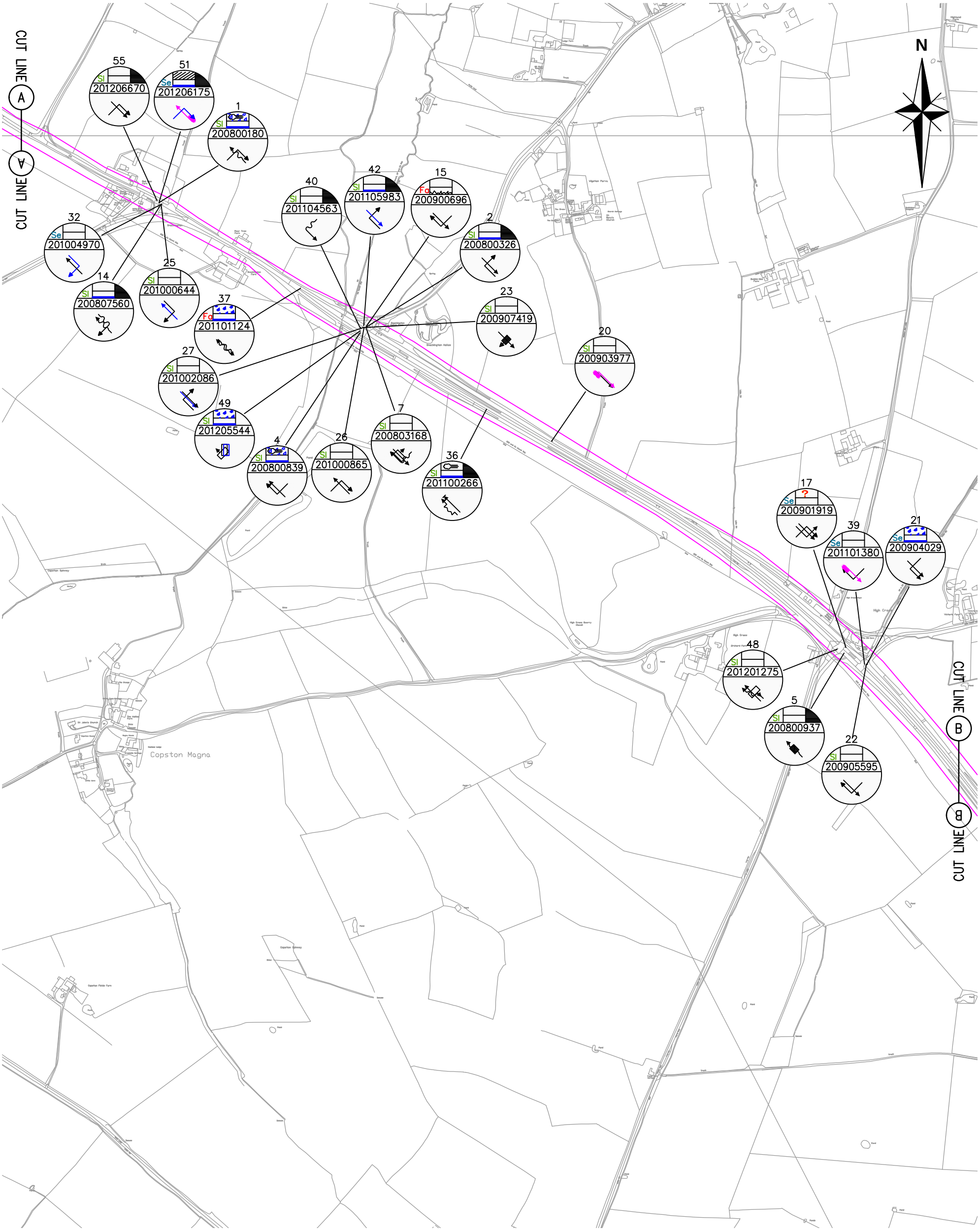

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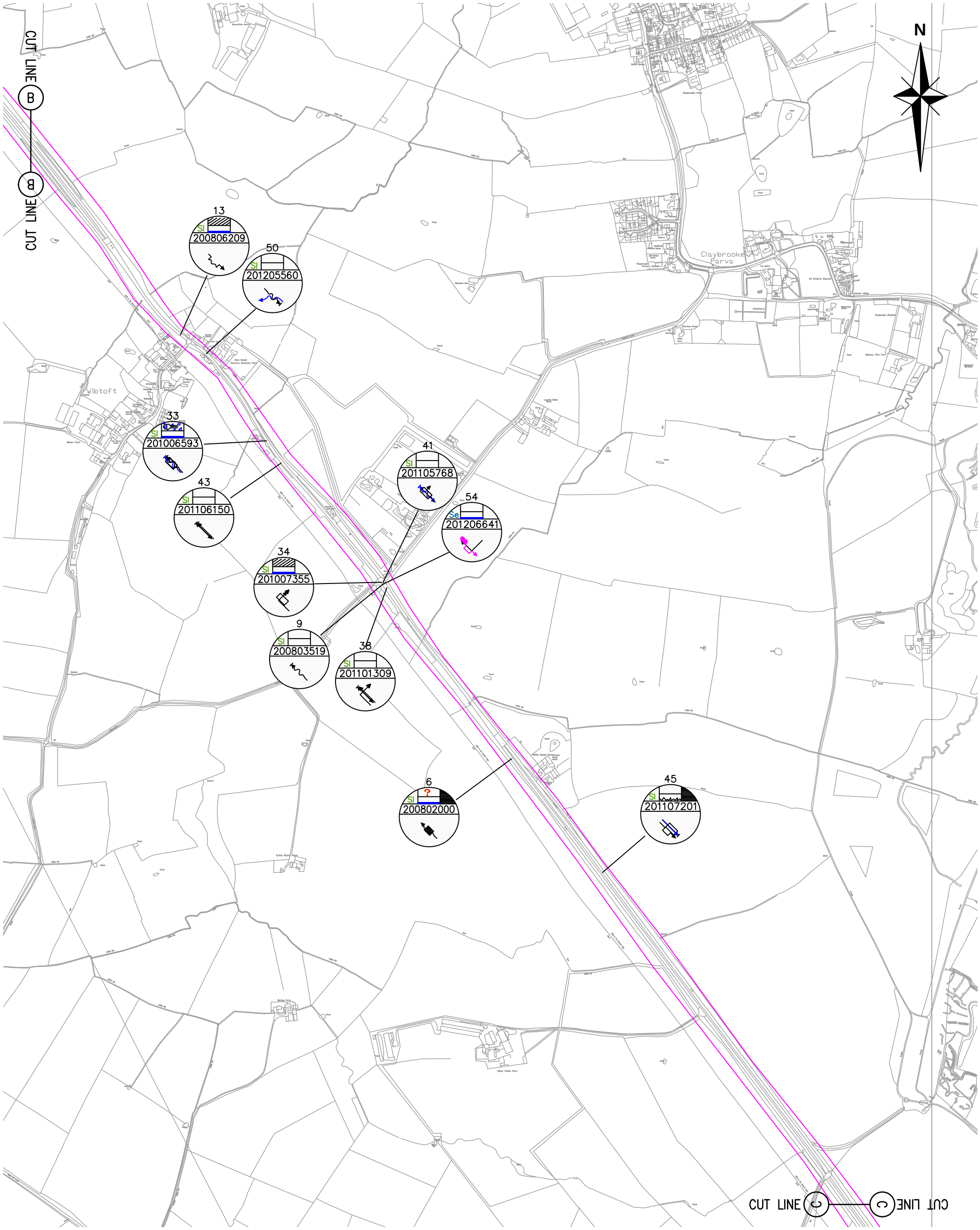

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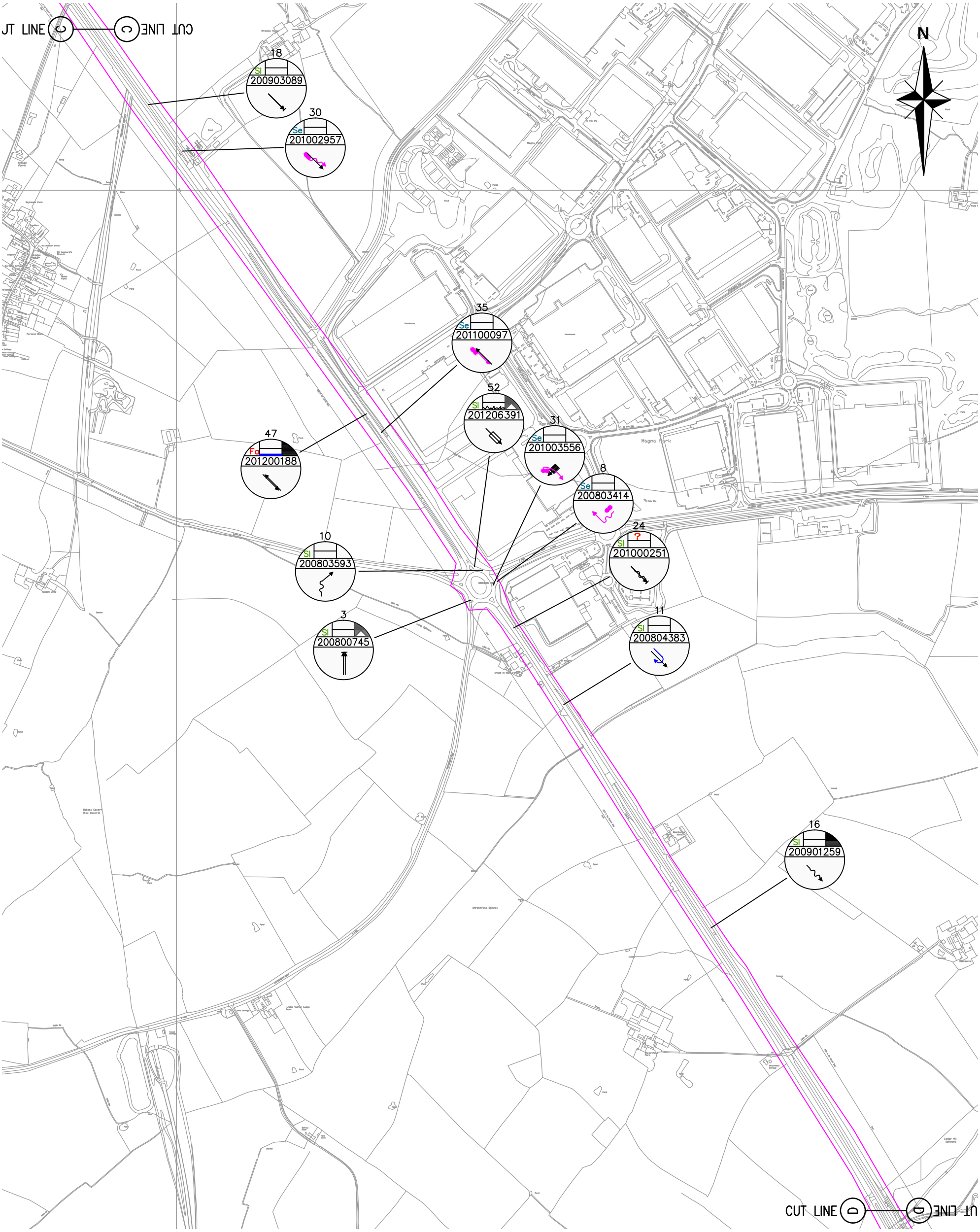

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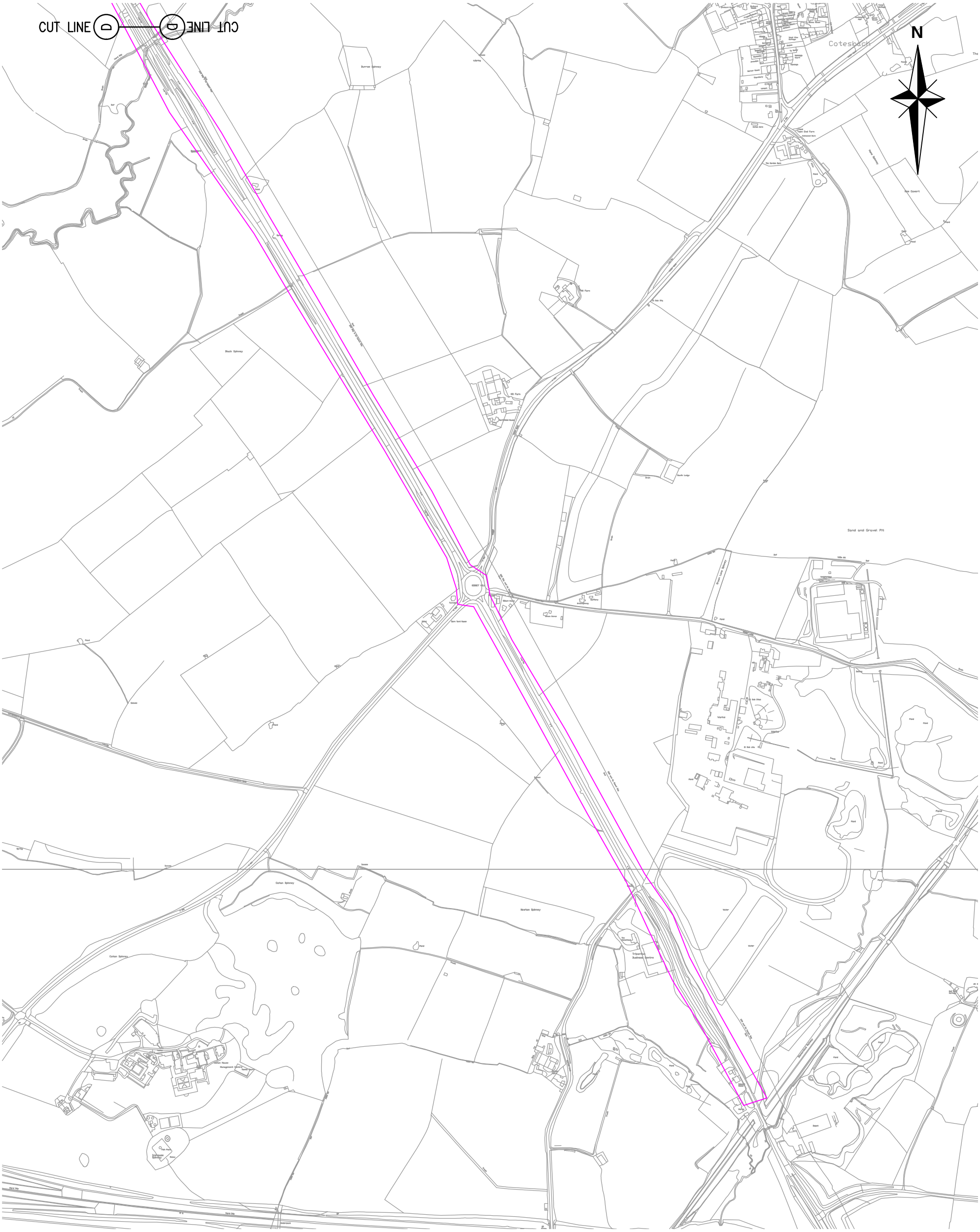

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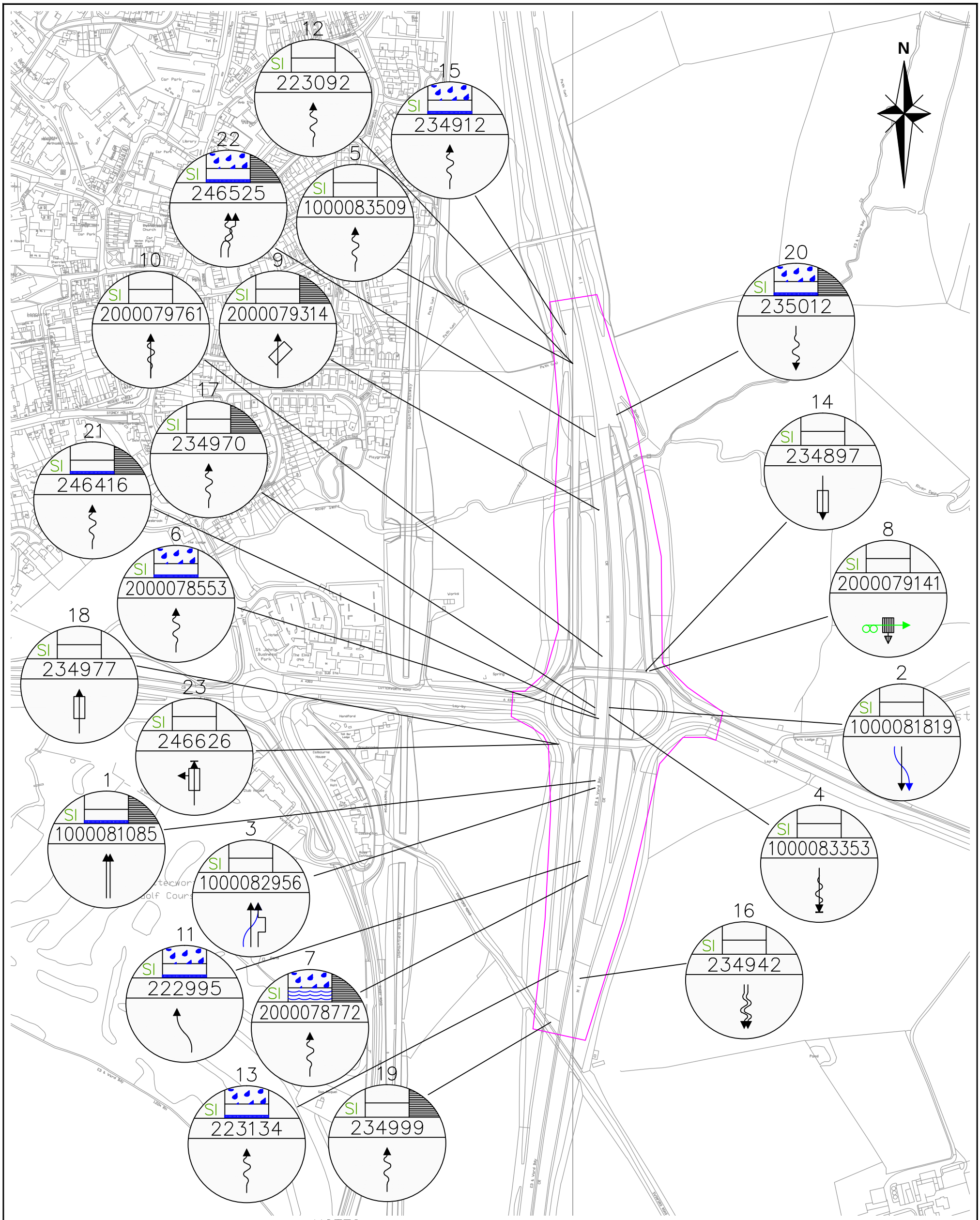

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M1 JUNCTION 20

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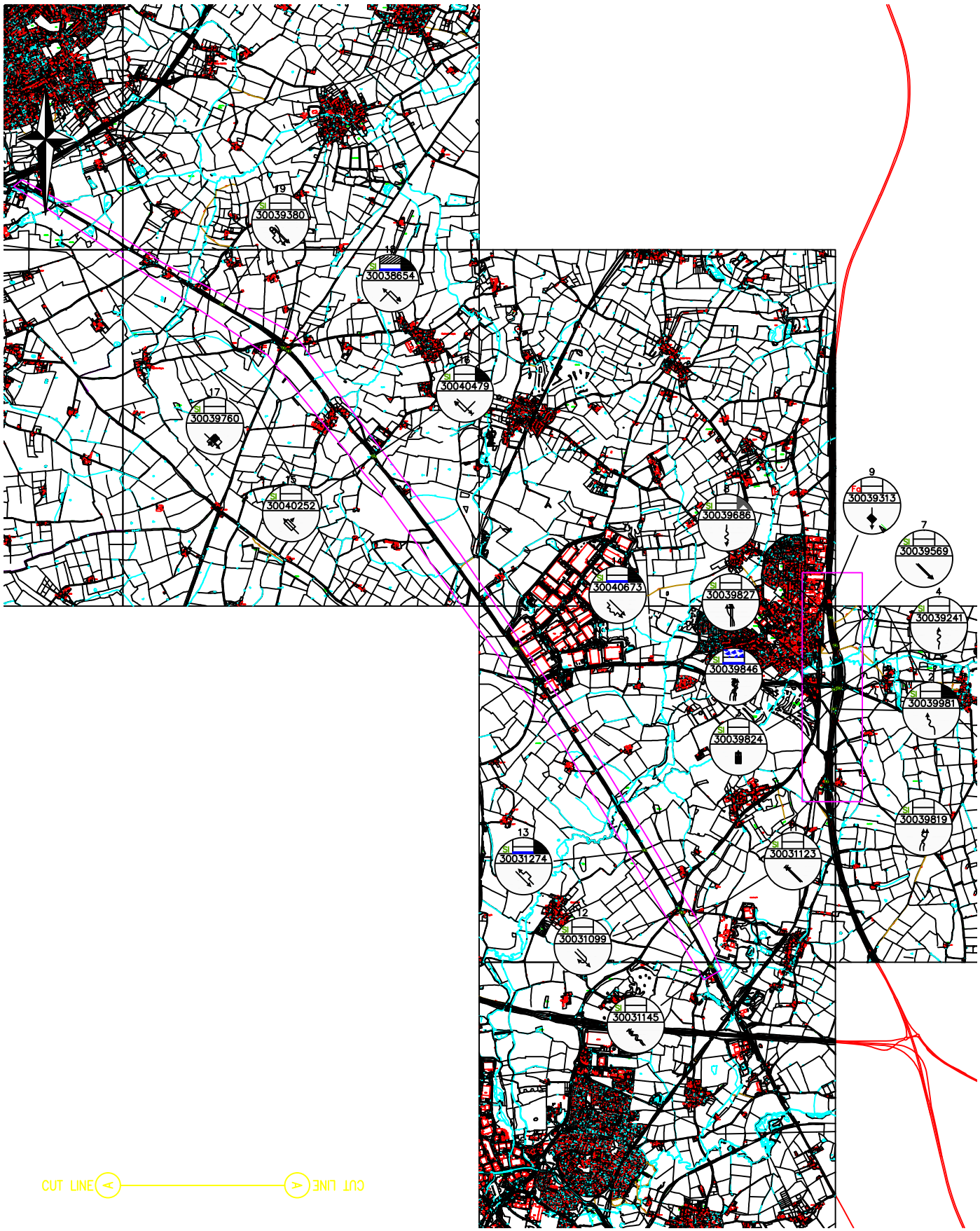

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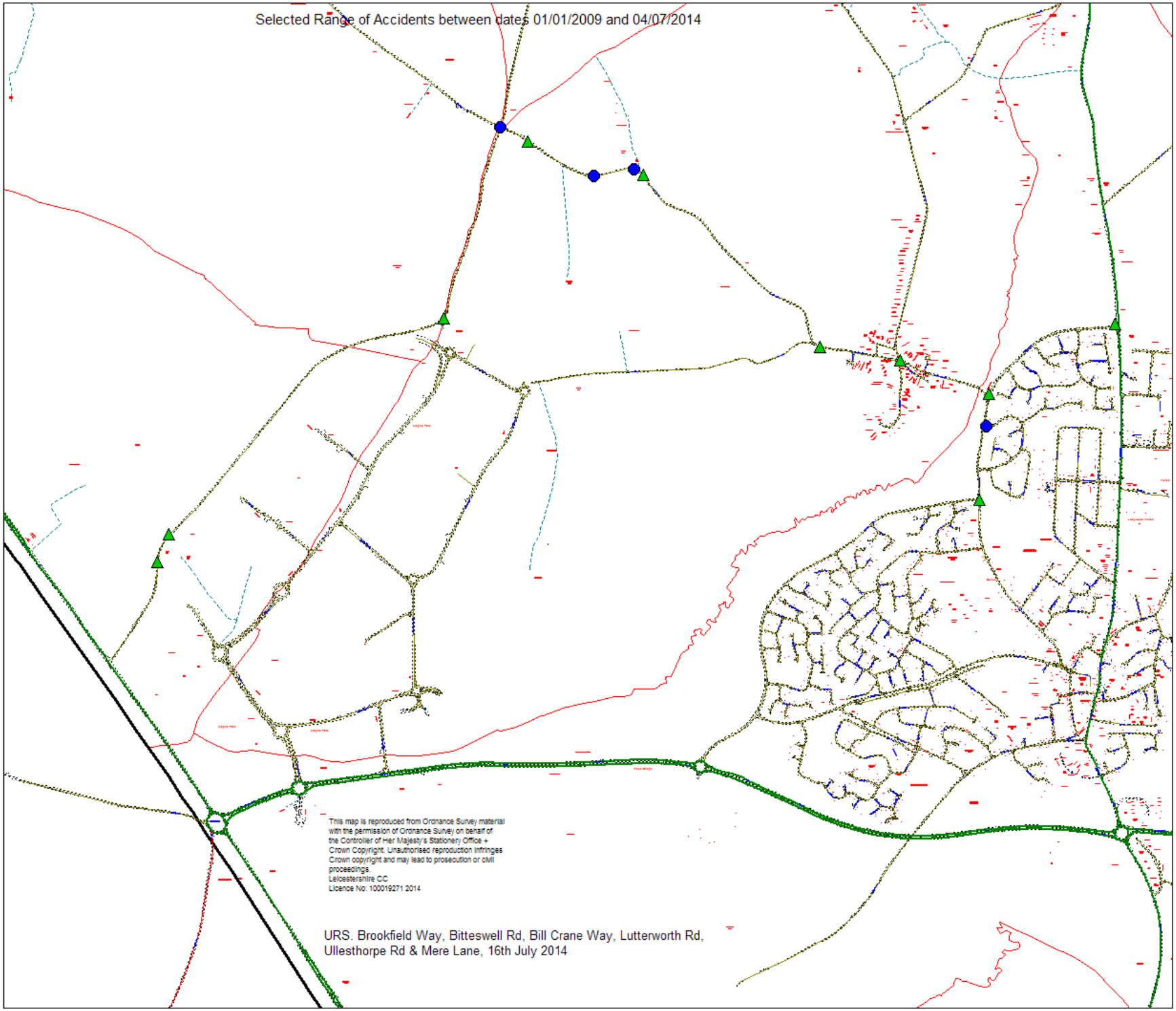

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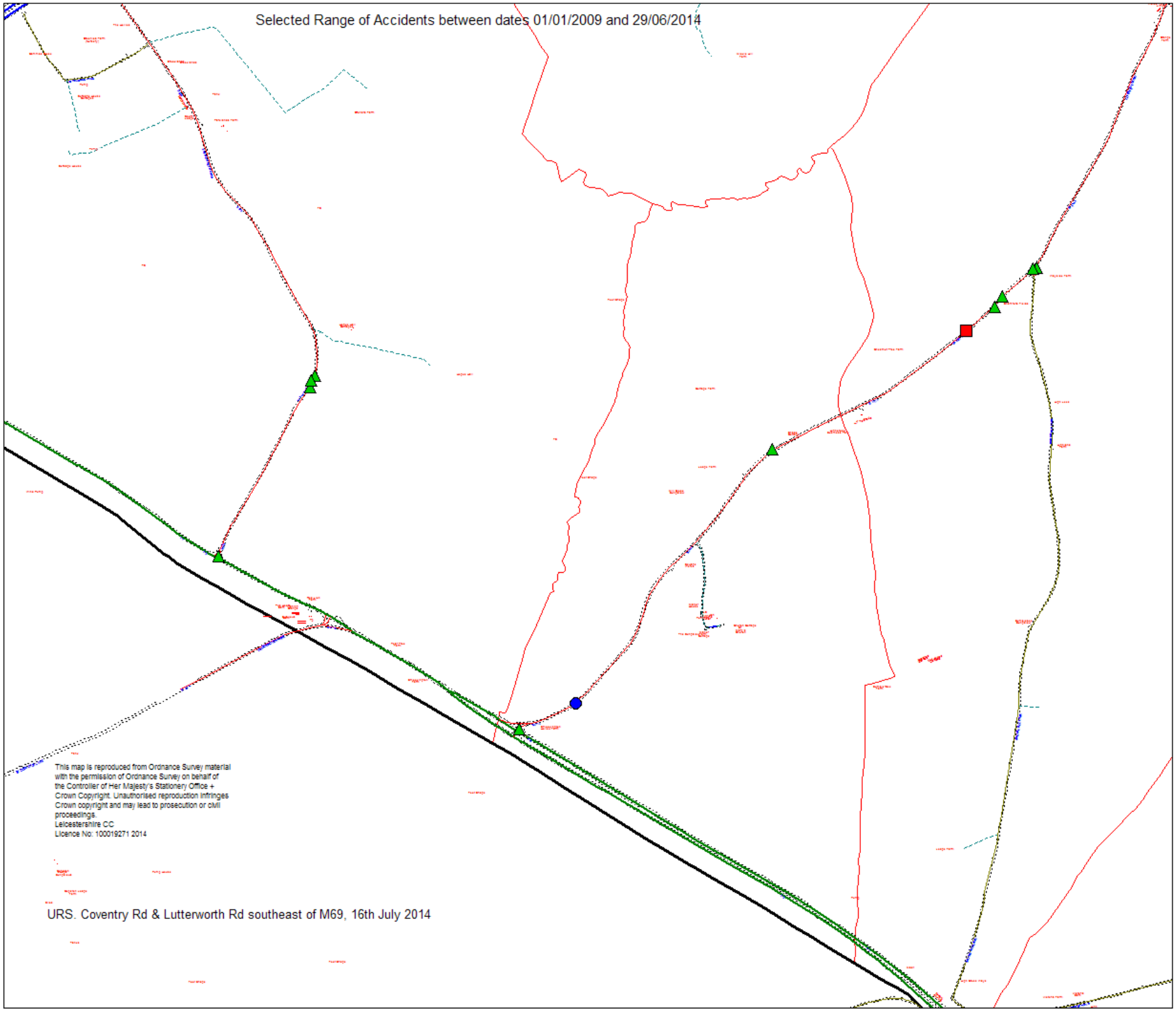

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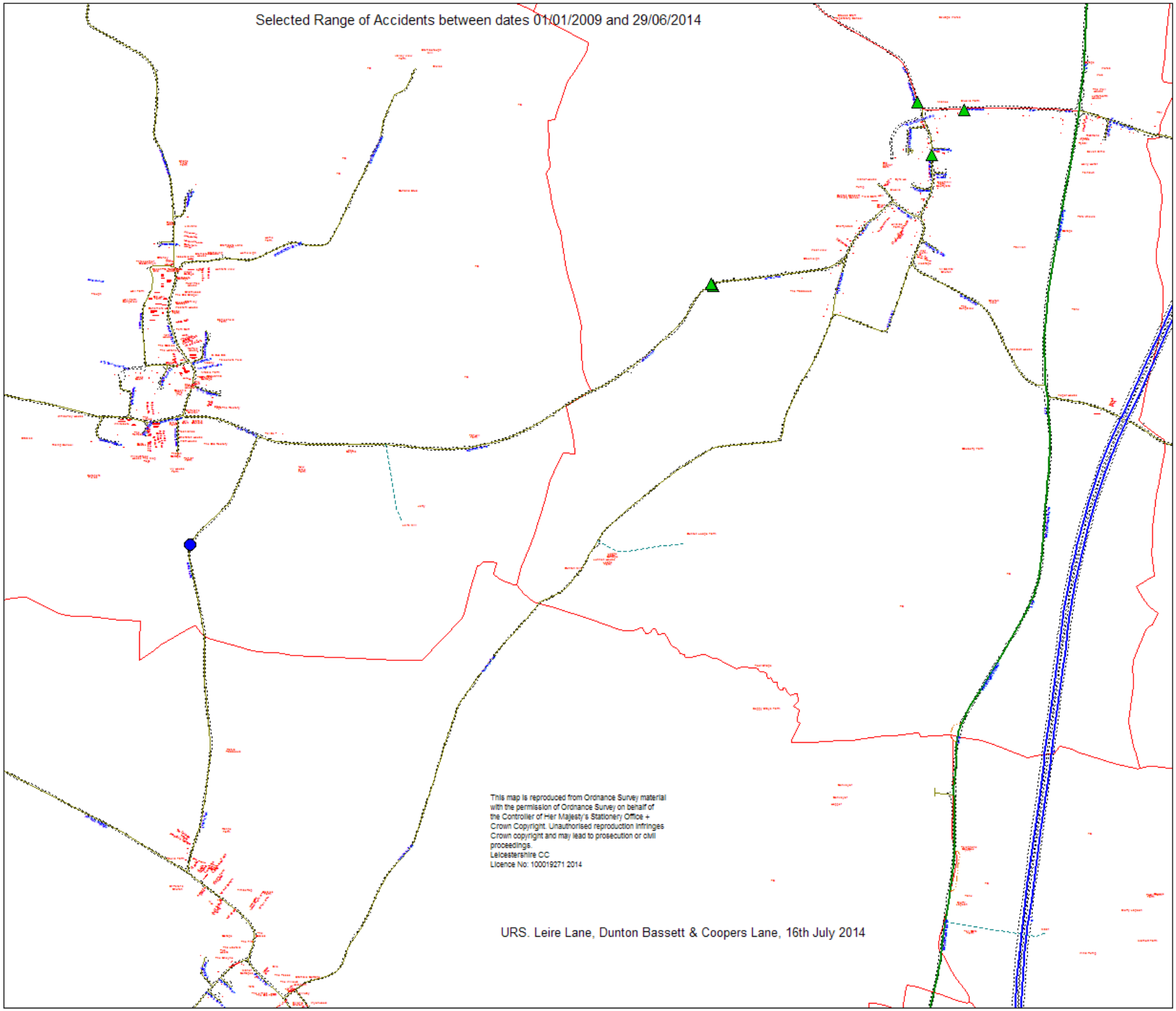

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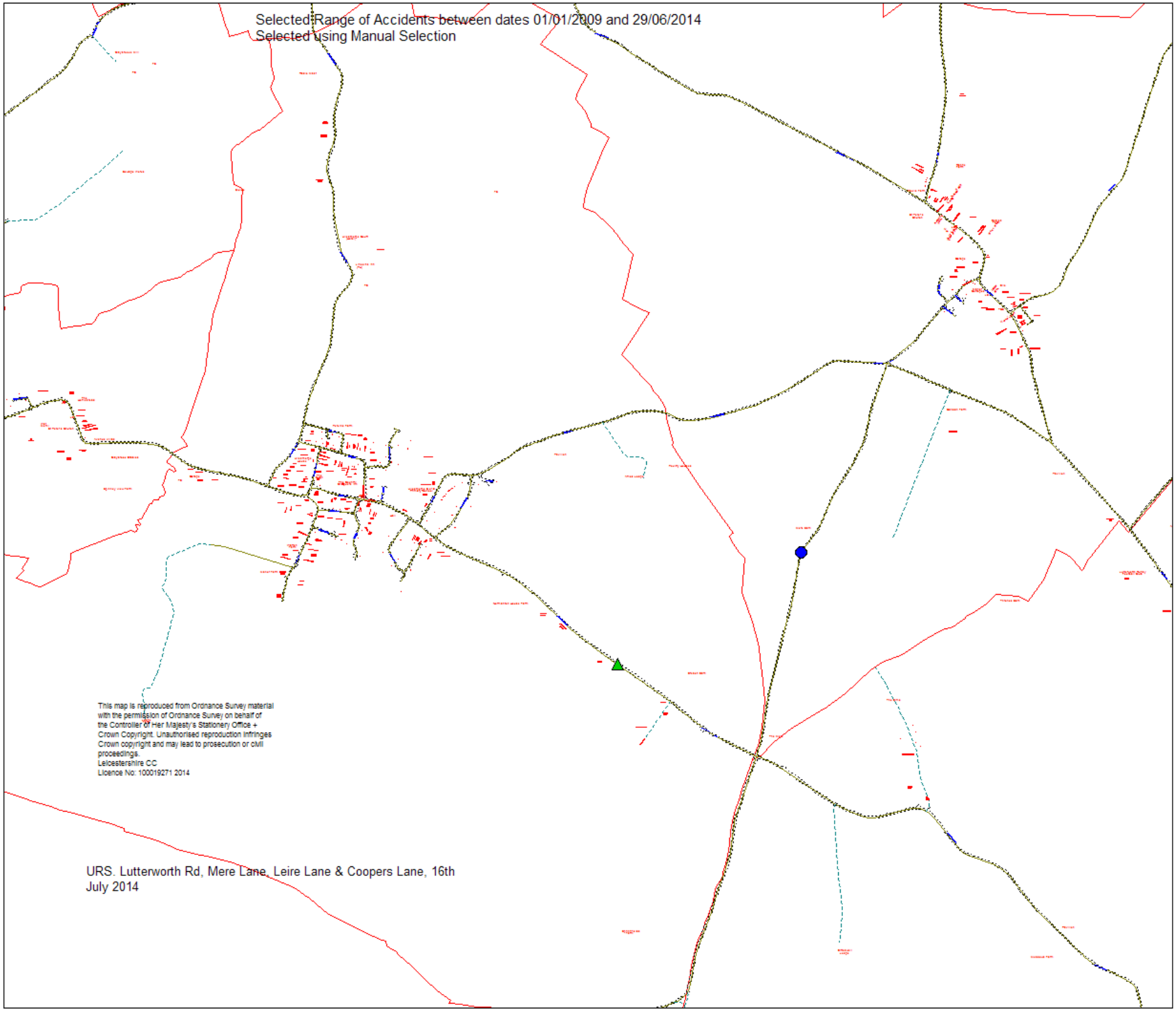

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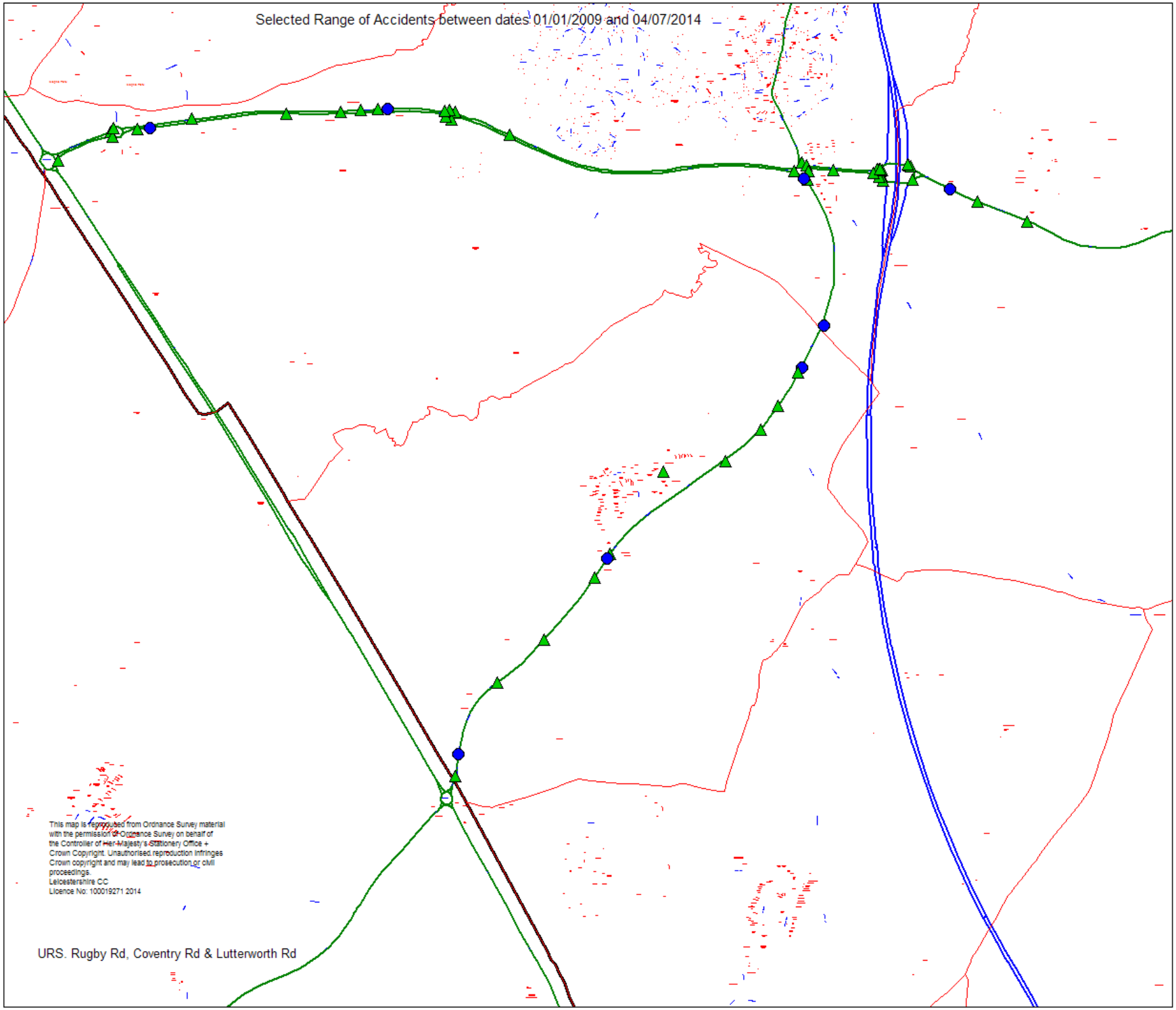

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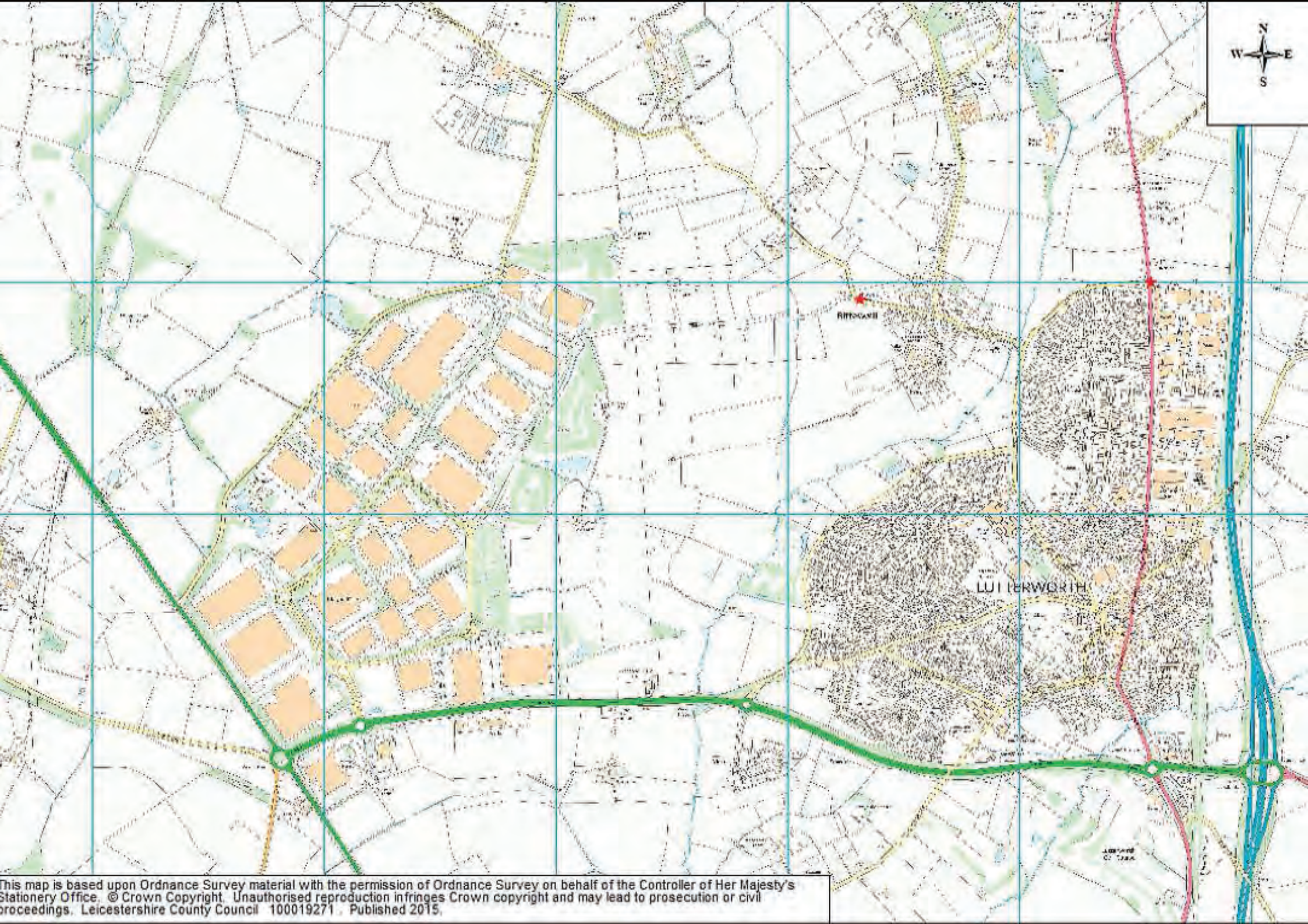

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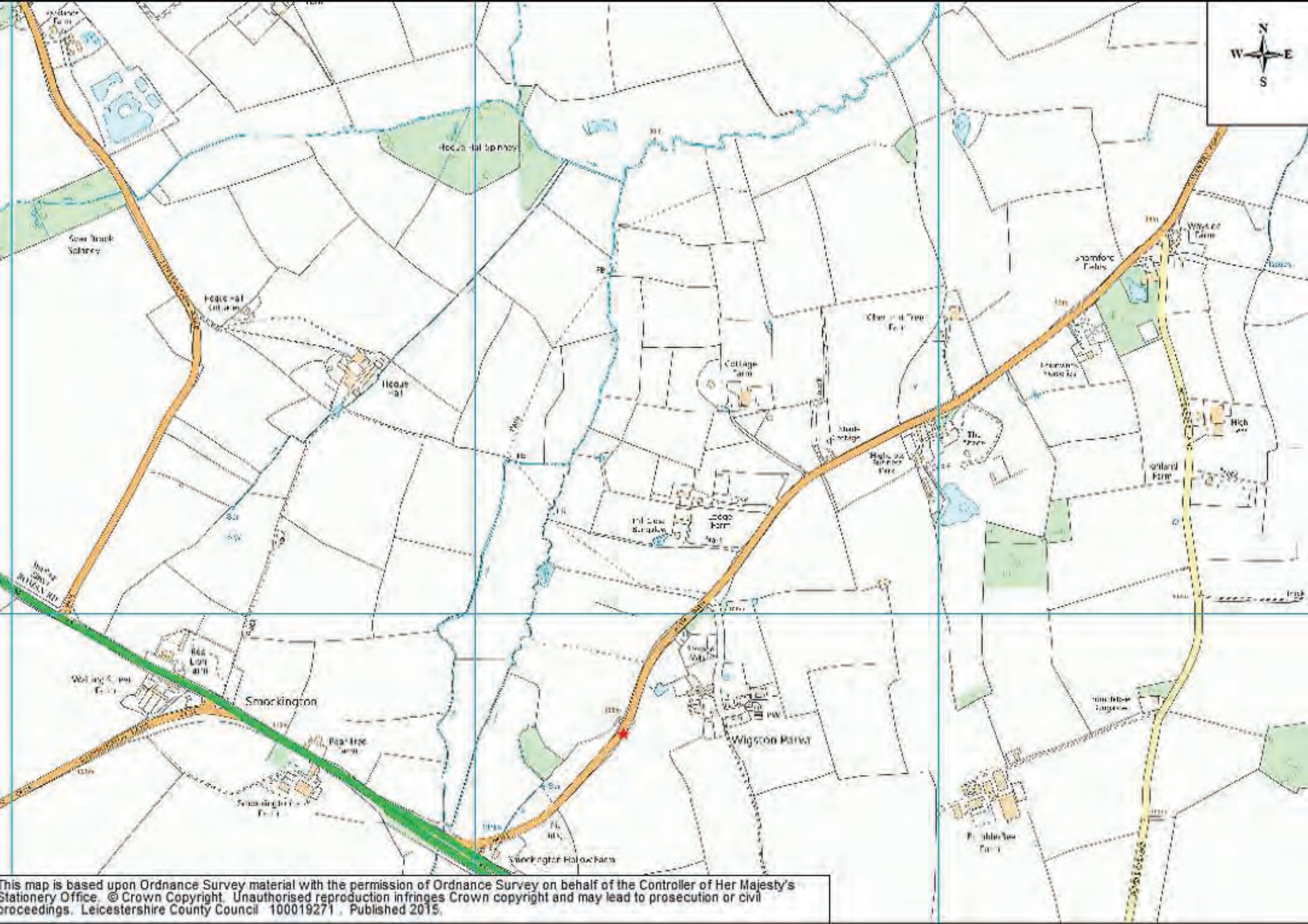

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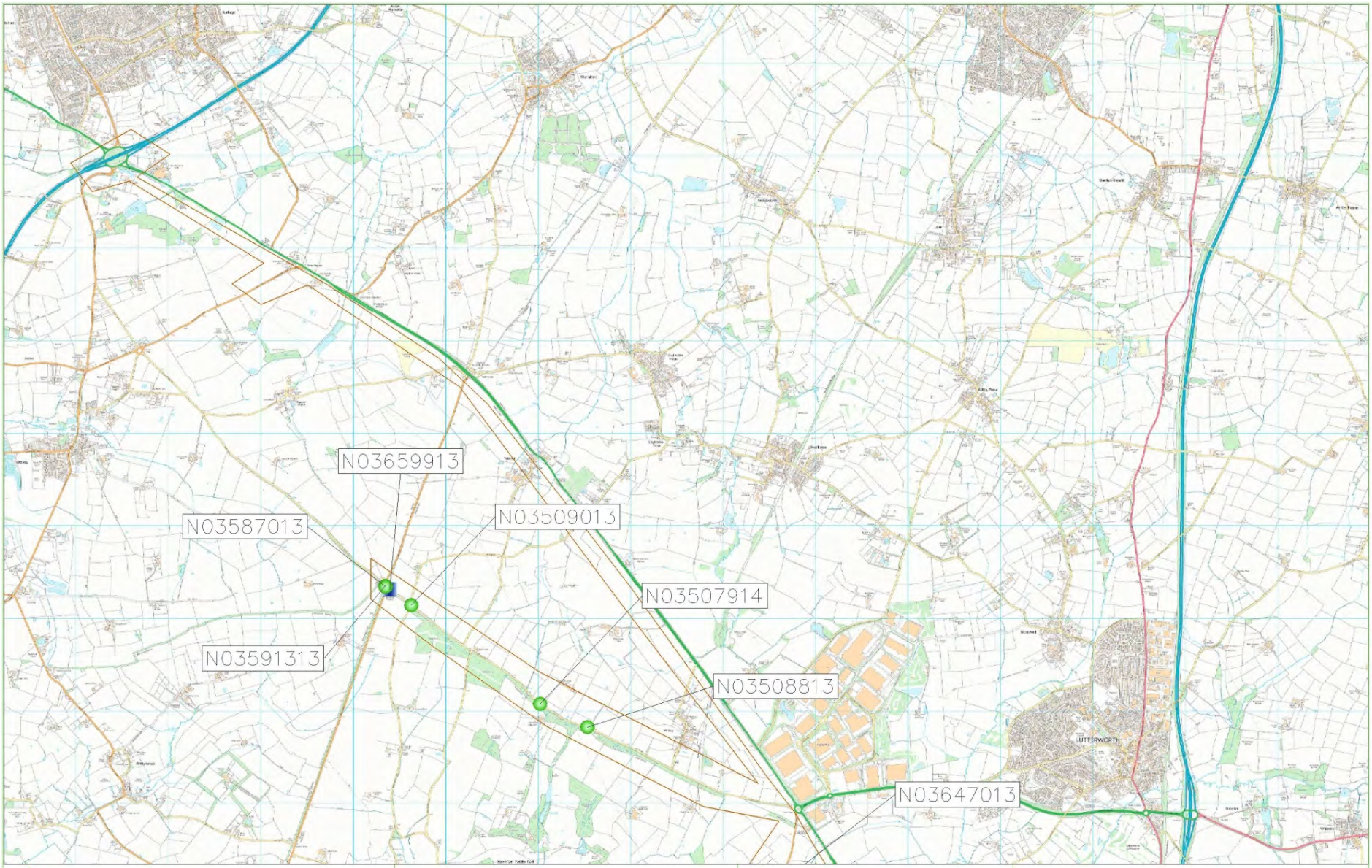
Warwickshire County Council Accident Plot Maps



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Communities

Graeme Fitton BSc, MSc, C.Eng, MICE.
Head of Transport and Highways

Accident Severity

- Slight
- Serious
- Fatal

N

Road Safety Intelligence Team

Tel: 01926 412740

Email: rsinfo@warwickshire.gov.uk

Lutterworth 01/01/2013 - 31/01/2014 (Page 1 of 2)

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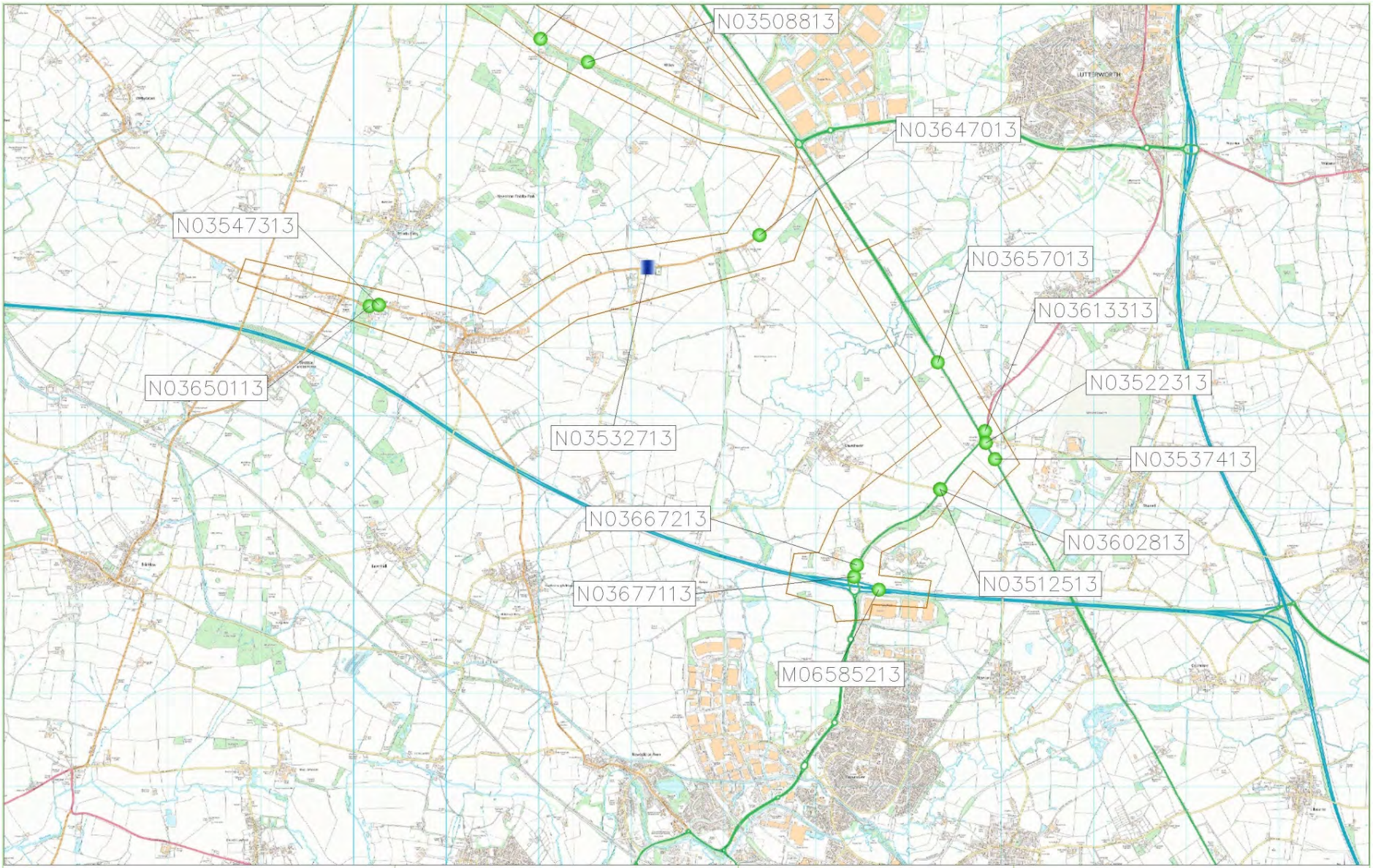

Warwickshire County Council
PO Box 43, Shire Hall
Warwick, CV34 4SX
Tel : 01926 410410
Fax : 01926 491665
Web . www.warwickshire.gov.uk

Communities

Graeme Fitton BSc, MSc, C.Eng, MICE.
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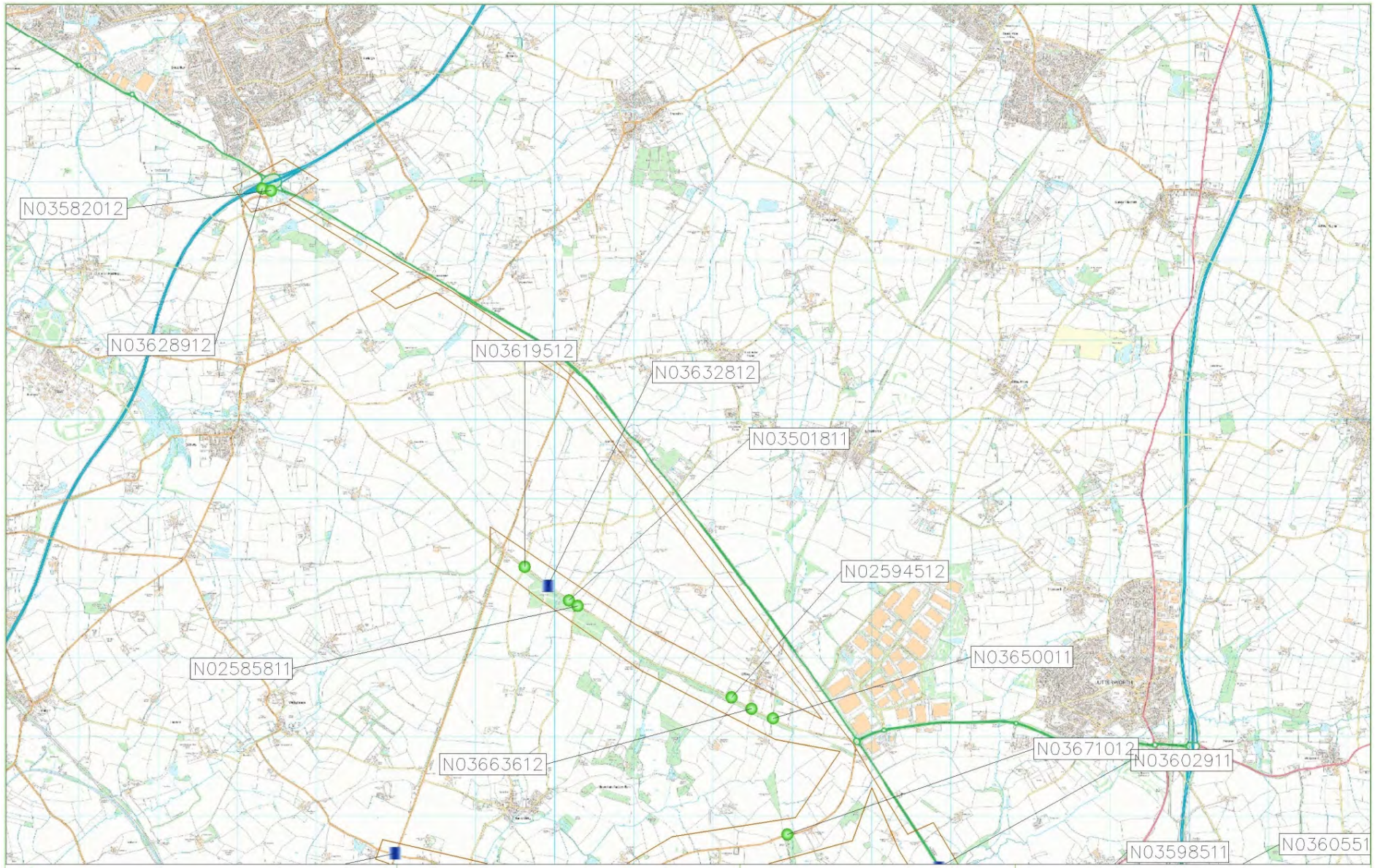

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Lutterworth 01/01/2011 -31/12/2012 (Page 1 of 2)

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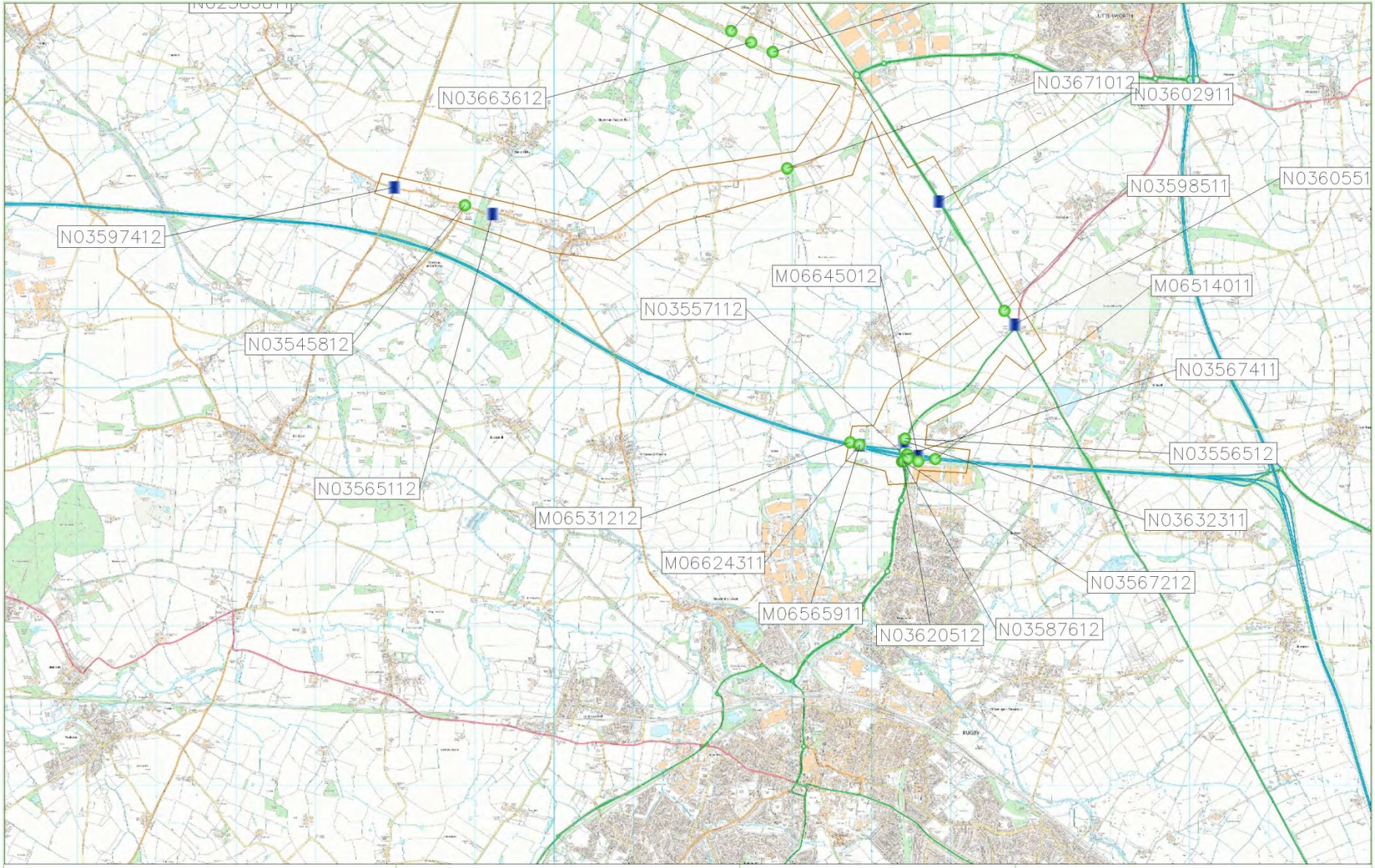

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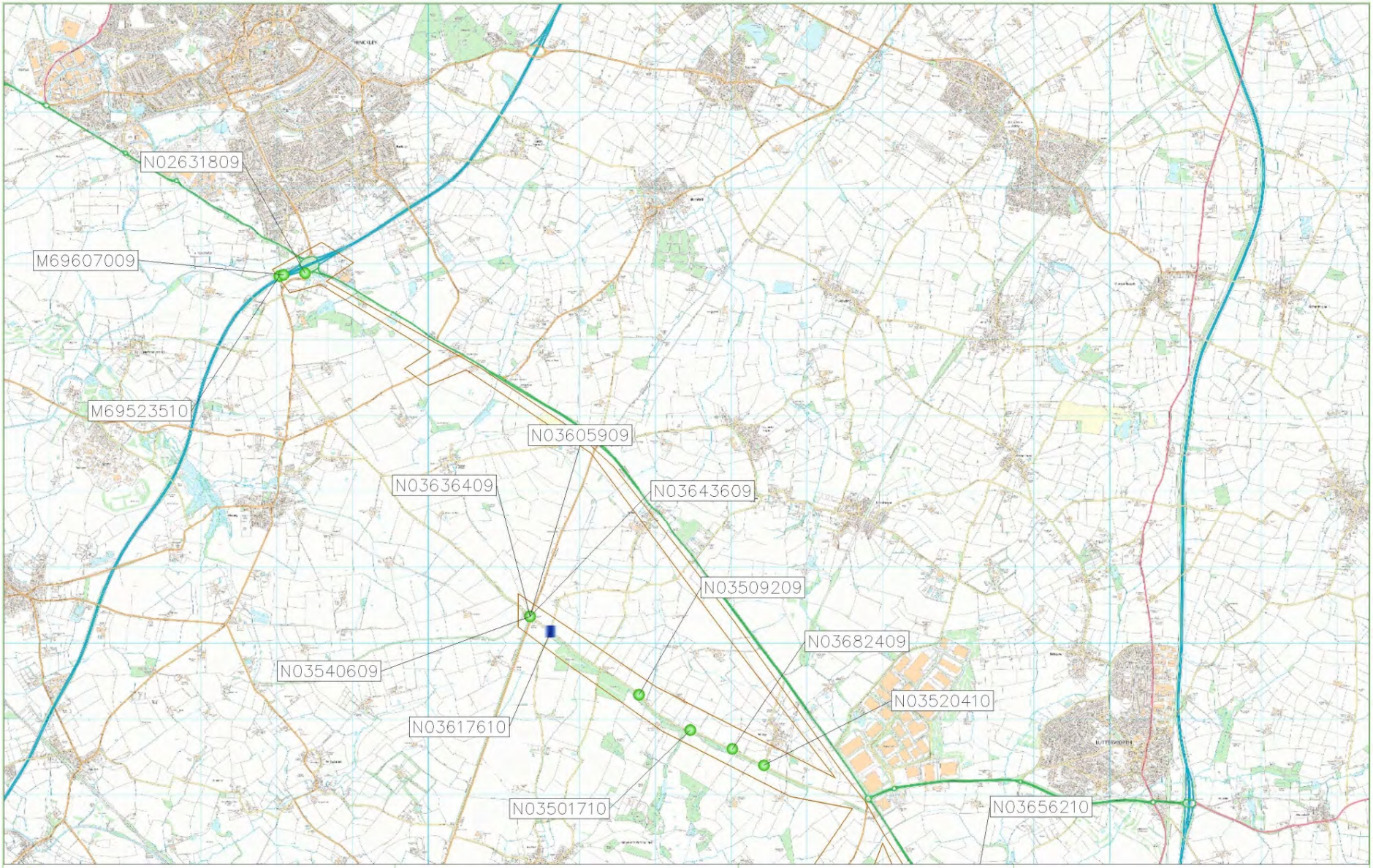

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Lutterworth 01/01/2009 - 31/12/2010 (Page 1 of 2)

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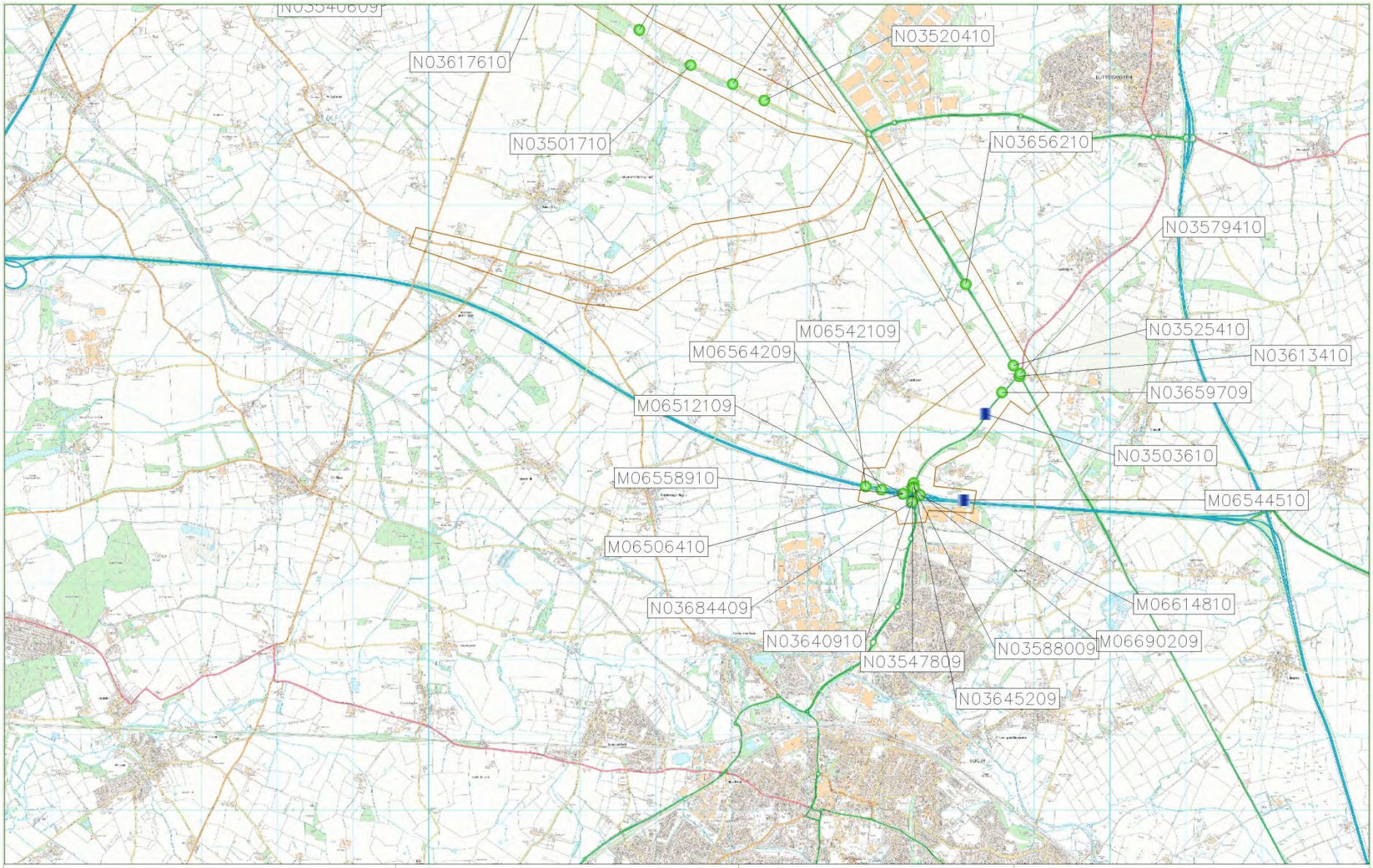

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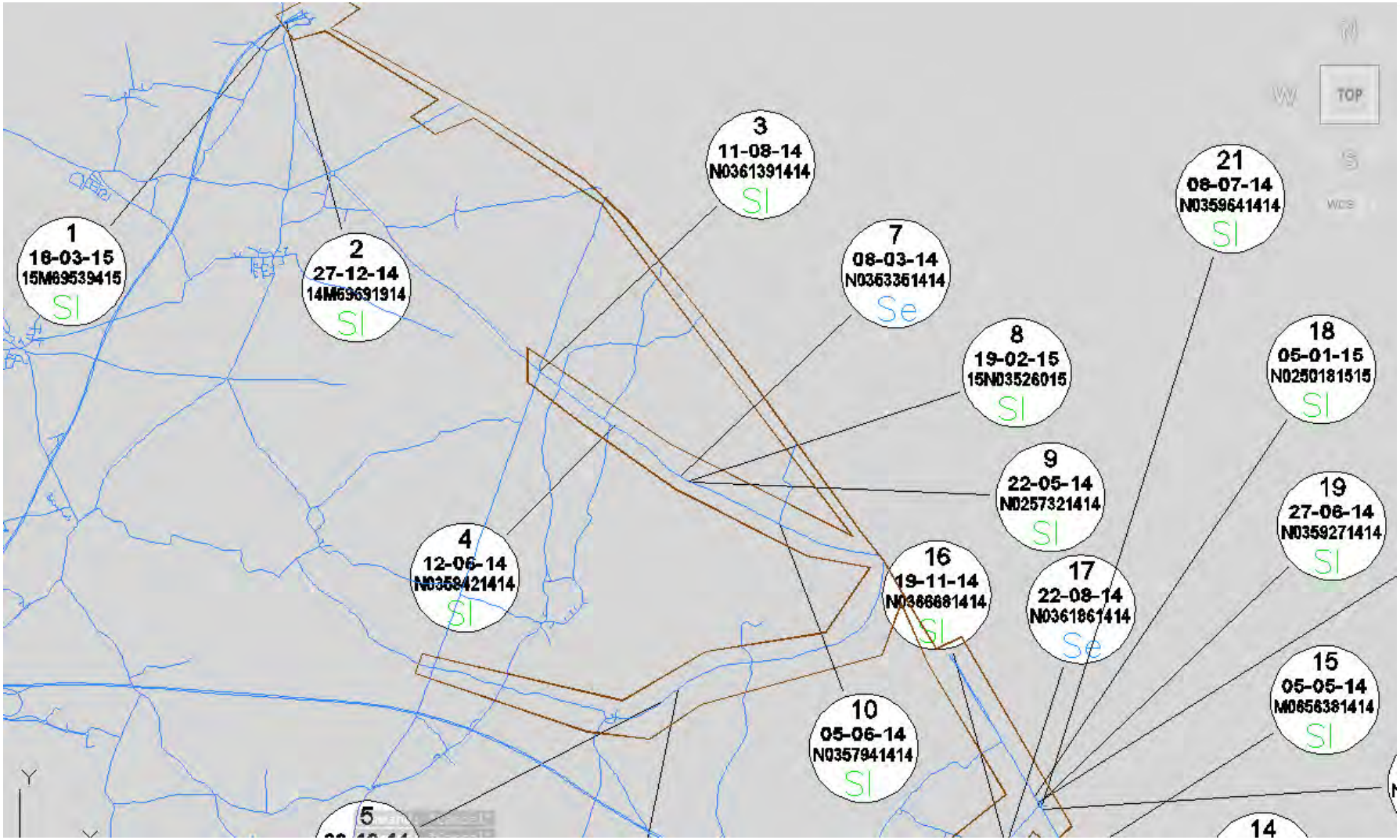

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Lutterworth Map 1

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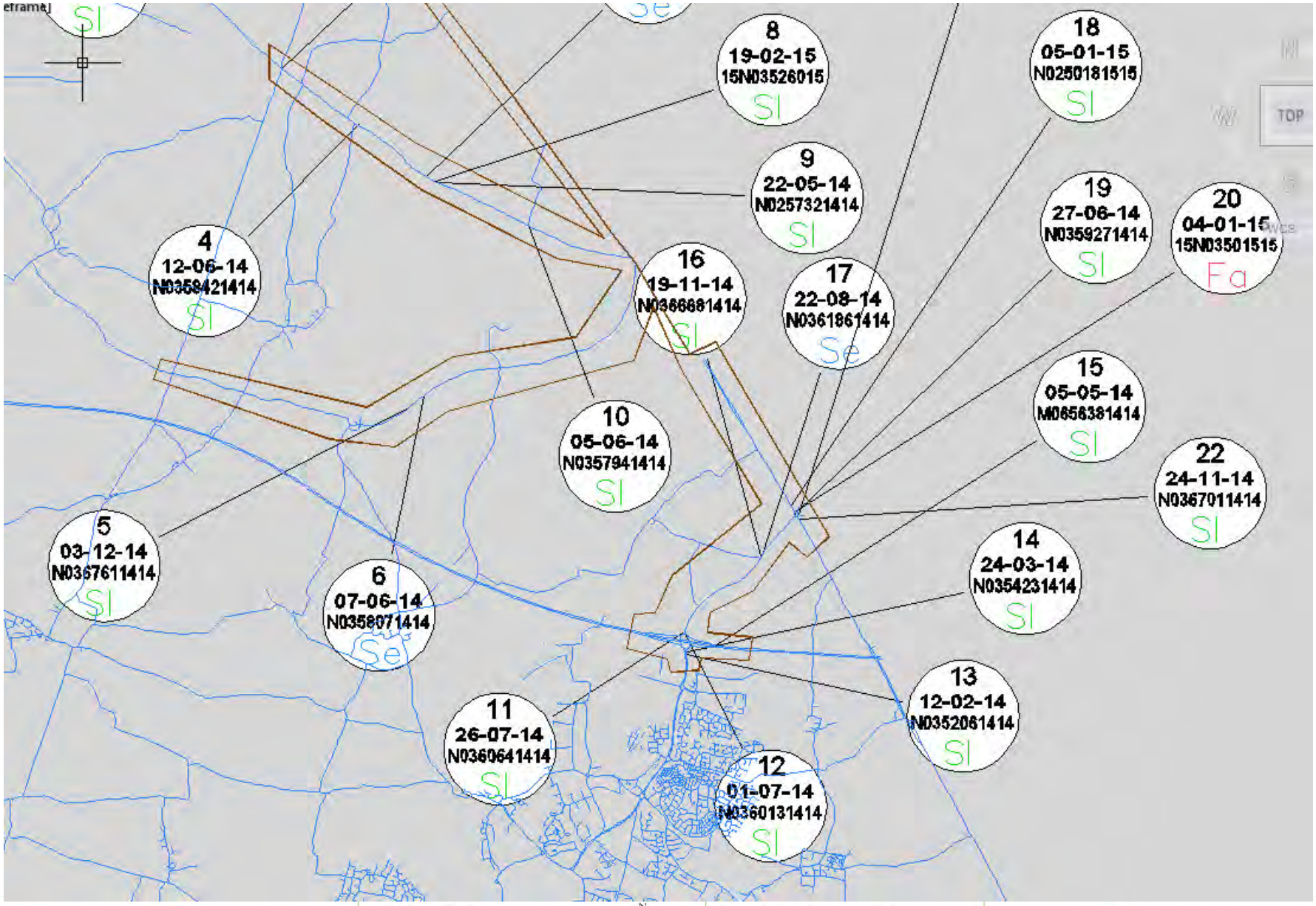

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Lutterworth Map 2

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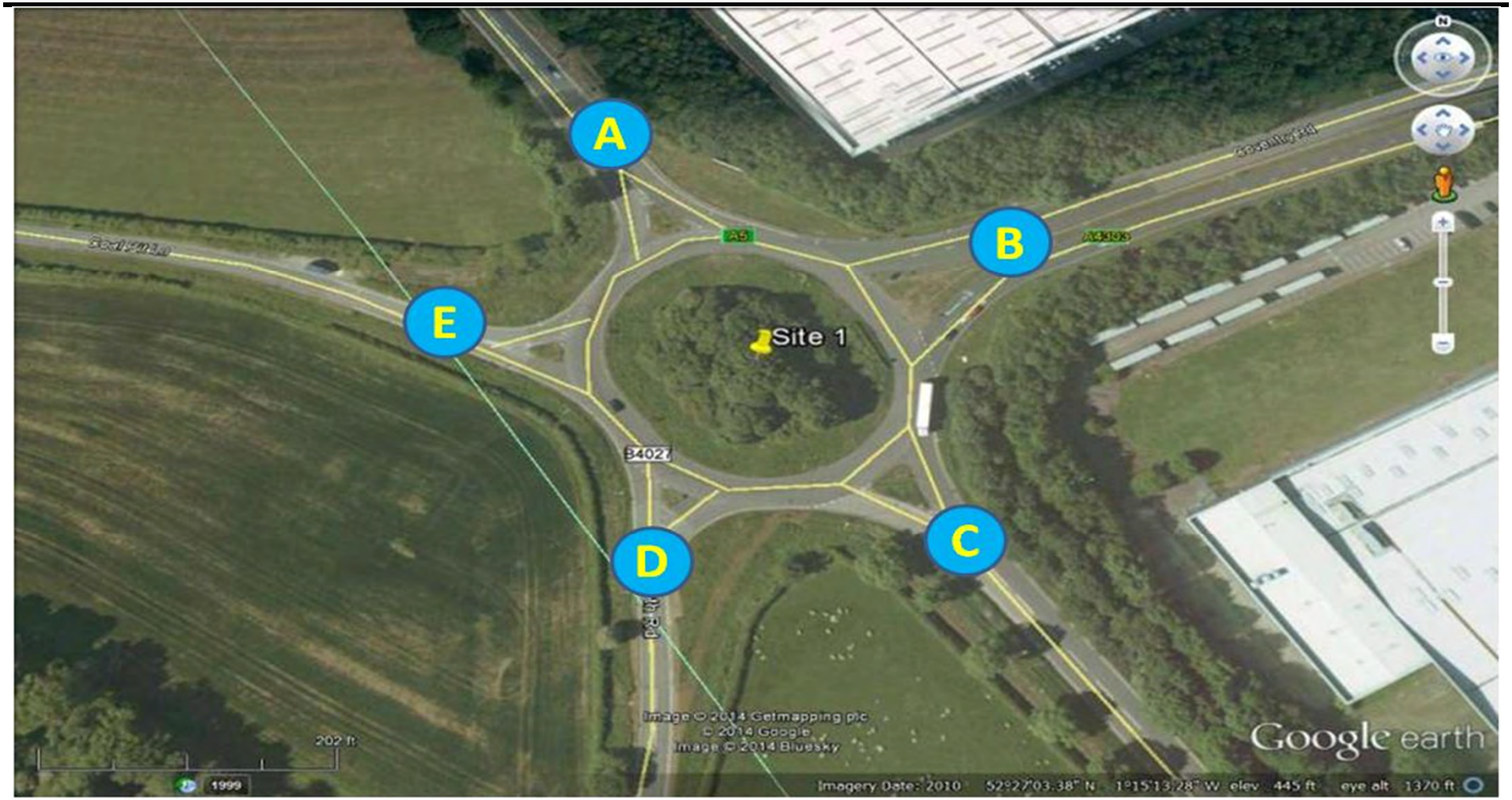
Magna Park Extension: Hybrid Application
Transport Assessment

Appendix M – Traffic Survey Data

Client:	URS
Project Number:	TSP11713
Project Name:	Lutterworth
Survey Type:	Manual Classified Traffic Count
Survey Date:	15 May 2014
Survey Time:	07:00 - 10:00 and 16:00 - 19:00
Weather:	Dry and Sunny
Comments:	

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **1**
Location: **A5/ A4303/ Lutterworth Road/ Coal Pit Lane Roundabout**



Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **1**
Location: **A5/ A4303/ Lutterworth Road/ Coal Pit Lane Roundabout**
Date: **15 May 2014, Thursday**

Time	A - A			A - B			A - C			A - D			A - E		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	0	0	0	85	10	95	120	17	137	9	0	9	0	0	0
07:15	0	0	0	80	9	89	121	5	126	6	0	6	0	0	0
07:30	1	0	1	113	11	124	138	15	153	11	0	11	0	0	0
07:45	0	0	0	134	9	143	119	9	128	10	0	10	4	0	4
H/Total	1	0	1	412	39	451	498	46	544	36	0	36	4	0	4
08:00	2	0	2	125	12	137	128	6	134	15	0	15	0	0	0
08:15	1	0	1	104	8	112	115	6	121	10	0	10	0	0	0
08:30	0	0	0	108	8	116	113	10	123	9	0	9	1	0	1
08:45	3	0	3	120	12	132	73	5	78	4	0	4	1	0	1
H/Total	6	0	6	457	40	497	429	27	456	38	0	38	2	0	2
09:00	0	0	0	101	13	114	80	12	92	6	0	6	0	0	0
09:15	0	0	0	78	21	99	80	11	91	1	0	1	0	0	0
09:30	0	0	0	48	16	64	65	6	71	5	0	5	1	0	1
09:45	0	0	0	58	17	75	42	12	54	1	0	1	0	0	0
H/Total	0	0	0	285	67	352	267	41	308	13	0	13	1	0	1
Total	7	0	7	1154	146	1300	1194	114	1308	87	0	87	7	0	7

Time	A - A			A - B			A - C			A - D			A - E		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	0	0	0	47	16	63	49	10	59	4	0	4	0	0	0
16:15	1	0	1	52	9	61	58	5	63	5	0	5	0	0	0
16:30	0	0	0	61	6	67	79	7	86	3	1	4	0	0	0
16:45	1	0	1	67	11	78	55	3	58	2	0	2	0	0	0
H/Total	2	0	2	227	42	269	241	25	266	14	1	15	0	0	0
17:00	0	0	0	61	8	69	70	4	74	2	0	2	0	0	0
17:15	0	0	0	77	7	84	75	4	79	4	1	5	2	0	2
17:30	0	0	0	61	8	69	75	3	78	3	0	3	0	0	0
17:45	0	0	0	75	4	79	59	2	61	3	0	3	0	0	0
H/Total	0	0	0	274	27	301	279	13	292	12	1	13	2	0	2
18:00	0	0	0	54	7	61	58	4	62	3	0	3	1	2	3
18:15	0	0	0	43	8	51	56	1	57	3	0	3	0	0	0
18:30	0	0	0	38	6	44	38	4	42	2	0	2	1	0	1
18:45	0	0	0	49	14	63	42	7	49	1	0	1	1	0	1
H/Total	0	0	0	184	35	219	194	16	210	9	0	9	3	2	5
Total	2	0	2	685	104	789	714	54	768	35	2	37	5	2	7

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **1**
Location: **A5/ A4303/ Lutterworth Road/ Coal Pit Lane Roundabout**
Date: **15 May 2014, Thursday**

Time	B - A			B - B			B - C			B - D			B - E		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	72	9	81	0	0	0	51	15	66	64	2	66	44	2	46
07:15	66	16	82	0	0	0	35	21	56	35	1	36	32	0	32
07:30	77	8	85	0	0	0	48	16	64	39	1	40	22	0	22
07:45	61	14	75	0	0	0	36	15	51	56	0	56	25	0	25
H/Total	276	47	323	0	0	0	170	67	237	194	4	198	123	2	125
08:00	72	12	84	0	0	0	50	15	65	44	1	45	39	0	39
08:15	85	7	92	0	0	0	37	19	56	39	0	39	28	1	29
08:30	57	9	66	0	0	0	31	16	47	40	0	40	16	0	16
08:45	58	14	72	0	0	0	34	21	55	12	0	12	22	1	23
H/Total	272	42	314	0	0	0	152	71	223	135	1	136	105	2	107
09:00	60	8	68	0	0	0	23	16	39	18	0	18	6	0	6
09:15	39	12	51	0	0	0	18	17	35	16	0	16	6	2	8
09:30	34	12	46	0	0	0	11	18	29	15	1	16	6	0	6
09:45	33	11	44	0	0	0	15	20	35	8	0	8	7	2	9
H/Total	166	43	209	0	0	0	67	71	138	57	1	58	25	4	29
Total	714	132	846	0	0	0	389	209	598	386	6	392	253	8	261

Time	B - A			B - B			B - C			B - D			B - E		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	95	8	103	0	0	0	55	12	67	16	0	16	47	4	51
16:15	81	9	90	0	0	0	37	10	47	20	2	22	21	1	22
16:30	97	7	104	0	0	0	59	11	70	20	0	20	38	1	39
16:45	79	12	91	0	0	0	42	8	50	22	0	22	30	0	30
H/Total	352	36	388	0	0	0	193	41	234	78	2	80	136	6	142
17:00	126	11	137	0	0	0	58	11	69	46	0	46	47	1	48
17:15	84	10	94	0	0	0	50	10	60	37	0	37	53	2	55
17:30	132	7	139	0	0	0	53	10	63	34	0	34	35	1	36
17:45	94	11	105	0	0	0	35	8	43	27	0	27	34	0	34
H/Total	436	39	475	0	0	0	196	39	235	144	0	144	169	4	173
18:00	87	6	93	1	0	1	36	14	50	36	1	37	42	3	45
18:15	55	9	64	1	0	1	23	13	36	18	0	18	17	0	17
18:30	61	8	69	0	0	0	17	12	29	19	0	19	21	0	21
18:45	43	5	48	0	0	0	21	4	25	17	0	17	14	0	14
H/Total	246	28	274	2	0	2	97	43	140	90	1	91	94	3	97
Total	1034	103	1137	2	0	2	486	123	609	312	3	315	399	13	412

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **1**
Location: **A5/ A4303/ Lutterworth Road/ Coal Pit Lane Roundabout**
Date: **15 May 2014, Thursday**

Time	C - A			C - B			C - C			C - D			C - E		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	53	9	62	22	14	36	0	0	0	1	0	1	10	0	10
07:15	54	2	56	27	21	48	0	0	0	3	1	4	7	0	7
07:30	79	8	87	34	20	54	0	0	0	3	1	4	10	1	11
07:45	78	9	87	63	17	80	0	0	0	5	0	5	17	0	17
H/Total	264	28	292	146	72	218	0	0	0	12	2	14	44	1	45
08:00	47	3	50	42	13	55	0	0	0	4	0	4	17	0	17
08:15	58	6	64	62	12	74	0	0	0	3	1	4	19	1	20
08:30	54	4	58	50	12	62	0	0	0	7	2	9	13	0	13
08:45	42	7	49	62	16	78	0	0	0	4	1	5	5	2	7
H/Total	201	20	221	216	53	269	0	0	0	18	4	22	54	3	57
09:00	36	5	41	37	12	49	0	0	0	6	0	6	3	0	3
09:15	29	9	38	23	19	42	0	0	0	3	0	3	4	0	4
09:30	50	9	59	16	13	29	0	0	0	1	0	1	6	0	6
09:45	31	8	39	16	20	36	0	0	0	1	0	1	13	0	13
H/Total	146	31	177	92	64	156	0	0	0	11	0	11	26	0	26
Total	611	79	690	454	189	643	0	0	0	41	6	47	124	4	128

Time	C - A			C - B			C - C			C - D			C - E		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	65	10	75	13	14	27	0	0	0	2	0	2	19	1	20
16:15	84	9	93	21	15	36	0	0	0	3	0	3	19	0	19
16:30	100	12	112	27	20	47	0	0	0	1	1	2	27	0	27
16:45	98	11	109	37	9	46	0	0	0	4	0	4	25	0	25
H/Total	347	42	389	98	58	156	0	0	0	10	1	11	90	1	91
17:00	101	10	111	29	16	45	0	0	0	1	0	1	18	1	19
17:15	109	6	115	18	8	26	0	0	0	1	0	1	35	0	35
17:30	133	4	137	27	8	35	0	0	0	4	0	4	16	0	16
17:45	123	2	125	29	10	39	0	0	0	3	0	3	19	0	19
H/Total	466	22	488	103	42	145	0	0	0	9	0	9	88	1	89
18:00	93	3	96	29	15	44	0	0	0	1	0	1	25	2	27
18:15	91	4	95	18	11	29	0	0	0	1	0	1	20	0	20
18:30	83	3	86	21	10	31	0	0	0	3	0	3	21	2	23
18:45	63	3	66	19	9	28	0	0	0	3	0	3	9	0	9
H/Total	330	13	343	87	45	132	0	0	0	8	0	8	75	4	79
Total	1143	77	1220	288	145	433	0	0	0	27	1	28	253	6	259

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **1**
Location: **A5/ A4303/ Lutterworth Road/ Coal Pit Lane Roundabout**
Date: **15 May 2014, Thursday**

Time	D - A			D - B			D - C			D - D			D - E		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	2	1	3	7	0	7	1	0	1	0	0	0	0	1	1
07:15	1	0	1	21	0	21	0	0	0	0	0	0	1	0	1
07:30	3	1	4	17	1	18	3	0	3	0	0	0	0	0	0
07:45	6	0	6	40	2	42	1	0	1	0	0	0	0	0	0
H/Total	12	2	14	85	3	88	5	0	5	0	0	0	1	1	2
08:00	6	0	6	23	1	24	3	0	3	0	0	0	0	0	0
08:15	4	0	4	43	0	43	1	0	1	0	0	0	1	0	1
08:30	6	0	6	51	0	51	2	0	2	0	0	0	3	0	3
08:45	3	0	3	37	0	37	4	0	4	0	0	0	0	0	0
H/Total	19	0	19	154	1	155	10	0	10	0	0	0	4	0	4
09:00	1	0	1	16	1	17	2	0	2	0	0	0	0	0	0
09:15	6	1	7	13	1	14	1	0	1	0	0	0	3	1	4
09:30	4	0	4	13	0	13	2	0	2	0	0	0	1	0	1
09:45	3	0	3	12	0	12	1	0	1	0	0	0	0	0	0
H/Total	14	1	15	54	2	56	6	0	6	0	0	0	4	1	5
Total	45	3	48	293	6	299	21	0	21	0	0	0	9	2	11

Time	D - A			D - B			D - C			D - D			D - E		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	6	1	7	21	0	21	2	0	2	1	0	1	0	0	0
16:15	7	1	8	30	0	30	3	0	3	0	0	0	0	0	0
16:30	19	0	19	40	1	41	2	0	2	0	0	0	0	1	1
16:45	13	0	13	44	0	44	4	0	4	0	0	0	0	0	0
H/Total	45	2	47	135	1	136	11	0	11	1	0	1	0	1	1
17:00	19	0	19	40	0	40	2	0	2	0	0	0	3	0	3
17:15	13	0	13	50	0	50	3	0	3	0	0	0	2	0	2
17:30	14	0	14	57	1	58	2	0	2	0	0	0	0	0	0
17:45	19	1	20	43	0	43	1	0	1	0	0	0	1	0	1
H/Total	65	1	66	190	1	191	8	0	8	0	0	0	6	0	6
18:00	9	0	9	43	1	44	0	0	0	0	0	0	3	0	3
18:15	9	0	9	40	1	41	1	0	1	0	0	0	1	0	1
18:30	7	0	7	34	0	34	1	0	1	0	0	0	0	0	0
18:45	2	0	2	29	0	29	0	0	0	0	0	0	1	0	1
H/Total	27	0	27	146	2	148	2	0	2	0	0	0	5	0	5
Total	137	3	140	471	4	475	21	0	21	1	0	1	11	1	12

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **1**
Location: **A5/ A4303/ Lutterworth Road/ Coal Pit Lane Roundabout**
Date: **15 May 2014, Thursday**

Time	E - A			E - B			E - C			E - D			E - E		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	0	1	1	19	2	21	18	1	19	1	0	1	0	0	0
07:15	0	0	0	29	3	32	26	2	28	3	0	3	0	0	0
07:30	2	0	2	37	1	38	20	0	20	2	0	2	0	0	0
07:45	1	0	1	53	0	53	26	1	27	0	0	0	1	0	1
H/Total	3	1	4	138	6	144	90	4	94	6	0	6	1	0	1
08:00	2	0	2	44	1	45	26	1	27	2	0	2	0	0	0
08:15	1	0	1	59	1	60	23	0	23	1	0	1	0	0	0
08:30	1	0	1	36	0	36	19	0	19	2	0	2	0	0	0
08:45	7	0	7	25	2	27	6	1	7	1	0	1	0	0	0
H/Total	11	0	11	164	4	168	74	2	76	6	0	6	0	0	0
09:00	6	1	7	5	0	5	4	0	4	0	0	0	0	0	0
09:15	0	0	0	15	3	18	6	0	6	0	0	0	0	0	0
09:30	2	0	2	19	0	19	6	1	7	2	0	2	0	0	0
09:45	2	0	2	18	3	21	9	1	10	1	0	1	0	0	0
H/Total	10	1	11	57	6	63	25	2	27	3	0	3	0	0	0
Total	24	2	26	359	16	375	189	8	197	15	0	15	1	0	1

Time	E - A			E - B			E - C			E - D			E - E		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	3	0	3	19	0	19	5	0	5	1	0	1	0	0	0
16:15	1	0	1	21	1	22	8	0	8	1	0	1	0	0	0
16:30	2	1	3	13	0	13	6	0	6	0	0	0	0	0	0
16:45	2	1	3	24	0	24	6	0	6	1	0	1	0	0	0
H/Total	8	2	10	77	1	78	25	0	25	3	0	3	0	0	0
17:00	1	0	1	24	0	24	7	1	8	0	1	1	0	0	0
17:15	0	0	0	25	0	25	12	0	12	1	0	1	0	0	0
17:30	1	1	2	31	0	31	14	0	14	1	1	2	0	0	0
17:45	2	0	2	31	1	32	12	0	12	0	0	0	0	0	0
H/Total	4	1	5	111	1	112	45	1	46	2	2	4	0	0	0
18:00	0	0	0	22	0	22	15	0	15	1	0	1	0	0	0
18:15	0	0	0	18	0	18	19	0	19	0	0	0	0	0	0
18:30	0	0	0	14	0	14	6	0	6	0	0	0	0	0	0
18:45	0	0	0	12	2	14	7	0	7	0	0	0	0	0	0
H/Total	0	0	0	66	2	68	47	0	47	1	0	1	0	0	0
Total	12	3	15	254	4	258	117	1	118	6	2	8	0	0	0

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **1**
Location: **A5/ A4303/ Lutterworth Road/ Coal Pit Lane Roundabout**
Date: **15 May 2014, Thursday**

Time	FROM A			TO A			FROM B			TO B		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	214	27	241	127	20	147	231	28	259	133	26	159
07:15	207	14	221	121	18	139	168	38	206	157	33	190
07:30	263	26	289	162	17	179	186	25	211	201	33	234
07:45	267	18	285	146	23	169	178	29	207	290	28	318
H/Total	951	85	1036	556	78	634	763	120	883	781	120	901
08:00	270	18	288	129	15	144	205	28	233	234	27	261
08:15	230	14	244	149	13	162	189	27	216	268	21	289
08:30	231	18	249	118	13	131	144	25	169	245	20	265
08:45	201	17	218	113	21	134	126	36	162	244	30	274
H/Total	932	67	999	509	62	571	664	116	780	991	98	1089
09:00	187	25	212	103	14	117	107	24	131	159	26	185
09:15	159	32	191	74	22	96	79	31	110	129	44	173
09:30	119	22	141	90	21	111	66	31	97	96	29	125
09:45	101	29	130	69	19	88	63	33	96	104	40	144
H/Total	566	108	674	336	76	412	315	119	434	488	139	627
Total	2449	260	2709	1401	216	1617	1742	355	2097	2260	357	2617

Time	FROM A			TO A			FROM B			TO B		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	100	26	126	169	19	188	213	24	237	100	30	130
16:15	116	14	130	174	19	193	159	22	181	124	25	149
16:30	143	14	157	218	20	238	214	19	233	141	27	168
16:45	125	14	139	193	24	217	173	20	193	172	20	192
H/Total	484	68	552	754	82	836	759	85	844	537	102	639
17:00	133	12	145	247	21	268	277	23	300	154	24	178
17:15	158	12	170	206	16	222	224	22	246	170	15	185
17:30	139	11	150	280	12	292	254	18	272	176	17	193
17:45	137	6	143	238	14	252	190	19	209	178	15	193
H/Total	567	41	608	971	63	1034	945	82	1027	678	71	749
18:00	116	13	129	189	9	198	202	24	226	149	23	172
18:15	102	9	111	155	13	168	114	22	136	120	20	140
18:30	79	10	89	151	11	162	118	20	138	107	16	123
18:45	93	21	114	108	8	116	95	9	104	109	25	134
H/Total	390	53	443	603	41	644	529	75	604	485	84	569
Total	1441	162	1603	2328	186	2514	2233	242	2475	1700	257	1957

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **1**
Location: **A5/ A4303/ Lutterworth Road/ Coal Pit Lane Roundabout**
Date: **15 May 2014, Thursday**

Time	FROM C			TO C			FROM D			TO D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	86	23	109	190	33	223	10	2	12	75	2	77
07:15	91	24	115	182	28	210	23	0	23	47	2	49
07:30	126	30	156	209	31	240	23	2	25	55	2	57
07:45	163	26	189	182	25	207	47	2	49	71	0	71
H/Total	466	103	569	763	117	880	103	6	109	248	6	254
08:00	110	16	126	207	22	229	32	1	33	65	1	66
08:15	142	20	162	176	25	201	49	0	49	53	1	54
08:30	124	18	142	165	26	191	62	0	62	58	2	60
08:45	113	26	139	117	27	144	44	0	44	21	1	22
H/Total	489	80	569	665	100	765	187	1	188	197	5	202
09:00	82	17	99	109	28	137	19	1	20	30	0	30
09:15	59	28	87	105	28	133	23	3	26	20	0	20
09:30	73	22	95	84	25	109	20	0	20	23	1	24
09:45	61	28	89	67	33	100	16	0	16	11	0	11
H/Total	275	95	370	365	114	479	78	4	82	84	1	85
Total	1230	278	1508	1793	331	2124	368	11	379	529	12	541

Time	FROM C			TO C			FROM D			TO D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	99	25	124	111	22	133	30	1	31	24	0	24
16:15	127	24	151	106	15	121	40	1	41	29	2	31
16:30	155	33	188	146	18	164	61	2	63	24	2	26
16:45	164	20	184	107	11	118	61	0	61	29	0	29
H/Total	545	102	647	470	66	536	192	4	196	106	4	110
17:00	149	27	176	137	16	153	64	0	64	49	1	50
17:15	163	14	177	140	14	154	68	0	68	43	1	44
17:30	180	12	192	144	13	157	73	1	74	42	1	43
17:45	174	12	186	107	10	117	64	1	65	33	0	33
H/Total	666	65	731	528	53	581	269	2	271	167	3	170
18:00	148	20	168	109	18	127	55	1	56	41	1	42
18:15	130	15	145	99	14	113	51	1	52	22	0	22
18:30	128	15	143	62	16	78	42	0	42	24	0	24
18:45	94	12	106	70	11	81	32	0	32	21	0	21
H/Total	500	62	562	340	59	399	180	2	182	108	1	109
Total	1711	229	1940	1338	178	1516	641	8	649	381	8	389

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **1**
Location: **A5/ A4303/ Lutterworth Road/ Coal Pit Lane Roundabout**
Date: **15 May 2014, Thursday**

Time	FROM E			TO E		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	38	4	42	54	3	57
07:15	58	5	63	40	0	40
07:30	61	1	62	32	1	33
07:45	81	1	82	47	0	47
H/Total	238	11	249	173	4	177
08:00	74	2	76	56	0	56
08:15	84	1	85	48	2	50
08:30	58	0	58	33	0	33
08:45	39	3	42	28	3	31
H/Total	255	6	261	165	5	170
09:00	15	1	16	9	0	9
09:15	21	3	24	13	3	16
09:30	29	1	30	14	0	14
09:45	30	4	34	20	2	22
H/Total	95	9	104	56	5	61
Total	588	26	614	394	14	408

Time	FROM E			TO E		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	28	0	28	66	5	71
16:15	31	1	32	40	1	41
16:30	21	1	22	65	2	67
16:45	33	1	34	55	0	55
H/Total	113	3	116	226	8	234
17:00	32	2	34	68	2	70
17:15	38	0	38	92	2	94
17:30	47	2	49	51	1	52
17:45	45	1	46	54	0	54
H/Total	162	5	167	265	5	270
18:00	38	0	38	71	7	78
18:15	37	0	37	38	0	38
18:30	20	0	20	43	2	45
18:45	19	2	21	25	0	25
H/Total	114	2	116	177	9	186
Total	389	10	399	668	22	690

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **1**
Location: **A5/ A4303/ Lutterworth Road/ Coal Pit Lane Roundabout**
Date: **15 May 2014, Thursday**

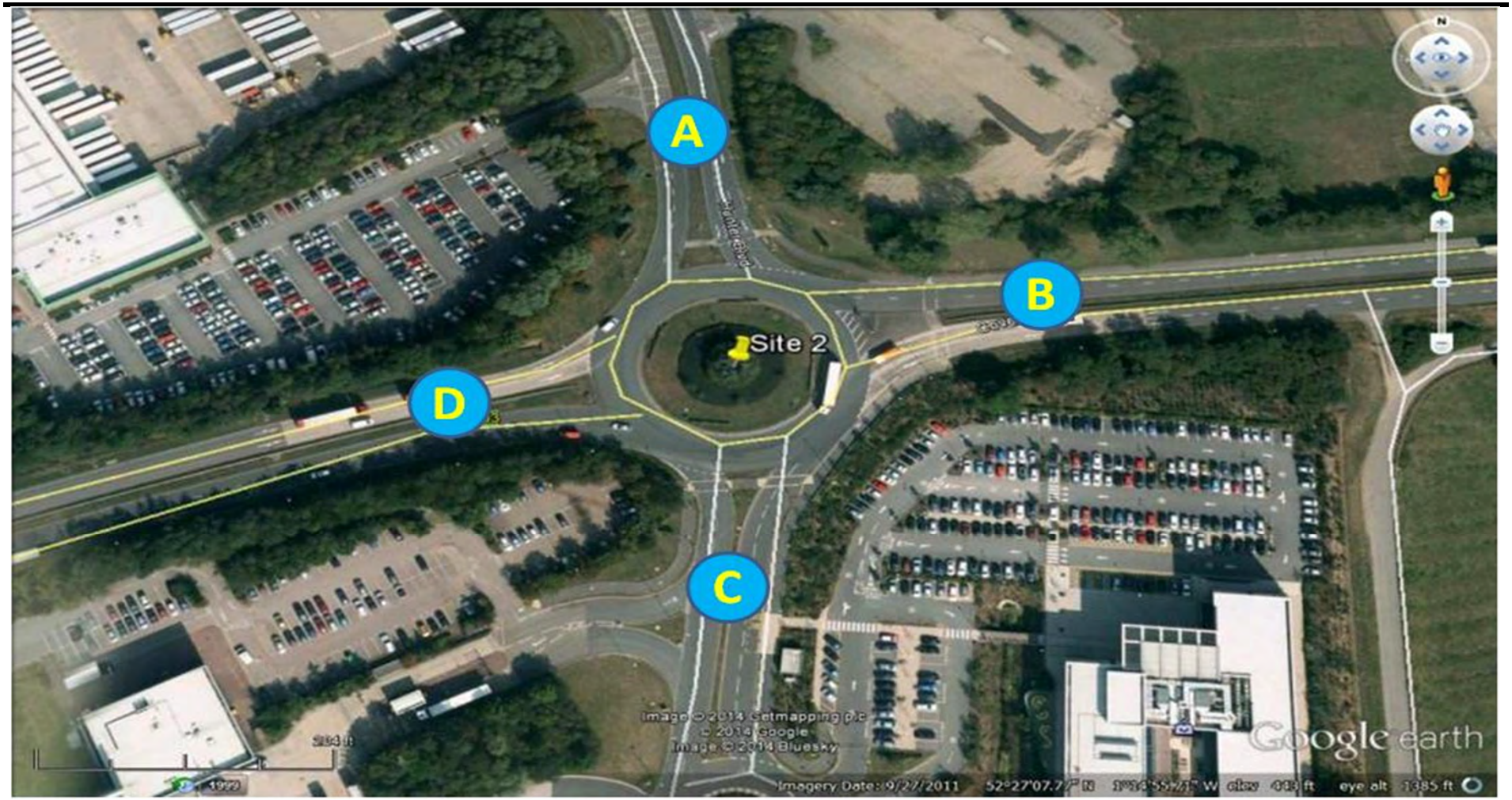
Time	WHOLE JUNCTION		
	LVs	HVs	TOTAL
07:00	579	84	663
07:15	547	81	628
07:30	659	84	743
07:45	736	76	812
H/Total	2521	325	2846
08:00	691	65	756
08:15	694	62	756
08:30	619	61	680
08:45	523	82	605
H/Total	2527	270	2797
09:00	410	68	478
09:15	341	97	438
09:30	307	76	383
09:45	271	94	365
H/Total	1329	335	1664
Total	6377	930	7307

Peak Hours		Totals
07:00	08:00	2846
07:15	08:15	2939
07:30	08:30	3067
07:45	08:45	3004
08:00	09:00	2797
08:15	09:15	2519
08:30	09:30	2201
08:45	09:45	1904
09:00	10:00	1664

Time	WHOLE JUNCTION		
	LVs	HVs	TOTAL
16:00	470	76	546
16:15	473	62	535
16:30	594	69	663
16:45	556	55	611
H/Total	2093	262	2355
17:00	655	64	719
17:15	651	48	699
17:30	693	44	737
17:45	610	39	649
H/Total	2609	195	2804
18:00	559	58	617
18:15	434	47	481
18:30	387	45	432
18:45	333	44	377
H/Total	1713	194	1907
Total	6415	651	7066

Peak Hours		Totals
16:00	17:00	2355
16:15	17:15	2528
16:30	17:30	2692
16:45	17:45	2766
17:00	18:00	2804
17:15	18:15	2702
17:30	18:30	2484
17:45	18:45	2179
18:00	19:00	1907

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **2**
Location: **Hunter Boulevard/ A4303 Roundabout**



Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **2**
Location: **Hunter Boulevard/ A4303 Roundabout**
Date: **15 May 2014, Thursday**

Time	A - A			A - B			A - C			A - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	1	0	1	71	7	78	0	0	0	132	21	153
07:15	0	0	0	18	12	30	0	0	0	38	25	63
07:30	0	0	0	3	17	20	0	0	0	23	20	43
07:45	0	0	0	7	20	27	0	0	0	16	20	36
H/Total	1	0	1	99	56	155	0	0	0	209	86	295
08:00	1	0	1	19	9	28	0	0	0	50	19	69
08:15	0	0	0	8	11	19	0	0	0	18	22	40
08:30	0	0	0	5	19	24	0	0	0	15	15	30
08:45	0	0	0	10	8	18	0	0	0	14	30	44
H/Total	1	0	1	42	47	89	0	0	0	97	86	183
09:00	1	0	1	10	13	23	0	0	0	14	17	31
09:15	0	0	0	3	14	17	1	0	1	10	27	37
09:30	0	0	0	8	16	24	0	0	0	9	27	36
09:45	0	0	0	12	19	31	0	0	0	18	22	40
H/Total	1	0	1	33	62	95	1	0	1	51	93	144
Total	3	0	3	174	165	339	1	0	1	357	265	622

Time	A - A			A - B			A - C			A - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	0	0	0	68	16	84	0	2	2	141	15	156
16:15	0	0	0	35	8	43	0	0	0	86	16	102
16:30	0	0	0	57	7	64	3	1	4	133	17	150
16:45	0	0	0	34	12	46	1	0	1	77	17	94
H/Total	0	0	0	194	43	237	4	3	7	437	65	502
17:00	0	0	0	56	8	64	0	0	0	154	18	172
17:15	0	0	0	50	13	63	0	0	0	116	14	130
17:30	0	0	0	54	6	60	0	1	1	85	16	101
17:45	0	0	0	25	15	40	0	2	2	43	13	56
H/Total	0	0	0	185	42	227	0	3	3	398	61	459
18:00	0	0	0	63	3	66	0	3	3	101	16	117
18:15	0	0	0	24	8	32	0	1	1	31	15	46
18:30	0	0	0	18	6	24	0	1	1	29	16	45
18:45	0	0	0	15	8	23	0	1	1	29	4	33
H/Total	0	0	0	120	25	145	0	6	6	190	51	241
Total	0	0	0	499	110	609	4	12	16	1025	177	1202

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **2**
Location: **Hunter Boulevard/ A4303 Roundabout**
Date: **15 May 2014, Thursday**

Time	B - A			B - B			B - C			B - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	38	16	54	2	2	4	2	1	3	92	7	99
07:15	39	18	57	4	5	9	3	0	3	127	8	135
07:30	69	19	88	1	2	3	5	1	6	171	6	177
07:45	110	22	132	8	6	14	12	0	12	155	6	161
H/Total	256	75	331	15	15	30	22	2	24	545	27	572
08:00	100	12	112	14	3	17	22	1	23	162	9	171
08:15	99	16	115	6	5	11	36	1	37	167	6	173
08:30	73	24	97	11	2	13	38	0	38	127	6	133
08:45	94	14	108	4	4	8	30	2	32	107	7	114
H/Total	366	66	432	35	14	49	126	4	130	563	28	591
09:00	51	20	71	8	6	14	18	0	18	63	4	67
09:15	30	12	42	6	6	12	10	5	15	75	4	79
09:30	32	10	42	6	4	10	8	2	10	64	7	71
09:45	39	17	56	8	5	13	8	1	9	45	7	52
H/Total	152	59	211	28	21	49	44	8	52	247	22	269
Total	774	200	974	78	50	128	192	14	206	1355	77	1432

Time	B - A			B - B			B - C			B - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	14	9	23	6	5	11	3	0	3	73	3	76
16:15	10	10	20	2	0	2	0	1	1	70	6	76
16:30	12	12	24	0	0	0	3	3	6	86	4	90
16:45	16	21	37	7	2	9	1	1	2	92	5	97
H/Total	52	52	104	15	7	22	7	5	12	321	18	339
17:00	20	17	37	9	1	10	1	1	2	104	2	106
17:15	22	15	37	10	0	10	2	0	2	100	4	104
17:30	26	9	35	5	0	5	3	3	6	107	5	112
17:45	30	10	40	2	0	2	1	3	4	114	5	119
H/Total	98	51	149	26	1	27	7	7	14	425	16	441
18:00	12	12	24	5	0	5	1	3	4	86	6	92
18:15	9	15	24	3	1	4	2	1	3	79	6	85
18:30	16	9	25	1	0	1	1	1	2	81	3	84
18:45	13	8	21	1	0	1	1	2	3	61	5	66
H/Total	50	44	94	10	1	11	5	7	12	307	20	327
Total	200	147	347	51	9	60	19	19	38	1053	54	1107

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **2**
Location: **Hunter Boulevard/ A4303 Roundabout**
Date: **15 May 2014, Thursday**

Time	C - A			C - B			C - C			C - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	0	1	1	0	0	0	0	0	0	1	0	1
07:15	0	0	0	1	2	3	0	0	0	1	2	3
07:30	0	1	1	0	0	0	0	0	0	0	2	2
07:45	2	0	2	2	0	2	0	0	0	2	0	2
H/Total	2	2	4	3	2	5	0	0	0	4	4	8
08:00	0	1	1	1	1	2	0	0	0	1	0	1
08:15	0	1	1	0	0	0	0	0	0	1	1	2
08:30	0	0	0	2	1	3	0	0	0	0	1	1
08:45	0	0	0	3	0	3	0	0	0	1	0	1
H/Total	0	2	2	6	2	8	0	0	0	3	2	5
09:00	2	1	3	3	2	5	0	0	0	4	0	4
09:15	1	2	3	1	2	3	0	1	1	1	2	3
09:30	0	2	2	2	0	2	0	0	0	0	0	0
09:45	0	6	6	2	0	2	0	0	0	1	0	1
H/Total	3	11	14	8	4	12	0	1	1	6	2	8
Total	5	15	20	17	8	25	0	1	1	13	8	21

Time	C - A			C - B			C - C			C - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	0	3	3	8	0	8	1	0	1	3	0	3
16:15	0	3	3	5	0	5	0	0	0	5	0	5
16:30	0	3	3	30	0	30	0	0	0	12	0	12
16:45	0	2	2	25	2	27	0	0	0	5	0	5
H/Total	0	11	11	68	2	70	1	0	1	25	0	25
17:00	1	2	3	28	0	28	0	0	0	13	0	13
17:15	1	1	2	22	1	23	0	0	0	9	0	9
17:30	4	0	4	70	0	70	1	0	1	46	0	46
17:45	0	2	2	38	0	38	0	0	0	19	2	21
H/Total	6	5	11	158	1	159	1	0	1	87	2	89
18:00	0	3	3	15	0	15	0	0	0	16	1	17
18:15	0	4	4	11	1	12	0	0	0	4	2	6
18:30	0	3	3	8	0	8	0	0	0	3	0	3
18:45	0	0	0	8	1	9	0	0	0	5	0	5
H/Total	0	10	10	42	2	44	0	0	0	28	3	31
Total	6	26	32	268	5	273	2	0	2	140	5	145

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **2**
Location: **Hunter Boulevard/ A4303 Roundabout**
Date: **15 May 2014, Thursday**

Time	D - A			D - B			D - C			D - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	50	16	66	68	9	77	3	1	4	0	0	0
07:15	74	25	99	81	7	88	5	1	6	1	1	2
07:30	96	25	121	100	6	106	6	0	6	0	0	0
07:45	153	18	171	121	8	129	16	2	18	1	0	1
H/Total	373	84	457	370	30	400	30	4	34	2	1	3
08:00	112	13	125	106	13	119	15	0	15	0	0	0
08:15	141	16	157	109	4	113	26	0	26	1	1	2
08:30	87	17	104	118	5	123	35	0	35	0	0	0
08:45	96	17	113	114	12	126	41	1	42	1	0	1
H/Total	436	63	499	447	34	481	117	1	118	2	1	3
09:00	68	17	85	70	9	79	26	1	27	0	0	0
09:15	62	26	88	65	15	80	5	1	6	1	0	1
09:30	40	19	59	51	9	60	4	1	5	0	1	1
09:45	46	26	72	58	12	70	1	1	2	0	1	1
H/Total	216	88	304	244	45	289	36	4	40	1	2	3
Total	1025	235	1260	1061	109	1170	183	9	192	5	4	9

Time	D - A			D - B			D - C			D - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	18	20	38	84	8	92	0	1	1	1	0	1
16:15	16	13	29	120	11	131	0	1	1	0	0	0
16:30	20	23	43	110	3	113	3	2	5	0	0	0
16:45	27	12	39	136	7	143	3	1	4	1	0	1
H/Total	81	68	149	450	29	479	6	5	11	2	0	2
17:00	21	15	36	130	8	138	1	0	1	0	0	0
17:15	24	9	33	145	5	150	0	1	1	1	0	1
17:30	13	11	24	168	7	175	4	0	4	0	0	0
17:45	23	11	34	150	4	154	2	1	3	1	0	1
H/Total	81	46	127	593	24	617	7	2	9	2	0	2
18:00	12	16	28	128	5	133	0	3	3	0	0	0
18:15	15	7	22	110	6	116	2	0	2	1	0	1
18:30	18	12	30	86	4	90	0	1	1	2	0	2
18:45	17	12	29	90	12	102	2	0	2	0	0	0
H/Total	62	47	109	414	27	441	4	4	8	3	0	3
Total	224	161	385	1457	80	1537	17	11	28	7	0	7

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **2**
Location: **Hunter Boulevard/ A4303 Roundabout**
Date: **15 May 2014, Thursday**

Time	FROM A			TO A			FROM B			TO B		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	204	28	232	89	33	122	134	26	160	141	18	159
07:15	56	37	93	113	43	156	173	31	204	104	26	130
07:30	26	37	63	165	45	210	246	28	274	104	25	129
07:45	23	40	63	265	40	305	285	34	319	138	34	172
H/Total	309	142	451	632	161	793	838	119	957	487	103	590
08:00	70	28	98	213	26	239	298	25	323	140	26	166
08:15	26	33	59	240	33	273	308	28	336	123	20	143
08:30	20	34	54	160	41	201	249	32	281	136	27	163
08:45	24	38	62	190	31	221	235	27	262	131	24	155
H/Total	140	133	273	803	131	934	1090	112	1202	530	97	627
09:00	25	30	55	122	38	160	140	30	170	91	30	121
09:15	14	41	55	93	40	133	121	27	148	75	37	112
09:30	17	43	60	72	31	103	110	23	133	67	29	96
09:45	30	41	71	85	49	134	100	30	130	80	36	116
H/Total	86	155	241	372	158	530	471	110	581	313	132	445
Total	535	430	965	1807	450	2257	2399	341	2740	1330	332	1662

Time	FROM A			TO A			FROM B			TO B		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	209	33	242	32	32	64	96	17	113	166	29	195
16:15	121	24	145	26	26	52	82	17	99	162	19	181
16:30	193	25	218	32	38	70	101	19	120	197	10	207
16:45	112	29	141	43	35	78	116	29	145	202	23	225
H/Total	635	111	746	133	131	264	395	82	477	727	81	808
17:00	210	26	236	42	34	76	134	21	155	223	17	240
17:15	166	27	193	47	25	72	134	19	153	227	19	246
17:30	139	23	162	43	20	63	141	17	158	297	13	310
17:45	68	30	98	53	23	76	147	18	165	215	19	234
H/Total	583	106	689	185	102	287	556	75	631	962	68	1030
18:00	164	22	186	24	31	55	104	21	125	211	8	219
18:15	55	24	79	24	26	50	93	23	116	148	16	164
18:30	47	23	70	34	24	58	99	13	112	113	10	123
18:45	44	13	57	30	20	50	76	15	91	114	21	135
H/Total	310	82	392	112	101	213	372	72	444	586	55	641
Total	1528	299	1827	430	334	764	1323	229	1552	2275	204	2479

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **2**
Location: **Hunter Boulevard/ A4303 Roundabout**
Date: **15 May 2014, Thursday**

Time	FROM C			TO C			FROM D			TO D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	1	1	2	5	2	7	121	26	147	225	28	253
07:15	2	4	6	8	1	9	161	34	195	167	36	203
07:30	0	3	3	11	1	12	202	31	233	194	28	222
07:45	6	0	6	28	2	30	291	28	319	174	26	200
H/Total	9	8	17	52	6	58	775	119	894	760	118	878
08:00	2	2	4	37	1	38	233	26	259	213	28	241
08:15	1	2	3	62	1	63	277	21	298	187	30	217
08:30	2	2	4	73	0	73	240	22	262	142	22	164
08:45	4	0	4	71	3	74	252	30	282	123	37	160
H/Total	9	6	15	243	5	248	1002	99	1101	665	117	782
09:00	9	3	12	44	1	45	164	27	191	81	21	102
09:15	3	7	10	16	7	23	133	42	175	87	33	120
09:30	2	2	4	12	3	15	95	30	125	73	35	108
09:45	3	6	9	9	2	11	105	40	145	64	30	94
H/Total	17	18	35	81	13	94	497	139	636	305	119	424
Total	35	32	67	376	24	400	2274	357	2631	1730	354	2084

Time	FROM C			TO C			FROM D			TO D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	12	3	15	4	3	7	103	29	132	218	18	236
16:15	10	3	13	0	2	2	136	25	161	161	22	183
16:30	42	3	45	9	6	15	133	28	161	231	21	252
16:45	30	4	34	5	2	7	167	20	187	175	22	197
H/Total	94	13	107	18	13	31	539	102	641	785	83	868
17:00	42	2	44	2	1	3	152	23	175	271	20	291
17:15	32	2	34	2	1	3	170	15	185	226	18	244
17:30	121	0	121	8	4	12	185	18	203	238	21	259
17:45	57	4	61	3	6	9	176	16	192	177	20	197
H/Total	252	8	260	15	12	27	683	72	755	912	79	991
18:00	31	4	35	1	9	10	140	24	164	203	23	226
18:15	15	7	22	4	2	6	128	13	141	115	23	138
18:30	11	3	14	1	3	4	106	17	123	115	19	134
18:45	13	1	14	3	3	6	109	24	133	95	9	104
H/Total	70	15	85	9	17	26	483	78	561	528	74	602
Total	416	36	452	42	42	84	1705	252	1957	2225	236	2461

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **2**
Location: **Hunter Boulevard/ A4303 Roundabout**
Date: **15 May 2014, Thursday**

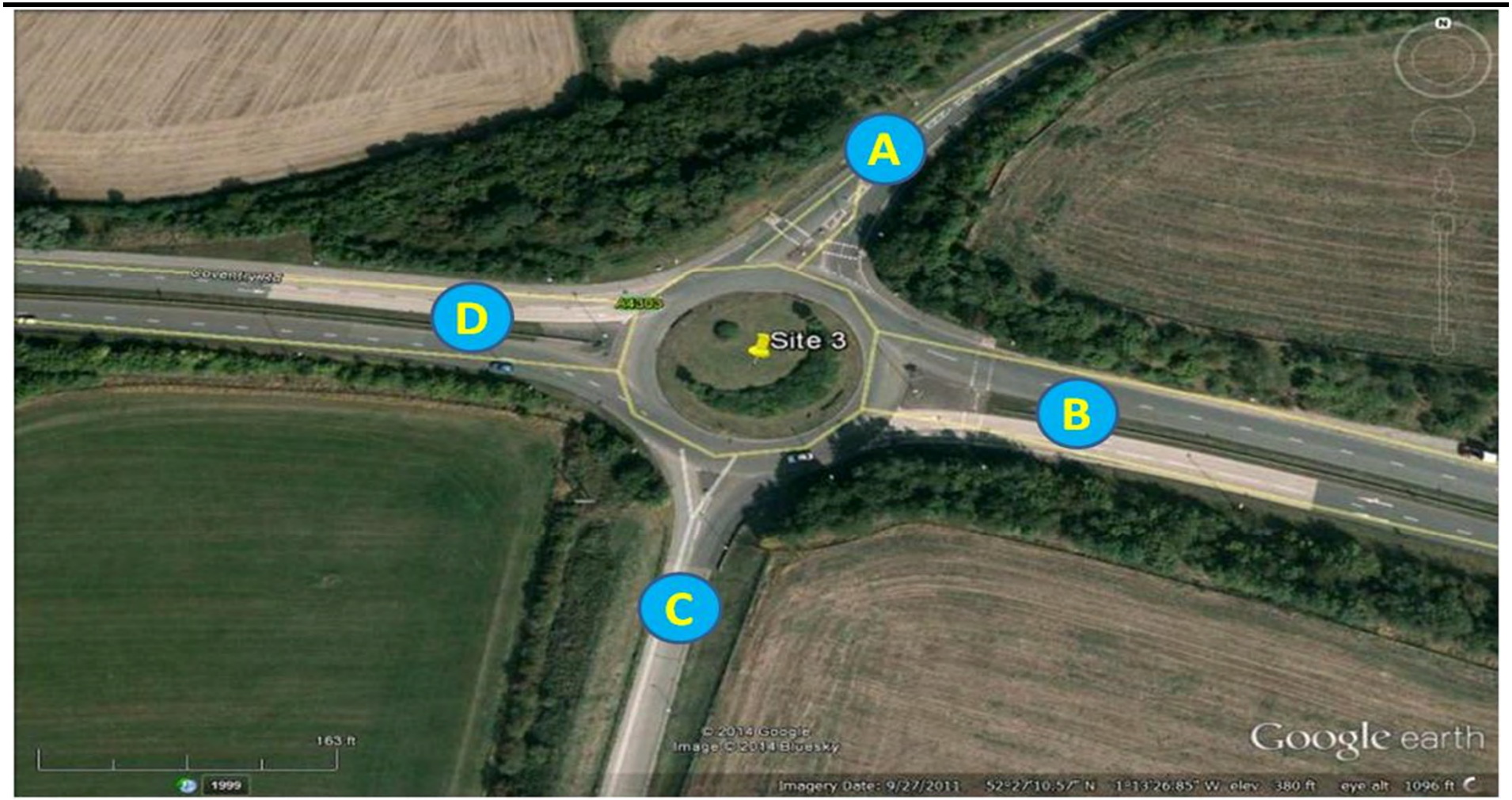
Time	WHOLE JUNCTION		
	LVs	HVs	TOTAL
07:00	460	81	541
07:15	392	106	498
07:30	474	99	573
07:45	605	102	707
H/Total	1931	388	2319
08:00	603	81	684
08:15	612	84	696
08:30	511	90	601
08:45	515	95	610
H/Total	2241	350	2591
09:00	338	90	428
09:15	271	117	388
09:30	224	98	322
09:45	238	117	355
H/Total	1071	422	1493
Total	5243	1160	6403

Peak Hours		Totals
07:00	08:00	2319
07:15	08:15	2462
07:30	08:30	2660
07:45	08:45	2688
08:00	09:00	2591
08:15	09:15	2335
08:30	09:30	2027
08:45	09:45	1748
09:00	10:00	1493

Time	WHOLE JUNCTION		
	LVs	HVs	TOTAL
16:00	420	82	502
16:15	349	69	418
16:30	469	75	544
16:45	425	82	507
H/Total	1663	308	1971
17:00	538	72	610
17:15	502	63	565
17:30	586	58	644
17:45	448	68	516
H/Total	2074	261	2335
18:00	439	71	510
18:15	291	67	358
18:30	263	56	319
18:45	242	53	295
H/Total	1235	247	1482
Total	4972	816	5788

Peak Hours		Totals
16:00	17:00	1971
16:15	17:15	2079
16:30	17:30	2226
16:45	17:45	2326
17:00	18:00	2335
17:15	18:15	2235
17:30	18:30	2028
17:45	18:45	1703
18:00	19:00	1482

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **3**
Location: **Coventry Road/ A4303/ Fairacres Roundabout**



Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **3**
Location: **Coventry Road/ A4303/ Fairacres Roundabout**
Date: **15 May 2014, Thursday**

Time	A - A			A - B			A - C			A - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	0	0	0	23	0	23	1	0	1	50	2	52
07:15	0	0	0	39	0	39	1	0	1	84	1	85
07:30	0	0	0	37	0	37	0	0	0	130	2	132
07:45	0	0	0	39	1	40	0	0	0	140	1	141
H/Total	0	0	0	138	1	139	2	0	2	404	6	410
08:00	0	0	0	39	0	39	0	0	0	140	2	142
08:15	0	0	0	33	0	33	0	0	0	134	2	136
08:30	0	0	0	24	2	26	5	0	5	120	4	124
08:45	1	0	1	25	0	25	3	0	3	101	4	105
H/Total	1	0	1	121	2	123	8	0	8	495	12	507
09:00	0	0	0	13	0	13	6	0	6	59	2	61
09:15	0	0	0	20	1	21	2	0	2	36	6	42
09:30	0	0	0	19	1	20	2	0	2	38	1	39
09:45	0	0	0	7	0	7	1	0	1	35	2	37
H/Total	0	0	0	59	2	61	11	0	11	168	11	179
Total	1	0	1	318	5	323	21	0	21	1067	29	1096

Time	A - A			A - B			A - C			A - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	0	0	0	16	1	17	2	0	2	43	0	43
16:15	0	0	0	14	0	14	4	0	4	38	1	39
16:30	0	0	0	10	0	10	4	0	4	25	0	25
16:45	0	0	0	13	1	14	3	0	3	30	0	30
H/Total	0	0	0	53	2	55	13	0	13	136	1	137
17:00	0	0	0	26	1	27	1	0	1	47	2	49
17:15	0	0	0	27	0	27	1	0	1	59	1	60
17:30	0	0	0	31	0	31	0	0	0	54	3	57
17:45	0	0	0	30	0	30	2	0	2	61	0	61
H/Total	0	0	0	114	1	115	4	0	4	221	6	227
18:00	0	0	0	6	0	6	1	0	1	39	0	39
18:15	0	0	0	9	0	9	3	0	3	23	1	24
18:30	0	0	0	8	0	8	2	0	2	29	0	29
18:45	0	0	0	11	0	11	4	0	4	20	0	20
H/Total	0	0	0	34	0	34	10	0	10	111	1	112
Total	0	0	0	201	3	204	27	0	27	468	8	476

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **3**
Location: **Coventry Road/ A4303/ Fairacres Roundabout**
Date: **15 May 2014, Thursday**

Time	B - A			B - B			B - C			B - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	2	1	3	0	0	0	1	0	1	82	23	105
07:15	4	1	5	0	1	1	0	0	0	115	27	142
07:30	6	0	6	1	0	1	0	0	0	170	24	194
07:45	4	3	7	0	0	0	0	0	0	162	38	200
H/Total	16	5	21	1	1	2	1	0	1	529	112	641
08:00	7	0	7	1	0	1	0	0	0	162	31	193
08:15	7	0	7	0	0	0	0	0	0	191	26	217
08:30	5	1	6	0	0	0	0	0	0	161	27	188
08:45	7	2	9	1	0	1	0	1	1	183	24	207
H/Total	26	3	29	2	0	2	0	1	1	697	108	805
09:00	8	0	8	0	0	0	0	0	0	95	28	123
09:15	3	0	3	0	1	1	0	0	0	99	13	112
09:30	3	1	4	2	1	3	0	0	0	77	34	111
09:45	3	0	3	0	0	0	0	0	0	73	30	103
H/Total	17	1	18	2	2	4	0	0	0	344	105	449
Total	59	9	68	5	3	8	1	1	2	1570	325	1895

Time	B - A			B - B			B - C			B - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	7	0	7	0	0	0	0	0	0	72	15	87
16:15	20	1	21	0	0	0	3	0	3	74	32	106
16:30	18	1	19	0	0	0	1	0	1	79	21	100
16:45	10	0	10	0	0	0	0	0	0	105	29	134
H/Total	55	2	57	0	0	0	4	0	4	330	97	427
17:00	18	0	18	0	0	0	0	0	0	88	28	116
17:15	15	0	15	0	1	1	2	0	2	85	25	110
17:30	14	0	14	0	0	0	2	0	2	111	27	138
17:45	20	0	20	0	0	0	2	0	2	92	29	121
H/Total	67	0	67	0	1	1	6	0	6	376	109	485
18:00	15	0	15	0	0	0	1	0	1	73	18	91
18:15	19	0	19	1	1	2	2	0	2	65	28	93
18:30	21	0	21	0	0	0	1	0	1	68	18	86
18:45	11	1	12	0	0	0	0	0	0	51	12	63
H/Total	66	1	67	1	1	2	4	0	4	257	76	333
Total	188	3	191	1	2	3	14	0	14	963	282	1245

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **3**
Location: **Coventry Road/ A4303/ Fairacres Roundabout**
Date: **15 May 2014, Thursday**

Time	C - A			C - B			C - C			C - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	1	0	1	0	0	0	1	0	1
07:30	1	0	1	0	0	0	0	0	0	1	0	1
07:45	0	1	1	2	0	2	0	0	0	1	0	1
H/Total	1	1	2	3	0	3	0	0	0	3	0	3
08:00	2	0	2	4	0	4	0	0	0	0	0	0
08:15	3	0	3	2	0	2	0	0	0	1	0	1
08:30	11	0	11	1	0	1	0	0	0	0	0	0
08:45	5	0	5	1	1	2	0	0	0	2	0	2
H/Total	21	0	21	8	1	9	0	0	0	3	0	3
09:00	1	0	1	1	1	2	0	0	0	2	0	2
09:15	0	0	0	0	0	0	0	0	0	0	0	0
09:30	1	0	1	0	0	0	0	0	0	0	1	1
09:45	2	0	2	0	0	0	0	0	0	0	0	0
H/Total	4	0	4	1	1	2	0	0	0	2	1	3
Total	26	1	27	12	2	14	0	0	0	8	1	9

Time	C - A			C - B			C - C			C - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	3	0	3	2	0	2	0	0	0	0	0	0
16:15	5	0	5	1	0	1	0	0	0	0	0	0
16:30	1	0	1	1	0	1	0	0	0	0	0	0
16:45	1	0	1	1	0	1	0	0	0	1	0	1
H/Total	10	0	10	5	0	5	0	0	0	1	0	1
17:00	0	0	0	0	0	0	0	0	0	1	0	1
17:15	4	0	4	0	0	0	0	0	0	0	0	0
17:30	1	0	1	0	0	0	0	0	0	0	0	0
17:45	2	0	2	1	0	1	0	0	0	2	0	2
H/Total	7	0	7	1	0	1	0	0	0	3	0	3
18:00	2	0	2	1	0	1	0	0	0	2	0	2
18:15	2	0	2	1	0	1	0	0	0	0	0	0
18:30	5	0	5	0	0	0	0	0	0	1	0	1
18:45	2	0	2	0	0	0	0	0	0	1	0	1
H/Total	11	0	11	2	0	2	0	0	0	4	0	4
Total	28	0	28	8	0	8	0	0	0	8	0	8

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **3**
Location: **Coventry Road/ A4303/ Fairacres Roundabout**
Date: **15 May 2014, Thursday**

Time	D - A			D - B			D - C			D - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	51	3	54	101	29	130	0	0	0	1	0	1
07:15	28	0	28	73	28	101	0	0	0	1	0	1
07:30	26	0	26	62	33	95	0	0	0	0	0	0
07:45	33	2	35	87	29	116	1	1	2	1	0	1
H/Total	138	5	143	323	119	442	1	1	2	3	0	3
08:00	45	0	45	77	28	105	0	0	0	2	0	2
08:15	56	2	58	74	21	95	1	0	1	0	2	2
08:30	42	3	45	86	32	118	0	1	1	1	0	1
08:45	51	3	54	65	21	86	0	0	0	1	0	1
H/Total	194	8	202	302	102	404	1	1	2	4	2	6
09:00	22	4	26	53	24	77	0	1	1	2	0	2
09:15	27	2	29	52	27	79	0	0	0	0	0	0
09:30	15	2	17	47	43	90	0	0	0	0	0	0
09:45	19	2	21	41	30	71	1	0	1	0	0	0
H/Total	83	10	93	193	124	317	1	1	2	2	0	2
Total	415	23	438	818	345	1163	3	3	6	9	2	11

Time	D - A			D - B			D - C			D - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	100	1	101	128	19	147	0	0	0	0	1	1
16:15	71	0	71	112	18	130	3	0	3	2	0	2
16:30	96	1	97	134	24	158	1	0	1	0	1	1
16:45	109	0	109	119	21	140	1	0	1	0	0	0
H/Total	376	2	378	493	82	575	5	0	5	2	2	4
17:00	137	2	139	151	22	173	0	0	0	1	0	1
17:15	119	1	120	153	26	179	1	0	1	0	0	0
17:30	155	1	156	196	29	225	2	0	2	1	0	1
17:45	96	0	96	151	19	170	2	0	2	0	0	0
H/Total	507	4	511	651	96	747	5	0	5	2	0	2
18:00	92	0	92	159	17	176	1	0	1	0	0	0
18:15	63	0	63	88	11	99	0	0	0	0	0	0
18:30	44	0	44	73	17	90	0	0	0	1	0	1
18:45	49	0	49	64	18	82	1	0	1	1	0	1
H/Total	248	0	248	384	63	447	2	0	2	2	0	2
Total	1131	6	1137	1528	241	1769	12	0	12	6	2	8

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **3**
Location: **Coventry Road/ A4303/ Fairacres Roundabout**
Date: **15 May 2014, Thursday**

Time	FROM A			TO A			FROM B			TO B		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	74	2	76	53	4	57	85	24	109	124	29	153
07:15	124	1	125	32	1	33	119	29	148	113	29	142
07:30	167	2	169	33	0	33	177	24	201	100	33	133
07:45	179	2	181	37	6	43	166	41	207	128	30	158
H/Total	544	7	551	155	11	166	547	118	665	465	121	586
08:00	179	2	181	54	0	54	170	31	201	121	28	149
08:15	167	2	169	66	2	68	198	26	224	109	21	130
08:30	149	6	155	58	4	62	166	28	194	111	34	145
08:45	130	4	134	64	5	69	191	27	218	92	22	114
H/Total	625	14	639	242	11	253	725	112	837	433	105	538
09:00	78	2	80	31	4	35	103	28	131	67	25	92
09:15	58	7	65	30	2	32	102	14	116	72	29	101
09:30	59	2	61	19	3	22	82	36	118	68	45	113
09:45	43	2	45	24	2	26	76	30	106	48	30	78
H/Total	238	13	251	104	11	115	363	108	471	255	129	384
Total	1407	34	1441	501	33	534	1635	338	1973	1153	355	1508

Time	FROM A			TO A			FROM B			TO B		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	61	1	62	110	1	111	79	15	94	146	20	166
16:15	56	1	57	96	1	97	97	33	130	127	18	145
16:30	39	0	39	115	2	117	98	22	120	145	24	169
16:45	46	1	47	120	0	120	115	29	144	133	22	155
H/Total	202	3	205	441	4	445	389	99	488	551	84	635
17:00	74	3	77	155	2	157	106	28	134	177	23	200
17:15	87	1	88	138	1	139	102	26	128	180	27	207
17:30	85	3	88	170	1	171	127	27	154	227	29	256
17:45	93	0	93	118	0	118	114	29	143	182	19	201
H/Total	339	7	346	581	4	585	449	110	559	766	98	864
18:00	46	0	46	109	0	109	89	18	107	166	17	183
18:15	35	1	36	84	0	84	87	29	116	99	12	111
18:30	39	0	39	70	0	70	90	18	108	81	17	98
18:45	35	0	35	62	1	63	62	13	75	75	18	93
H/Total	155	1	156	325	1	326	328	78	406	421	64	485
Total	696	11	707	1347	9	1356	1166	287	1453	1738	246	1984

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **3**
Location: **Coventry Road/ A4303/ Fairacres Roundabout**
Date: **15 May 2014, Thursday**

Time	FROM C			TO C			FROM D			TO D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	0	0	0	2	0	2	153	32	185	133	25	158
07:15	2	0	2	1	0	1	102	28	130	201	28	229
07:30	2	0	2	0	0	0	88	33	121	301	26	327
07:45	3	1	4	1	1	2	122	32	154	304	39	343
H/Total	7	1	8	4	1	5	465	125	590	939	118	1057
08:00	6	0	6	0	0	0	124	28	152	304	33	337
08:15	6	0	6	1	0	1	131	25	156	326	30	356
08:30	12	0	12	5	1	6	129	36	165	282	31	313
08:45	8	1	9	3	1	4	117	24	141	287	28	315
H/Total	32	1	33	9	2	11	501	113	614	1199	122	1321
09:00	4	1	5	6	1	7	77	29	106	158	30	188
09:15	0	0	0	2	0	2	79	29	108	135	19	154
09:30	1	1	2	2	0	2	62	45	107	115	36	151
09:45	2	0	2	2	0	2	61	32	93	108	32	140
H/Total	7	2	9	12	1	13	279	135	414	516	117	633
Total	46	4	50	25	4	29	1245	373	1618	2654	357	3011

Time	FROM C			TO C			FROM D			TO D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	5	0	5	2	0	2	228	21	249	115	16	131
16:15	6	0	6	10	0	10	188	18	206	114	33	147
16:30	2	0	2	6	0	6	231	26	257	104	22	126
16:45	3	0	3	4	0	4	229	21	250	136	29	165
H/Total	16	0	16	22	0	22	876	86	962	469	100	569
17:00	1	0	1	1	0	1	289	24	313	137	30	167
17:15	4	0	4	4	0	4	273	27	300	144	26	170
17:30	1	0	1	4	0	4	354	30	384	166	30	196
17:45	5	0	5	6	0	6	249	19	268	155	29	184
H/Total	11	0	11	15	0	15	1165	100	1265	602	115	717
18:00	5	0	5	3	0	3	252	17	269	114	18	132
18:15	3	0	3	5	0	5	151	11	162	88	29	117
18:30	6	0	6	3	0	3	118	17	135	99	18	117
18:45	3	0	3	5	0	5	115	18	133	73	12	85
H/Total	17	0	17	16	0	16	636	63	699	374	77	451
Total	44	0	44	53	0	53	2677	249	2926	1445	292	1737

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **3**
Location: **Coventry Road/ A4303/ Fairacres Roundabout**
Date: **15 May 2014, Thursday**

Time	WHOLE JUNCTION		
	LVs	HVs	TOTAL
07:00	312	58	370
07:15	347	58	405
07:30	434	59	493
07:45	470	76	546
H/Total	1563	251	1814
08:00	479	61	540
08:15	502	53	555
08:30	456	70	526
08:45	446	56	502
H/Total	1883	240	2123
09:00	262	60	322
09:15	239	50	289
09:30	204	84	288
09:45	182	64	246
H/Total	887	258	1145
Total	4333	749	5082

Peak Hours		Totals
07:00	08:00	1814
07:15	08:15	1984
07:30	08:30	2134
07:45	08:45	2167
08:00	09:00	2123
08:15	09:15	1905
08:30	09:30	1639
08:45	09:45	1401
09:00	10:00	1145

Time	WHOLE JUNCTION		
	LVs	HVs	TOTAL
16:00	373	37	410
16:15	347	52	399
16:30	370	48	418
16:45	393	51	444
H/Total	1483	188	1671
17:00	470	55	525
17:15	466	54	520
17:30	567	60	627
17:45	461	48	509
H/Total	1964	217	2181
18:00	392	35	427
18:15	276	41	317
18:30	253	35	288
18:45	215	31	246
H/Total	1136	142	1278
Total	4583	547	5130

Peak Hours		Totals
16:00	17:00	1671
16:15	17:15	1786
16:30	17:30	1907
16:45	17:45	2116
17:00	18:00	2181
17:15	18:15	2083
17:30	18:30	1880
17:45	18:45	1541
18:00	19:00	1278

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **4**
Location: **A426 Rugby Road/ A4303 Lutterworth Road Roundabout**

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **4**
Location: **A426 Rugby Road/ A4303 Lutterworth Road Roundabout**
Date: **15 May 2014, Thursday**

Time	A - A			A - B			A - C			A - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	0	0	0	93	8	101	69	0	69	18	1	19
07:15	0	0	0	99	7	106	67	4	71	20	0	20
07:30	0	0	0	96	9	105	92	4	96	26	0	26
07:45	0	0	0	110	13	123	83	1	84	23	1	24
H/Total	0	0	0	398	37	435	311	9	320	87	2	89
08:00	0	0	0	100	11	111	58	7	65	19	1	20
08:15	0	0	0	120	12	132	85	4	89	24	1	25
08:30	0	0	0	100	14	114	57	6	63	20	3	23
08:45	0	0	0	90	12	102	60	3	63	21	1	22
H/Total	0	0	0	410	49	459	260	20	280	84	6	90
09:00	0	0	0	90	6	96	56	4	60	21	4	25
09:15	1	0	1	66	7	73	43	4	47	19	3	22
09:30	0	0	0	63	8	71	52	7	59	23	1	24
09:45	0	0	0	50	5	55	42	5	47	19	2	21
H/Total	1	0	1	269	26	295	193	20	213	82	10	92
Total	1	0	1	1077	112	1189	764	49	813	253	18	271

Time	A - A			A - B			A - C			A - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	0	0	0	83	4	87	54	2	56	19	5	24
16:15	0	0	0	83	4	87	54	2	56	14	0	14
16:30	0	0	0	75	4	79	59	1	60	19	0	19
16:45	0	0	0	75	3	78	51	1	52	19	0	19
H/Total	0	0	0	316	15	331	218	6	224	71	5	76
17:00	0	0	0	107	2	109	75	3	78	40	1	41
17:15	0	0	0	94	2	96	85	1	86	23	1	24
17:30	0	0	0	103	0	103	77	0	77	24	1	25
17:45	0	0	0	105	3	108	64	1	65	22	3	25
H/Total	0	0	0	409	7	416	301	5	306	109	6	115
18:00	0	0	0	85	1	86	65	2	67	15	3	18
18:15	0	0	0	77	1	78	46	0	46	16	0	16
18:30	0	0	0	63	2	65	46	1	47	15	1	16
18:45	0	0	0	57	1	58	39	2	41	14	0	14
H/Total	0	0	0	282	5	287	196	5	201	60	4	64
Total	0	0	0	1007	27	1034	715	16	731	240	15	255

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **4**
Location: **A426 Rugby Road/ A4303 Lutterworth Road Roundabout**
Date: **15 May 2014, Thursday**

Time	B - A			B - B			B - C			B - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	38	9	47	0	0	0	74	14	88	72	22	94
07:15	77	9	86	0	0	0	90	9	99	110	29	139
07:30	97	3	100	0	0	0	113	18	131	132	23	155
07:45	86	15	101	0	0	0	104	11	115	129	39	168
H/Total	298	36	334	0	0	0	381	52	433	443	113	556
08:00	114	10	124	0	0	0	129	10	139	120	28	148
08:15	121	14	135	0	0	0	139	9	148	135	26	161
08:30	115	10	125	0	0	0	55	15	70	155	26	181
08:45	134	10	144	0	0	0	43	14	57	162	22	184
H/Total	484	44	528	0	0	0	366	48	414	572	102	674
09:00	97	9	106	0	0	0	47	11	58	87	20	107
09:15	72	9	81	0	0	0	44	14	58	88	10	98
09:30	51	5	56	0	0	0	68	17	85	58	37	95
09:45	58	5	63	0	0	0	50	11	61	67	29	96
H/Total	278	28	306	0	0	0	209	53	262	300	96	396
Total	1060	108	1168	0	0	0	956	153	1109	1315	311	1626

Time	B - A			B - B			B - C			B - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	88	9	97	0	0	0	46	11	57	58	28	86
16:15	84	6	90	0	0	0	75	19	94	72	24	96
16:30	92	8	100	0	0	0	64	12	76	65	26	91
16:45	120	11	131	0	0	0	71	14	85	85	24	109
H/Total	384	34	418	0	0	0	256	56	312	280	102	382
17:00	98	6	104	0	0	0	80	14	94	68	27	95
17:15	120	5	125	0	0	0	92	11	103	83	22	105
17:30	127	2	129	0	0	0	85	8	93	88	27	115
17:45	114	2	116	0	0	0	76	9	85	96	23	119
H/Total	459	15	474	0	0	0	333	42	375	335	99	434
18:00	137	6	143	0	0	0	63	4	67	71	17	88
18:15	127	6	133	0	0	0	50	12	62	59	25	84
18:30	80	3	83	0	0	0	51	8	59	70	16	86
18:45	79	2	81	0	0	0	30	8	38	45	15	60
H/Total	423	17	440	0	0	0	194	32	226	245	73	318
Total	1266	66	1332	0	0	0	783	130	913	860	274	1134

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **4**
Location: **A426 Rugby Road/ A4303 Lutterworth Road Roundabout**
Date: **15 May 2014, Thursday**

Time	C - A			C - B			C - C			C - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	43	2	45	50	10	60	0	0	0	1	0	1
07:15	35	3	38	76	11	87	0	0	0	4	2	6
07:30	58	3	61	81	13	94	0	0	0	4	0	4
07:45	71	2	73	75	7	82	0	0	0	6	3	9
H/Total	207	10	217	282	41	323	0	0	0	15	5	20
08:00	65	4	69	55	8	63	0	0	0	7	0	7
08:15	81	5	86	54	11	65	0	0	0	7	0	7
08:30	62	8	70	53	11	64	0	0	0	5	0	5
08:45	72	6	78	49	7	56	0	0	0	8	0	8
H/Total	280	23	303	211	37	248	0	0	0	27	0	27
09:00	58	10	68	30	10	40	0	0	0	6	0	6
09:15	42	4	46	57	18	75	0	0	0	2	0	2
09:30	47	3	50	44	11	55	0	0	0	5	1	6
09:45	54	5	59	35	14	49	0	0	0	2	0	2
H/Total	201	22	223	166	53	219	0	0	0	15	1	16
Total	688	55	743	659	131	790	0	0	0	57	6	63

Time	C - A			C - B			C - C			C - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	75	2	77	73	9	82	0	0	0	4	0	4
16:15	74	1	75	74	13	87	0	0	0	10	0	10
16:30	66	7	73	73	10	83	0	0	0	2	0	2
16:45	95	4	99	75	8	83	0	0	0	5	0	5
H/Total	310	14	324	295	40	335	0	0	0	21	0	21
17:00	84	2	86	77	5	82	0	0	0	7	0	7
17:15	79	2	81	73	6	79	0	0	0	5	0	5
17:30	85	2	87	84	7	91	0	0	0	9	0	9
17:45	98	0	98	66	6	72	0	0	0	8	0	8
H/Total	346	6	352	300	24	324	0	0	0	29	0	29
18:00	88	0	88	59	9	68	0	0	0	3	0	3
18:15	89	1	90	83	5	88	0	1	1	6	0	6
18:30	68	2	70	71	4	75	1	0	1	10	0	10
18:45	71	1	72	51	3	54	0	0	0	2	1	3
H/Total	316	4	320	264	21	285	1	1	2	21	1	22
Total	972	24	996	859	85	944	1	1	2	71	1	72

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **4**
Location: **A426 Rugby Road/ A4303 Lutterworth Road Roundabout**
Date: **15 May 2014, Thursday**

Time	D - A			D - B			D - C			D - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	3	1	4	119	20	139	1	2	3	0	0	0
07:15	5	3	8	97	30	127	3	0	3	0	0	0
07:30	10	2	12	95	22	117	5	2	7	0	0	0
07:45	12	2	14	103	33	136	10	2	12	0	0	0
H/Total	30	8	38	414	105	519	19	6	25	0	0	0
08:00	10	3	13	97	20	117	7	2	9	0	0	0
08:15	22	1	23	86	22	108	5	0	5	0	0	0
08:30	29	1	30	81	32	113	6	0	6	0	0	0
08:45	23	6	29	75	19	94	2	0	2	0	0	0
H/Total	84	11	95	339	93	432	20	2	22	0	0	0
09:00	11	0	11	53	23	76	6	1	7	0	0	0
09:15	10	1	11	54	31	85	2	3	5	0	0	0
09:30	10	2	12	43	34	77	7	1	8	0	0	0
09:45	10	3	13	35	27	62	0	2	2	0	0	0
H/Total	41	6	47	185	115	300	15	7	22	0	0	0
Total	155	25	180	938	313	1251	54	15	69	0	0	0

Time	D - A			D - B			D - C			D - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	14	0	14	126	21	147	5	0	5	0	0	0
16:15	16	1	17	104	18	122	5	2	7	0	0	0
16:30	14	2	16	128	17	145	5	0	5	0	0	0
16:45	17	4	21	102	17	119	2	2	4	0	0	0
H/Total	61	7	68	460	73	533	17	4	21	0	0	0
17:00	24	1	25	150	24	174	11	0	11	0	0	0
17:15	15	2	17	147	21	168	13	2	15	0	0	0
17:30	24	1	25	171	25	196	5	0	5	0	0	0
17:45	22	0	22	166	22	188	5	0	5	0	0	0
H/Total	85	4	89	634	92	726	34	2	36	0	0	0
18:00	19	0	19	154	16	170	4	0	4	0	0	0
18:15	17	2	19	84	11	95	2	1	3	0	0	0
18:30	14	1	15	61	13	74	3	0	3	0	0	0
18:45	12	1	13	59	17	76	7	1	8	0	0	0
H/Total	62	4	66	358	57	415	16	2	18	0	0	0
Total	208	15	223	1452	222	1674	67	8	75	0	0	0

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **4**
Location: **A426 Rugby Road/ A4303 Lutterworth Road Roundabout**
Date: **15 May 2014, Thursday**

Time	FROM A			TO A			FROM B			TO B		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	180	9	189	84	12	96	184	45	229	262	38	300
07:15	186	11	197	117	15	132	277	47	324	272	48	320
07:30	214	13	227	165	8	173	342	44	386	272	44	316
07:45	216	15	231	169	19	188	319	65	384	288	53	341
H/Total	796	48	844	535	54	589	1122	201	1323	1094	183	1277
08:00	177	19	196	189	17	206	363	48	411	252	39	291
08:15	229	17	246	224	20	244	395	49	444	260	45	305
08:30	177	23	200	206	19	225	325	51	376	234	57	291
08:45	171	16	187	229	22	251	339	46	385	214	38	252
H/Total	754	75	829	848	78	926	1422	194	1616	960	179	1139
09:00	167	14	181	166	19	185	231	40	271	173	39	212
09:15	129	14	143	125	14	139	204	33	237	177	56	233
09:30	138	16	154	108	10	118	177	59	236	150	53	203
09:45	111	12	123	122	13	135	175	45	220	120	46	166
H/Total	545	56	601	521	56	577	787	177	964	620	194	814
Total	2095	179	2274	1904	188	2092	3331	572	3903	2674	556	3230

Time	FROM A			TO A			FROM B			TO B		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	156	11	167	177	11	188	192	48	240	282	34	316
16:15	151	6	157	174	8	182	231	49	280	261	35	296
16:30	153	5	158	172	17	189	221	46	267	276	31	307
16:45	145	4	149	232	19	251	276	49	325	252	28	280
H/Total	605	26	631	755	55	810	920	192	1112	1071	128	1199
17:00	222	6	228	206	9	215	246	47	293	334	31	365
17:15	202	4	206	214	9	223	295	38	333	314	29	343
17:30	204	1	205	236	5	241	300	37	337	358	32	390
17:45	191	7	198	234	2	236	286	34	320	337	31	368
H/Total	819	18	837	890	25	915	1127	156	1283	1343	123	1466
18:00	165	6	171	244	6	250	271	27	298	298	26	324
18:15	139	1	140	233	9	242	236	43	279	244	17	261
18:30	124	4	128	162	6	168	201	27	228	195	19	214
18:45	110	3	113	162	4	166	154	25	179	167	21	188
H/Total	538	14	552	801	25	826	862	122	984	904	83	987
Total	1962	58	2020	2446	105	2551	2909	470	3379	3318	334	3652

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **4**
Location: **A426 Rugby Road/ A4303 Lutterworth Road Roundabout**
Date: **15 May 2014, Thursday**

Time	FROM C			TO C			FROM D			TO D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	94	12	106	144	16	160	123	23	146	91	23	114
07:15	115	16	131	160	13	173	105	33	138	134	31	165
07:30	143	16	159	210	24	234	110	26	136	162	23	185
07:45	152	12	164	197	14	211	125	37	162	158	43	201
H/Total	504	56	560	711	67	778	463	119	582	545	120	665
08:00	127	12	139	194	19	213	114	25	139	146	29	175
08:15	142	16	158	229	13	242	113	23	136	166	27	193
08:30	120	19	139	118	21	139	116	33	149	180	29	209
08:45	129	13	142	105	17	122	100	25	125	191	23	214
H/Total	518	60	578	646	70	716	443	106	549	683	108	791
09:00	94	20	114	109	16	125	70	24	94	114	24	138
09:15	101	22	123	89	21	110	66	35	101	109	13	122
09:30	96	15	111	127	25	152	60	37	97	86	39	125
09:45	91	19	110	92	18	110	45	32	77	88	31	119
H/Total	382	76	458	417	80	497	241	128	369	397	107	504
Total	1404	192	1596	1774	217	1991	1147	353	1500	1625	335	1960

Time	FROM C			TO C			FROM D			TO D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	152	11	163	105	13	118	145	21	166	81	33	114
16:15	158	14	172	134	23	157	125	21	146	96	24	120
16:30	141	17	158	128	13	141	147	19	166	86	26	112
16:45	175	12	187	124	17	141	121	23	144	109	24	133
H/Total	626	54	680	491	66	557	538	84	622	372	107	479
17:00	168	7	175	166	17	183	185	25	210	115	28	143
17:15	157	8	165	190	14	204	175	25	200	111	23	134
17:30	178	9	187	167	8	175	200	26	226	121	28	149
17:45	172	6	178	145	10	155	193	22	215	126	26	152
H/Total	675	30	705	668	49	717	753	98	851	473	105	578
18:00	150	9	159	132	6	138	177	16	193	89	20	109
18:15	178	7	185	98	14	112	103	14	117	81	25	106
18:30	150	6	156	101	9	110	78	14	92	95	17	112
18:45	124	5	129	76	11	87	78	19	97	61	16	77
H/Total	602	27	629	407	40	447	436	63	499	326	78	404
Total	1903	111	2014	1566	155	1721	1727	245	1972	1171	290	1461

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **4**
Location: **A426 Rugby Road/ A4303 Lutterworth Road Roundabout**
Date: **15 May 2014, Thursday**

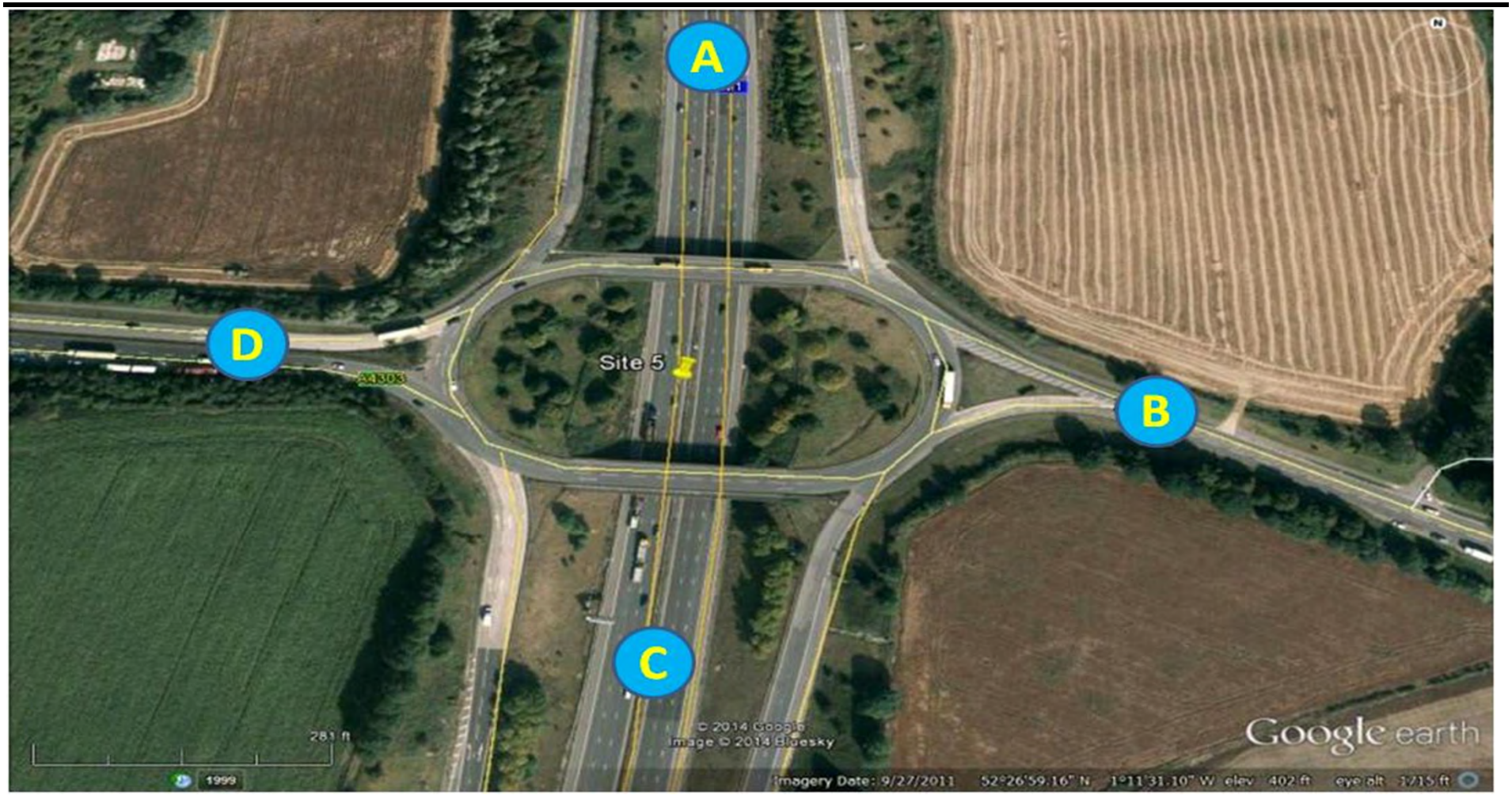
Time	WHOLE JUNCTION		
	LVs	HVs	TOTAL
07:00	581	89	670
07:15	683	107	790
07:30	809	99	908
07:45	812	129	941
H/Total	2885	424	3309
08:00	781	104	885
08:15	879	105	984
08:30	738	126	864
08:45	739	100	839
H/Total	3137	435	3572
09:00	562	98	660
09:15	500	104	604
09:30	471	127	598
09:45	422	108	530
H/Total	1955	437	2392
Total	7977	1296	9273

Peak Hours		Totals
07:00	08:00	3309
07:15	08:15	3524
07:30	08:30	3718
07:45	08:45	3674
08:00	09:00	3572
08:15	09:15	3347
08:30	09:30	2967
08:45	09:45	2701
09:00	10:00	2392

Time	WHOLE JUNCTION		
	LVs	HVs	TOTAL
16:00	645	91	736
16:15	665	90	755
16:30	662	87	749
16:45	717	88	805
H/Total	2689	356	3045
17:00	821	85	906
17:15	829	75	904
17:30	882	73	955
17:45	842	69	911
H/Total	3374	302	3676
18:00	763	58	821
18:15	656	65	721
18:30	553	51	604
18:45	466	52	518
H/Total	2438	226	2664
Total	8501	884	9385

Peak Hours		Totals
16:00	17:00	3045
16:15	17:15	3215
16:30	17:30	3364
16:45	17:45	3570
17:00	18:00	3676
17:15	18:15	3591
17:30	18:30	3408
17:45	18:45	3057
18:00	19:00	2664

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **5**
Location: **M1/ A4304/ A4303 Roundabout**



Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **5**
Location: **M1/ A4304/ A4303 Roundabout**
Date: **15 May 2014, Thursday**

traffic survey partners

Time	A - A			A - B			A - C			A - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	0	0	0	23	6	29	0	0	0	79	23	102
07:15	0	0	0	14	1	15	1	0	1	113	19	132
07:30	0	0	0	24	3	27	0	0	0	160	28	188
07:45	0	0	0	45	0	45	0	0	0	146	22	168
H/Total	0	0	0	106	10	116	1	0	1	498	92	590
08:00	0	0	0	21	3	24	1	0	1	173	15	188
08:15	0	0	0	18	2	20	0	0	0	179	23	202
08:30	0	0	0	27	1	28	0	1	1	158	20	178
08:45	0	0	0	29	3	32	1	1	2	173	19	192
H/Total	0	0	0	95	9	104	2	2	4	683	77	760
09:00	0	0	0	16	2	18	1	0	1	90	17	107
09:15	0	0	0	16	1	17	0	0	0	90	21	111
09:30	0	0	0	19	4	23	0	1	1	83	22	105
09:45	0	0	0	10	3	13	0	0	0	70	18	88
H/Total	0	0	0	61	10	71	1	1	2	333	78	411
Total	0	0	0	262	29	291	4	3	7	1514	247	1761

Time	A - A			A - B			A - C			A - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	0	0	0	37	1	38	1	0	1	56	15	71
16:15	0	0	0	26	1	27	0	0	0	82	21	103
16:30	0	0	0	32	1	33	2	0	2	81	20	101
16:45	0	0	0	37	1	38	1	0	1	95	15	110
H/Total	0	0	0	132	4	136	4	0	4	314	71	385
17:00	0	0	0	52	1	53	0	0	0	101	17	118
17:15	0	0	0	59	1	60	2	0	2	127	12	139
17:30	0	0	0	53	5	58	0	0	0	129	14	143
17:45	0	0	0	54	3	57	1	0	1	121	19	140
H/Total	0	0	0	218	10	228	3	0	3	478	62	540
18:00	0	0	0	45	0	45	0	0	0	100	10	110
18:15	0	0	0	39	1	40	0	0	0	87	16	103
18:30	0	0	0	34	0	34	1	0	1	68	9	77
18:45	0	0	0	22	0	22	0	0	0	41	13	54
H/Total	0	0	0	140	1	141	1	0	1	296	48	344
Total	0	0	0	490	15	505	8	0	8	1088	181	1269

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **5**
Location: **M1/ A4304/ A4303 Roundabout**
Date: **15 May 2014, Thursday**

Time	B - A			B - B			B - C			B - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	31	0	31	0	0	0	24	1	25	62	4	66
07:15	35	1	36	0	0	0	27	4	31	92	3	95
07:30	43	1	44	0	0	0	35	4	39	87	6	93
07:45	55	0	55	0	0	0	24	1	25	89	6	95
H/Total	164	2	166	0	0	0	110	10	120	330	19	349
08:00	65	1	66	0	0	0	19	0	19	129	6	135
08:15	73	4	77	0	0	0	23	0	23	114	8	122
08:30	46	8	54	0	0	0	23	3	26	106	12	118
08:45	36	4	40	0	0	0	15	2	17	121	5	126
H/Total	220	17	237	0	0	0	80	5	85	470	31	501
09:00	33	5	38	1	0	1	26	0	26	83	7	90
09:15	25	3	28	0	0	0	13	1	14	62	3	65
09:30	12	3	15	0	0	0	10	1	11	46	5	51
09:45	22	3	25	1	0	1	12	2	14	52	7	59
H/Total	92	14	106	2	0	2	61	4	65	243	22	265
Total	476	33	509	2	0	2	251	19	270	1043	72	1115

Time	B - A			B - B			B - C			B - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	25	6	31	0	0	0	12	1	13	77	14	91
16:15	40	6	46	2	0	2	18	1	19	94	8	102
16:30	29	3	32	0	0	0	12	2	14	86	10	96
16:45	52	0	52	0	0	0	9	2	11	114	2	116
H/Total	146	15	161	2	0	2	51	6	57	371	34	405
17:00	27	4	31	0	0	0	11	0	11	90	12	102
17:15	52	4	56	0	0	0	11	2	13	105	7	112
17:30	29	0	29	1	0	1	10	3	13	97	2	99
17:45	23	2	25	0	0	0	12	1	13	81	2	83
H/Total	131	10	141	1	0	1	44	6	50	373	23	396
18:00	21	1	22	0	0	0	3	2	5	81	4	85
18:15	21	0	21	0	0	0	6	1	7	56	9	65
18:30	20	0	20	0	0	0	7	2	9	64	2	66
18:45	15	0	15	0	0	0	2	0	2	51	3	54
H/Total	77	1	78	0	0	0	18	5	23	252	18	270
Total	354	26	380	3	0	3	113	17	130	996	75	1071

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **5**
Location: **M1/ A4304/ A4303 Roundabout**
Date: **15 May 2014, Thursday**

Time	C - A			C - B			C - C			C - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	0	0	0	2	4	6	0	5	5	41	16	57
07:15	0	0	0	7	1	8	4	3	7	57	24	81
07:30	0	0	0	2	4	6	7	2	9	90	13	103
07:45	0	0	0	5	0	5	4	5	9	78	37	115
H/Total	0	0	0	16	9	25	15	15	30	266	90	356
08:00	0	0	0	11	4	15	3	1	4	62	28	90
08:15	0	0	0	9	1	10	1	1	2	82	20	102
08:30	0	1	1	8	0	8	2	2	4	91	18	109
08:45	0	0	0	8	0	8	4	4	8	89	19	108
H/Total	0	1	1	36	5	41	10	8	18	324	85	409
09:00	0	0	0	9	1	10	4	4	8	67	18	85
09:15	0	0	0	4	4	8	0	1	1	42	11	53
09:30	0	0	0	7	0	7	2	0	2	42	31	73
09:45	0	0	0	7	1	8	2	5	7	47	22	69
H/Total	0	0	0	27	6	33	8	10	18	198	82	280
Total	0	1	1	79	20	99	33	33	66	788	257	1045

Time	C - A			C - B			C - C			C - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	0	0	0	17	1	18	2	4	6	51	22	73
16:15	1	0	1	16	3	19	1	1	2	56	18	74
16:30	0	0	0	12	1	13	2	3	5	58	19	77
16:45	0	0	0	30	1	31	2	4	6	67	21	88
H/Total	1	0	1	75	6	81	7	12	19	232	80	312
17:00	0	0	0	19	2	21	1	3	4	63	17	80
17:15	1	0	1	29	0	29	2	2	4	75	23	98
17:30	0	0	0	18	0	18	1	3	4	81	21	102
17:45	0	0	0	14	3	17	1	2	3	90	12	102
H/Total	1	0	1	80	5	85	5	10	15	309	73	382
18:00	0	0	0	23	0	23	2	2	4	97	15	112
18:15	0	0	0	24	1	25	2	1	3	90	22	112
18:30	0	0	0	22	2	24	0	1	1	68	13	81
18:45	0	0	0	20	1	21	2	1	3	55	7	62
H/Total	0	0	0	89	4	93	6	5	11	310	57	367
Total	2	0	2	244	15	259	18	27	45	851	210	1061

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **5**
Location: **M1/ A4304/ A4303 Roundabout**
Date: **15 May 2014, Thursday**

Time	D - A			D - B			D - C			D - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	140	21	161	39	3	42	98	16	114	0	0	0
07:15	120	23	143	59	8	67	93	15	108	0	0	0
07:30	133	23	156	62	7	69	79	15	94	0	0	0
07:45	121	23	144	67	2	69	104	27	131	0	0	0
H/Total	514	90	604	227	20	247	374	73	447	0	0	0
08:00	123	20	143	65	5	70	73	15	88	0	0	0
08:15	100	22	122	59	4	63	77	17	94	0	0	0
08:30	77	22	99	82	7	89	70	26	96	0	0	0
08:45	67	18	85	63	3	66	50	19	69	0	0	0
H/Total	367	82	449	269	19	288	270	77	347	0	0	0
09:00	57	15	72	52	7	59	61	19	80	0	0	0
09:15	71	23	94	58	4	62	50	29	79	0	0	0
09:30	50	25	75	52	4	56	52	25	77	0	0	0
09:45	50	18	68	37	8	45	40	18	58	0	0	0
H/Total	228	81	309	199	23	222	203	91	294	0	0	0
Total	1109	253	1362	695	62	757	847	241	1088	0	0	0

Time	D - A			D - B			D - C			D - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	141	14	155	77	0	77	59	15	74	0	0	0
16:15	110	26	136	86	3	89	67	8	75	0	0	0
16:30	132	17	149	84	4	88	55	9	64	0	0	0
16:45	121	7	128	79	4	83	46	18	64	0	0	0
H/Total	504	64	568	326	11	337	227	50	277	0	0	0
17:00	155	12	167	100	3	103	67	15	82	0	0	0
17:15	130	13	143	124	3	127	67	15	82	1	0	1
17:30	154	17	171	118	2	120	74	12	86	0	0	0
17:45	146	19	165	125	0	125	86	13	99	0	0	0
H/Total	585	61	646	467	8	475	294	55	349	1	0	1
18:00	150	17	167	103	3	106	54	10	64	0	0	0
18:15	114	10	124	84	1	85	44	5	49	0	0	0
18:30	82	9	91	77	0	77	38	12	50	0	0	0
18:45	60	7	67	83	1	84	33	12	45	0	0	0
H/Total	406	43	449	347	5	352	169	39	208	0	0	0
Total	1495	168	1663	1140	24	1164	690	144	834	1	0	1

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **5**
Location: **M1/ A4304/ A4303 Roundabout**
Date: **15 May 2014, Thursday**

traffic survey partners

Time	FROM A			TO A			FROM B			TO B		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	102	29	131	171	21	192	117	5	122	64	13	77
07:15	128	20	148	155	24	179	154	8	162	80	10	90
07:30	184	31	215	176	24	200	165	11	176	88	14	102
07:45	191	22	213	176	23	199	168	7	175	117	2	119
H/Total	605	102	707	678	92	770	604	31	635	349	39	388
08:00	195	18	213	188	21	209	213	7	220	97	12	109
08:15	197	25	222	173	26	199	210	12	222	86	7	93
08:30	185	22	207	123	31	154	175	23	198	117	8	125
08:45	203	23	226	103	22	125	172	11	183	100	6	106
H/Total	780	88	868	587	100	687	770	53	823	400	33	433
09:00	107	19	126	90	20	110	143	12	155	78	10	88
09:15	106	22	128	96	26	122	100	7	107	78	9	87
09:30	102	27	129	62	28	90	68	9	77	78	8	86
09:45	80	21	101	72	21	93	87	12	99	55	12	67
H/Total	395	89	484	320	95	415	398	40	438	289	39	328
Total	1780	279	2059	1585	287	1872	1772	124	1896	1038	111	1149

Time	FROM A			TO A			FROM B			TO B		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	94	16	110	166	20	186	114	21	135	131	2	133
16:15	108	22	130	151	32	183	154	15	169	130	7	137
16:30	115	21	136	161	20	181	127	15	142	128	6	134
16:45	133	16	149	173	7	180	175	4	179	146	6	152
H/Total	450	75	525	651	79	730	570	55	625	535	21	556
17:00	153	18	171	182	16	198	128	16	144	171	6	177
17:15	188	13	201	183	17	200	168	13	181	212	4	216
17:30	182	19	201	183	17	200	137	5	142	190	7	197
17:45	176	22	198	169	21	190	116	5	121	193	6	199
H/Total	699	72	771	717	71	788	549	39	588	766	23	789
18:00	145	10	155	171	18	189	105	7	112	171	3	174
18:15	126	17	143	135	10	145	83	10	93	147	3	150
18:30	103	9	112	102	9	111	91	4	95	133	2	135
18:45	63	13	76	75	7	82	68	3	71	125	2	127
H/Total	437	49	486	483	44	527	347	24	371	576	10	586
Total	1586	196	1782	1851	194	2045	1466	118	1584	1877	54	1931

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **5**
Location: **M1/ A4304/ A4303 Roundabout**
Date: **15 May 2014, Thursday**

traffic survey partners

Time	FROM C			TO C			FROM D			TO D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	43	25	68	122	22	144	277	40	317	182	43	225
07:15	68	28	96	125	22	147	272	46	318	262	46	308
07:30	99	19	118	121	21	142	274	45	319	337	47	384
07:45	87	42	129	132	33	165	292	52	344	313	65	378
H/Total	297	114	411	500	98	598	1115	183	1298	1094	201	1295
08:00	76	33	109	96	16	112	261	40	301	364	49	413
08:15	92	22	114	101	18	119	236	43	279	375	51	426
08:30	101	21	122	95	32	127	229	55	284	355	50	405
08:45	101	23	124	70	26	96	180	40	220	383	43	426
H/Total	370	99	469	362	92	454	906	178	1084	1477	193	1670
09:00	80	23	103	92	23	115	170	41	211	240	42	282
09:15	46	16	62	63	31	94	179	56	235	194	35	229
09:30	51	31	82	64	27	91	154	54	208	171	58	229
09:45	56	28	84	54	25	79	127	44	171	169	47	216
H/Total	233	98	331	273	106	379	630	195	825	774	182	956
Total	900	311	1211	1135	296	1431	2651	556	3207	3345	576	3921

Time	FROM C			TO C			FROM D			TO D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	70	27	97	74	20	94	277	29	306	184	51	235
16:15	74	22	96	86	10	96	263	37	300	232	47	279
16:30	72	23	95	71	14	85	271	30	301	225	49	274
16:45	99	26	125	58	24	82	246	29	275	276	38	314
H/Total	315	98	413	289	68	357	1057	125	1182	917	185	1102
17:00	83	22	105	79	18	97	322	30	352	254	46	300
17:15	107	25	132	82	19	101	322	31	353	308	42	350
17:30	100	24	124	85	18	103	346	31	377	307	37	344
17:45	105	17	122	100	16	116	357	32	389	292	33	325
H/Total	395	88	483	346	71	417	1347	124	1471	1161	158	1319
18:00	122	17	139	59	14	73	307	30	337	278	29	307
18:15	116	24	140	52	7	59	242	16	258	233	47	280
18:30	90	16	106	46	15	61	197	21	218	200	24	224
18:45	77	9	86	37	13	50	176	20	196	147	23	170
H/Total	405	66	471	194	49	243	922	87	1009	858	123	981
Total	1115	252	1367	829	188	1017	3326	336	3662	2936	466	3402

Project Number:	TSP11713
Project Name:	Lutterworth
Survey Type:	Manual Classified Traffic Count
Site No:	5
Location:	M1/ A4304/ A4303 Roundabout
Date:	15 May 2014, Thursday

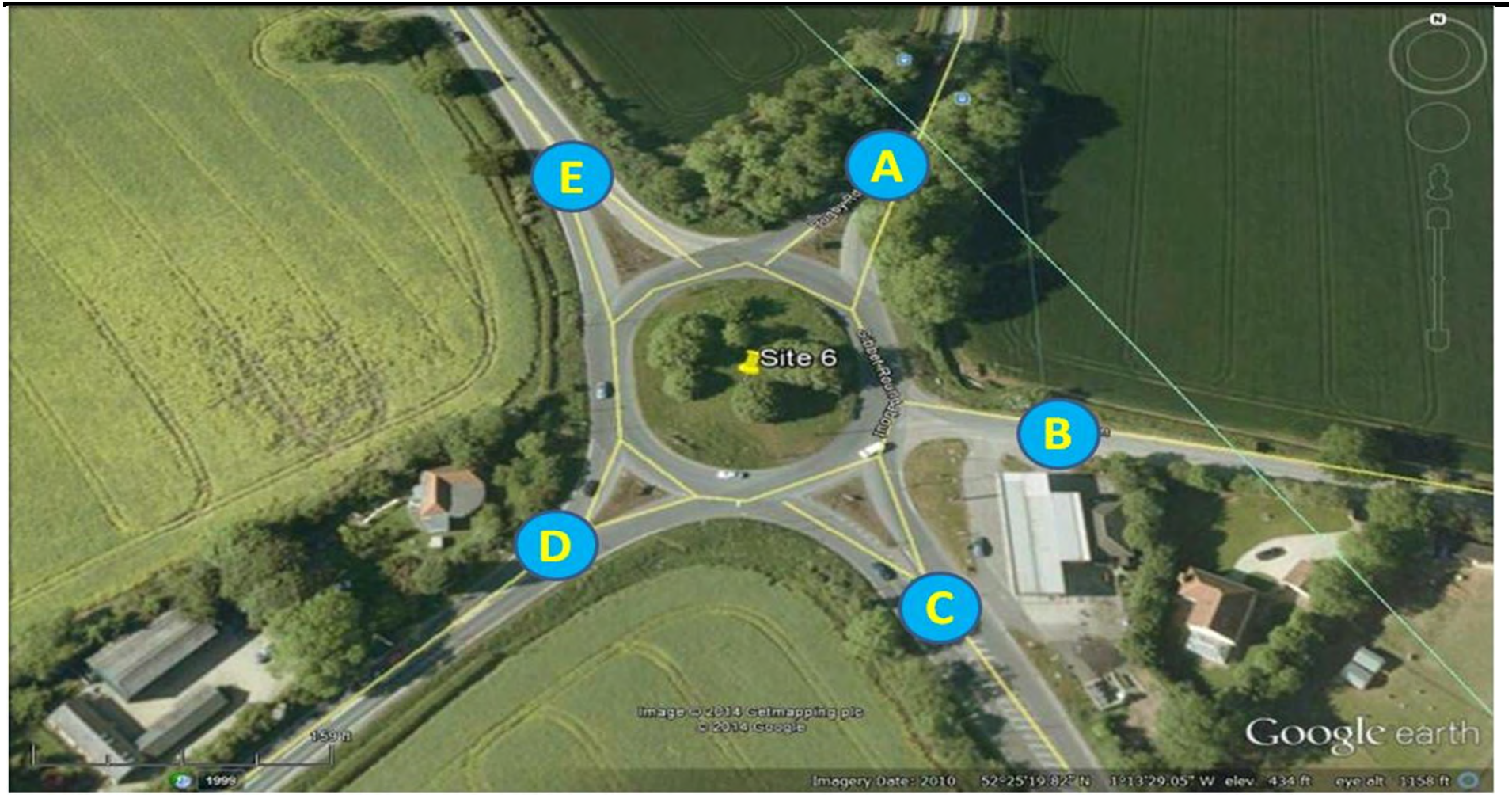
Time	WHOLE JUNCTION		
	LVs	HVs	TOTAL
07:00	539	99	638
07:15	622	102	724
07:30	722	106	828
07:45	738	123	861
H/Total	2621	430	3051
08:00	745	98	843
08:15	735	102	837
08:30	690	121	811
08:45	656	97	753
H/Total	2826	418	3244
09:00	500	95	595
09:15	431	101	532
09:30	375	121	496
09:45	350	105	455
H/Total	1656	422	2078
Total	7103	1270	8373

Peak Hours		Totals
07:00	08:00	3051
07:15	08:15	3256
07:30	08:30	3369
07:45	08:45	3352
08:00	09:00	3244
08:15	09:15	2996
08:30	09:30	2691
08:45	09:45	2376
09:00	10:00	2078

Time	WHOLE JUNCTION		
	LVs	HVs	TOTAL
16:00	555	93	648
16:15	599	96	695
16:30	585	89	674
16:45	653	75	728
H/Total	2392	353	2745
17:00	686	86	772
17:15	785	82	867
17:30	765	79	844
17:45	754	76	830
H/Total	2990	323	3313
18:00	679	64	743
18:15	567	67	634
18:30	481	50	531
18:45	384	45	429
H/Total	2111	226	2337
Total	7493	902	8395

Peak Hours		Totals
16:00	17:00	2745
16:15	17:15	2869
16:30	17:30	3041
16:45	17:45	3211
17:00	18:00	3313
17:15	18:15	3284
17:30	18:30	3051
17:45	18:45	2738
18:00	19:00	2337

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **6**
Location: **A426 Rugby Road / A5 Roundabout**



Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **6**
Location: **A426 Rugby Road / A5 Roundabout**
Date: **15 May 2014, Thursday**

Time	A - A			A - B			A - C			A - D			A - E		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	0	0	0	3	1	4	13	2	15	120	12	132	0	0	0
07:15	0	0	0	7	4	11	29	3	32	122	7	129	1	0	1
07:30	0	0	0	4	0	4	31	8	39	100	7	107	0	0	0
07:45	0	1	1	6	3	9	31	4	35	90	14	104	2	0	2
H/Total	0	1	1	20	8	28	104	17	121	432	40	472	3	0	3
08:00	0	0	0	5	3	8	32	4	36	102	11	113	0	0	0
08:15	0	0	0	4	1	5	26	1	27	123	8	131	0	0	0
08:30	0	0	0	7	4	11	39	5	44	88	14	102	0	0	0
08:45	0	0	0	7	0	7	18	6	24	95	5	100	0	0	0
H/Total	0	0	0	23	8	31	115	16	131	408	38	446	0	0	0
09:00	0	0	0	3	4	7	24	3	27	88	15	103	2	1	3
09:15	1	0	1	3	2	5	15	4	19	84	14	98	0	1	1
09:30	0	0	0	6	5	11	11	7	18	81	9	90	1	1	2
09:45	0	0	0	2	3	5	16	4	20	70	14	84	0	1	1
H/Total	1	0	1	14	14	28	66	18	84	323	52	375	3	4	7
Total	1	1	2	57	30	87	285	51	336	1163	130	1293	6	4	10

Time	A - A			A - B			A - C			A - D			A - E		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	0	0	0	1	0	1	21	5	26	76	9	85	0	0	0
16:15	0	1	1	1	1	2	22	4	26	96	13	109	0	0	0
16:30	0	0	0	3	0	3	24	7	31	96	9	105	0	0	0
16:45	0	0	0	1	1	2	26	4	30	92	10	102	0	0	0
H/Total	0	1	1	6	2	8	93	20	113	360	41	401	0	0	0
17:00	0	0	0	5	0	5	21	5	26	109	10	119	2	0	2
17:15	0	0	0	3	0	3	37	4	41	110	10	120	6	0	6
17:30	0	0	0	10	0	10	45	3	48	110	7	117	2	0	2
17:45	0	0	0	7	0	7	26	6	32	93	3	96	2	0	2
H/Total	0	0	0	25	0	25	129	18	147	422	30	452	12	0	12
18:00	0	0	0	6	0	6	27	2	29	113	3	116	3	0	3
18:15	0	1	1	8	0	8	18	4	22	80	7	87	0	1	1
18:30	0	0	0	4	2	6	16	2	18	56	7	63	0	0	0
18:45	0	0	0	5	0	5	18	2	20	47	6	53	0	0	0
H/Total	0	1	1	23	2	25	79	10	89	296	23	319	3	1	4
Total	0	2	2	54	4	58	301	48	349	1078	94	1172	15	1	16

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **6**
Location: **A426 Rugby Road / A5 Roundabout**
Date: **15 May 2014, Thursday**

Time	B - A			B - B			B - C			B - D			B - E		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	4	2	6	0	0	0	2	1	3	7	0	7	1	0	1
07:15	6	2	8	0	0	0	1	3	4	4	2	6	0	1	1
07:30	3	3	6	0	0	0	3	1	4	11	0	11	2	1	3
07:45	1	2	3	0	0	0	2	1	3	9	2	11	3	2	5
H/Total	14	9	23	0	0	0	8	6	14	31	4	35	6	4	10
08:00	3	4	7	0	0	0	1	1	2	8	3	11	5	1	6
08:15	2	3	5	0	0	0	3	1	4	8	0	8	0	1	1
08:30	6	2	8	0	0	0	5	3	8	9	2	11	0	2	2
08:45	4	3	7	0	0	0	2	4	6	12	1	13	4	0	4
H/Total	15	12	27	0	0	0	11	9	20	37	6	43	9	4	13
09:00	0	2	2	0	0	0	0	2	2	5	0	5	7	1	8
09:15	3	4	7	0	0	0	1	0	1	6	3	9	1	0	1
09:30	1	4	5	0	0	0	1	1	2	5	3	8	2	2	4
09:45	1	2	3	0	0	0	1	0	1	9	4	13	3	1	4
H/Total	5	12	17	0	0	0	3	3	6	25	10	35	13	4	17
Total	34	33	67	0	0	0	22	18	40	93	20	113	28	12	40

Time	B - A			B - B			B - C			B - D			B - E		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	12	2	14	0	0	0	4	0	4	13	1	14	14	0	14
16:15	4	0	4	0	0	0	1	0	1	6	3	9	2	1	3
16:30	3	1	4	0	0	0	4	1	5	8	1	9	4	0	4
16:45	8	0	8	0	0	0	0	0	0	9	0	9	6	1	7
H/Total	27	3	30	0	0	0	9	1	10	36	5	41	26	2	28
17:00	9	0	9	0	0	0	3	0	3	11	1	12	9	0	9
17:15	4	0	4	0	0	0	6	0	6	5	0	5	5	0	5
17:30	4	0	4	0	0	0	4	0	4	11	0	11	2	0	2
17:45	1	0	1	0	0	0	2	0	2	8	0	8	5	0	5
H/Total	18	0	18	0	0	0	15	0	15	35	1	36	21	0	21
18:00	3	0	3	0	0	0	4	0	4	4	0	4	1	0	1
18:15	1	0	1	0	0	0	2	0	2	6	0	6	0	0	0
18:30	4	0	4	0	0	0	1	0	1	11	0	11	2	0	2
18:45	5	0	5	0	0	0	2	0	2	9	0	9	4	0	4
H/Total	13	0	13	0	0	0	9	0	9	30	0	30	7	0	7
Total	58	3	61	0	0	0	33	1	34	101	6	107	54	2	56

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **6**
Location: **A426 Rugby Road / A5 Roundabout**
Date: **15 May 2014, Thursday**

Time	C - A			C - B			C - C			C - D			C - E		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	16	4	20	0	0	0	0	2	2	5	6	11	41	7	48
07:15	29	3	32	2	0	2	1	1	2	12	13	25	60	11	71
07:30	21	1	22	4	2	6	2	2	4	9	7	16	52	8	60
07:45	32	4	36	3	1	4	2	0	2	1	11	12	61	14	75
H/Total	98	12	110	9	3	12	5	5	10	27	37	64	214	40	254
08:00	21	1	22	2	1	3	0	2	2	12	15	27	57	7	64
08:15	22	3	25	2	5	7	1	0	1	9	11	20	63	17	80
08:30	27	4	31	3	2	5	2	0	2	10	12	22	53	18	71
08:45	29	1	30	2	0	2	1	1	2	6	12	18	49	12	61
H/Total	99	9	108	9	8	17	4	3	7	37	50	87	222	54	276
09:00	16	5	21	0	1	1	2	0	2	8	9	17	30	8	38
09:15	21	4	25	2	0	2	1	1	2	5	5	10	35	7	42
09:30	14	4	18	1	0	1	1	0	1	9	8	17	31	15	46
09:45	10	1	11	1	1	2	0	0	0	9	4	13	33	14	47
H/Total	61	14	75	4	2	6	4	1	5	31	26	57	129	44	173
Total	258	35	293	22	13	35	13	9	22	95	113	208	565	138	703

Time	C - A			C - B			C - C			C - D			C - E		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	18	6	24	2	0	2	0	0	0	16	10	26	64	8	72
16:15	24	7	31	3	1	4	1	0	1	15	9	24	61	6	67
16:30	21	6	27	1	0	1	1	0	1	14	8	22	63	12	75
16:45	26	1	27	5	0	5	2	0	2	12	5	17	77	6	83
H/Total	89	20	109	11	1	12	4	0	4	57	32	89	265	32	297
17:00	29	7	36	3	0	3	2	1	3	13	7	20	86	7	93
17:15	47	2	49	8	0	8	3	0	3	14	9	23	113	7	120
17:30	25	1	26	3	0	3	1	0	1	10	2	12	92	9	101
17:45	45	1	46	4	0	4	2	0	2	8	2	10	102	7	109
H/Total	146	11	157	18	0	18	8	1	9	45	20	65	393	30	423
18:00	20	3	23	2	0	2	0	0	0	11	7	18	98	9	107
18:15	17	0	17	3	0	3	0	0	0	6	3	9	74	5	79
18:30	16	4	20	3	0	3	1	0	1	2	4	6	61	10	71
18:45	16	3	19	2	1	3	0	1	1	8	7	15	53	14	67
H/Total	69	10	79	10	1	11	1	1	2	27	2	48	286	38	324
Total	304	41	345	39	2	41	13	2	15	129	54	183	944	100	1044

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **6**
Location: **A426 Rugby Road / A5 Roundabout**
Date: **15 May 2014, Thursday**

Time	D - A			D - B			D - C			D - D			D - E		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	61	12	73	5	4	9	13	6	19	1	0	1	38	11	49
07:15	87	10	97	4	4	8	17	7	24	0	1	1	58	14	72
07:30	118	6	124	5	0	5	22	2	24	0	0	0	84	14	98
07:45	100	9	109	5	2	7	18	4	22	1	0	1	74	9	83
H/Total	366	37	403	19	10	29	70	19	89	2	1	3	254	48	302
08:00	94	11	105	4	0	4	23	2	25	0	0	0	68	8	76
08:15	80	7	87	7	3	10	24	4	28	0	0	0	59	13	72
08:30	79	11	90	6	3	9	17	14	31	1	0	1	53	16	69
08:45	70	8	78	3	2	5	17	8	25	2	0	2	56	10	66
H/Total	323	37	360	20	8	28	81	28	109	3	0	3	236	47	283
09:00	76	17	93	2	0	2	9	7	16	2	0	2	36	10	46
09:15	75	9	84	8	2	10	12	6	18	2	0	2	37	9	46
09:30	54	13	67	4	2	6	11	5	16	0	0	0	44	10	54
09:45	55	14	69	2	0	2	6	3	9	1	0	1	23	11	34
H/Total	260	53	313	16	4	20	38	21	59	5	0	5	140	40	180
Total	949	127	1076	55	22	77	189	68	257	10	1	11	630	135	765

Time	D - A			D - B			D - C			D - D			D - E		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	123	5	128	2	0	2	8	10	18	1	1	2	66	10	76
16:15	132	14	146	4	0	4	5	8	13	1	1	2	65	12	77
16:30	124	7	131	9	0	9	16	13	29	3	1	4	77	10	87
16:45	120	4	124	13	0	13	4	5	9	1	0	1	63	6	69
H/Total	499	30	529	28	0	28	33	36	69	6	3	9	271	38	309
17:00	122	4	126	13	1	14	7	9	16	1	1	2	65	7	72
17:15	103	8	111	11	1	12	9	8	17	1	1	2	73	8	81
17:30	101	6	107	12	0	12	13	10	23	0	0	0	80	11	91
17:45	131	8	139	10	0	10	12	6	18	1	0	1	78	4	82
H/Total	457	26	483	46	2	48	41	33	74	3	2	5	296	30	326
18:00	114	8	122	9	0	9	10	13	23	2	0	2	67	11	78
18:15	114	2	116	3	0	3	8	7	15	4	0	4	48	11	59
18:30	107	2	109	4	0	4	7	10	17	2	0	2	47	6	53
18:45	82	5	87	1	0	1	7	5	12	1	0	1	34	10	44
H/Total	417	17	434	17	0	17	32	35	67	9	0	9	196	38	234
Total	1373	73	1446	91	2	93	106	104	210	18	5	23	763	106	869

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **6**
Location: **A426 Rugby Road / A5 Roundabout**
Date: **15 May 2014, Thursday**

Time	E - A			E - B			E - C			E - D			E - E		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	0	1	1	5	0	5	88	10	98	81	13	94	0	0	0
07:15	3	0	3	3	1	4	88	15	103	90	10	100	0	0	0
07:30	2	1	3	2	0	2	126	9	135	105	17	122	0	1	1
07:45	2	0	2	0	0	0	92	11	103	102	18	120	0	0	0
H/Total	7	2	9	10	1	11	394	45	439	378	58	436	0	1	1
08:00	1	1	2	4	0	4	91	8	99	103	16	119	1	0	1
08:15	1	0	1	6	2	8	81	10	91	82	13	95	0	1	1
08:30	2	0	2	2	3	5	79	10	89	106	12	118	0	0	0
08:45	4	0	4	2	1	3	58	7	65	68	13	81	1	0	1
H/Total	8	1	9	14	6	20	309	35	344	359	54	413	2	1	3
09:00	2	1	3	2	0	2	45	7	52	54	21	75	0	0	0
09:15	0	0	0	0	2	2	44	8	52	30	15	45	0	0	0
09:30	0	0	0	2	1	3	31	6	37	32	13	45	0	1	1
09:45	1	0	1	2	2	4	31	15	46	34	15	49	0	0	0
H/Total	3	1	4	6	5	11	151	36	187	150	64	214	0	1	1
Total	18	4	22	30	12	42	854	116	970	887	176	1063	2	3	5

Time	E - A			E - B			E - C			E - D			E - E		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	1	0	1	6	0	6	50	7	57	73	9	82	0	1	1
16:15	1	0	1	2	2	4	47	4	51	54	6	60	0	0	0
16:30	1	0	1	7	1	8	44	8	52	47	6	53	0	0	0
16:45	0	2	2	7	0	7	50	10	60	53	9	62	0	0	0
H/Total	3	2	5	22	3	25	191	29	220	227	30	257	0	1	1
17:00	2	0	2	1	0	1	69	7	76	79	6	85	0	0	0
17:15	1	0	1	3	0	3	74	5	79	65	11	76	1	0	1
17:30	1	0	1	4	1	5	73	8	81	78	5	83	0	0	0
17:45	1	0	1	4	0	4	44	5	49	81	13	94	0	0	0
H/Total	5	0	5	12	1	13	260	25	285	303	35	338	1	0	1
18:00	1	0	1	4	0	4	39	7	46	63	7	70	0	0	0
18:15	0	0	0	3	0	3	43	6	49	46	6	52	0	0	0
18:30	3	0	3	2	0	2	32	6	38	48	6	54	0	0	0
18:45	0	1	1	0	0	0	30	8	38	29	12	41	0	0	0
H/Total	4	1	5	9	0	9	144	27	171	186	31	217	0	0	0
Total	12	3	15	43	4	47	595	81	676	716	96	812	1	1	2

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **6**
Location: **A426 Rugby Road / A5 Roundabout**
Date: **15 May 2014, Thursday**

Time	FROM A			TO A			FROM B			TO B		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	136	15	151	81	19	100	14	3	17	13	5	18
07:15	159	14	173	125	15	140	11	8	19	16	9	25
07:30	135	15	150	144	11	155	19	5	24	15	2	17
07:45	129	22	151	135	16	151	15	7	22	14	6	20
H/Total	559	66	625	485	61	546	59	23	82	58	22	80
08:00	139	18	157	119	17	136	17	9	26	15	4	19
08:15	153	10	163	105	13	118	13	5	18	19	11	30
08:30	134	23	157	114	17	131	20	9	29	18	12	30
08:45	120	11	131	107	12	119	22	8	30	14	3	17
H/Total	546	62	608	445	59	504	72	31	103	66	30	96
09:00	117	23	140	94	25	119	12	5	17	7	5	12
09:15	103	21	124	100	17	117	11	7	18	13	6	19
09:30	99	22	121	69	21	90	9	10	19	13	8	21
09:45	88	22	110	67	17	84	14	7	21	7	6	13
H/Total	407	88	495	330	80	410	46	29	75	40	25	65
Total	1512	216	1728	1260	200	1460	177	83	260	164	77	241

Time	FROM A			TO A			FROM B			TO B		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	98	14	112	154	13	167	43	3	46	11	0	11
16:15	119	19	138	161	22	183	13	4	17	10	4	14
16:30	123	16	139	149	14	163	19	3	22	20	1	21
16:45	119	15	134	154	7	161	23	1	24	26	1	27
H/Total	459	64	523	618	56	674	98	11	109	67	6	73
17:00	137	15	152	162	11	173	32	1	33	22	1	23
17:15	156	14	170	155	10	165	20	0	20	25	1	26
17:30	167	10	177	131	7	138	21	0	21	29	1	30
17:45	128	9	137	178	9	187	16	0	16	25	0	25
H/Total	588	48	636	626	37	663	89	1	90	101	3	104
18:00	149	5	154	138	11	149	12	0	12	21	0	21
18:15	106	13	119	132	3	135	9	0	9	17	0	17
18:30	76	11	87	130	6	136	18	0	18	13	2	15
18:45	70	8	78	103	9	112	20	0	20	8	1	9
H/Total	401	37	438	503	29	532	59	0	59	59	3	62
Total	1448	149	1597	1747	122	1869	246	12	258	227	12	239

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **6**
Location: **A426 Rugby Road / A5 Roundabout**
Date: **15 May 2014, Thursday**

Time	FROM C			TO C			FROM D			TO D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	62	19	81	116	21	137	118	33	151	214	31	245
07:15	104	28	132	136	29	165	166	36	202	228	33	261
07:30	88	20	108	184	22	206	229	22	251	225	31	256
07:45	99	30	129	145	20	165	198	24	222	203	45	248
H/Total	353	97	450	581	92	673	711	115	826	870	140	1010
08:00	92	26	118	147	17	164	189	21	210	225	45	270
08:15	97	36	133	135	16	151	170	27	197	222	32	254
08:30	95	36	131	142	32	174	156	44	200	214	40	254
08:45	87	26	113	96	26	122	148	28	176	183	31	214
H/Total	371	124	495	520	91	611	663	120	783	844	148	992
09:00	56	23	79	80	19	99	125	34	159	157	45	202
09:15	64	17	81	73	19	92	134	26	160	127	37	164
09:30	56	27	83	55	19	74	113	30	143	127	33	160
09:45	53	20	73	54	22	76	87	28	115	123	37	160
H/Total	229	87	316	262	79	341	459	118	577	534	152	686
Total	953	308	1261	1363	262	1625	1833	353	2186	2248	440	2688

Time	FROM C			TO C			FROM D			TO D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	100	24	124	83	22	105	200	26	226	179	30	209
16:15	104	23	127	76	16	92	207	35	242	172	32	204
16:30	100	26	126	89	29	118	229	31	260	168	25	193
16:45	122	12	134	82	19	101	201	15	216	167	24	191
H/Total	426	85	511	330	86	416	837	107	944	686	111	797
17:00	133	22	155	102	22	124	208	22	230	213	25	238
17:15	185	18	203	129	17	146	197	26	223	195	31	226
17:30	131	12	143	136	21	157	206	27	233	209	14	223
17:45	161	10	171	86	17	103	232	18	250	191	18	209
H/Total	610	62	672	453	77	530	843	93	936	808	88	896
18:00	131	19	150	80	22	102	202	32	234	193	17	210
18:15	100	8	108	71	17	88	177	20	197	142	16	158
18:30	83	18	101	57	18	75	167	18	185	119	17	136
18:45	79	26	105	57	16	73	125	20	145	94	25	119
H/Total	393	71	464	265	73	338	671	90	761	548	75	623
Total	1429	218	1647	1048	236	1284	2351	290	2641	2042	274	2316

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **6**
Location: **A426 Rugby Road / A5 Roundabout**
Date: **15 May 2014, Thursday**

Time	FROM E			TO E		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	174	24	198	80	18	98
07:15	184	26	210	119	26	145
07:30	235	28	263	138	24	162
07:45	196	29	225	140	25	165
H/Total	789	107	896	477	93	570
08:00	200	25	225	131	16	147
08:15	170	26	196	122	32	154
08:30	189	25	214	106	36	142
08:45	133	21	154	110	22	132
H/Total	692	97	789	469	106	575
09:00	103	29	132	75	20	95
09:15	74	25	99	73	17	90
09:30	65	21	86	78	29	107
09:45	68	32	100	59	27	86
H/Total	310	107	417	285	93	378
Total	1791	311	2102	1231	292	1523

Time	FROM E			TO E		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	130	17	147	144	19	163
16:15	104	12	116	128	19	147
16:30	99	15	114	144	22	166
16:45	110	21	131	146	13	159
H/Total	443	65	508	562	73	635
17:00	151	13	164	162	14	176
17:15	144	16	160	198	15	213
17:30	156	14	170	176	20	196
17:45	130	18	148	187	11	198
H/Total	581	61	642	723	60	783
18:00	107	14	121	169	20	189
18:15	92	12	104	122	17	139
18:30	85	12	97	110	16	126
18:45	59	21	80	91	24	115
H/Total	343	59	402	492	77	569
Total	1367	185	1552	1777	210	1987

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **6**
Location: **A426 Rugby Road / A5 Roundabout**
Date: **15 May 2014, Thursday**

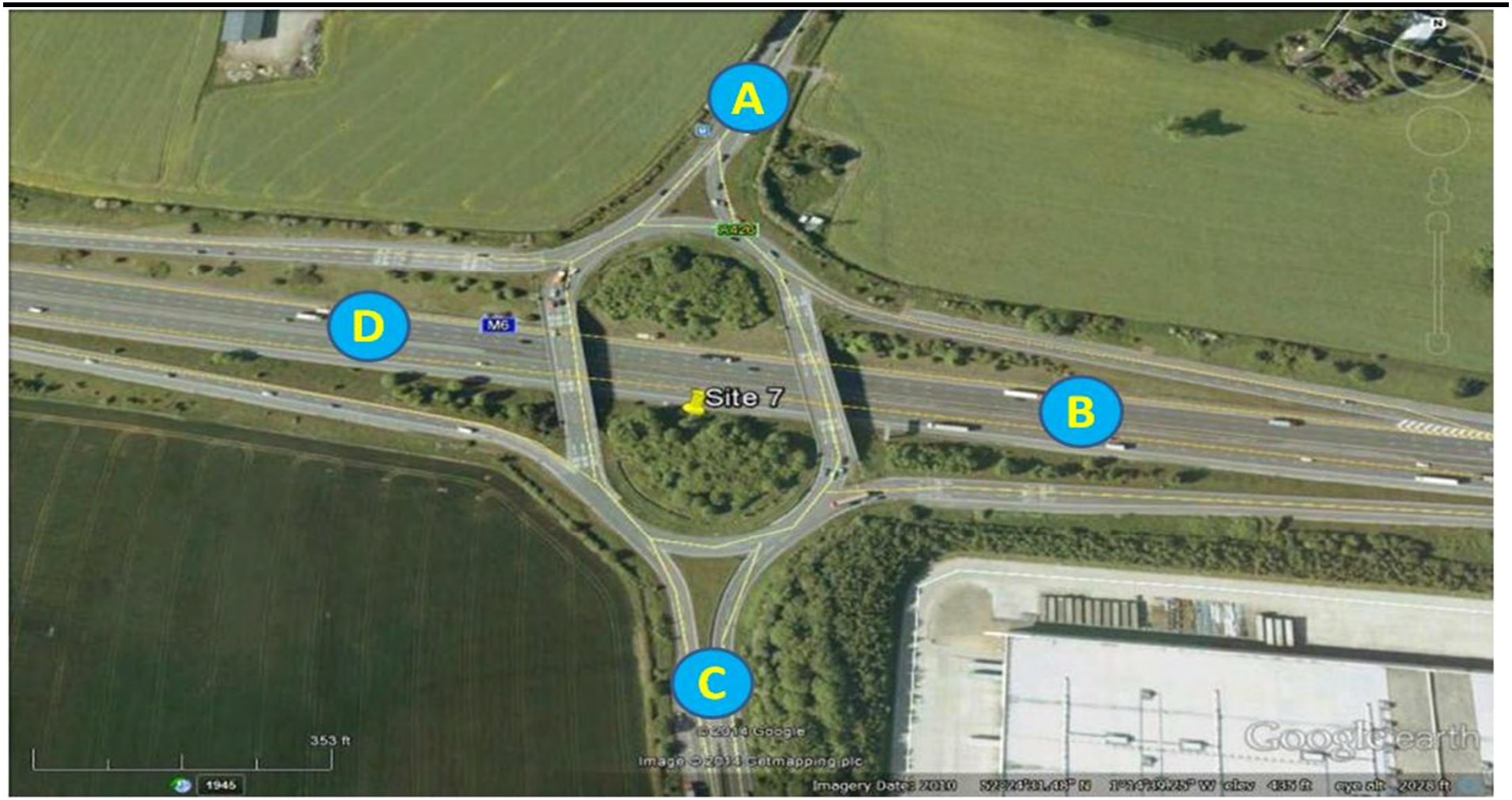
Time	WHOLE JUNCTION		
	LVs	HVs	TOTAL
07:00	504	94	598
07:15	624	112	736
07:30	706	90	796
07:45	637	112	749
H/Total	2471	408	2879
08:00	637	99	736
08:15	603	104	707
08:30	594	137	731
08:45	510	94	604
H/Total	2344	434	2778
09:00	413	114	527
09:15	386	96	482
09:30	342	110	452
09:45	310	109	419
H/Total	1451	429	1880
Total	6266	1271	7537

Peak Hours		Totals
07:00	08:00	2879
07:15	08:15	3017
07:30	08:30	2988
07:45	08:45	2923
08:00	09:00	2778
08:15	09:15	2569
08:30	09:30	2344
08:45	09:45	2065
09:00	10:00	1880

Time	WHOLE JUNCTION		
	LVs	HVs	TOTAL
16:00	571	84	655
16:15	547	93	640
16:30	570	91	661
16:45	575	64	639
H/Total	2263	332	2595
17:00	661	73	734
17:15	702	74	776
17:30	681	63	744
17:45	667	55	722
H/Total	2711	265	2976
18:00	601	70	671
18:15	484	53	537
18:30	429	59	488
18:45	353	75	428
H/Total	1867	257	2124
Total	6841	854	7695

Peak Hours		Totals
16:00	17:00	2595
16:15	17:15	2674
16:30	17:30	2810
16:45	17:45	2893
17:00	18:00	2976
17:15	18:15	2913
17:30	18:30	2674
17:45	18:45	2418
18:00	19:00	2124

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **7**
Location: **A426 / M6 Junction**



Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **7**
Location: **A426 / M6 Junction**
Date: **15 May 2014, Thursday**

Time	A - A			A - B			A - C			A - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	0	0	0	3	5	8	162	11	173	21	11	32
07:15	0	0	0	0	6	6	205	11	216	35	13	48
07:30	0	0	0	4	1	5	179	12	191	41	21	62
07:45	0	0	0	3	4	7	207	24	231	24	20	44
H/Total	0	0	0	10	16	26	753	58	811	121	65	186
08:00	0	0	0	1	8	9	169	15	184	36	19	55
08:15	0	0	0	4	2	6	197	10	207	36	22	58
08:30	0	0	0	4	6	10	181	16	197	37	16	53
08:45	0	0	0	2	5	7	156	16	172	20	16	36
H/Total	0	0	0	11	21	32	703	57	760	129	73	202
09:00	0	1	1	1	5	6	129	21	150	30	14	44
09:15	0	0	0	1	5	6	110	16	126	26	16	42
09:30	0	0	0	2	3	5	101	11	112	34	16	50
09:45	0	0	0	3	6	9	85	15	100	23	18	41
H/Total	0	1	1	7	19	26	425	63	488	113	64	177
Total	0	1	1	28	56	84	1881	178	2059	363	202	565

Time	A - A			A - B			A - C			A - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	0	0	0	3	4	7	121	13	134	49	13	62
16:15	0	0	0	4	4	8	116	8	124	40	15	55
16:30	0	0	0	2	6	8	112	12	124	41	10	51
16:45	0	0	0	1	5	6	105	7	112	55	12	67
H/Total	0	0	0	10	19	29	454	40	494	185	50	235
17:00	0	0	0	1	2	3	142	11	153	54	13	67
17:15	0	0	0	6	1	7	141	11	152	48	19	67
17:30	0	0	0	3	2	5	161	4	165	53	5	58
17:45	0	0	0	4	2	6	140	10	150	42	15	57
H/Total	0	0	0	14	7	21	584	36	620	197	52	249
18:00	0	0	0	2	1	3	137	2	139	55	12	67
18:15	0	0	0	0	1	1	138	8	146	19	2	21
18:30	0	0	0	0	1	1	105	10	115	22	11	33
18:45	0	0	0	2	0	2	76	10	86	23	9	32
H/Total	0	0	0	4	3	7	456	30	486	119	34	153
Total	0	0	0	28	29	57	1494	106	1600	501	136	637

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **7**
Location: **A426 / M6 Junction**
Date: **15 May 2014, Thursday**

Time	B - A			B - B			B - C			B - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	1	6	7	4	2	6	40	8	48	0	0	0
07:15	1	6	7	0	7	7	56	4	60	0	0	0
07:30	4	3	7	4	10	14	78	7	85	0	0	0
07:45	3	4	7	2	6	8	88	7	95	0	0	0
H/Total	9	19	28	10	25	35	262	26	288	0	0	0
08:00	1	2	3	1	8	9	102	10	112	0	1	1
08:15	1	2	3	2	10	12	89	11	100	0	0	0
08:30	3	4	7	2	7	9	89	5	94	0	0	0
08:45	5	1	6	1	8	9	91	10	101	0	0	0
H/Total	10	9	19	6	33	39	371	36	407	0	1	1
09:00	1	2	3	1	7	8	65	14	79	0	0	0
09:15	5	3	8	1	6	7	48	13	61	0	0	0
09:30	3	1	4	3	4	7	47	10	57	0	1	1
09:45	4	3	7	3	5	8	31	8	39	0	0	0
H/Total	13	9	22	8	22	30	191	45	236	0	1	1
Total	32	37	69	24	80	104	824	107	931	0	2	2

Time	B - A			B - B			B - C			B - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	6	0	6	2	10	12	17	6	23	0	0	0
16:15	3	4	7	3	3	6	27	7	34	1	0	1
16:30	3	4	7	1	1	2	32	6	38	0	0	0
16:45	5	1	6	2	7	9	18	8	26	0	0	0
H/Total	17	9	26	8	21	29	94	27	121	1	0	1
17:00	7	6	13	4	3	7	33	12	45	0	0	0
17:15	6	6	12	3	0	3	37	8	45	1	0	1
17:30	2	2	4	2	4	6	33	7	40	0	0	0
17:45	3	6	9	1	0	1	48	10	58	1	0	1
H/Total	18	20	38	10	7	17	151	37	188	2	0	2
18:00	6	5	11	2	2	4	49	7	56	1	0	1
18:15	2	3	5	2	5	7	51	9	60	0	0	0
18:30	2	2	4	0	1	1	25	11	36	0	1	1
18:45	4	1	5	3	3	6	27	7	34	0	1	1
H/Total	14	11	25	7	11	18	152	34	186	1	2	3
Total	49	40	89	25	39	64	397	98	495	4	2	6

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **7**
Location: **A426 / M6 Junction**
Date: **15 May 2014, Thursday**

Time	C - A			C - B			C - C			C - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	109	13	122	31	6	37	0	0	0	147	10	157
07:15	142	12	154	33	10	43	0	0	0	157	16	173
07:30	160	15	175	43	6	49	0	0	0	167	16	183
07:45	145	11	156	28	6	34	0	0	0	178	12	190
H/Total	556	51	607	135	28	163	0	0	0	649	54	703
08:00	142	11	153	20	15	35	0	0	0	120	9	129
08:15	95	13	108	20	7	27	0	0	0	107	13	120
08:30	122	19	141	21	5	26	0	0	0	111	9	120
08:45	72	20	92	17	10	27	0	0	0	107	18	125
H/Total	431	63	494	78	37	115	0	0	0	445	49	494
09:00	106	21	127	28	10	38	0	0	0	112	14	126
09:15	89	11	100	26	8	34	0	0	0	92	18	110
09:30	80	15	95	31	17	48	0	0	0	60	19	79
09:45	73	12	85	25	9	34	0	0	0	67	11	78
H/Total	348	59	407	110	44	154	0	0	0	331	62	393
Total	1335	173	1508	323	109	432	0	0	0	1425	165	1590

Time	C - A			C - B			C - C			C - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	196	13	209	61	5	66	0	0	0	168	12	180
16:15	143	18	161	37	7	44	0	0	0	155	8	163
16:30	186	7	193	58	12	70	0	0	0	146	7	153
16:45	165	4	169	42	4	46	0	0	0	134	10	144
H/Total	690	42	732	198	28	226	0	0	0	603	37	640
17:00	186	8	194	58	4	62	0	0	0	169	5	174
17:15	168	11	179	41	2	43	0	0	0	121	4	125
17:30	173	9	182	53	4	57	0	0	0	135	6	141
17:45	122	10	132	39	4	43	0	0	0	111	7	118
H/Total	649	38	687	191	14	205	0	0	0	536	22	558
18:00	167	5	172	32	2	34	0	0	0	91	6	97
18:15	129	5	134	27	4	31	0	0	0	95	6	101
18:30	143	6	149	31	5	36	0	0	0	67	3	70
18:45	95	5	100	32	5	37	0	0	0	66	4	70
H/Total	534	21	555	122	16	138	0	0	0	319	19	338
Total	1873	101	1974	511	58	569	0	0	0	1458	78	1536

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **7**
Location: **A426 / M6 Junction**
Date: **15 May 2014, Thursday**

traffic survey partners

Time	D - A			D - B			D - C			D - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	35	17	52	0	0	0	118	11	129	1	0	1
07:15	57	15	72	0	0	0	129	16	145	0	0	0
07:30	52	13	65	0	0	0	135	13	148	0	0	0
07:45	52	12	64	0	0	0	204	11	215	0	0	0
H/Total	196	57	253	0	0	0	586	51	637	1	0	1
08:00	50	12	62	0	0	0	148	13	161	0	0	0
08:15	59	13	72	0	0	0	175	10	185	0	0	0
08:30	47	23	70	0	0	0	131	6	137	0	0	0
08:45	51	14	65	0	0	0	151	12	163	0	0	0
H/Total	207	62	269	0	0	0	605	41	646	0	0	0
09:00	44	15	59	2	1	3	105	11	116	2	0	2
09:15	33	15	48	1	0	1	89	17	106	0	0	0
09:30	38	9	47	0	1	1	82	10	92	3	0	3
09:45	23	11	34	0	0	0	77	10	87	3	0	3
H/Total	138	50	188	3	2	5	353	48	401	8	0	8
Total	541	169	710	3	2	5	1544	140	1684	9	0	9

Time	D - A			D - B			D - C			D - D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	37	15	52	0	0	0	115	12	127	1	0	1
16:15	40	13	53	0	0	0	99	5	104	0	0	0
16:30	38	15	53	0	0	0	110	7	117	2	0	2
16:45	37	8	45	0	0	0	110	1	111	0	0	0
H/Total	152	51	203	0	0	0	434	25	459	3	0	3
17:00	49	12	61	0	0	0	128	6	134	0	0	0
17:15	56	17	73	0	0	0	164	6	170	0	0	0
17:30	40	5	45	1	0	1	149	8	157	0	0	0
17:45	55	7	62	1	0	1	153	4	157	0	0	0
H/Total	200	41	241	2	0	2	594	24	618	0	0	0
18:00	45	18	63	1	0	1	113	5	118	2	0	2
18:15	36	10	46	0	0	0	105	4	109	1	0	1
18:30	41	11	52	0	1	1	101	8	109	0	0	0
18:45	23	14	37	0	0	0	79	3	82	0	0	0
H/Total	145	53	198	1	1	2	398	20	418	3	0	3
Total	497	145	642	3	1	4	1426	69	1495	6	0	6

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **7**
Location: **A426 / M6 Junction**
Date: **15 May 2014, Thursday**

traffic survey partners

Time	FROM A			TO A			FROM B			TO B		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	186	27	213	145	36	181	45	16	61	38	13	51
07:15	240	30	270	200	33	233	57	17	74	33	23	56
07:30	224	34	258	216	31	247	86	20	106	51	17	68
07:45	234	48	282	200	27	227	93	17	110	33	16	49
H/Total	884	139	1023	761	127	888	281	70	351	155	69	224
08:00	206	42	248	193	25	218	104	21	125	22	31	53
08:15	237	34	271	155	28	183	92	23	115	26	19	45
08:30	222	38	260	172	46	218	94	16	110	27	18	45
08:45	178	37	215	128	35	163	97	19	116	20	23	43
H/Total	843	151	994	648	134	782	387	79	466	95	91	186
09:00	160	41	201	151	39	190	67	23	90	32	23	55
09:15	137	37	174	127	29	156	54	22	76	29	19	48
09:30	137	30	167	121	25	146	53	16	69	36	25	61
09:45	111	39	150	100	26	126	38	16	54	31	20	51
H/Total	545	147	692	499	119	618	212	77	289	128	87	215
Total	2272	437	2709	1908	380	2288	880	226	1106	378	247	625

Time	FROM A			TO A			FROM B			TO B		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	173	30	203	239	28	267	25	16	41	66	19	85
16:15	160	27	187	186	35	221	34	14	48	44	14	58
16:30	155	28	183	227	26	253	36	11	47	61	19	80
16:45	161	24	185	207	13	220	25	16	41	45	16	61
H/Total	649	109	758	859	102	961	120	57	177	216	68	284
17:00	197	26	223	242	26	268	44	21	65	63	9	72
17:15	195	31	226	230	34	264	47	14	61	50	3	53
17:30	217	11	228	215	16	231	37	13	50	59	10	69
17:45	186	27	213	180	23	203	53	16	69	45	6	51
H/Total	795	95	890	867	99	966	181	64	245	217	28	245
18:00	194	15	209	218	28	246	58	14	72	37	5	42
18:15	157	11	168	167	18	185	55	17	72	29	10	39
18:30	127	22	149	186	19	205	27	15	42	31	8	39
18:45	101	19	120	122	20	142	34	12	46	37	8	45
H/Total	579	67	646	693	85	778	174	58	232	134	31	165
Total	2023	271	2294	2419	286	2705	475	179	654	567	127	694

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **7**
Location: **A426 / M6 Junction**
Date: **15 May 2014, Thursday**

traffic survey partners

Time	FROM C			TO C			FROM D			TO D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	287	29	316	320	30	350	154	28	182	169	21	190
07:15	332	38	370	390	31	421	186	31	217	192	29	221
07:30	370	37	407	392	32	424	187	26	213	208	37	245
07:45	351	29	380	499	42	541	256	23	279	202	32	234
H/Total	1340	133	1473	1601	135	1736	783	108	891	771	119	890
08:00	282	35	317	419	38	457	198	25	223	156	29	185
08:15	222	33	255	461	31	492	234	23	257	143	35	178
08:30	254	33	287	401	27	428	178	29	207	148	25	173
08:45	196	48	244	398	38	436	202	26	228	127	34	161
H/Total	954	149	1103	1679	134	1813	812	103	915	574	123	697
09:00	246	45	291	299	46	345	153	27	180	144	28	172
09:15	207	37	244	247	46	293	123	32	155	118	34	152
09:30	171	51	222	230	31	261	123	20	143	97	36	133
09:45	165	32	197	193	33	226	103	21	124	93	29	122
H/Total	789	165	954	969	156	1125	502	100	602	452	127	579
Total	3083	447	3530	4249	425	4674	2097	311	2408	1797	369	2166

Time	FROM C			TO C			FROM D			TO D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	425	30	455	253	31	284	153	27	180	218	25	243
16:15	335	33	368	242	20	262	139	18	157	196	23	219
16:30	390	26	416	254	25	279	150	22	172	189	17	206
16:45	341	18	359	233	16	249	147	9	156	189	22	211
H/Total	1491	107	1598	982	92	1074	589	76	665	792	87	879
17:00	413	17	430	303	29	332	177	18	195	223	18	241
17:15	330	17	347	342	25	367	220	23	243	170	23	193
17:30	361	19	380	343	19	362	190	13	203	188	11	199
17:45	272	21	293	341	24	365	209	11	220	154	22	176
H/Total	1376	74	1450	1329	97	1426	796	65	861	735	74	809
18:00	290	13	303	299	14	313	161	23	184	149	18	167
18:15	251	15	266	294	21	315	142	14	156	115	8	123
18:30	241	14	255	231	29	260	142	20	162	89	15	104
18:45	193	14	207	182	20	202	102	17	119	89	14	103
H/Total	975	56	1031	1006	84	1090	547	74	621	442	55	497
Total	3842	237	4079	3317	273	3590	1932	215	2147	1969	216	2185

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **7**
Location: **A426 / M6 Junction**
Date: **15 May 2014, Thursday**

Time	WHOLE JUNCTION		
	LVs	HVs	TOTAL
07:00	672	100	772
07:15	815	116	931
07:30	867	117	984
07:45	934	117	1051
H/Total	3288	450	3738
08:00	790	123	913
08:15	785	113	898
08:30	748	116	864
08:45	673	130	803
H/Total	2996	482	3478
09:00	626	136	762
09:15	521	128	649
09:30	484	117	601
09:45	417	108	525
H/Total	2048	489	2537
Total	8332	1421	9753

Peak Hours		Totals
07:00	08:00	3738
07:15	08:15	3879
07:30	08:30	3846
07:45	08:45	3726

08:00	09:00	3478
08:15	09:15	3327
08:30	09:30	3078
08:45	09:45	2815

09:00	10:00	2537

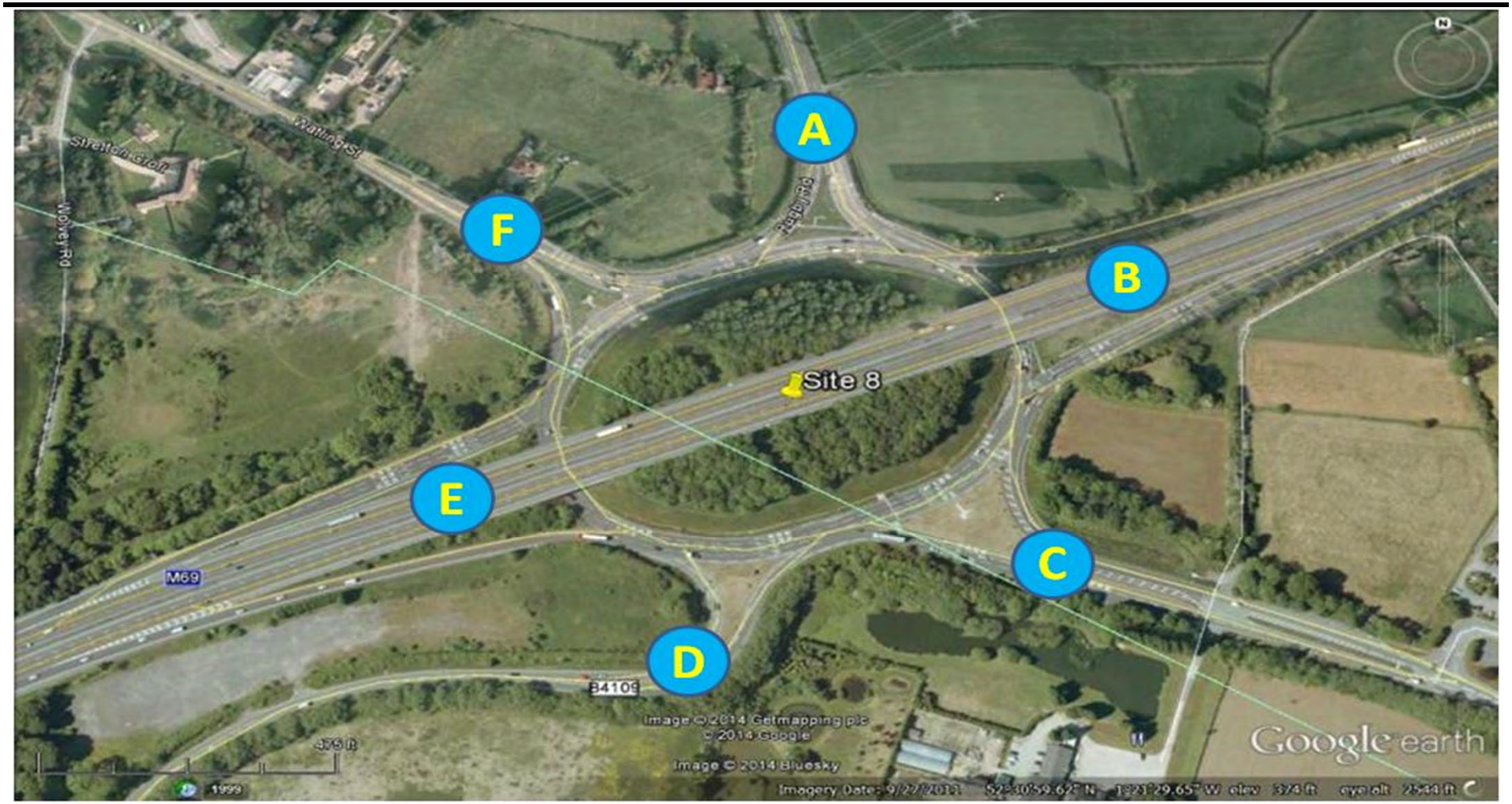
Time	WHOLE JUNCTION		
	LVs	HVs	TOTAL
16:00	776	103	879
16:15	668	92	760
16:30	731	87	818
16:45	674	67	741
H/Total	2849	349	3198
17:00	831	82	913
17:15	792	85	877
17:30	805	56	861
17:45	720	75	795
H/Total	3148	298	3446
18:00	703	65	768
18:15	605	57	662
18:30	537	71	608
18:45	430	62	492
H/Total	2275	255	2530
Total	8272	902	9174

Peak Hours		Totals
16:00	17:00	3198
16:15	17:15	3232
16:30	17:30	3349
16:45	17:45	3392

17:00	18:00	3446
17:15	18:15	3301
17:30	18:30	3086
17:45	18:45	2833

18:00	19:00	2530

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **8**
Location: **M69 / A5 Roundabout**



Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **8**
Location: **M69 / A5 Roundabout**
Date: **15 May 2014, Thursday**

Time	A - A			A - B			A - C			A - D			A - E			A - F		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	0	0	0	34	0	34	46	3	49	25	0	25	160	3	163	8	0	8
07:15	0	0	0	31	0	31	63	1	64	46	1	47	169	1	170	12	0	12
07:30	0	0	0	39	1	40	85	2	87	57	0	57	184	3	187	17	1	18
07:45	0	0	0	44	1	45	94	0	94	57	2	59	196	3	199	18	2	20
H/Total	0	0	0	148	2	150	288	6	294	185	3	188	709	10	719	55	3	58
08:00	0	0	0	33	0	33	86	1	87	56	1	57	146	0	146	17	0	17
08:15	0	0	0	33	0	33	51	0	51	63	0	63	121	1	122	30	0	30
08:30	0	0	0	17	0	17	48	1	49	51	0	51	72	1	73	34	1	35
08:45	0	0	0	19	1	20	45	1	46	31	2	33	90	0	90	25	0	25
H/Total	0	0	0	102	1	103	230	3	233	201	3	204	429	2	431	106	1	107
09:00	0	0	0	25	1	26	37	0	37	30	3	33	73	2	75	15	0	15
09:15	0	0	0	16	2	18	34	3	37	30	1	31	46	3	49	13	0	13
09:30	0	0	0	18	0	18	25	0	25	22	0	22	50	2	52	10	0	10
09:45	0	0	0	15	1	16	28	0	28	17	0	17	34	2	36	2	0	2
H/Total	0	0	0	74	4	78	124	3	127	99	4	103	203	9	212	40	0	40
Total	0	0	0	324	7	331	642	12	654	485	10	495	1341	21	1362	201	4	205

Time	A - A			A - B			A - C			A - D			A - E			A - F		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	0	0	0	19	0	19	38	0	38	32	2	34	41	3	44	8	0	8
16:15	0	0	0	7	0	7	28	0	28	35	2	37	48	0	48	9	0	9
16:30	0	0	0	8	1	9	36	1	37	43	2	45	38	1	39	7	0	7
16:45	0	0	0	7	0	7	23	1	24	30	0	30	68	1	69	10	0	10
H/Total	0	0	0	41	1	42	125	2	127	140	6	146	195	5	200	34	0	34
17:00	0	0	0	10	3	13	17	0	17	33	0	33	56	0	56	11	0	11
17:15	0	0	0	6	0	6	15	0	15	43	1	44	68	0	68	9	0	9
17:30	0	0	0	27	0	27	28	0	28	41	1	42	46	1	47	5	0	5
17:45	0	0	0	11	0	11	34	1	35	28	1	29	46	1	47	6	0	6
H/Total	0	0	0	54	3	57	94	1	95	145	3	148	216	2	218	31	0	31
18:00	0	0	0	22	0	22	30	0	30	24	1	25	44	1	45	3	0	3
18:15	0	0	0	18	1	19	35	0	35	22	0	22	39	0	39	1	0	1
18:30	0	0	0	15	0	15	32	0	32	17	0	17	41	0	41	4	0	4
18:45	0	0	0	13	1	14	45	0	45	16	0	16	35	0	35	3	1	4
H/Total	0	0	0	68	2	70	142	0	142	79	1	80	159	1	160	11	1	12
Total	0	0	0	163	6	169	361	3	364	364	10	374	570	8	578	76	1	77

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **8**
Location: **M69 / A5 Roundabout**
Date: **15 May 2014, Thursday**

Time	B - A			B - B			B - C			B - D			B - E			B - F		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	10	0	10	2	0	2	7	0	7	17	0	17	0	0	0	75	1	76
07:15	8	0	8	0	0	0	5	3	8	26	0	26	0	0	0	91	8	99
07:30	10	0	10	0	0	0	10	1	11	30	0	30	0	0	0	101	5	106
07:45	11	1	12	2	0	2	11	2	13	36	0	36	0	0	0	71	5	76
H/Total	39	1	40	4	0	4	33	6	39	109	0	109	0	0	0	338	19	357
08:00	5	1	6	0	0	0	9	1	10	41	0	41	0	0	0	76	12	88
08:15	9	1	10	1	0	1	9	2	11	46	0	46	0	0	0	62	6	68
08:30	8	0	8	0	0	0	9	0	9	19	1	20	1	0	1	50	4	54
08:45	3	1	4	0	0	0	14	0	14	23	5	28	0	0	0	58	10	68
H/Total	25	3	28	1	0	1	41	3	44	129	6	135	1	0	1	246	32	278
09:00	4	1	5	0	0	0	8	1	9	20	1	21	1	0	1	30	15	45
09:15	4	1	5	0	0	0	6	0	6	21	0	21	0	0	0	42	7	49
09:30	10	1	11	0	0	0	10	1	11	21	0	21	0	0	0	54	10	64
09:45	6	0	6	0	0	0	6	0	6	5	3	8	1	0	1	43	10	53
H/Total	24	3	27	0	0	0	30	2	32	67	4	71	2	0	2	169	42	211
Total	88	7	95	5	0	5	104	11	115	305	10	315	3	0	3	753	93	846

Time	B - A			B - B			B - C			B - D			B - E			B - F		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	11	0	11	0	0	0	1	0	1	30	1	31	0	0	0	39	7	46
16:15	15	0	15	0	0	0	7	2	9	40	1	41	0	1	1	57	3	60
16:30	12	0	12	0	0	0	8	1	9	42	0	42	0	0	0	44	6	50
16:45	12	0	12	0	0	0	6	2	8	37	1	38	0	0	0	58	3	61
H/Total	50	0	50	0	0	0	22	5	27	149	3	152	0	1	1	198	19	217
17:00	22	1	23	0	0	0	6	2	8	62	2	64	0	0	0	44	5	49
17:15	13	1	14	0	0	0	10	0	10	55	2	57	1	0	1	39	8	47
17:30	16	0	16	0	0	0	10	0	10	63	1	64	0	0	0	54	5	59
17:45	17	0	17	0	0	0	8	0	8	51	1	52	0	0	0	65	5	70
H/Total	68	2	70	0	0	0	34	2	36	231	6	237	1	0	1	202	23	225
18:00	19	1	20	0	0	0	6	0	6	39	0	39	0	0	0	53	5	58
18:15	13	2	15	0	0	0	8	0	8	32	1	33	0	0	0	48	4	52
18:30	8	0	8	0	0	0	7	0	7	29	0	29	0	0	0	41	5	46
18:45	13	0	13	0	0	0	6	0	6	8	0	8	1	0	1	31	5	36
H/Total	53	3	56	0	0	0	27	0	27	108	1	109	1	0	1	173	19	192
Total	171	5	176	0	0	0	83	7	90	488	10	498	2	1	3	573	61	634

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **8**
Location: **M69 / A5 Roundabout**
Date: **15 May 2014, Thursday**

Time	C - A			C - B			C - C			C - D			C - E			C - F		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	31	2	33	5	0	5	0	0	0	1	0	1	51	5	56	47	7	54
07:15	26	0	26	8	1	9	0	0	0	2	0	2	76	7	83	94	11	105
07:30	38	0	38	6	0	6	0	0	0	0	0	0	70	5	75	99	19	118
07:45	32	0	32	9	0	9	0	0	0	2	0	2	63	3	66	86	13	99
H/Total	127	2	129	28	1	29	0	0	0	5	0	5	260	20	280	326	50	376
08:00	39	1	40	6	0	6	0	0	0	0	0	0	54	4	58	111	14	125
08:15	19	2	21	5	3	8	0	0	0	2	0	2	46	0	46	100	9	109
08:30	25	2	27	3	0	3	0	0	0	0	0	0	43	9	52	94	20	114
08:45	30	0	30	8	0	8	0	0	0	0	0	0	37	6	43	83	15	98
H/Total	113	5	118	22	3	25	0	0	0	2	0	2	180	19	199	388	58	446
09:00	27	0	27	9	0	9	0	0	0	0	0	0	33	7	40	70	13	83
09:15	21	0	21	2	1	3	0	0	0	0	0	0	27	5	32	78	13	91
09:30	13	2	15	10	0	10	0	0	0	0	0	0	15	2	17	58	18	76
09:45	15	0	15	9	1	10	0	0	0	2	0	2	23	5	28	61	18	79
H/Total	76	2	78	30	2	32	0	0	0	2	0	2	98	19	117	267	62	329
Total	316	9	325	80	6	86	0	0	0	9	0	9	538	58	596	981	170	1151

Time	C - A			C - B			C - C			C - D			C - E			C - F		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	46	0	46	6	0	6	0	0	0	1	1	2	25	3	28	77	14	91
16:15	47	0	47	6	0	6	0	0	0	1	0	1	20	5	25	90	11	101
16:30	53	0	53	17	0	17	0	0	0	7	0	7	22	9	31	81	15	96
16:45	49	1	50	5	0	5	0	0	0	4	0	4	26	1	27	79	13	92
H/Total	195	1	196	34	0	34	0	0	0	13	1	14	93	18	111	327	53	380
17:00	46	1	47	16	0	16	0	0	0	2	1	3	20	3	23	92	12	104
17:15	47	1	48	15	0	15	0	0	0	3	1	4	32	3	35	90	16	106
17:30	59	0	59	1	1	2	0	0	0	7	0	7	30	2	32	86	9	95
17:45	47	0	47	3	0	3	0	0	0	4	0	4	35	3	38	83	5	88
H/Total	199	2	201	35	1	36	0	0	0	16	2	18	117	11	128	351	42	393
18:00	49	0	49	2	0	2	0	0	0	1	1	2	30	1	31	83	8	91
18:15	41	0	41	6	0	6	0	0	0	6	0	6	20	6	26	86	13	99
18:30	22	0	22	4	0	4	0	0	0	1	0	1	17	2	19	67	9	76
18:45	23	0	23	2	1	3	0	0	0	1	0	1	12	0	12	54	10	64
H/Total	135	0	135	14	1	15	0	0	0	9	1	10	79	9	88	290	40	330
Total	529	3	532	83	2	85	0	0	0	38	4	42	289	38	327	968	135	1103

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **8**
Location: **M69 / A5 Roundabout**
Date: **15 May 2014, Thursday**

Time	D - A			D - B			D - C			D - D			D - E			D - F		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	7	0	7	46	2	48	0	0	0	0	0	0	4	0	4	11	1	12
07:15	10	0	10	49	4	53	0	0	0	0	0	0	2	0	2	14	0	14
07:30	16	0	16	37	4	41	0	0	0	0	0	0	2	0	2	20	0	20
07:45	20	1	21	47	1	48	0	0	0	0	0	0	7	0	7	24	1	25
H/Total	53	1	54	179	11	190	0	0	0	0	0	0	15	0	15	69	2	71
08:00	16	0	16	55	1	56	0	0	0	0	0	0	2	0	2	17	0	17
08:15	26	0	26	38	2	40	0	0	0	0	0	0	2	0	2	14	1	15
08:30	31	2	33	27	1	28	2	0	2	0	0	0	1	0	1	13	3	16
08:45	27	3	30	16	1	17	0	0	0	0	0	0	0	0	0	22	3	25
H/Total	100	5	105	136	5	141	2	0	2	0	0	0	5	0	5	66	7	73
09:00	14	0	14	35	1	36	0	0	0	0	0	0	0	1	1	16	0	16
09:15	15	2	17	24	1	25	0	0	0	0	0	0	1	0	1	13	1	14
09:30	19	0	19	30	0	30	0	0	0	0	0	0	2	0	2	12	0	12
09:45	16	1	17	13	1	14	0	0	0	0	0	0	3	1	4	17	1	18
H/Total	64	3	67	102	3	105	0	0	0	0	0	0	6	2	8	58	2	60
Total	217	9	226	417	19	436	2	0	2	0	0	0	26	2	28	193	11	204

Time	D - A			D - B			D - C			D - D			D - E			D - F		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	35	1	36	15	2	17	2	0	2	0	0	0	1	0	1	17	2	19
16:15	34	2	36	18	0	18	3	0	3	0	0	0	3	1	4	23	0	23
16:30	28	2	30	29	0	29	0	0	0	0	0	0	5	0	5	19	1	20
16:45	31	1	32	33	2	35	1	0	1	0	0	0	2	1	3	15	2	17
H/Total	128	6	134	95	4	99	6	0	6	0	0	0	11	2	13	74	5	79
17:00	49	1	50	41	1	42	0	0	0	0	0	0	3	0	3	20	1	21
17:15	43	1	44	39	1	40	2	0	2	0	0	0	4	0	4	30	0	30
17:30	39	0	39	31	1	32	1	0	1	0	0	0	5	0	5	24	0	24
17:45	35	0	35	24	1	25	0	0	0	0	0	0	5	0	5	19	0	19
H/Total	166	2	168	135	4	139	3	0	3	0	0	0	17	0	17	93	1	94
18:00	40	0	40	19	1	20	0	0	0	0	0	0	1	0	1	26	0	26
18:15	38	0	38	20	0	20	0	0	0	0	0	0	4	0	4	16	1	17
18:30	18	0	18	22	0	22	3	0	3	0	0	0	2	0	2	26	0	26
18:45	21	0	21	12	0	12	2	0	2	0	0	0	2	0	2	7	0	7
H/Total	117	0	117	73	1	74	5	0	5	0	0	0	9	0	9	75	1	76
Total	411	8	419	303	9	312	14	0	14	0	0	0	37	2	39	242	7	249

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **8**
Location: **M69 / A5 Roundabout**
Date: **15 May 2014, Thursday**

Time	E - A			E - B			E - C			E - D			E - E			E - F		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	26	3	29	1	0	1	19	4	23	0	0	0	0	0	0	57	10	67
07:15	32	3	35	0	0	0	24	5	29	1	0	1	1	0	1	89	3	92
07:30	53	3	56	0	0	0	30	12	42	1	0	1	0	0	0	87	6	93
07:45	57	5	62	1	0	1	37	6	43	2	0	2	1	0	1	62	4	66
H/Total	168	14	182	2	0	2	110	27	137	4	0	4	2	0	2	295	23	318
08:00	55	0	55	0	0	0	38	7	45	1	0	1	1	0	1	61	6	67
08:15	55	4	59	0	0	0	36	4	40	0	0	0	0	0	0	72	13	85
08:30	41	3	44	1	0	1	22	7	29	4	2	6	1	0	1	43	9	52
08:45	48	0	48	1	0	1	21	8	29	3	0	3	0	0	0	41	10	51
H/Total	199	7	206	2	0	2	117	26	143	8	2	10	2	0	2	217	38	255
09:00	39	1	40	0	0	0	29	8	37	1	0	1	1	0	1	46	10	56
09:15	32	3	35	0	0	0	27	4	31	2	0	2	1	0	1	53	4	57
09:30	30	2	32	1	0	1	19	6	25	0	0	0	0	0	0	35	10	45
09:45	25	1	26	0	0	0	14	6	20	2	0	2	1	0	1	38	11	49
H/Total	126	7	133	1	0	1	89	24	113	5	0	5	3	0	3	172	35	207
Total	493	28	521	5	0	5	316	77	393	17	2	19	7	0	7	684	96	780

Time	E - A			E - B			E - C			E - D			E - E			E - F		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	85	1	86	1	0	1	41	4	45	3	0	3	0	0	0	49	6	55
16:15	114	1	115	3	0	3	43	5	48	3	1	4	1	0	1	68	3	71
16:30	134	4	138	1	0	1	51	5	56	3	1	4	1	0	1	50	7	57
16:45	158	1	159	1	0	1	52	4	56	6	0	6	2	0	2	58	7	65
H/Total	491	7	498	6	0	6	187	18	205	15	2	17	4	0	4	225	23	248
17:00	142	1	143	4	0	4	72	3	75	7	0	7	3	0	3	69	6	75
17:15	135	1	136	2	0	2	68	1	69	5	0	5	1	0	1	55	3	58
17:30	147	0	147	1	0	1	84	3	87	5	0	5	2	0	2	77	1	78
17:45	135	0	135	0	0	0	71	3	74	1	0	1	1	0	1	59	5	64
H/Total	559	2	561	7	0	7	295	10	305	18	0	18	7	0	7	260	15	275
18:00	111	0	111	0	0	0	62	2	64	5	0	5	1	0	1	65	2	67
18:15	118	1	119	1	0	1	40	6	46	1	0	1	2	0	2	52	5	57
18:30	95	0	95	1	0	1	46	2	48	6	0	6	1	0	1	54	5	59
18:45	79	0	79	0	0	0	34	1	35	1	0	1	1	0	1	43	1	44
H/Total	403	1	404	2	0	2	182	11	193	13	0	13	5	0	5	214	13	227
Total	1453	10	1463	15	0	15	664	39	703	46	2	48	16	0	16	699	51	750

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **8**
Location: **M69 / A5 Roundabout**
Date: **15 May 2014, Thursday**

Time	F - A			F - B			F - C			F - D			F - E			F - F		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	0	0	0	73	6	79	97	10	107	9	0	9	54	6	60	0	0	0
07:15	0	0	0	85	10	95	95	15	110	7	0	7	59	5	64	0	0	0
07:30	1	1	2	87	9	96	100	8	108	11	0	11	70	2	72	0	0	0
07:45	2	0	2	69	7	76	69	11	80	21	1	22	53	1	54	0	0	0
H/Total	3	1	4	314	32	346	361	44	405	48	1	49	236	14	250	0	0	0
08:00	0	0	0	48	12	60	82	12	94	14	0	14	37	6	43	0	0	0
08:15	2	1	3	56	9	65	106	13	119	28	2	30	78	6	84	0	0	0
08:30	6	2	8	49	8	57	95	24	119	24	1	25	24	4	28	1	0	1
08:45	5	0	5	55	12	67	70	13	83	11	0	11	39	6	45	4	0	4
H/Total	13	3	16	208	41	249	353	62	415	77	3	80	178	22	200	5	0	5
09:00	5	0	5	40	16	56	64	19	83	16	0	16	46	7	53	1	0	1
09:15	2	1	3	42	9	51	44	13	57	17	1	18	33	8	41	2	0	2
09:30	0	0	0	46	11	57	52	24	76	13	2	15	33	3	36	1	0	1
09:45	4	0	4	32	3	35	49	9	58	8	2	10	21	7	28	0	0	0
H/Total	11	1	12	160	39	199	209	65	274	54	5	59	133	25	158	4	0	4
Total	27	5	32	682	112	794	923	171	1094	179	9	188	547	61	608	9	0	9

Time	F - A			F - B			F - C			F - D			F - E			F - F		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	7	1	8	77	3	80	82	7	89	17	1	18	39	2	41	0	0	0
16:15	6	1	7	58	4	62	95	12	107	10	0	10	45	4	49	0	0	0
16:30	4	0	4	60	4	64	116	21	137	20	2	22	62	4	66	1	0	1
16:45	4	0	4	57	8	65	105	11	116	24	1	25	53	5	58	0	0	0
H/Total	21	2	23	252	19	271	398	51	449	71	4	75	199	15	214	1	0	1
17:00	6	0	6	71	5	76	106	16	122	18	1	19	53	4	57	0	0	0
17:15	9	2	11	41	3	44	111	10	121	8	1	9	68	7	75	1	0	1
17:30	4	0	4	74	4	78	84	7	91	12	1	13	46	2	48	0	1	1
17:45	7	0	7	54	6	60	77	9	86	12	0	12	63	3	66	0	0	0
H/Total	26	2	28	240	18	258	378	42	420	50	3	53	230	16	246	1	1	2
18:00	11	0	11	49	5	54	85	5	90	17	0	17	58	8	66	2	0	2
18:15	6	0	6	36	5	41	80	7	87	8	0	8	32	1	33	0	0	0
18:30	6	0	6	36	1	37	63	12	75	13	0	13	41	2	43	0	0	0
18:45	6	0	6	37	2	39	46	13	59	9	0	9	19	1	20	0	0	0
H/Total	29	0	29	158	13	171	274	37	311	47	0	47	150	12	162	2	0	2
Total	76	4	80	650	50	700	1050	130	1180	168	7	175	579	43	622	4	1	5

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **8**
Location: **M69 / A5 Roundabout**
Date: **15 May 2014, Thursday**

Time	FROM A			TO A			FROM B			TO B		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	273	6	279	74	5	79	111	1	112	161	8	169
07:15	321	3	324	76	3	79	130	11	141	173	15	188
07:30	382	7	389	118	4	122	151	6	157	169	14	183
07:45	409	8	417	122	7	129	131	8	139	172	9	181
H/Total	1385	24	1409	390	19	409	523	26	549	675	46	721
08:00	338	2	340	115	2	117	131	14	145	142	13	155
08:15	298	1	299	111	8	119	127	9	136	133	14	147
08:30	222	3	225	111	9	120	87	5	92	97	9	106
08:45	210	4	214	113	4	117	98	16	114	99	14	113
H/Total	1068	10	1078	450	23	473	443	44	487	471	50	521
09:00	180	6	186	89	2	91	63	18	81	109	18	127
09:15	139	9	148	74	7	81	73	8	81	84	13	97
09:30	125	2	127	72	5	77	95	12	107	105	11	116
09:45	96	3	99	66	2	68	61	13	74	69	6	75
H/Total	540	20	560	301	16	317	292	51	343	367	48	415
Total	2993	54	3047	1141	58	1199	1258	121	1379	1513	144	1657

Time	FROM A			TO A			FROM B			TO B		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	138	5	143	184	3	187	81	8	89	118	5	123
16:15	127	2	129	216	4	220	119	7	126	92	4	96
16:30	132	5	137	231	6	237	106	7	113	115	5	120
16:45	138	2	140	254	3	257	113	6	119	103	10	113
H/Total	535	14	549	885	16	901	419	28	447	428	24	452
17:00	127	3	130	265	4	269	134	10	144	142	9	151
17:15	141	1	142	247	6	253	118	11	129	103	4	107
17:30	147	2	149	265	0	265	143	6	149	134	6	140
17:45	125	3	128	241	0	241	141	6	147	92	7	99
H/Total	540	9	549	1018	10	1028	536	33	569	471	26	497
18:00	123	2	125	230	1	231	117	6	123	92	6	98
18:15	115	1	116	216	3	219	101	7	108	81	6	87
18:30	109	0	109	149	0	149	85	5	90	78	1	79
18:45	112	2	114	142	0	142	59	5	64	64	4	68
H/Total	459	5	464	737	4	741	362	23	385	315	17	332
Total	1534	28	1562	2640	30	2670	1317	84	1401	1214	67	1281

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **8**
Location: **M69 / A5 Roundabout**
Date: **15 May 2014, Thursday**

Time	FROM C			TO C			FROM D			TO D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	135	14	149	169	17	186	68	3	71	52	0	52
07:15	206	19	225	187	24	211	75	4	79	82	1	83
07:30	213	24	237	225	23	248	75	4	79	99	0	99
07:45	192	16	208	211	19	230	98	3	101	118	3	121
H/Total	746	73	819	792	83	875	316	14	330	351	4	355
08:00	210	19	229	215	21	236	90	1	91	112	1	113
08:15	172	14	186	202	19	221	80	3	83	139	2	141
08:30	165	31	196	176	32	208	74	6	80	98	4	102
08:45	158	21	179	150	22	172	65	7	72	68	7	75
H/Total	705	85	790	743	94	837	309	17	326	417	14	431
09:00	139	20	159	138	28	166	65	2	67	67	4	71
09:15	128	19	147	111	20	131	53	4	57	70	2	72
09:30	96	22	118	106	31	137	63	0	63	56	2	58
09:45	110	24	134	97	15	112	49	4	53	34	5	39
H/Total	473	85	558	452	94	546	230	10	240	227	13	240
Total	1924	243	2167	1987	271	2258	855	41	896	995	31	1026

Time	FROM C			TO C			FROM D			TO D		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	155	18	173	164	11	175	70	5	75	83	5	88
16:15	164	16	180	176	19	195	81	3	84	89	4	93
16:30	180	24	204	211	28	239	81	3	84	115	5	120
16:45	163	15	178	187	18	205	82	6	88	101	2	103
H/Total	662	73	735	738	76	814	314	17	331	388	16	404
17:00	176	17	193	201	21	222	113	3	116	122	4	126
17:15	187	21	208	206	11	217	118	2	120	114	5	119
17:30	183	12	195	207	10	217	100	1	101	128	3	131
17:45	172	8	180	190	13	203	83	1	84	96	2	98
H/Total	718	58	776	804	55	859	414	7	421	460	14	474
18:00	165	10	175	183	7	190	86	1	87	86	2	88
18:15	159	19	178	163	13	176	78	1	79	69	1	70
18:30	111	11	122	151	14	165	71	0	71	66	0	66
18:45	92	11	103	133	14	147	44	0	44	35	0	35
H/Total	527	51	578	630	48	678	279	2	281	256	3	259
Total	1907	182	2089	2172	179	2351	1007	26	1033	1104	33	1137

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **8**
Location: **M69 / A5 Roundabout**
Date: **15 May 2014, Thursday**

Time	FROM E			TO E			FROM F			TO F		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
07:00	103	17	120	269	14	283	233	22	255	198	19	217
07:15	147	11	158	307	13	320	246	30	276	300	22	322
07:30	171	21	192	326	10	336	269	20	289	324	31	355
07:45	160	15	175	320	7	327	214	20	234	261	25	286
H/Total	581	64	645	1222	44	1266	962	92	1054	1083	97	1180
08:00	156	13	169	240	10	250	181	30	211	282	32	314
08:15	163	21	184	247	7	254	270	31	301	278	29	307
08:30	112	21	133	142	14	156	199	39	238	235	37	272
08:45	114	18	132	166	12	178	184	31	215	233	38	271
H/Total	545	73	618	795	43	838	834	131	965	1028	136	1164
09:00	116	19	135	154	17	171	172	42	214	178	38	216
09:15	115	11	126	108	16	124	140	32	172	201	25	226
09:30	85	18	103	100	7	107	145	40	185	170	38	208
09:45	80	18	98	83	15	98	114	21	135	161	40	201
H/Total	396	66	462	445	55	500	571	135	706	710	141	851
Total	1522	203	1725	2462	142	2604	2367	358	2725	2821	374	3195

Time	FROM E			TO E			FROM F			TO F		
	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL	LVs	HVs	TOTAL
16:00	179	11	190	106	8	114	222	14	236	190	29	219
16:15	232	10	242	117	11	128	214	21	235	247	17	264
16:30	240	17	257	128	14	142	263	31	294	202	29	231
16:45	277	12	289	151	8	159	243	25	268	220	25	245
H/Total	928	50	978	502	41	543	942	91	1033	859	100	959
17:00	297	10	307	135	7	142	254	26	280	236	24	260
17:15	266	5	271	174	10	184	238	23	261	224	27	251
17:30	316	4	320	129	5	134	220	15	235	246	16	262
17:45	267	8	275	150	7	157	213	18	231	232	15	247
H/Total	1146	27	1173	588	29	617	925	82	1007	938	82	1020
18:00	244	4	248	134	10	144	222	18	240	232	15	247
18:15	214	12	226	97	7	104	162	13	175	203	23	226
18:30	203	7	210	102	4	106	159	15	174	192	19	211
18:45	158	2	160	70	1	71	117	16	133	138	17	155
H/Total	819	25	844	403	22	425	660	62	722	765	74	839
Total	2893	102	2995	1493	92	1585	2527	235	2762	2562	256	2818

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Manual Classified Traffic Count**
Site No: **8**
Location: **M69 / A5 Roundabout**
Date: **15 May 2014, Thursday**

traffic survey partners

Time	WHOLE JUNCTION		
	LVs	HVs	TOTAL
07:00	923	63	986
07:15	1125	78	1203
07:30	1261	82	1343
07:45	1204	70	1274
H/Total	4513	293	4806
08:00	1106	79	1185
08:15	1110	79	1189
08:30	859	105	964
08:45	829	97	926
H/Total	3904	360	4264
09:00	735	107	842
09:15	648	83	731
09:30	609	94	703
09:45	510	83	593
H/Total	2502	367	2869
Total	10919	1020	11939

Peak Hours		Totals
07:00	08:00	4806
07:15	08:15	5005
07:30	08:30	4991
07:45	08:45	4612
08:00	09:00	4264
08:15	09:15	3921
08:30	09:30	3463
08:45	09:45	3202
09:00	10:00	2869

Time	WHOLE JUNCTION		
	LVs	HVs	TOTAL
16:00	845	61	906
16:15	937	59	996
16:30	1002	87	1089
16:45	1016	66	1082
H/Total	3800	273	4073
17:00	1101	69	1170
17:15	1068	63	1131
17:30	1109	40	1149
17:45	1001	44	1045
H/Total	4279	216	4495
18:00	957	41	998
18:15	829	53	882
18:30	738	38	776
18:45	582	36	618
H/Total	3106	168	3274
Total	11185	657	11842

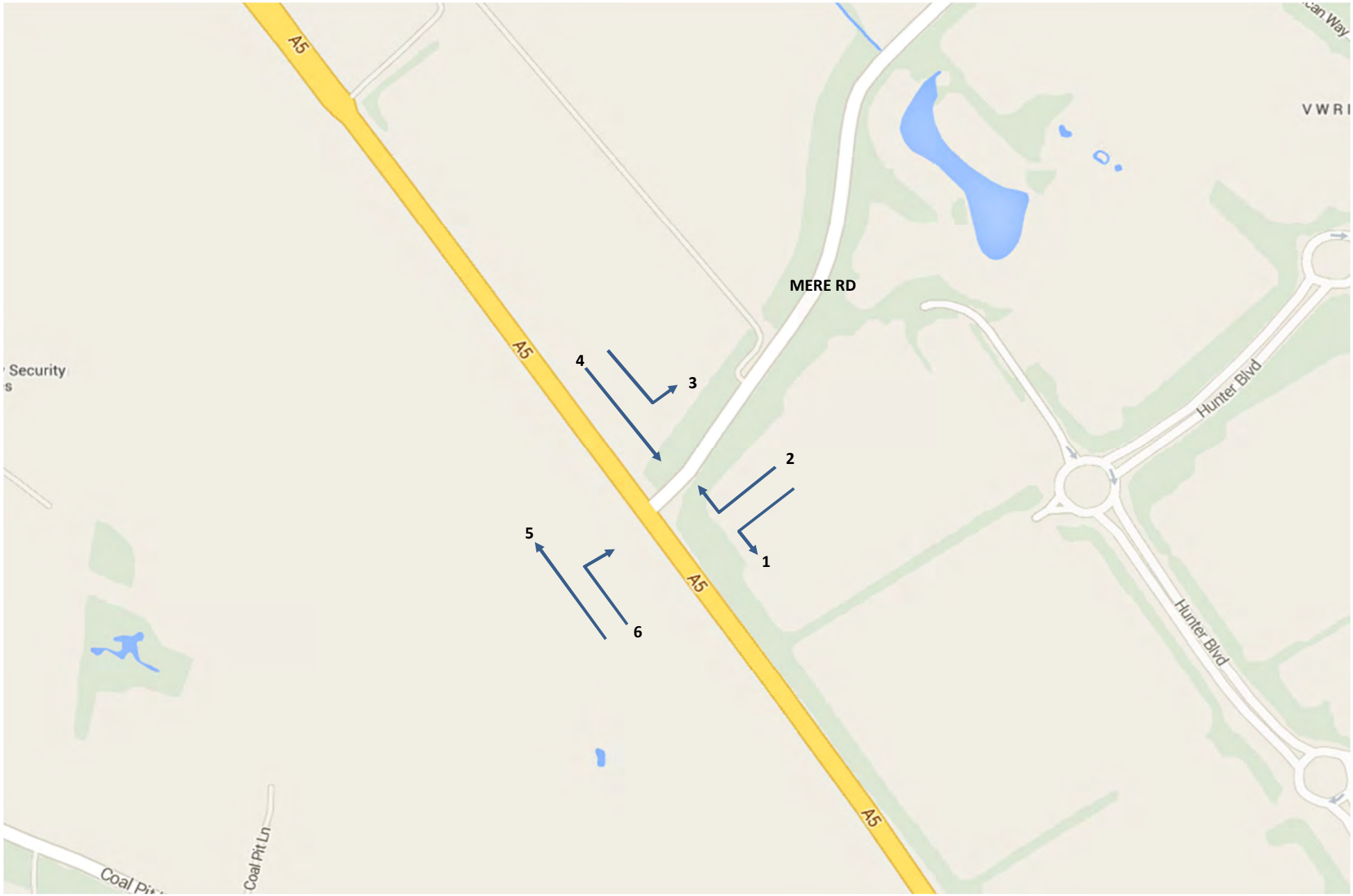
Peak Hours		Totals
16:00	17:00	4073
16:15	17:15	4337
16:30	17:30	4472
16:45	17:45	4532
17:00	18:00	4495
17:15	18:15	4323
17:30	18:30	4074
17:45	18:45	3701
18:00	19:00	3274

K&M TRAFFIC SURVEYS

DATE : 3rd JUNE 2014

DAY : TUESDAY

LOCATION : MERE RD j/w A5, LUTTERWORTH, LEICS



K&M TRAFFIC SURVEYS

DATE : 3rd JUNE 2014

DAY : TUESDAY

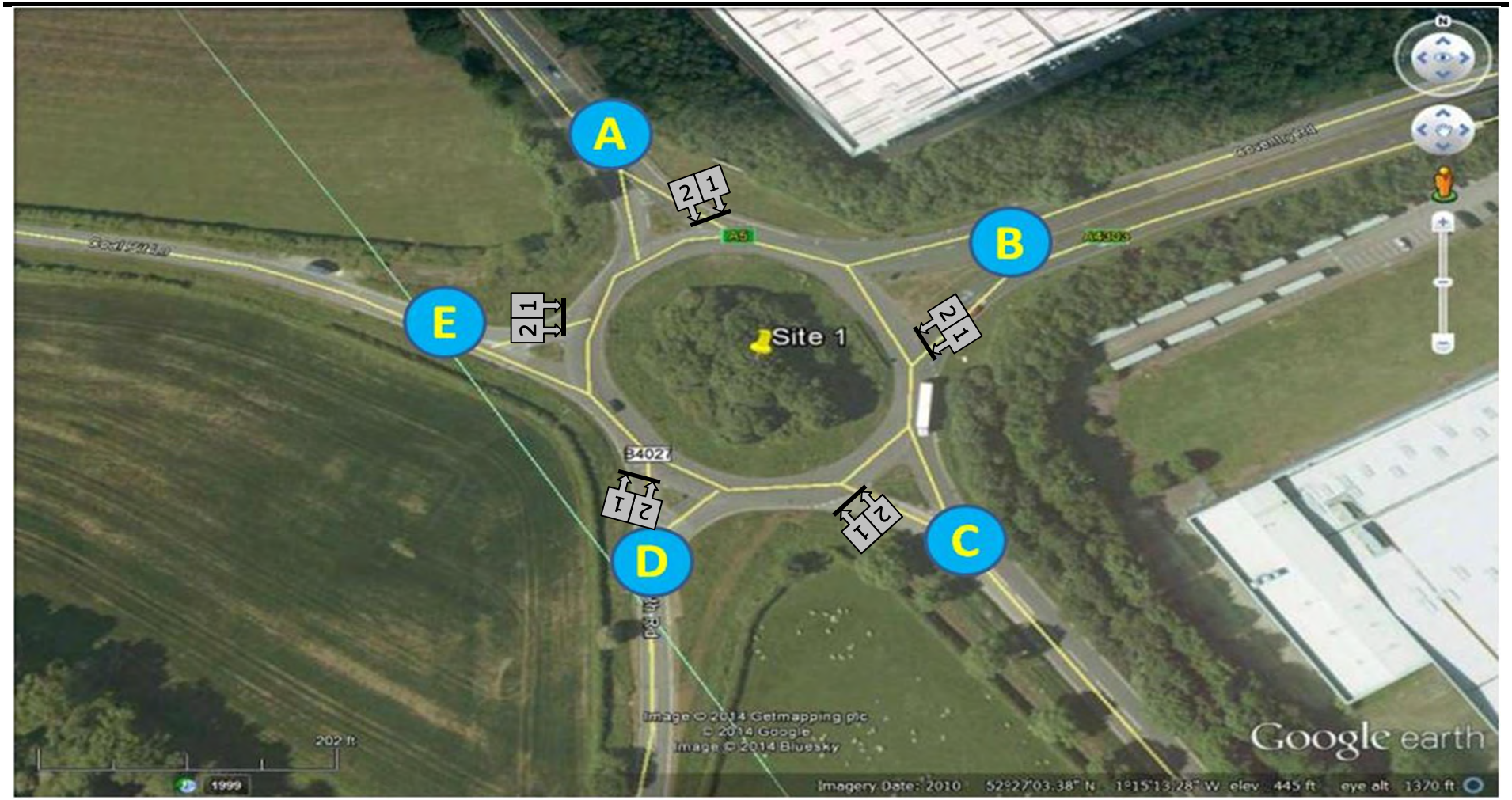
LOCATION : MERE RD j/w A5, LUTTERWORTH, LEICS

	MERE RD TO A5 - SOUTH MOVEMENT 1			MERE RD TO A5 - NORTH MOVEMENT 2			A5 - NORTH TO MERE RD MOVEMENT 3			A5 - NORTH TO A5 - SOUTH MOVEMENT 4			A5 - SOUTH TO A5 - NORTH MOVEMENT 5			A5 - SOUTH TO MERE RD MOVEMENT 6		
	LIGHT	HEAVY	TOTAL	LIGHT	HEAVY	TOTAL	LIGHT	HEAVY	TOTAL	LIGHT	HEAVY	TOTAL	LIGHT	HEAVY	TOTAL	LIGHT	HEAVY	TOTAL
0730-0745	27	1	**28**	2	1	**3**	1	0	**1**	233	18	**251**	145	21	**166**	4	1	**5**
0745-0800	17	1	**18**	1	0	**1**	1	0	**1**	225	24	**249**	115	12	**127**	6	0	**6**
0800-0815	22	1	**23**	2	0	**2**	3	0	**3**	230	18	**248**	121	18	**139**	7	0	**7**
0815-0830	23	0	**23**	2	0	**2**	3	0	**3**	225	27	**252**	126	21	**147**	12	0	**12**
0830-0845	18	1	**19**	4	0	**4**	8	0	**8**	224	15	**239**	118	18	**136**	16	1	**17**
0845-0900	17	1	**18**	2	0	**2**	5	0	**5**	216	22	**238**	109	13	**122**	13	0	**13**
0900-0915	10	0	**10**	2	0	**2**	4	0	**4**	159	24	**183**	92	17	**109**	5	0	**5**
0915-0930	8	0	**8**	0	0	**0**	2	0	**2**	115	19	**134**	75	16	**91**	5	0	**5**
0730-0930	**142**	**5**	**147**	**15**	**1**	**16**	**27**	**0**	**27**	**1627**	**167**	**1794**	**901**	**136**	**1037**	**68**	**2**	**70**
0730-0830	89	3	**92**	7	1	**8**	8	0	**8**	913	87	**1000**	507	72	**579**	29	1	**30**
0745-0845	80	3	**83**	9	0	**9**	15	0	**15**	904	84	**988**	480	69	**549**	41	1	**42**
0800-0900	80	3	**83**	10	0	**10**	19	0	**19**	895	82	**977**	474	70	**544**	48	1	**49**
0815-0915	68	2	**70**	10	0	**10**	20	0	**20**	824	88	**912**	445	69	**514**	46	1	**47**
0830-0930	53	2	**55**	8	0	**8**	19	0	**19**	714	80	**794**	394	64	**458**	39	1	**40**

	MERE RD TO A5 - SOUTH MOVEMENT 1			MERE RD TO A5 - NORTH MOVEMENT 2			A5 - NORTH TO MERE RD MOVEMENT 3			A5 - NORTH TO A5 - SOUTH MOVEMENT 4			A5 - SOUTH TO A5 - NORTH MOVEMENT 5			A5 - SOUTH TO MERE RD MOVEMENT 6		
	LIGHT	HEAVY	TOTAL	LIGHT	HEAVY	TOTAL	LIGHT	HEAVY	TOTAL	LIGHT	HEAVY	TOTAL	LIGHT	HEAVY	TOTAL	LIGHT	HEAVY	TOTAL
1630-1645	6	0	**6**	2	0	**2**	2	0	**2**	91	11	**102**	141	17	**158**	10	0	**10**
1645-1700	11	1	**12**	2	1	**3**	1	0	**1**	112	20	**132**	167	14	**181**	15	2	**17**
1700-1715	3	1	**4**	1	0	**1**	1	0	**1**	111	15	**126**	189	13	**202**	7	0	**7**
1715-1730	5	0	**5**	1	0	**1**	3	0	**3**	112	12	**124**	218	16	**234**	21	1	**22**
1730-1745	13	0	**13**	4	0	**4**	2	0	**2**	116	13	**129**	211	15	**226**	17	0	**17**
1745-1800	17	0	**17**	3	0	**3**	1	0	**1**	126	10	**136**	202	16	**218**	15	1	**16**
1800-1815	8	1	**9**	2	0	**2**	1	0	**1**	121	7	**128**	206	18	**224**	16	0	**16**
1815-1830	9	0	**9**	1	0	**1**	0	0	**0**	112	17	**129**	193	15	**208**	18	0	**18**
1630-1830	**72**	**3**	**75**	**16**	**1**	**17**	**11**	**0**	**11**	**901**	**105**	**1006**	**1527**	**124**	**1651**	**119**	**4**	**123**
1630-1730	25	2	**27**	6	1	**7**	7	0	**7**	426	58	**484**	715	60	**775**	53	3	**56**
1645-1745	32	2	**34**	8	1	**9**	7	0	**7**	451	60	**511**	785	58	**843**	60	3	**63**
1700-1800	38	1	**39**	9	0	**9**	7	0	**7**	465	50	**515**	820	60	**880**	60	2	**62**
1715-1815	43	1	**44**	10	0	**10**	7	0	**7**	475	42	**517**	837	65	**902**	69	2	**71**
1730-1830	47	1	**48**	10	0	**10**	4	0	**4**	475	47	**522**	812	64	**876**	66	1	**67**

Client:	URS
Project Number:	TSP11713
Project Name:	Lutterworth
Survey Type:	Queue Length Survey
Survey Date:	15 May 2014
Survey Time:	07:00 - 10:00 and 16:00 - 19:00
Weather:	Dry and Sunny
Comments:	

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **1**
Location: **A5/ A4303/ Lutterworth Road/ Coal Pit Lane Roundabout**

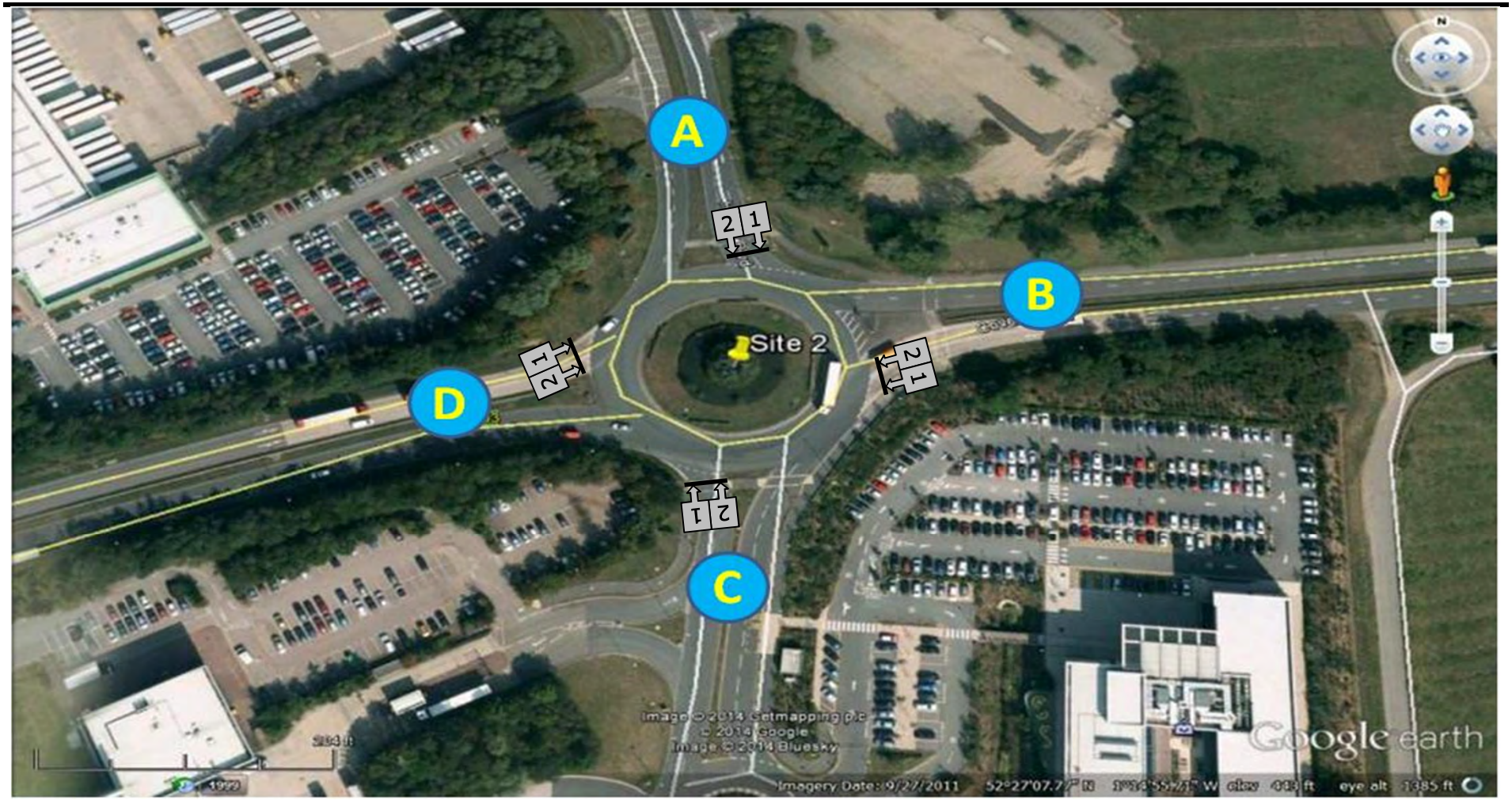


Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **1**
Location: **A5/ A4303/ Lutterworth Road/ Coal Pit Lane Roundabout**
Date: **15 May 2014, Thursday**

max Queue in metres

Time	Arm A		Arm B		Arm C		Arm D		Arm E	
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2
07:00 - 10:00										
7:00	25	0	15	10	0	25	5	5	0	15
7:05	20	0	10	35	20	15	0	0	10	10
7:10	20	0	15	20	30	15	0	0	5	5
7:15	25	5	35	30	20	20	5	10	20	40
7:20	40	10	30	25	20	15	0	10	5	5
7:25	45	0	25	15	10	5	0	5	10	10
7:30	20	0	25	25	15	0	0	5	15	10
7:35	40	0	45	15	20	20	5	30	5	15
7:40	35	15	55	35	25	70	5	5	15	15
7:45	50	35	25	15	10	35	0	10	25	15
7:50	35	25	15	5	40	15	5	10	50	15
7:55	15	10	40	10	20	20	0	10	10	15
8:00	15	5	35	40	50	30	0	0	10	10
8:05	25	5	20	20	10	45	0	20	15	10
8:10	35	10	35	15	10	25	5	10	45	5
8:15	30	5	15	20	20	10	5	15	20	10
8:20	40	15	25	55	20	10	5	5	25	5
8:25	45	15	20	15	10	15	0	10	20	10
8:30	35	10	45	40	60	25	5	10	10	15
8:35	30	5	5	15	0	15	0	15	10	5
8:40	30	15	30	15	25	15	5	20	25	5
8:45	100	30	20	15	10	25	0	0	5	5
8:50	30	0	30	5	0	10	15	10	10	5
8:55	60	0	25	5	0	15	0	10	20	5
9:00	35	0	30	20	0	30	0	0	40	5
9:05	0	0	30	5	0	20	0	0	5	0
9:10	0	0	25	20	5	0	0	10	5	0
9:15	45	0	10	20	15	0	0	0	10	15
9:20	10	0	0	20	5	20	0	5	5	5
9:25	0	0	0	20	0	0	0	0	5	0
9:30	10	0	0	10	40	20	0	0	5	5
9:35	0	0	30	10	25	15	5	0	5	0
9:40	15	5	5	15	30	5	0	0	15	0
9:45	25	0	5	5	15	15	5	0	10	0
9:50	0	0	20	0	45	0	5	0	5	0
9:55	20	10	25	25	0	20	0	15	5	15
16:00 - 19:00										
16:00	0	0	0	0	35	30	10	0	30	0
16:05	5	5	25	20	55	25	10	15	25	10
16:10	20	0	10	30	30	20	10	5	5	15
16:15	20	0	15	0	20	15	5	5	10	10
16:20	5	0	5	10	0	5	5	10	10	0
16:25	5	0	5	5	20	10	0	10	5	0
16:30	15	5	10	5	10	15	30	15	5	5
16:35	15	0	30	15	10	55	25	20	10	5
16:40	20	0	10	25	35	50	10	25	10	0
16:45	25	5	5	5	20	15	10	25	5	5
16:50	25	0	0	30	25	40	45	15	15	20
16:55	20	0	25	10	40	15	5	15	15	10
17:00	25	0	5	30	10	35	0	15	35	5
17:05	10	0	10	10	20	25	25	30	10	15
17:10	10	0	5	10	25	20	20	25	10	5
17:15	35	0	5	15	25	15	10	30	20	10
17:20	15	0	10	45	25	20	10	25	10	10
17:25	20	10	15	10	35	35	10	10	15	5
17:30	0	5	35	5	20	30	10	10	10	15
17:35	20	5	45	15	45	5	5	40	10	10
17:40	10	0	25	10	30	30	5	35	35	5
17:45	15	0	10	15	35	10	0	50	25	10
17:50	10	25	5	15	25	10	40	30	20	5
17:55	15	5	10	10	70	20	15	15	5	5
18:00	0	0	5	10	40	0	0	15	10	5
18:05	20	0	5	40	25	35	5	10	5	5
18:10	20	5	10	5	20	0	5	10	10	0
18:15	25	0	5	10	30	5	10	20	15	5
18:20	15	0	0	35	0	5	5	0	10	5
18:25	0	0	5	10	30	20	0	5	5	0
18:30	25	0	15	0	20	5	15	5	0	15
18:35	0	0	5	15	30	15	5	0	0	0
18:40	5	0	5	0	10	15	15	10	15	5
18:45	0	0	0	0	0	10	5	5	5	0
18:50	5	0	5	5	10	15	0	15	15	0
18:55	0	0	20	0	0	20	5	0	0	0

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **2**
Location: **Hunter Boulevard/ A4303 Roundabout**

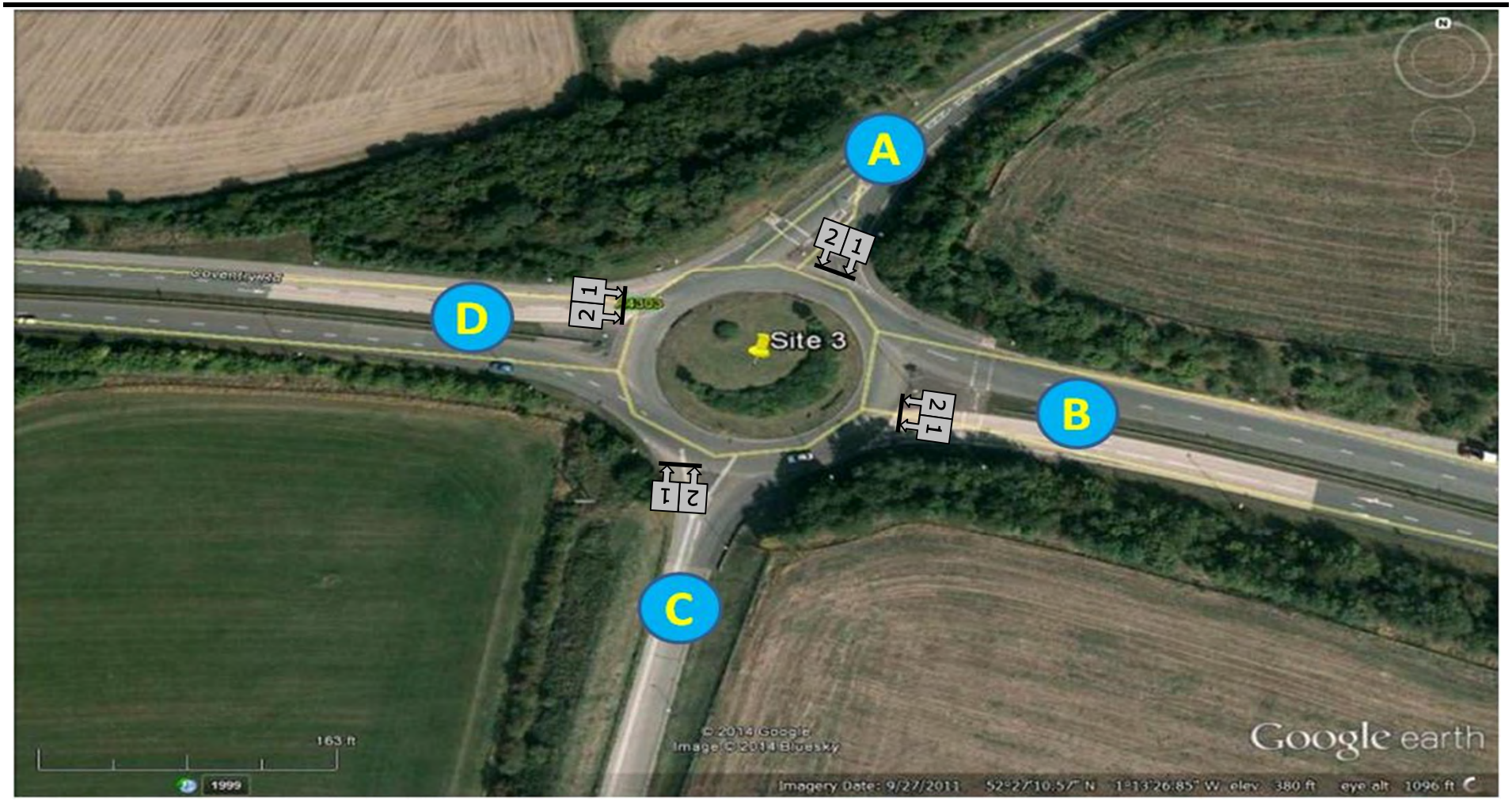


Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **2**
Location: **Hunter Boulevard/ A4303 Roundabout**
Date: **15 May 2014, Thursday**

max Queue in metres

Time	Arm A		Arm B		Arm C		Arm D	
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2
07:00 - 10:00								
7:00	40	0	5	15	0	15	5	15
7:05	10	5	5	25	0	0	0	0
7:10	0	0	5	30	5	0	0	0
7:15	30	5	0	30	0	15	30	10
7:20	5	10	0	25	15	0	15	10
7:25	15	5	0	25	15	0	30	10
7:30	15	10	5	25	0	20	15	0
7:35	15	5	25	15	0	5	15	5
7:40	30	10	0	0	0	0	25	5
7:45	0	10	20	30	15	5	20	10
7:50	30	5	5	25	0	0	50	20
7:55	5	5	5	35	0	0	50	5
8:00	25	5	30	30	15	5	15	5
8:05	15	10	5	30	15	0	10	0
8:10	30	5	5	35	5	5	30	5
8:15	0	10	5	30	0	0	30	10
8:20	15	5	20	5	0	30	40	25
8:25	30	5	15	20	5	0	5	5
8:30	30	5	0	25	0	0	10	5
8:35	0	5	10	0	0	0	25	20
8:40	30	0	0	5	15	0	30	10
8:45	15	10	10	25	0	5	15	10
8:50	5	5	10	20	5	0	40	15
8:55	20	5	0	15	0	5	15	10
9:00	30	5	0	30	0	0	20	5
9:05	0	5	0	15	15	0	20	0
9:10	0	5	0	0	0	5	10	5
9:15	15	15	0	0	0	0	25	20
9:20	5	10	0	0	0	0	5	0
9:25	5	10	5	35	0	5	5	10
9:30	15	5	15	0	0	15	5	5
9:35	15	10	20	35	15	0	15	5
9:40	15	5	0	0	0	0	10	5
9:45	20	5	0	5	0	0	0	10
9:50	15	5	5	10	15	0	0	5
9:55	0	15	0	5	15	5	0	25
16:00 - 19:00								
16:00	20	5	15	30	5	5	0	0
16:05	10	0	20	10	5	5	5	0
16:10	20	20	0	35	10	0	5	0
16:15	10	10	0	0	5	20	20	5
16:20	15	5	0	0	15	5	10	0
16:25	20	0	5	15	15	0	20	10
16:30	5	0	0	15	15	0	0	0
16:35	15	5	0	15	15	15	15	5
16:40	0	0	5	15	20	5	0	0
16:45	35	15	20	20	0	5	10	5
16:50	5	5	0	20	15	5	15	10
16:55	25	10	5	20	20	0	0	5
17:00	10	5	0	60	15	10	5	5
17:05	15	5	30	20	25	10	15	5
17:10	30	10	10	30	5	25	10	20
17:15	15	0	15	20	0	10	10	10
17:20	20	15	0	15	15	5	10	0
17:25	55	0	20	5	15	15	10	10
17:30	15	5	0	0	5	10	20	15
17:35	30	10	5	15	35	55	20	10
17:40	15	10	0	25	30	50	25	5
17:45	30	5	30	5	15	30	25	5
17:50	25	5	15	5	30	15	5	15
17:55	15	10	0	15	10	10	15	15
18:00	30	5	0	40	5	15	25	0
18:05	15	0	15	20	15	10	20	0
18:10	25	5	0	20	15	0	0	0
18:15	5	10	0	15	15	30	10	5
18:20	0	0	0	0	5	0	0	5
18:25	20	5	0	0	15	0	5	0
18:30	20	0	0	15	5	5	5	5
18:35	0	5	0	0	0	15	0	0
18:40	15	5	0	0	15	0	0	0
18:45	0	5	0	0	5	0	0	0
18:50	15	10	15	15	0	0	0	0
18:55	15	0	0	0	0	0	0	0

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **3**
Location: **Coventry Road/ A4303/ Fairacres Roundabout**



Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **3**
Location: **Coventry Road/ A4303/ Fairacres Roundabout**
Date: **15 May 2014, Thursday**

max Queue in metres

Time	Arm A		Arm B		Arm C		Arm D	
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2
07:00 - 10:00								
7:00	5	10	0	0	0	0	0	0
7:05	5	15	45	0	0	0	0	0
7:10	0	5	0	0	0	0	0	0
7:15	15	5	0	0	0	0	0	0
7:20	5	15	15	5	0	0	0	0
7:25	5	5	20	0	0	0	0	0
7:30	5	15	15	0	5	0	0	0
7:35	5	15	25	15	5	0	0	0
7:40	10	30	15	5	0	0	0	0
7:45	10	30	0	10	5	0	0	0
7:50	5	20	15	5	5	0	0	0
7:55	5	15	0	5	15	0	0	0
8:00	5	35	20	25	5	0	0	0
8:05	10	30	15	20	0	0	0	0
8:10	10	35	30	0	5	0	0	0
8:15	20	40	15	0	5	0	0	0
8:20	15	10	20	15	0	0	20	0
8:25	5	45	10	5	10	0	0	0
8:30	10	25	15	0	5	0	0	0
8:35	10	20	0	10	5	0	0	0
8:40	5	20	15	5	10	0	0	0
8:45	10	10	5	0	10	0	0	0
8:50	5	20	5	5	15	0	0	0
8:55	5	15	0	0	5	0	0	0
9:00	5	10	0	0	5	0	0	0
9:05	5	10	0	0	0	0	0	0
9:10	10	5	0	0	0	0	0	0
9:15	5	5	0	0	0	0	0	0
9:20	5	5	0	0	0	0	0	0
9:25	0	10	0	0	0	0	0	0
9:30	5	10	0	0	0	0	0	0
9:35	10	10	0	0	5	0	0	0
9:40	0	15	0	0	0	0	0	0
9:45	0	10	0	5	0	0	0	0
9:50	0	5	0	0	5	0	0	0
9:55	0	5	0	0	0	0	0	0
16:00 - 19:00								
16:00	10	20	5	0	5	0	0	0
16:05	5	15	0	0	5	0	0	0
16:10	5	10	30	0	0	0	0	0
16:15	5	5	5	0	0	0	0	0
16:20	5	5	15	0	5	0	0	0
16:25	0	10	0	5	5	0	0	0
16:30	0	5	0	0	0	0	0	0
16:35	5	5	0	0	0	0	0	0
16:40	5	5	0	0	0	0	0	0
16:45	5	10	20	0	0	0	0	0
16:50	10	5	0	0	0	0	0	0
16:55	15	5	0	0	0	0	0	0
17:00	5	5	0	0	0	0	0	0
17:05	15	15	0	0	0	0	0	0
17:10	10	20	0	0	0	0	0	0
17:15	10	60	5	5	0	0	0	0
17:20	10	15	5	0	0	0	0	0
17:25	10	15	0	5	0	0	0	0
17:30	15	65	0	15	0	0	0	15
17:35	10	55	0	0	0	0	0	0
17:40	10	20	15	5	5	0	0	0
17:45	10	30	15	5	5	0	0	0
17:50	10	10	0	10	5	0	0	0
17:55	10	20	15	0	5	0	0	0
18:00	0	15	0	0	5	0	0	0
18:05	0	15	15	0	0	0	0	0
18:10	10	5	0	0	0	0	0	0
18:15	5	5	0	0	0	0	0	0
18:20	5	10	0	0	5	0	0	0
18:25	5	10	0	0	0	0	0	0
18:30	0	10	0	0	5	0	0	0
18:35	5	10	0	0	0	0	0	0
18:40	5	5	0	0	5	0	0	0
18:45	0	10	0	0	0	0	0	0
18:50	5	5	0	0	0	0	0	0
18:55	5	5	0	0	0	0	0	0

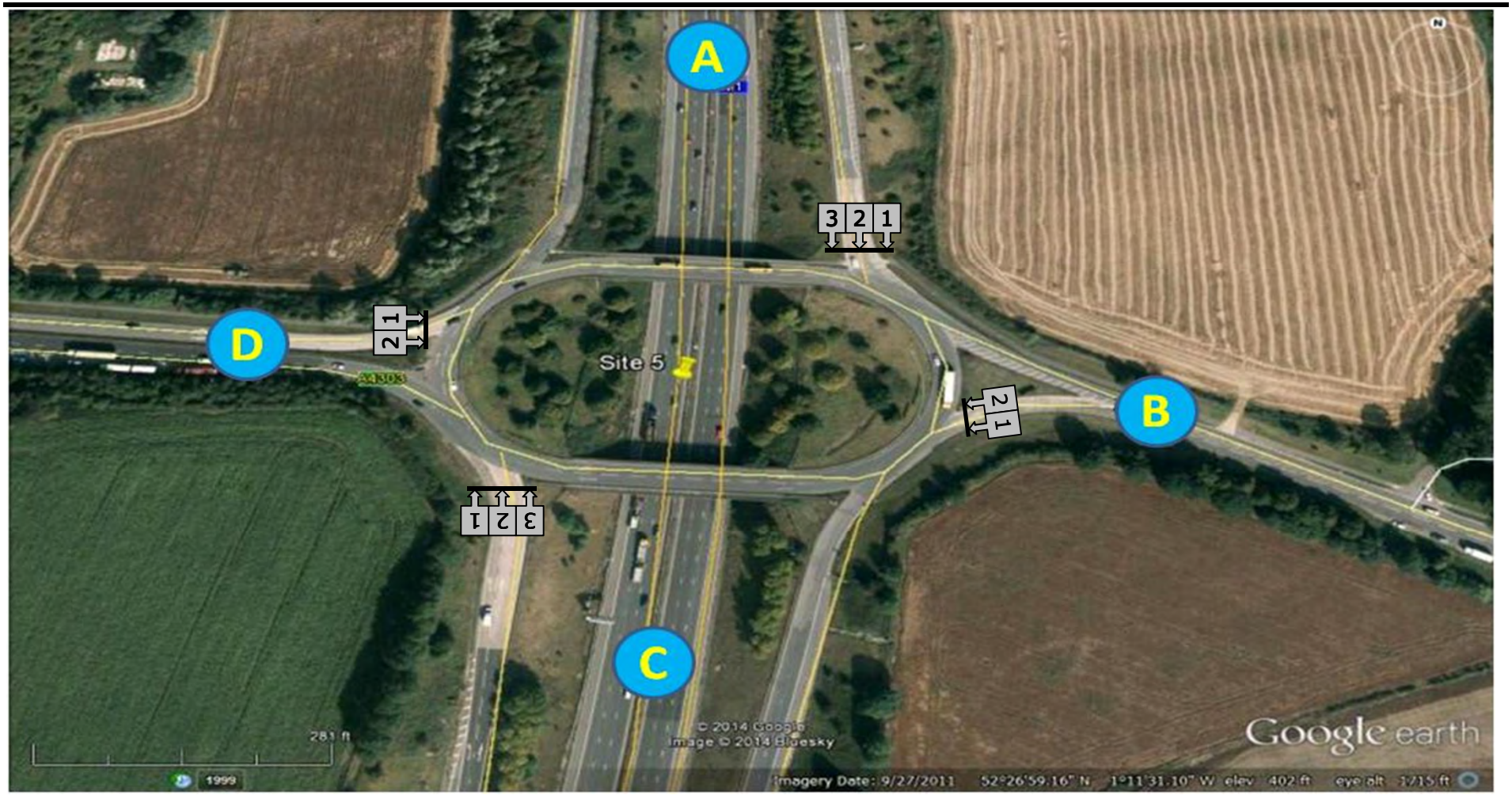
Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **4**
Location: **A426 Rugby Road/ A4303 Lutterworth Road Roundabout**

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **4**
Location: **A426 Rugby Road/ A4303 Lutterworth Road Roundabout**
Date: **15 May 2014, Thursday**

max Queue in metres

Time	Arm A		Arm B		Arm C		Arm D	
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2
07:00 - 10:00								
7:00	40	5	15	15	10	30	20	10
7:05	40	0	30	15	5	15	20	10
7:10	15	5	5	0	15	30	20	5
7:15	25	0	30	0	20	25	20	10
7:20	105	10	20	40	10	65	30	10
7:25	70	5	15	25	5	20	20	10
7:30	50	5	10	20	15	85	10	0
7:35	55	0	45	15	25	45	35	20
7:40	50	5	25	5	25	55	30	35
7:45	60	50	35	10	45	35	50	30
7:50	25	20	30	5	20	85	15	10
7:55	20	0	15	20	15	45	60	25
8:00	55	10	35	25	65	60	20	10
8:05	40	5	0	0	25	95	30	5
8:10	15	25	65	40	70	20	30	25
8:15	40	5	20	25	100	70	35	10
8:20	35	5	35	50	85	30	20	5
8:25	50	5	30	30	25	55	40	25
8:30	35	10	20	0	50	15	60	10
8:35	60	5	40	30	35	60	75	10
8:40	35	15	30	25	20	70	45	10
8:45	15	0	45	20	35	65	10	5
8:50	35	5	75	10	15	30	40	10
8:55	25	5	0	0	55	25	25	5
9:00	0	0	15	25	25	65	45	15
9:05	10	60	35	10	30	45	15	0
9:10	25	5	30	15	55	20	30	10
9:15	30	0	5	5	55	20	20	10
9:20	45	0	0	0	15	40	10	5
9:25	35	0	20	10	35	105	20	20
9:30	15	5	20	20	50	15	30	5
9:35	35	10	20	10	75	5	30	5
9:40	20	5	45	5	25	25	25	0
9:45	15	0	20	5	10	25	50	10
9:50	15	5	0	0	20	20	5	0
9:55	35	0	10	5	20	15	30	5
16:00 - 19:00								
16:00	35	15	35	25	15	30	20	10
16:05	15	5	15	10	35	15	15	5
16:10	15	15	15	15	30	25	35	15
16:15	15	5	20	25	30	15	35	20
16:20	30	5	0	35	10	45	20	10
16:25	55	10	0	10	20	75	20	10
16:30	20	5	35	10	25	45	15	5
16:35	20	10	35	25	30	15	55	30
16:40	25	5	20	20	20	40	45	10
16:45	15	5	20	15	25	15	45	20
16:50	0	0	45	10	40	40	25	10
16:55	20	0	20	20	25	25	30	5
17:00	15	10	55	20	15	40	35	20
17:05	30	15	35	20	30	25	40	15
17:10	30	10	50	15	20	35	30	15
17:15	30	5	45	15	15	20	35	120
17:20	20	15	20	15	10	60	50	20
17:25	10	10	20	20	65	70	35	20
17:30	15	10	35	10	20	20	40	35
17:35	20	5	35	25	70	45	65	30
17:40	25	15	30	30	20	30	35	55
17:45	20	25	40	35	30	25	55	25
17:50	60	5	15	10	15	30	60	40
17:55	20	15	35	20	20	40	45	10
18:00	50	15	35	15	15	15	35	20
18:05	45	0	10	10	30	35	50	15
18:10	35	5	0	5	15	15	35	20
18:15	50	5	30	25	20	30	25	10
18:20	10	5	15	10	20	20	30	15
18:25	10	5	0	15	25	30	20	10
18:30	15	10	40	10	10	25	25	0
18:35	15	0	10	10	10	30	35	10
18:40	25	5	10	10	10	25	25	15
18:45	30	5	15	10	10	30	25	5
18:50	45	5	0	25	10	15	15	5
18:55	15	5	10	15	5	15	5	5

Project Number:	TSP11713
Project Name:	Lutterworth
Survey Type:	Queue Length Survey
Site No:	5
Location:	M1/ A4304/ A4303 Roundabout

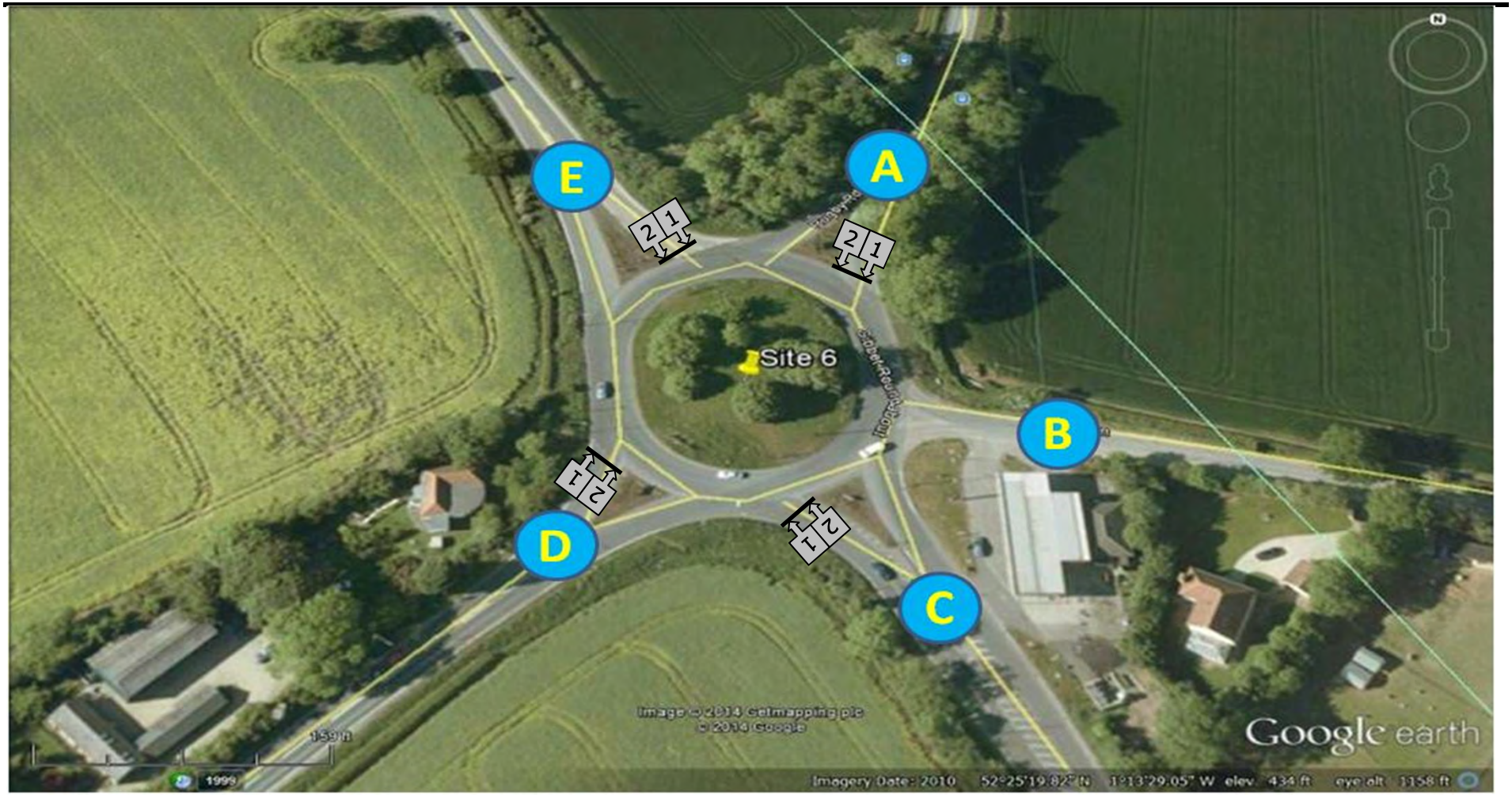


Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **5**
Location: **M1/ A4304/ A4303 Roundabout**
Date: **15 May 2014, Thursday**

max Queue in metres

Time	Arm A			Arm B		Arm C			Arm D	
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2
07:00 - 10:00										
7:00	0	5	15	5	15	20	5	5	5	0
7:05	0	15	10	0	0	25	15	15	5	5
7:10	0	20	20	5	0	0	5	45	0	0
7:15	0	30	20	10	0	5	5	15	0	30
7:20	0	55	10	10	20	40	10	15	0	0
7:25	0	50	5	5	30	25	5	5	0	15
7:30	0	20	20	10	30	30	5	30	5	5
7:35	15	15	25	0	15	20	20	5	60	5
7:40	30	10	40	5	15	20	15	5	0	5
7:45	0	15	20	0	10	35	10	15	25	20
7:50	10	15	25	5	15	40	10	5	0	30
7:55	0	25	35	10	10	65	20	15	20	10
8:00	0	15	25	25	0	20	15	0	0	30
8:05	0	45	25	0	5	50	15	25	25	20
8:10	0	15	60	20	10	35	10	15	0	0
8:15	0	30	40	45	10	40	5	5	0	0
8:20	0	15	30	55	15	25	5	5	0	10
8:25	0	20	30	85	15	45	15	15	35	0
8:30	0	30	40	85	25	20	20	10	0	40
8:35	20	15	25	20	20	40	10	30	20	15
8:40	0	15	35	15	15	40	10	10	15	0
8:45	15	15	40	45	15	65	5	20	15	15
8:50	0	30	25	25	0	35	10	20	15	10
8:55	0	30	30	60	15	5	5	15	0	0
9:00	15	0	30	10	5	30	0	20	0	0
9:05	15	15	20	0	5	30	5	10	0	0
9:10	0	15	15	15	15	5	5	20	0	5
9:15	0	0	10	0	0	15	0	15	0	0
9:20	0	15	40	5	0	5	5	15	0	0
9:25	0	0	5	0	0	0	0	5	0	0
9:30	0	30	15	10	0	5	0	0	0	0
9:35	0	15	15	0	0	25	0	0	0	0
9:40	0	60	5	10	0	15	0	5	0	0
9:45	0	15	15	0	5	25	15	5	0	0
9:50	0	0	10	5	30	40	5	20	0	0
9:55	0	5	10	0	0	35	5	5	0	15
16:00 - 19:00										
16:00	5	0	15	0	15	20	10	5	0	0
16:05	0	5	10	0	0	15	0	10	30	0
16:10	10	30	10	20	25	20	0	25	10	0
16:15	0	15	15	35	15	35	15	30	0	0
16:20	0	0	15	20	15	30	15	40	0	10
16:25	0	15	10	10	30	5	10	5	25	0
16:30	0	15	10	15	5	15	0	5	0	0
16:35	0	5	15	30	15	0	5	20	20	5
16:40	5	15	25	30	5	30	10	10	40	0
16:45	0	25	40	15	10	10	15	5	0	30
16:50	5	30	20	25	0	60	10	25	0	0
16:55	0	5	5	15	20	45	10	20	20	0
17:00	5	20	30	0	25	25	5	15	10	0
17:05	0	15	25	0	20	0	0	15	25	25
17:10	10	25	20	5	20	15	5	30	0	15
17:15	5	15	15	10	0	20	20	10	35	15
17:20	15	20	35	0	0	35	5	15	25	25
17:25	10	35	15	0	5	75	15	20	0	0
17:30	10	25	20	15	5	20	0	15	30	5
17:35	15	15	25	0	0	30	5	15	5	15
17:40	10	5	20	0	0	25	5	15	25	30
17:45	10	30	15	0	0	10	10	15	25	10
17:50	0	10	15	10	5	10	0	15	25	15
17:55	10	30	30	5	0	25	5	25	20	20
18:00	10	0	15	5	10	15	10	25	15	0
18:05	0	5	20	10	5	30	5	10	20	5
18:10	10	0	25	15	10	25	10	15	15	5
18:15	0	30	20	15	10	10	5	10	40	10
18:20	0	5	10	10	15	15	10	5	0	5
18:25	0	30	10	10	5	30	10	15	0	5
18:30	5	5	5	20	5	5	5	15	0	0
18:35	0	15	10	0	0	5	5	15	0	0
18:40	0	5	5	0	0	0	5	5	0	15
18:45	0	5	10	5	5	5	5	5	10	5
18:50	5	5	5	0	0	20	0	5	0	15
18:55	0	15	15	0	0	45	0	15	0	5

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **6**
Location: **A426 Rugby Road / A5 Roundabout**



Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **6**
Location: **A426 Rugby Road / A5 Roundabout**
Date: **15 May 2014, Thursday**

traffic survey partners

max Queue in metres

Time	Arm A		Arm B	Arm C		Arm D		Arm E	
	Lane 1	Lane 2	Lane 1	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2
07:00 - 10:00									
7:00	45	20	5	25	10	15	0	15	35
7:05	25	10	0	100	5	5	5	5	20
7:10	40	15	35	20	20	10	5	40	10
7:15	60	10	15	40	0	25	5	50	40
7:20	45	5	35	55	15	10	15	40	45
7:25	35	0	35	60	10	30	0	35	35
7:30	60	0	20	15	20	25	0	30	50
7:35	80	5	30	85	65	20	5	35	35
7:40	45	5	5	45	10	25	10	30	15
7:45	40	20	15	110	35	40	10	15	0
7:50	30	20	15	30	15	15	0	30	55
7:55	45	5	15	65	10	55	0	45	10
8:00	20	5	15	40	15	35	0	10	20
8:05	35	0	20	80	15	30	0	35	40
8:10	50	15	30	85	15	20	15	25	40
8:15	25	5	20	45	10	25	0	30	35
8:20	60	20	10	50	25	40	0	0	0
8:25	60	5	20	70	15	55	5	45	15
8:30	50	15	15	90	5	25	15	40	20
8:35	60	5	20	105	10	65	20	25	40
8:40	40	0	10	55	10	50	20	10	25
8:45	25	0	25	40	10	35	15	0	10
8:50	10	10	15	20	0	15	0	0	0
8:55	15	0	20	25	15	30	0	5	10
9:00	20	5	0	20	35	15	0	0	5
9:05	45	0	5	20	35	15	5	10	30
9:10	10	10	15	35	10	25	0	10	30
9:15	50	0	30	0	15	15	0	40	5
9:20	35	5	5	30	10	5	5	0	45
9:25	5	5	15	50	20	5	10	0	20
9:30	45	0	0	75	20	40	0	0	35
9:35	25	10	30	45	25	50	5	0	20
9:40	55	0	0	20	30	5	0	0	30
9:45	45	0	30	30	5	5	5	10	5
9:50	15	0	15	15	5	35	0	0	30
9:55	10	0	0	20	0	10	0	5	0
16:00 - 19:00									
16:00	55	0	15	60	15	10	5	15	35
16:05	35	20	15	50	0	15	5	20	30
16:10	0	0	0	75	5	35	20	0	15
16:15	20	20	0	15	5	15	15	10	35
16:20	35	10	5	20	5	35	0	25	25
16:25	35	0	5	70	40	75	10	10	15
16:30	35	15	15	20	30	30	40	20	5
16:35	40	0	0	75	0	40	30	15	10
16:40	70	0	20	30	20	20	5	35	15
16:45	15	15	15	35	5	55	10	0	5
16:50	25	5	5	40	5	5	10	5	10
16:55	35	5	5	15	5	30	20	0	30
17:00	50	10	5	70	20	15	15	15	40
17:05	0	5	15	80	45	35	5	15	10
17:10	45	10	10	35	15	35	10	10	25
17:15	30	15	0	20	5	20	5	10	50
17:20	35	0	15	30	10	50	5	5	40
17:25	45	0	10	20	10	45	5	10	20
17:30	30	10	15	20	5	30	15	30	20
17:35	20	5	5	35	5	10	15	30	10
17:40	35	0	5	35	5	30	10	10	15
17:45	25	10	5	40	10	0	15	0	30
17:50	35	5	5	45	0	20	20	5	25
17:55	35	0	5	10	10	35	15	10	20
18:00	25	0	5	45	15	25	35	25	25
18:05	15	5	5	60	20	40	0	25	60
18:10	0	5	0	10	5	95	20	0	5
18:15	0	0	0	40	5	25	0	30	20
18:20	20	0	5	15	15	10	10	20	20
18:25	40	65	0	40	5	35	0	5	0
18:30	15	5	0	55	0	10	15	15	35
18:35	10	0	0	0	0	25	0	0	0
18:40	35	5	10	0	0	0	0	15	45
18:45	15	0	10	25	0	5	0	5	10
18:50	45	0	0	10	0	15	0	0	35
18:55	0	0	10	0	0	30	5	0	20

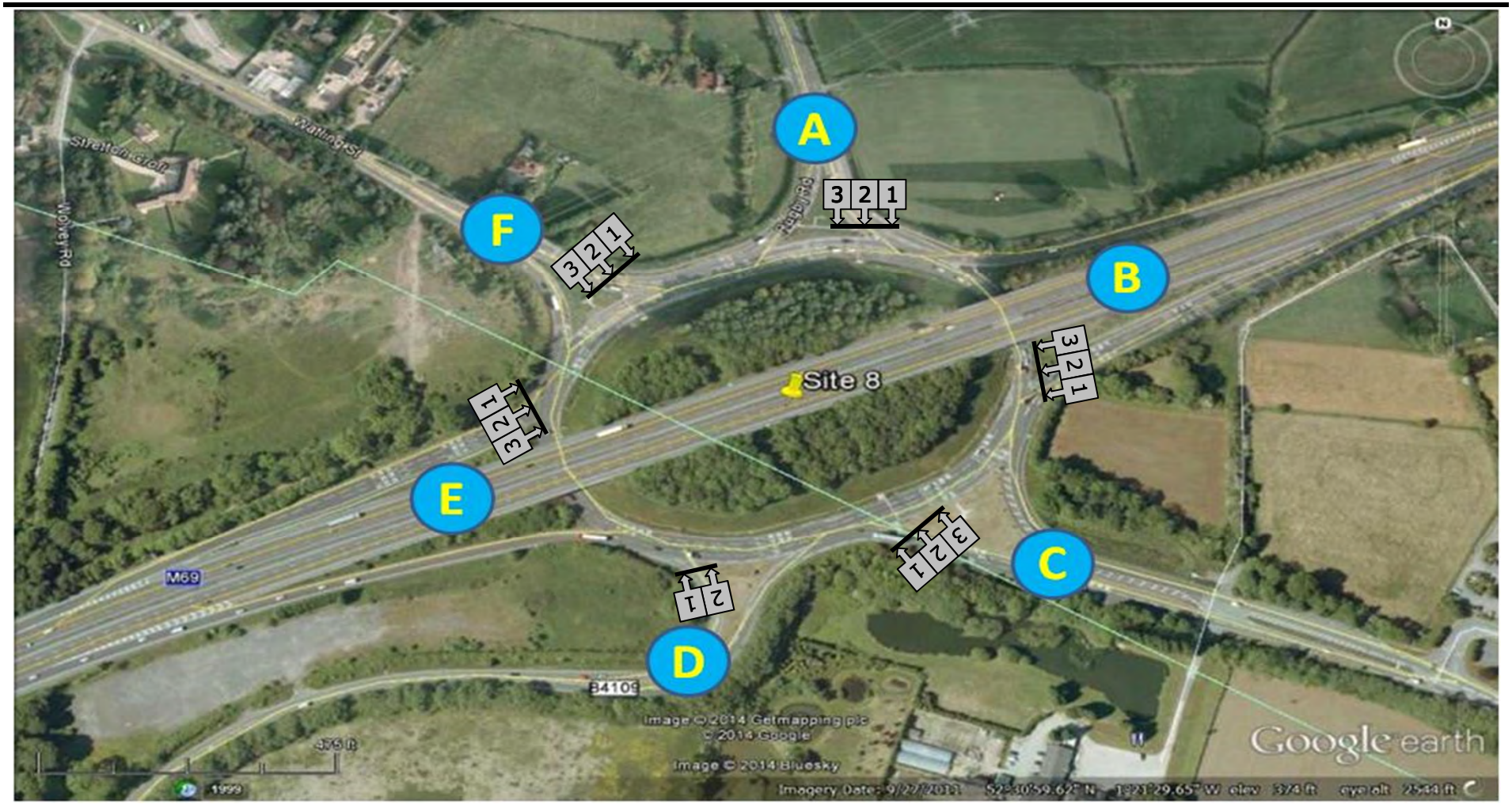
Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **7**
Location: **A426 / M6 Junction**

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **7**
Location: **A426 / M6 Junction**
Date: **15 May 2014, Thursday**

max Queue in metres

Time	Arm A		Arm B			Arm C		Arm D		
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 1	Lane 2	Lane 3
07:00 - 10:00										
7:00	20	20	10	0	0	0	0	35	20	15
7:05	20	10	20	5	30	5	10	40	25	10
7:10	25	25	25	20	15	15	0	20	30	20
7:15	30	10	25	20	15	20	10	5	30	25
7:20	25	35	30	20	30	35	20	25	30	20
7:25	40	30	25	10	15	20	15	40	30	15
7:30	10	45	15	10	15	15	0	30	45	15
7:35	35	25	25	5	30	15	10	50	20	15
7:40	25	15	40	15	15	0	15	15	30	40
7:45	35	30	40	20	15	20	30	10	25	30
7:50	40	30	20	10	30	20	10	35	30	35
7:55	40	30	55	10	15	20	10	30	15	20
8:00	35	15	20	10	5	10	20	15	25	20
8:05	25	15	40	20	20	15	15	30	25	15
8:10	55	30	40	20	15	25	0	40	35	20
8:15	30	35	30	20	15	10	5	40	20	15
8:20	30	20	30	20	30	45	5	25	15	40
8:25	30	35	70	25	20	5	5	40	50	45
8:30	30	20	45	40	15	25	20	30	15	10
8:35	45	30	15	10	5	30	15	30	20	15
8:40	35	15	25	10	5	5	5	25	15	30
8:45	35	35	50	15	30	5	0	40	15	15
8:50	30	20	20	10	5	0	0	10	30	25
8:55	30	15	35	10	35	0	0	15	15	30
9:00	25	35	20	15	15	0	5	10	10	10
9:05	35	25	20	5	15	5	0	35	30	20
9:10	25	15	20	10	0	10	5	15	30	15
9:15	40	20	25	10	15	0	0	35	25	25
9:20	15	15	5	5	15	10	10	30	25	15
9:25	40	35	55	15	45	5	5	20	10	15
9:30	25	25	15	0	15	15	20	20	20	15
9:35	35	20	35	10	15	0	0	10	20	15
9:40	20	40	15	5	5	0	5	15	35	10
9:45	25	10	25	10	0	5	0	20	15	20
9:50	30	30	30	0	15	5	0	20	30	25
9:55	25	15	10	0	15	0	5	5	15	10
16:00 - 19:00										
16:00	35	20	15	0	10	25	15	10	15	25
16:05	35	30	15	0	15	15	25	45	25	30
16:10	20	40	35	0	15	0	0	30	15	25
16:15	30	35	25	0	10	15	5	55	10	15
16:20	10	20	10	0	5	0	0	15	30	20
16:25	35	40	20	5	20	20	5	30	30	10
16:30	5	5	10	5	15	10	0	30	10	25
16:35	20	35	20	0	15	15	0	15	25	15
16:40	15	30	15	0	5	50	5	25	20	30
16:45	30	15	20	15	15	0	5	35	10	30
16:50	15	15	20	0	30	20	5	15	15	15
16:55	15	0	15	15	10	15	15	20	10	15
17:00	25	10	15	5	5	10	10	50	15	20
17:05	15	20	45	10	5	0	20	60	20	30
17:10	15	20	20	10	5	30	20	10	15	15
17:15	35	30	10	5	20	15	20	65	25	10
17:20	35	15	50	5	15	15	20	35	30	30
17:25	20	25	15	20	15	0	5	40	20	15
17:30	20	15	25	0	0	15	5	25	30	20
17:35	20	20	50	15	0	0	10	30	20	20
17:40	35	25	20	5	15	5	5	15	20	20
17:45	30	25	10	5	0	0	10	15	35	15
17:50	25	25	30	0	15	0	5	35	15	25
17:55	20	20	15	20	5	40	10	20	15	15
18:00	20	5	15	10	5	10	5	55	10	25
18:05	25	10	25	15	5	0	0	55	25	15
18:10	15	25	35	10	15	15	0	40	40	40
18:15	15	5	30	10	30	0	15	10	15	10
18:20	30	10	15	0	0	0	0	15	10	15
18:25	15	15	25	5	15	0	0	5	35	20
18:30	30	15	20	5	15	0	0	10	30	10
18:35	30	30	15	0	15	0	0	30	30	5
18:40	30	30	20	0	0	5	10	25	20	25
18:45	35	10	15	0	5	0	0	20	20	15
18:50	25	0	15	0	0	0	15	30	15	15
18:55	30	5	10	0	5	0	0	15	5	10

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **8**
Location: **M69 / A5 Roundabout**



Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **8**
Location: **M69 / A5 Roundabout**
Date: **15 May 2014, Thursday**

max Queue in metres

Time	Arm A			Arm B			Arm C			Arm D		Arm E			Arm F		
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3
07:00 - 10:00																	
7:00	10	25	60	5	35	10	40	20	15	0	10	40	20	0	20	50	25
7:05	15	30	85	20	30	20	60	45	25	5	10	35	10	35	25	60	30
7:10	15	30	85	5	10	25	45	45	55	0	15	45	15	15	40	85	20
7:15	15	50	125	20	35	40	50	50	30	10	40	55	5	10	65	55	35
7:20	10	35	65	15	10	30	45	55	30	10	45	50	10	20	50	80	45
7:25	15	40	55	30	35	15	35	15	20	0	20	40	20	10	50	55	35
7:30	15	35	85	20	35	25	60	90	40	5	60	65	10	25	50	80	40
7:35	15	50	90	20	50	30	40	55	45	20	45	50	20	35	60	85	65
7:40	20	65	85	15	35	35	55	70	45	15	60	105	30	25	50	65	35
7:45	35	50	45	30	30	30	50	35	25	25	65	95	35	25	65	40	30
7:50	5	40	45	25	25	25	30	75	60	40	80	45	35	10	50	75	0
7:55	15	55	55	25	30	20	50	50	55	5	50	70	20	40	45	75	55
8:00	15	50	35	15	30	20	50	40	40	10	80	40	15	60	30	70	35
8:05	10	30	60	15	40	25	40	40	25	10	25	60	45	15	70	35	35
8:10	25	45	65	20	40	15	20	70	30	15	15	50	30	30	80	80	25
8:15	15	50	50	30	40	25	20	70	55	25	65	60	15	35	30	75	40
8:20	10	50	55	20	20	20	20	40	20	10	55	85	25	10	40	95	40
8:25	5	45	50	50	35	10	45	30	30	65	60	80	20	15	40	50	35
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8:40	5	20	25	5	35	10	20	30	30	20	35	40	10	65	20	60	30
8:45	10	25	35	20	20	15	20	45	30	0	25	25	10	20	35	40	25
8:50	5	40	35	35	30	20	20	75	20	20	45	30	10	45	30	35	30
8:55	25	30	50	45	15	15	25	25	15	30	20	40	5	15	55	70	20
9:00	15	25	35	15	20	5	25	25	15	10	15	25	15	30	20	80	25
9:05	10	40	25	40	45	25	5	20	15	5	15	95	5	10	25	90	50
9:10	15	35	40	10	20	15	20	40	15	5	25	30	10	30	20	40	20
9:15	5	20	25	20	30	5	35	20	20	10	10	20	5	15	20	45	35
9:20	5	25	35	15	15	5	15	25	25	5	5	20	10	30	25	25	20
9:25	15	15	20	10	25	5	10	45	20	5	15	25	20	15	25	35	15
9:30	15	20	25	5	30	30	5	30	20	5	5	30	5	10	30	25	10
9:35	5	10	25	5	15	10	5	40	35	5	5	20	5	15	35	30	15
9:40	15	15	30	15	10	10	20	55	35	5	10	35	45	15	30	55	40
9:45	5	15	35	10	30	10	40	50	10	20	20	55	15	20	10	55	20
9:50	5	10	10	5	30	15	5	20	15	0	10	45	5	10	20	40	15
9:55	20	10	20	20	20	10	35	20	10	0	20	45	10	15	5	20	15
16:00 - 19:00																	
16:00	5	25	30	10	25	10	25	30	20	0	20	35	10	20	25	25	25
16:05	15	25	15	10	20	10	25	50	30	5	20	50	10	10	10	40	45
16:10	30	35	25	15	15	10	10	35	40	10	5	40	15	35	50	35	10
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16:20	10	25	15	30	30	20	5	45	35	10	15	35	30	40	15	45	30
16:25	0	40	25	30	20	20	5	40	15	0	15	45	15	15	25	35	15
16:30	10	20	25	20	15	15	15	20	25	10	15	50	15	25	20	60	30
16:35	20	20	20	40	15	15	15	45	20	10	10	30	10	20	30	55	35
16:40	5	35	20	20	25	10	20	40	25	15	20	25	25	25	25	35	30
16:45	10	10	30	30	20	15	5	55	40	5	5	40	15	45	40	80	30
16:50	10	25	20	10	10	15	5	35	15	25	90	60	45	20	65	70	30
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17:00	5	35	30	25	10	10	15	20	30	15	20	60	25	25	40	50	35
17:05	10	15	30	25	45	20	40	30	15	5	10	55	20	50	20	65	50
17:10	5	20	25	40	35	25	10	20	25	15	35	35	15	30	55	40	30
17:15	5	50	25	25	25	10	10	50	20	15	15	50	20	30	40	30	30
17:20	15	30	35	25	30	25	35	50	25	5	40	55	15	30	30	50	35
17:25	10	30	40	15	30	15	35	55	35	5	10	45	25	25	35	65	20
17:30	15	20	30	30	25	15	10	45	50	5	15	45	15	35	40	30	20
17:35	15	55	25	25	25	10	40	35	40	5	25	45	20	50	30	45	35
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17:45	5	25	25	25	20	20	25	20	55	0	15	50	35	35	20	50	25
17:50	10	35	10	10	20	20	20	60	20	15	10	50	20	25	35	40	35
17:55	0	20	20	20	20	10	20	45	25	5	10	60	10	45	35	35	25
18:00	20	30	15	5	10	20	25	70	20	30	15	55	15	20	10	60	60
18:05	5	30	20	15	20	15	15	50	25	5	5	40	15	15	30	35	75
18:10	5	15	35	5	20	10	30	55	25	10	5	45	10	20	30	35	25
18:15	5	25	20	20	15	5	15	20	45	5	10	75	20	15	20	25	10
18:20	5	35	25	5	15	15	10	35	35	5	5	35	20	35	20	45	10
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18:30	5	15	20	5	25	5	10	25	25	10	20	50	20	15	15	50	40
18:35	20	10	15	20	30	5	15	10	10	5	10	30	10	30	25	45	25
18:40	15	15	15	5	15	0	5	25	15	5	10	45	20	20	15	25	20
18:45	0	15	10	15	20	5	15	15	15	0	15	35	0	10	15	25	5
18:50	5	15	20	20	10	10	15	20	20	0	5	30	10	15	5	50	15
18:55	0	40	45	5	25	5	20	65	50	0	5	30	10	15	20	20	0

Client: URS

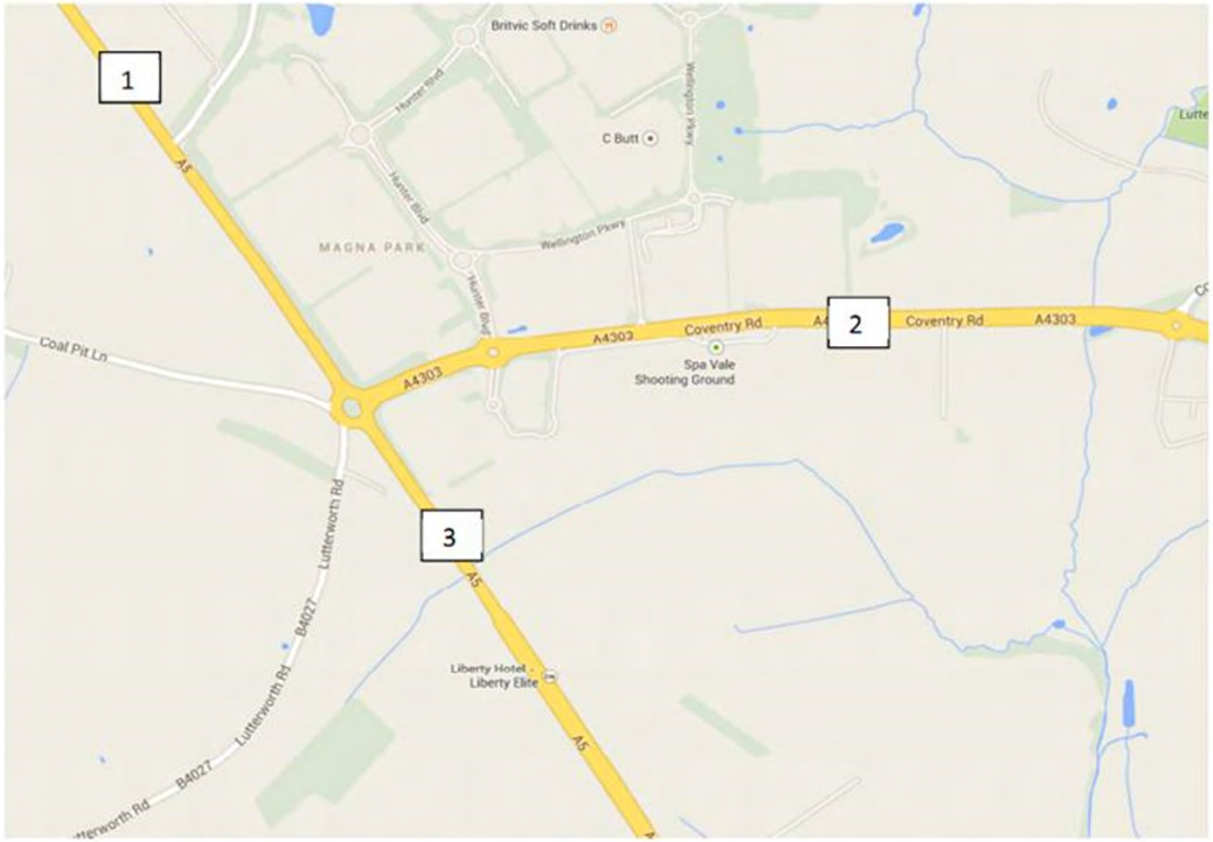
Project Name: Lutterworth

Survey Type: ATC

Survey Date: 12th to 19th of May 2014

Survey Time: 00:00-23:59

Location of ATCs:



Automatic Traffic Counts Classification Scheme

Length	Axles & Groups		Vehicle Type	ARX Classification			
Type	**Axles**	**Groups**	**Description**	**Class**		**Parameters**	**Dominant Vechicle**
Short up to 5.5m	**Light Vehicles**						
	2	1 or 2	Very Short Bicycle or Motorcycle	MC	1	d(1) < 1.7 and axles = 2	
	2	1 or 2	Short Saloon, Hatchback, Estate, 4WD, Pick-Up, Light Van, Bicycle, Motorcycle, etc.	SV	2	d(1) > 1.7m. d(1) < = 3.2m and axles = 2	
Medium 5.5m to 14.5m	3, 4 or 5	3	Short - Towing Trailer, Caravan, Boat, etc.	SVT	3	groups = 3, d(1) > 2.1m. d(1) < = 3.2m. d(2) > = 2.1m and axles = 3,4,5	
	Heavy Vehicles						
	2	2	Two Axle Truck or Bus	TB2	4	d(1) > 3.2m and axles = 2	
	3	2	Three Axle Truck or Bus	TB3	5	axles = 3 and groups = 2	
	> 3	2	Four Axle Truck	T4	6	d(1) > 3.2m. axles = 3 and groups = 3	
Long 11.5m to 19.0m	3	3	Three Axle Articulated Three axle articulated vehicle or rigid vehicle and trailer	ART3	7	d(1) > 3.2m. Axles = 3 and groups = 3	
	4	> 2	Four Axle Articulated Four axle articulated vehicle or rigid vehicle and trailer	ART4	8	d(2) < 2.1m or d(1) < 2.1m or d(1) > 3.2m axles = 5 and groups < 2	
	5	> 2	Five Axle Articulated Five axle articulated vehicle or rigid vehicle and trailer	ART5	9	axles = 6 and groups > 2 or axles 6 and groups = 3	
	> = 6	> 2	Six Axle Articulated Six (or more) axle articulated vehicle or rigid vehicle and trailer	ART6	10	axles = 6 and groups >2 or axles > 6 and groups = 3	
	Ungrouped classes						
			Unclassifiable Vehicle		13		
			Unclassifiable Axle Event		0		

TSP Class Profile All Days 15 Mins

Globals

Report Id	CustomList-40
Descriptor	TSP Class Profile All Days 15 Mins
Created by	MetroCount Traffic Executive
Creation Time (UTC)	2014-06-10T12:10:18
Legal	Copyright (c)1997 - 2013 MetroCount
Graphic	header.gif
Language	English
Country	United Kingdom
Time	UTC + 120 min
Create Version	4.0.5.0
Metric	Non metric
Speed Unit	mph
Length Unit	ft
Mass Unit	ton

Dataset

Site Name	LUTTERWORTH- 01
Site Attribute	LUTTERWORTH
File Name	I:\Present Projects\TSP11713-Lutterworth\LUTTERWORTH- 0115May2014.EC0
File Type	Plus
Algorithm	Factory default axle
Description	A5 N [60M]
Lane	0
Direction	7
Direction Text	7 - North bound A]B, South bound B]A.
Layout Text	Axle sensors - Paired (Class/Speed/Count)
Setup Time	2014-05-11T15:19:20
Start Time	2014-05-11T15:19:20
Finish Time	2014-05-15T05:41:20
Operator	DS
Configuration	00000000 80 00 14 6a 6a 00 00 00 00 00 , Standard

Dataset

Site Name	LUTTERWORTH- 01
Site Attribute	LUTTERWORTH
File Name	I:\Present Projects\TSP11713-Lutterworth\LUTTERWORTH- 0119May2014.EC0
File Type	Plus
Algorithm	Factory default axle
Description	A5 N [60M]
Lane	0
Direction	7
Direction Text	7 - North bound A]B, South bound B]A.
Layout Text	Axle sensors - Paired (Class/Speed/Count)
Setup Time	2014-05-15T05:44:44
Start Time	2014-05-15T05:44:44
Finish Time	2014-05-19T19:18:44
Operator	DS
Configuration	00000000 80 00 14 6a 6a 00 00 00 00 00 , Standard

Profile

Name	TSP Class Profile All Days New15 mins
Title	TSP Traffic Reports
Graphic Logo	C:and SettingsDocuments3.21_on_us_logo_cmyk 50.BMP
Header	
Footer	
Percentile 1	85
Percentile 2	95
Pace	12
Filter Start	2014-05-12T00:00:00
Filter End	2014-05-19T00:00:00
Class Scheme	ARX
Low Speed	0
High Speed	120
Posted Limit	60
Speed Limits	68 75 60 60 60 0 0 0 0 60
Separation	0.000
Separation Type	Headway
Direction	North
Encoded Direction	1

TSP Class Profile All Days 15 Mins

Column	
Time	24-hour time (0000 - 2359)
Total	Number in time step
Cls 1	Class totals
Cls 2	Class totals
Cls 3	Class totals
Cls 4	Class totals
Cls 5	Class totals
Cls 6	Class totals
Cls 7	Class totals
Cls 8	Class totals
Cls 9	Class totals
Cls 10	Class totals
Fix1	User defined fixed text
Time	24-hour time (0000 - 2359)
Vbin 0 5	Speed bin totals
Vbin 5 10	Speed bin totals
Vbin 10 15	Speed bin totals
Vbin 15 20	Speed bin totals
Vbin 20 25	Speed bin totals
Vbin 25 30	Speed bin totals
Vbin 30 35	Speed bin totals
Vbin 35 40	Speed bin totals
Vbin 40 45	Speed bin totals
Vbin 45 50	Speed bin totals
Vbin 50 55	Speed bin totals
Vbin 55 60	Speed bin totals
Vbin 60 65	Speed bin totals
Vbin 65 70	Speed bin totals
Vbin 70 75	Speed bin totals
Vbin 75 80	Speed bin totals
Vbin 80 130	Speed bin totals
Mean	Average speed
Vpp 85	Percentile speed
]PSL 60	Number exceeding Posted Speed Limit
]PSL% 60	Percent exceeding Posted Speed Limit
]SL1 68 ACPO	Number exceeding Speed Limit 1
]SL1% 68 ACPO	Percent exceeding Speed Limit 1
]SL2 75 DFT	Number exceeding Speed Limit 2
]SL2% 75 DFT	Percent exceeding Speed Limit 2
Fix1	User defined fixed text

TSP Class Profile All Days 15 Mins

Report Id - CustomList-40
Site Name - LUTTERWORTH- 01
Description - A5 N [60M]
Direction - North

12 May 2014

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	18	1	14	0	1	0	0	0	0	0	2	
0015	13	0	9	0	1	0	0	0	0	3	0	
0030	11	0	8	0	0	0	0	0	0	1	2	
0045	7	0	5	0	0	0	0	0	0	2	0	
0100	4	0	3	0	0	0	0	0	0	1	0	
0115	11	0	7	0	1	0	0	0	0	1	2	
0130	5	0	3	0	1	0	0	0	0	1	0	
0145	4	0	2	0	0	0	0	0	0	0	2	
0200	6	0	5	0	0	0	0	0	0	1	0	
0215	6	0	4	0	0	0	0	0	1	1	0	
0230	10	0	6	0	3	0	0	0	1	0	0	
0245	8	0	5	0	0	0	0	0	0	2	1	
0300	10	0	4	0	2	0	0	0	1	2	1	
0315	10	0	8	0	2	0	0	0	0	0	0	
0330	12	0	8	0	0	0	0	0	0	3	1	
0345	7	0	4	0	1	0	0	0	0	1	1	
0400	12	0	10	0	1	0	0	0	0	1	0	
0415	7	1	0	0	0	0	0	0	0	2	4	
0430	8	0	5	0	1	0	0	0	1	1	0	
0445	12	0	10	0	0	1	0	0	0	1	0	
0500	22	0	15	0	1	0	0	0	0	4	2	
0515	19	0	14	0	1	0	0	0	2	1	1	
0530	31	1	25	0	1	1	1	0	1	0	1	
0545	25	0	22	0	1	0	0	0	0	1	1	
0600	72	0	61	0	3	2	0	0	0	4	2	
0615	48	0	38	0	5	0	1	0	1	1	2	
0630	71	0	60	0	4	0	1	0	2	3	1	
0645	77	0	61	0	7	0	2	0	1	4	2	
0700	112	1	99	0	7	0	0	0	1	2	2	
0715	122	0	110	0	3	1	3	0	1	2	2	
0730	175	2	147	1	14	1	3	0	0	6	1	
0745	146	2	128	2	6	1	0	0	2	2	3	
0800	159	1	140	0	9	0	1	0	0	5	3	
0815	129	0	117	1	8	0	0	0	0	3	0	
0830	151	0	136	2	5	0	1	0	0	4	3	
0845	107	1	86	0	12	0	2	0	0	2	4	
0900	123	1	97	0	14	0	2	0	0	3	6	
0915	109	0	78	0	11	2	5	0	2	7	4	
0930	92	0	69	1	14	0	2	0	0	3	3	
0945	79	0	58	1	9	0	0	0	1	5	5	
1000	97	1	63	2	17	2	3	0	0	7	2	
1015	92	0	61	3	14	2	1	0	2	8	1	
1030	81	0	57	1	9	0	2	0	1	7	4	
1045	92	0	73	2	5	3	1	1	2	3	2	
1100	81	1	63	0	10	0	2	0	1	1	3	
1115	102	0	78	1	12	2	2	0	0	4	3	
1130	79	0	60	1	15	1	1	0	0	0	1	
1145	77	0	59	0	10	3	1	0	0	3	1	
1200	100	0	73	0	10	3	4	0	4	4	2	
1215	90	0	67	4	11	0	0	0	3	4	1	
1230	75	0	58	1	6	2	0	0	1	6	1	
1245	104	0	81	3	12	1	2	0	2	2	1	
1300	107	1	82	2	11	1	2	1	0	7	0	
1315	85	0	63	0	10	4	0	0	1	6	1	
1330	85	0	63	0	12	2	3	0	0	4	1	
1345	107	0	83	1	14	3	1	1	0	2	2	
1400	144	1	117	1	14	0	2	0	2	6	1	
1415	135	0	116	0	11	0	1	0	1	4	2	
1430	133	0	107	1	15	2	2	1	0	3	2	
1445	114	1	82	2	13	1	2	0	3	8	2	
1500	123	0	102	0	11	0	3	0	1	3	3	
1515	140	1	112	2	14	2	0	0	2	6	1	
1530	162	1	132	1	15	2	1	0	2	5	3	
1545	141	0	116	4	13	0	1	0	1	3	3	
1600	184	2	161	1	9	1	1	0	1	5	3	
1615	168	0	146	0	10	1	1	1	1	4	4	
1630	202	1	183	0	10	1	1	0	1	2	3	
1645	189	0	164	2	11	1	0	0	3	5	3	
1700	233	2	210	0	13	2	0	0	1	2	3	
1715	239	1	221	0	10	0	1	0	0	4	2	
1730	273	0	255	2	9	0	1	0	1	2	3	
1745	225	1	206	0	13	1	0	0	1	2	1	
1800	178	0	163	1	8	0	1	1	1	2	1	
1815	155	1	138	0	10	0	0	0	3	1	2	
1830	123	0	108	0	10	0	0	0	2	3	0	
1845	114	2	94	0	6	0	0	0	3	5	4	
1900	108	1	97	1	3	0	0	0	2	2	2	
1915	56	0	50	0	2	0	0	0	2	2	0	
1930	55	0	50	0	1	0	0	0	0	1	3	
1945	68	1	60	1	4	0	0	0	1	0	1	
2000	76	0	67	0	4	0	0	0	2	1	2	
2015	54	2	41	0	5	0	0	0	1	4	1	
2030	65	1	55	0	3	1	0	0	2	2	1	
2045	29	1	21	1	4	0	0	0	1	1	0	
2100	35	0	25	0	3	0	0	0	3	4	0	
2115	46	1	37	0	3	0	0	0	2	2	1	
2130	42	0	35	0	4	0	0	0	2	1	0	
2145	46	0	37	0	4	1	0	0	2	1	1	
2200	85	3	68	0	7	0	0	0	3	3	1	
2215	42	1	32	1	5	0	0	0	2	1	0	
2230	38	0	28	0	3	1	0	0	2	2	2	
2245	33	0	27	0	2	0	0	0	1	1	2	
2300	43	0	36	0	2	1	0	0	3	0	1	
2315	24	1	20	0	1	0	0	0	2	0	0	
2330	28	0	15	0	2	0	1	0	3	6	1	
2345	15	0	9	0	1	0	1	0	2	2	0	
07-19	**6333**	**25**	**5282**	**46**	**515**	**48**	**62**	**6**	**54**	**187**	**108**	
06-22	**7281**	**32**	**6077**	**49**	**574**	**52**	**66**	**6**	**78**	**220**	**127**	
06-00	**7589**	**37**	**6312**	**50**	**597**	**54**	**68**	**6**	**96**	**235**	**134**	
00-00	**7867**	**40**	**6508**	**50**	**615**	**56**	**69**	**6**	**103**	**265**	**155**	

7934.8		1190	15.68%		1279
7297.9		1269			**1117**

13 May 2014

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	26	0	21	0	2	0	1	0	0	2	0	
0015	18	0	13	0	2	0	1	0	0	0	2	
0030	28	1	21	0	3	0	0	0	1	2	0	
0045	18	0	9	1	2	0	0	0	1	3	2	
0100	8	0	5	0	0	0	0	0	1	2	0	
0115	12	0	7	0	1	0	0	0	2	2	0	
0130	13	0	8	0	2	0	0	0	0	1	2	
0145	18	0	11	0	3	0	0	0	1	1	2	
0200	14	0	7	0	3	0	0	0	2	0	2	
0215	8	0	8	0	0	0	0	0	0	0	0	
0230	8	0	4	0	1	0	0	0	0	0	3	
0245	9	0	7	0	2	0	0	0	0	0	0	
0300	14	0	12	0	1	0	0	0	1	0	0	
0315	16	0	10	0	5	0	0	0	0	0	1	
0330	5	0	2	0	0	0	0	0	1	0	2	
0345	11	0	7	0	2	0	0	0	0	0	2	
0400	13	0	8	0	3	0	0	0	0	1	1	
0415	15	1	11	0	1	0	0	1	0	1	0	
0430	24	0	21	0	0	0	0	0	1	0	2	
0445	18	0	14	0	0	1	0	0	0	3	0	
0500	21	0	16	0	1	0	0	0	0	1	3	
0515	23	0	16	0	1	1	0	0	1	1	3	
0530	44	2	33	0	2	1	1	0	2	0	3	
0545	36	0	28	0	2	0	0	0	2	2	2	
0600	71	2	57	1	3	0	2	0	1	3	2	
0615	45	0	40	0	0	3	0	0	0	1	1	
0630	60	1	49	0	4	0	0	0	1	5	0	
0645	84	1	67	0	6	1	2	0	0	3	4	
0700	137	0	120	1	6	0	1	0	2	5	2	
0715	145	0	135	0	6	0	2	0	0	0	2	
0730	160	2	140	1	7	0	0	0	0	3	7	
0745	165	0	136	3	14	4	2	0	2	1	3	
0800	159	2	143	2	5	0	1	0	2	3	1	
0815	126	0	106	0	12	1	3	0	1	1	2	
0830	156	0	133	2	13	5	1	0	0	0	2	
0845	118	1	100	0	11	0	1	0	0	2	3	
0900	96	0	85	0	4	0	1	0	1	3	2	
0915	111	0	83	1	13	2	1	0	6	3	2	
0930	137	0	105	0	19	2	4	0	2	4	1	
0945	79	0	58	1	10	2	2	0	1	3	2	
1000	75	0	51	1	12	2	0	0	2	4	3	
1015	92	1	67	0	9	1	3	1	3	5	2	
1030	83	0	56	1	18	2	0	0	2	3	1	
1045	82	0	65	0	9	0	1	0	0	5	2	
1100	80	1	51	1	12	2	2	0	1	6	4	
1115	84	0	67	0	10	0	1	0	1	4	1	
1130	93	0	67	2	17	1	0	0	2	3	1	
1145	91	0	71	1	10	2	0	0	1	4	2	
1200	100	0	75	1	14	0	1	1	2	4	2	
1215	83	0	68	1	6	2	1	0	2	3	0	
1230	94	0	63	0	15	2	1	0	5	5	3	
1245	91	0	66	0	17	0	2	0	1	4	1	
1300	111	1	93	0	12	1	2	0	1	0	1	
1315	88	0	65	2	15	0	0	0	1	3	2	
1330	84	0	65	1	11	0	2	0	1	3	1	
1345	109	0	83	0	15	3	1	0	1	2	4	
1400	159	0	128	2	13	2	5	0	1	4	4	
1415	145	2	116	0	15	1	2	0	1	4	4	
1430	125	1	99	0	12	1	2	0	1	6	3	
1445	94	1	77	0	10	0	1	0	2	2	1	
1500	150	1	126	2	10	1	2	0	3	4	1	
1515	143	2	120	0	13	1	1	0	0	5	1	
1530	144	0	119	1	14	0	3	0	1	5	1	
1545	138	4	111	0	12	1	3	0	1	3	3	
1600	198	2	163	0	21	0	2	0	2	4	4	
1615	192	2	168	0	16	0	2	0	0	3	1	
1630	198	1	178	1	15	0	0	0	3	0	0	
1645	193	0	172	2	12	2	0	0	1	3	1	
1700	205	0	192	0	10	0	0	0	0	3	0	
1715	255	1	236	1	12	0	0	0	1	2	2	
1730	241	0	229	0	8	0	0	0	0	2	2	
1745	200	1	190	0	5	0	0	0	0	2	2	
1800	218	1	194	1	11	0	0	0	2	6	3	
1815	175	4	159	0	6	1	1	0	1	0	3	
1830	127	1	116	0	6	0	1	0	1	2	0	
1845	119	2	111	0	3	1	0	0	0	1	1	
1900	105	1	87	1	10	0	0	0	3	3	0	
1915	80	0	73	0	3	0	0	0	0	2	2	
1930	62	2	53	0	2	0	0	0	4	0	1	
1945	76	0	67	0	2	1	0	0	2	2	2	
2000	77	2	64	0	1	1	0	0	4	3	2	
2015	70	0	64	0	1	0	0	0	0	4	1	
2030	59	0	55	0	3	0	0	0	0	1	0	
2045	35	0	28	1	1	2	0	0	1	0	2	
2100	43	0	35	0	1	1	0	0	1	4	1	
2115	44	0	40	0	2	0	0	0	1	0	1	
2130	42	0	35	1	4	0	0	0	0	1	1	
2145	43	1	31	0	5	0	0	0	3	0	3	
2200	86	3	73	0	5	0	0	0	1	3	1	
2215	45	1	37	0	3	1	1	0	1	1	0	
2230	46	0	41	0	2	0	0	0	2	0	1	
2245	31	0	26	0	2	1	0	0	1	1	0	
2300	41	0	39	0	0	0	0	0	0	2	0	
2315	35	0	32	0	1	0	0	0	1	0	1	
2330	20	0	16	0	1	0	0	0	1	2	0	
2345	20	0	15	0	2	1	0	0	0	1	1	
07-19	**6448**	**34**	**5421**	**32**	**546**	**45**	**61**	**2**	**64**	**147**	**96**	
06-22	**7444**	**44**	**6266**	**36**	**594**	**54**	**65**	**2**	**85**	**179**	**119**	
06-00	**7768**	**48**	**6545**	**36**	**610**	**57**	**66**	**2**	**92**	**189**	**123**	
00-00	**8188**	**52**	**6844**	**37**	**649**	**60**	**69**	**3**	**108**	**211**	**155**	

1139 14.66%

14 May 2014 1255

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	34	0	31	0	0	0	0	0	2	0	1	
0015	18	0	14	0	0	0	0	0	1	2	1	
0030	24	0	20	0	1	0	1	0	0	2	0	
0045	10	0	8	0	1	0	0	0	0	0	1	
0100	15	0	11	0	1	0	0	0	2	1	0	
0115	11	0	9	0	2	0	0	0	0	0	0	
0130	8	0	7	0	0	0	0	0	0	1	0	
0145	20	0	18	0	0	0	0	0	0	1	1	
0200	11	0	10	0	0	0	1	0	0	0	0	
0215	15	0	10	1	2	0	1	0	0	1	0	
0230	2	0	0	0	0	0	0	0	1	0	1	
0245	7	0	5	0	1	0	0	0	1	0	0	
0300	17	0	10	0	4	0	0	0	0	1	2	
0315	10	0	8	0	0	0	0	0	0	0	2	
0330	10	0	8	0	0	0	0	0	0	2	0	
0345	7	0	4	0	2	0	0	0	1	0	0	
0400	16	0	12	0	0	0	0	0	0	2	2	
0415	18	0	12	0	2	0	0	0	1	2	1	
0430	12	0	11	0	0	0	0	0	0	1	0	
0445	21	0	16	0	1	1	0	0	0	0	3	
0500	16	0	10	0	2	0	0	0	0	2	2	
0515	26	0	17	0	2	1	0	0	0	3	3	
0530	27	0	23	0	1	0	0	0	0	3	0	
0545	51	1	44	0	3	0	1	0	0	1	1	
0600	65	0	56	0	3	0	0	0	0	5	1	
0615	49	1	37	0	4	2	0	0	0	2	3	
0630	69	0	60	0	4	0	1	0	1	3	0	
0645	75	0	59	1	7	0	2	1	2	2	1	
0700	132	0	125	0	5	0	1	0	1	0	0	
0715	157	0	138	1	8	2	0	0	3	1	4	
0730	162	0	148	1	7	1	1	0	1	2	1	
0745	145	1	134	0	4	4	1	0	0	0	1	
0800	139	2	131	1	2	1	1	0	0	1	0	
0815	134	0	120	1	8	1	1	0	0	1	2	
0830	132	0	118	0	7	1	1	1	1	1	2	
0845	131	5	111	1	6	1	3	1	0	1	2	
0900	130	0	109	1	9	0	2	0	3	4	2	
0915	94	1	79	0	7	0	2	0	1	3	1	
0930	92	1	74	0	11	0	0	0	3	1	2	
0945	92	2	71	0	7	1	4	0	0	7	0	
1000	102	0	78	1	10	0	2	0	3	4	4	
1015	116	1	79	2	17	1	1	0	5	7	3	
1030	71	1	51	0	13	0	0	0	3	1	2	
1045	85	0	58	0	8	0	2	0	6	9	2	
1100	63	0	49	0	8	1	0	0	0	2	3	
1115	93	1	60	1	21	0	0	0	3	5	2	
1130	83	4	49	1	20	1	2	0	2	1	3	
1145	89	2	58	0	12	0	1	0	4	8	4	
1200	110	0	72	2	22	0	0	1	3	7	3	
1215	94	0	59	3	17	1	2	0	2	3	7	
1230	97	1	66	1	11	0	1	0	4	9	4	
1245	98	0	56	3	28	0	2	0	1	6	2	
1300	107	0	79	0	16	1	2	0	1	6	2	
1315	94	0	72	1	13	0	1	1	0	5	1	
1330	103	1	73	1	15	2	1	0	3	5	2	
1345	108	0	82	0	16	2	1	0	0	3	4	
1400	147	0	115	0	16	1	2	0	2	6	5	
1415	136	2	110	0	11	1	0	1	1	4	6	
1430	117	1	90	1	9	0	2	1	5	7	1	
1445	125	1	89	1	16	2	3	0	2	8	3	
1500	168	1	139	0	18	0	3	0	0	1	6	
1515	151	3	113	0	20	2	3	1	2	5	2	
1530	158	0	134	1	13	0	2	1	3	2	2	
1545	137	0	111	2	13	2	1	0	1	2	5	
1600	225	3	196	1	17	0	1	0	2	1	4	
1615	177	3	149	0	17	1	0	0	1	6	0	
1630	185	2	154	4	19	0	1	0	1	3	1	
1645	201	1	175	1	15	0	0	0	3	6	0	
1700	241	2	215	1	16	0	0	0	1	3	3	
1715	224	2	211	1	2	0	1	0	0	3	4	
1730	231	1	210	1	10	0	0	0	4	3	2	
1745	208	2	187	0	13	0	0	0	2	2	2	
1800	206	2	193	1	4	1	0	0	1	2	2	
1815	165	1	147	0	9	0	0	0	2	6	0	
1830	171	3	146	3	5	0	0	1	4	5	4	
1845	119	0	108	0	6	0	0	0	2	2	1	
1900	113	4	94	0	8	0	0	0	2	4	1	
1915	105	4	80	1	11	0	0	0	2	2	5	
1930	80	1	63	2	3	0	0	0	5	2	4	
1945	73	0	64	0	1	1	0	0	3	3	1	
2000	72	2	52	0	10	0	0	0	0	7	1	
2015	60	5	49	0	1	1	0	0	4	0	0	
2030	53	1	40	0	4	0	1	0	3	2	2	
2045	53	0	47	0	3	0	0	0	2	0	1	
2100	41	2	34	0	2	0	0	0	2	1	0	
2115	49	1	39	1	5	0	0	0	1	0	2	
2130	42	1	34	1	3	0	0	0	2	1	0	
2145	47	2	37	0	5	1	0	0	1	1	0	
2200	101	3	86	0	4	1	0	0	2	2	3	
2215	57	6	40	0	5	0	0	0	4	2	0	
2230	67	2	58	0	1	0	0	0	2	1	3	
2245	25	0	21	0	1	0	0	0	2	0	1	
2300	45	1	37	0	1	0	1	0	1	2	2	
2315	38	0	27	0	1	0	0	0	4	4	2	
2330	24	0	18	0	0	0	0	0	3	2	1	
2345	10	0	10	0	0	0	0	0	0	0	0	
07-19	**6545**	**53**	**5391**	**40**	**577**	**31**	**54**	**9**	**92**	**180**	**118**	
06-22	**7591**	**77**	**6236**	**46**	**651**	**36**	**58**	**10**	**122**	**215**	**140**	
06-00	**7958**	**89**	**6533**	**46**	**664**	**37**	**59**	**10**	**140**	**228**	**152**	
00-00	**8364**	**90**	**6851**	**47**	**689**	**39**	**63**	**10**	**149**	**253**	**173**	

1290 16.21%

15 May 2014 1376

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	43	1	42	0	0	0	0	0	0	0	0	
0015	13	0	12	0	1	0	0	0	0	0	0	
0030	19	1	17	0	0	0	0	0	0	1	0	
0045	17	0	16	0	0	0	0	0	1	0	0	
0100	13	0	12	0	0	0	0	0	0	0	1	
0115	12	0	9	0	1	0	0	0	2	0	0	
0130	15	0	12	0	2	0	0	0	0	1	0	
0145	20	1	17	0	1	0	0	0	0	0	1	
0200	15	0	12	0	0	0	0	0	1	1	1	
0215	6	0	4	0	1	0	0	0	0	0	1	
0230	13	0	11	0	0	0	0	0	0	1	1	
0245	18	0	11	0	5	0	0	0	0	1	1	
0300	19	0	10	0	3	0	0	0	1	2	3	
0315	9	0	8	0	1	0	0	0	0	0	0	
0330	10	0	6	0	1	0	0	0	1	1	1	
0345	12	0	10	0	1	1	0	0	0	0	0	
0400	18	0	15	0	1	0	0	0	1	1	0	
0415	14	0	9	0	3	0	0	0	0	1	1	
0430	22	0	19	0	1	1	0	0	0	0	1	
0445	18	0	9	0	2	1	0	0	0	2	4	
0500	20	0	16	0	1	0	0	0	0	0	3	
0515	29	0	24	0	0	0	0	0	0	4	1	
0530	36	0	26	0	5	0	0	0	1	3	1	
0545	49	2	40	0	1	1	0	0	1	1	3	
0600	69	1	60	0	4	0	2	0	1	1	0	
0615	56	0	47	0	3	2	1	1	0	0	2	
0630	67	1	50	1	6	3	0	0	2	0	4	
0645	77	1	67	1	6	0	1	0	1	0	0	
0700	146	0	132	2	4	0	1	1	1	1	4	
0715	131	0	118	0	8	1	1	0	1	1	1	
0730	174	1	162	0	4	3	0	1	0	2	1	
0745	151	2	136	1	9	0	1	0	0	2	0	
0800	141	0	124	0	7	1	0	0	3	5	1	
0815	148	0	127	0	12	0	3	1	1	1	3	
0830	132	2	112	0	4	3	3	0	2	3	3	
0845	129	1	112	0	9	2	0	0	1	1	3	
0900	108	0	89	0	8	0	3	0	1	4	3	
0915	105	2	88	0	9	0	2	0	1	2	1	
0930	102	0	73	1	7	2	2	0	4	8	5	
0945	101	0	70	1	15	1	3	0	1	5	5	
1000	100	2	71	1	9	1	2	0	3	8	3	
1015	101	1	82	0	7	0	2	0	0	7	2	
1030	83	0	57	0	18	0	1	1	2	3	1	
1045	98	2	64	1	23	1	1	0	1	3	2	
1100	73	0	51	0	10	0	3	1	3	3	2	
1115	83	1	56	4	12	0	2	0	1	7	0	
1130	93	0	63	2	19	1	1	0	2	3	2	
1145	87	0	51	1	20	1	1	0	3	7	3	
1200	99	0	65	1	19	0	1	2	2	6	3	
1215	126	0	92	2	20	2	0	0	4	3	3	
1230	78	1	50	1	12	0	3	0	3	3	5	
1245	95	0	65	0	17	1	1	1	0	7	3	
1300	109	2	77	0	22	1	1	1	0	4	1	
1315	80	0	57	1	15	1	1	0	3	1	1	
1330	95	2	66	2	12	1	1	0	2	7	2	
1345	101	1	66	0	19	2	3	0	2	5	3	
1400	146	2	123	0	11	0	2	0	2	2	4	
1415	151	0	121	3	12	0	2	0	5	6	2	
1430	106	0	84	0	13	1	1	0	0	4	3	
1445	134	2	93	0	22	0	4	0	1	9	3	
1500	145	0	118	1	11	2	1	0	4	6	2	
1515	121	3	100	1	6	0	2	1	2	5	1	
1530	141	0	119	2	14	0	1	0	0	3	2	
1545	155	2	124	1	22	1	0	0	0	3	2	
1600	212	1	170	3	20	2	1	0	3	3	9	
1615	185	3	153	1	17	2	1	0	1	5	2	
1630	209	0	174	3	19	0	0	0	2	8	3	
1645	207	0	178	1	16	0	0	0	3	6	3	
1700	220	1	199	0	12	0	0	1	1	3	3	
1715	245	5	219	1	11	0	1	0	1	7	0	
1730	211	1	194	2	5	0	3	0	0	3	3	
1745	249	2	227	0	8	1	0	0	1	5	5	
1800	205	2	184	5	7	0	0	0	2	3	2	
1815	190	1	167	3	10	0	0	0	2	4	3	
1830	138	0	126	0	7	0	1	0	0	0	4	
1845	130	3	109	0	7	0	0	0	3	6	2	
1900	137	2	116	1	7	0	0	0	3	7	1	
1915	96	2	78	1	6	0	1	0	2	4	2	
1930	98	4	79	0	8	0	0	0	3	4	0	
1945	64	0	53	0	2	0	0	0	5	3	1	
2000	80	1	61	0	8	0	0	0	5	3	2	
2015	56	1	41	0	5	0	0	0	3	2	4	
2030	66	0	59	0	1	1	0	0	1	1	3	
2045	57	0	40	0	5	0	0	0	6	2	4	
2100	61	1	50	0	5	1	0	0	0	1	3	
2115	40	0	32	0	1	0	0	0	4	3	0	
2130	47	1	41	0	1	0	0	0	0	2	2	
2145	50	1	39	0	1	1	0	0	3	3	2	
2200	90	2	76	0	6	0	0	0	4	1	1	
2215	55	1	40	0	3	0	0	0	5	2	4	
2230	35	0	28	0	3	0	0	0	0	2	2	
2245	36	0	28	0	1	0	0	0	2	4	1	
2300	54	0	46	1	3	0	0	0	0	3	1	
2315	37	0	34	0	0	0	0	0	2	1	0	
2330	31	0	19	0	3	0	0	0	3	3	3	
2345	25	0	16	0	0	0	0	0	3	3	3	
07-19	**6569**	**48**	**5358**	**48**	**600**	**34**	**63**	**11**	**80**	**203**	**124**	
06-22	**7690**	**64**	**6271**	**52**	**669**	**42**	**68**	**12**	**119**	**239**	**154**	
06-00	**8053**	**67**	**6558**	**53**	**688**	**42**	**68**	**12**	**138**	**258**	**169**	
00-00	**8513**	**72**	**6925**	**53**	**719**	**46**	**68**	**12**	**147**	**278**	**193**	

1375 17.07%

16 May 2014 1463

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	30	0	27	0	0	0	1	0	0	2	0	
0015	13	0	8	0	2	0	0	0	1	0	2	
0030	22	0	16	0	2	1	0	0	1	0	2	
0045	5	0	3	0	0	0	0	0	0	2	0	
0100	23	1	16	0	3	1	0	0	1	1	0	
0115	16	0	12	0	1	1	0	0	1	1	0	
0130	16	0	12	0	3	0	0	0	1	0	0	
0145	10	0	7	0	0	0	0	0	1	0	2	
0200	7	0	5	0	0	0	1	0	0	1	0	
0215	12	1	8	0	1	0	0	0	1	1	0	
0230	15	0	10	0	1	0	0	0	1	1	2	
0245	7	0	4	0	3	0	0	0	0	0	0	
0300	19	0	10	0	4	1	0	0	2	0	2	
0315	8	0	8	0	0	0	0	0	0	0	0	
0330	10	0	7	0	0	0	0	0	0	2	1	
0345	12	0	7	0	1	1	0	0	0	0	3	
0400	22	0	19	0	0	0	0	0	0	0	3	
0415	11	0	8	0	1	0	0	0	0	0	2	
0430	24	0	20	0	2	0	0	0	1	0	1	
0445	22	0	16	0	0	0	0	0	2	2	2	
0500	17	0	14	0	1	0	0	0	0	1	1	
0515	22	1	14	0	1	0	1	0	0	1	4	
0530	46	0	36	0	3	1	1	0	1	3	1	
0545	46	0	38	0	0	0	1	0	0	4	3	
0600	60	0	51	2	2	1	0	0	0	1	3	
0615	65	1	54	0	7	1	0	0	0	0	2	
0630	66	1	53	1	4	1	0	0	2	3	1	
0645	72	1	60	0	7	2	1	0	0	0	1	
0700	140	1	127	0	4	0	1	0	2	4	1	
0715	145	4	120	0	12	0	1	0	1	3	4	
0730	145	2	126	0	11	2	0	1	0	1	2	
0745	130	2	110	0	12	0	2	0	2	2	0	
0800	150	0	126	1	11	0	2	0	0	7	3	
0815	110	0	93	0	7	0	0	0	0	6	4	
0830	129	1	106	2	8	1	1	0	1	5	4	
0845	131	1	108	1	13	0	2	0	2	2	2	
0900	91	0	67	2	11	1	1	0	2	4	3	
0915	93	0	69	1	8	2	3	0	5	2	3	
0930	126	2	93	0	11	1	2	1	4	5	7	
0945	140	3	97	1	18	1	2	0	3	12	3	
1000	121	1	96	3	6	1	2	0	4	8	0	
1015	109	0	73	1	20	0	2	0	1	4	8	
1030	105	2	73	3	17	0	0	0	3	4	3	
1045	104	0	76	0	11	3	3	0	2	4	5	
1100	102	3	69	3	13	1	1	2	2	6	2	
1115	108	1	81	2	16	1	2	0	2	1	2	
1130	103	0	71	1	18	2	0	0	3	6	2	
1145	106	3	75	2	13	1	1	0	1	6	4	
1200	109	1	87	0	10	0	0	0	3	4	4	
1215	107	6	71	2	18	0	3	0	2	4	1	
1230	116	1	85	1	20	1	1	1	1	5	0	
1245	121	4	91	1	15	0	0	0	4	3	3	
1300	109	1	79	1	19	0	2	1	0	5	1	
1315	115	1	84	0	17	1	0	0	4	4	4	
1330	134	3	104	0	12	0	2	0	5	6	2	
1345	113	3	77	0	20	1	2	1	3	4	2	
1400	187	0	155	0	15	1	3	0	3	5	5	
1415	156	4	123	0	21	0	1	0	1	3	3	
1430	131	3	97	1	17	2	1	1	1	6	2	
1445	137	1	105	0	18	1	3	0	0	5	4	
1500	198	4	159	3	20	0	4	0	1	3	4	
1515	158	1	125	2	15	0	5	0	2	3	5	
1530	154	3	124	1	13	1	3	1	0	4	4	
1545	192	3	154	3	19	2	2	0	0	6	3	
1600	229	2	203	0	14	0	2	0	2	5	1	
1615	201	1	173	0	16	0	2	0	3	3	3	
1630	207	6	180	0	10	0	0	0	2	5	4	
1645	223	1	202	2	9	0	0	0	1	5	3	
1700	208	2	189	2	12	0	1	0	0	2	0	
1715	231	1	200	1	17	0	0	0	1	9	2	
1730	194	2	179	0	9	0	0	0	0	1	3	
1745	194	1	174	3	11	1	0	0	1	2	1	
1800	184	1	162	1	11	0	1	0	1	4	3	
1815	158	4	139	2	7	0	0	0	1	4	1	
1830	114	3	98	0	6	0	0	0	2	4	1	
1845	115	1	99	0	5	0	1	0	3	4	2	
1900	113	1	99	0	4	0	0	0	3	6	0	
1915	74	0	58	0	7	0	0	0	2	2	5	
1930	81	2	71	0	4	0	0	0	1	0	3	
1945	62	0	49	0	4	0	0	0	5	3	1	
2000	74	1	58	1	5	0	0	0	2	4	3	
2015	60	2	48	1	3	0	1	0	1	2	2	
2030	64	0	57	0	2	0	0	0	1	2	2	
2045	58	2	44	0	5	0	0	0	3	2	2	
2100	53	0	46	0	2	0	0	0	0	1	4	
2115	41	0	35	0	2	0	0	0	3	1	0	
2130	49	5	34	0	5	0	1	0	2	2	0	
2145	58	2	49	0	2	0	0	0	4	1	0	
2200	67	1	54	0	6	0	0	0	4	1	1	
2215	64	1	52	0	3	1	0	0	1	4	2	
2230	42	0	33	0	3	0	0	0	3	2	1	
2245	45	0	35	0	4	0	0	0	3	1	2	
2300	66	4	53	0	3	1	0	0	1	2	2	
2315	34	0	29	0	0	0	0	0	1	3	1	
2330	25	1	16	0	0	0	0	0	2	6	0	
2345	30	0	24	0	0	0	0	0	4	2	0	
07-19	**6883**	**90**	**5574**	**49**	**636**	**28**	**67**	**9**	**87**	**210**	**133**	
06-22	**7933**	**108**	**6440**	**54**	**701**	**33**	**70**	**9**	**116**	**240**	**162**	
06-00	**8306**	**115**	**6736**	**54**	**720**	**35**	**70**	**9**	**135**	**261**	**171**	
00-00	**8741**	**118**	**7061**	**54**	**749**	**41**	**75**	**9**	**149**	**283**	**202**	

1401 16.87%

17 May 2014 1508

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	41	0	36	0	0	1	0	0	0	2	2	
0015	15	0	14	0	0	0	0	0	0	1	0	
0030	24	0	17	1	2	1	0	0	1	1	1	
0045	18	0	13	0	0	1	0	0	0	2	2	
0100	16	0	14	0	0	0	0	0	1	1	0	
0115	16	0	13	0	2	0	0	0	1	0	0	
0130	6	0	4	0	1	0	0	0	0	1	0	
0145	19	0	16	0	0	0	0	0	0	2	1	
0200	9	0	5	0	3	0	0	0	0	0	1	
0215	10	0	6	0	0	0	1	0	2	0	1	
0230	9	1	7	0	1	0	0	0	0	0	0	
0245	9	0	8	0	1	0	0	0	0	0	0	
0300	15	0	11	0	0	0	0	0	1	2	1	
0315	20	0	17	0	1	1	0	0	1	0	0	
0330	13	0	12	0	0	0	0	0	0	1	0	
0345	6	0	5	0	1	0	0	0	0	0	0	
0400	17	0	13	0	1	0	1	0	1	0	1	
0415	11	0	9	0	0	1	0	0	0	1	0	
0430	9	0	8	0	0	0	0	0	1	0	0	
0445	15	0	14	0	0	0	0	0	0	0	1	
0500	18	0	16	0	1	0	0	0	0	1	0	
0515	14	0	13	0	0	0	0	0	0	0	1	
0530	30	0	24	0	3	2	0	0	0	0	1	
0545	27	2	20	0	1	0	0	0	0	1	3	
0600	52	0	44	0	3	0	1	0	0	1	3	
0615	22	0	19	0	3	0	0	0	0	0	0	
0630	38	0	32	0	4	0	1	0	0	1	0	
0645	34	1	24	0	4	0	0	0	1	2	2	
0700	58	1	53	0	2	1	0	0	0	0	1	
0715	33	0	29	0	2	0	0	0	0	0	2	
0730	47	0	41	0	3	0	0	0	0	1	2	
0745	53	1	44	0	2	0	0	1	1	4	0	
0800	74	2	55	0	7	2	1	0	3	2	2	
0815	57	7	43	0	4	0	1	0	0	2	0	
0830	66	4	54	0	3	1	0	0	1	3	0	
0845	75	5	66	0	2	0	0	0	0	0	2	
0900	61	2	48	1	2	0	1	1	0	4	2	
0915	71	2	66	0	2	0	0	0	1	0	0	
0930	76	0	54	2	7	0	1	0	4	4	4	
0945	92	1	72	0	7	0	1	0	3	5	3	
1000	84	7	66	0	5	1	0	0	0	2	3	
1015	87	5	69	1	8	0	1	0	1	1	1	
1030	76	0	64	1	9	0	0	0	0	1	1	
1045	87	5	70	0	6	0	2	0	1	3	0	
1100	93	3	85	2	1	0	0	0	1	0	1	
1115	96	0	83	1	11	0	0	0	0	0	1	
1130	108	1	95	1	9	0	0	0	1	0	1	
1145	82	2	69	1	7	0	1	0	0	1	1	
1200	96	2	89	1	4	0	0	0	0	0	0	
1215	99	3	81	3	5	1	0	0	0	5	1	
1230	84	2	72	0	6	0	0	0	1	3	0	
1245	90	3	81	0	4	1	0	0	0	1	0	
1300	92	4	77	1	6	0	0	1	0	3	0	
1315	76	2	67	0	1	1	0	0	0	3	2	
1330	92	0	77	2	7	0	1	0	0	2	3	
1345	96	5	80	0	4	2	1	0	0	2	2	
1400	88	1	80	0	3	0	1	0	0	2	1	
1415	91	5	77	0	6	0	0	0	0	1	2	
1430	90	3	79	0	7	0	0	0	0	1	0	
1445	72	3	62	1	4	0	0	0	0	1	1	
1500	91	3	84	0	0	0	0	0	0	3	1	
1515	92	5	80	1	4	0	0	0	0	1	1	
1530	75	2	64	3	4	0	0	0	0	1	1	
1545	80	6	67	1	3	0	0	0	0	1	2	
1600	103	8	86	0	5	0	0	1	0	0	3	
1615	81	8	61	0	6	0	0	1	0	2	3	
1630	71	1	67	1	0	0	0	1	0	1	0	
1645	79	4	64	3	4	0	0	0	0	1	3	
1700	105	1	91	5	5	1	0	0	0	0	2	
1715	74	2	60	1	6	0	0	0	0	2	3	
1730	65	3	56	2	2	0	0	0	0	2	0	
1745	70	3	59	0	4	0	1	0	1	1	1	
1800	83	4	74	0	1	0	0	1	0	1	2	
1815	75	3	63	1	6	0	0	0	0	1	1	
1830	72	1	65	0	2	0	0	1	0	1	2	
1845	61	2	53	1	3	0	0	0	0	0	2	
1900	59	2	50	0	4	0	0	0	0	1	2	
1915	40	0	35	2	1	0	0	0	0	2	0	
1930	35	2	31	0	2	0	0	0	0	0	0	
1945	37	0	33	0	3	0	0	0	0	1	0	
2000	40	2	35	1	0	0	0	0	0	2	0	
2015	36	0	33	1	2	0	0	0	0	0	0	
2030	38	0	33	2	1	0	0	0	0	2	0	
2045	30	1	25	0	2	0	0	0	1	1	0	
2100	32	1	30	0	0	0	0	0	0	1	0	
2115	38	1	34	1	2	0	0	0	0	0	0	
2130	37	0	29	0	4	0	0	0	0	2	2	
2145	25	1	23	0	0	0	0	0	0	1	0	
2200	32	1	31	0	0	0	0	0	0	0	0	
2215	31	1	27	0	1	1	0	0	0	0	1	
2230	23	0	23	0	0	0	0	0	0	0	0	
2245	27	0	21	1	3	0	0	0	0	1	1	
2300	39	0	38	0	1	0	0	0	0	0	0	
2315	19	0	18	0	0	0	0	0	0	0	1	
2330	30	0	25	1	1	0	0	0	0	2	1	
2345	14	0	11	0	1	0	0	0	1	0	1	
07-19	**3819**	**137**	**3242**	**37**	**211**	**11**	**13**	**8**	**19**	**75**	**66**	
06-22	**4412**	**148**	**3752**	**44**	**246**	**11**	**15**	**8**	**21**	**92**	**75**	
06-00	**4627**	**150**	**3946**	**46**	**253**	**12**	**15**	**8**	**22**	**95**	**80**	
00-00	**5014**	**153**	**4261**	**47**	**271**	**19**	**17**	**8**	**31**	**111**	**96**	

18 May 2014 553

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	21	0	21	0	0	0	0	0	0	0	0	
0015	13	0	11	0	0	1	0	0	0	0	1	
0030	9	0	8	0	0	0	0	0	0	0	1	
0045	16	0	15	0	0	0	0	0	0	0	1	
0100	6	0	6	0	0	0	0	0	0	0	0	
0115	13	1	11	0	0	0	0	0	0	0	1	
0130	11	0	9	0	1	0	0	0	0	1	0	
0145	10	1	7	0	1	0	0	0	0	0	1	
0200	5	0	4	0	1	0	0	0	0	0	0	
0215	7	0	6	0	0	0	0	0	0	1	0	
0230	4	0	2	0	0	0	0	0	0	1	1	
0245	0	0	0	0	0	0	0	0	0	0	0	
0300	11	1	7	0	1	0	0	0	0	2	0	
0315	6	0	5	0	0	0	0	0	0	0	1	
0330	2	0	0	0	1	0	0	0	0	1	0	
0345	4	0	1	0	0	0	0	0	0	1	2	
0400	7	0	6	0	1	0	0	0	0	0	0	
0415	8	1	5	0	2	0	0	0	0	0	0	
0430	10	0	8	0	0	0	0	0	0	1	1	
0445	3	0	2	0	0	0	0	1	0	0	0	
0500	11	0	11	0	0	0	0	0	0	0	0	
0515	11	0	9	0	1	0	0	0	0	1	0	
0530	18	0	16	0	1	0	0	0	0	0	1	
0545	29	0	24	0	4	0	0	0	0	0	1	
0600	30	0	27	0	1	0	0	0	0	2	0	
0615	24	0	22	1	0	0	0	0	0	0	1	
0630	28	0	27	0	0	0	0	0	0	0	1	
0645	29	1	26	0	1	0	0	0	0	1	0	
0700	65	1	58	2	2	0	0	0	0	2	0	
0715	26	0	24	0	1	1	0	0	0	0	0	
0730	19	0	14	1	0	0	0	0	0	1	3	
0745	40	2	33	0	2	0	0	0	0	0	3	
0800	33	0	32	0	1	0	0	0	0	0	0	
0815	28	3	21	0	3	0	0	0	0	1	0	
0830	36	1	28	1	2	0	0	0	0	2	2	
0845	52	1	45	0	1	0	0	0	0	3	2	
0900	46	1	40	0	2	0	0	1	0	1	1	
0915	37	0	34	0	2	0	0	0	0	0	1	
0930	49	1	47	0	1	0	0	0	0	0	0	
0945	62	9	47	1	4	0	0	0	0	0	1	
1000	61	4	50	1	1	0	0	0	3	1	1	
1015	57	1	50	3	2	0	0	0	0	0	1	
1030	50	2	45	0	1	0	1	0	0	1	0	
1045	67	7	52	1	1	1	0	1	0	2	2	
1100	47	6	36	2	1	0	0	0	2	0	0	
1115	91	6	79	1	2	0	0	0	1	0	2	
1130	92	3	80	1	4	0	0	0	0	0	4	
1145	79	6	68	1	0	1	0	0	1	1	1	
1200	93	3	88	1	1	0	0	0	0	0	0	
1215	99	4	83	1	4	0	1	1	1	3	1	
1230	87	9	68	2	2	0	3	0	1	0	2	
1245	85	8	68	1	4	0	2	0	1	0	1	
1300	79	8	64	1	4	0	0	0	1	1	0	
1315	94	11	76	3	3	0	0	0	0	0	1	
1330	86	8	66	1	4	0	0	0	2	2	3	
1345	78	13	60	3	1	0	0	0	0	0	1	
1400	85	4	74	0	4	0	0	0	1	1	1	
1415	89	8	75	0	4	0	1	0	0	0	1	
1430	63	4	52	0	6	0	0	0	0	1	0	
1445	89	10	70	2	5	0	0	0	0	0	2	
1500	94	7	83	1	3	0	0	0	0	0	0	
1515	89	8	75	1	1	0	0	1	0	1	2	
1530	77	2	62	1	5	2	1	0	1	0	3	
1545	79	7	66	0	5	0	0	0	0	1	0	
1600	90	2	81	0	4	0	0	0	0	1	2	
1615	85	1	77	1	3	0	0	0	0	3	0	
1630	83	7	65	1	4	0	1	0	0	3	2	
1645	73	0	70	0	2	0	0	0	0	1	0	
1700	85	0	76	1	5	0	0	0	1	0	2	
1715	73	1	68	1	0	0	0	0	1	1	1	
1730	81	6	69	2	0	1	0	0	0	2	1	
1745	75	7	62	0	4	0	0	0	1	0	1	
1800	89	8	76	0	3	0	0	0	1	0	1	
1815	67	5	53	2	4	1	0	0	1	1	0	
1830	72	5	56	0	6	0	0	1	1	2	1	
1845	65	3	57	1	2	0	0	0	1	0	1	
1900	65	1	55	1	3	0	0	1	2	1	1	
1915	44	2	38	0	0	0	1	0	1	0	2	
1930	53	3	43	1	4	0	0	1	0	1	0	
1945	51	0	45	2	1	0	0	0	1	2	0	
2000	55	2	49	1	1	0	0	0	0	1	1	
2015	42	1	36	0	2	1	0	0	0	2	0	
2030	33	0	29	0	2	0	0	0	1	1	0	
2045	44	0	34	2	4	0	0	0	4	0	0	
2100	32	1	23	3	2	0	0	0	2	0	1	
2115	32	1	28	1	1	0	0	0	0	0	1	
2130	40	3	29	0	2	0	0	0	4	1	1	
2145	28	0	23	1	2	0	0	0	1	0	1	
2200	47	0	42	1	2	0	0	0	1	1	0	
2215	24	0	19	1	2	1	0	0	0	1	0	
2230	18	0	15	0	0	0	1	0	0	2	0	
2245	24	0	20	0	0	0	0	0	0	4	0	
2300	32	0	29	0	2	0	0	0	0	0	1	
2315	17	1	15	0	0	0	0	0	0	1	0	
2330	14	0	11	0	1	0	0	0	0	1	1	
2345	16	0	12	0	1	0	0	0	2	1	0	
07-19	**3341**	**213**	**2823**	**42**	**126**	**7**	**10**	**5**	**22**	**39**	**54**	
06-22	**3971**	**228**	**3357**	**55**	**152**	**8**	**11**	**7**	**38**	**51**	**64**	
06-00	**4163**	**229**	**3520**	**57**	**160**	**9**	**12**	**7**	**41**	**62**	**66**	
00-00	**4398**	**233**	**3714**	**57**	**174**	**10**	**12**	**8**	**41**	**71**	**78**	

Grand Total 394

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
--	**51085**	**758**	**42164**	**345**	**3866**	**271**	**373**	**56**	**728**	**1472**	**1052**	

Period	Total	Per day		
18 hour	39674	7935		
AADT	51085	7298		
AM 5	2711	542	Combined peak 5 day	1448
PM 5	4527	905		
AM 7	3132	447	Combined peak 7 day	1184
PM 7	5155	736		

18 hr factor 5.4813

AADT factor 6.1645

Report Id - CustomList-40
Site Name - LUTTERWORTH- 01
Description - A5 N [60M]
Direction - North

12 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
0000	0	0	0	0	0	0	0	0	3	4	2	3	2	2	0	0	2	57.3	66.2	6	33.3	2	11.1	2	11.1	
0015	0	0	0	0	0	0	0	0	2	1	1	4	0	1	1	1	2	60.7	76.1	5	38.5	4	30.8	3	23.1	
0030	0	0	0	0	0	0	0	0	2	1	1	1	1	2	1	2	0	60	71.4	6	54.5	3	27.3	2	18.2	
0045	0	0	0	0	0	0	0	1	0	0	1	1	3	1	0	0	0	57.6	-	4	57.1	1	14.3	0	0	
0100	0	0	0	0	0	0	0	0	0	1	1	0	1	1	0	0	0	57.6	-	2	50	0	0	0	0	
0115	0	0	0	0	0	0	0	0	0	2	5	2	0	1	1	0	0	56	56.6	2	18.2	1	9.1	0	0	
0130	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	1	63.3	-	3	60	1	20	1	20	
0145	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0	0	54	-	2	50	0	0	0	0	
0200	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	58.5	-	1	16.7	1	16.7	0	0	
0215	0	0	0	0	0	0	0	0	0	0	3	1	0	0	1	1	0	60.6	-	2	33.3	2	33.3	1	16.7	
0230	0	0	0	0	0	0	0	0	0	2	3	1	3	0	0	0	1	58.8	-	4	40	1	10	1	10	
0245	0	0	0	0	0	0	0	1	0	1	3	1	0	2	0	0	0	54.2	-	2	25	0	0	0	0	
0300	0	0	0	0	0	0	0	0	0	0	6	0	1	1	2	0	0	60.2	-	4	40	3	30	0	0	
0315	0	0	0	0	0	0	0	0	0	0	4	1	1	4	0	0	0	60.6	-	5	50	1	10	0	0	
0330	0	0	0	0	0	0	0	1	0	4	4	3	0	0	0	0	0	51	56.1	0	0	0	0	0	0	
0345	0	0	0	0	0	0	0	0	1	1	3	2	0	0	0	0	0	51.7	-	0	0	0	0	0	0	
0400	0	0	0	0	0	0	0	0	1	1	4	3	1	2	0	0	0	55.9	61.7	3	25	0	0	0	0	
0415	0	0	0	0	0	0	0	1	1	2	2	0	0	0	0	0	1	52.3	-	1	14.3	1	14.3	1	14.3	
0430	0	0	0	0	0	0	0	0	0	0	2	4	0	1	0	1	0	60.4	-	2	25	2	25	1	12.5	
0445	0	0	0	0	0	0	0	1	0	0	2	2	1	4	0	0	2	64.8	67.1	7	58.3	2	16.7	2	16.7	
0500	0	0	0	0	0	0	0	0	0	3	2	3	5	6	3	0	0	56.3	64.6	9	40.9	0	0	0	0	
0515	0	0	0	0	0	0	0	0	0	2	3	5	5	0	2	1	0	56.6	66.2	4	21.1	2	10.5	1	5.3	
0530	0	0	0	0	0	0	0	0	0	0	3	8	2	9	5	1	1	2	60.9	67.3	18	58.1	5	16.1	3	9.7
0545	0	0	0	0	0	0	0	0	0	1	2	4	5	6	5	0	1	1	60.9	68.2	13	52	5	20	2	8
0600	0	0	0	0	0	0	0	0	0	0	7	17	12	19	11	4	1	1	59.5	68	36	50	12	16.7	2	2.8
0615	0	0	0	0	0	0	0	3	2	5	9	11	8	6	3	1	0	56.9	66.9	18	37.5	6	12.5	1	2.1	
0630	0	0	0	0	0	0	1	0	3	4	9	28	15	9	2	0	0	57.9	64.9	26	36.6	4	5.6	0	0	
0645	0	0	0	0	0	0	0	2	1	15	12	16	14	13	2	1	1	57.5	66.2	31	40.3	9	11.7	2	2.6	
0700	0	0	0	0	0	0	0	2	3	8	28	38	19	9	4	0	1	57.3	64.4	33	29.5	8	7.1	1	0.9	
0715	0	0	0	0	0	0	1	1	6	10	14	42	26	13	3	3	3	58.7	65.1	48	39.3	13	10.7	6	4.9	
0730	0	0	0	0	0	3	10	3	14	21	40	40	33	9	1	1	0	53.4	62.4	44	25.1	5	2.9	1	0.6	
0745	0	0	0	0	0	0	0	0	9	24	29	48	13	15	4	2	2	56.6	64.9	36	24.7	11	7.5	4	2.7	
0800	0	0	0	0	0	0	0	0	4	11	29	66	37	9	2	0	1	57.6	62.2	49	30.8	3	1.9	1	0.6	
0815	0	0	0	0	0	0	0	1	11	14	33	39	20	9	2	0	0	55.5	63.3	31	24	5	3.9	0	0	
0830	0	0	0	0	0	0	0	0	7	18	39	51	16	16	4	0	0	56.5	64.2	36	23.8	10	6.6	0	0	
0845	0	0	0	0	0	0	0	1	7	14	17	25	21	15	5	2	0	57.7	65.8	43	40.2	10	9.3	2	1.9	
0900	0	0	0	0	0	0	0	3	13	20	22	29	22	7	6	1	0	55.1	63.1	36	29.3	8	6.5	1	0.8	
0915	0	0	0	0	0	0	0	1	9	13	28	34	14	6	1	1	2	55.6	62.2	24	22	5	4.6	3	2.8	
0930	0	0	0	0	0	0	0	2	3	10	28	19	23	3	3	1	0	56	63.3	30	32.6	6	6.5	1	1.1	
0945	0	0	0	0	0	0	0	0	1	8	30	17	14	4	5	0	0	56.6	62.6	23	29.1	7	8.9	0	0	
1000	0	0	0	0	0	0	0	1	20	12	28	13	12	6	3	0	2	53.8	62.4	23	23.7	6	6.2	2	2.1	
1015	0	0	0	0	0	0	0	0	6	13	27	26	10	7	2	1	0	55.9	61.7	20	21.7	6	6.5	1	1.1	
1030	0	0	0	0	0	0	0	0	13	10	26	15	8	6	3	0	0	54.1	63.5	17	21	4	4.9	0	0	
1045	0	0	0	0	0	0	0	3	10	18	11	24	18	4	3	1	0	54.9	63.1	26	28.3	4	4.3	1	1.1	
1100	0	0	0	0	0	0	0	1	7	15	17	24	12	3	0	2	0	54.3	61.5	17	21	3	3.7	2	2.5	
1115	0	0	0	0	0	0	0	1	7	21	36	24	11	2	0	0	0	53.4	59.3	13	12.7	1	1	0	0	
1130	0	0	0	0	0	0	0	0	1	9	23	25	14	6	1	0	0	56.1	61.1	21	26.6	2	2.5	0	0	
1145	0	0	0	0	0	0	0	3	2	14	20	20	7	7	3	1	0	55.7	64	18	23.4	5	6.5	1	1.3	
1200	0	0	0	0	0	0	1	6	9	13	33	21	9	4	3	1	0	53.6	60.8	17	17	7	7	1	1	
1215	0	0	0	0	0	0	0	0	3	8	35	24	10	5	3	1	1	56.2	61.7	20	22.2	6	6.7	2	2.2	
1230	0	0	0	0	1	0	0	0	1	10	18	25	10	5	5	0	0	56.7	64.6	20	26.7	5	6.7	0	0	
1245	0	0	0	0	0	0	1	2	4	16	24	31	10	13	2	0	1	55.8	64.4	26	25	7	6.7	1	1	
1300	0	0	0	0	0	0	0	0	9	11	28	31	15	7	4	2	0	56.2	61.7	28	26.2	9	8.4	2	1.9	
1315	0	0	0	0	0	0	0	1	2	10	18	25	18	8	3	0	0	57	64	29	34.1	4	4.7	0	0	
1330	0	0	0	0	0	0	0	0	3	2	31	21	16	6	5	1	0	57.6	64.9	28	32.9	6	7.1	1	1.2	
1345	0	0	0	0	0	0	0	1	5	8	24	24	24	11	10	0	0	58.1	66.4	45	42.1	12	11.2	0	0	
1400	0	0	0	0	0	0	0	3	11	16	29	44	25	8	8	0	0	56	63.3	41	28.5	11	7.6	0	0	
1415	0	0	0	0	0	0	0	2	4	13	52	42	13	5	3	1	0	54.7	60.4	22	16.3	4	3	1	0.7	
1430	0	0	0	0	0	0	0	0	0	17	54	37	20	5	0	0	0	55.3	60.8	25	18.8	0	0	0	0	
1445	0	0	0	0	0	0	0	1	10	13	22	40	15	12	1	0	0	55.5	63.1	28	24.6	5	4.4	0	0	
1500	0	0	0	0	0	0	0	0	7	14	22	39	22	14	4	0	1	57.4	64.9	41	33.3	10	8.1	1	0.8	
1515	0	0	0	0	0	0	0	1	0	22	51	40	18	4	2	1	1	55.6	61.3	26	18.6	4	2.9	2	1.4	
1530	0	0	0	0	0	0	0	8	21	13	45	45	18	7	5	0	0	54	61.3	30	18.5	6	3.7	0	0	
1545	0	0	0	0	0	0	0	0	2	10	39	36	30	16	4	1	3	58.6	65.3	54	38.3	14	9.9	4	2.8	
1600	0	0	0	0	0	0	0	2	6	14	41	79	27	12	2	0	1	56.7	62.2	42	22.8	7	3.8	1	0.5	
1615	0	0	0	0	0	0	0	1	15	11	42	52	34	5	4	4	0	56.2	62.9	47	28	10	6	4	2.4	
1630	0	0	0	0	0	0	0	0	3	28	49	70	41	7	3	1	0	56.3	62	52	25.7	4	2	1	0.5	
1645	0	0	0	0	1	0	0	0	0	27	55	60	23	19	2	1	1	56.7	62.6	46	24.3	7	3.7	2	1.1	
1700	0	0	0	0	0	0	0	5	13	18	53	72	48	19	3	2	0	56.5	63.5	72	30.9	10	4.3	2	0.9	
1715	0	0	0	0	0	0	0	3	6	17	53	83	50	21	5	0	1	57.4	63.8	77	32.2	15	6.3	1	0.4	
1730	0	0	0	0	0	0	0	0	4	16	80	89	60	16	6	2	0	57.3	62.6	84	30.8	10	3.7	2	0.7	
1745	0	0	0	0	0	0	0	0	0	9	44	76	51	33	8	4	0	59.6	66.4	96	42.7	20	8.9	4	1.8	
1800	0	0	0	0	0	0	0	0	2	14	25	51	40	31	8	5	2	60.3	67.1	86	48.3	25	14	7	3.9	
1815	0	0	0	0	0	0	0	2	2	12	17	42	43	25	7	2	3	60.3	68	80	51.6	24	15.5	5	3.2	
1830	0	0	0	0	0	0	0	0	0	3	18	29	26	24	10	9	4	63.2	73.4	73	59.3	31	25.2	13	10.6	
1845	0	0	0	0	0	0	0	0	1	17	14	36	24	12	2	3	5	59.4	66.2	46	40.4	16	14	8	7	
1900	0	0	0	0	0	1	0	2	5	3	13	33	18	23	5	2	3	59.8	68.2	51	47.2	17	15.7	5	4.6	
1915	0	0	0	0	0	0	0	2	0	1	8	12	10	12	4	3	4	63	71.6	33	58.9	14	25	7	12.5	
1930	0	0	0	0	0	0	0	0	0	0	1	2	9	15	15	9	4	0	64.8	71.6	43	78.2	17	30.9	4	7.3
1945	0	0	0	0	0	0	0	0	1	8	2	13	19	13	8	3	1	62.4	70	44	64.7	18	26.5	4	5.9	
2000	0	0	0	0	0	0	0	0	0	1	4	14	15	18	19	3	2	0	60.5	66.9	42	55.3	8	10.5	2	2.6
2015	0	0	0	0	0	0	0	0	0	1	1	10	19	12	4	2	1	4	61.5	69.3	23	42.6	10	18.5	5	9.3
2030	0	0	0	0	0	0	0	0	0	1	5	11	18	9	9	8	2	2	61	70.5	30	46.2	14	21.5	4	6.2
2045	0	0	0	0	0	1	1	2	0	1	3	4	7	8	2	0	0	58.2	67.6	17	58.6	4	13.8	0	0	
2100	0	0	0	0	0	0	0	0	0	0	2	5	11	5	2	3	2	5	63.2	78.5	17	48.6	10	28.6	7	20
2115	0	0	0	0	0	0	0	1	4	3	8	17	6	0	2	4	1	58.2	63.5	13	28.3	7	15.2	5	10.9	
2130	0	0	0	0	0	0	0	0	0	0	3	10	13	11	4	1	0	0	58.2	64	16	38.1	2	4.8	0	0
2145	0	0	0	0	0	0	0	0	0	1	2	11	14	10	6	2	0	0	58.6	64.9	18	39.1	4	8.7	0	0
2200	0	0	0	0	0	0	0	0	0	8	7	18	25	20	4	2	0	1	56.4	63.8	27	31.8	6	7.1	1	1.2
2215	0	0	0	0	0	0	0	0	1	0	1	5	14	16	4	1	0	0	59	63.8	21	50	2	4.8	0	0
2230	0	0	0	0	0	0	0	0	1	1	2	15	7	4	5	2	0	1	57.5	65.8	12	31.6	3	7.9	1	2.6
2245	0	0	0	0	0	0	0	1	1	5	5	12	5	1	2	0	1	57.3	64.4	9	27.3	3	9.1	1	3	
2300	0	0	0	0	0	0	0	0	1	1	4	6	17	5	5	3	0	1	58.8	67.1	14	32.6	6	14	1	2.3
2315	0	0	0	0	0	0	0	0	0	0	1	6	10	3	4	0	0	0	58.2	63.1	7	29.2	3	12.5	0	0
2330	0	0	0	0	0	0	0	0	1	6	6	8	2	2	1	1	0	1	52.7	59.9	5	17.9	3	10.7	1	3.6
2345	0	0	0	0	0	0	0	0	0	1	1	6	1	2	4	0	0	0	56.8	66.2	6	40	1	6.7	0	0
07-19	**0**	**0**	**0**	**0**	**2**	**3**	**13**	**61**	**296**	**665**	**1541**	**1883**	**1090**	**510**	**177**	**57**	**35**	**56.7**	**63.8**	**1869**	**29.5**	**411**	**6.5**	**92**	**1.5**	
06-22	**0**	**0**	**0**	**0**	**2**	**5**	**15**	**73**	**316**	**730**	**1685**	**2128**	**1286**	**664**	**237**	**83**	**57**	**57.1**	**64.6**	**2327**	**32**	**567**	**7.8**	**140**	**1.9**	
06-00	**0**	**0**	**0**	**0**	**2**	**5**	**15**	**78**	**334**	**757**	**1754**	**2216**	**1343**	**692**	**248**	**83**	**62**	**57.1**	**64.6**	**2428**	**32**	**594**	**7.8**	**145**	**1.9**	
00-00	**0**	**0**	**0**	**0**	**2**	**5**	**15**	**83**	**351**	**788**	**1822**	**2268**	**1381**	**731**	**256**	**90**	**75**	**57.2**	**64.9**	**2533**	**32.2**	**631**	**8**	**165**	**2.1**	

13 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
0000	0	0	0	0	0	0	0	2	0	1	4	3	8	5	1	2	0	60.5	66.2	16	61.5	3	11.5	2	7.7	
0015	0	0	0	0	0	0	0	0	0	1	3	6	3	4	1	0	0	60.1	67.6	8	44.4	2	11.1	0	0	
0030	0	0	0	0	0	0	0	0	0	0	7	5	7	5	2	2	0	0	56.8	64	9	32.1	2	7.1	0	0	
0045	0	0	0	0	0	0	0	1	2	0	5	3	3	2	1	0	1	57.6	68	7	38.9	4	22.2	1	5.6	
0100	0	0	0	0	0	0	0	0	0	1	2	0	2	2	0	1	0	60.4	-	5	62.5	2	25	1	12.5	
0115	0	0	0	0	0	0	0	0	0	0	5	4	0	1	0	1	1	60	65.1	3	25	2	16.7	2	16.7	
0130	0	0	0	0	0	0	0	0	0	1	5	2	3	1	1	0	0	57	62.2	5	38.5	1	7.7	0	0	
0145	0	0	0	0	0	0	0	0	1	2	4	2	4	4	1	0	0	59.3	67.8	9	50	3	16.7	0	0	
0200	0	0	0	0	0	0	0	0	0	7	5	2	0	0	0	0	0	50.3	54.4	0	0	0	0	0	0	
0215	0	0	0	0	0	0	0	0	0	0	0	6	2	0	0	0	0	60	-	2	25	0	0	0	0	
0230	0	0	0	0	0	0	0	1	0	2	2	2	0	1	0	0	0	52.2	-	1	12.5	0	0	0	0	
0245	0	0	0	0	0	0	0	0	0	4	0	1	0	3	1	0	0	57.6	-	4	44.4	2	22.2	0	0	
0300	0	0	0	0	0	0	0	0	0	1	1	3	4	0	4	0	1	64.7	73.6	9	64.3	5	35.7	1	7.1	
0315	0	0	0	0	0	0	0	0	0	2	6	2	5	1	0	0	0	56.4	60.8	6	37.5	1	6.3	0	0	
0330	0	0	0	0	0	0	0	0	0	1	3	0	1	0	0	0	0	53	-	1	20	0	0	0	0	
0345	0	0	0	0	0	0	0	0	2	1	3	2	0	1	1	1	0	56.1	67.6	3	27.3	2	18.2	1	9.1	
0400	0	0	0	0	0	0	0	1	0	2	3	2	2	3	0	0	0	56.5	66.2	5	38.5	1	7.7	0	0	
0415	0	0	0	0	0	0	0	0	0	0	4	1	4	4	0	1	1	64.1	66.4	10	66.7	2	13.3	2	13.3	
0430	0	0	0	0	0	0	0	0	5	5	3	10	0	1	0	0	0	52.2	56.8	1	4.2	1	4.2	0	0	
0445	0	0	0	0	0	0	0	1	0	6	1	3	0	4	2	0	1	59.3	68.2	7	38.9	7	38.9	1	5.6	
0500	0	0	0	0	0	0	0	2	0	1	2	6	7	2	1	0	0	58	64.4	10	47.6	1	4.8	0	0	
0515	0	0	0	0	0	0	0	1	1	3	7	5	3	2	0	1	0	55.3	62.4	6	26.1	1	4.3	1	4.3	
0530	0	0	0	0	0	0	0	0	5	4	16	12	3	0	2	2	0	55.2	58.6	7	15.9	4	9.1	2	4.5	
0545	0	0	0	0	0	0	0	1	3	3	3	12	6	5	2	1	0	57.7	66.4	14	38.9	3	8.3	1	2.8	
0600	0	0	0	0	0	0	0	2	2	6	11	15	11	14	8	0	2	60.1	69.6	35	49.3	18	25.4	2	2.8	
0615	0	0	0	0	0	0	0	2	2	3	7	11	13	1	1	3	2	59.8	64.6	20	44.4	7	15.6	5	11.1	
0630	0	0	0	0	0	0	0	0	4	5	8	11	15	11	5	1	0	59.7	67.1	32	53.3	8	13.3	1	1.7	
0645	0	0	0	0	0	0	0	0	4	10	10	25	19	12	4	0	0	58.2	65.1	35	41.7	4	4.8	0	0	
0700	0	0	0	0	0	0	0	0	5	22	37	40	23	8	1	0	1	55.9	62.6	33	24.1	4	2.9	1	0.7	
0715	0	0	0	0	0	0	0	0	7	13	39	51	14	14	4	2	1	56.8	63.8	35	24.1	10	6.9	3	2.1	
0730	0	0	0	0	0	1	0	9	5	16	48	49	21	9	0	0	2	54.9	61.3	32	20	6	3.8	2	1.3	
0745	0	0	0	0	0	0	1	5	35	27	27	39	16	10	4	1	0	52.9	61.3	31	18.8	7	4.2	1	0.6	
0800	0	0	0	0	0	0	0	0	10	29	40	43	23	11	2	0	1	55.1	62.2	37	23.3	5	3.1	1	0.6	
0815	0	0	0	0	0	0	0	5	4	13	40	41	15	4	2	2	0	55.1	60.4	23	18.3	6	4.8	2	1.6	
0830	0	0	0	0	0	0	0	2	7	23	39	48	26	7	2	1	1	55.7	62.2	37	23.7	7	4.5	2	1.3	
0845	0	0	0	0	0	0	0	1	0	11	27	32	26	15	2	2	2	58.5	65.3	47	39.8	9	7.6	4	3.4	
0900	0	0	0	0	0	0	0	4	8	12	20	22	16	11	2	1	0	55.6	64.4	30	31.3	8	8.3	1	1	
0915	0	0	0	0	0	0	1	0	8	9	12	30	31	12	6	2	0	58.1	65.8	51	45.9	11	9.9	2	1.8	
0930	0	0	0	0	0	0	0	5	12	12	43	44	10	6	1	3	1	54.6	59.7	21	15.3	7	5.1	4	2.9	
0945	0	0	0	0	0	0	0	1	5	7	19	23	15	3	2	2	2	57.2	63.8	24	30.4	7	8.9	4	5.1	
1000	0	0	0	0	0	0	0	3	3	6	16	21	17	7	2	0	0	56.8	64	26	34.7	5	6.7	0	0	
1015	0	0	0	0	0	0	0	0	2	7	18	42	9	6	3	4	1	58	64.4	23	25	8	8.7	5	5.4	
1030	0	0	0	0	0	0	0	1	6	14	23	22	11	4	2	0	0	54.8	61.5	17	20.5	4	4.8	0	0	
1045	0	0	0	0	0	0	0	1	3	6	23	18	18	9	4	0	0	57.4	65.1	31	37.8	7	8.5	0	0	
1100	0	0	0	0	0	0	0	2	4	6	15	27	16	6	3	1	0	57.2	64.2	26	32.5	7	8.8	1	1.3	
1115	0	0	0	0	0	0	0	1	2	11	19	25	13	10	3	0	0	56.9	64.9	26	31	5	6	0	0	
1130	0	0	0	0	0	0	0	0	9	12	20	28	13	9	1	0	1	56.1	62.6	24	25.8	5	5.4	1	1.1	
1145	0	0	0	0	0	0	0	0	7	4	22	28	17	9	2	2	0	57.3	64.6	30	33	6	6.6	2	2.2	
1200	0	0	0	0	0	0	0	0	7	24	19	27	17	4	1	0	1	54.6	61.5	23	23	3	3	1	1	
1215	0	0	0	0	0	0	0	0	0	6	14	27	18	17	0	1	0	59.2	66.7	36	43.4	9	10.8	1	1.2	
1230	0	0	0	0	0	0	0	0	9	10	26	25	16	3	2	2	1	55.8	61.1	24	25.5	5	5.3	3	3.2	
1245	0	0	0	0	0	0	0	0	5	14	21	31	8	10	2	0	0	55.7	62.9	20	22	2	2.2	0	0	
1300	0	0	0	0	0	0	0	0	5	15	26	34	22	7	1	1	0	56.1	62.6	31	27.9	4	3.6	1	0.9	
1315	0	0	0	0	0	0	0	1	2	8	19	21	15	15	4	2	1	58.7	67.8	37	42	13	14.8	3	3.4	
1330	0	0	0	0	0	0	0	0	2	9	14	26	21	10	2	0	0	57.9	64.6	33	39.3	4	4.8	0	0	
1345	0	0	0	0	0	0	0	6	4	17	22	35	17	6	0	1	1	54.8	62.6	25	22.9	2	1.8	2	1.8	
1400	0	0	0	0	0	0	0	0	9	27	53	37	22	7	3	0	1	54.7	60.8	33	20.8	7	4.4	1	0.6	
1415	0	0	0	0	0	0	0	0	2	10	45	46	17	14	9	1	1	57.8	65.3	42	29	15	10.3	2	1.4	
1430	0	0	0	0	0	0	0	0	10	6	29	44	22	10	3	1	0	56.9	63.3	36	28.8	7	5.6	1	0.8	
1445	0	0	0	0	0	0	0	0	0	3	8	16	32	18	6	8	3	0	58.6	68.7	35	37.2	15	16	3	3.2
1500	0	0	0	0	0	0	0	5	3	16	35	44	24	11	6	2	4	57.5	65.1	47	31.3	15	10	6	4	
1515	0	0	0	0	0	0	0	1	11	17	19	35	40	14	5	1	0	57.5	64.6	60	42	10	7	1	0.7	
1530	0	0	0	0	0	0	0	1	10	26	32	37	24	10	3	1	0	55.5	62.9	38	26.4	5	3.5	1	0.7	
1545	0	0	0	0	1	2	0	2	11	9	28	34	26	14	7	2	2	56.8	65.8	51	37	17	12.3	4	2.9	
1600	0	0	0	0	0	0	0	4	8	10	59	62	41	11	3	0	0	56	62	55	27.8	5	2.5	0	0	
1615	0	0	0	0	0	0	0	0	0	1	46	64	41	27	10	2	1	60	66.7	81	42.2	26	13.5	3	1.6	
1630	0	0	0	0	0	0	0	0	6	25	52	61	35	13	4	1	1	56.5	62.2	54	27.3	11	5.6	2	1	
1645	0	0	0	0	0	0	0	2	17	15	35	56	48	14	4	2	0	56.7	63.3	68	35.2	9	4.7	2	1	
1700	0	0	0	0	0	1	0	3	8	25	28	46	63	25	6	0	0	57.7	64.4	94	45.9	14	6.8	0	0	
1715	0	0	0	0	0	0	0	4	10	20	64	75	58	19	2	3	0	56.8	63.3	82	32.2	12	4.7	3	1.2	
1730	0	0	0	0	0	0	0	0	1	9	45	94	67	21	3	1	0	58.7	63.8	92	38.2	11	4.6	1	0.4	
1745	0	0	0	0	0	0	0	0	4	24	40	67	39	22	3	0	1	57.4	63.1	65	32.5	8	4	1	0.5	
1800	0	0	0	0	0	0	0	6	22	21	33	46	40	33	9	8	0	57.5	67.6	90	41.3	30	13.8	8	3.7	
1815	0	0	0	0	0	0	0	0	0	5	19	52	51	24	13	8	3	62	68.7	99	56.6	32	18.3	11	6.3	
1830	0	0	0	0	0	0	0	3	3	17	12	25	32	19	9	3	4	60	69.1	67	52.8	25	19.7	7	5.5	
1845	0	0	0	0	0	0	0	5	7	6	15	20	26	23	9	3	5	60.3	69.3	66	55.5	25	21	8	6.7	
1900	0	0	0	0	0	0	0	0	2	2	10	43	20	9	8	4	7	62.2	70.5	48	45.7	24	22.9	11	10.5	
1915	0	0	0	0	0	0	2	2	0	2	13	10	17	20	7	5	2	62.3	70.9	51	63.8	23	28.8	7	8.8	
1930	0	0	0	0	0	0	0	0	2	1	5	16	9	8	13	3	5	64.8	73.8	38	61.3	25	40.3	8	12.9	
1945	0	0	0	0	0	0	0	0	0	3	6	27	10	18	7	4	1	62.3	70	40	52.6	15	19.7	5	6.6	
2000	0	0	0	0	0	0	0	0	3	5	11	15	13	11	13	2	4	62.4	70.7	43	55.8	23	29.9	6	7.8	
2015	0	0	0	0	0	0	0	2	4	1	7	18	21	10	4	2	1	59.9	66.4	38	54.3	8	11.4	3	4.3	
2030	0	0	0	0	0	0	0	2	3	6	3	10	14	11	4	3	3	61.4	70	35	59.3	14	23.7	6	10.2	
2045	0	0	0	0	0	0	0	0	3	1	5	5	10	4	4	2	1	61.6	72.3	21	60	10	28.6	3	8.6	
2100	0	0	0	0	0	0	0	0	1	4	9	15	5	7	1	1	0	58.1	65.8	14	32.6	4	9.3	1	2.3	
2115	0	0	0	0	0	0	1	0	1	6	3	13	10	6	4	0	0	58.6	65.8	20	45.5	4	9.1	0	0	
2130	0	0	0	0	0	0	0	2	0	1	10	8	12	4	4	1	0	59.4	68	21	50	7	16.7	1	2.4	
2145	0	0	0	0	0	0	0	0	2	6	4	10	7	6	6	0	2	60.1	70.5	21	48.8	10	23.3	2	4.7	
2200	0	0	0	0	0	0	0	0	4	5	16	23	26	6	5	1	0	58.7	64.4	38	44.2	9	10.5	1	1.2	
2215	0	0	0	0	0	0	1	0	2	2	13	12	8	5	0	2	0	57.2	64.4	15	33.3	2	4.4	2	4.4	
2230	0	0	0	0	0	0	0	0	0	0	4	5	14	15	6	2	0	0	59.1	64.9	23	50	4	8.7	0	0
2245	0	0	0	0	0	0	0	0	0	0	1	6	7	9	4	0	2	2	62.4	66.2	17	54.8	4	12.9	4	12.9
2300	0	0	0	0	0	0	0	0	0	2	0	5	15	8	5	2	4	0	60.7	69.8	19	46.3	9	22	4	9.8
2315	0	0	0	0	0	0	0	1	1	3	8	9	6	3	1	0	3	59.2	67.6	13	37.1	5	14.3	3	8.6	
2330	0	0	0	0	0	0	0	0	0	2	0	3	9	6	0	0	0	0	56.3	60.6	6	30	0	0	0	0
2345	0	0	0	0	0	0	0	0	0	0	10	4	2	2	0	0	2	0	54.7	59.9	4	20	2	10	2	10
07-19	**0**	**0**	**0**	**0**	**1**	**4**	**2**	**83**	**321**	**660**	**1413**	**1876**	**1218**	**579**	**179**	**72**	**40**	**57**	**64.4**	**2088**	**32.4**	**475**	**7.4**	**112**	**1.7**	
06-22	**0**	**0**	**0**	**0**	**1**	**4**	**5**	**95**	**354**	**722**	**1535**	**2128**	**1424**	**731**	**272**	**103**	**70**	**57.5**	**65.1**	**2600**	**34.9**	**679**	**9.1**	**173**	**2.3**	
06-00	**0**	**0**	**0**	**0**	**1**	**4**	**6**	**96**	**365**	**747**	**1595**	**2219**	**1504**	**760**	**282**	**114**	**75**	**57.5**	**65.1**	**2735**	**35.2**	**714**	**9.2**	**189**	**2.4**	
00-00	**0**	**0**	**0**	**0**	**1**	**4**	**6**	**106**	**384**	**802**	**1687**	**2315**	**1569**	**808**	**302**	**124**	**80**	**57.5**	**65.3**	**2883**	**35.2**	**763**	**9.3**	**204**	**2.5**	

14 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
0000	0	0	0	0	0	0	0	0	0	1	6	10	5	7	5	0	0	60.7	69.6	17	50	7	20.6	0	0	
0015	0	0	0	0	0	0	0	1	1	2	3	6	2	0	1	0	2	58.6	64.4	5	27.8	3	16.7	2	11.1	
0030	0	0	0	0	0	0	0	0	1	1	9	6	7	0	0	0	0	56	61.5	7	29.2	0	0	0	0	
0045	0	0	0	0	0	0	0	0	1	3	0	0	4	1	0	1	0	58.8	-	6	60	2	20	1	10	
0100	0	0	0	0	0	0	0	0	0	2	5	6	2	0	0	0	0	55.1	57.9	2	13.3	0	0	0	0	
0115	0	0	0	0	0	0	0	0	0	0	1	3	4	0	2	1	0	63.3	71.6	7	63.6	3	27.3	1	9.1	
0130	0	0	0	0	0	0	0	0	1	0	1	1	4	1	0	0	0	58.6	-	5	62.5	0	0	0	0	
0145	0	0	0	0	0	0	0	0	0	0	1	13	5	0	0	1	0	59.9	61.5	6	30	1	5	1	5	
0200	0	0	0	0	0	0	0	0	0	1	4	1	2	1	2	0	0	58.9	68.2	5	45.5	3	27.3	0	0	
0215	0	0	0	0	0	0	0	0	1	0	6	1	4	3	0	0	0	58.4	67.1	7	46.7	2	13.3	0	0	
0230	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	53.5	-	0	0	0	0	0	0	
0245	0	0	0	0	0	0	0	0	0	0	2	2	2	1	0	0	0	58.3	-	3	42.9	1	14.3	0	0	
0300	0	0	0	0	0	0	0	0	1	1	3	7	1	3	1	0	0	57.9	66.7	5	29.4	2	11.8	0	0	
0315	0	0	0	0	0	0	0	0	0	1	4	3	1	0	1	0	0	56.1	-	2	20	1	10	0	0	
0330	0	0	0	0	0	0	0	1	0	3	3	3	0	0	0	0	0	50.5	-	0	0	0	0	0	0	
0345	0	0	0	0	0	0	0	0	1	0	2	1	0	1	2	0	0	59.3	-	3	42.9	3	42.9	0	0	
0400	0	0	0	0	0	0	0	1	0	2	4	6	0	1	2	0	0	56.4	68.2	3	18.8	3	18.8	0	0	
0415	0	0	0	0	0	0	0	0	1	5	6	0	2	2	2	0	0	55.8	65.8	6	33.3	2	11.1	0	0	
0430	0	0	0	0	0	0	0	1	0	0	1	3	5	1	0	1	0	60.4	62.9	7	58.3	1	8.3	1	8.3	
0445	0	0	0	0	0	0	0	0	1	5	6	3	3	1	2	0	0	55.5	62	6	28.6	3	14.3	0	0	
0500	0	0	0	0	0	0	0	1	1	0	6	5	2	1	0	0	0	54.7	60.8	3	18.8	1	6.3	0	0	
0515	0	0	0	0	0	0	0	1	4	2	6	2	8	1	2	0	0	55.4	62.6	11	42.3	2	7.7	0	0	
0530	0	0	0	0	0	0	0	0	0	1	7	7	6	3	1	1	1	60.4	66	12	44.4	4	14.8	2	7.4	
0545	0	0	0	0	0	0	0	1	2	5	12	11	11	6	3	0	0	58.1	65.8	20	39.2	4	7.8	0	0	
0600	0	0	0	0	0	0	0	0	1	8	18	12	10	12	4	0	0	58.1	67.1	26	40	10	15.4	0	0	
0615	0	0	0	0	0	0	0	2	4	5	16	8	7	6	0	0	1	54.8	64	14	28.6	1	2	1	2	
0630	0	0	0	0	0	0	0	4	5	7	9	16	23	4	0	0	1	56.2	63.3	28	40.6	4	5.8	1	1.4	
0645	0	0	0	0	0	0	0	2	3	6	17	24	16	6	1	0	0	56.4	62.9	23	30.7	3	4	0	0	
0700	0	0	0	0	0	0	0	0	5	10	28	42	31	15	1	0	0	57.5	64.2	47	35.6	5	3.8	0	0	
0715	0	0	0	0	0	0	0	0	6	15	32	71	23	8	1	1	0	56.2	60.6	33	21	2	1.3	1	0.6	
0730	0	0	0	0	0	0	1	0	6	22	33	43	27	20	9	1	0	57.6	66.2	57	35.2	17	10.5	1	0.6	
0745	0	0	0	0	0	0	0	0	3	17	27	38	34	16	5	3	2	58.7	65.3	60	41.4	13	9	5	3.4	
0800	0	0	0	0	0	2	0	2	1	21	21	39	24	16	8	3	2	58.2	66.9	53	38.1	16	11.5	5	3.6	
0815	0	0	0	0	0	0	0	2	4	13	37	43	23	5	4	2	1	56.5	63.3	35	26.1	9	6.7	3	2.2	
0830	0	0	0	0	0	0	0	3	10	9	41	34	28	3	3	1	0	55.2	62	35	26.5	6	4.5	1	0.8	
0845	0	0	0	0	0	12	2	1	3	11	34	29	18	9	10	0	2	54.5	65.1	39	29.8	14	10.7	2	1.5	
0900	0	0	0	0	0	0	0	4	7	24	24	31	25	12	3	0	0	55.6	63.8	40	30.8	5	3.8	0	0	
0915	0	0	0	0	1	0	0	4	2	6	23	20	21	10	4	2	1	57.8	65.8	38	40.4	12	12.8	3	3.2	
0930	0	0	0	0	0	0	0	3	7	9	26	21	15	4	6	1	0	55.8	64.6	26	28.3	8	8.7	1	1.1	
0945	0	0	0	0	0	0	0	1	9	8	18	30	11	10	4	0	1	56.5	66	26	28.3	7	7.6	1	1.1	
1000	0	0	0	0	0	0	3	2	5	13	41	23	11	2	1	0	1	53.9	59.5	15	14.7	3	2.9	1	1	
1015	0	0	0	0	0	0	0	4	10	22	28	27	12	10	2	0	1	54.4	61.7	25	21.6	5	4.3	1	0.9	
1030	0	0	0	0	0	0	0	4	0	3	16	21	22	3	0	1	1	57.7	63.8	27	38	2	2.8	2	2.8	
1045	0	0	0	0	0	0	0	1	5	13	22	23	12	5	2	1	1	56.1	64.2	21	24.7	6	7.1	2	2.4	
1100	0	0	0	0	0	0	0	3	2	6	12	19	14	5	1	0	1	56.7	63.3	21	33.3	3	4.8	1	1.6	
1115	0	0	0	0	0	0	0	5	6	11	26	25	7	9	0	3	1	55.3	63.8	20	21.5	8	8.6	4	4.3	
1130	0	0	0	0	0	0	0	1	8	17	22	14	11	7	2	1	0	54.2	63.8	21	25.3	4	4.8	1	1.2	
1145	0	0	0	0	0	0	0	0	9	19	20	19	11	4	4	1	2	55.2	63.1	22	24.7	8	9	3	3.4	
1200	0	0	0	0	0	0	0	2	9	17	31	29	10	5	2	4	1	55.4	62.6	22	20	9	8.2	5	4.5	
1215	0	0	0	0	0	0	1	0	0	14	29	24	13	5	6	2	0	56.7	63.8	26	27.7	8	8.5	2	2.1	
1230	0	0	0	0	0	0	0	0	3	13	25	32	16	6	2	0	0	56.4	62.9	24	24.7	6	6.2	0	0	
1245	0	0	0	0	0	0	0	1	7	9	23	26	14	10	7	0	1	57.5	66.4	32	32.7	9	9.2	1	1	
1300	0	0	0	0	0	0	0	0	7	23	30	27	13	5	2	0	0	54.1	60.8	20	18.7	5	4.7	0	0	
1315	0	0	0	0	0	0	0	0	11	14	28	13	15	5	7	0	1	55.5	64.6	28	29.8	8	8.5	1	1.1	
1330	0	0	0	0	0	0	0	0	0	3	18	35	17	17	7	4	2	0	56.2	63.8	30	29.1	8	7.8	2	1.9
1345	0	0	0	0	0	0	0	0	1	9	27	42	17	6	3	3	0	57.6	63.3	29	26.9	9	8.3	3	2.8	
1400	0	0	0	0	0	0	0	1	4	15	34	52	26	13	1	0	1	57	63.3	41	27.9	5	3.4	1	0.7	
1415	0	0	0	0	0	0	0	7	5	11	44	47	13	8	1	0	0	54.8	60.6	22	16.2	4	2.9	0	0	
1430	0	0	0	0	0	0	0	1	9	7	34	37	13	6	6	2	2	56.5	63.8	29	24.8	11	9.4	4	3.4	
1445	0	0	0	0	0	0	0	5	17	4	30	26	29	12	0	2	0	55.6	64	43	34.4	4	3.2	2	1.6	
1500	0	0	0	0	0	0	0	0	5	21	36	48	37	14	6	0	1	57.4	64.2	58	34.5	12	7.1	1	0.6	
1515	0	0	0	0	0	0	1	6	10	18	34	46	21	12	1	1	1	55.1	62.9	36	23.8	6	4	2	1.3	
1530	0	0	0	0	0	0	0	3	9	11	35	66	21	7	5	1	0	56	60.8	34	21.5	9	5.7	1	0.6	
1545	0	0	0	0	0	0	0	6	5	10	32	33	23	21	5	2	0	57.4	66.9	51	37.2	16	11.7	2	1.5	
1600	0	0	0	0	0	0	0	0	4	18	59	75	38	18	12	1	0	57.7	64	69	30.7	21	9.3	1	0.4	
1615	0	0	0	0	0	0	0	0	4	6	39	50	47	22	6	2	1	59.2	65.3	78	44.1	19	10.7	3	1.7	
1630	0	0	0	0	0	0	0	0	17	15	35	63	46	7	2	0	0	56.2	62.6	55	29.7	3	1.6	0	0	
1645	0	0	0	0	0	0	0	2	8	25	63	53	28	13	8	1	0	55.9	63.1	50	24.9	12	6	1	0.5	
1700	0	0	0	0	1	2	3	2	4	20	49	77	47	24	6	5	1	57.4	64.6	83	34.4	20	8.3	6	2.5	
1715	0	0	0	0	0	0	0	5	6	8	36	72	54	36	7	0	0	58.9	65.3	97	43.3	16	7.1	0	0	
1730	0	0	0	0	0	0	0	9	15	25	45	65	41	22	6	3	0	56.3	64.2	72	31.2	12	5.2	3	1.3	
1745	0	0	0	0	0	0	0	1	14	42	30	50	34	26	8	0	3	56.8	65.3	71	34.1	19	9.1	3	1.4	
1800	0	0	0	0	0	0	0	3	6	12	26	53	61	25	9	8	3	60	67.3	106	51.5	27	13.1	11	5.3	
1815	0	0	0	0	0	0	0	1	3	10	21	40	51	31	8	0	0	59.9	66.2	90	54.5	13	7.9	0	0	
1830	0	0	0	0	0	0	0	0	1	14	39	34	44	18	12	7	2	60	67.3	83	48.5	25	14.6	9	5.3	
1845	0	0	0	0	0	0	0	0	0	4	23	43	22	14	8	2	3	60.4	68.5	49	41.2	21	17.6	5	4.2	
1900	0	0	0	0	0	0	0	0	8	2	16	26	26	14	9	4	8	61.9	72.3	61	54	27	23.9	12	10.6	
1915	0	0	0	0	0	0	0	1	3	11	17	14	21	14	16	5	3	61.2	70.9	59	56.2	26	24.8	8	7.6	
1930	0	0	0	0	0	0	0	1	10	12	9	12	11	10	9	5	1	58.8	70.7	36	45	21	26.3	6	7.5	
1945	0	0	0	0	0	0	0	0	0	10	5	20	17	8	5	3	5	61.6	70.7	38	52.1	17	23.3	8	11	
2000	0	0	0	0	0	0	0	1	0	5	11	22	14	11	6	1	1	60	66.9	33	45.8	9	12.5	2	2.8	
2015	0	0	0	0	0	0	0	0	1	6	8	14	17	5	2	2	5	61.7	69.3	31	51.7	10	16.7	7	11.7	
2030	0	0	0	0	0	0	0	2	4	4	11	8	13	4	4	0	3	58.6	67.8	24	45.3	8	15.1	3	5.7	
2045	0	0	0	0	0	0	0	0	1	6	7	16	8	11	2	1	1	60	68.2	23	43.4	9	17	2	3.8	
2100	0	0	0	0	0	0	0	0	0	1	7	12	12	5	2	0	2	60.8	65.5	21	51.2	5	12.2	2	4.9	
2115	0	0	0	0	0	0	0	0	0	3	15	7	13	6	4	0	1	60.4	68.5	24	49	9	18.4	1	2	
2130	0	0	0	0	0	0	0	0	0	2	10	8	12	5	1	1	3	61.6	68	22	52.4	7	16.7	4	9.5	
2145	0	0	0	0	0	0	0	0	0	2	6	14	19	5	0	1	0	59.7	64.4	25	53.2	1	2.1	1	2.1	
2200	0	0	0	0	0	0	0	3	0	10	19	39	16	7	3	2	2	57.9	64.2	30	29.7	10	9.9	4	4	
2215	0	0	0	0	0	0	0	1	1	5	15	17	11	1	3	3	0	57.7	62.9	18	31.6	6	10.5	3	5.3	
2230	0	0	0	0	0	0	0	0	4	13	12	19	9	5	3	0	2	56.9	64.4	19	28.4	5	7.5	2	3	
2245	0	0	0	0	0	0	0	0	0	2	3	2	5	11	1	0	0	1	58.8	64	13	52	1	4	1	4
2300	0	0	0	0	0	0	0	0	1	0	13	12	8	4	3	2	2	60.1	68.7	19	42.2	8	17.8	4	8.9	
2315	0	0	0	0	0	0	0	1	2	7	13	9	4	2	0	0	0	53.6	57.7	6	15.8	0	0	0	0	
2330	0	0	0	0	0	0	0	1	0	2	5	10	3	2	1	0	0	56.7	62.6	6	25	1	4.2	0	0	
2345	0	0	0	0	0	0	0	0	0	1	1	4	4	0	0	0	0	58.3	-	4	40	0	0	0	0	
07-19	**0**	**0**	**0**	**0**	**2**	**16**	**11**	**95**	**295**	**682**	**1503**	**1852**	**1191**	**571**	**220**	**69**	**38**	**56.9**	**64.4**	**2089**	**31.9**	**490**	**7.5**	**107**	**1.6**	
06-22	**0**	**0**	**0**	**0**	**2**	**16**	**11**	**108**	**335**	**772**	**1685**	**2085**	**1430**	**697**	**285**	**92**	**73**	**57.3**	**64.9**	**2577**	**33.9**	**657**	**8.7**	**165**	**2.2**	
06-00	**0**	**0**	**0**	**0**	**2**	**16**	**11**	**114**	**345**	**813**	**1765**	**2200**	**1496**	**719**	**298**	**99**	**80**	**57.3**	**64.9**	**2692**	**33.8**	**688**	**8.6**	**179**	**2.2**	
00-00	**0**	**0**	**0**	**0**	**2**	**16**	**11**	**121**	**361**	**848**	**1864**	**2301**	**1576**	**753**	**324**	**104**	**83**	**57.3**	**64.9**	**2840**	**34**	**736**	**8.8**	**187**	**2.2**	

15 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
0000	0	0	0	0	0	0	0	0	1	0	4	7	12	13	2	2	2	63.8	68.9	31	72.1	11	25.6	4	9.3	
0015	0	0	0	0	0	0	0	0	0	1	0	4	4	3	0	1	0	63.2	68.7	8	61.5	4	30.8	1	7.7	
0030	0	0	0	0	0	0	0	0	1	0	8	0	3	2	1	3	1	61.6	74.9	10	52.6	5	26.3	4	21.1	
0045	0	0	0	0	0	0	0	0	0	1	1	0	6	6	1	1	1	64.9	67.3	15	88.2	3	17.6	2	11.8	
0100	0	0	0	0	0	0	0	1	2	1	0	6	1	1	1	0	0	55.5	60.6	3	23.1	1	7.7	0	0	
0115	0	0	0	0	0	0	0	0	0	1	1	2	2	4	2	0	0	62.7	68.9	8	66.7	5	41.7	0	0	
0130	0	0	0	0	0	0	0	1	1	2	4	1	3	2	1	0	0	54.9	65.3	6	40	1	6.7	0	0	
0145	0	0	0	0	0	0	0	0	0	3	2	6	5	4	0	0	0	59.1	66.7	9	45	1	5	0	0	
0200	0	0	0	0	0	0	0	1	0	2	3	7	0	0	1	0	1	57.7	59.1	2	13.3	2	13.3	1	6.7	
0215	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	2	1	64.1	-	3	50	3	50	3	50	
0230	0	0	0	0	0	0	0	0	0	1	3	3	5	0	1	0	0	58.4	62.2	6	46.2	1	7.7	0	0	
0245	0	0	0	0	0	0	0	1	1	1	5	7	1	2	0	0	0	55.2	59.3	3	16.7	1	5.6	0	0	
0300	0	0	0	0	0	0	0	0	1	1	9	3	2	0	3	0	0	56.1	64	5	26.3	3	15.8	0	0	
0315	0	0	0	0	0	0	0	0	0	0	5	1	3	0	0	0	0	56.7	-	3	33.3	0	0	0	0	
0330	0	0	0	0	0	0	0	1	0	1	4	1	2	0	1	0	0	55.8	-	3	30	1	10	0	0	
0345	0	0	0	0	0	0	0	0	0	8	1	1	1	0	1	0	0	52.3	57.7	2	16.7	1	8.3	0	0	
0400	0	0	0	0	0	0	0	1	0	2	12	1	1	0	0	1	0	53.1	53.5	2	11.1	1	5.6	1	5.6	
0415	0	0	0	0	0	0	0	0	0	0	3	1	6	2	0	2	0	63.4	67.6	10	71.4	2	14.3	2	14.3	
0430	0	0	0	0	0	0	0	2	0	4	3	3	2	6	1	1	0	58.3	67.6	10	45.5	3	13.6	1	4.5	
0445	0	0	0	0	0	0	0	1	0	1	10	0	4	0	2	0	0	55.8	62	6	33.3	2	11.1	0	0	
0500	0	0	0	0	0	0	0	2	1	1	11	3	0	1	0	0	1	53.5	58.2	2	10	1	5	1	5	
0515	0	0	0	0	0	0	0	1	1	5	12	5	4	1	0	0	0	53.9	60.2	5	17.2	1	3.4	0	0	
0530	0	0	0	0	0	0	0	0	0	4	16	4	4	4	0	2	2	58.2	66	12	33.3	4	11.1	4	11.1	
0545	0	0	0	0	0	0	0	0	3	4	9	7	11	10	3	2	0	59.6	68	26	53.1	8	16.3	2	4.1	
0600	0	0	0	0	0	0	0	2	4	5	8	15	15	7	7	4	2	60.2	71.4	35	50.7	17	24.6	6	8.7	
0615	0	0	0	0	0	0	0	0	3	6	12	19	9	3	3	0	1	57.8	63.8	16	28.6	7	12.5	1	1.8	
0630	0	0	0	0	0	0	0	0	3	11	19	13	12	6	1	1	1	56.9	63.1	21	31.3	4	6	2	3	
0645	0	0	0	0	0	0	0	2	5	10	13	22	7	8	6	1	3	57.9	68.2	25	32.5	14	18.2	4	5.2	
0700	0	0	0	0	0	0	0	0	4	32	39	37	21	8	3	1	1	55.6	62.2	34	23.3	10	6.8	2	1.4	
0715	0	0	0	0	0	0	0	1	11	17	14	39	27	16	4	1	1	57.5	65.3	49	37.4	14	10.7	2	1.5	
0730	0	0	0	0	0	0	0	4	4	9	53	43	37	16	6	2	0	57.2	64.4	61	35.1	13	7.5	2	1.1	
0745	0	0	0	0	0	0	0	0	1	13	30	53	37	13	3	0	1	58.2	64	54	35.8	6	4	1	0.7	
0800	0	0	0	0	0	0	0	2	7	15	31	36	28	14	6	2	0	57.2	65.3	50	35.5	13	9.2	2	1.4	
0815	0	0	0	0	0	0	0	0	8	12	40	37	27	15	4	3	2	57.6	65.3	51	34.5	12	8.1	5	3.4	
0830	0	0	0	0	0	0	0	1	7	15	29	39	24	10	5	0	2	56.7	64.2	41	31.1	7	5.3	2	1.5	
0845	0	0	0	0	0	0	0	0	0	4	31	45	26	13	6	2	2	59.3	65.8	49	38	15	11.6	4	3.1	
0900	0	0	0	0	0	0	0	1	5	10	33	23	17	7	10	2	0	57.4	67.6	36	33.3	16	14.8	2	1.9	
0915	0	0	0	0	0	0	0	0	7	6	19	29	26	10	4	1	3	59.1	66.2	44	41.9	15	14.3	4	3.8	
0930	0	0	0	0	0	0	0	4	12	14	30	31	6	3	1	1	0	53.1	59.1	11	10.8	4	3.9	1	1	
0945	0	0	0	0	0	0	0	5	7	12	21	32	9	7	4	2	2	56.2	63.5	24	23.8	9	8.9	4	4	
1000	0	0	0	0	0	0	0	2	14	15	18	32	11	4	4	0	0	54	62.2	19	19	6	6	0	0	
1015	0	0	0	0	0	0	0	0	1	15	32	23	14	6	4	4	2	57.9	67.1	30	29.7	14	13.9	6	5.9	
1030	0	0	0	0	0	0	0	0	0	12	23	26	11	9	2	0	0	57.1	64.9	22	26.5	5	6	0	0	
1045	0	0	0	0	0	0	0	1	1	14	25	24	18	11	1	3	0	57.3	64.9	33	33.7	8	8.2	3	3.1	
1100	0	0	0	0	0	0	0	1	3	3	23	23	13	4	3	0	0	56.4	63.1	20	27.4	4	5.5	0	0	
1115	0	0	0	0	0	0	1	3	6	16	11	21	7	12	5	0	1	56	67.3	25	30.1	10	12	1	1.2	
1130	0	0	1	1	4	0	3	5	6	8	30	16	11	5	1	1	1	51.4	61.1	19	20.4	3	3.2	2	2.2	
1145	0	0	0	0	0	0	0	4	5	15	31	20	8	2	2	0	0	53.1	58.8	12	13.8	3	3.4	0	0	
1200	0	0	0	0	0	0	0	0	6	15	28	25	9	11	2	3	0	55.8	65.1	25	25.3	7	7.1	3	3	
1215	0	0	0	0	0	0	0	0	12	14	50	23	19	5	3	0	0	54.3	61.3	27	21.4	5	4	0	0	
1230	0	0	0	0	0	0	0	1	10	6	19	21	7	10	3	1	0	55.7	65.8	21	26.9	6	7.7	1	1.3	
1245	0	0	0	0	0	0	0	0	10	12	26	17	15	10	3	1	1	56.4	64.9	30	31.6	9	9.5	2	2.1	
1300	0	0	0	0	0	0	0	1	3	11	25	27	23	10	4	1	4	58.5	66.2	42	38.5	11	10.1	5	4.6	
1315	0	0	0	0	0	0	0	0	0	1	25	28	16	4	4	1	1	58.4	63.1	26	32.5	8	10	2	2.5	
1330	0	0	0	0	0	0	1	1	10	14	22	17	14	8	7	1	0	55.6	65.1	30	31.6	10	10.5	1	1.1	
1345	0	0	0	0	1	0	0	4	5	18	21	28	16	2	4	2	0	54.9	62.4	24	23.8	7	6.9	2	2	
1400	0	0	0	0	0	0	0	0	1	14	30	54	29	10	7	0	1	58.1	64.4	47	32.2	10	6.8	1	0.7	
1415	0	0	0	0	0	0	0	1	10	23	30	38	22	19	5	1	2	56.8	65.3	49	32.5	13	8.6	3	2	
1430	0	0	0	0	0	0	0	3	5	4	19	42	19	10	2	2	0	57.4	64.4	33	31.1	8	7.5	2	1.9	
1445	0	0	0	0	0	0	0	0	5	19	44	36	13	11	6	0	0	55.8	62.9	30	22.4	13	9.7	0	0	
1500	0	0	0	0	0	0	0	2	6	10	36	44	23	18	2	3	1	57.4	65.8	47	32.4	12	8.3	4	2.8	
1515	0	0	0	0	0	0	0	0	9	11	24	39	24	7	6	1	0	57.1	63.8	38	31.4	10	8.3	1	0.8	
1530	0	0	0	0	0	0	0	2	1	11	26	47	24	18	11	1	0	59	66.9	54	38.3	19	13.5	1	0.7	
1545	0	0	0	0	0	0	0	1	8	13	27	50	24	26	5	0	1	58	66.2	56	36.1	14	9	1	0.6	
1600	0	0	0	0	0	14	3	9	16	28	43	42	36	15	4	2	0	53	63.1	57	26.9	9	4.2	2	0.9	
1615	0	0	0	0	0	0	1	0	12	18	31	53	37	26	4	3	0	57.7	66	70	37.8	12	6.5	3	1.6	
1630	0	0	0	0	0	0	0	0	8	26	45	78	28	17	7	0	0	56.6	63.3	52	24.9	9	4.3	0	0	
1645	0	0	0	0	0	1	0	5	6	23	42	59	41	23	5	2	0	57	64.2	71	34.3	17	8.2	2	1	
1700	0	0	0	0	0	0	0	2	1	17	39	64	61	26	8	2	0	59	65.1	97	44.1	19	8.6	2	0.9	
1715	0	0	0	0	0	0	0	4	9	21	51	61	66	24	6	1	2	57.7	64.2	99	40.4	12	4.9	3	1.2	
1730	0	0	0	0	0	0	0	0	9	35	32	57	51	18	7	1	1	57.3	64.2	78	37	13	6.2	2	0.9	
1745	0	0	0	0	0	1	0	0	16	27	45	62	59	24	11	2	2	57.7	65.3	98	39.4	22	8.8	4	1.6	
1800	0	0	0	0	0	0	0	1	23	10	36	46	41	36	9	2	1	57.9	66	89	43.4	18	8.8	3	1.5	
1815	0	0	0	0	0	0	0	3	2	13	59	57	31	16	6	1	2	57.3	63.1	56	29.5	15	7.9	3	1.6	
1830	0	0	0	0	0	2	7	0	2	6	11	39	38	21	6	4	2	59.5	68.5	71	51.4	22	15.9	6	4.3	
1845	0	0	0	0	0	0	0	0	0	12	23	33	26	16	10	8	2	60.7	70.9	62	47.7	26	20	10	7.7	
1900	0	0	0	0	0	0	0	0	4	9	23	42	31	18	3	5	2	59.7	67.1	59	43.1	15	10.9	7	5.1	
1915	0	0	0	0	0	0	0	0	2	6	8	19	22	13	18	6	2	63.4	72.7	61	63.5	34	35.4	8	8.3	
1930	0	0	0	0	0	0	0	1	0	12	10	22	23	13	11	3	3	61.3	70	53	54.1	22	22.4	6	6.1	
1945	0	0	0	0	0	1	3	0	1	5	10	14	14	4	2	5	5	60.3	72.9	30	46.9	15	23.4	10	15.6	
2000	0	0	0	0	0	0	0	2	3	0	19	25	10	5	11	1	4	60.3	70.9	31	38.8	21	26.3	5	6.3	
2015	0	0	0	0	0	0	0	0	2	5	10	10	7	6	9	4	3	62.3	74.7	29	51.8	19	33.9	7	12.5	
2030	0	0	0	0	0	0	0	0	0	9	8	10	20	13	3	1	2	60.6	66.2	39	59.1	7	10.6	3	4.5	
2045	0	0	0	0	0	0	0	3	1	7	4	19	7	6	6	3	1	59.6	71.8	23	40.4	13	22.8	4	7	
2100	0	0	0	0	0	0	0	0	0	1	9	21	17	6	4	3	0	61	68.5	30	49.2	10	16.4	3	4.9	
2115	0	0	0	0	0	0	0	1	2	3	9	8	7	2	7	0	1	59.3	70.9	17	42.5	10	25	1	2.5	
2130	0	0	0	0	0	0	0	1	3	3	3	10	19	4	2	2	0	59.5	66.2	27	57.4	5	10.6	2	4.3	
2145	0	0	0	0	0	0	0	1	4	4	11	12	8	3	4	1	2	57.9	68	18	36	8	16	3	6	
2200	0	0	0	0	0	0	0	0	4	11	15	28	17	12	1	0	2	57.9	66.2	32	35.6	7	7.8	2	2.2	
2215	0	0	0	0	0	0	0	0	0	2	2	16	19	6	3	5	0	2	58.4	69.6	16	29.1	9	16.4	2	3.6
2230	0	0	0	0	0	0	0	0	0	0	3	7	10	7	5	0	2	1	60.2	69.3	15	42.9	7	20	3	8.6
2245	0	0	0	0	0	0	0	0	2	2	1	9	12	4	3	1	0	2	58.1	66.4	10	27.8	4	11.1	2	5.6
2300	0	0	0	0	0	0	0	1	1	9	7	12	7	9	5	2	1	59.4	68.7	24	44.4	9	16.7	3	5.6	
2315	0	0	0	0	0	0	0	0	0	0	4	8	12	5	5	1	1	1	59.2	66.7	13	35.1	6	16.2	2	5.4
2330	0	0	0	0	0	0	0	0	0	2	3	6	10	6	2	1	0	1	58	62.9	10	32.3	3	9.7	1	3.2
2345	0	0	0	0	0	0	0	0	0	0	1	6	10	6	1	0	1	0	58	62.9	8	32	1	4	1	4
07-19	**0**	**0**	**1**	**1**	**5**	**18**	**16**	**74**	**314**	**689**	**1472**	**1816**	**1190**	**626**	**235**	**71**	**41**	**57**	**64.9**	**2163**	**32.9**	**543**	**8.3**	**112**	**1.7**	
06-22	**0**	**0**	**1**	**1**	**5**	**19**	**19**	**87**	**351**	**785**	**1648**	**2097**	**1418**	**743**	**332**	**111**	**73**	**57.4**	**65.5**	**2677**	**34.8**	**764**	**9.9**	**184**	**2.4**	
06-00	**0**	**0**	**1**	**1**	**5**	**19**	**19**	**90**	**362**	**819**	**1722**	**2210**	**1476**	**783**	**346**	**117**	**83**	**57.5**	**65.5**	**2805**	**34.8**	**810**	**10.1**	**200**	**2.5**	
00-00	**0**	**0**	**1**	**1**	**5**	**19**	**19**	**102**	**376**	**864**	**1848**	**2283**	**1558**	**844**	**367**	**134**	**92**	**57.5**	**65.8**	**2995**	**35.2**	**875**	**10.3**	**226**	**2.7**	

16 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
0000	0	0	0	0	0	0	0	2	0	1	4	5	6	6	2	3	1	62.3	71.1	18	60	9	30	4	13.3	
0015	0	0	0	0	0	0	0	0	0	0	2	5	3	2	1	0	0	60.3	65.5	6	46.2	2	15.4	0	0	
0030	0	0	0	0	0	0	0	0	0	4	4	7	3	0	4	0	0	58.4	70	7	31.8	4	18.2	0	0	
0045	0	0	0	0	0	0	0	0	0	0	2	1	0	0	1	0	1	65.7	-	2	40	2	40	1	20	
0100	0	0	0	0	0	0	0	0	0	0	2	8	4	2	6	1	0	63.5	72.5	13	56.5	8	34.8	1	4.3	
0115	0	0	0	0	0	0	0	0	0	0	3	4	8	0	1	0	0	59.8	63.5	9	56.3	1	6.3	0	0	
0130	0	0	0	0	0	0	0	0	0	0	0	8	6	1	0	0	1	60.9	63.1	8	50	1	6.3	1	6.3	
0145	0	0	0	0	0	0	0	0	0	1	3	5	0	1	0	0	0	55.7	-	1	10	1	10	0	0	
0200	0	0	0	0	0	0	0	0	0	0	1	4	0	0	1	0	1	63.9	-	2	28.6	2	28.6	1	14.3	
0215	0	0	0	0	0	0	0	0	1	1	5	4	0	0	1	0	0	54.8	58.6	1	8.3	1	8.3	0	0	
0230	0	0	0	0	0	0	0	4	0	2	5	4	0	0	0	0	0	48.8	55.9	0	0	0	0	0	0	
0245	0	0	0	0	0	0	0	0	2	0	1	3	0	1	0	0	0	52.9	-	1	14.3	1	14.3	0	0	
0300	0	0	0	0	0	0	0	0	2	1	6	4	1	1	2	2	0	58.4	70	6	31.6	4	21.1	2	10.5	
0315	0	0	0	0	0	0	0	0	0	0	1	5	1	0	1	0	0	60.1	-	2	25	1	12.5	0	0	
0330	0	0	0	0	0	0	0	0	0	1	3	5	1	0	0	0	0	55.8	-	1	10	0	0	0	0	
0345	0	0	0	0	0	0	0	2	2	0	2	4	1	0	0	0	1	53.5	59.5	2	16.7	1	8.3	1	8.3	
0400	0	0	0	0	0	0	0	0	0	2	3	7	2	0	1	0	0	59	64	10	45.5	2	9.1	1	4.5	
0415	0	0	0	0	0	0	0	0	0	0	1	3	4	2	1	0	0	60.7	66.9	7	63.6	1	9.1	0	0	
0430	0	0	0	0	0	0	0	2	0	2	3	12	5	0	0	0	0	55.1	60.6	5	20.8	0	0	0	0	
0445	0	0	0	0	0	0	0	0	0	2	8	7	2	0	2	0	1	58.5	64	5	22.7	3	13.6	1	4.5	
0500	0	0	0	0	0	0	0	0	0	2	0	7	6	1	0	1	0	59.2	61.1	8	47.1	1	5.9	1	5.9	
0515	0	0	0	0	0	0	0	0	3	2	4	3	2	5	1	2	0	58.7	67.3	10	45.5	3	13.6	2	9.1	
0530	0	0	0	0	0	0	0	2	2	8	7	11	8	6	1	1	0	55.5	65.3	16	34.8	2	4.3	1	2.2	
0545	0	0	0	0	0	0	0	0	0	0	8	19	8	3	5	2	1	61.2	70.7	19	41.3	8	17.4	3	6.5	
0600	0	0	0	0	0	0	0	0	1	5	7	15	16	8	7	1	0	60.4	66.7	32	53.3	9	15	1	1.7	
0615	0	0	0	0	0	0	2	0	2	6	11	18	11	9	3	2	1	58.5	66.2	26	40	7	10.8	3	4.6	
0630	0	0	0	0	0	0	0	0	2	5	12	19	11	8	3	4	2	60.3	69.6	28	42.4	13	19.7	6	9.1	
0645	0	0	0	0	0	0	0	1	4	5	13	15	15	10	2	3	4	60	69.6	34	47.2	13	18.1	7	9.7	
0700	0	0	0	0	0	0	0	2	7	8	32	37	33	11	6	4	0	58	64.9	54	38.6	12	8.6	4	2.9	
0715	0	0	0	0	0	1	4	0	6	12	27	29	32	24	6	4	0	58.2	66.9	66	45.5	17	11.7	4	2.8	
0730	0	0	0	0	0	0	0	1	4	13	31	27	30	23	10	5	1	59.4	68.7	69	47.6	27	18.6	6	4.1	
0745	0	0	0	0	0	0	0	1	2	11	26	39	29	12	6	4	0	58.8	65.5	51	39.2	13	10	4	3.1	
0800	0	0	0	0	0	0	0	0	1	16	33	45	38	10	4	2	1	58.2	64	55	36.7	12	8	3	2	
0815	0	0	0	1	0	0	2	4	8	14	25	28	11	10	6	1	0	54.8	65.1	28	25.5	13	11.8	1	0.9	
0830	0	0	0	0	0	0	0	7	9	22	18	41	21	6	3	1	1	55	62.6	32	24.8	7	5.4	2	1.6	
0845	0	0	0	0	0	2	0	2	7	8	25	38	27	13	5	1	3	57.6	64.9	49	37.4	14	10.7	4	3.1	
0900	0	0	0	0	0	0	0	4	7	17	28	16	13	5	0	1	0	53.6	60.4	19	20.9	3	3.3	1	1.1	
0915	0	0	0	0	0	0	1	4	1	11	19	25	17	11	3	0	1	56.9	64.9	32	34.4	5	5.4	1	1.1	
0930	0	0	0	0	0	0	0	8	8	24	34	26	12	7	6	1	0	53.9	62	26	20.6	7	5.6	1	0.8	
0945	0	0	0	0	0	2	0	2	4	22	51	32	18	3	3	2	1	54.5	60.2	27	19.3	6	4.3	3	2.1	
1000	0	0	0	0	0	6	1	1	5	20	21	34	19	4	5	4	1	55.3	63.3	33	27.3	11	9.1	5	4.1	
1015	0	0	0	0	0	2	0	4	7	14	36	31	10	3	0	1	1	53.5	59.5	15	13.8	3	2.8	2	1.8	
1030	0	0	0	0	0	1	0	1	4	12	38	20	14	8	3	3	1	56.5	64.6	29	27.6	11	10.5	4	3.8	
1045	0	0	0	0	0	0	0	2	12	17	29	27	12	3	1	1	0	53.5	60.4	17	16.3	5	4.8	1	1	
1100	0	0	0	0	0	0	0	5	9	20	23	22	11	5	4	0	3	54.8	63.3	23	22.5	8	7.8	3	2.9	
1115	0	0	0	0	0	2	0	1	5	9	37	30	14	5	3	1	1	55.6	62	24	22.2	7	6.5	2	1.9	
1130	0	0	0	0	0	0	0	1	4	15	27	22	18	10	3	2	1	56.6	64.9	34	33	10	9.7	3	2.9	
1145	0	0	0	0	0	0	0	2	12	7	28	35	15	4	1	2	0	55.1	61.5	22	20.8	4	3.8	2	1.9	
1200	0	0	0	0	0	0	0	2	10	17	21	26	9	17	6	0	1	56.7	67.1	33	30.3	13	11.9	1	0.9	
1215	0	0	0	0	0	0	0	1	6	9	20	29	22	12	5	0	3	58.2	65.5	42	39.3	12	11.2	3	2.8	
1230	0	0	0	0	0	0	0	0	3	14	30	24	19	13	8	4	1	58.1	66.9	45	38.8	14	12.1	5	4.3	
1245	0	0	0	0	1	0	5	7	12	16	24	16	20	10	7	2	1	54.3	65.8	40	33.1	14	11.6	3	2.5	
1300	0	0	0	0	0	0	0	0	1	17	21	36	13	10	5	6	0	58.3	66.7	34	31.2	14	12.8	6	5.5	
1315	0	0	0	0	0	0	0	5	12	15	19	31	19	9	2	1	2	55.5	63.3	33	28.7	6	5.2	3	2.6	
1330	0	0	0	0	0	0	0	0	10	16	52	35	12	5	1	2	1	54.8	60.4	21	15.7	5	3.7	3	2.2	
1345	0	0	0	0	0	0	0	1	9	12	23	31	21	10	3	1	2	56.9	64.4	37	32.7	6	5.3	3	2.7	
1400	0	0	0	0	0	0	0	0	6	34	69	44	19	10	1	1	3	55.1	61.1	34	18.2	6	3.2	4	2.1	
1415	0	0	0	0	0	0	0	3	7	21	46	28	30	10	8	3	0	56.2	64.6	51	32.7	13	8.3	3	1.9	
1430	0	0	0	0	0	0	0	0	0	24	25	47	19	11	2	2	1	57.2	63.8	35	26.7	9	6.9	3	2.3	
1445	0	0	0	0	0	0	0	7	3	4	36	48	19	10	5	4	1	57.5	64	39	28.5	12	8.8	5	3.6	
1500	0	0	0	0	0	0	1	0	10	26	69	47	25	13	6	0	1	55.7	62.9	45	22.7	11	5.6	1	0.5	
1515	0	0	0	0	0	0	0	1	4	30	33	38	34	14	4	0	0	56.3	64	52	32.9	9	5.7	0	0	
1530	0	0	0	0	0	0	0	2	9	16	41	46	17	11	9	2	1	56.4	64.6	40	26	16	10.4	3	1.9	
1545	0	0	0	0	0	2	1	0	1	18	49	67	37	10	4	1	2	57	62.2	54	28.1	9	4.7	3	1.6	
1600	0	0	0	0	0	0	0	0	18	19	46	76	38	16	10	3	3	57.6	64.6	70	30.6	24	10.5	6	2.6	
1615	0	0	0	0	1	0	0	1	6	11	44	71	43	14	6	3	1	58	64.2	67	33.3	16	8	4	2	
1630	0	0	0	0	0	4	0	5	8	26	29	61	43	15	8	4	4	57.2	64.6	74	35.7	21	10.1	8	3.9	
1645	0	0	0	0	0	0	0	1	13	18	44	59	51	28	8	0	1	57.9	65.3	88	39.5	16	7.2	1	0.4	
1700	0	0	0	0	0	0	0	3	1	9	20	65	64	30	10	4	2	60.4	66	110	52.9	21	10.1	6	2.9	
1715	0	0	0	0	0	0	0	1	9	11	46	83	40	29	8	2	2	58.4	65.8	81	35.1	19	8.2	4	1.7	
1730	0	0	0	0	0	0	1	0	2	14	41	51	41	23	15	5	1	59.6	68.2	85	43.8	32	16.5	6	3.1	
1745	0	0	0	0	0	0	0	0	3	12	26	55	61	30	5	2	0	59.5	65.3	98	50.5	15	7.7	2	1	
1800	0	0	0	0	0	0	0	0	3	19	31	49	42	23	14	2	1	59.2	66.7	82	44.6	24	13	3	1.6	
1815	0	0	0	0	0	0	0	0	3	18	20	39	35	26	13	3	1	60.2	68.5	78	49.4	26	16.5	4	2.5	
1830	0	0	0	0	0	0	0	0	2	7	22	24	19	24	7	4	5	61.3	69.3	59	51.8	24	21.1	9	7.9	
1845	0	0	0	0	0	0	0	5	14	6	18	24	15	15	13	2	3	58.5	70.7	48	41.7	24	20.9	5	4.3	
1900	0	0	0	0	0	0	0	2	6	5	13	35	23	17	3	4	5	60.6	68.2	52	46	20	17.7	9	8	
1915	0	0	0	0	0	0	1	0	0	1	10	17	19	8	5	6	7	64.4	76.7	45	60.8	21	28.4	13	17.6	
1930	0	0	0	0	0	0	0	0	4	10	15	18	11	8	10	3	2	59.6	70.9	34	42	20	24.7	5	6.2	
1945	0	0	0	0	0	0	0	0	2	5	12	16	10	11	3	3	0	59.6	68.7	27	43.5	10	16.1	3	4.8	
2000	0	0	0	0	0	0	0	3	3	3	15	20	12	8	5	4	1	59	67.6	30	40.5	11	14.9	5	6.8	
2015	0	0	0	0	0	0	0	0	2	4	9	16	11	10	4	1	3	60.8	68.9	29	48.3	13	21.7	4	6.7	
2030	0	0	0	0	0	0	0	2	1	9	9	16	15	9	1	1	1	57.9	65.1	27	42.2	5	7.8	2	3.1	
2045	0	0	0	0	0	0	0	1	0	1	11	13	12	8	6	2	4	63.4	72.3	32	55.2	13	22.4	6	10.3	
2100	0	0	0	0	0	0	0	0	5	5	2	12	14	8	3	1	3	60.5	68.2	29	54.7	10	18.9	4	7.5	
2115	0	0	0	0	0	0	0	0	5	4	7	10	7	3	2	2	1	57.8	65.8	15	36.6	6	14.6	3	7.3	
2130	0	0	0	0	0	0	0	0	0	6	12	5	15	4	2	1	4	60.7	68.9	26	53.1	9	18.4	5	10.2	
2145	0	0	0	0	0	0	0	0	0	5	8	23	9	12	1	0	0	59.4	65.5	22	37.9	5	8.6	0	0	
2200	0	0	0	0	0	0	0	1	4	8	8	14	14	11	5	1	1	59	67.6	32	47.8	10	14.9	2	3	
2215	0	0	0	0	0	0	0	0	3	8	10	18	15	3	6	1	0	57.7	63.8	25	39.1	8	12.5	1	1.6	
2230	0	0	0	0	0	0	0	0	3	1	4	11	15	4	4	0	0	60	65.5	23	54.8	5	11.9	0	0	
2245	0	0	0	0	0	0	0	0	1	0	10	15	8	6	2	0	3	60.9	68.2	19	42.2	9	20	3	6.7	
2300	0	0	0	0	0	0	0	0	2	12	17	13	13	5	3	1	0	56.6	64	22	33.3	5	7.6	1	1.5	
2315	0	0	0	0	0	0	0	0	0	1	7	11	8	6	0	0	1	60.4	67.1	15	44.1	2	5.9	1	2.9	
2330	0	0	0	0	0	0	0	0	0	6	5	6	4	1	0	1	2	58.2	63.3	8	32	3	12	3	12	
2345	0	0	0	0	0	0	0	2	1	11	1	6	3	3	2	0	1	55	66	9	30	4	13.3	1	3.3	
07-19	**0**	**0**	**0**	**1**	**2**	**22**	**16**	**97**	**307**	**751**	**1553**	**1854**	**1221**	**625**	**271**	**103**	**60**	**57.1**	**64.9**	**2280**	**33.1**	**626**	**9.1**	**163**	**2.4**	
06-22	**0**	**0**	**0**	**1**	**2**	**22**	**19**	**106**	**344**	**830**	**1719**	**2122**	**1432**	**766**	**331**	**141**	**98**	**57.5**	**65.5**	**2768**	**34.9**	**811**	**10.2**	**239**	**3**	
06-00	**0**	**0**	**0**	**1**	**2**	**22**	**19**	**109**	**358**	**877**	**1781**	**2216**	**1512**	**805**	**353**	**145**	**106**	**57.6**	**65.5**	**2921**	**35.2**	**857**	**10.3**	**251**	**3**	
00-00	**0**	**0**	**0**	**1**	**2**	**22**	**19**	**121**	**370**	**906**	**1859**	**2361**	**1588**	**838**	**383**	**158**	**113**	**57.6**	**65.5**	**3080**	**35.2**	**915**	**10.5**	**271**	**3.1**	

17 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
0000	0	0	0	0	0	0	0	0	2	6	9	11	3	3	3	1	3	59.8	70.5	13	31.7	8	19.5	4	9.8	
0015	0	0	0	0	0	0	0	0	0	0	1	3	4	3	3	0	1	65.2	74.3	11	73.3	4	26.7	1	6.7	
0030	0	0	0	0	0	0	0	0	0	2	3	8	4	3	4	0	0	60.7	69.6	11	45.8	5	20.8	0	0	
0045	0	0	0	0	0	0	0	0	0	1	3	3	5	4	1	1	0	61.5	65.1	11	61.1	2	11.1	1	5.6	
0100	0	0	0	0	0	0	2	1	0	0	2	5	3	0	2	1	0	56.7	72.7	6	37.5	3	18.8	1	6.3	
0115	0	0	0	0	0	0	0	0	0	1	1	11	1	0	1	0	1	59.3	61.3	3	18.8	2	12.5	1	6.3	
0130	0	0	0	0	0	0	0	1	0	0	4	1	0	0	0	0	0	52	-	0	0	0	0	0	0	
0145	0	0	0	0	0	0	0	0	1	1	6	4	2	4	0	1	0	57.7	67.1	7	36.8	1	5.3	1	5.3	
0200	0	0	0	0	0	0	0	0	0	2	1	1	2	2	0	0	1	60.6	-	5	55.6	2	22.2	1	11.1	
0215	0	0	0	0	0	0	0	1	0	0	3	5	1	0	0	0	0	55.1	-	1	10	0	0	0	0	
0230	0	0	0	0	0	0	0	0	0	1	0	2	4	2	0	0	0	60.7	-	6	66.7	0	0	0	0	
0245	0	0	0	0	0	0	0	1	0	1	2	1	0	3	1	0	0	57.8	-	4	44.4	1	11.1	0	0	
0300	0	0	0	0	0	0	0	0	0	0	5	3	2	3	2	0	0	60.1	67.3	7	46.7	2	13.3	0	0	
0315	0	0	0	0	0	0	0	0	1	0	0	5	8	3	2	1	0	62.6	66.2	14	70	3	15	1	5	
0330	0	0	0	0	0	0	0	1	0	2	0	4	1	3	1	0	1	60.3	67.6	6	46.2	2	15.4	1	7.7	
0345	0	0	0	0	0	0	0	0	1	0	1	3	0	1	0	0	0	55.4	-	1	16.7	1	16.7	0	0	
0400	0	0	0	0	0	0	0	1	0	1	6	4	1	3	0	0	1	58.4	66.9	5	29.4	1	5.9	1	5.9	
0415	0	0	0	0	0	0	0	0	3	2	5	1	0	0	0	0	0	49.6	53.9	0	0	0	0	0	0	
0430	0	0	0	0	0	0	0	0	0	0	3	5	0	1	0	0	0	57.2	-	1	11.1	1	11.1	0	0	
0445	0	0	0	0	0	0	0	0	0	0	0	2	8	3	2	0	0	64.2	67.1	13	86.7	2	13.3	0	0	
0500	0	0	0	0	0	0	0	0	0	0	5	3	4	0	2	2	2	64.5	79	10	55.6	6	33.3	4	22.2	
0515	0	0	0	0	0	0	0	0	0	1	4	1	1	7	0	0	0	60.3	65.8	8	57.1	0	0	0	0	
0530	0	0	0	0	0	0	0	0	0	1	4	9	5	3	4	3	1	63	74.7	16	53.3	9	30	4	13.3	
0545	0	0	0	0	0	0	0	0	1	2	6	6	3	2	3	1	3	62.3	73.4	12	44.4	7	25.9	4	14.8	
0600	0	0	0	0	0	0	1	0	0	1	11	10	13	12	0	1	3	61.1	67.6	29	55.8	7	13.5	4	7.7	
0615	0	0	0	0	0	0	0	0	0	0	1	5	7	5	2	2	0	63.7	70.7	16	72.7	6	27.3	2	9.1	
0630	0	0	0	0	0	0	0	0	2	0	7	8	6	7	0	4	4	63.4	76.7	21	55.3	10	26.3	8	21.1	
0645	0	0	0	0	0	0	0	0	1	1	7	9	5	4	3	4	0	61.6	72.9	16	47.1	10	29.4	4	11.8	
0700	0	0	0	0	0	0	0	0	0	6	4	15	14	7	7	2	3	62.4	70.5	33	56.9	13	22.4	5	8.6	
0715	0	0	0	0	0	0	0	0	0	0	6	13	6	4	2	0	2	62	66.7	14	42.4	4	12.1	2	6.1	
0730	0	0	0	0	0	0	0	1	0	0	5	13	5	4	9	7	3	65.5	75.8	28	59.6	21	44.7	10	21.3	
0745	0	0	0	0	0	0	0	0	4	6	7	15	6	10	3	1	1	58.5	68	21	39.6	9	17	2	3.8	
0800	0	0	0	0	0	0	0	0	0	2	10	25	13	10	6	6	2	62.4	73.1	37	50	17	23	8	10.8	
0815	0	0	0	0	0	0	0	0	0	3	8	16	15	7	4	1	3	62.6	69.3	30	52.6	12	21.1	4	7	
0830	0	0	0	0	0	0	0	0	2	6	11	12	18	9	4	2	2	60.2	68.5	35	53	11	16.7	4	6.1	
0845	0	0	0	0	0	0	0	0	2	8	11	17	13	14	3	5	2	60.8	69.3	37	49.3	12	16	7	9.3	
0900	0	0	0	0	0	0	0	0	0	2	9	20	11	12	5	1	1	61.4	68.9	30	49.2	11	18	2	3.3	
0915	0	0	0	0	0	0	0	0	4	2	8	12	15	14	11	2	3	62.9	70.9	45	63.4	25	35.2	5	7	
0930	0	0	0	0	0	0	0	4	2	7	12	21	15	8	5	0	2	58.2	67.8	30	39.5	10	13.2	2	2.6	
0945	0	0	0	0	0	0	1	0	5	7	19	30	10	12	5	1	2	58.2	67.8	30	32.6	14	15.2	3	3.3	
1000	0	0	0	0	0	0	0	0	0	5	31	15	14	8	4	3	4	60	69.1	33	39.3	14	16.7	7	8.3	
1015	0	0	0	0	0	0	0	0	5	0	5	14	12	24	12	10	3	2	61	70	51	58.6	19	21.8	5	5.7
1030	0	0	0	0	0	0	0	0	2	2	8	13	22	16	7	3	1	2	58.2	65.8	29	38.2	8	10.5	3	3.9
1045	0	0	0	0	0	0	0	0	1	4	7	19	20	21	8	6	1	0	58.2	65.3	36	41.4	10	11.5	1	1.1
1100	0	0	0	0	0	4	0	2	0	9	10	25	17	18	4	4	0	58.8	67.6	43	46.2	13	14	4	4.3	
1115	0	0	0	0	0	0	2	1	0	14	9	26	21	12	6	3	2	59.6	68	44	45.8	15	15.6	5	5.2	
1130	0	0	0	0	0	0	0	1	0	6	12	30	26	20	8	3	2	61.8	68.7	59	54.6	21	19.4	5	4.6	
1145	0	0	0	0	0	0	0	0	2	4	12	20	12	15	11	5	1	61.9	72.7	44	53.7	25	30.5	6	7.3	
1200	0	0	0	0	0	0	0	0	1	8	15	32	23	11	4	1	1	59.1	65.5	40	41.7	9	9.4	2	2.1	
1215	0	0	0	0	0	0	0	1	3	5	26	23	14	8	8	5	6	60.5	72	41	41.4	23	23.2	11	11.1	
1230	0	0	0	0	0	0	0	0	0	1	10	22	25	12	9	4	1	62.6	70	51	60.7	21	25	5	6	
1245	0	0	0	0	0	0	0	0	0	5	8	24	24	17	3	5	4	62.7	69.1	53	58.9	17	18.9	9	10	
1300	0	0	0	0	0	0	0	0	12	9	18	14	15	15	2	5	2	58.1	67.6	39	42.4	13	14.1	7	7.6	
1315	0	0	0	0	0	0	0	0	0	7	13	13	16	12	7	4	4	62.3	73.4	43	56.6	17	22.4	8	10.5	
1330	0	0	0	0	0	0	0	0	1	4	11	21	23	22	5	4	1	62.1	69.6	55	59.8	19	20.7	5	5.4	
1345	0	0	0	0	0	0	0	1	5	10	10	28	27	9	3	1	2	59	64.9	42	43.8	8	8.3	3	3.1	
1400	0	0	0	0	0	0	0	0	1	3	12	25	15	17	6	7	2	62.4	72.7	47	53.4	22	25	9	10.2	
1415	0	0	0	0	0	0	0	0	1	4	8	21	30	13	9	1	4	62.6	69.3	57	62.6	17	18.7	5	5.5	
1430	0	0	0	0	0	0	0	0	1	5	10	22	23	21	6	2	0	61.3	67.8	52	57.8	13	14.4	2	2.2	
1445	0	0	0	0	0	1	0	0	0	5	16	21	9	8	7	1	4	60.4	70.7	29	40.3	14	19.4	5	6.9	
1500	0	0	0	0	0	1	0	0	4	0	11	27	25	12	7	3	1	60.6	68	48	52.7	16	17.6	4	4.4	
1515	0	0	0	0	0	0	0	3	2	6	9	20	26	11	8	3	4	61.5	70.5	52	56.5	19	20.7	7	7.6	
1530	0	0	0	0	1	0	0	0	3	8	10	17	15	9	6	4	2	59.9	69.8	36	48	17	22.7	6	8	
1545	0	0	0	0	0	0	0	0	2	6	12	15	12	23	5	1	4	62	69.3	45	56.3	18	22.5	5	6.3	
1600	0	0	0	0	0	0	0	0	0	1	3	14	31	23	19	6	3	3	61.6	68	54	52.4	16	15.5	6	5.8
1615	0	0	0	0	0	0	0	0	0	5	10	19	7	18	14	4	3	1	59.1	67.6	40	49.4	11	13.6	4	4.9
1630	0	0	0	0	0	0	0	0	0	0	1	6	16	15	20	6	2	5	64.9	72.5	48	67.6	20	28.2	7	9.9
1645	0	0	0	0	1	0	0	0	0	1	1	17	12	19	16	4	4	4	62.4	69.8	47	59.5	18	22.8	8	10.1
1700	0	0	0	0	0	0	0	0	2	4	3	16	19	35	18	6	1	1	60.2	66.7	61	58.1	12	11.4	2	1.9
1715	0	0	0	0	0	0	0	0	1	2	1	14	12	16	11	8	7	2	63	73.4	44	59.5	23	31.1	9	12.2
1730	0	0	0	0	0	0	0	0	0	2	0	5	11	22	13	8	3	1	63.7	70.2	47	72.3	18	27.7	4	6.2
1745	0	0	0	0	0	0	1	0	0	7	9	10	16	15	5	7	0	62.2	71.6	43	61.4	22	31.4	7	10	
1800	0	0	0	0	0	0	0	0	5	1	7	17	12	22	14	2	3	63.4	71.6	53	63.9	28	33.7	5	6	
1815	0	0	0	0	0	0	0	2	1	1	11	16	16	15	5	4	4	62.8	71.4	44	58.7	16	21.3	8	10.7	
1830	0	0	0	0	0	0	0	0	2	6	6	19	12	14	4	5	4	62.4	71.4	39	54.2	18	25	9	12.5	
1845	0	0	0	0	0	0	0	0	0	6	4	17	9	14	3	2	6	63.9	73.1	34	55.7	15	24.6	8	13.1	
1900	0	0	0	0	0	0	0	0	8	0	3	13	17	8	7	1	2	60.9	70	35	59.3	13	22	3	5.1	
1915	0	0	0	0	0	0	0	0	3	4	3	5	9	10	3	2	1	61.1	68.7	25	62.5	8	20	3	7.5	
1930	0	0	0	0	0	1	0	0	1	3	2	7	9	7	1	4	0	61.3	69.3	21	60	8	22.9	4	11.4	
1945	0	0	0	0	0	0	0	0	1	3	4	12	3	8	4	1	1	61	67.6	17	45.9	6	16.2	2	5.4	
2000	0	0	0	0	0	0	1	0	2	4	1	7	10	8	3	2	2	61.9	71.6	25	62.5	9	22.5	4	10	
2015	0	0	0	0	0	0	0	0	1	1	7	2	9	9	5	1	1	63	71.4	25	69.4	10	27.8	2	5.6	
2030	0	0	0	0	0	2	2	0	1	3	3	7	7	5	3	2	3	59.9	74	20	52.6	9	23.7	5	13.2	
2045	0	0	0	0	0	0	0	0	3	2	4	3	3	7	4	3	1	62.8	74.3	18	60	9	30	4	13.3	
2100	0	0	0	0	0	1	0	0	1	1	3	10	8	4	0	2	2	61.2	68.7	16	50	6	18.8	4	12.5	
2115	0	0	0	0	0	0	0	0	0	1	6	11	11	4	3	1	1	61.3	67.6	20	52.6	6	15.8	2	5.3	
2130	0	0	0	0	0	0	0	1	5	1	4	11	4	3	5	2	1	59.6	72.3	15	40.5	10	27	3	8.1	
2145	0	0	0	0	0	0	0	0	0	1	3	2	8	6	2	1	2	64.4	70.2	19	76	7	28	3	12	
2200	0	0	0	0	0	0	0	1	3	1	4	9	9	2	3	0	0	57.7	64.4	14	43.8	4	12.5	0	0	
2215	0	0	0	0	0	0	0	0	1	4	4	4	5	9	4	0	0	0	55.9	63.8	13	41.9	3	9.7	0	0
2230	0	0	0	0	0	0	0	0	0	1	7	5	5	3	2	0	0	59.8	66.9	10	43.5	3	13	0	0	
2245	0	0	0	0	0	0	0	0	2	3	3	3	6	6	2	1	1	60.7	69.3	16	59.3	7	25.9	2	7.4	
2300	0	0	0	0	0	0	0	0	0	2	5	7	14	6	1	3	1	61.8	67.8	25	64.1	6	15.4	4	10.3	
2315	0	0	0	0	0	0	0	1	0	2	4	5	2	0	2	1	2	60	74.7	7	36.8	5	26.3	3	15.8	
2330	0	0	0	0	0	0	0	0	4	1	6	10	0	5	3	1	0	58	68.7	9	30	7	23.3	1	3.3	
2345	0	0	0	0	0	0	0	0	0	3	0	6	2	1	1	1	0	59.6	68.7	5	35.7	3	21.4	1	7.1	
07-19	**0**	**0**	**0**	**0**	**2**	**6**	**4**	**27**	**86**	**233**	**557**	**911**	**827**	**622**	**284**	**145**	**115**	**61.2**	**69.6**	**1993**	**52.2**	**764**	**20**	**260**	**6.8**	
06-22	**0**	**0**	**0**	**0**	**2**	**10**	**8**	**28**	**115**	**259**	**626**	**1033**	**956**	**729**	**329**	**178**	**139**	**61.2**	**69.6**	**2331**	**52.8**	**898**	**20.4**	**317**	**7.2**	
06-00	**0**	**0**	**0**	**0**	**2**	**10**	**8**	**31**	**128**	**276**	**659**	**1083**	**1003**	**756**	**343**	**185**	**143**	**61.1**	**69.6**	**2430**	**52.5**	**936**	**20.2**	**328**	**7.1**	
00-00	**0**	**0**	**0**	**0**	**2**	**10**	**10**	**37**	**137**	**300**	**733**	**1184**	**1065**	**809**	**374**	**196**	**157**	**61**	**69.6**	**2601**	**51.9**	**998**	**19.9**	**353**	**7**	

18 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
0000	0	0	0	1	0	0	0	0	0	2	1	6	4	5	1	1	0	59.6	67.3	11	52.4	3	14.3	1	4.8	
0015	0	0	0	0	0	0	0	1	1	0	4	3	2	0	1	0	1	57.1	63.5	4	30.8	2	15.4	1	7.7	
0030	0	0	0	0	0	0	0	0	0	1	1	3	1	2	1	0	0	60.2	-	4	44.4	2	22.2	0	0	
0045	0	0	0	0	0	0	0	0	0	3	7	2	2	1	1	0	0	55.2	64.4	4	25	1	6.3	0	0	
0100	0	0	0	0	0	0	0	0	0	1	3	2	0	0	0	0	0	54	-	0	0	0	0	0	0	
0115	0	0	0	0	0	0	0	0	1	2	2	0	3	2	1	1	1	61.9	70.7	8	61.5	5	38.5	2	15.4	
0130	0	0	0	0	0	0	0	0	0	1	1	0	4	2	2	0	1	65.6	70	9	81.8	3	27.3	1	9.1	
0145	0	0	0	0	0	0	0	1	1	1	1	1	3	1	1	0	0	56.7	-	5	50	1	10	0	0	
0200	0	0	0	0	0	0	0	0	0	0	3	0	2	0	0	0	0	56.8	-	2	40	0	0	0	0	
0215	0	0	0	0	0	0	0	0	0	1	1	1	3	1	0	0	0	59.3	-	4	57.1	0	0	0	0	
0230	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	53.4	-	0	0	0	0	0	0	
0245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	
0300	0	0	0	0	0	0	0	0	3	0	1	1	1	1	1	1	2	63	77.6	6	54.5	4	36.4	3	27.3	
0315	0	0	0	0	0	0	0	0	1	0	3	0	1	1	0	0	0	56.5	-	2	33.3	1	16.7	0	0	
0330	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	43.8	-	0	0	0	0	0	0	
0345	0	0	0	0	0	0	0	0	1	0	2	0	0	1	0	0	0	54.3	-	1	25	0	0	0	0	
0400	0	0	0	0	0	0	0	0	0	0	5	1	1	0	0	0	0	54.9	-	1	14.3	0	0	0	0	
0415	0	0	0	0	0	0	0	0	0	0	3	3	1	0	0	1	0	59.7	-	2	25	1	12.5	1	12.5	
0430	0	0	0	0	0	0	0	1	0	0	1	3	0	5	0	0	0	60.2	-	5	50	0	0	0	0	
0445	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	54.9	-	2	66.7	0	0	0	0	
0500	0	0	0	0	0	0	0	0	0	0	1	4	4	2	0	0	0	61	62.9	6	54.5	0	0	0	0	
0515	0	0	0	0	0	0	0	0	0	2	0	2	3	2	1	1	0	61.9	67.3	7	63.6	2	18.2	1	9.1	
0530	0	0	0	0	0	0	0	2	0	0	1	2	6	3	2	2	0	62.3	70.9	13	72.2	4	22.2	2	11.1	
0545	0	0	0	0	0	0	0	0	2	1	5	4	5	6	3	3	0	62.1	73.6	17	58.6	9	31	3	10.3	
0600	0	0	0	0	0	0	0	0	0	0	7	12	1	4	4	0	2	62.6	71.6	11	36.7	8	26.7	2	6.7	
0615	0	0	0	0	0	0	0	0	0	1	0	7	9	3	3	0	1	63	67.6	16	66.7	4	16.7	1	4.2	
0630	0	0	0	0	0	0	0	0	0	1	4	7	3	6	4	1	2	64.7	72.3	16	57.1	9	32.1	3	10.7	
0645	0	0	0	0	0	0	0	0	1	3	4	6	2	6	5	2	0	61	71.8	15	51.7	8	27.6	2	6.9	
0700	0	0	0	0	0	0	0	0	1	1	9	16	14	11	9	1	3	63.2	71.6	38	58.5	17	26.2	4	6.2	
0715	0	0	0	0	0	0	1	0	0	1	1	3	12	5	1	0	2	62.6	67.6	20	76.9	4	15.4	2	7.7	
0730	0	0	0	0	0	0	0	0	2	0	3	3	3	5	2	1	0	61	68.7	11	57.9	5	26.3	1	5.3	
0745	0	0	0	0	0	1	0	0	4	3	5	6	6	5	5	1	4	61.2	72.3	21	52.5	11	27.5	5	12.5	
0800	0	0	0	0	0	0	0	0	1	0	7	6	2	8	4	5	0	63.6	74.3	19	57.6	14	42.4	5	15.2	
0815	0	0	0	0	0	1	0	0	2	0	1	5	6	4	5	2	2	63.5	72.9	19	67.9	11	39.3	4	14.3	
0830	0	0	0	0	0	0	0	0	2	2	2	8	8	6	5	2	1	62.3	70.9	22	61.1	10	27.8	3	8.3	
0845	0	0	0	0	0	0	0	0	0	2	4	12	15	8	5	5	1	63.5	70.9	34	65.4	15	28.8	6	11.5	
0900	0	0	0	0	0	0	0	1	3	0	3	9	13	11	2	3	1	62.6	69.6	30	65.2	10	21.7	4	8.7	
0915	0	0	0	0	0	0	0	0	0	0	6	11	5	6	4	3	2	63.5	74.3	20	54.1	11	29.7	5	13.5	
0930	0	0	0	0	0	0	0	0	0	0	7	12	7	12	8	1	2	63.8	71.4	30	61.2	17	34.7	3	6.1	
0945	0	0	0	0	0	0	0	0	1	2	7	23	9	8	8	3	1	61.6	71.6	29	46.8	16	25.8	4	6.5	
1000	0	0	0	0	0	0	0	0	2	3	4	17	13	7	8	1	6	63.6	73.4	35	57.4	16	26.2	7	11.5	
1015	0	0	0	0	0	0	0	0	1	4	10	11	18	5	3	3	2	60.6	68.5	31	54.4	11	19.3	5	8.8	
1030	0	0	0	0	0	0	0	0	1	1	4	14	11	10	6	1	2	63.4	71.8	30	60	13	26	3	6	
1045	0	0	0	0	0	0	0	1	7	2	8	12	9	5	12	8	3	63.2	75.8	37	55.2	23	34.3	11	16.4	
1100	0	0	0	0	0	0	0	2	1	2	6	1	12	8	7	4	4	64.9	75.2	35	74.5	19	40.4	8	17	
1115	0	0	0	0	0	0	0	0	5	3	11	20	24	15	8	1	4	61.4	69.1	52	57.1	19	20.9	5	5.5	
1130	0	0	0	0	0	0	0	0	4	13	17	18	21	11	3	4	1	58.3	66.2	40	43.5	12	13	5	5.4	
1145	0	0	0	0	0	0	0	3	2	13	14	12	13	8	7	3	4	59.7	70.9	35	44.3	16	20.3	7	8.9	
1200	0	0	0	0	0	0	0	0	0	1	12	22	25	23	8	1	1	62.4	68.2	58	62.4	17	18.3	2	2.2	
1215	0	0	1	0	0	0	0	0	8	4	20	28	18	9	8	1	2	58.4	67.6	38	38.4	14	14.1	3	3	
1230	0	0	0	0	0	0	0	0	3	2	11	29	19	16	3	2	2	60.6	67.3	42	48.3	13	14.9	4	4.6	
1245	0	0	0	0	0	0	0	0	1	5	6	19	18	14	9	7	6	64.6	74.9	54	63.5	28	32.9	13	15.3	
1300	0	0	0	0	0	0	0	0	2	1	17	21	20	9	4	3	2	60.4	66	38	48.1	11	13.9	5	6.3	
1315	0	0	0	0	0	0	0	0	0	1	10	19	26	15	13	8	2	64.2	72.5	64	68.1	28	29.8	10	10.6	
1330	0	0	0	0	0	0	0	1	5	10	13	18	12	12	8	3	4	59.8	71.1	39	45.3	19	22.1	7	8.1	
1345	0	0	1	0	0	0	0	1	2	4	7	11	10	19	13	6	4	63.7	72.9	52	66.7	30	38.5	10	12.8	
1400	0	0	0	0	0	0	0	0	0	7	10	19	26	12	6	1	4	61.7	68.9	49	57.6	16	18.8	5	5.9	
1415	0	0	0	0	0	0	0	0	1	1	12	13	23	20	12	5	2	63.7	71.6	62	69.7	25	28.1	7	7.9	
1430	0	0	0	0	0	0	0	1	0	3	6	10	14	12	8	6	3	64.2	74.5	43	68.3	22	34.9	9	14.3	
1445	0	0	0	0	0	0	0	0	0	8	18	17	22	9	6	4	5	61.7	70.7	46	51.7	18	20.2	9	10.1	
1500	0	0	0	0	0	0	0	0	0	6	18	35	12	12	8	2	1	59.7	67.8	35	37.2	14	14.9	3	3.2	
1515	0	0	0	0	0	0	0	0	2	4	15	20	19	16	10	1	2	61.8	69.6	48	53.9	22	24.7	3	3.4	
1530	0	0	0	0	0	0	0	1	3	11	10	22	10	8	5	4	3	59.3	68.5	30	39	14	18.2	7	9.1	
1545	0	0	0	0	0	0	0	0	0	3	7	23	20	12	6	3	5	63	71.1	46	58.2	16	20.3	8	10.1	
1600	0	0	0	0	0	0	0	1	3	1	14	27	21	11	7	3	2	61	69.3	44	48.9	16	17.8	5	5.6	
1615	0	0	0	0	0	0	0	3	2	4	9	19	21	14	9	2	2	60.9	68.7	48	56.5	16	18.8	4	4.7	
1630	0	0	0	1	0	0	0	0	1	4	4	21	25	19	6	2	0	61.5	67.6	52	62.7	12	14.5	2	2.4	
1645	0	0	0	0	0	0	0	0	1	7	11	10	27	6	9	0	2	61	69.6	44	60.3	13	17.8	2	2.7	
1700	0	0	0	0	0	0	0	2	2	6	7	26	20	9	7	4	2	60.7	69.8	42	49.4	18	21.2	6	7.1	
1715	0	0	0	0	0	0	0	0	5	4	7	13	13	16	8	5	2	62.1	72.5	44	60.3	20	27.4	7	9.6	
1730	0	0	0	0	0	0	0	0	2	2	16	18	17	10	8	5	3	62.4	71.8	43	53.1	20	24.7	8	9.9	
1745	0	0	0	0	0	8	0	2	2	2	6	10	20	14	8	0	3	58.8	69.6	45	60	18	24	3	4	
1800	0	0	0	0	0	0	0	0	2	5	7	20	19	19	9	6	2	63	71.6	55	61.8	25	28.1	8	9	
1815	0	0	0	0	0	0	0	0	2	1	4	16	25	11	2	3	3	62.6	68	44	65.7	11	16.4	6	9	
1830	0	0	0	0	0	0	0	0	0	2	11	23	9	16	6	3	2	62.3	69.6	36	50	20	27.8	5	6.9	
1845	0	0	0	0	0	1	0	0	1	5	10	11	14	11	5	4	3	61.4	70.9	37	56.9	14	21.5	7	10.8	
1900	0	0	0	0	0	0	0	0	0	1	7	17	18	10	7	3	2	63.6	71.4	40	61.5	16	24.6	5	7.7	
1915	0	0	1	0	0	0	0	0	0	2	7	5	11	9	5	3	1	62.7	71.6	29	65.9	11	25	4	9.1	
1930	0	0	0	0	0	0	0	1	0	2	10	10	13	6	5	4	2	62.1	71.4	30	56.6	13	24.5	6	11.3	
1945	0	0	0	0	0	0	0	0	3	3	6	14	9	5	5	2	4	61.7	72.7	25	49	12	23.5	6	11.8	
2000	0	0	0	0	0	0	0	0	1	1	7	12	15	7	8	1	3	63.8	72.9	34	61.8	15	27.3	4	7.3	
2015	0	0	0	0	0	0	1	0	0	1	5	8	10	6	5	3	3	63.3	72.9	27	64.3	13	31	6	14.3	
2030	0	0	0	0	0	0	0	0	0	0	3	10	6	6	5	1	2	64.3	71.1	20	60.6	10	30.3	3	9.1	
2045	0	0	0	0	0	0	0	0	1	7	3	8	13	3	6	1	2	61.6	71.4	25	56.8	10	22.7	3	6.8	
2100	0	0	0	0	0	0	0	1	4	2	3	4	7	3	4	3	1	60	73.8	18	56.3	8	25	4	12.5	
2115	0	0	0	0	0	0	0	0	0	1	5	11	5	5	4	0	1	61.5	68.9	15	46.9	7	21.9	1	3.1	
2130	0	0	0	0	0	0	0	0	4	1	3	11	9	8	1	1	2	60.6	68.2	21	52.5	7	17.5	3	7.5	
2145	0	0	0	0	0	0	2	0	0	0	5	7	4	4	2	2	2	61.5	74.5	14	50	7	25	4	14.3	
2200	0	0	0	0	0	0	0	3	0	4	5	15	13	6	1	0	0	57.9	64.4	20	42.6	4	8.5	0	0	
2215	0	0	0	0	0	0	0	0	3	1	2	5	4	4	2	2	1	0	56.7	66.2	9	37.5	3	12.5	1	4.2
2230	0	0	0	0	0	0	0	0	3	2	3	4	1	4	1	0	0	56.5	66	6	33.3	1	5.6	0	0	
2245	0	0	0	0	0	0	0	0	4	0	4	4	4	7	1	0	0	53.8	62	8	33.3	0	0	0	0	
2300	0	0	0	0	0	0	0	0	1	1	2	5	5	8	6	3	0	1	60.2	68.5	18	56.3	7	21.9	1	3.1
2315	0	0	0	0	0	0	0	0	0	1	2	3	3	4	1	2	0	1	59.6	66.7	8	47.1	3	17.6	1	5.9
2330	0	0	0	0	0	0	0	0	0	0	1	0	6	3	2	1	0	1	63.1	69.6	7	50	3	21.4	1	7.1
2345	0	0	0	0	0	0	0	0	0	0	1	2	3	4	2	3	0	1	63.6	72	10	62.5	6	37.5	1	6.3
07-19	**0**	**0**	**2**	**1**	**0**	**11**	**1**	**19**	**89**	**166**	**427**	**759**	**746**	**532**	**323**	**146**	**119**	**61.8**	**70.9**	**1866**	**55.9**	**780**	**23.3**	**265**	**7.9**	
06-22	**0**	**0**	**3**	**1**	**0**	**11**	**4**	**21**	**103**	**192**	**506**	**908**	**881**	**623**	**396**	**173**	**149**	**61.9**	**71.1**	**2222**	**56**	**938**	**23.6**	**322**	**8.1**	
06-00	**0**	**0**	**3**	**1**	**0**	**11**	**4**	**32**	**109**	**210**	**533**	**952**	**925**	**647**	**409**	**174**	**153**	**61.7**	**71.1**	**2308**	**55.4**	**965**	**23.2**	**327**	**7.9**	
00-00	**0**	**0**	**3**	**2**	**0**	**11**	**4**	**37**	**121**	**226**	**582**	**991**	**973**	**682**	**424**	**184**	**158**	**61.6**	**70.9**	**2421**	**55**	**1003**	**22.8**	**342**	**7.8**	

Grand Total

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
--	**0**	**0**	**4**	**4**	**14**	**87**	**84**	**607**	**2100**	**4734**	**10395**	**13703**	**9710**	**5465**	**2430**	**990**	**758**	**58.2**	**66.4**	**19353**	**37.9**	**5921**	**11.6**	**1748**	**3.4**	

TSP Class Profile All Days 15 Mins

Report Id - CustomList-40
Site Name - LUTTERWORTH- 01
Description - A5 N [60M]
Direction - South

12 May 2014

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	10	0	7	0	1	0	0	0	0	2	0	
0015	9	0	4	0	1	0	0	0	0	2	2	
0030	7	0	3	0	0	0	0	0	0	3	1	
0045	9	0	6	0	1	0	0	0	0	1	1	
0100	3	0	1	0	1	0	0	0	0	1	0	
0115	4	0	3	0	0	0	0	0	0	1	0	
0130	11	0	7	0	0	0	0	0	0	3	1	
0145	9	0	7	0	1	0	0	0	0	1	0	
0200	17	0	11	0	0	0	0	0	0	5	1	
0215	10	0	7	0	0	0	0	0	0	2	1	
0230	11	0	6	0	3	0	0	0	0	1	1	
0245	6	0	4	0	1	0	0	0	0	1	0	
0300	4	0	1	0	2	0	0	0	1	0	0	
0315	13	1	8	0	1	0	1	0	0	2	0	
0330	17	0	12	0	3	0	0	0	1	0	1	
0345	22	0	11	0	3	1	0	2	2	2	1	
0400	16	0	7	0	4	0	0	0	2	2	1	
0415	20	0	15	0	1	1	0	0	1	1	1	
0430	35	0	21	0	4	0	0	0	0	4	6	
0445	27	1	19	0	2	1	1	0	0	0	3	
0500	59	0	45	0	5	0	3	1	1	1	3	
0515	101	1	79	0	13	1	0	0	0	2	5	
0530	144	1	127	0	9	0	0	0	0	2	5	
0545	111	1	94	0	10	0	0	0	0	2	4	
0600	98	0	87	0	5	0	3	0	0	0	3	
0615	136	1	116	0	8	2	2	0	1	3	3	
0630	174	0	145	1	16	1	3	0	1	2	5	
0645	203	2	171	0	15	1	4	0	1	7	2	
0700	205	0	174	1	20	0	1	0	2	4	3	
0715	221	2	191	1	18	0	1	0	0	4	4	
0730	281	1	258	0	13	0	2	1	1	0	5	
0745	246	2	226	1	13	0	1	0	0	1	2	
0800	232	0	210	3	10	2	2	0	1	3	1	
0815	282	2	245	3	21	2	4	1	1	2	1	
0830	215	0	181	0	22	0	1	0	1	6	4	
0845	182	0	146	2	18	0	2	1	1	8	4	
0900	191	0	148	3	20	1	0	0	2	9	8	
0915	142	0	116	0	14	0	2	0	2	5	3	
0930	125	1	93	2	15	1	1	0	1	6	5	
0945	123	2	96	1	13	1	0	1	3	3	3	
1000	91	2	62	1	11	1	3	0	2	5	4	
1015	108	0	76	0	14	1	3	2	0	10	2	
1030	97	0	64	1	15	0	3	1	1	8	4	
1045	104	0	77	1	8	2	4	1	2	5	4	
1100	99	0	70	0	18	0	1	0	0	7	3	
1115	90	0	69	0	8	1	2	0	1	5	4	
1130	121	0	80	2	14	2	2	0	2	12	7	
1145	110	1	78	1	18	2	1	1	1	4	3	
1200	85	1	61	1	16	2	1	0	0	2	1	
1215	93	0	74	1	13	1	0	0	0	2	2	
1230	97	0	70	1	10	1	0	0	2	10	3	
1245	84	0	63	0	8	1	0	0	2	6	4	
1300	86	1	62	0	8	2	1	0	4	2	6	
1315	91	0	70	0	6	2	2	0	1	6	4	
1330	111	1	81	1	10	4	0	0	3	9	2	
1345	94	2	78	1	6	0	1	0	3	1	2	
1400	97	0	69	0	10	2	2	0	1	12	1	
1415	138	1	109	1	13	1	3	0	2	6	2	
1430	113	0	82	0	13	3	0	0	2	11	2	
1445	104	5	79	1	5	2	2	0	3	5	2	
1500	103	0	82	0	11	1	1	0	2	5	1	
1515	115	0	81	2	11	4	4	0	2	8	3	
1530	114	0	83	1	21	1	0	0	1	4	3	
1545	98	0	80	0	10	0	0	0	3	3	2	
1600	113	4	83	2	14	0	1	1	1	3	4	
1615	128	1	110	0	10	0	0	0	3	3	1	
1630	132	1	112	0	9	0	0	0	2	4	4	
1645	130	2	102	3	11	1	0	0	2	5	4	
1700	139	1	118	0	12	0	0	0	2	1	5	
1715	141	1	129	1	5	1	0	0	0	2	2	
1730	149	1	136	1	7	0	1	0	1	2	0	
1745	142	2	123	0	10	1	0	0	1	4	1	
1800	108	1	93	2	6	0	0	0	1	2	3	
1815	108	0	95	0	6	1	0	0	1	3	2	
1830	86	0	80	1	1	0	0	0	0	2	2	
1845	77	0	63	0	5	0	0	0	3	4	2	
1900	62	0	53	1	3	0	0	0	1	3	1	
1915	55	0	43	1	2	0	1	0	3	2	3	
1930	58	1	48	1	2	0	0	0	1	4	1	
1945	49	0	44	0	1	1	0	0	1	2	0	
2000	41	0	32	0	4	0	0	0	2	3	0	
2015	32	0	25	0	3	0	0	0	2	1	1	
2030	39	0	27	1	4	0	0	0	1	2	4	
2045	38	0	33	0	2	0	0	0	1	2	0	
2100	28	0	19	0	2	0	0	0	4	3	0	
2115	65	0	48	1	6	0	0	0	4	4	2	
2130	42	0	36	0	1	0	0	0	1	2	2	
2145	43	0	33	0	1	0	0	0	7	1	1	
2200	32	0	26	0	0	0	0	0	3	3	0	
2215	49	1	38	1	0	0	0	0	4	3	2	
2230	47	0	36	0	4	0	0	0	3	2	2	
2245	31	0	26	0	0	0	0	0	2	3	0	
2300	21	0	18	0	0	0	0	0	0	3	0	
2315	30	0	21	0	3	0	0	0	2	4	0	
2330	26	0	17	0	2	0	0	0	4	3	0	
2345	17	0	7	0	2	0	0	1	1	4	2	
07-19	**6341**	**38**	**5128**	**43**	**570**	**47**	**55**	**10**	**72**	**234**	**144**	
06-22	**7504**	**42**	**6088**	**49**	**645**	**52**	**68**	**10**	**103**	**275**	**172**	
06-00	**7757**	**43**	**6277**	**50**	**656**	**52**	**68**	**11**	**122**	**300**	**178**	
00-00	**8432**	**48**	**6782**	**50**	**722**	**56**	**73**	**14**	**130**	**341**	**216**	

7938.8		1387	17.88%	1403.6	
7666.1		1552		**1333.6**	

13 May 2014

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	17	1	5	0	2	0	0	0	4	2	3	
0015	11	0	5	0	2	0	0	0	0	2	2	
0030	19	0	9	0	4	0	0	0	3	0	3	
0045	11	0	4	0	1	0	0	0	3	1	2	
0100	10	0	3	0	1	0	0	0	2	1	3	
0115	9	0	3	0	0	0	0	0	4	2	0	
0130	14	0	7	0	2	0	0	0	1	3	1	
0145	17	0	6	0	0	0	0	1	3	7	0	
0200	20	0	16	0	0	0	0	0	2	2	0	
0215	19	0	12	0	0	0	0	0	4	2	1	
0230	14	0	5	0	2	0	0	0	2	3	2	
0245	13	0	8	0	2	0	0	0	3	0	0	
0300	20	0	10	1	4	0	0	0	4	0	1	
0315	10	0	8	0	0	0	0	0	0	1	1	
0330	25	1	7	0	4	0	0	1	6	4	2	
0345	32	0	15	0	1	1	0	0	7	6	2	
0400	26	0	10	0	2	0	0	0	8	4	2	
0415	25	0	15	1	4	0	0	0	0	1	4	
0430	47	0	34	0	4	2	0	0	1	2	4	
0445	39	1	25	0	8	0	1	0	1	2	1	
0500	38	0	30	0	1	0	0	0	1	2	4	
0515	69	1	54	0	7	0	0	0	2	1	4	
0530	154	0	136	0	8	0	1	0	0	7	2	
0545	123	1	102	0	10	0	0	1	0	6	3	
0600	90	0	73	0	6	2	1	0	2	3	3	
0615	106	1	84	0	10	1	0	0	2	4	4	
0630	145	1	122	1	10	1	1	0	2	3	4	
0645	200	2	176	2	9	3	2	1	1	2	2	
0700	205	1	175	0	17	2	2	0	0	6	2	
0715	232	1	204	0	18	1	0	0	2	5	1	
0730	253	0	228	2	11	1	4	0	1	3	3	
0745	255	2	229	0	16	0	3	0	1	2	2	
0800	268	2	233	2	19	1	2	0	1	6	2	
0815	261	1	226	7	19	2	1	0	1	2	2	
0830	261	1	229	1	19	0	0	0	0	5	6	
0845	205	1	170	1	19	0	1	1	3	4	5	
0900	186	0	147	0	17	1	3	0	2	6	10	
0915	160	0	122	0	18	0	3	0	2	9	6	
0930	150	0	116	1	22	2	2	0	1	2	4	
0945	127	4	91	3	17	0	2	0	3	4	3	
1000	90	0	62	0	8	2	4	0	3	5	6	
1015	83	0	56	1	15	0	0	0	0	5	6	
1030	93	1	61	1	10	1	6	0	1	7	5	
1045	96	0	68	2	11	0	1	0	1	9	4	
1100	90	1	66	0	14	0	3	0	2	3	1	
1115	88	1	65	0	13	0	0	0	1	4	4	
1130	97	1	74	0	12	1	0	0	4	3	2	
1145	75	1	58	0	9	1	1	0	1	1	3	
1200	106	1	74	0	16	0	3	0	4	6	2	
1215	89	0	57	1	14	1	1	0	1	10	4	
1230	78	0	55	0	13	0	2	1	1	3	3	
1245	84	1	60	0	9	1	1	0	3	5	4	
1300	104	0	90	0	5	0	0	0	3	5	1	
1315	114	0	78	0	10	1	3	0	6	9	7	
1330	104	1	79	1	10	0	2	0	3	3	5	
1345	92	0	71	1	13	0	1	0	2	1	3	
1400	111	1	75	2	20	2	1	0	1	6	3	
1415	92	0	64	0	14	0	1	0	2	5	6	
1430	94	0	70	1	10	0	1	0	3	7	2	
1445	104	1	83	2	9	3	0	1	2	1	2	
1500	110	2	84	0	16	0	1	0	2	1	4	
1515	124	4	98	0	15	0	2	0	0	4	1	
1530	128	0	102	0	17	1	0	0	1	4	3	
1545	107	1	86	0	9	2	1	0	0	2	6	
1600	142	1	113	3	12	1	1	1	1	4	5	
1615	114	0	97	0	10	1	1	0	1	2	2	
1630	158	0	134	2	13	0	0	0	4	2	3	
1645	151	1	127	2	8	2	1	0	2	5	3	
1700	161	0	129	2	11	1	1	0	4	9	4	
1715	179	1	166	0	8	0	1	0	0	3	0	
1730	147	2	130	0	11	0	1	0	1	1	1	
1745	151	0	139	0	4	1	0	0	0	5	2	
1800	95	0	86	0	4	0	0	0	0	4	1	
1815	95	1	83	0	2	0	0	0	2	3	4	
1830	78	0	71	0	3	0	0	0	1	3	0	
1845	80	0	68	0	6	0	0	0	2	2	2	
1900	69	0	60	0	2	0	0	0	0	3	4	
1915	58	0	45	0	3	0	0	0	2	5	3	
1930	53	0	45	1	4	0	0	0	1	2	0	
1945	45	0	36	0	3	0	0	0	1	4	1	
2000	41	0	33	0	4	0	0	0	2	1	1	
2015	43	0	36	0	2	0	0	0	0	2	3	
2030	35	0	31	0	0	0	0	0	0	2	2	
2045	37	1	26	0	4	0	0	0	2	2	2	
2100	37	0	27	0	3	0	0	0	5	1	1	
2115	59	0	47	0	5	0	0	0	5	2	0	
2130	50	1	41	0	4	0	0	0	3	1	0	
2145	42	0	37	0	1	0	0	0	1	2	1	
2200	29	0	24	0	0	0	0	0	3	0	2	
2215	45	0	40	0	0	0	0	0	1	1	3	
2230	53	0	43	0	4	0	0	0	3	2	1	
2245	31	0	26	0	1	0	0	0	2	0	2	
2300	17	0	11	0	1	0	0	0	3	1	1	
2315	31	0	24	0	2	0	0	0	1	4	0	
2330	30	0	15	0	6	0	0	0	4	4	1	
2345	25	0	18	0	1	1	0	0	2	2	1	
07-19	**6467**	**36**	**5249**	**38**	**596**	**32**	**64**	**4**	**82**	**206**	**160**	
06-22	**7577**	**42**	**6168**	**42**	**666**	**39**	**68**	**5**	**111**	**245**	**191**	
06-00	**7838**	**42**	**6369**	**42**	**681**	**40**	**68**	**5**	**130**	**259**	**202**	
00-00	**8620**	**47**	**6898**	**44**	**750**	**43**	**70**	**8**	**191**	**320**	**249**	

1385 17.67%

14 May 2014 1631

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	17	0	10	0	0	0	0	0	2	4	1	
0015	19	0	8	0	3	0	0	0	4	3	1	
0030	19	0	11	0	1	0	0	0	4	3	0	
0045	10	0	4	0	0	0	0	0	2	2	2	
0100	18	0	12	0	0	0	0	0	2	1	3	
0115	10	0	6	0	0	0	0	0	2	0	2	
0130	15	0	8	0	0	0	0	0	3	3	1	
0145	23	0	13	0	2	0	0	0	4	3	1	
0200	20	0	13	0	0	0	0	0	2	3	2	
0215	21	1	12	0	1	0	0	0	1	5	1	
0230	17	0	9	0	3	0	0	0	2	2	1	
0245	18	0	13	0	2	0	0	0	0	2	1	
0300	14	0	8	0	3	0	0	0	2	1	0	
0315	34	1	12	0	9	0	0	1	2	3	6	
0330	30	0	12	0	3	0	0	0	10	5	0	
0345	29	0	12	1	1	0	0	3	7	3	2	
0400	17	1	9	0	1	1	0	0	1	2	2	
0415	16	0	9	1	2	0	0	0	1	0	3	
0430	35	0	23	0	4	0	0	1	2	1	4	
0445	46	1	29	0	4	1	1	0	1	3	6	
0500	54	0	43	0	6	0	1	0	0	2	2	
0515	94	2	73	0	10	2	1	0	0	4	2	
0530	145	0	129	0	9	0	0	0	0	2	5	
0545	114	0	97	1	7	1	0	0	1	3	4	
0600	100	1	76	0	13	1	3	0	0	3	3	
0615	119	1	101	0	10	0	2	1	1	0	3	
0630	176	2	140	0	11	1	6	0	4	5	7	
0645	213	5	175	1	17	1	1	0	1	5	7	
0700	225	4	187	1	23	2	1	0	1	2	4	
0715	245	2	213	1	23	0	0	0	1	1	4	
0730	247	3	218	0	19	2	1	0	1	3	0	
0745	296	2	271	0	12	1	1	0	1	3	5	
0800	288	2	258	1	15	1	3	0	4	3	1	
0815	267	2	235	1	19	1	3	0	1	3	2	
0830	256	2	225	2	15	2	1	0	2	2	5	
0845	208	3	176	3	15	1	2	0	3	3	2	
0900	171	0	131	2	18	1	1	0	2	8	8	
0915	156	0	128	0	17	2	3	0	1	3	2	
0930	128	1	95	2	14	0	1	0	5	5	5	
0945	123	1	94	0	13	4	3	0	0	7	1	
1000	106	2	77	0	13	0	0	2	1	5	6	
1015	91	1	66	2	13	0	1	0	0	6	2	
1030	95	1	68	1	14	0	2	0	0	9	0	
1045	94	2	65	1	17	0	1	0	1	3	4	
1100	80	1	56	2	12	1	0	0	0	5	3	
1115	102	0	64	3	15	1	1	0	3	10	5	
1130	93	2	70	0	10	1	0	0	3	3	4	
1145	104	0	73	1	11	2	3	0	3	7	4	
1200	92	1	68	0	11	0	2	0	1	3	6	
1215	91	1	65	1	9	1	1	1	0	8	4	
1230	110	0	78	2	13	0	3	0	3	5	6	
1245	91	0	65	1	11	0	3	1	1	4	5	
1300	100	2	70	3	12	1	1	0	1	5	5	
1315	129	2	89	1	20	2	2	0	1	7	5	
1330	124	1	93	1	18	3	1	0	1	5	1	
1345	114	1	90	1	10	1	1	1	2	4	3	
1400	95	2	72	0	11	0	0	0	2	4	4	
1415	96	1	68	1	16	0	0	0	2	4	4	
1430	112	3	80	0	17	0	2	0	1	3	6	
1445	133	0	108	1	17	0	2	0	0	3	2	
1500	105	1	74	2	20	0	2	0	0	5	1	
1515	101	0	86	0	6	0	1	0	2	3	3	
1530	105	0	82	1	14	0	1	0	0	2	5	
1545	118	0	104	1	7	0	0	0	1	3	2	
1600	94	1	73	1	9	0	2	0	4	2	2	
1615	129	2	116	1	4	0	0	0	1	2	3	
1630	138	1	117	1	7	0	0	0	4	4	4	
1645	180	3	156	1	8	0	1	0	4	2	5	
1700	147	0	132	0	11	0	0	0	1	3	0	
1715	154	0	136	2	8	0	1	1	1	2	3	
1730	151	2	134	1	9	0	0	0	3	2	0	
1745	132	1	117	1	6	1	0	0	1	2	3	
1800	135	1	114	1	5	0	0	0	3	6	5	
1815	120	2	97	2	6	0	0	0	0	6	7	
1830	86	1	74	1	4	0	0	0	1	4	1	
1845	79	1	67	0	3	0	0	0	2	3	3	
1900	69	2	57	0	5	0	0	0	1	0	4	
1915	64	1	58	1	1	0	0	0	0	2	1	
1930	76	3	56	0	5	0	0	0	1	7	4	
1945	56	11	38	1	1	0	0	0	2	1	2	
2000	50	5	30	0	5	0	0	0	2	4	4	
2015	40	1	28	0	6	0	0	0	2	1	2	
2030	57	0	48	0	3	0	0	0	2	3	1	
2045	41	0	35	0	2	0	0	0	2	1	1	
2100	40	1	28	0	2	0	0	0	3	6	0	
2115	60	1	50	0	6	0	0	0	1	1	1	
2130	57	0	49	2	2	0	0	0	3	1	0	
2145	40	0	31	0	0	0	0	0	4	4	1	
2200	38	0	34	0	1	0	0	0	2	1	0	
2215	42	1	32	0	1	0	0	0	4	2	2	
2230	42	1	35	0	2	0	0	0	1	2	1	
2245	32	0	23	0	0	1	0	0	4	2	2	
2300	31	0	20	0	3	0	0	0	2	3	3	
2315	26	0	20	0	0	0	0	0	4	2	0	
2330	34	0	21	0	7	0	0	0	3	2	1	
2345	24	0	13	1	1	0	0	0	3	4	2	
07-19	**6636**	**61**	**5395**	**51**	**600**	**31**	**54**	**6**	**76**	**197**	**165**	
06-22	**7894**	**95**	**6395**	**56**	**689**	**34**	**66**	**7**	**105**	**241**	**206**	
06-00	**8163**	**97**	**6593**	**57**	**704**	**35**	**66**	**7**	**128**	**259**	**217**	
00-00	**8998**	**103**	**7168**	**60**	**775**	**40**	**69**	**12**	**183**	**319**	**269**	

1416 17.35%

15 May 2014 1667

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	24	0	13	0	0	0	0	0	2	6	3	
0015	17	0	7	0	4	0	0	0	2	2	2	
0030	20	0	10	0	0	0	0	0	5	5	0	
0045	22	0	10	0	1	0	0	0	4	6	1	
0100	11	0	7	0	0	0	0	0	2	1	1	
0115	10	1	5	0	1	0	0	0	2	1	0	
0130	13	0	8	0	0	0	0	0	2	2	1	
0145	20	0	12	0	1	0	0	0	1	6	0	
0200	15	0	7	0	1	0	0	0	3	4	0	
0215	17	1	9	0	1	0	0	0	1	4	1	
0230	20	0	10	0	2	0	0	0	3	5	0	
0245	18	0	13	0	0	0	0	0	3	1	1	
0300	17	0	7	0	2	0	0	0	3	3	2	
0315	19	0	9	0	4	0	0	0	2	1	3	
0330	33	1	12	0	5	0	0	1	8	5	1	
0345	29	0	15	1	1	0	0	1	4	5	2	
0400	20	0	10	0	4	0	0	0	2	3	1	
0415	19	0	12	0	1	0	0	1	1	2	2	
0430	43	0	31	0	3	0	0	0	5	1	3	
0445	39	0	25	0	7	0	0	0	1	3	3	
0500	53	1	40	0	3	0	0	0	2	4	3	
0515	89	1	73	0	11	1	0	0	0	0	3	
0530	136	1	113	2	7	0	0	0	0	6	7	
0545	126	0	107	0	11	0	0	1	0	2	5	
0600	89	1	73	0	10	1	0	0	0	2	2	
0615	116	0	92	2	13	1	2	1	0	5	0	
0630	171	2	150	1	11	1	1	0	0	1	4	
0645	202	8	173	1	10	0	3	0	1	2	4	
0700	192	3	158	0	21	2	2	0	2	2	2	
0715	265	2	229	0	24	0	3	0	0	4	3	
0730	250	2	224	0	15	2	3	0	1	1	2	
0745	266	2	239	0	17	0	3	0	1	1	3	
0800	244	3	211	4	15	0	4	0	0	3	4	
0815	271	1	235	4	18	1	1	0	1	3	7	
0830	240	3	214	1	12	1	1	0	0	4	4	
0845	196	0	164	0	20	1	2	0	1	6	2	
0900	167	2	124	2	20	1	0	0	3	9	6	
0915	132	0	109	1	13	1	0	0	2	3	3	
0930	112	1	81	0	11	1	1	0	2	7	8	
0945	114	3	85	1	14	1	1	0	1	3	5	
1000	98	0	70	1	18	0	2	0	0	5	2	
1015	90	0	64	1	13	0	2	0	2	3	5	
1030	101	2	65	0	15	1	1	0	3	5	9	
1045	111	2	82	0	9	2	2	0	5	7	2	
1100	87	0	57	1	15	2	1	0	1	5	5	
1115	97	0	68	2	15	2	1	0	1	5	3	
1130	120	4	91	0	9	2	3	1	0	7	3	
1145	98	2	74	0	13	0	0	0	1	4	4	
1200	89	0	66	2	9	0	1	0	2	5	4	
1215	88	1	64	0	9	1	1	1	2	2	7	
1230	83	0	56	1	15	0	1	0	2	8	0	
1245	98	1	75	0	10	0	3	0	4	3	2	
1300	98	1	76	4	8	0	1	0	1	6	1	
1315	114	2	86	0	17	2	0	1	1	4	1	
1330	120	2	91	0	12	1	6	0	2	2	4	
1345	102	2	76	1	13	0	1	0	3	4	2	
1400	104	2	73	1	11	3	2	0	1	6	5	
1415	103	0	77	1	11	0	1	0	3	7	3	
1430	117	1	81	1	23	1	3	0	0	6	1	
1445	112	0	94	0	9	0	2	2	3	0	2	
1500	135	2	107	0	13	1	2	0	2	4	4	
1515	114	0	87	0	13	0	0	1	3	6	4	
1530	145	4	103	0	22	0	4	0	3	3	6	
1545	120	0	97	2	14	1	1	0	0	3	2	
1600	110	0	93	0	9	0	2	0	0	4	2	
1615	146	2	123	0	11	2	1	0	1	3	3	
1630	127	3	103	2	9	0	0	0	1	4	5	
1645	152	2	126	1	12	0	0	0	3	3	5	
1700	133	1	111	0	13	0	0	1	1	6	0	
1715	145	3	130	0	7	0	1	0	2	0	2	
1730	153	3	137	2	9	0	0	0	0	2	0	
1745	147	0	129	1	6	1	1	2	1	3	3	
1800	119	0	102	1	6	0	0	1	1	5	3	
1815	114	0	102	0	6	0	0	0	1	4	1	
1830	118	2	97	0	9	1	0	0	1	3	5	
1845	73	5	62	0	2	0	0	1	1	0	2	
1900	68	1	49	1	9	0	0	0	1	4	3	
1915	65	2	49	1	6	0	0	0	2	3	2	
1930	49	1	37	1	5	0	0	0	1	3	1	
1945	47	0	34	0	7	0	0	0	3	3	0	
2000	54	5	38	0	1	0	0	0	1	6	3	
2015	35	0	29	0	2	0	0	0	0	1	3	
2030	52	1	45	0	0	0	0	0	3	2	1	
2045	48	1	29	1	6	0	0	0	5	4	2	
2100	52	0	42	0	3	0	0	0	4	2	1	
2115	71	1	62	0	0	0	0	0	2	4	2	
2130	50	0	40	0	1	0	0	0	3	5	1	
2145	34	0	29	0	1	0	0	0	1	1	2	
2200	34	1	30	0	0	0	0	0	1	1	1	
2215	45	0	36	0	1	0	0	0	1	5	2	
2230	40	1	31	0	1	0	0	0	3	2	2	
2245	32	0	22	0	3	0	0	0	3	2	2	
2300	23	0	16	0	3	0	0	0	3	1	0	
2315	24	0	19	0	0	0	0	0	1	3	1	
2330	31	0	20	0	3	0	0	0	4	3	1	
2345	29	0	16	0	4	0	0	0	4	4	1	
07-19	**6530**	**71**	**5268**	**38**	**615**	**34**	**67**	**11**	**72**	**193**	**161**	
06-22	**7733**	**94**	**6239**	**46**	**700**	**37**	**73**	**12**	**99**	**241**	**192**	
06-00	**7991**	**96**	**6429**	**46**	**715**	**37**	**73**	**12**	**119**	**262**	**202**	
00-00	**8821**	**102**	**6994**	**49**	**785**	**38**	**73**	**16**	**177**	**340**	**247**	

1420 17.77%

16 May 2014 1676

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	20	0	10	0	3	0	0	0	2	3	2	
0015	17	0	5	0	3	0	0	0	5	4	0	
0030	17	0	8	0	1	0	0	0	5	2	1	
0045	20	1	6	0	1	0	0	0	6	4	2	
0100	15	0	6	0	2	1	0	0	1	4	1	
0115	13	0	8	0	0	0	0	1	2	2	0	
0130	13	0	7	0	1	0	0	0	2	1	2	
0145	17	0	6	0	1	0	0	0	2	7	1	
0200	20	0	9	0	1	0	0	0	5	3	2	
0215	25	0	14	0	1	0	0	0	6	3	1	
0230	16	0	9	0	3	0	1	0	1	2	0	
0245	17	0	12	0	0	0	0	0	3	1	1	
0300	10	0	5	0	3	0	0	0	1	1	0	
0315	16	0	8	0	1	1	0	1	2	3	0	
0330	23	1	9	0	5	0	0	1	2	3	2	
0345	37	1	14	0	3	1	0	0	11	5	2	
0400	26	1	11	0	5	0	0	1	4	3	1	
0415	18	0	13	0	1	0	1	0	1	1	1	
0430	40	0	28	0	3	0	0	0	2	1	6	
0445	48	2	27	1	6	0	0	1	2	1	8	
0500	42	0	31	0	2	0	1	0	1	1	6	
0515	101	2	86	0	5	0	2	0	1	2	3	
0530	147	1	126	0	5	2	0	2	0	7	4	
0545	116	0	101	0	5	1	0	0	1	4	4	
0600	85	0	59	2	12	0	2	0	3	2	5	
0615	104	1	88	1	10	0	1	0	0	2	1	
0630	163	2	141	0	13	1	2	0	0	2	2	
0645	198	5	163	0	19	1	1	2	1	4	2	
0700	194	4	150	0	28	1	2	1	1	2	5	
0715	231	5	193	3	19	2	1	0	0	4	4	
0730	262	3	227	0	20	0	2	0	0	3	7	
0745	221	2	193	2	11	0	3	0	1	4	5	
0800	243	4	215	2	8	1	2	0	2	6	3	
0815	247	1	207	4	22	1	0	0	3	6	3	
0830	221	2	192	0	17	0	3	0	0	4	3	
0845	173	5	143	1	9	1	2	0	2	6	4	
0900	154	0	110	0	27	0	2	1	2	8	4	
0915	142	1	109	0	15	1	1	0	3	6	6	
0930	133	0	109	2	13	0	1	0	1	2	5	
0945	120	2	95	2	11	0	1	0	1	2	6	
1000	92	0	64	1	12	1	1	0	2	5	6	
1015	111	0	80	0	17	0	2	0	0	5	7	
1030	101	1	75	2	5	0	1	0	2	9	6	
1045	102	1	76	0	13	1	2	0	1	5	3	
1100	102	0	74	1	15	0	0	0	1	6	5	
1115	123	2	97	1	7	0	2	0	3	8	3	
1130	112	2	75	2	15	0	2	0	3	6	7	
1145	104	2	85	0	11	0	0	0	0	3	3	
1200	95	0	66	1	8	1	3	0	1	9	6	
1215	89	1	63	1	12	2	0	1	2	4	3	
1230	100	3	71	0	13	0	3	0	2	5	3	
1245	125	0	97	1	11	0	2	1	1	8	4	
1300	107	2	78	1	14	1	4	0	1	4	2	
1315	125	2	99	2	12	1	0	0	1	5	3	
1330	140	4	117	0	13	0	1	0	1	1	3	
1345	125	3	78	1	24	3	1	0	2	7	6	
1400	116	3	94	0	11	0	0	0	1	1	6	
1415	142	4	104	1	17	0	2	0	3	6	5	
1430	114	1	83	1	11	1	1	0	2	9	5	
1445	127	1	101	0	12	0	2	1	2	4	4	
1500	98	2	74	1	8	0	3	1	0	7	2	
1515	121	0	94	0	11	2	0	0	2	5	7	
1530	132	2	104	1	14	0	2	1	0	3	5	
1545	126	0	110	1	6	0	0	0	1	6	2	
1600	136	5	108	3	9	2	0	0	0	2	7	
1615	158	0	140	2	8	0	2	0	1	2	3	
1630	139	1	123	1	8	0	0	0	3	1	2	
1645	136	3	114	1	12	0	2	0	0	1	3	
1700	136	1	115	1	11	1	1	0	2	0	4	
1715	142	0	127	0	3	0	1	1	1	5	4	
1730	141	0	119	3	6	1	1	0	1	6	4	
1745	142	3	122	3	6	0	0	0	3	3	2	
1800	120	1	101	0	6	0	0	0	3	7	2	
1815	111	2	98	1	4	0	0	0	0	2	4	
1830	87	1	72	2	7	0	0	0	0	1	4	
1845	84	0	72	2	3	0	0	0	0	5	2	
1900	63	1	52	1	1	0	0	1	1	5	1	
1915	72	1	58	1	3	0	0	0	2	6	1	
1930	62	1	51	0	2	0	0	0	1	3	4	
1945	61	11	34	0	5	0	0	0	6	3	2	
2000	36	0	27	0	4	0	0	0	1	2	2	
2015	50	4	33	0	2	0	0	0	3	5	3	
2030	39	0	26	0	5	0	0	0	2	4	2	
2045	31	0	25	0	2	0	0	0	2	1	1	
2100	40	0	31	0	3	0	0	0	2	3	1	
2115	34	0	27	0	1	0	0	0	3	2	1	
2130	43	0	35	0	2	0	0	0	4	2	0	
2145	42	0	35	0	3	0	0	0	3	1	0	
2200	29	0	27	0	0	0	0	0	1	0	1	
2215	36	2	29	0	0	0	0	0	0	4	1	
2230	34	0	28	0	0	0	0	0	3	2	1	
2245	36	0	27	0	2	0	0	0	2	2	3	
2300	19	1	12	0	0	0	0	0	4	2	0	
2315	21	0	15	0	0	0	0	0	2	1	3	
2330	18	0	11	0	2	0	0	0	1	2	2	
2345	27	0	18	0	1	0	0	0	3	2	3	
07-19	**6602**	**82**	**5313**	**54**	**575**	**24**	**61**	**8**	**64**	**219**	**202**	
06-22	**7725**	**108**	**6198**	**59**	**662**	**26**	**67**	**11**	**98**	**266**	**230**	
06-00	**7945**	**111**	**6365**	**59**	**667**	**26**	**67**	**11**	**114**	**281**	**244**	
00-00	**8779**	**120**	**6924**	**60**	**728**	**32**	**72**	**18**	**182**	**349**	**294**	

1410 17.75%

17 May 2014 1675

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	28	0	14	0	4	0	0	0	1	8	1	
0015	20	0	12	0	3	0	0	0	2	2	1	
0030	24	0	12	0	1	0	0	0	4	4	3	
0045	18	0	8	0	1	0	0	0	5	3	1	
0100	22	0	13	0	0	0	0	0	6	2	1	
0115	18	0	12	0	1	0	0	0	0	3	2	
0130	9	0	6	0	0	0	0	0	1	2	0	
0145	17	0	9	0	0	0	0	0	4	4	0	
0200	10	0	6	0	0	0	0	0	0	2	2	
0215	17	0	7	0	1	0	0	0	7	2	0	
0230	20	0	13	0	0	0	0	0	3	4	0	
0245	7	0	7	0	0	0	0	0	0	0	0	
0300	12	0	6	0	2	1	0	0	1	1	1	
0315	17	0	9	0	2	0	0	0	1	2	3	
0330	30	0	11	0	2	0	0	0	9	5	3	
0345	17	0	7	0	2	0	0	0	6	2	0	
0400	20	0	13	0	2	0	0	0	3	1	1	
0415	13	0	9	0	1	0	0	0	2	0	1	
0430	20	0	7	0	1	0	0	0	2	7	3	
0445	20	0	17	0	2	0	0	0	0	0	1	
0500	19	2	14	0	1	0	0	0	0	2	0	
0515	39	1	32	0	2	0	1	1	0	2	0	
0530	62	0	52	1	2	1	0	0	1	1	4	
0545	52	0	49	0	1	0	0	0	0	1	1	
0600	45	1	33	0	5	0	0	0	0	2	4	
0615	53	1	41	1	7	0	0	0	0	1	2	
0630	70	1	59	0	4	0	0	0	1	1	4	
0645	68	1	54	2	6	1	0	0	0	3	1	
0700	48	0	39	0	7	0	0	0	0	0	2	
0715	81	2	59	0	7	0	2	0	0	6	5	
0730	73	2	60	0	3	0	3	0	2	1	2	
0745	77	0	59	0	12	0	0	0	3	3	0	
0800	69	2	51	3	8	1	1	0	0	3	0	
0815	77	4	62	1	6	0	0	0	0	3	1	
0830	67	4	52	3	6	1	0	0	0	1	0	
0845	89	0	79	1	3	0	2	0	1	1	2	
0900	74	8	56	2	3	0	1	0	0	2	2	
0915	88	2	68	2	6	1	0	1	1	4	3	
0930	89	0	76	2	3	1	0	0	1	2	4	
0945	111	4	95	1	4	0	1	0	2	2	2	
1000	85	2	74	1	5	0	0	0	0	1	2	
1015	101	1	83	1	8	0	1	0	1	3	3	
1030	104	1	87	2	7	0	2	0	0	3	2	
1045	94	1	79	1	5	0	2	0	0	2	4	
1100	95	4	83	1	4	0	0	0	0	1	2	
1115	107	2	85	5	10	1	0	0	0	2	2	
1130	113	4	98	1	4	1	0	0	1	1	3	
1145	90	1	79	0	2	0	0	0	2	3	3	
1200	80	2	65	0	6	0	0	0	0	2	5	
1215	79	5	66	0	4	0	0	1	0	2	1	
1230	86	7	69	1	4	0	1	0	1	1	2	
1245	97	8	82	0	3	1	0	0	0	2	1	
1300	70	2	64	2	1	0	0	0	0	1	0	
1315	87	4	75	1	4	0	0	0	0	1	2	
1330	84	6	72	0	0	0	1	0	0	3	2	
1345	92	3	81	1	3	0	0	0	2	0	2	
1400	90	2	80	0	4	0	0	0	1	0	3	
1415	74	2	70	0	1	0	0	0	0	0	1	
1430	79	2	69	1	5	0	0	0	1	1	0	
1445	72	7	62	0	2	0	0	0	0	1	0	
1500	64	0	57	0	3	0	0	0	0	3	1	
1515	65	1	60	1	1	0	0	0	1	1	0	
1530	82	4	68	0	4	0	0	0	1	2	3	
1545	66	4	55	1	1	0	1	0	0	1	3	
1600	72	0	64	0	5	0	0	0	0	0	3	
1615	91	2	84	1	2	0	0	0	0	2	0	
1630	76	5	66	1	1	0	0	0	0	0	3	
1645	83	3	76	0	2	1	0	0	0	0	1	
1700	72	0	66	1	2	0	0	0	1	1	1	
1715	77	0	76	1	0	0	0	0	0	0	0	
1730	59	1	54	1	1	0	1	0	0	0	1	
1745	65	4	56	0	4	0	0	0	0	1	0	
1800	62	1	56	0	2	0	0	0	0	2	1	
1815	81	1	73	0	6	0	0	0	0	1	0	
1830	49	1	45	0	0	0	0	0	0	2	1	
1845	56	0	42	0	7	0	0	0	1	5	1	
1900	41	1	35	1	2	0	0	0	0	1	1	
1915	59	2	53	0	1	0	0	0	0	2	1	
1930	38	0	29	0	3	0	1	0	0	3	2	
1945	37	0	34	0	1	0	0	0	0	1	1	
2000	31	1	28	0	2	0	0	0	0	0	0	
2015	33	1	32	0	0	0	0	0	0	0	0	
2030	26	1	20	1	1	0	0	0	0	2	1	
2045	36	0	34	0	0	0	0	0	0	1	1	
2100	19	0	17	0	1	0	0	0	0	0	1	
2115	25	1	22	0	0	0	0	0	0	2	0	
2130	27	0	26	0	1	0	0	0	0	0	0	
2145	20	0	20	0	0	0	0	0	0	0	0	
2200	30	0	30	0	0	0	0	0	0	0	0	
2215	34	0	32	0	1	0	0	0	0	0	1	
2230	39	0	37	0	0	0	0	0	0	1	1	
2245	25	0	24	0	0	0	0	0	0	1	0	
2300	15	0	13	0	1	0	0	0	0	1	0	
2315	22	0	20	0	0	0	0	0	0	1	1	
2330	15	0	12	1	0	0	1	0	0	1	0	
2345	10	0	8	0	0	0	0	0	0	1	1	
07-19	**3842**	**121**	**3277**	**40**	**191**	**8**	**19**	**2**	**23**	**79**	**82**	
06-22	**4470**	**132**	**3814**	**45**	**225**	**9**	**20**	**2**	**24**	**98**	**101**	
06-00	**4660**	**132**	**3990**	**46**	**227**	**9**	**21**	**2**	**24**	**104**	**105**	
00-00	**5191**	**135**	**4335**	**47**	**258**	**11**	**22**	**3**	**82**	**164**	**134**	

18 May 2014 674

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	16	0	10	0	0	0	0	0	1	2	3	
0015	22	0	18	0	0	0	1	0	1	2	0	
0030	13	0	10	0	0	0	0	0	0	3	0	
0045	10	0	7	0	1	0	0	0	0	2	0	
0100	12	0	10	0	0	0	0	0	1	1	0	
0115	13	0	12	0	0	0	0	0	1	0	0	
0130	8	0	5	0	0	0	0	0	0	3	0	
0145	10	0	9	0	0	0	0	0	0	1	0	
0200	9	0	7	0	1	0	0	0	0	0	1	
0215	8	0	6	0	1	0	0	0	1	0	0	
0230	6	0	3	0	0	0	0	0	0	2	1	
0245	5	0	5	0	0	0	0	0	0	0	0	
0300	8	0	5	0	1	0	0	0	0	2	0	
0315	9	0	6	0	1	0	0	0	0	0	2	
0330	5	0	4	0	0	0	0	0	1	0	0	
0345	11	0	6	0	2	1	0	0	1	1	0	
0400	8	0	6	0	1	0	0	0	0	1	0	
0415	10	0	7	0	0	0	0	0	0	0	3	
0430	18	0	16	0	0	0	0	0	0	2	0	
0445	15	1	5	0	2	0	0	0	1	3	3	
0500	12	1	8	0	0	0	0	0	0	2	1	
0515	30	0	27	0	1	0	0	0	0	1	1	
0530	37	1	32	0	2	0	0	0	0	1	1	
0545	31	0	28	0	2	0	0	0	0	0	1	
0600	24	1	19	0	0	0	0	0	0	2	2	
0615	26	1	23	0	1	1	0	0	0	0	0	
0630	46	0	39	1	4	0	0	0	0	1	1	
0645	42	1	36	0	2	0	0	0	1	0	2	
0700	31	3	22	1	3	0	0	0	0	1	1	
0715	30	1	22	2	2	0	0	0	0	2	1	
0730	51	0	38	1	6	0	0	1	2	2	1	
0745	34	3	24	0	4	0	0	0	0	2	1	
0800	37	4	31	1	1	0	0	0	0	0	0	
0815	41	1	35	0	4	0	0	0	0	1	0	
0830	52	3	43	0	3	0	0	0	0	2	1	
0845	68	5	52	3	4	0	0	0	1	2	1	
0900	67	8	55	0	3	0	0	0	0	0	1	
0915	107	28	67	1	7	0	0	0	0	3	1	
0930	77	2	66	3	3	0	0	1	0	0	2	
0945	98	16	73	1	5	0	0	0	0	1	2	
1000	93	14	68	1	7	0	1	0	0	0	2	
1015	74	10	59	2	2	0	0	0	0	0	1	
1030	98	6	86	1	3	0	0	0	0	2	0	
1045	105	15	85	1	0	0	0	1	0	3	0	
1100	90	8	69	3	2	0	3	0	0	3	2	
1115	93	2	86	2	1	0	0	0	1	1	0	
1130	100	13	83	0	2	0	0	0	0	0	2	
1145	93	6	80	2	1	0	0	0	1	2	1	
1200	87	4	78	1	1	0	0	0	0	2	1	
1215	91	4	81	1	1	0	0	0	0	1	3	
1230	88	6	72	0	6	0	2	0	0	0	2	
1245	92	4	82	1	3	0	0	0	1	1	0	
1300	82	4	71	1	2	0	0	0	1	1	2	
1315	90	2	84	1	1	0	1	0	0	0	1	
1330	77	3	72	0	0	0	0	0	0	1	1	
1345	96	3	83	1	6	0	0	0	1	2	0	
1400	90	9	75	1	3	0	0	0	1	0	1	
1415	79	3	69	3	1	0	0	1	0	2	0	
1430	73	3	65	0	2	0	0	0	2	1	0	
1445	91	4	77	0	4	0	0	0	0	4	2	
1500	69	2	62	0	2	0	0	0	0	0	3	
1515	79	4	71	0	2	0	0	0	0	1	1	
1530	86	4	78	1	2	0	0	0	0	1	0	
1545	61	1	56	0	3	0	0	0	1	0	0	
1600	77	1	68	0	3	0	0	0	2	2	1	
1615	91	10	74	2	3	0	0	0	0	2	0	
1630	66	2	60	0	1	0	0	0	1	0	2	
1645	96	2	88	0	0	0	0	0	2	2	2	
1700	80	1	69	1	3	1	1	0	1	2	1	
1715	74	2	65	0	3	0	0	0	1	1	2	
1730	77	1	70	1	3	0	0	0	1	0	1	
1745	69	4	56	0	2	0	0	1	2	1	3	
1800	72	5	58	3	2	0	0	2	1	1	0	
1815	77	1	69	0	4	0	0	0	1	0	2	
1830	67	3	60	0	3	0	0	0	1	0	0	
1845	50	2	41	2	2	0	0	2	0	1	0	
1900	45	0	38	0	3	0	0	0	1	1	2	
1915	55	2	48	0	4	0	0	0	0	0	1	
1930	43	1	32	1	5	0	0	0	0	2	2	
1945	59	1	47	0	6	0	0	0	1	2	2	
2000	54	0	53	0	0	0	0	0	0	0	1	
2015	36	0	31	0	3	0	0	0	0	0	2	
2030	32	3	24	0	2	1	0	0	0	1	1	
2045	38	0	32	0	0	0	0	0	0	4	2	
2100	34	0	31	2	0	0	0	0	0	1	0	
2115	47	0	44	0	1	0	0	0	0	1	1	
2130	43	0	39	0	0	0	0	0	1	2	1	
2145	29	0	25	1	0	0	0	1	0	0	2	
2200	31	0	27	0	2	0	0	0	0	1	1	
2215	32	0	28	0	1	0	0	0	2	0	1	
2230	28	0	25	1	0	0	0	0	0	2	0	
2245	18	0	15	0	2	0	0	0	0	1	0	
2300	19	0	16	0	1	0	0	0	0	1	1	
2315	17	0	12	0	0	0	0	0	3	1	1	
2330	21	0	12	0	0	0	0	0	4	4	1	
2345	11	0	10	0	0	0	0	0	0	0	1	
07-19	**3666**	**242**	**3098**	**45**	**131**	**1**	**8**	**9**	**25**	**56**	**51**	
06-22	**4319**	**252**	**3659**	**50**	**162**	**3**	**8**	**10**	**29**	**73**	**73**	
06-00	**4496**	**252**	**3804**	**51**	**168**	**3**	**8**	**10**	**38**	**83**	**79**	
00-00	**4822**	**255**	**4056**	**51**	**183**	**4**	**9**	**10**	**46**	**112**	**96**	

Grand Total 460

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
--	**53663**	**810**	**43157**	**361**	**4201**	**224**	**388**	**81**	**991**	**1945**	**1505**	

Period	Total	Per day		
18 hour	39694	7939		
AADT	53663	7666		
AM 5	4760	952	Combined peak 5 day	1538
PM 5	2932	586		
AM 7	5260	751	Combined peak 7 day	1252
PM 7	3505	501		

18 hr factor 5.1604

AADT factor 6.1224

Report Id - CustomList-40
Site Name - LUTTERWORTH- 01
Description - A5 N [60M]
Direction - South

12 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
0000	0	0	0	0	0	0	0	1	1	1	2	4	0	1	0	0	0	53.1	-	1	10	0	0	0	0	
0015	0	0	0	0	0	0	0	1	0	0	3	3	0	0	2	0	0	57	-	2	22.2	2	22.2	0	0	
0030	0	0	0	0	0	0	0	0	0	1	3	2	0	0	1	0	0	55.9	-	1	14.3	1	14.3	0	0	
0045	0	0	0	0	0	0	0	1	1	5	1	0	1	0	0	0	0	48.1	-	1	11.1	0	0	0	0	
0100	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	54.1	-	0	0	0	0	0	0	
0115	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	51.4	-	0	0	0	0	0	0	
0130	0	0	0	0	0	0	0	1	0	4	4	0	0	0	2	0	0	52	53.5	2	18.2	2	18.2	0	0	
0145	0	0	0	0	0	0	0	0	1	1	1	4	1	1	0	0	0	56.2	-	2	22.2	0	0	0	0	
0200	0	0	0	0	0	0	0	0	0	3	6	4	2	0	1	0	1	57.5	63.1	4	23.5	2	11.8	1	5.9	
0215	0	0	0	0	0	0	0	0	2	0	4	1	1	1	0	1	0	56.1	-	3	30	2	20	1	10	
0230	0	0	0	0	0	0	0	0	1	1	6	1	1	0	0	0	1	55.3	57.3	2	18.2	1	9.1	1	9.1	
0245	0	0	0	0	0	0	0	0	0	0	2	1	1	2	0	0	0	59.5	-	3	50	1	16.7	0	0	
0300	0	0	0	0	0	0	0	0	1	0	1	1	0	1	0	0	0	55.3	-	1	25	1	25	0	0	
0315	0	0	0	0	0	0	0	0	0	2	4	3	2	0	2	0	0	57.2	64.2	4	30.8	2	15.4	0	0	
0330	0	0	0	0	0	0	0	0	0	0	3	3	3	2	3	2	0	1	60.5	69.1	8	47.1	5	29.4	1	5.9
0345	0	0	0	0	0	0	0	0	1	4	8	4	4	1	0	0	0	54.9	63.5	5	22.7	0	0	0	0	
0400	0	0	0	0	0	0	0	3	0	5	3	2	1	0	0	1	1	53.8	63.8	3	18.8	2	12.5	2	12.5	
0415	0	0	0	0	0	0	0	0	0	1	8	5	3	0	2	1	0	58.1	64.4	6	30	3	15	1	5	
0430	0	0	0	0	0	0	0	2	4	5	8	9	4	0	1	0	2	55	62.4	7	20	3	8.6	2	5.7	
0445	0	0	0	0	0	0	0	0	2	2	4	6	3	4	3	1	2	61.9	73.6	13	48.1	7	25.9	3	11.1	
0500	0	0	0	0	0	0	0	0	1	8	13	10	14	8	2	1	2	59	66.7	27	45.8	8	13.6	3	5.1	
0515	0	0	0	0	0	0	0	1	2	6	23	23	14	18	5	3	6	60.8	69.1	46	45.5	19	18.8	9	8.9	
0530	0	0	0	0	0	0	0	3	8	9	30	37	26	23	4	2	2	57.9	65.8	57	39.6	10	6.9	4	2.8	
0545	0	0	0	0	0	0	0	0	2	7	20	23	30	12	9	6	2	61	69.8	59	53.2	21	18.9	8	7.2	
0600	0	0	0	0	0	0	0	0	0	10	23	25	16	4	11	2	7	60.5	72.5	40	40.8	21	21.4	9	9.2	
0615	0	0	0	0	0	0	0	2	4	11	28	36	28	16	6	3	2	58.7	66.4	55	40.4	18	13.2	5	3.7	
0630	0	0	0	0	0	0	0	0	2	13	54	46	36	16	6	0	1	57.8	64.2	59	33.9	10	5.7	1	0.6	
0645	0	0	0	0	0	0	0	1	22	34	37	51	35	15	7	0	1	55.5	63.3	58	28.6	15	7.4	1	0.5	
0700	0	0	0	0	0	0	0	0	6	25	58	68	38	5	2	3	0	55.9	61.1	48	23.4	5	2.4	3	1.5	
0715	0	0	0	0	0	0	1	11	23	27	73	44	25	12	5	0	0	53.5	61.3	42	19	8	3.6	0	0	
0730	0	0	0	0	0	1	11	28	31	69	65	49	19	6	2	0	0	49.9	58.2	27	9.6	5	1.8	0	0	
0745	0	0	0	0	0	0	0	0	9	50	80	70	21	12	2	1	1	54.5	59.7	37	15	5	2	2	0.8	
0800	0	0	0	0	0	0	0	0	26	59	54	58	27	6	2	0	0	53	59.9	35	15.1	3	1.3	0	0	
0815	0	0	0	1	0	0	5	24	26	51	85	62	11	8	4	2	3	51.8	58.2	28	9.9	13	4.6	5	1.8	
0830	0	0	0	0	0	0	0	3	32	53	61	37	23	5	0	0	1	52	58.6	29	13.5	2	0.9	1	0.5	
0845	0	0	0	0	1	0	5	29	10	26	39	42	17	5	5	1	2	51.8	61.1	30	16.5	8	4.4	3	1.6	
0900	0	0	0	0	0	0	0	15	30	39	53	27	16	7	1	2	1	51.5	59.7	27	14.1	6	3.1	3	1.6	
0915	0	0	0	0	0	0	0	4	11	24	26	29	34	10	2	1	1	55.5	63.5	48	33.8	5	3.5	2	1.4	
0930	0	0	0	0	0	0	0	1	8	24	38	35	11	6	1	0	1	54	59.5	19	15.2	2	1.6	1	0.8	
0945	0	0	0	0	0	0	1	0	9	27	26	30	15	12	1	1	1	55	62.6	30	24.4	7	5.7	2	1.6	
1000	0	0	0	0	0	0	2	2	2	19	36	15	9	3	1	0	2	53.7	60.6	15	16.5	3	3.3	2	2.2	
1015	0	0	0	0	0	0	4	8	12	22	24	18	13	3	4	0	0	51.7	60.2	20	18.5	5	4.6	0	0	
1030	0	0	0	0	0	0	0	3	7	18	39	17	8	3	2	0	0	53.2	59.3	13	13.4	3	3.1	0	0	
1045	0	0	0	0	0	0	0	0	6	23	35	22	14	3	1	0	0	53.4	60.2	18	17.3	2	1.9	0	0	
1100	0	0	0	0	0	0	0	3	18	22	25	14	8	4	4	1	0	52.3	60.6	17	17.2	6	6.1	1	1	
1115	0	0	0	0	0	0	0	0	7	19	27	18	15	3	0	1	0	54.3	61.1	19	21.1	1	1.1	1	1.1	
1130	0	0	0	0	0	0	0	5	21	32	28	24	9	2	0	0	0	50.9	59.1	11	9.1	1	0.8	0	0	
1145	0	0	0	0	0	0	0	4	8	18	40	22	8	5	1	1	3	54.2	60.6	18	16.4	7	6.4	4	3.6	
1200	0	0	0	0	0	0	0	7	7	10	21	18	17	3	0	0	2	54	61.5	22	25.9	2	2.4	2	2.4	
1215	0	0	0	0	0	0	0	0	3	12	26	26	11	10	3	1	1	57.1	64.9	26	28	8	8.6	2	2.2	
1230	0	0	0	0	0	0	0	2	12	19	26	14	11	8	2	2	1	54.5	63.1	24	24.7	7	7.2	3	3.1	
1245	0	0	0	0	0	0	0	5	6	14	22	21	5	6	4	1	0	54.1	62.6	16	19	5	6	1	1.2	
1300	0	0	0	0	0	0	0	6	8	18	26	12	9	2	3	2	0	52.9	60.4	16	18.6	5	5.8	2	2.3	
1315	0	0	0	0	0	0	0	1	6	13	26	29	9	6	1	0	0	54.6	60.2	16	17.6	2	2.2	0	0	
1330	0	0	0	0	0	0	0	9	4	16	45	15	14	5	1	2	0	53.6	61.1	22	19.8	5	4.5	2	1.8	
1345	0	0	0	0	0	0	0	3	13	3	23	29	11	4	5	2	1	55.6	61.7	23	24.5	9	9.6	3	3.2	
1400	0	0	0	0	0	0	0	4	2	13	30	16	20	10	1	1	0	55.7	64	32	33	3	3.1	1	1	
1415	0	0	0	0	2	5	0	2	4	19	45	35	20	4	1	0	1	53.4	60.6	26	18.8	4	2.9	1	0.7	
1430	0	0	0	0	0	0	0	0	6	24	37	22	7	11	6	0	0	55.3	64.2	24	21.2	10	8.8	0	0	
1445	0	0	0	0	1	0	1	1	10	21	29	24	7	6	1	2	1	53.4	59.9	17	16.3	5	4.8	3	2.9	
1500	0	0	0	0	0	0	0	4	8	21	26	26	10	6	1	1	0	53.9	61.1	18	17.5	6	5.8	1	1	
1515	0	0	0	0	0	0	0	2	6	22	41	26	11	3	2	1	1	54.4	60.8	18	15.7	4	3.5	2	1.7	
1530	0	0	0	0	0	0	0	4	4	18	29	28	14	13	2	0	2	55.9	64.4	31	27.2	7	6.1	2	1.8	
1545	0	0	0	0	0	0	0	4	2	7	14	35	24	4	6	1	1	58.2	63.8	36	36.7	11	11.2	2	2	
1600	0	0	0	0	0	0	0	10	8	23	26	23	12	9	1	0	1	53.3	62.4	23	20.4	5	4.4	1	0.9	
1615	0	0	0	0	0	0	0	0	4	8	26	38	37	13	1	0	1	58.4	64.4	52	40.6	7	5.5	1	0.8	
1630	0	0	0	0	0	0	0	4	9	24	40	23	19	9	3	1	0	54.6	62.6	32	24.2	5	3.8	1	0.8	
1645	0	0	0	0	1	6	7	3	12	25	23	21	14	9	5	2	2	52.2	64.2	32	24.6	12	9.2	4	3.1	
1700	0	0	0	0	0	0	0	0	0	18	39	36	30	12	3	0	1	56.9	63.5	46	33.1	7	5	1	0.7	
1715	0	0	0	0	0	0	0	0	5	11	37	46	29	9	2	1	1	57	63.3	42	29.8	5	3.5	2	1.4	
1730	0	0	0	0	0	0	0	0	2	26	38	41	20	15	5	2	0	56.8	64.6	42	28.2	13	8.7	2	1.3	
1745	0	0	0	0	0	0	0	0	1	11	31	47	25	22	3	1	1	58.6	66	52	36.6	10	7	2	1.4	
1800	0	0	0	0	0	0	0	0	9	15	23	21	16	13	6	2	3	57.8	68	40	37	17	15.7	5	4.6	
1815	0	0	0	0	0	0	0	0	0	16	12	32	21	17	4	4	2	59.9	67.8	48	44.4	16	14.8	6	5.6	
1830	0	0	0	0	0	0	0	0	0	4	13	26	24	8	7	2	2	60.8	68.7	43	50	14	16.3	4	4.7	
1845	0	0	0	0	0	0	0	0	3	10	18	12	14	10	8	0	2	59.5	69.3	34	44.2	15	19.5	2	2.6	
1900	0	0	0	0	0	0	0	1	2	4	8	10	17	10	7	1	2	61.6	70	37	59.7	12	19.4	3	4.8	
1915	0	0	0	0	0	0	0	1	3	8	9	10	7	8	6	2	1	59.1	70.7	24	43.6	11	20	3	5.5	
1930	0	0	0	0	0	0	0	2	1	2	13	16	7	12	5	0	0	59.1	69.3	24	41.4	12	20.7	0	0	
1945	0	0	0	0	0	0	0	0	1	8	5	11	13	7	2	0	2	59.7	69.1	24	49	8	16.3	2	4.1	
2000	0	0	0	0	0	0	0	0	0	2	6	13	8	6	4	2	0	61.4	69.8	20	48.8	10	24.4	2	4.9	
2015	0	0	0	0	0	0	0	0	1	1	8	13	4	4	1	0	0	58	64.9	9	28.1	4	12.5	0	0	
2030	0	0	0	0	0	0	0	2	4	1	3	9	6	5	2	3	4	61.1	74.9	20	51.3	9	23.1	7	17.9	
2045	0	0	0	0	0	0	0	0	1	3	6	8	10	7	2	1	0	60.4	67.6	20	52.6	5	13.2	1	2.6	
2100	0	0	0	0	0	0	0	0	2	4	9	8	2	2	0	1	0	55.2	61.1	5	17.9	2	7.1	1	3.6	
2115	0	0	0	0	0	0	0	4	6	8	15	13	6	11	1	1	0	55.2	65.1	19	29.2	5	7.7	1	1.5	
2130	0	0	0	0	0	0	0	0	1	6	12	14	6	1	1	0	1	56.1	62.4	9	21.4	3	7.1	1	2.4	
2145	0	0	0	0	0	0	0	0	4	8	9	13	5	2	0	1	1	55.1	64.4	9	20.9	2	4.7	2	4.7	
2200	0	0	0	0	0	0	0	1	1	3	11	3	8	2	2	1	0	57.7	64.4	13	40.6	3	9.4	1	3.1	
2215	0	0	0	0	0	0	0	0	1	8	12	18	7	2	1	0	0	55.8	61.5	10	20.4	1	2	0	0	
2230	0	0	0	0	0	0	0	0	4	8	11	8	8	5	0	1	2	57.4	65.3	16	34	5	10.6	3	6.4	
2245	0	0	0	0	0	0	0	1	1	4	5	10	3	5	1	1	0	57.2	66.4	10	32.3	3	9.7	1	3.2	
2300	0	0	0	0	0	0	0	0	0	0	3	3	2	8	4	1	0	0	59.5	66	13	61.9	2	9.5	0	0
2315	0	0	0	0	0	0	0	0	2	7	8	6	3	2	2	0	0	55.2	64.4	7	23.3	3	10	0	0	
2330	0	0	0	0	0	0	0	1	2	3	5	8	2	3	0	2	0	57.1	65.5	7	26.9	3	11.5	2	7.7	
2345	0	0	0	0	0	0	0	0	0	3	2	5	3	2	1	1	0	58.8	66.2	7	41.2	2	11.8	1	5.9	
07-19	**0**	**0**	**0**	**1**	**5**	**12**	**37**	**211**	**456**	**1088**	**1704**	**1443**	**802**	**367**	**127**	**45**	**43**	**54.3**	**62.2**	**1384**	**21.8**	**316**	**5**	**88**	**1.4**	
06-22	**0**	**0**	**0**	**1**	**5**	**12**	**37**	**224**	**510**	**1211**	**1949**	**1739**	**1008**	**493**	**188**	**62**	**65**	**54.9**	**62.9**	**1816**	**24.2**	**463**	**6.2**	**127**	**1.7**	
06-00	**0**	**0**	**0**	**1**	**5**	**12**	**37**	**227**	**521**	**1250**	**2006**	**1799**	**1050**	**518**	**196**	**68**	**67**	**55**	**62.9**	**1899**	**24.5**	**485**	**6.3**	**135**	**1.7**	
00-00	**0**	**0**	**0**	**1**	**5**	**12**	**37**	**240**	**549**	**1319**	**2165**	**1948**	**1160**	**593**	**232**	**84**	**87**	**55.2**	**63.3**	**2156**	**25.6**	**577**	**6.8**	**171**	**2**	

13 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
0000	0	0	0	0	0	0	0	2	2	2	5	3	1	1	0	1	0	52.6	56.1	3	17.6	1	5.9	1	5.9	
0015	0	0	0	0	0	0	0	1	0	1	7	1	0	1	0	0	0	52.6	54.4	1	9.1	1	9.1	0	0	
0030	0	0	0	0	0	0	0	1	5	4	2	4	0	1	2	0	0	51.2	56.4	3	15.8	2	10.5	0	0	
0045	0	0	0	0	0	0	0	1	2	3	4	0	0	1	0	0	0	49.5	53.9	1	9.1	0	0	0	0	
0100	0	0	0	0	0	0	0	1	1	1	2	4	0	0	1	0	0	53.5 -		1	10	1	10	0	0	
0115	0	0	0	0	0	0	0	0	1	2	2	1	0	0	0	1	2	61.4 -		3	33.3	3	33.3	3	33.3	
0130	0	0	0	0	0	0	0	0	0	5	3	5	0	0	1	0	0	53.6	55.9	1	7.1	1	7.1	0	0	
0145	0	0	0	0	0	0	0	2	0	4	4	4	2	0	0	1	0	53.3	57.5	3	17.6	1	5.9	1	5.9	
0200	0	0	0	0	0	0	0	0	0	0	2	6	7	4	0	0	1	57.5	60.6	5	25	1	5	1	5	
0215	0	0	0	0	0	0	0	0	1	1	4	8	2	1	1	1	0	58.2	62.6	5	26.3	2	10.5	1	5.3	
0230	0	0	0	0	0	0	0	1	1	2	6	2	1	0	1	0	0	52.9	55	2	14.3	1	7.1	0	0	
0245	0	0	0	0	0	0	0	0	1	3	2	1	2	2	1	1	0	58.8	69.6	6	46.2	3	23.1	1	7.7	
0300	0	0	0	0	0	0	0	1	0	3	8	2	3	2	1	0	0	55.3	64	6	30	1	5	0	0	
0315	0	0	0	0	0	0	0	0	1	0	1	0	1	2	4	1	0	66.1 -		8	80	5	50	1	10	
0330	0	0	0	0	0	0	0	3	1	4	10	4	0	2	0	0	1	53.2	55.9	3	12	1	4	1	4	
0345	0	0	0	0	0	0	0	0	2	4	12	6	3	2	1	1	1	55.5	64	8	25	4	12.5	2	6.3	
0400	0	0	0	0	0	0	0	1	3	3	8	5	1	3	1	0	1	55.3	65.3	6	23.1	3	11.5	1	3.8	
0415	0	0	0	0	0	0	0	0	1	2	4	10	3	5	0	0	0	57.5	65.1	8	32	0	0	0	0	
0430	0	0	0	0	0	0	0	0	4	2	14	12	7	5	2	1	0	57	66	15	31.9	5	10.6	1	2.1	
0445	0	0	0	0	0	0	0	0	0	6	14	8	3	5	1	0	2	58	66.4	11	28.2	5	12.8	2	5.1	
0500	0	0	0	0	0	0	0	3	3	5	7	5	1	9	2	1	2	57.7	68.5	15	39.5	8	21.1	3	7.9	
0515	0	0	0	0	0	0	0	2	2	6	17	19	11	3	5	1	3	58.2	66.4	23	33.3	9	13	4	5.8	
0530	0	0	0	0	0	0	0	9	12	15	22	41	34	14	5	0	2	56.3	64	55	35.7	7	4.5	2	1.3	
0545	0	0	0	0	0	0	0	1	12	19	24	24	15	16	9	2	1	56.9	68	43	35	19	15.4	3	2.4	
0600	0	0	0	0	0	0	0	0	10	6	17	15	21	9	7	3	2	59	69.3	42	46.7	15	16.7	5	5.6	
0615	0	0	0	0	0	0	0	4	2	16	31	23	16	10	2	0	2	55.9	64.6	30	28.3	8	7.5	2	1.9	
0630	0	0	0	0	0	0	1	4	10	17	27	27	34	12	8	1	4	57.3	65.8	59	40.7	15	10.3	5	3.4	
0645	0	0	0	0	0	0	0	10	15	34	34	43	33	16	8	5	2	56.1	65.1	64	32	18	9	7	3.5	
0700	0	0	0	0	0	0	0	0	6	13	66	69	34	12	2	1	2	56.6	62.6	51	24.9	7	3.4	3	1.5	
0715	0	0	0	0	0	0	0	3	17	48	47	55	42	15	5	0	0	54.9	62	62	26.7	10	4.3	0	0	
0730	0	0	0	0	0	0	5	33	38	59	48	41	16	8	2	3	0	50.1	58.6	29	11.5	5	2	3	1.2	
0745	0	0	0	0	0	0	0	9	39	60	60	47	29	8	3	0	0	52.1	60.2	40	15.7	7	2.7	0	0	
0800	0	0	0	0	0	0	4	16	49	76	55	43	17	7	1	0	0	49.9	57.7	25	9.3	4	1.5	0	0	
0815	0	0	0	0	0	0	5	23	39	75	60	35	13	7	3	1	0	49.8	56.6	24	9.2	5	1.9	1	0.4	
0830	0	0	0	0	0	0	0	1	26	85	81	41	20	4	2	0	1	51.9	57.9	27	10.3	4	1.5	1	0.4	
0845	0	0	0	0	0	0	0	0	24	40	69	41	15	12	3	1	0	53.4	59.7	31	15.1	5	2.4	1	0.5	
0900	0	0	0	0	0	0	0	11	18	30	49	36	24	11	6	1	0	53.7	62.4	42	22.6	9	4.8	1	0.5	
0915	0	0	0	0	0	0	1	11	6	25	51	40	18	5	2	0	1	53.4	60.4	26	16.3	4	2.5	1	0.6	
0930	0	0	0	0	0	0	0	11	16	21	37	35	17	8	3	2	0	53.4	61.5	30	20	6	4	2	1.3	
0945	0	0	0	0	0	0	0	0	1	27	44	27	20	3	0	5	0	55.3	61.1	28	22	6	4.7	5	3.9	
1000	0	0	0	0	0	0	0	0	4	13	20	21	13	10	6	2	1	57.7	66.9	32	35.6	10	11.1	3	3.3	
1015	0	0	0	0	0	0	2	9	8	8	19	17	11	5	1	3	0	53.4	62.9	20	24.1	4	4.8	3	3.6	
1030	0	0	0	0	0	0	0	4	16	12	31	14	8	2	3	2	1	52.9	60.2	16	17.2	7	7.5	3	3.2	
1045	0	0	0	0	0	0	0	0	3	28	28	21	6	7	3	0	0	54.1	61.1	16	16.7	6	6.3	0	0	
1100	0	0	0	0	0	0	0	3	1	17	24	23	9	7	5	1	0	55.8	64.9	22	24.4	7	7.8	1	1.1	
1115	0	0	0	0	0	0	0	2	3	15	25	17	12	7	4	2	1	56.5	65.3	26	29.5	10	11.4	3	3.4	
1130	0	0	0	0	0	0	0	0	8	13	20	28	10	14	3	1	0	56.9	65.3	28	28.9	9	9.3	1	1	
1145	0	0	0	0	0	0	0	0	3	6	22	23	8	11	0	1	1	57	65.3	21	28	6	8	2	2.7	
1200	0	0	0	0	0	0	0	4	23	9	19	23	13	12	2	0	1	54.3	64.4	28	26.4	6	5.7	1	0.9	
1215	0	0	0	0	0	0	0	6	7	14	24	16	15	5	2	0	0	54	62.2	22	24.7	4	4.5	0	0	
1230	0	0	0	0	0	0	0	3	2	8	26	10	13	9	3	1	3	57.4	66.2	29	37.2	9	11.5	4	5.1	
1245	0	0	0	0	0	0	0	0	15	12	21	20	10	2	2	2	0	53.7	60.2	16	19	6	7.1	2	2.4	
1300	0	0	0	0	0	0	0	1	11	19	29	20	13	7	0	2	2	55.1	62.9	24	23.1	6	5.8	4	3.8	
1315	0	0	0	0	0	0	4	7	10	17	30	25	16	1	3	1	0	52.8	60.4	21	18.4	4	3.5	1	0.9	
1330	0	0	0	0	0	0	0	3	8	10	34	26	15	6	0	1	1	55	62.4	23	22.1	4	3.8	2	1.9	
1345	0	0	0	0	0	0	0	5	5	10	25	18	20	6	2	0	1	55.6	63.8	29	31.5	5	5.4	1	1.1	
1400	0	0	0	0	0	0	1	8	17	16	31	17	10	4	6	0	1	52.3	60.8	21	18.9	9	8.1	1	0.9	
1415	0	0	0	0	0	0	0	2	5	23	24	21	8	4	2	0	3	54.8	61.5	17	18.5	6	6.5	3	3.3	
1430	0	0	0	0	0	0	0	2	8	8	28	20	19	6	2	1	0	55.8	63.5	28	29.8	6	6.4	1	1.1	
1445	0	0	0	0	0	0	0	2	16	14	23	16	19	8	4	0	2	55.1	63.3	33	31.7	10	9.6	2	1.9	
1500	0	0	0	1	0	0	0	0	7	10	20	23	21	19	5	3	1	58.3	67.8	49	44.5	15	13.6	4	3.6	
1515	0	0	0	1	0	0	0	1	6	16	37	31	10	12	4	4	2	56.6	65.3	32	25.8	13	10.5	6	4.8	
1530	0	0	0	0	0	0	0	7	11	14	27	34	22	10	2	0	1	55.1	62.4	35	27.3	9	7	1	0.8	
1545	0	0	0	0	0	0	0	0	6	18	31	15	19	12	5	0	1	56.6	65.5	37	34.6	9	8.4	1	0.9	
1600	0	0	0	0	0	0	0	4	12	25	27	46	16	6	2	3	1	54.9	61.7	28	19.7	9	6.3	4	2.8	
1615	0	0	0	0	0	0	0	0	1	9	35	35	17	9	3	4	1	57.9	64.2	34	29.8	15	13.2	5	4.4	
1630	0	0	0	0	0	0	0	7	18	29	41	34	16	10	3	0	0	53.1	62.4	29	18.4	5	3.2	0	0	
1645	0	0	0	0	0	0	0	11	28	13	31	27	27	7	6	1	0	53.4	63.1	41	27.2	8	5.3	1	0.7	
1700	0	0	0	0	0	0	0	1	5	27	40	49	20	10	3	4	2	56.5	62.6	39	24.2	10	6.2	6	3.7	
1715	0	0	0	0	0	0	0	1	1	20	67	54	26	7	1	2	0	55.7	61.5	36	20.1	5	2.8	2	1.1	
1730	0	0	0	0	0	0	0	1	10	14	20	45	39	10	2	5	1	57.7	64	57	38.8	14	9.5	6	4.1	
1745	0	0	0	0	0	0	0	0	1	26	40	31	24	23	4	1	1	57.5	65.5	53	35.1	15	9.9	2	1.3	
1800	0	0	0	0	0	0	0	0	4	4	11	30	21	12	7	3	3	61	68	46	48.4	17	17.9	6	6.3	
1815	0	0	0	0	0	0	0	1	7	11	7	29	13	13	9	3	2	59.5	68.9	40	42.1	17	17.9	5	5.3	
1830	0	0	0	0	0	0	0	2	0	9	12	21	13	15	4	1	1	59.3	67.6	34	43.6	8	10.3	2	2.6	
1845	0	0	0	0	0	0	0	0	0	10	17	16	20	10	4	1	2	59.7	66	37	46.3	10	12.5	3	3.8	
1900	0	0	0	0	0	0	0	1	2	8	8	17	12	10	10	0	1	60.2	70.2	33	47.8	17	24.6	1	1.4	
1915	0	0	0	0	0	0	0	0	8	5	10	14	11	4	1	4	1	57.3	64.9	21	36.2	7	12.1	5	8.6	
1930	0	0	0	0	0	0	0	0	3	1	4	13	12	15	3	2	0	61.7	68.9	32	60.4	12	22.6	2	3.8	
1945	0	0	0	0	0	0	0	3	4	4	6	7	8	7	1	5	0	58.4	67.1	21	46.7	6	13.3	5	11.1	
2000	0	0	0	0	0	0	0	0	1	3	6	15	5	5	1	4	1	61.2	69.8	16	39	7	17.1	5	12.2	
2015	0	0	0	0	0	0	0	0	1	5	7	8	13	7	2	0	0	59.4	66	22	51.2	3	7	0	0	
2030	0	0	0	0	0	0	0	0	3	3	1	8	6	9	1	1	3	61.6	69.3	20	57.1	7	20	4	11.4	
2045	0	0	0	0	0	0	0	1	2	1	6	9	6	6	3	2	1	60.5	69.8	18	48.6	9	24.3	3	8.1	
2100	0	0	0	0	0	0	0	2	2	4	6	10	5	2	3	3	0	57.7	66.4	13	35.1	6	16.2	3	8.1	
2115	0	0	0	0	0	0	0	2	6	12	18	10	6	3	2	0	0	53.4	60.6	11	18.6	3	5.1	0	0	
2130	0	0	0	0	0	0	0	0	0	8	15	19	7	0	1	0	0	55.5	59.9	8	16	1	2	0	0	
2145	0	0	0	0	0	0	0	1	5	4	7	8	7	6	3	1	0	57.3	67.8	17	40.5	6	14.3	1	2.4	
2200	0	0	0	0	0	0	1	0	3	6	11	5	1	1	0	1	0	51.9	57.9	3	10.3	1	3.4	1	3.4	
2215	0	0	0	0	0	0	0	1	3	8	6	8	9	6	0	3	1	57.6	65.3	19	42.2	5	11.1	4	8.9	
2230	0	0	0	0	0	0	0	0	4	11	11	21	5	1	0	0	0	54.2	59.5	6	11.3	0	0	0	0	
2245	0	0	0	0	0	0	0	0	3	2	7	6	6	5	0	0	2	58.6	67.8	13	41.9	5	16.1	2	6.5	
2300	0	0	0	0	0	0	0	1	0	0	7	5	1	2	1	0	0	56.9	64.2	4	23.5	1	5.9	0	0	
2315	0	0	0	0	0	0	0	0	4	9	8	6	4	0	0	0	0	52.2	58.8	4	12.9	0	0	0	0	
2330	0	0	0	0	0	0	0	0	5	3	9	4	2	5	2	0	0	55.3	66.2	9	30	4	13.3	0	0	
2345	0	0	0	0	0	0	0	1	1	1	7	5	5	3	1	0	1	58.6	65.5	10	40	2	8	1	4	
07-19	**0**	**0**	**0**	**2**	**0**	**0**	**22**	**215**	**569**	**1086**	**1633**	**1426**	**837**	**418**	**149**	**69**	**41**	**54.5**	**62.9**	**1514**	**23.4**	**385**	**6**	**110**	**1.7**	
06-22	**0**	**0**	**0**	**2**	**0**	**0**	**23**	**243**	**643**	**1217**	**1836**	**1672**	**1039**	**539**	**205**	**100**	**58**	**55**	**63.5**	**1941**	**25.6**	**525**	**6.9**	**158**	**2.1**	
06-00	**0**	**0**	**0**	**2**	**0**	**0**	**24**	**246**	**666**	**1257**	**1902**	**1732**	**1072**	**562**	**209**	**104**	**62**	**55**	**63.5**	**2009**	**25.6**	**543**	**6.9**	**166**	**2.1**	
00-00	**0**	**0**	**0**	**2**	**0**	**0**	**24**	**275**	**721**	**1356**	**2090**	**1908**	**1166**	**637**	**247**	**116**	**78**	**55.1**	**63.8**	**2244**	**26**	**627**	**7.3**	**194**	**2.3**	

14 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
0000	0	0	0	0	0	0	0	0	2	3	8	3	0	1	0	0	0	52.6	55.9	1	5.9	1	5.9	0	0	
0015	0	0	0	0	0	0	0	1	3	3	5	4	2	1	0	0	0	52.2	58.6	3	15.8	1	5.3	0	0	
0030	0	0	0	0	0	0	0	0	1	2	5	4	4	3	0	0	0	56.9	61.5	7	36.8	1	5.3	0	0	
0045	0	0	0	0	0	0	0	0	1	2	2	3	2	0	0	0	0	53.5	-	2	20	0	0	0	0	
0100	0	0	0	0	0	0	0	0	0	5	4	7	0	1	0	1	0	55.2	57.7	2	11.1	1	5.6	1	5.6	
0115	0	0	0	0	0	0	0	0	0	3	5	1	0	0	0	0	1	54.5	-	1	10	1	10	1	10	
0130	0	0	0	0	0	0	0	0	1	2	6	4	1	0	0	1	0	55.2	58.2	2	13.3	1	6.7	1	6.7	
0145	0	0	0	0	0	0	0	1	0	4	4	7	5	1	1	0	0	56.3	63.5	7	30.4	1	4.3	0	0	
0200	0	0	0	0	0	0	0	0	1	6	3	7	2	0	0	0	1	55.3	58.8	3	15	1	5	1	5	
0215	0	0	0	0	0	0	0	0	0	0	11	5	2	2	0	0	1	57.3	64	5	23.8	2	9.5	1	4.8	
0230	0	0	0	0	0	0	0	0	0	2	5	8	1	0	1	0	0	55.6	56.8	2	11.8	1	5.9	0	0	
0245	0	0	0	0	0	0	0	0	2	1	4	4	3	3	1	0	0	57.5	66.2	7	38.9	3	16.7	0	0	
0300	0	0	0	0	0	0	0	0	1	3	3	2	2	2	0	1	0	56.6	66.9	5	35.7	1	7.1	1	7.1	
0315	0	0	0	0	0	0	0	2	2	7	8	9	2	1	1	0	2	54.7	61.1	6	17.6	3	8.8	2	5.9	
0330	0	0	0	0	0	0	0	0	0	3	9	10	3	2	1	1	1	58	67.6	8	26.7	4	13.3	2	6.7	
0345	0	0	0	0	0	0	0	0	1	3	13	5	3	3	0	0	1	55.5	64.2	7	24.1	1	3.4	1	3.4	
0400	0	0	0	0	0	0	0	0	2	3	4	1	2	4	0	1	0	56.6	65.5	7	41.2	2	11.8	1	5.9	
0415	0	0	0	0	0	0	0	1	0	2	5	3	1	2	0	2	0	57.4	65.5	5	31.3	2	12.5	2	12.5	
0430	0	0	0	0	0	0	0	2	4	3	10	6	6	1	1	0	2	55.5	62.6	10	28.6	4	11.4	2	5.7	
0445	0	0	0	0	0	0	0	0	1	2	13	11	8	6	2	1	2	59.8	68.7	19	41.3	10	21.7	3	6.5	
0500	0	0	0	0	0	0	0	0	1	3	12	9	12	10	3	2	2	61.2	69.3	29	53.7	12	22.2	4	7.4	
0515	0	0	0	0	0	0	0	1	1	4	23	29	15	13	5	1	2	59.3	66.7	36	38.3	13	13.8	3	3.2	
0530	0	0	0	0	0	0	0	0	1	20	41	35	29	9	6	2	2	57.4	63.3	48	33.1	14	9.7	4	2.8	
0545	0	0	0	0	0	0	0	2	1	20	20	26	20	16	7	1	1	57.9	67.6	45	39.5	15	13.2	2	1.8	
0600	0	0	0	0	0	0	0	0	3	12	31	13	18	14	5	2	2	58.4	67.8	41	41	14	14	4	4	
0615	0	0	0	0	0	0	0	1	0	3	25	21	36	10	15	6	2	61.8	71.6	69	58	26	21.8	8	6.7	
0630	0	0	0	0	0	0	0	11	7	24	37	43	30	13	5	4	2	56	64	54	30.7	13	7.4	6	3.4	
0645	0	0	0	0	0	0	1	24	26	31	43	42	28	8	8	0	2	52.4	61.5	46	21.6	12	5.6	2	0.9	
0700	0	0	1	0	0	0	0	5	5	26	65	82	27	11	2	0	1	55.3	60.6	41	18.2	6	2.7	1	0.4	
0715	0	0	0	0	0	0	0	6	25	59	45	55	39	14	2	0	0	53.8	62	55	22.4	5	2	0	0	
0730	0	0	0	0	0	0	0	4	14	45	90	59	21	7	6	0	1	53.9	59.7	35	14.2	8	3.2	1	0.4	
0745	0	0	0	0	0	0	0	0	25	74	96	62	24	7	5	2	1	53.3	59.3	39	13.2	13	4.4	3	1	
0800	0	0	0	0	0	14	12	18	50	42	74	42	28	4	2	0	2	49.3	59.1	36	12.5	5	1.7	2	0.7	
0815	0	0	0	0	0	10	16	32	42	33	31	54	33	4	9	3	0	49.8	60.4	49	18.4	13	4.9	3	1.1	
0830	0	0	0	0	0	0	0	24	22	43	70	53	27	8	6	3	0	52.8	60.4	44	17.2	13	5.1	3	1.2	
0845	0	0	0	0	0	1	2	10	19	32	48	46	34	8	7	1	0	54.1	62.6	50	24	12	5.8	1	0.5	
0900	0	0	0	0	2	3	1	9	13	31	43	33	17	12	5	1	1	53	62	36	21.1	8	4.7	2	1.2	
0915	0	0	0	0	1	1	2	8	18	25	44	22	21	13	0	1	0	52.8	62.2	35	22.4	8	5.1	1	0.6	
0930	0	0	0	0	0	0	0	1	5	13	48	32	16	11	0	0	2	55.8	62.4	29	22.7	6	4.7	2	1.6	
0945	0	0	0	0	0	0	0	6	8	14	46	33	11	4	1	0	0	53.7	59.1	16	13	5	4.1	0	0	
1000	0	0	0	0	0	1	2	7	11	27	23	16	13	4	1	0	1	51.6	60.2	19	17.9	3	2.8	1	0.9	
1015	0	0	0	0	0	0	0	2	7	15	20	20	16	10	1	0	0	55.4	62.6	27	29.7	5	5.5	0	0	
1030	0	0	0	0	0	0	0	0	10	14	24	22	9	7	5	2	2	56.1	66	25	26.3	10	10.5	4	4.2	
1045	0	0	0	0	0	0	0	3	8	8	22	26	13	6	5	1	2	56.4	64.2	27	28.7	11	11.7	3	3.2	
1100	0	0	0	0	0	0	0	2	7	11	14	19	10	5	6	4	2	57.7	66.9	27	33.8	12	15	6	7.5	
1115	0	0	0	0	0	0	0	6	7	16	26	28	13	3	3	0	0	53.7	61.1	19	18.6	5	4.9	0	0	
1130	0	0	0	0	0	0	0	3	9	22	21	17	10	9	2	0	0	53.5	62.9	21	22.6	5	5.4	0	0	
1145	0	0	0	0	0	0	0	7	15	13	26	21	15	4	2	1	0	53	62.6	22	21.2	4	3.8	1	1	
1200	0	0	0	0	0	0	1	5	12	17	18	17	11	5	2	3	1	53.8	63.1	22	23.9	7	7.6	4	4.3	
1215	0	0	0	0	0	0	0	2	2	19	25	21	15	4	1	1	1	55.1	62.4	22	24.2	3	3.3	2	2.2	
1230	0	0	0	0	0	0	0	4	12	18	23	33	13	5	1	0	1	54	61.5	20	18.2	4	3.6	1	0.9	
1245	0	0	0	0	0	4	0	0	4	11	27	11	20	9	2	0	3	56.4	64.6	34	37.4	10	11	3	3.3	
1300	0	0	0	0	0	0	0	2	7	30	18	20	19	3	1	0	0	53.5	60.8	23	23	2	2	0	0	
1315	0	0	0	0	0	0	0	5	12	36	26	25	13	7	3	1	1	53.5	62	25	19.4	9	7	2	1.6	
1330	0	0	0	0	0	0	0	2	2	24	36	38	13	5	1	3	0	55.2	60.2	22	17.7	4	3.2	3	2.4	
1345	0	0	0	0	0	0	0	5	8	15	22	35	13	9	5	1	1	55.5	64	29	25.4	8	7	2	1.8	
1400	0	0	0	0	0	0	0	2	10	13	26	17	11	10	2	3	1	55.9	65.1	27	28.4	10	10.5	4	4.2	
1415	0	0	0	0	0	0	0	0	2	21	29	25	10	8	1	0	0	54.9	61.5	19	19.8	3	3.1	0	0	
1430	0	0	0	0	0	0	0	0	6	17	23	33	19	9	2	1	2	56.6	63.5	33	29.5	6	5.4	3	2.7	
1445	0	0	0	0	0	0	2	13	8	15	27	39	17	6	2	2	2	54.1	62.9	29	21.8	7	5.3	4	3	
1500	0	0	0	0	0	0	0	1	30	7	23	27	11	3	2	1	0	52.7	60.6	17	16.2	4	3.8	1	1	
1515	0	0	0	0	0	0	0	6	11	5	19	33	11	12	1	1	2	55.6	65.5	27	26.7	10	9.9	3	3	
1530	0	0	0	0	0	0	0	6	2	13	23	31	18	8	1	1	2	56	63.8	30	28.6	6	5.7	3	2.9	
1545	0	0	0	0	0	0	0	1	10	21	24	31	18	7	4	2	0	55.4	62.6	31	26.3	8	6.8	2	1.7	
1600	0	0	0	0	0	0	0	6	10	16	19	11	19	7	5	1	0	55	64	32	34	7	7.4	1	1.1	
1615	0	0	0	0	0	0	0	1	5	16	26	37	24	13	6	1	0	57.2	64.9	44	34.1	11	8.5	1	0.8	
1630	0	0	0	0	0	0	0	6	12	34	29	23	19	12	2	1	0	53.9	63.8	34	24.6	9	6.5	1	0.7	
1645	0	0	0	0	0	1	9	7	20	17	38	38	31	12	4	1	2	53.9	62.4	50	27.8	10	5.6	3	1.7	
1700	0	0	0	0	0	0	0	0	4	20	35	38	32	14	3	1	0	56.9	64	50	34	9	6.1	1	0.7	
1715	0	0	0	0	0	0	0	9	11	33	31	32	21	8	9	0	0	54.2	63.1	38	24.7	9	5.8	0	0	
1730	0	0	0	0	0	0	0	0	13	26	34	45	20	9	2	2	0	55.1	62.9	33	21.9	8	5.3	2	1.3	
1745	0	0	0	0	0	0	0	4	2	19	35	39	16	13	2	2	0	55.9	62.4	33	25	8	6.1	2	1.5	
1800	0	0	0	0	0	0	0	6	4	28	35	17	15	10	9	7	4	56.8	69.3	45	33.3	23	17	11	8.1	
1815	0	0	0	0	0	0	0	6	11	19	31	17	18	10	5	0	3	55.4	64.6	36	30	10	8.3	3	2.5	
1830	0	0	0	0	0	0	0	2	0	7	17	19	18	13	3	4	3	60.3	67.8	41	47.7	13	15.1	7	8.1	
1845	0	0	0	0	0	0	0	2	4	1	19	19	17	10	5	1	1	58.5	66.7	34	43	10	12.7	2	2.5	
1900	0	0	0	0	0	0	0	1	0	7	9	16	20	5	9	0	2	60.5	70.7	36	52.2	12	17.4	2	2.9	
1915	0	0	0	1	0	0	0	0	0	6	7	22	11	10	2	4	1	59.9	68.7	28	43.8	14	21.9	5	7.8	
1930	0	0	0	0	0	0	0	2	3	6	25	19	9	5	2	2	3	57.3	66	21	27.6	8	10.5	5	6.6	
1945	0	0	0	0	0	0	0	0	0	5	11	10	12	12	1	2	3	61.7	68	30	53.6	9	16.1	5	8.9	
2000	0	0	0	0	0	0	0	2	5	8	13	9	2	2	4	2	3	56.8	70.5	13	26	9	18	5	10	
2015	0	0	0	0	0	0	0	4	4	1	6	6	7	5	4	2	1	58.3	70.2	19	47.5	8	20	3	7.5	
2030	0	0	0	0	0	0	0	2	4	11	5	9	12	2	5	3	4	58.7	71.1	26	45.6	12	21.1	7	12.3	
2045	0	0	0	0	0	0	0	0	1	2	7	11	11	1	3	2	3	62.1	70.9	20	48.8	8	19.5	5	12.2	
2100	0	0	0	0	0	0	0	1	3	3	5	11	6	5	5	0	1	59.6	69.3	17	42.5	7	17.5	1	2.5	
2115	0	0	0	0	0	0	0	0	2	5	12	24	10	4	2	0	1	57.6	63.5	17	28.3	4	6.7	1	1.7	
2130	0	0	0	0	0	0	1	3	2	8	18	10	6	6	1	2	0	54.9	64.6	15	26.3	4	7	2	3.5	
2145	0	0	0	0	0	0	0	1	3	3	11	11	5	2	1	1	2	57.1	64.4	11	27.5	6	15	3	7.5	
2200	0	0	0	0	0	0	0	2	1	7	5	15	2	3	0	3	0	56	61.5	8	21.1	4	10.5	3	7.9	
2215	0	0	0	0	0	0	0	0	3	4	7	9	9	9	0	0	1	58.3	67.6	19	45.2	6	14.3	1	2.4	
2230	0	0	0	0	0	0	0	0	2	4	10	11	9	5	1	0	0	57.1	64.4	15	35.7	4	9.5	0	0	
2245	0	0	0	0	0	0	0	1	3	3	7	6	4	5	1	1	1	57.9	67.3	12	37.5	4	12.5	2	6.3	
2300	0	0	0	0	0	0	1	1	3	4	7	5	4	0	5	0	1	56.4	71.6	10	32.3	6	19.4	1	3.2	
2315	0	0	0	0	0	0	0	0	2	1	7	6	7	3	0	0	0	56.8	64	10	38.5	1	3.8	0	0	
2330	0	0	0	0	0	0	0	5	2	4	12	3	4	2	1	1	0	53.3	62.2	8	23.5	2	5.9	1	2.9	
2345	0	0	0	0	0	0	0	1	1	7	5	4	3	1	1	0	1	55.2	61.5	6	25	3	12.5	1	4.2	
07-19	**0**	**0**	**1**	**0**	**3**	**35**	**47**	**256**	**554**	**1081**	**1614**	**1513**	**879**	**392**	**156**	**60**	**45**	**54.3**	**62.4**	**1532**	**23.1**	**385**	**5.8**	**105**	**1.6**	
06-22	**0**	**0**	**1**	**1**	**3**	**35**	**49**	**308**	**617**	**1216**	**1879**	**1790**	**1102**	**496**	**228**	**92**	**77**	**54.8**	**63.1**	**1995**	**25.3**	**551**	**7**	**169**	**2.1**	
06-00	**0**	**0**	**1**	**1**	**3**	**35**	**50**	**318**	**634**	**1250**	**1939**	**1849**	**1144**	**524**	**237**	**97**	**81**	**54.8**	**63.3**	**2083**	**25.5**	**581**	**7.1**	**178**	**2.2**	
00-00	**0**	**0**	**1**	**1**	**3**	**35**	**50**	**328**	**660**	**1356**	**2162**	**2052**	**1269**	**605**	**266**	**111**	**99**	**55.1**	**63.5**	**2350**	**26.1**	**676**	**7.5**	**210**	**2.3**	

15 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
0000	0	0	0	0	0	0	0	0	0	4	8	9	2	1	0	0	0	55.3	59.1	3	12.5	0	0	0	0	
0015	0	0	0	0	0	0	0	0	1	2	4	3	2	3	2	0	0	57.7	67.1	7	41.2	2	11.8	0	0	
0030	0	0	0	0	0	0	0	3	2	0	6	2	3	3	0	0	1	55.3	66.4	7	35	3	15	1	5	
0045	0	0	0	0	0	0	0	0	3	4	9	2	2	2	0	0	0	53.1	62.6	4	18.2	1	4.5	0	0	
0100	0	0	0	0	0	0	0	0	2	0	2	5	1	0	0	1	0	55.5	55.9	2	18.2	1	9.1	1	9.1	
0115	0	0	0	0	0	0	0	0	0	2	6	1	0	1	0	0	0	52.9	-	1	10	0	0	0	0	
0130	0	0	0	0	0	0	0	0	0	0	3	10	0	0	0	0	0	56	57.3	0	0	0	0	0	0	
0145	0	0	0	0	0	0	0	0	0	2	12	3	1	1	1	0	0	54.4	57.3	3	15	1	5	0	0	
0200	0	0	0	0	0	0	0	0	0	1	7	5	0	1	0	0	1	57.7	56.6	2	13.3	1	6.7	1	6.7	
0215	0	0	0	0	0	0	0	1	2	1	5	5	1	1	0	0	1	55.4	59.3	3	17.6	1	5.9	1	5.9	
0230	0	0	0	0	0	0	0	0	1	5	6	2	4	0	2	0	0	55.6	61.5	6	30	2	10	0	0	
0245	0	0	0	0	0	0	0	0	0	1	3	4	4	4	1	1	0	61.2	67.8	10	55.6	4	22.2	1	5.6	
0300	0	0	0	0	0	0	0	1	5	3	4	2	2	0	0	0	0	49.7	55.5	2	11.8	0	0	0	0	
0315	0	0	0	0	0	0	0	0	2	3	5	6	1	1	0	0	1	56.7	57.3	3	15.8	1	5.3	1	5.3	
0330	0	0	0	0	0	0	0	2	3	4	13	5	2	3	0	1	0	54.2	61.1	6	18.2	4	12.1	1	3	
0345	0	0	0	0	0	0	0	0	4	4	6	8	2	4	1	0	0	54.6	65.3	7	24.1	2	6.9	0	0	
0400	0	0	0	0	0	0	0	1	5	3	5	3	1	1	0	0	1	52.6	59.5	3	15	2	10	1	5	
0415	0	0	0	0	0	0	0	1	1	3	7	4	3	0	0	0	0	52.9	57.5	3	15.8	0	0	0	0	
0430	0	0	0	0	0	0	0	0	2	4	10	5	9	7	4	1	1	59.7	69.3	22	51.2	8	18.6	2	4.7	
0445	0	0	0	0	0	0	0	0	0	3	3	14	3	1	7	6	1	1	58.8	70.2	16	41	8	20.5	2	5.1
0500	0	0	0	0	0	0	0	0	0	3	3	8	10	8	13	7	0	1	60.7	69.1	29	54.7	11	20.8	1	1.9
0515	0	0	0	0	0	0	0	0	0	5	10	26	24	13	6	3	1	1	56.4	63.3	24	27	8	9	2	2.2
0530	0	0	0	0	0	0	0	0	1	16	23	32	33	18	8	3	2	0	54.7	62.6	31	22.8	7	5.1	2	1.5
0545	0	0	0	0	0	0	0	0	0	0	14	23	28	24	21	11	2	3	60.2	67.8	61	48.4	19	15.1	5	4
0600	0	0	0	0	0	0	0	0	0	1	8	15	20	15	13	12	4	1	61.1	71.1	45	50.6	21	23.6	5	5.6
0615	0	0	0	0	0	0	0	0	0	4	11	27	34	19	11	7	1	2	58.3	66.7	40	34.5	15	12.9	3	2.6
0630	0	0	0	0	0	0	1	3	8	29	53	14	29	15	13	3	3	56.7	67.8	63	36.8	26	15.2	6	3.5	
0645	0	0	0	0	0	0	0	9	2	22	51	72	26	12	4	2	2	56	62.2	46	22.8	10	5	4	2	
0700	0	1	0	0	0	0	0	0	16	21	62	48	23	15	4	1	1	55.4	62.2	44	22.9	12	6.3	2	1	
0715	0	0	0	0	0	0	0	1	34	47	73	69	26	14	1	0	0	53.5	59.9	41	15.5	6	2.3	0	0	
0730	0	0	0	0	0	0	0	0	23	52	84	47	26	13	3	2	0	53.6	60.6	44	17.6	6	2.4	2	0.8	
0745	0	0	0	0	0	4	8	16	27	52	80	44	23	9	3	0	0	50.9	59.1	35	13.2	3	1.1	0	0	
0800	0	0	0	0	0	0	0	15	17	52	75	52	27	2	1	2	1	52.6	59.5	33	13.5	4	1.6	3	1.2	
0815	0	0	0	0	0	4	10	9	51	92	52	29	14	7	2	1	0	49	56.6	24	8.9	4	1.5	1	0.4	
0830	0	0	0	0	0	0	0	19	16	45	59	43	34	16	5	1	2	53.8	63.8	58	24.2	12	5	3	1.3	
0845	0	0	0	0	0	0	0	3	23	23	38	58	29	17	3	2	0	55.5	63.3	51	26	9	4.6	2	1	
0900	0	0	0	0	0	0	0	0	15	23	51	45	16	13	1	3	0	55	62.2	33	19.8	10	6	3	1.8	
0915	0	0	0	0	0	0	0	3	12	26	36	35	9	5	4	2	0	53.7	59.1	20	15.2	7	5.3	2	1.5	
0930	0	0	0	0	0	0	0	2	7	12	38	26	15	7	4	1	0	55.6	63.1	27	24.1	6	5.4	1	0.9	
0945	0	0	0	0	0	0	0	13	14	10	23	26	16	7	2	2	1	54	62.4	28	24.6	9	7.9	3	2.6	
1000	0	0	0	0	4	0	0	1	9	19	31	13	15	3	2	0	1	52.8	60.8	21	21.4	4	4.1	1	1	
1015	0	0	0	0	2	1	1	1	11	11	22	25	8	7	0	1	0	52.9	61.1	16	17.8	4	4.4	1	1.1	
1030	0	0	0	0	0	0	0	3	9	26	44	15	1	2	1	0	0	51.3	55.5	4	4	2	2	0	0	
1045	0	0	0	0	0	0	0	2	15	24	34	22	8	5	1	0	0	52.5	59.1	14	12.6	1	0.9	0	0	
1100	0	0	0	0	0	0	6	8	11	21	13	11	10	4	2	1	0	50.4	61.1	17	19.5	4	4.6	1	1.1	
1115	0	0	0	0	0	0	0	0	4	16	26	32	12	5	2	0	0	55.1	60.4	19	19.6	3	3.1	0	0	
1130	0	0	1	0	0	0	0	8	11	31	32	13	13	11	0	0	0	51.9	61.7	24	20	1	0.8	0	0	
1145	0	0	0	0	0	0	0	3	6	15	30	26	12	3	1	0	2	54.6	60.4	18	18.4	5	5.1	2	2	
1200	0	0	0	0	0	0	0	4	9	24	18	11	17	4	2	0	0	53.1	61.5	23	25.8	4	4.5	0	0	
1215	0	0	0	0	0	0	0	1	7	14	32	18	10	1	3	1	1	54.6	61.3	16	18.2	5	5.7	2	2.3	
1230	0	0	0	0	0	0	0	1	2	18	32	12	8	8	1	1	0	54.8	62.2	18	21.7	7	8.4	1	1.2	
1245	0	0	0	0	0	0	0	1	5	11	30	25	16	7	2	1	0	55.9	63.1	26	26.5	6	6.1	1	1	
1300	0	0	0	0	0	0	0	0	4	23	18	27	14	7	3	0	2	56.1	63.8	26	26.5	8	8.2	2	2	
1315	0	0	0	0	0	0	0	5	7	16	22	32	16	10	3	2	1	55.7	62.6	32	28.1	7	6.1	3	2.6	
1330	0	0	0	0	0	0	0	4	10	31	33	30	9	2	0	1	0	52.5	59.1	12	10	1	0.8	1	0.8	
1345	0	0	0	0	0	0	0	8	3	12	33	25	13	1	6	1	0	54.5	62.9	21	20.6	7	6.9	1	1	
1400	0	0	0	0	0	1	0	0	8	20	34	21	9	4	1	6	0	54.8	63.1	20	19.2	7	6.7	6	5.8	
1415	0	0	0	0	0	0	0	0	1	19	33	26	13	4	3	0	4	56.8	63.1	24	23.3	7	6.8	4	3.9	
1430	0	0	0	0	0	0	0	9	11	13	26	36	12	9	0	1	0	53.7	62.6	22	18.8	1	0.9	1	0.9	
1445	0	0	0	0	0	0	0	1	8	26	31	18	17	6	5	0	0	54.5	62.2	28	25	7	6.3	0	0	
1500	0	0	0	0	0	1	4	9	15	37	19	29	7	10	2	2	0	51.8	60.4	21	15.6	7	5.2	2	1.5	
1515	0	0	0	0	0	0	0	4	12	24	34	17	10	7	4	0	2	53.7	62.9	23	20.2	10	8.8	2	1.8	
1530	0	0	0	0	0	1	0	1	25	21	32	37	19	4	3	1	1	53.6	61.1	28	19.3	8	5.5	2	1.4	
1545	0	0	0	0	0	0	0	2	10	25	20	33	11	13	1	3	2	55.4	65.5	30	25	10	8.3	5	4.2	
1600	0	0	0	0	0	0	0	0	1	3	13	29	34	15	12	3	0	0	56.5	64.6	30	27.3	4	3.6	0	0
1615	0	0	0	0	0	4	6	9	4	11	29	35	30	11	7	0	0	54.7	63.5	48	32.9	11	7.5	0	0	
1630	0	0	0	0	0	0	0	0	8	11	36	32	20	12	6	2	0	56.9	64.9	40	31.5	9	7.1	2	1.6	
1645	0	0	0	0	0	0	0	6	13	27	33	36	27	6	1	1	2	54.5	62	37	24.3	5	3.3	3	2	
1700	0	0	0	0	0	0	0	3	3	19	18	39	29	11	5	3	3	58.2	65.3	51	38.3	13	9.8	6	4.5	
1715	0	0	0	0	0	0	0	0	6	12	38	42	28	10	5	2	2	57.8	63.5	47	32.4	9	6.2	4	2.8	
1730	0	0	0	0	0	0	0	1	9	27	37	26	23	22	6	1	1	56.7	65.8	53	34.6	16	10.5	2	1.3	
1745	0	0	0	0	0	0	0	3	16	12	31	40	30	11	1	1	2	56.2	63.5	45	30.6	8	5.4	3	2	
1800	0	0	0	0	0	0	0	1	2	22	31	22	13	13	5	5	5	58.1	68.5	41	34.5	21	17.6	10	8.4	
1815	0	0	0	0	0	0	0	2	4	5	23	31	27	17	3	0	2	58.8	66	49	43	12	10.5	2	1.8	
1830	0	0	0	0	0	1	0	2	8	11	27	21	23	14	10	1	0	57.4	66.4	48	40.7	16	13.6	1	0.8	
1845	0	0	0	0	0	0	0	0	3	6	12	11	18	15	3	3	2	60.6	68	41	56.2	12	16.4	5	6.8	
1900	0	0	0	0	0	0	0	0	3	8	18	8	15	5	8	3	0	59	70	31	45.6	11	16.2	3	4.4	
1915	0	0	0	0	0	0	0	1	2	3	18	18	5	6	6	3	3	59.8	72.3	23	35.4	13	20	6	9.2	
1930	0	0	0	0	0	0	0	0	3	6	11	7	6	9	4	2	1	59.4	68.9	22	44.9	11	22.4	3	6.1	
1945	0	0	0	0	0	0	0	1	1	4	12	14	9	3	1	2	0	57.6	63.1	15	31.9	6	12.8	2	4.3	
2000	0	0	0	0	0	1	1	4	2	4	6	14	8	8	4	1	1	57.8	66.9	22	40.7	8	14.8	2	3.7	
2015	0	0	0	0	0	0	0	1	0	1	5	10	5	6	5	0	2	62.1	70.7	18	51.4	9	25.7	2	5.7	
2030	0	0	0	0	0	0	0	0	2	4	13	7	15	8	2	0	1	59.3	66	26	50	4	7.7	1	1.9	
2045	0	0	0	0	0	0	0	0	7	10	7	10	8	4	1	0	1	55.2	62.9	14	29.2	3	6.3	1	2.1	
2100	0	0	0	0	0	0	0	3	2	4	18	17	7	1	0	0	0	53.9	59.9	8	15.4	0	0	0	0	
2115	0	0	0	0	0	0	0	6	4	14	19	7	12	4	4	0	1	54.6	63.1	21	29.6	6	8.5	1	1.4	
2130	0	0	0	0	0	0	0	4	2	13	9	12	4	3	1	2	0	54.3	64	10	20	6	12	2	4	
2145	0	0	0	0	0	0	0	1	3	5	9	9	4	2	1	0	0	54.8	62.9	7	20.6	1	2.9	0	0	
2200	0	0	0	0	0	0	0	1	3	3	11	9	1	4	1	1	0	55.5	65.8	7	20.6	4	11.8	1	2.9	
2215	0	0	0	0	0	0	0	1	3	11	7	12	6	3	1	0	1	55.5	64	11	24.4	3	6.7	1	2.2	
2230	0	0	0	0	0	0	0	2	1	5	12	12	4	3	1	0	0	55.4	62.9	8	20	2	5	0	0	
2245	0	0	0	0	0	0	0	0	7	9	5	5	2	1	2	0	1	53.4	59.9	6	18.8	3	9.4	1	3.1	
2300	0	0	0	0	0	0	0	0	1	6	3	9	1	2	1	0	0	55.2	62.6	4	17.4	1	4.3	0	0	
2315	0	0	0	0	0	3	1	3	5	3	3	2	0	3	1	0	0	47.3	57.3	4	16.7	2	8.3	0	0	
2330	0	0	0	0	0	0	0	1	3	5	7	8	5	0	2	0	0	54.7	62.4	7	22.6	2	6.5	0	0	
2345	0	0	0	0	0	0	0	2	5	5	4	5	5	1	0	2	0	53.7	64	8	27.6	2	6.9	2	6.9	
07-19	**0**	**1**	**1**	**0**	**6**	**17**	**35**	**185**	**547**	**1128**	**1694**	**1445**	**821**	**416**	**136**	**58**	**40**	**54.4**	**62.4**	**1471**	**22.5**	**350**	**5.4**	**98**	**1.5**	
06-22	**0**	**1**	**1**	**0**	**6**	**18**	**37**	**218**	**593**	**1274**	**1985**	**1718**	**1008**	**526**	**209**	**81**	**58**	**54.8**	**63.1**	**1882**	**24.3**	**500**	**6.5**	**139**	**1.8**	
06-00	**0**	**1**	**1**	**0**	**6**	**21**	**38**	**228**	**621**	**1321**	**2037**	**1780**	**1032**	**543**	**218**	**84**	**60**	**54.8**	**63.1**	**1937**	**24.2**	**519**	**6.5**	**144**	**1.8**	
00-00	**0**	**1**	**1**	**0**	**6**	**21**	**38**	**238**	**681**	**1420**	**2261**	**1962**	**1136**	**631**	**259**	**94**	**72**	**55**	**63.5**	**2192**	**24.8**	**605**	**6.9**	**166**	**1.9**	

16 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
0000	0	0	0	0	0	0	0	1	0	5	7	4	0	2	0	1	0	54.1	59.3	3	15	1	5	1	5	
0015	0	0	0	0	0	0	0	2	2	1	7	1	2	1	0	0	1	55.1	64.4	4	23.5	1	5.9	1	5.9	
0030	0	0	0	0	0	0	0	1	4	1	4	2	2	2	0	0	1	54.7	62.4	5	29.4	1	5.9	1	5.9	
0045	0	0	0	0	0	0	0	2	2	1	7	4	2	0	0	1	1	54.9	61.1	4	20	2	10	2	10	
0100	0	0	0	0	0	0	0	0	2	2	7	2	0	1	0	0	1	54.1	55.7	2	13.3	1	6.7	1	6.7	
0115	0	0	0	0	0	0	0	0	1	3	7	1	1	0	0	0	0	51.5	54.6	1	7.7	0	0	0	0	
0130	0	0	0	0	0	0	0	0	1	0	6	5	0	1	0	0	0	55.1	59.3	1	7.7	1	7.7	0	0	
0145	0	0	0	0	0	0	0	0	0	3	6	6	2	0	0	0	0	54.4	55.9	2	11.8	0	0	0	0	
0200	0	0	0	0	0	0	0	1	2	6	4	3	3	0	0	0	1	54	61.1	4	20	1	5	1	5	
0215	0	0	0	0	0	0	0	0	0	2	13	5	1	0	3	0	1	57	64	5	20	4	16	1	4	
0230	0	0	0	0	0	0	0	2	0	2	3	5	2	0	1	0	1	55.6	62	4	25	2	12.5	1	6.3	
0245	0	0	0	0	0	0	0	0	0	1	5	6	1	4	0	0	0	58	65.8	5	29.4	1	5.9	0	0	
0300	0	0	0	0	0	0	0	0	0	0	8	1	0	1	0	0	0	54.6	-	1	10	1	10	0	0	
0315	0	0	0	0	0	0	0	0	0	4	3	1	1	3	1	1	2	62.1	75.6	8	50	7	43.8	3	18.8	
0330	0	0	0	0	0	0	0	0	2	4	7	5	1	2	0	0	2	56.2	66.4	5	21.7	3	13	2	8.7	
0345	0	0	0	0	0	0	0	0	2	12	11	6	1	3	1	0	1	54.4	56.8	6	16.2	2	5.4	1	2.7	
0400	0	0	0	0	0	0	0	0	1	7	14	1	1	1	1	0	0	52.7	54.4	3	11.5	1	3.8	0	0	
0415	0	0	0	0	0	0	0	0	0	6	2	7	2	1	0	0	0	54.8	59.7	3	16.7	1	5.6	0	0	
0430	0	0	0	0	0	0	0	0	1	3	17	11	4	2	1	1	0	56	62.2	8	20	2	5	1	2.5	
0445	0	0	0	0	0	0	0	1	1	10	10	8	6	5	3	2	2	58.2	68.5	18	37.5	8	16.7	4	8.3	
0500	0	0	0	0	0	0	0	3	1	8	9	9	5	3	1	3	0	56	65.3	12	28.6	4	9.5	3	7.1	
0515	0	0	0	0	0	0	0	5	3	7	22	26	17	7	6	3	5	58.8	69.3	38	37.6	18	17.8	8	7.9	
0530	0	0	0	0	0	0	0	0	3	16	34	49	24	12	4	3	2	57.6	64.2	45	30.6	12	8.2	5	3.4	
0545	0	0	0	0	0	0	0	0	3	7	17	33	30	9	8	6	3	60.5	68	56	48.3	18	15.5	9	7.8	
0600	0	0	0	0	0	0	0	1	8	8	16	15	15	12	4	3	3	58.7	68.5	37	43.5	16	18.8	6	7.1	
0615	0	0	0	0	0	0	0	0	0	11	32	32	18	4	4	3	0	57.1	63.1	29	27.9	7	6.7	3	2.9	
0630	0	0	0	0	0	0	0	3	5	19	42	37	24	19	8	4	2	57.9	66.2	57	35	20	12.3	6	3.7	
0645	0	0	0	0	0	0	0	0	11	19	56	42	43	17	4	5	1	57.1	64.2	70	35.4	14	7.1	6	3	
0700	0	0	0	0	0	0	0	0	5	27	67	45	32	14	1	3	0	56.1	62.9	50	25.8	10	5.2	3	1.5	
0715	0	0	0	0	0	0	3	18	25	34	65	39	27	11	3	5	1	52.9	61.5	47	20.3	10	4.3	6	2.6	
0730	0	0	0	0	0	1	4	18	14	43	87	62	21	8	3	0	1	52.6	59.1	33	12.6	5	1.9	1	0.4	
0745	0	0	0	0	0	0	0	0	12	53	74	46	18	13	3	0	2	54.1	60.4	36	16.3	8	3.6	2	0.9	
0800	0	0	0	0	0	0	2	15	16	54	65	43	36	6	3	2	1	52.8	60.8	48	19.8	6	2.5	3	1.2	
0815	0	0	0	1	0	0	1	12	17	69	61	53	11	12	7	3	0	52.5	59.5	33	13.4	16	6.5	3	1.2	
0830	0	0	0	0	3	4	9	15	21	60	35	44	19	8	2	1	0	50.5	59.3	30	13.6	5	2.3	1	0.5	
0845	0	0	0	0	0	2	0	1	17	33	48	38	18	9	3	2	2	54.3	61.3	34	19.7	9	5.2	4	2.3	
0900	0	0	0	0	0	1	0	3	12	23	64	24	13	7	6	1	0	54	61.1	27	17.5	8	5.2	1	0.6	
0915	0	0	0	0	6	3	0	10	25	26	21	20	19	7	3	2	0	50.5	62	31	21.8	6	4.2	2	1.4	
0930	0	0	0	1	0	0	0	6	19	24	34	28	11	8	2	0	0	52.3	59.9	21	15.8	3	2.3	0	0	
0945	0	0	0	0	0	6	2	5	10	14	41	26	6	5	1	4	0	52.3	58.8	16	13.3	6	5	4	3.3	
1000	0	0	0	0	0	2	5	11	5	13	19	17	11	4	3	2	0	51.6	61.5	20	21.7	7	7.6	2	2.2	
1015	0	0	0	0	0	0	0	1	14	29	28	14	9	9	2	5	0	54	64.2	25	22.5	10	9	5	4.5	
1030	0	0	0	0	0	0	0	8	10	13	34	16	13	5	1	1	0	53	60.6	20	19.8	2	2	1	1	
1045	0	0	0	0	1	0	0	0	13	26	31	19	7	1	2	0	2	52.6	59.1	12	11.8	4	3.9	2	2	
1100	0	0	0	0	0	0	0	4	17	28	14	17	12	5	2	2	1	52.6	61.3	22	21.6	7	6.9	3	2.9	
1115	0	0	0	0	0	0	0	4	22	28	32	17	13	2	4	1	0	52.1	59.9	20	16.3	6	4.9	1	0.8	
1130	0	0	0	0	0	0	0	7	17	23	29	17	11	2	3	2	1	52.3	60.2	19	17	6	5.4	3	2.7	
1145	0	0	0	0	0	0	0	6	8	21	21	28	13	4	1	1	1	53.8	60.6	20	19.2	4	3.8	2	1.9	
1200	0	0	0	0	0	0	0	3	12	21	24	20	8	4	2	1	0	52.7	59.9	15	15.8	3	3.2	1	1.1	
1215	0	0	0	0	0	0	0	8	7	12	22	17	10	5	8	0	0	54.4	64.6	23	25.8	9	10.1	0	0	
1230	0	0	0	0	0	0	0	0	13	15	22	30	10	2	4	1	3	55.2	61.1	20	20	8	8	4	4	
1245	0	0	0	0	0	0	0	8	8	23	35	26	16	5	4	0	0	53.7	61.1	25	20	6	4.8	0	0	
1300	0	0	0	0	0	0	0	0	7	19	26	35	10	6	4	0	0	55	61.3	20	18.7	8	7.5	0	0	
1315	0	0	0	0	0	0	1	6	8	23	34	35	7	8	3	0	0	53.6	59.5	18	14.4	4	3.2	0	0	
1330	0	0	0	0	0	0	0	2	17	22	41	26	16	7	4	2	3	54.8	62.4	32	22.9	10	7.1	5	3.6	
1345	0	0	0	0	0	0	0	8	15	18	42	16	18	3	2	2	1	53	62.2	26	20.8	5	4	3	2.4	
1400	0	0	0	0	0	0	3	3	17	7	19	22	27	12	3	3	0	55.7	65.3	45	38.8	12	10.3	3	2.6	
1415	0	0	0	0	0	0	0	10	3	23	43	35	14	6	7	1	0	54.5	61.7	28	19.7	11	7.7	1	0.7	
1430	0	0	0	0	0	0	0	1	9	31	31	20	11	7	1	3	0	53.9	62	22	19.3	5	4.4	3	2.6	
1445	0	0	0	0	0	0	0	5	23	36	20	25	6	6	4	1	1	52	59.1	18	14.2	11	8.7	2	1.6	
1500	0	0	0	0	0	0	0	1	5	37	21	17	8	4	5	0	0	53.5	60.8	17	17.3	6	6.1	0	0	
1515	0	0	0	0	0	0	0	1	3	16	33	33	11	14	8	1	1	57.2	66.9	35	28.9	15	12.4	2	1.7	
1530	0	0	0	0	0	0	0	4	3	17	44	31	14	13	5	1	0	55.5	64.2	33	25	6	4.5	1	0.8	
1545	0	0	0	0	0	0	0	0	4	28	39	32	15	5	2	1	0	54.6	61.1	23	18.3	4	3.2	1	0.8	
1600	0	0	0	1	0	1	0	10	24	18	27	26	15	6	2	5	1	52.6	62.4	29	21.3	10	7.4	6	4.4	
1615	0	0	0	0	2	5	13	7	10	17	37	32	17	13	3	1	1	52	64	35	22.2	8	5.1	2	1.3	
1630	0	0	0	0	0	0	0	8	7	20	41	33	13	10	2	3	2	54.8	63.8	30	21.6	10	7.2	5	3.6	
1645	0	0	0	0	0	0	0	0	8	8	54	27	21	10	7	1	0	56.9	64.4	39	28.7	14	10.3	1	0.7	
1700	0	0	0	0	0	0	1	11	3	5	29	26	24	21	11	4	1	58.5	68.7	61	44.9	24	17.6	5	3.7	
1715	0	0	0	0	0	0	0	7	9	15	35	37	21	10	6	1	1	55.8	63.8	39	27.5	12	8.5	2	1.4	
1730	0	0	0	0	0	0	7	2	10	4	39	33	24	13	7	2	0	55.9	64.9	46	32.6	12	8.5	2	1.4	
1745	0	0	0	0	0	5	0	4	10	30	20	22	29	13	6	1	2	55.2	66	51	35.9	16	11.3	3	2.1	
1800	0	0	0	0	0	0	0	4	11	9	25	31	22	11	6	1	0	56.5	64.9	40	33.3	10	8.3	1	0.8	
1815	0	0	0	0	0	0	0	0	0	5	24	40	22	12	5	3	0	59.3	66.2	42	37.8	13	11.7	3	2.7	
1830	0	0	0	0	0	0	6	3	2	5	25	13	12	7	9	3	2	57.1	70	33	37.9	18	20.7	5	5.7	
1845	0	0	0	0	0	0	0	4	2	7	17	21	14	11	4	3	1	58.2	67.1	33	39.3	12	14.3	4	4.8	
1900	0	0	0	0	0	0	0	0	4	2	13	18	12	8	3	1	2	59.4	67.6	26	41.3	9	14.3	3	4.8	
1915	0	0	0	0	0	0	0	4	8	8	6	11	17	5	6	4	3	58.8	71.8	35	48.6	15	20.8	7	9.7	
1930	0	0	0	0	0	0	0	0	5	5	11	16	7	8	5	3	2	59.1	70.7	25	40.3	14	22.6	5	8.1	
1945	0	0	0	0	0	0	0	0	3	3	19	12	7	2	3	7	5	60.9	77.4	24	39.3	15	24.6	12	19.7	
2000	0	0	0	0	0	0	0	1	2	4	12	8	3	3	2	0	1	56	66	9	25	3	8.3	1	2.8	
2015	0	0	0	0	0	0	0	1	1	4	12	15	6	7	2	1	1	58	66	17	34	6	12	2	4	
2030	0	0	0	0	0	0	0	0	1	3	8	9	7	7	2	1	1	60.4	67.8	18	46.2	6	15.4	2	5.1	
2045	0	0	0	0	0	0	0	1	4	1	5	7	5	4	2	1	1	58.7	68.5	13	41.9	6	19.4	2	6.5	
2100	0	0	0	0	0	0	0	4	2	9	13	5	2	3	1	1	0	53.1	64	7	17.5	4	10	1	2.5	
2115	0	0	0	0	0	0	0	2	0	6	7	11	3	4	0	1	0	55.9	64.2	8	23.5	2	5.9	1	2.9	
2130	0	0	0	0	0	0	0	0	1	13	10	9	6	3	0	1	0	54.6	61.1	10	23.3	1	2.3	1	2.3	
2145	0	0	0	0	0	0	0	0	4	7	9	9	8	4	1	0	0	55.7	64.2	13	31	4	9.5	0	0	
2200	0	0	0	0	0	0	0	0	1	1	12	5	4	2	3	0	1	58.4	65.5	10	34.5	4	13.8	1	3.4	
2215	0	0	0	0	0	0	0	1	4	3	6	8	5	5	2	1	1	58.3	68.9	14	38.9	6	16.7	2	5.6	
2230	0	0	0	0	0	0	0	1	0	7	11	9	2	3	1	0	0	54.8	64	6	17.6	1	2.9	0	0	
2245	0	0	0	0	0	0	0	1	1	6	10	9	6	2	1	0	0	55.4	61.1	9	25	1	2.8	0	0	
2300	0	0	0	0	0	0	0	0	0	4	4	7	1	2	1	0	0	55.8	61.3	4	21.1	1	5.3	0	0	
2315	0	0	0	0	0	0	0	0	3	1	10	2	3	1	1	0	0	54.8	61.1	5	23.8	1	4.8	0	0	
2330	0	0	0	0	0	0	0	0	2	1	5	4	4	2	0	0	0	56	61.7	6	33.3	1	5.6	0	0	
2345	0	0	0	0	0	0	0	1	2	7	7	5	3	1	1	0	0	53.6	62.4	5	18.5	2	7.4	0	0	
07-19	**0**	**0**	**0**	**3**	**12**	**30**	**57**	**264**	**549**	**1132**	**1739**	**1374**	**755**	**384**	**189**	**82**	**32**	**54**	**62.6**	**1442**	**21.8**	**420**	**6.4**	**114**	**1.7**	
06-22	**0**	**0**	**0**	**3**	**12**	**30**	**57**	**281**	**608**	**1254**	**2010**	**1630**	**938**	**494**	**236**	**118**	**54**	**54.5**	**63.3**	**1840**	**23.8**	**562**	**7.3**	**172**	**2.2**	
06-00	**0**	**0**	**0**	**3**	**12**	**30**	**57**	**285**	**621**	**1284**	**2075**	**1679**	**966**	**512**	**246**	**119**	**56**	**54.6**	**63.3**	**1899**	**23.9**	**579**	**7.3**	**175**	**2.2**	
00-00	**0**	**0**	**0**	**3**	**12**	**30**	**57**	**303**	**652**	**1395**	**2305**	**1880**	**1074**	**572**	**276**	**140**	**80**	**54.8**	**63.5**	**2142**	**24.4**	**671**	**7.6**	**220**	**2.5**	

17 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
0000	0	0	0	0	0	0	0	1	3	2	9	8	3	2	0	0	0	53.9	60.4	5	17.9	0	0	0	0	
0015	0	0	0	0	0	0	0	1	0	4	3	8	1	0	2	1	0	56.8	60.6	4	20	3	15	1	5	
0030	0	0	0	0	0	0	0	2	1	4	6	5	3	1	1	1	0	55.2	64.4	6	25	3	12.5	1	4.2	
0045	0	0	0	0	0	0	0	2	2	7	4	3	0	0	0	0	0	49.1	54.1	0	0	0	0	0	0	
0100	0	0	0	0	0	0	2	0	1	5	7	3	3	0	0	1	0	52.6	61.5	4	18.2	1	4.5	1	4.5	
0115	0	0	0	0	0	0	0	3	0	2	6	7	0	0	0	0	0	51.2	55.7	0	0	0	0	0	0	
0130	0	0	0	0	0	0	0	0	0	4	3	1	1	0	0	0	0	51.9	-	1	11.1	0	0	0	0	
0145	0	0	0	0	0	0	0	1	3	2	2	6	0	1	1	1	0	54.1	55.9	3	17.6	2	11.8	1	5.9	
0200	0	0	0	0	0	0	0	1	0	0	4	1	1	1	1	0	1	61.1	-	4	40	2	20	1	10	
0215	0	0	0	0	0	0	0	0	1	3	7	4	1	0	1	0	0	54.1	59.3	2	11.8	1	5.9	0	0	
0230	0	0	0	0	0	0	0	0	4	2	6	5	0	2	1	0	0	54.6	59.7	3	15	2	10	0	0	
0245	0	0	0	0	0	0	0	0	0	0	1	2	1	3	0	0	0	62.7	-	4	57.1	2	28.6	0	0	
0300	0	0	0	0	0	0	0	1	1	2	5	2	1	0	0	0	0	51.3	55	1	8.3	0	0	0	0	
0315	0	0	0	0	0	0	0	2	0	4	5	4	1	0	1	0	0	52.8	56.8	2	11.8	1	5.9	0	0	
0330	0	0	0	0	0	0	0	1	3	3	16	4	0	3	0	0	0	53.1	55.7	3	10	0	0	0	0	
0345	0	0	0	0	0	0	0	0	0	5	4	4	3	1	0	0	0	55	59.9	4	23.5	1	5.9	0	0	
0400	0	0	0	0	0	0	0	0	1	0	5	8	4	1	1	0	0	58	61.7	6	30	1	5	0	0	
0415	0	0	0	0	0	0	0	0	3	2	1	6	1	0	0	0	0	53.3	58.4	1	7.7	0	0	0	0	
0430	0	0	0	0	0	0	0	1	2	2	9	4	1	1	0	0	0	52.2	55.9	2	10	0	0	0	0	
0445	0	0	0	0	0	0	0	0	1	0	6	2	4	4	1	1	1	61.5	67.1	11	55	3	15	2	10	
0500	0	0	0	0	0	0	0	0	0	1	5	5	2	2	3	1	0	61.2	70.7	8	42.1	5	26.3	1	5.3	
0515	0	0	0	0	0	0	0	0	0	3	7	10	11	1	6	0	1	60.9	70.2	19	48.7	7	17.9	1	2.6	
0530	0	0	0	0	0	0	1	1	0	10	13	19	8	7	2	0	1	56.6	65.3	18	29	4	6.5	1	1.6	
0545	0	0	0	0	0	0	0	2	0	3	7	9	13	9	2	3	4	62.2	72.7	31	59.6	12	23.1	7	13.5	
0600	0	0	0	0	0	0	0	1	2	4	9	9	4	6	5	5	0	59.8	74.7	20	44.4	11	24.4	5	11.1	
0615	0	0	0	0	0	0	0	0	0	2	10	15	9	10	6	1	0	60.6	68.9	26	49.1	10	18.9	1	1.9	
0630	0	0	0	0	0	0	1	4	2	5	21	20	8	6	3	0	0	55.3	64.2	17	24.3	3	4.3	0	0	
0645	0	0	0	0	0	0	0	0	1	2	14	20	9	11	5	3	3	61.5	70.5	31	45.6	15	22.1	6	8.8	
0700	0	0	0	0	0	0	0	0	0	2	5	12	12	9	2	4	2	63.3	70.7	29	60.4	13	27.1	6	12.5	
0715	0	0	0	0	0	0	0	4	9	8	15	18	11	7	7	2	0	55.9	65.5	27	33.3	10	12.3	2	2.5	
0730	0	0	0	0	0	0	0	0	1	7	18	12	16	9	3	2	5	60.4	69.1	35	47.9	13	17.8	7	9.6	
0745	0	0	0	0	0	0	0	2	6	9	9	12	15	17	7	0	0	58.6	67.6	39	50.6	11	14.3	0	0	
0800	0	0	0	0	0	0	0	0	0	8	18	13	17	4	5	3	1	59.4	67.8	30	43.5	10	14.5	4	5.8	
0815	0	0	0	0	0	0	0	2	0	3	15	28	13	5	4	2	5	59.9	67.8	29	37.7	12	15.6	7	9.1	
0830	0	0	1	0	0	0	0	1	2	11	5	12	11	14	6	3	1	59.6	68.9	35	52.2	13	19.4	4	6	
0845	0	0	0	0	0	0	0	0	7	11	18	26	16	5	4	1	1	57	63.8	27	30.3	6	6.7	2	2.2	
0900	0	0	0	0	0	0	0	0	0	3	15	17	17	12	8	0	2	61.2	68.2	39	52.7	12	16.2	2	2.7	
0915	0	0	0	0	0	6	0	1	13	8	15	14	11	11	5	3	1	55	66.9	31	35.2	11	12.5	4	4.5	
0930	0	0	0	0	0	0	0	0	2	12	19	15	20	14	4	2	1	58.9	67.8	41	46.1	12	13.5	3	3.4	
0945	0	0	0	0	0	0	0	0	1	16	35	34	13	4	6	0	2	57.1	64	25	22.5	10	9	2	1.8	
1000	0	0	0	0	0	0	0	0	3	12	15	10	27	7	5	2	4	59.8	67.1	45	52.9	13	15.3	6	7.1	
1015	0	0	0	0	0	0	0	5	5	15	29	15	18	8	4	2	0	56	64.4	32	31.7	12	11.9	2	2	
1030	0	0	0	0	0	0	0	0	12	10	20	27	14	16	5	0	0	56.6	65.5	35	33.7	10	9.6	0	0	
1045	0	0	0	0	0	0	0	2	1	14	23	24	20	6	3	1	0	56.5	63.8	30	31.9	4	4.3	1	1.1	
1100	0	0	0	0	0	1	0	1	3	7	19	34	14	10	5	1	0	57.6	65.3	30	31.6	7	7.4	1	1.1	
1115	0	0	0	0	0	0	0	6	2	10	37	28	14	5	3	2	0	55.4	61.5	24	22.4	8	7.5	2	1.9	
1130	0	0	0	0	0	0	0	0	1	15	25	39	18	4	8	1	2	57.7	63.8	33	29.2	11	9.7	3	2.7	
1145	0	0	0	0	0	0	0	3	5	7	21	27	13	11	1	1	1	56.9	65.1	27	30	7	7.8	2	2.2	
1200	0	0	0	1	0	0	0	1	1	7	19	25	15	8	3	0	0	57	63.5	26	32.5	5	6.3	0	0	
1215	0	0	0	0	0	0	0	0	2	10	17	28	12	6	2	2	0	57.3	63.8	22	27.8	5	6.3	2	2.5	
1230	0	0	0	1	0	3	0	7	9	3	14	15	8	13	9	2	2	56.2	69.3	34	39.5	20	23.3	4	4.7	
1245	0	0	0	0	0	0	0	6	2	10	24	24	16	5	5	2	3	57.1	64.4	31	32	11	11.3	5	5.2	
1300	0	0	0	0	1	8	0	0	1	6	16	17	8	6	4	1	2	54.7	68.2	21	30	12	17.1	3	4.3	
1315	0	0	0	0	0	0	0	6	3	10	17	25	19	6	0	0	1	55.6	63.1	26	29.9	2	2.3	1	1.1	
1330	0	0	0	0	0	0	0	0	0	6	29	16	12	17	3	0	1	58.6	67.3	33	39.3	12	14.3	1	1.2	
1345	0	0	0	0	0	0	0	0	4	10	20	24	15	10	8	1	0	58.1	66.4	34	37	11	12	1	1.1	
1400	0	0	0	0	0	0	0	5	8	5	14	25	11	11	4	4	3	57.9	67.3	33	36.7	13	14.4	7	7.8	
1415	0	0	0	0	0	0	0	1	1	5	15	16	22	10	1	2	1	59.3	65.5	36	48.6	7	9.5	3	4.1	
1430	0	0	0	0	0	0	0	0	3	16	10	21	18	6	2	2	1	57.7	64.6	29	36.7	8	10.1	3	3.8	
1445	0	0	0	0	0	3	0	0	1	6	13	20	11	7	6	2	3	59.1	69.6	29	40.3	13	18.1	5	6.9	
1500	0	0	0	0	0	0	1	7	1	7	16	17	10	4	0	0	1	54.5	62	15	23.4	4	6.3	1	1.6	
1515	0	0	0	0	0	0	0	1	4	8	12	10	15	5	5	2	3	59.1	69.1	30	46.2	11	16.9	5	7.7	
1530	0	0	0	0	0	0	1	7	3	4	18	11	14	13	10	1	0	57.9	68.7	38	46.3	13	15.9	1	1.2	
1545	0	0	0	0	0	0	2	4	2	12	10	15	12	5	2	1	1	55.4	64.4	21	31.8	7	10.6	2	3	
1600	0	0	0	0	1	0	0	10	3	3	15	27	8	4	0	1	0	53.6	60.4	13	18.1	2	2.8	1	1.4	
1615	0	0	0	0	0	0	1	3	0	5	18	20	26	11	3	0	4	59.7	67.3	44	48.4	11	12.1	4	4.4	
1630	0	0	0	0	0	0	0	1	1	5	17	18	17	8	5	3	1	59.4	66.7	34	44.7	10	13.2	4	5.3	
1645	0	0	0	0	0	0	0	0	0	1	19	28	14	10	5	4	2	60.9	67.1	35	42.2	11	13.3	6	7.2	
1700	0	0	0	0	0	0	0	3	3	7	17	21	11	4	4	1	1	57	63.5	21	29.2	6	8.3	2	2.8	
1715	0	0	0	0	0	0	0	0	7	8	13	13	21	12	2	0	1	58.1	65.8	36	46.8	6	7.8	1	1.3	
1730	0	0	0	0	0	0	0	0	2	9	10	11	12	11	0	2	2	59.3	67.6	27	45.8	9	15.3	4	6.8	
1745	0	0	0	0	0	0	0	0	0	2	10	17	14	9	2	3	8	64.1	76.5	36	55.4	17	26.2	11	16.9	
1800	0	0	0	0	0	0	0	2	2	0	12	28	12	4	1	1	0	57.3	62.6	18	29	2	3.2	1	1.6	
1815	0	0	0	0	0	0	0	0	0	2	26	25	15	8	2	2	1	58.8	64.9	28	34.6	8	9.9	3	3.7	
1830	0	0	0	0	0	0	0	0	6	5	11	4	14	6	3	0	0	57.4	66.9	23	46.9	7	14.3	0	0	
1845	0	0	0	0	0	0	0	0	4	8	13	15	8	3	5	0	0	56.5	64.2	16	28.6	6	10.7	0	0	
1900	0	0	0	0	0	0	0	0	0	5	3	11	12	5	2	3	0	60.7	69.1	22	53.7	9	22	3	7.3	
1915	0	0	0	0	0	0	0	3	1	7	6	11	8	18	3	1	1	60.4	68.5	31	52.5	10	16.9	2	3.4	
1930	0	0	0	0	0	0	0	0	0	2	8	9	8	7	0	2	2	61.2	66.4	19	50	5	13.2	4	10.5	
1945	0	0	0	0	0	0	0	0	1	1	5	5	19	1	4	0	1	61.6	64.6	25	67.6	5	13.5	1	2.7	
2000	0	0	0	0	0	0	0	0	1	4	3	8	7	6	0	1	1	60	68.2	15	48.4	6	19.4	2	6.5	
2015	0	0	0	0	0	0	0	1	0	1	4	9	8	6	3	1	0	60.6	67.8	18	54.5	5	15.2	1	3	
2030	0	0	0	0	0	0	0	0	1	2	7	7	3	4	1	0	1	58.8	66.9	9	34.6	4	15.4	1	3.8	
2045	0	0	0	0	0	0	0	0	2	5	7	5	9	3	4	1	0	58.3	69.3	17	47.2	7	19.4	1	2.8	
2100	0	0	0	0	0	0	0	0	1	1	8	7	1	0	0	0	1	55.7	56.1	2	10.5	1	5.3	1	5.3	
2115	0	0	0	0	0	0	0	0	0	2	4	4	6	5	1	2	1	62.3	68.2	15	60	5	20	3	12	
2130	0	0	0	0	0	0	0	1	0	4	5	5	7	3	1	0	1	59.1	67.8	12	44.4	4	14.8	1	3.7	
2145	0	0	0	0	0	0	0	1	2	0	2	7	5	2	1	0	0	57.5	64.4	8	40	2	10	0	0	
2200	0	0	0	0	0	0	0	0	0	5	5	12	5	1	2	0	0	57	64.4	8	26.7	2	6.7	0	0	
2215	0	0	0	0	0	0	0	3	1	2	2	7	10	2	2	1	4	61.2	72.9	19	55.9	8	23.5	5	14.7	
2230	0	0	0	0	0	0	0	0	3	6	12	10	5	0	1	1	1	55.8	63.1	8	20.5	3	7.7	2	5.1	
2245	0	0	0	0	0	0	0	0	0	2	7	5	3	2	3	2	1	0	56	66.2	8	32	3	12	1	4
2300	0	0	0	0	0	0	0	0	0	0	0	2	2	10	0	0	1	0	61.4	63.1	11	73.3	1	6.7	1	6.7
2315	0	0	0	0	0	0	0	0	0	0	3	9	3	4	1	1	0	1	56.8	63.5	7	31.8	2	9.1	1	4.5
2330	0	0	0	0	0	0	0	0	0	2	3	5	3	2	0	0	0	0	52.7	59.3	2	13.3	0	0	0	0
2345	0	0	0	0	0	0	0	2	1	0	2	4	0	1	0	0	0	51.8	-	1	10	0	0	0	0	
07-19	**0**	**0**	**0**	**3**	**2**	**21**	**5**	**91**	**146**	**368**	**821**	**953**	**700**	**400**	**191**	**71**	**70**	**57.8**	**66.4**	**1432**	**37.3**	**454**	**11.8**	**141**	**3.7**	
06-22	**0**	**0**	**0**	**3**	**2**	**21**	**6**	**102**	**160**	**415**	**937**	**1105**	**823**	**493**	**230**	**91**	**82**	**58.1**	**66.7**	**1719**	**38.5**	**556**	**12.4**	**173**	**3.9**	
06-00	**0**	**0**	**0**	**3**	**2**	**21**	**6**	**107**	**169**	**441**	**979**	**1149**	**861**	**501**	**238**	**95**	**88**	**58**	**66.7**	**1783**	**38.3**	**575**	**12.3**	**183**	**3.9**	
00-00	**0**	**0**	**0**	**3**	**2**	**21**	**9**	**126**	**195**	**511**	**1120**	**1279**	**924**	**540**	**261**	**104**	**96**	**57.8**	**66.4**	**1925**	**37.1**	**625**	**12**	**200**	**3.9**	

18 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
0000	0	0	0	0	0	0	0	1	3	1	4	6	1	0	0	0	0	52.1	57.9	1	6.3	0	0	0	0	
0015	0	0	0	0	0	0	0	3	1	5	1	7	3	0	2	0	0	53.9	62.4	5	22.7	2	9.1	0	0	
0030	0	0	0	0	0	0	0	0	0	3	3	0	2	3	1	1	0	59.9	68.5	7	53.8	3	23.1	1	7.7	
0045	0	0	0	0	0	0	0	0	2	0	5	0	1	0	1	1	0	56.3 -		3	30	2	20	1	10	
0100	0	0	0	0	0	0	0	1	0	1	2	5	3	0	0	0	0	55.6	59.9	3	25	0	0	0	0	
0115	0	0	0	0	0	0	0	1	2	3	0	2	2	3	0	0	0	54.6	67.8	5	38.5	2	15.4	0	0	
0130	0	0	0	0	0	0	0	0	2	2	0	1	2	0	1	0	0	54.1 -		3	37.5	1	12.5	0	0	
0145	0	0	0	0	0	0	0	0	0	2	1	1	5	1	0	0	0	58.4 -		6	60	0	0	0	0	
0200	0	0	0	0	0	0	0	0	0	0	1	4	0	3	0	0	1	63 -		4	44.4	2	22.2	1	11.1	
0215	0	0	0	0	0	0	0	1	0	1	2	0	2	1	1	0	0	56.9 -		4	50	1	12.5	0	0	
0230	0	0	0	0	0	0	0	1	0	2	1	0	2	0	0	0	0	52.3 -		2	33.3	0	0	0	0	
0245	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	58 -		1	20	0	0	0	0	
0300	0	0	0	0	0	0	0	1	2	1	0	0	1	1	1	1	0	56 -		4	50	3	37.5	1	12.5	
0315	0	0	0	0	0	0	0	1	0	1	1	1	3	0	1	0	1	60.7 -		5	55.6	2	22.2	1	11.1	
0330	0	0	0	0	0	0	0	1	0	0	1	1	1	0	0	0	1	61.8 -		2	40	1	20	1	20	
0345	0	0	0	0	0	0	0	1	0	2	2	1	5	0	0	0	0	54.4	62.2	5	45.5	0	0	0	0	
0400	0	0	0	0	0	0	0	0	0	0	4	2	1	1	0	0	0	55.8 -		2	25	0	0	0	0	
0415	0	0	0	0	0	0	0	0	1	1	3	1	3	0	0	1	0	55.8 -		4	40	1	10	1	10	
0430	0	0	0	0	0	0	0	1	0	1	0	6	9	0	0	1	0	59.1	62.4	10	55.6	1	5.6	1	5.6	
0445	0	0	0	0	0	0	0	0	2	0	5	4	3	1	0	0	0	55.8	63.8	4	26.7	0	0	0	0	
0500	0	0	0	0	0	0	0	1	1	0	2	4	2	1	0	0	1	57.6	64	4	33.3	1	8.3	1	8.3	
0515	0	0	0	0	0	0	0	0	0	2	11	9	6	2	0	0	0	57.1	63.3	8	26.7	1	3.3	0	0	
0530	0	0	0	0	0	0	0	0	2	2	5	14	4	8	2	0	0	59	66	14	37.8	4	10.8	0	0	
0545	0	0	0	0	0	0	0	0	0	1	4	8	6	4	8	0	0	62.8	70.5	18	58.1	9	29	0	0	
0600	0	0	0	0	0	0	0	0	3	2	1	3	4	4	3	2	2	62.8	74	15	62.5	9	37.5	4	16.7	
0615	0	0	0	0	0	0	0	2	0	0	2	4	2	11	3	1	1	63.7	69.8	18	69.2	8	30.8	2	7.7	
0630	0	0	0	0	0	0	0	0	1	1	6	11	11	7	4	5	0	62.5	70.7	27	58.7	12	26.1	5	10.9	
0645	0	0	0	0	0	0	0	0	0	1	5	13	6	9	5	1	2	62.6	70.7	23	54.8	10	23.8	3	7.1	
0700	0	0	0	0	0	0	0	0	0	0	5	9	7	5	3	0	2	63.1	66.4	17	54.8	5	16.1	2	6.5	
0715	0	0	0	0	0	0	0	0	0	2	3	8	9	2	0	3	3	63.4	76.7	17	56.7	6	20	6	20	
0730	0	0	0	0	0	0	0	2	2	9	13	11	6	2	3	2	1	56.1	64.6	14	27.5	6	11.8	3	5.9	
0745	0	0	0	0	0	0	0	0	0	4	11	6	5	2	4	0	2	59	70.7	13	38.2	6	17.6	2	5.9	
0800	0	0	0	0	0	0	0	0	0	6	4	6	11	5	2	1	2	60.9	68	21	56.8	7	18.9	3	8.1	
0815	0	0	0	0	0	0	0	0	1	2	9	9	7	7	4	2	0	60.7	69.3	20	48.8	9	22	2	4.9	
0830	0	0	0	0	0	0	0	0	2	2	10	17	10	6	3	2	0	59.4	66.9	21	40.4	7	13.5	2	3.8	
0845	0	0	0	0	0	0	0	0	5	3	19	16	5	8	7	4	1	59	70.2	25	36.8	15	22.1	5	7.4	
0900	0	0	0	0	0	0	0	1	3	2	12	16	13	12	3	3	2	60.7	68.7	33	49.3	15	22.4	5	7.5	
0915	0	0	0	0	0	0	0	0	4	10	20	20	20	15	13	2	3	60.3	70.2	53	49.5	26	24.3	5	4.7	
0930	0	0	0	0	0	0	0	0	3	9	15	20	15	6	3	3	3	59	66.4	30	39	9	11.7	6	7.8	
0945	0	0	0	0	0	0	0	0	1	6	24	25	20	7	5	6	4	60.1	69.8	42	42.9	19	19.4	10	10.2	
1000	0	0	0	0	0	0	0	1	0	6	19	21	24	9	9	2	2	60.3	67.6	46	49.5	14	15.1	4	4.3	
1015	0	0	1	0	0	0	0	0	0	11	18	25	12	4	1	0	2	56.7	61.7	19	25.7	4	5.4	2	2.7	
1030	0	0	0	0	0	0	0	0	1	11	21	37	15	9	3	1	0	57.5	64.4	28	28.6	7	7.1	1	1	
1045	0	0	0	0	0	0	0	0	8	19	23	18	17	15	3	2	0	56.5	65.8	37	35.2	11	10.5	2	1.9	
1100	0	0	0	0	0	0	0	10	2	2	19	28	13	9	3	3	1	57.1	66	29	32.2	12	13.3	4	4.4	
1115	0	0	0	1	0	0	0	0	0	10	30	24	16	10	2	0	0	56.8	64.4	28	30.1	4	4.3	0	0	
1130	0	0	0	1	0	0	0	0	1	7	13	32	28	10	6	2	0	59.3	66.2	46	46	10	10	2	2	
1145	0	0	0	1	0	0	0	0	5	13	30	23	10	5	3	2	1	55.5	63.1	21	22.6	8	8.6	3	3.2	
1200	0	0	0	0	0	0	0	1	6	15	18	13	13	16	3	1	1	57.2	66.7	34	39.1	8	9.2	2	2.3	
1215	0	0	0	0	0	0	0	3	4	11	18	28	13	7	3	1	3	56.7	64.2	27	29.7	9	9.9	4	4.4	
1230	0	0	0	0	0	0	0	0	4	6	19	21	14	10	11	1	2	59.4	70	38	43.2	18	20.5	3	3.4	
1245	0	0	0	0	0	0	0	1	14	16	20	17	12	9	1	1	1	54.7	63.8	24	26.1	7	7.6	2	2.2	
1300	0	0	0	0	0	0	0	1	1	7	22	16	15	10	10	0	0	58.8	68.2	35	42.7	14	17.1	0	0	
1315	0	0	0	0	0	0	0	0	0	3	23	30	18	10	4	1	1	59.4	66	34	37.8	8	8.9	2	2.2	
1330	0	0	0	0	0	0	0	4	6	12	16	12	15	8	1	2	1	56.2	64.9	27	35.1	7	9.1	3	3.9	
1345	0	0	1	0	0	0	0	0	5	7	23	19	18	14	3	3	3	58.5	66.9	41	42.7	14	14.6	6	6.3	
1400	0	0	0	0	0	0	0	0	0	2	7	21	20	13	11	7	4	5	60.7	71.6	40	44.4	19	21.1	9	10
1415	0	0	0	0	0	0	0	0	4	11	15	17	19	9	4	0	0	57.6	65.3	32	40.5	6	7.6	0	0	
1430	0	0	0	0	0	0	0	1	0	9	10	17	22	8	5	0	1	59.2	66.4	36	49.3	8	11	1	1.4	
1445	0	0	0	0	0	0	2	2	1	19	20	23	8	11	4	1	0	55.8	65.3	24	26.4	9	9.9	1	1.1	
1500	0	0	0	0	0	0	0	1	6	6	7	25	13	6	2	1	2	58.2	65.1	24	34.8	7	10.1	3	4.3	
1515	0	0	0	0	0	0	0	0	2	7	16	27	13	6	5	2	1	58.7	65.3	27	34.2	9	11.4	3	3.8	
1530	0	0	0	0	0	0	0	0	5	2	20	23	20	9	5	1	1	59	67.1	36	41.9	9	10.5	2	2.3	
1545	0	0	0	0	0	0	0	1	2	5	15	18	10	6	3	1	0	57.4	65.1	20	32.8	5	8.2	1	1.6	
1600	0	0	0	0	0	0	0	1	4	7	20	22	9	3	8	2	1	57.6	66.4	23	29.9	12	15.6	3	3.9	
1615	0	0	0	0	0	0	0	0	0	8	14	35	12	12	8	1	1	59.7	66.7	34	37.4	13	14.3	2	2.2	
1630	0	0	0	0	0	0	0	0	0	0	17	21	13	5	5	3	2	60.5	68	28	42.4	11	16.7	5	7.6	
1645	0	0	0	0	0	0	0	0	4	11	12	21	22	11	8	3	4	60.3	69.8	48	50	19	19.8	7	7.3	
1700	0	0	0	0	0	0	0	2	1	8	12	20	23	8	4	1	1	58.4	65.1	37	46.3	7	8.8	2	2.5	
1715	0	0	1	0	0	0	0	4	3	6	17	15	18	6	4	0	0	56.1	64.2	28	37.8	7	9.5	0	0	
1730	0	0	0	0	0	0	0	0	0	7	8	25	22	12	2	1	0	59.6	66.4	37	48.1	7	9.1	1	1.3	
1745	0	0	0	0	0	0	0	2	2	2	16	19	12	8	4	3	1	59.5	68.2	28	40.6	12	17.4	4	5.8	
1800	0	0	0	0	0	0	0	2	0	5	19	20	11	9	4	0	2	58.8	66.4	26	36.1	8	11.1	2	2.8	
1815	0	0	0	0	0	0	0	0	2	8	14	23	22	1	4	2	1	58.4	62.6	30	39	7	9.1	3	3.9	
1830	0	0	0	0	0	0	0	0	2	2	13	15	16	9	4	4	2	61.1	68.7	35	52.2	14	20.9	6	9	
1845	0	0	0	0	0	0	0	0	0	10	9	12	7	7	2	1	2	58.8	65.5	19	38	5	10	3	6	
1900	0	0	0	0	0	0	0	2	1	3	12	10	9	3	3	0	2	58.3	65.3	17	37.8	5	11.1	2	4.4	
1915	0	0	0	0	0	0	0	0	0	1	7	13	17	10	5	1	1	62.5	68.9	34	61.8	11	20	2	3.6	
1930	0	0	0	0	0	0	0	2	4	4	10	6	4	7	3	2	1	58.2	68.7	17	39.5	8	18.6	3	7	
1945	0	0	0	0	0	0	0	0	0	4	16	11	15	7	3	1	2	60	66.9	28	47.5	8	13.6	3	5.1	
2000	0	0	0	0	0	0	0	0	1	0	10	23	6	4	5	4	1	60.8	70	20	37	12	22.2	5	9.3	
2015	0	0	0	0	0	0	0	0	0	3	5	13	4	6	1	4	0	61	69.1	15	41.7	8	22.2	4	11.1	
2030	0	1	0	0	0	0	0	2	5	1	3	6	5	4	1	2	2	58.5	69.8	14	43.8	7	21.9	4	12.5	
2045	0	0	0	0	0	0	0	1	1	5	8	10	6	5	1	0	1	57	65.3	13	34.2	3	7.9	1	2.6	
2100	0	0	0	0	0	0	1	0	0	4	11	7	5	2	2	1	1	57.5	66.2	11	32.4	5	14.7	2	5.9	
2115	0	0	0	0	0	0	0	1	2	2	6	10	12	11	0	0	3	60.8	67.1	26	55.3	6	12.8	3	6.4	
2130	0	0	0	0	0	0	0	0	1	8	9	12	8	3	1	0	1	57.1	63.5	13	30.2	5	11.6	1	2.3	
2145	0	0	0	0	0	0	3	3	0	0	6	8	4	2	2	0	1	54.9	66.4	9	31	4	13.8	1	3.4	
2200	0	0	0	0	0	0	0	1	2	4	3	7	9	3	1	0	1	58.1	64.2	14	45.2	3	9.7	1	3.2	
2215	0	0	0	0	0	0	0	0	1	6	3	5	7	3	5	1	0	1	55.8	66.4	10	31.3	5	15.6	1	3.1
2230	0	0	0	0	0	0	0	0	1	4	6	7	6	2	1	1	0	57.3	62.4	10	35.7	2	7.1	1	3.6	
2245	0	0	0	0	0	0	0	0	1	0	3	5	4	4	1	0	0	0	55.2	61.5	5	27.8	0	0	0	0
2300	0	0	0	0	0	0	0	0	0	0	2	5	7	2	2	0	0	1	58.1	62.4	5	26.3	1	5.3	1	5.3
2315	0	0	0	0	0	0	0	0	0	2	3	4	6	2	0	0	0	0	53	56.6	2	11.8	0	0	0	0
2330	0	0	0	0	0	0	0	1	2	1	9	3	2	1	1	1	0	54.9	62.6	5	23.8	2	9.5	1	4.8	
2345	0	0	0	0	0	0	0	0	2	2	3	2	0	1	1	0	0	53.1	59.3	2	18.2	1	9.1	0	0	
07-19	**0**	**0**	**3**	**3**	**0**	**0**	**2**	**40**	**118**	**351**	**772**	**945**	**686**	**389**	**208**	**81**	**68**	**58.5**	**66.9**	**1432**	**39.1**	**479**	**13.1**	**149**	**4.1**	
06-22	**0**	**1**	**3**	**3**	**0**	**0**	**6**	**53**	**137**	**390**	**889**	**1105**	**804**	**484**	**250**	**105**	**89**	**58.7**	**67.3**	**1732**	**40.1**	**600**	**13.9**	**194**	**4.5**	
06-00	**0**	**1**	**3**	**3**	**0**	**0**	**6**	**57**	**152**	**412**	**929**	**1148**	**832**	**499**	**255**	**107**	**92**	**58.6**	**67.1**	**1785**	**39.7**	**614**	**13.7**	**199**	**4.4**	
00-00	**0**	**1**	**3**	**3**	**0**	**0**	**6**	**71**	**170**	**443**	**987**	**1229**	**900**	**528**	**273**	**112**	**96**	**58.5**	**67.1**	**1909**	**39.6**	**650**	**13.5**	**208**	**4.3**	

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
--	**0**	**2**	**5**	**13**	**28**	**119**	**221**	**1581**	**3628**	**7800**	**13090**	**12258**	**7629**	**4106**	**1814**	**761**	**608**	**55.6**	**64.2**	**14918**	**27.8**	**4431**	**8.3**	**1369**	**2.6**	

TSP Class Profile All Days 15 Mins

Globals

Report Id	CustomList-40
Descriptor	TSP Class Profile All Days 15 Mins
Created by	MetroCount Traffic Executive
Creation Time (UTC)	2014-06-10T12:25:05
Legal	Copyright (c)1997 - 2013 MetroCount
Graphic	header.gif
Language	English
Country	United Kingdom
Time	UTC + 120 min
Create Version	4.0.5.0
Metric	Non metric
Speed Unit	mph
Length Unit	ft
Mass Unit	ton

Dataset

Site Name	LUTTERWORTH- 02
Site Attribute	LUTTERWORTH
File Name	I:\Present Projects\TSP11713-Lutterworth\LUTTERWORTH- 02E15May2014.EC0
File Type	Plus
Algorithm	Factory default axle
Description	COVENTRY ROAD [70M]
Lane	0
Direction	2
Direction Text	2 - East bound, A trigger first.
Layout Text	Axle sensors - Paired (Class/Speed/Count)
Setup Time	2014-05-11T14:42:29
Start Time	2014-05-11T14:42:29
Finish Time	2014-05-15T03:43:29
Operator	DS
Configuration	00000000 80 00 14 6a 6a 00 00 00 00 00 , Standard

Dataset

Site Name	LUTTERWORTH- 02
Site Attribute	LUTTERWORTH
File Name	I:\Present Projects\TSP11713-Lutterworth\LUTTERWORTH- 02E19May2014.EC0
File Type	Plus
Algorithm	Factory default axle
Description	COVENTRY ROAD [70M]
Lane	0
Direction	2
Direction Text	2 - East bound, A trigger first.
Layout Text	Axle sensors - Paired (Class/Speed/Count)
Setup Time	2014-05-15T03:46:01
Start Time	2014-05-15T03:46:01
Finish Time	2014-05-19T20:00:01
Operator	DS
Configuration	00000000 80 00 14 6a 6a 00 00 00 00 00 , Standard

Profile

Name	TSP Class Profile All Days New15 mins
Title	TSP Traffic Reports
Graphic Logo	C:and SettingsDocuments3.21_on_us_logo_cmyk 50.BMP
Header	
Footer	
Percentile 1	85
Percentile 2	95
Pace	12
Filter Start	2014-05-12T00:00:00
Filter End	2014-05-19T00:00:00
Class Scheme	ARX
Low Speed	0
High Speed	120
Posted Limit	70
Speed Limits	79 85 70 70 70 0 0 0 0 70
Separation	0.000
Separation Type	Headway
Direction	East
Encoded Direction	2

TSP Class Profile All Days 15 Mins

Column	
Time	24-hour time (0000 - 2359)
Total	Number in time step
Cls 1	Class totals
Cls 2	Class totals
Cls 3	Class totals
Cls 4	Class totals
Cls 5	Class totals
Cls 6	Class totals
Cls 7	Class totals
Cls 8	Class totals
Cls 9	Class totals
Cls 10	Class totals
Fix1	User defined fixed text
Time	24-hour time (0000 - 2359)
Vbin 0 5	Speed bin totals
Vbin 5 10	Speed bin totals
Vbin 10 15	Speed bin totals
Vbin 15 20	Speed bin totals
Vbin 20 25	Speed bin totals
Vbin 25 30	Speed bin totals
Vbin 30 35	Speed bin totals
Vbin 35 40	Speed bin totals
Vbin 40 45	Speed bin totals
Vbin 45 50	Speed bin totals
Vbin 50 55	Speed bin totals
Vbin 55 60	Speed bin totals
Vbin 60 65	Speed bin totals
Vbin 65 70	Speed bin totals
Vbin 70 75	Speed bin totals
Vbin 75 80	Speed bin totals
Vbin 80 130	Speed bin totals
Mean	Average speed
Vpp 85	Percentile speed
]PSL 70	Number exceeding Posted Speed Limit
]PSL% 70	Percent exceeding Posted Speed Limit
]SL1 79 ACPO	Number exceeding Speed Limit 1
]SL1% 79 ACPO	Percent exceeding Speed Limit 1
]SL2 85 DFT	Number exceeding Speed Limit 2
]SL2% 85 DFT	Percent exceeding Speed Limit 2
Fix1	User defined fixed text

TSP Class Profile All Days 15 Mins

Report Id - CustomList-40
Site Name - LUTTERWORTH- 02
Description - COVENTRY ROAD [70M]
Direction - East

12 May 2014

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	35	2	27	0	1	0	0	0	0	1	4	
0015	18	0	15	0	0	0	0	0	0	0	3	
0030	39	0	30	0	2	0	0	0	0	3	4	
0045	20	0	16	0	2	1	0	0	0	0	1	
0100	6	0	4	0	0	0	0	0	0	0	2	
0115	14	0	4	0	2	1	0	0	0	2	5	
0130	20	0	11	0	1	0	0	0	0	4	4	
0145	28	0	21	0	3	0	0	0	0	1	3	
0200	35	0	24	0	1	1	0	0	1	4	4	
0215	19	0	10	0	4	0	0	0	1	2	2	
0230	16	0	10	0	2	0	0	0	0	1	3	
0245	34	0	25	0	5	1	0	0	0	2	1	
0300	29	0	25	0	3	0	0	0	0	1	0	
0315	24	0	13	0	3	2	1	0	1	3	1	
0330	19	0	14	0	2	0	0	0	0	0	3	
0345	19	0	10	0	1	0	0	2	0	1	5	
0400	33	0	22	0	6	0	0	0	0	4	1	
0415	29	0	19	0	4	2	0	0	0	3	1	
0430	33	0	23	0	3	0	0	0	0	4	3	
0445	37	0	17	0	11	0	0	0	4	1	4	
0500	56	0	41	0	8	1	0	0	0	5	1	
0515	38	1	21	0	9	1	0	0	1	3	2	
0530	50	1	33	0	10	0	0	1	3	0	2	
0545	73	1	54	0	7	1	0	0	4	4	2	
0600	140	0	112	1	16	0	0	0	2	6	3	
0615	87	0	61	0	14	0	0	0	1	8	3	
0630	97	0	68	1	16	1	0	0	2	3	6	
0645	104	0	72	0	20	0	0	0	1	7	4	
0700	203	0	174	0	19	1	0	0	0	5	4	
0715	108	0	76	0	16	1	1	0	5	7	2	
0730	123	0	95	4	11	0	0	0	4	4	5	
0745	133	0	104	0	15	0	1	0	2	6	5	
0800	131	1	102	0	10	1	3	0	2	6	6	
0815	171	1	140	0	13	1	1	0	1	8	6	
0830	154	0	111	2	20	1	1	0	5	10	4	
0845	157	0	123	0	14	3	0	0	1	10	6	
0900	130	1	88	2	18	3	0	1	2	10	5	
0915	119	0	93	0	17	0	0	0	2	3	4	
0930	121	1	87	1	18	0	0	1	2	5	6	
0945	123	2	86	1	13	1	0	1	2	12	5	
1000	106	1	78	0	12	0	1	0	3	4	7	
1015	128	2	86	0	16	2	2	1	2	10	7	
1030	112	0	87	0	14	0	1	0	1	4	5	
1045	107	0	77	1	4	2	1	1	6	8	7	
1100	105	0	69	0	20	1	3	0	1	6	5	
1115	100	1	63	1	9	2	1	0	3	16	4	
1130	126	1	93	0	12	1	2	0	3	6	8	
1145	119	0	84	3	10	0	0	2	3	13	4	
1200	156	1	115	0	21	0	1	0	1	12	5	
1215	146	0	115	2	12	0	1	0	1	9	6	
1230	155	0	125	0	12	1	0	0	2	12	3	
1245	130	0	100	3	13	1	0	1	0	4	8	
1300	119	0	97	0	9	1	0	0	1	8	3	
1315	125	0	106	0	7	1	0	0	1	6	4	
1330	96	0	69	0	5	0	1	0	2	15	4	
1345	136	0	125	0	6	1	0	0	0	4	0	
1400	313	2	284	2	16	3	0	0	1	5	0	
1415	155	1	121	1	20	2	0	0	2	5	3	
1430	157	1	125	0	14	2	1	0	0	9	5	
1445	145	7	109	0	10	3	0	0	1	9	6	
1500	234	3	214	3	8	0	0	0	0	3	3	
1515	161	0	135	2	11	3	0	0	3	6	1	
1530	179	0	143	2	22	1	0	0	1	7	3	
1545	145	3	123	0	11	0	0	1	1	4	2	
1600	237	4	216	1	10	0	0	0	0	3	3	
1615	184	1	164	1	11	1	1	0	0	2	3	
1630	248	1	224	0	11	0	1	0	2	4	5	
1645	212	0	187	0	15	0	0	0	0	7	3	
1700	307	1	293	0	7	0	0	0	1	3	2	
1715	307	2	279	0	12	0	0	0	5	2	7	
1730	331	3	307	0	13	1	1	0	1	4	1	
1745	315	2	294	0	10	0	1	0	1	6	1	
1800	245	0	223	1	12	0	0	0	0	5	4	
1815	176	1	152	0	7	0	0	0	3	7	6	
1830	119	1	106	0	3	0	0	0	0	3	6	
1845	87	0	72	0	4	0	0	0	2	7	2	
1900	102	1	84	0	3	1	0	0	1	7	5	
1915	89	1	64	0	8	0	0	0	1	9	6	
1930	65	3	51	0	0	0	0	0	0	7	4	
1945	73	1	56	0	5	0	0	0	1	7	3	
2000	64	0	47	0	3	0	0	0	1	7	6	
2015	55	0	45	0	4	0	0	0	2	3	1	
2030	56	0	39	1	6	1	0	0	1	5	3	
2045	53	1	46	1	3	0	0	0	0	0	2	
2100	67	0	49	0	5	0	0	0	2	8	3	
2115	56	0	42	1	2	0	0	0	2	5	4	
2130	54	0	50	0	2	0	0	0	0	1	1	
2145	78	0	65	1	3	0	0	0	0	3	6	
2200	142	1	134	0	1	0	0	0	0	5	1	
2215	62	3	52	0	3	0	0	0	2	1	1	
2230	44	0	33	0	0	1	0	0	2	3	5	
2245	32	0	24	0	2	0	0	0	1	2	3	
2300	134	1	127	0	4	0	0	0	1	0	1	
2315	47	1	36	0	2	0	0	0	0	7	1	
2330	42	0	28	0	2	0	0	0	0	5	7	
2345	49	0	36	0	4	0	0	0	1	5	3	
07-19	**7896**	**45**	**6539**	**33**	**593**	**41**	**26**	**9**	**82**	**324**	**204**	
06-22	**9136**	**52**	**7490**	**39**	**703**	**44**	**26**	**9**	**99**	**410**	**264**	
06-00	**9688**	**58**	**7960**	**39**	**721**	**45**	**26**	**9**	**106**	**438**	**286**	
00-00	**10412**	**63**	**8449**	**39**	**811**	**56**	**27**	**12**	**121**	**487**	**347**	

9939.8		1631	16.84%		1816.8	
9165.4		1861			**1768.7**	

13 May 2014

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	75	0	63	0	4	0	0	0	2	3	3	
0015	36	0	20	0	5	0	0	0	0	5	6	
0030	40	0	28	0	3	0	0	0	1	2	6	
0045	22	0	16	0	1	1	0	0	1	2	1	
0100	12	0	7	0	0	0	0	0	0	2	3	
0115	25	0	13	0	6	0	0	0	2	0	4	
0130	32	0	21	0	4	0	0	0	1	3	3	
0145	29	0	17	0	1	0	0	0	0	8	3	
0200	22	0	11	0	2	0	0	0	1	6	2	
0215	29	0	15	0	3	0	0	0	1	7	3	
0230	26	0	16	0	1	1	0	0	0	3	5	
0245	27	0	17	0	4	0	0	0	3	2	1	
0300	30	0	15	0	5	1	0	0	1	2	6	
0315	23	0	9	0	9	0	0	0	1	0	4	
0330	29	0	14	0	6	2	0	0	1	5	1	
0345	27	0	13	0	2	0	0	0	2	3	7	
0400	40	0	28	0	4	0	0	0	2	0	6	
0415	25	0	9	0	7	1	0	0	1	4	3	
0430	31	0	22	0	4	0	0	0	1	1	3	
0445	38	0	22	0	8	1	0	0	1	2	4	
0500	44	0	24	0	10	0	0	0	3	4	3	
0515	46	0	25	0	9	0	1	0	3	3	5	
0530	59	0	36	0	12	0	0	0	0	8	3	
0545	78	0	51	0	9	0	0	1	4	7	6	
0600	131	1	106	0	14	0	0	0	1	7	2	
0615	94	0	57	0	29	0	0	0	0	7	1	
0630	71	0	42	1	16	0	0	0	2	5	5	
0645	115	1	75	3	18	1	1	0	1	9	6	
0700	212	1	184	1	12	0	0	0	2	7	5	
0715	138	0	106	0	13	2	0	1	0	7	9	
0730	127	3	94	0	11	1	0	0	3	7	8	
0745	145	0	112	0	11	1	0	0	3	10	8	
0800	167	0	140	0	15	0	1	0	2	6	3	
0815	186	1	159	3	13	0	1	0	3	4	2	
0830	181	0	150	0	10	0	3	0	2	10	6	
0845	177	1	140	0	19	1	1	1	1	11	2	
0900	139	0	100	2	21	0	0	0	2	9	5	
0915	137	0	91	4	18	0	1	0	3	9	11	
0930	114	2	72	0	23	1	0	0	2	10	4	
0945	100	1	71	2	11	0	0	0	0	7	8	
1000	110	1	68	0	18	0	0	0	7	11	5	
1015	84	0	48	1	18	2	1	0	1	4	9	
1030	110	0	73	2	17	0	3	0	1	7	7	
1045	103	0	65	4	9	1	0	1	4	11	8	
1100	94	1	64	1	14	0	1	0	1	8	4	
1115	130	0	92	1	14	2	1	0	2	11	7	
1130	89	0	71	0	6	0	0	0	1	8	3	
1145	102	1	59	0	19	1	3	1	3	9	6	
1200	138	1	95	1	14	0	1	0	5	15	6	
1215	128	2	95	3	11	1	1	1	1	11	2	
1230	146	1	102	0	20	1	1	0	2	11	8	
1245	105	0	74	0	14	0	0	0	2	10	5	
1300	141	2	107	0	14	0	0	0	3	11	4	
1315	113	0	85	1	15	1	0	0	1	5	5	
1330	136	0	106	2	16	0	1	1	3	6	1	
1345	150	0	116	0	17	1	2	0	0	8	6	
1400	326	2	294	3	16	1	3	0	2	4	1	
1415	144	0	120	2	12	0	0	1	0	3	6	
1430	151	1	134	0	5	0	0	0	5	4	2	
1445	129	0	99	0	10	1	2	0	1	6	10	
1500	232	2	199	0	22	0	0	0	3	2	4	
1515	168	2	139	1	10	0	0	0	3	8	5	
1530	194	0	169	0	11	1	1	0	3	5	4	
1545	173	1	137	3	13	2	0	0	3	10	4	
1600	242	2	220	0	9	2	0	0	1	4	4	
1615	220	1	191	2	16	2	1	0	1	2	4	
1630	273	2	248	1	15	1	0	0	0	4	2	
1645	253	0	225	1	12	1	0	0	2	6	6	
1700	301	0	270	2	17	0	0	0	3	7	2	
1715	355	5	336	0	9	0	0	0	2	3	0	
1730	353	2	327	0	14	2	0	0	1	3	4	
1745	273	3	248	1	8	0	0	0	3	8	2	
1800	269	0	258	0	6	0	0	0	0	5	0	
1815	167	2	147	2	5	0	0	0	3	6	2	
1830	158	1	143	0	2	0	0	0	0	8	4	
1845	107	2	88	0	5	0	0	0	3	3	6	
1900	96	1	78	2	9	1	0	0	0	3	2	
1915	74	1	58	0	6	0	0	0	2	4	3	
1930	69	0	52	1	3	0	0	0	1	8	4	
1945	107	0	87	0	6	0	0	0	1	9	4	
2000	71	0	52	0	6	0	0	0	1	4	8	
2015	60	0	47	0	5	0	0	0	0	5	3	
2030	41	0	26	0	1	0	0	0	1	8	5	
2045	52	1	35	0	7	1	0	0	2	5	1	
2100	59	3	42	0	4	0	0	0	0	7	3	
2115	49	0	38	0	4	0	0	0	2	2	3	
2130	50	2	31	0	5	0	0	0	1	7	4	
2145	90	0	80	0	1	0	0	0	1	6	2	
2200	136	1	127	0	2	0	0	0	2	2	2	
2215	56	0	49	1	1	0	0	0	0	3	2	
2230	53	0	37	0	4	1	0	0	2	3	6	
2245	45	0	33	0	2	0	0	0	1	5	4	
2300	128	0	115	1	3	0	0	0	0	4	5	
2315	50	1	42	0	2	0	0	0	1	3	1	
2330	36	0	23	0	4	0	0	0	2	5	2	
2345	32	0	24	0	1	0	0	0	2	4	1	
07-19	**8190**	**46**	**6731**	**46**	**630**	**29**	**29**	**7**	**99**	**344**	**229**	
06-22	**9419**	**56**	**7637**	**53**	**764**	**32**	**30**	**7**	**115**	**440**	**285**	
06-00	**9955**	**58**	**8087**	**55**	**783**	**33**	**30**	**7**	**125**	**469**	**308**	
00-00	**10800**	**58**	**8599**	**55**	**902**	**40**	**31**	**8**	**157**	**551**	**399**	

8983.4 1755 17.63% 1490.6

14 May 2014 2088

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	88	1	77	0	1	0	0	0	1	4	4	
0015	34	0	25	0	1	0	0	0	2	1	5	
0030	37	0	26	0	2	0	0	0	0	7	2	
0045	27	0	13	0	5	0	0	0	1	2	6	
0100	24	0	15	0	0	0	0	0	3	3	3	
0115	38	0	22	0	3	0	1	0	1	2	9	
0130	30	0	19	0	4	0	0	0	0	5	2	
0145	36	0	22	0	3	0	0	0	0	5	6	
0200	37	0	21	0	0	0	0	0	2	8	6	
0215	28	0	20	0	2	0	0	0	1	0	5	
0230	28	0	22	0	1	0	0	0	0	4	1	
0245	24	0	10	0	7	0	0	0	1	3	3	
0300	22	0	11	0	2	0	0	0	1	4	4	
0315	40	0	16	0	13	0	0	0	1	5	5	
0330	27	0	14	0	2	1	0	0	1	7	2	
0345	27	0	7	0	6	0	0	1	3	2	8	
0400	41	0	29	1	5	0	0	0	0	2	4	
0415	28	0	17	0	5	0	0	0	2	1	3	
0430	38	0	21	1	6	0	0	0	2	6	2	
0445	27	0	16	0	5	0	0	0	2	1	3	
0500	35	1	18	0	8	2	0	0	1	4	1	
0515	54	0	29	0	11	1	0	0	1	7	5	
0530	43	0	19	0	8	1	0	0	2	6	7	
0545	83	0	61	1	14	0	0	0	1	3	3	
0600	169	1	142	0	18	2	0	0	0	2	4	
0615	82	2	51	0	19	1	0	0	0	7	2	
0630	82	1	54	1	8	0	0	0	4	8	6	
0645	108	4	70	0	15	1	0	0	2	8	8	
0700	215	1	178	2	17	2	1	0	2	8	4	
0715	148	1	112	1	21	0	0	0	2	7	4	
0730	118	1	81	0	18	3	0	0	4	10	1	
0745	176	1	135	1	16	3	0	0	3	11	6	
0800	179	4	137	1	14	2	1	1	2	12	5	
0815	161	0	133	0	15	0	0	0	2	8	3	
0830	147	1	124	1	11	1	1	0	0	4	4	
0845	143	0	112	1	13	1	1	2	0	5	8	
0900	142	0	93	3	20	0	1	0	6	14	5	
0915	120	2	86	0	16	1	1	1	2	7	4	
0930	116	0	81	2	14	1	3	0	3	7	5	
0945	123	1	81	1	14	1	2	0	1	14	8	
1000	122	1	75	2	20	1	0	1	4	10	8	
1015	101	0	73	4	10	1	0	0	3	6	4	
1030	98	1	72	2	7	2	0	0	2	7	5	
1045	93	1	60	2	11	0	3	0	3	7	6	
1100	102	2	62	2	17	0	0	0	3	11	5	
1115	126	0	84	4	12	2	2	0	1	12	9	
1130	111	4	70	0	15	2	0	0	4	9	7	
1145	116	2	62	1	22	2	0	1	2	14	10	
1200	135	1	104	1	13	0	0	0	2	7	7	
1215	119	1	84	0	12	3	1	1	5	8	4	
1230	154	1	116	0	15	1	0	1	1	12	7	
1245	134	0	104	0	15	0	0	1	1	9	4	
1300	146	1	108	1	11	0	3	0	4	14	4	
1315	144	0	110	1	16	0	1	1	2	9	4	
1330	127	0	85	2	19	0	1	0	1	12	7	
1345	151	1	119	1	12	0	2	0	2	9	5	
1400	296	7	252	2	14	2	3	0	3	6	7	
1415	152	3	117	1	18	0	0	0	2	8	3	
1430	167	3	142	1	16	1	1	0	0	2	1	
1445	181	2	144	2	17	1	0	0	2	6	7	
1500	251	3	212	2	17	0	1	0	4	9	3	
1515	152	1	130	1	10	1	0	0	0	7	2	
1530	199	1	178	0	7	0	1	0	0	8	4	
1545	199	1	170	0	11	0	0	0	7	4	6	
1600	257	2	224	2	12	2	0	0	3	7	5	
1615	189	3	156	1	13	0	0	0	1	9	6	
1630	224	1	206	1	9	0	1	0	3	1	2	
1645	213	4	181	0	8	0	0	0	4	12	4	
1700	325	1	302	0	13	0	0	1	0	4	4	
1715	299	4	262	5	18	0	0	0	2	4	4	
1730	312	2	284	1	12	2	0	0	4	6	1	
1745	270	3	236	0	20	1	0	0	2	4	4	
1800	296	2	265	2	9	0	0	0	1	10	7	
1815	163	3	145	0	5	0	0	0	2	3	5	
1830	134	1	121	0	3	0	1	0	1	5	2	
1845	117	0	102	1	7	0	0	0	2	2	3	
1900	101	0	89	0	5	0	0	0	0	3	4	
1915	77	2	61	0	3	0	0	0	0	6	5	
1930	82	3	62	0	4	0	0	0	0	10	3	
1945	98	11	68	0	2	0	1	0	4	6	6	
2000	79	2	63	0	4	0	0	0	0	8	2	
2015	57	1	45	0	5	0	0	0	1	3	2	
2030	70	0	50	0	7	1	0	0	1	5	6	
2045	53	0	34	0	7	0	0	0	2	5	5	
2100	52	1	39	0	2	1	0	0	2	4	3	
2115	45	0	33	0	3	1	0	0	1	5	2	
2130	56	1	36	1	5	0	0	0	0	10	3	
2145	84	0	67	0	4	0	1	0	2	7	3	
2200	178	3	158	2	5	0	0	0	3	4	3	
2215	43	0	31	0	2	0	0	0	2	6	2	
2230	50	0	38	0	2	0	0	0	1	8	1	
2245	46	0	30	0	3	0	0	0	1	7	5	
2300	135	1	120	0	4	0	1	0	4	3	2	
2315	39	1	28	0	1	0	0	0	2	5	2	
2330	37	1	27	0	3	0	0	0	1	4	1	
2345	49	0	37	1	0	0	0	0	2	4	5	
07-19	**8163**	**75**	**6570**	**58**	**655**	**39**	**32**	**11**	**110**	**380**	**233**	
06-22	**9458**	**104**	**7534**	**60**	**766**	**46**	**34**	**11**	**129**	**477**	**297**	
06-00	**10035**	**110**	**8003**	**63**	**786**	**46**	**35**	**11**	**145**	**518**	**318**	
00-00	**10931**	**112**	**8553**	**66**	**900**	**51**	**36**	**12**	**174**	**610**	**417**	

7846.8 1859 18.53% 1139.6

15 May 2014 2200

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	78	0	69	0	2	0	0	0	2	2	3	
0015	30	0	19	0	3	0	0	0	1	3	4	
0030	32	0	23	0	2	0	0	0	2	3	2	
0045	35	0	22	0	3	0	0	0	2	5	3	
0100	28	0	20	0	3	0	0	0	0	1	4	
0115	35	0	20	0	5	0	0	0	3	4	3	
0130	21	0	14	0	0	0	0	0	0	5	2	
0145	26	0	14	0	1	0	0	0	0	6	5	
0200	42	0	27	0	1	0	0	0	1	7	6	
0215	24	0	8	0	3	1	0	0	0	9	3	
0230	32	0	18	0	0	0	0	0	3	7	4	
0245	15	0	6	0	1	0	0	0	1	3	4	
0300	35	0	20	0	2	1	0	0	0	6	6	
0315	27	0	16	0	4	1	0	0	0	4	2	
0330	39	0	17	0	6	0	0	0	2	7	7	
0345	24	2	9	1	3	0	0	0	0	4	5	
0400	39	0	25	0	5	0	0	0	2	2	5	
0415	29	0	14	0	6	0	0	0	0	4	5	
0430	34	0	15	0	9	0	0	0	5	4	1	
0445	48	0	29	0	10	0	0	0	1	3	5	
0500	36	0	18	0	6	0	0	0	1	6	5	
0515	52	0	24	0	12	0	0	0	1	5	10	
0530	47	0	25	0	7	1	0	0	3	3	8	
0545	96	1	74	1	14	2	0	0	1	2	1	
0600	156	2	129	0	15	0	0	0	1	6	3	
0615	82	1	45	0	22	1	0	0	2	7	4	
0630	108	1	73	1	22	1	1	0	2	4	3	
0645	100	1	69	0	16	2	0	0	1	5	6	
0700	189	0	163	1	11	1	0	0	0	11	2	
0715	141	1	112	1	18	1	0	0	1	4	3	
0730	113	0	77	0	17	1	2	0	2	8	6	
0745	177	0	139	1	18	0	0	0	4	9	6	
0800	157	1	118	0	18	0	3	0	1	10	6	
0815	168	1	135	1	14	0	2	0	3	4	8	
0830	158	1	124	0	10	1	3	0	3	11	5	
0845	137	2	104	0	19	0	0	0	0	7	5	
0900	105	0	69	1	14	2	1	0	3	7	8	
0915	118	0	71	3	19	0	0	0	4	16	5	
0930	112	0	68	1	16	2	3	0	3	10	9	
0945	107	1	77	2	5	1	0	0	2	15	4	
1000	107	3	64	0	17	0	2	0	0	16	5	
1015	116	0	82	0	13	1	0	0	2	11	7	
1030	106	3	71	0	14	0	2	0	2	8	6	
1045	122	0	82	2	16	1	0	0	4	10	7	
1100	79	0	50	2	8	0	0	0	1	15	3	
1115	125	3	78	1	15	1	1	0	5	14	7	
1130	128	1	83	2	16	0	2	0	4	8	12	
1145	111	1	78	0	18	0	0	1	4	6	3	
1200	141	2	107	2	9	0	1	0	2	12	6	
1215	111	1	92	1	7	2	0	0	1	5	2	
1230	147	1	102	1	21	0	1	0	1	16	4	
1245	126	1	89	1	14	1	0	1	2	8	9	
1300	120	2	89	1	12	1	3	0	2	5	5	
1315	130	0	85	0	17	4	0	0	4	14	6	
1330	140	0	117	1	14	0	1	0	2	1	4	
1345	145	3	111	1	13	1	1	0	2	11	2	
1400	286	4	242	3	14	1	2	0	5	7	8	
1415	164	3	123	1	17	0	1	0	4	9	6	
1430	164	2	125	0	16	2	3	0	1	6	9	
1445	131	0	110	0	13	0	1	0	0	3	4	
1500	296	1	271	0	14	0	2	0	2	5	1	
1515	178	2	146	0	15	1	0	0	3	7	4	
1530	186	3	155	0	15	0	2	0	1	5	5	
1545	175	1	132	2	12	2	0	1	2	17	6	
1600	255	1	226	4	14	1	1	0	0	6	2	
1615	205	3	172	3	12	0	0	0	3	7	5	
1630	257	3	218	1	16	0	0	0	1	10	8	
1645	248	2	216	1	16	1	0	0	3	5	4	
1700	328	3	295	1	14	0	0	0	1	7	7	
1715	316	4	283	3	6	0	0	0	1	9	10	
1730	372	3	335	3	17	0	0	0	5	5	4	
1745	263	3	230	3	11	1	2	1	2	7	3	
1800	274	2	249	1	12	0	0	1	0	3	6	
1815	155	1	142	1	5	0	0	0	2	4	0	
1830	149	1	129	0	7	1	0	0	0	8	3	
1845	126	3	104	2	4	0	0	0	3	7	3	
1900	104	2	85	0	9	0	0	0	0	3	5	
1915	83	3	64	0	7	0	0	0	2	5	2	
1930	59	0	38	1	6	0	0	0	0	8	6	
1945	70	1	49	0	8	0	0	0	4	5	3	
2000	104	3	85	0	3	0	0	0	1	9	3	
2015	51	1	40	0	2	0	0	0	1	4	3	
2030	56	1	37	1	1	0	0	0	2	6	8	
2045	65	2	43	1	4	0	0	0	1	8	6	
2100	74	0	62	0	4	0	0	0	3	3	2	
2115	50	2	39	0	1	0	0	0	0	4	4	
2130	71	1	51	0	5	0	0	0	1	7	6	
2145	78	0	64	1	2	0	0	0	1	7	3	
2200	157	2	139	1	5	0	0	0	1	5	4	
2215	51	0	37	0	6	0	0	0	1	3	4	
2230	35	1	22	0	4	0	0	0	2	5	1	
2245	44	0	26	0	0	0	0	0	2	9	7	
2300	148	0	139	0	1	0	0	0	1	2	5	
2315	46	2	35	0	1	0	0	0	3	2	3	
2330	37	0	25	0	3	0	0	0	1	4	4	
2345	43	0	33	0	4	0	0	0	3	3	0	
07-19	**8164**	**73**	**6540**	**55**	**653**	**31**	**42**	**5**	**103**	**409**	**253**	
06-22	**9475**	**94**	**7513**	**60**	**780**	**35**	**43**	**5**	**125**	**500**	**320**	
06-00	**10036**	**99**	**7969**	**61**	**804**	**35**	**43**	**5**	**139**	**533**	**348**	
00-00	**10940**	**102**	**8515**	**63**	**912**	**41**	**43**	**5**	**170**	**638**	**451**	

5839.8 1907 19.00% 767.8

16 May 2014 2260

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	80	0	71	0	2	0	0	0	2	1	4	
0015	29	0	20	0	2	0	0	0	1	1	5	
0030	42	0	31	0	4	0	0	0	2	3	2	
0045	33	1	19	0	2	0	0	0	2	6	3	
0100	33	0	20	0	2	0	0	0	0	3	8	
0115	32	0	16	0	4	0	0	0	3	4	5	
0130	29	0	16	0	1	0	0	0	1	4	7	
0145	30	0	12	0	3	0	0	0	1	11	3	
0200	43	0	33	0	1	0	0	0	1	4	4	
0215	32	0	15	0	4	0	0	0	2	5	6	
0230	30	0	11	0	6	0	0	0	0	7	6	
0245	12	0	4	0	4	0	0	0	1	1	2	
0300	37	0	23	0	6	0	0	0	0	4	4	
0315	29	0	9	0	7	0	0	0	2	6	5	
0330	34	0	16	0	7	0	1	0	4	2	4	
0345	38	0	12	0	9	0	0	0	2	5	10	
0400	30	0	13	0	3	0	0	0	3	5	6	
0415	20	0	8	0	5	0	0	0	0	4	3	
0430	30	0	19	0	1	0	0	0	1	5	4	
0445	36	0	24	0	3	0	1	0	2	2	4	
0500	40	0	18	1	7	0	0	1	1	6	6	
0515	45	0	24	0	8	0	0	0	2	4	7	
0530	52	1	22	0	7	2	1	2	2	10	5	
0545	104	1	70	0	16	0	0	0	1	9	7	
0600	133	1	104	0	13	1	0	0	4	7	3	
0615	71	0	37	0	23	0	0	0	0	6	5	
0630	119	2	73	3	19	1	1	1	2	10	7	
0645	97	1	67	1	17	0	1	0	1	2	7	
0700	201	1	158	0	22	4	0	1	2	9	4	
0715	114	1	84	1	9	0	0	0	3	6	10	
0730	141	0	103	0	17	1	0	0	2	12	6	
0745	131	0	99	2	12	1	1	0	2	8	6	
0800	158	1	123	2	12	1	2	0	3	7	7	
0815	175	1	140	2	12	0	0	1	5	7	7	
0830	160	2	119	0	20	0	2	0	3	10	4	
0845	151	0	106	1	19	0	2	0	0	16	7	
0900	133	1	87	1	16	1	1	1	2	14	9	
0915	130	1	86	3	14	0	1	1	2	11	11	
0930	149	2	100	1	19	1	0	0	5	12	9	
0945	100	0	63	2	17	0	0	0	1	10	7	
1000	117	0	80	2	14	2	0	1	5	5	8	
1015	119	0	79	1	14	0	2	0	2	13	8	
1030	104	0	76	1	12	0	0	0	1	7	7	
1045	106	1	69	1	13	0	2	1	1	14	4	
1100	110	0	74	1	16	2	0	0	4	10	3	
1115	117	0	82	0	10	0	0	0	7	10	8	
1130	124	0	78	2	17	0	0	0	5	17	5	
1145	111	1	85	1	13	0	0	0	0	6	5	
1200	167	0	121	0	9	1	2	0	3	21	10	
1215	135	0	101	0	10	2	0	0	1	14	7	
1230	168	2	127	1	12	0	0	2	4	8	12	
1245	139	0	112	0	12	0	1	0	1	11	2	
1300	177	5	141	1	13	0	2	0	1	4	10	
1315	140	1	111	0	11	0	0	0	2	7	8	
1330	162	1	124	2	16	1	1	0	2	8	7	
1345	162	1	121	0	18	1	0	0	1	11	9	
1400	335	5	299	1	15	2	1	0	3	5	4	
1415	158	1	117	2	19	1	0	0	3	10	5	
1430	192	0	151	2	18	2	0	0	3	9	7	
1445	183	3	142	2	17	0	1	0	4	8	6	
1500	267	7	232	1	11	4	1	1	1	4	5	
1515	179	1	142	0	13	2	0	0	1	9	11	
1530	189	1	157	2	11	3	0	0	2	7	6	
1545	203	1	173	0	10	0	0	0	2	9	8	
1600	287	3	263	2	7	0	0	0	0	6	6	
1615	217	1	195	2	11	0	0	0	2	2	4	
1630	257	1	230	3	10	1	0	0	2	3	7	
1645	253	9	222	1	10	0	0	0	2	3	6	
1700	293	1	259	4	16	0	3	0	1	4	5	
1715	258	4	224	0	9	1	0	0	2	14	4	
1730	277	5	251	1	10	0	0	0	2	3	5	
1745	231	4	194	4	13	1	0	0	3	7	5	
1800	238	1	218	1	9	1	0	0	2	2	4	
1815	138	0	119	1	10	0	0	0	0	6	2	
1830	118	0	99	0	8	0	0	0	1	4	6	
1845	109	3	84	2	4	0	0	0	0	8	8	
1900	102	1	86	0	6	0	0	0	1	6	2	
1915	96	1	77	0	7	0	1	0	2	5	3	
1930	66	2	50	1	6	0	1	0	1	4	1	
1945	61	2	40	0	3	0	1	0	5	7	3	
2000	69	0	47	1	8	1	0	0	2	4	6	
2015	66	1	48	0	5	0	0	0	1	5	6	
2030	63	1	46	0	4	0	0	0	1	5	6	
2045	42	0	28	0	3	0	0	0	2	5	4	
2100	53	0	43	0	2	0	0	0	1	6	1	
2115	46	2	32	0	2	0	0	0	3	4	3	
2130	43	1	32	0	1	0	0	0	1	2	6	
2145	77	0	63	0	4	0	0	0	2	6	2	
2200	135	3	124	0	3	0	0	0	0	2	3	
2215	47	0	33	0	2	0	0	0	1	10	1	
2230	40	0	30	0	4	0	0	0	2	3	1	
2245	46	0	29	0	5	0	0	0	1	8	3	
2300	115	0	109	0	0	0	0	0	3	1	2	
2315	43	0	32	0	2	0	0	0	1	7	1	
2330	39	1	23	0	1	0	0	0	1	7	6	
2345	33	0	23	0	0	0	0	0	2	2	6	
07-19	**8283**	**73**	**6620**	**59**	**630**	**36**	**25**	**9**	**106**	**411**	**314**	
06-22	**9487**	**88**	**7493**	**65**	**753**	**39**	**30**	**10**	**135**	**495**	**379**	
06-00	**9985**	**92**	**7896**	**65**	**770**	**39**	**30**	**10**	**146**	**535**	**402**	
00-00	**10905**	**95**	**8422**	**66**	**884**	**41**	**33**	**13**	**182**	**647**	**522**	

3832.6 1932 19.35% 386.4

17 May 2014 2322

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	71	1	59	0	3	0	0	0	2	3	3	
0015	29	0	25	0	2	0	0	0	0	0	2	
0030	34	0	20	0	1	0	0	0	1	2	10	
0045	24	0	18	0	1	0	0	0	1	2	2	
0100	27	0	20	0	0	0	0	0	4	0	3	
0115	13	0	8	0	0	0	0	0	0	3	2	
0130	23	0	12	0	2	0	0	0	0	4	5	
0145	21	0	8	0	0	0	0	0	0	9	4	
0200	23	0	12	0	3	0	0	0	2	1	5	
0215	12	0	2	0	2	0	0	0	3	4	1	
0230	23	0	11	0	1	0	0	0	3	4	4	
0245	21	0	11	0	1	0	0	0	0	4	5	
0300	28	0	22	0	2	0	0	0	0	1	3	
0315	25	0	13	0	3	0	0	0	0	3	6	
0330	30	0	13	0	4	0	0	0	3	3	7	
0345	21	0	14	0	3	0	0	0	1	0	3	
0400	33	0	20	0	1	0	0	0	0	3	9	
0415	18	0	5	0	0	0	0	0	3	5	5	
0430	23	0	13	0	1	0	0	0	0	6	3	
0445	19	0	10	0	1	0	0	0	1	0	7	
0500	24	0	10	0	7	0	0	0	0	5	2	
0515	28	0	18	0	3	0	1	0	3	1	2	
0530	37	0	25	1	3	0	0	0	2	3	3	
0545	35	0	24	0	0	1	0	1	2	3	4	
0600	83	4	66	0	4	0	0	0	0	5	4	
0615	33	2	16	0	8	0	0	0	0	1	6	
0630	47	1	33	0	5	1	0	0	0	3	4	
0645	35	1	21	0	3	0	0	0	2	4	4	
0700	133	1	116	0	6	2	0	0	0	3	5	
0715	48	1	37	0	4	0	0	0	0	4	2	
0730	57	2	45	0	1	0	1	0	1	5	2	
0745	38	0	24	0	4	0	0	0	2	3	5	
0800	80	2	59	2	6	2	0	0	0	5	4	
0815	63	2	48	0	3	1	2	0	0	4	3	
0830	47	2	34	0	4	1	0	0	0	3	3	
0845	68	0	59	1	2	0	1	0	0	1	4	
0900	79	4	60	2	5	0	1	0	3	1	3	
0915	70	3	52	1	5	0	0	1	1	3	4	
0930	91	1	75	1	4	1	0	0	2	5	2	
0945	109	0	93	4	3	0	1	0	0	3	5	
1000	102	1	91	2	5	1	1	0	0	0	1	
1015	85	4	63	2	8	0	0	0	0	4	4	
1030	105	0	92	0	5	0	0	0	2	2	4	
1045	95	3	79	0	6	0	0	0	0	2	5	
1100	98	2	78	0	3	0	1	0	2	8	4	
1115	87	4	69	0	8	0	0	0	0	4	2	
1130	112	1	90	0	7	0	1	0	0	4	9	
1145	99	2	83	1	1	0	0	0	2	5	5	
1200	120	3	100	0	5	2	1	0	0	6	3	
1215	80	5	66	1	3	0	0	0	0	3	2	
1230	90	4	75	0	2	1	0	0	2	3	3	
1245	78	4	64	3	2	0	0	0	2	3	0	
1300	86	0	76	0	5	0	0	0	0	1	4	
1315	86	3	72	1	5	0	0	0	0	4	1	
1330	85	7	67	2	2	0	1	0	1	2	3	
1345	87	1	73	1	1	0	0	0	2	3	6	
1400	140	2	124	1	9	0	0	0	0	2	2	
1415	80	2	68	2	4	0	0	0	1	1	2	
1430	84	2	74	0	4	1	0	0	1	0	2	
1445	62	1	56	0	3	0	0	0	0	2	0	
1500	156	4	143	1	1	0	0	0	2	2	3	
1515	70	2	59	1	2	0	0	0	0	4	2	
1530	105	2	87	0	3	0	0	0	0	6	7	
1545	64	1	55	0	2	0	0	0	2	1	3	
1600	100	2	86	0	2	0	0	0	2	4	4	
1615	78	0	70	1	2	0	0	0	1	3	1	
1630	85	0	78	0	1	0	0	0	0	3	3	
1645	75	3	64	0	1	2	0	0	0	2	3	
1700	97	0	83	1	8	0	0	1	1	2	1	
1715	81	1	72	0	1	0	0	0	0	5	2	
1730	75	4	61	1	4	0	0	0	0	3	2	
1745	75	3	60	1	1	0	0	0	1	4	5	
1800	80	1	71	0	3	0	0	0	0	2	3	
1815	65	3	51	0	4	0	0	0	0	3	4	
1830	47	0	40	0	1	0	0	0	0	4	2	
1845	46	0	39	0	5	0	0	0	0	2	0	
1900	56	0	46	0	6	0	0	0	0	1	3	
1915	53	1	41	0	5	0	0	0	0	4	2	
1930	44	1	35	1	2	0	1	0	0	3	1	
1945	37	3	29	0	0	0	0	0	0	2	3	
2000	34	0	28	0	1	0	0	0	0	2	3	
2015	28	3	23	0	1	0	0	0	0	0	1	
2030	27	0	21	0	1	0	0	0	0	2	3	
2045	31	1	22	1	2	0	0	0	0	3	2	
2100	25	1	20	0	1	0	0	0	0	3	0	
2115	28	1	23	0	2	0	0	0	0	0	2	
2130	24	0	17	0	2	0	0	0	0	2	3	
2145	17	0	16	0	0	0	0	0	0	0	1	
2200	38	1	36	0	0	0	0	0	0	0	1	
2215	21	0	16	0	2	1	0	0	0	1	1	
2230	28	0	24	0	0	0	0	0	0	2	2	
2245	28	0	23	0	0	0	0	0	0	4	1	
2300	76	0	70	0	2	0	0	0	0	2	2	
2315	31	0	23	0	1	0	0	0	0	4	3	
2330	26	0	24	0	0	0	0	0	0	2	0	
2345	13	0	8	1	1	0	0	0	0	1	2	
07-19	**4043**	**95**	**3381**	**33**	**176**	**14**	**11**	**2**	**33**	**149**	**149**	
06-22	**4645**	**114**	**3838**	**35**	**219**	**15**	**12**	**2**	**35**	**184**	**191**	
06-00	**4906**	**115**	**4062**	**36**	**225**	**16**	**12**	**2**	**35**	**200**	**203**	
00-00	**5548**	**116**	**4455**	**37**	**269**	**17**	**13**	**3**	**66**	**269**	**303**	

18 May 2014 940

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	31	1	26	0	1	0	0	0	0	0	3	
0015	25	0	23	0	0	0	0	0	0	2	0	
0030	11	0	10	0	0	0	0	0	0	1	0	
0045	18	0	14	0	1	0	0	0	0	2	1	
0100	14	0	8	0	1	0	0	0	1	2	2	
0115	8	0	7	0	0	0	0	0	0	0	1	
0130	15	0	11	0	0	0	0	0	0	0	4	
0145	9	0	7	0	0	0	0	0	0	2	0	
0200	9	0	7	0	1	0	0	0	0	0	1	
0215	9	0	5	0	1	0	0	0	1	1	1	
0230	11	0	8	0	0	0	0	0	0	2	1	
0245	12	0	7	0	0	0	0	0	0	2	3	
0300	15	0	11	0	1	0	0	0	0	1	2	
0315	10	0	6	0	0	0	0	0	0	3	1	
0330	15	0	8	0	0	0	0	0	1	2	4	
0345	7	0	5	0	0	0	0	0	0	0	2	
0400	15	0	6	0	1	1	0	0	1	3	3	
0415	3	0	2	0	0	0	0	0	0	0	1	
0430	27	0	20	0	4	0	0	0	0	0	3	
0445	17	0	7	0	2	0	0	0	1	3	4	
0500	8	0	3	0	0	0	0	0	0	1	4	
0515	17	2	11	0	1	0	0	0	0	3	0	
0530	22	0	12	0	3	0	0	0	0	5	2	
0545	22	0	13	0	4	0	0	0	1	2	2	
0600	42	3	29	0	3	0	0	0	0	1	6	
0615	17	1	14	0	0	0	0	0	0	2	0	
0630	27	0	15	0	5	0	0	0	0	4	3	
0645	25	1	14	1	1	0	0	0	2	5	1	
0700	96	2	88	1	3	0	0	0	1	0	1	
0715	29	0	22	1	0	0	0	0	1	3	2	
0730	33	0	24	0	3	0	0	0	1	3	2	
0745	34	2	25	1	2	0	0	0	0	3	1	
0800	45	3	33	2	1	0	0	0	1	1	4	
0815	32	1	23	1	2	0	0	0	0	2	3	
0830	39	1	29	0	5	0	0	0	0	4	0	
0845	49	4	32	2	2	0	0	0	1	5	3	
0900	56	5	43	1	1	0	0	0	1	4	1	
0915	102	26	61	1	5	1	1	0	0	4	3	
0930	70	3	57	2	0	0	0	0	1	2	5	
0945	69	0	58	0	1	0	0	1	0	6	3	
1000	77	6	53	1	6	0	0	0	0	5	6	
1015	77	2	63	2	3	0	0	0	2	2	3	
1030	72	4	60	0	2	0	0	0	0	3	3	
1045	75	3	61	0	0	0	5	0	1	3	2	
1100	66	2	54	1	3	0	0	0	1	5	0	
1115	77	2	64	5	2	0	0	0	0	1	3	
1130	84	4	71	1	1	0	1	0	1	4	1	
1145	82	4	63	1	5	1	0	0	2	5	1	
1200	79	4	66	0	2	0	0	0	1	2	4	
1215	84	1	78	0	0	0	0	0	0	3	2	
1230	85	1	73	0	6	0	0	0	0	4	1	
1245	83	2	70	0	4	0	0	0	1	5	1	
1300	64	1	52	1	2	0	0	0	1	4	3	
1315	75	0	67	0	2	0	0	0	0	4	2	
1330	70	6	61	0	1	0	0	0	0	2	0	
1345	77	2	63	2	2	0	0	0	1	4	3	
1400	139	4	124	1	5	0	0	0	0	2	3	
1415	77	2	66	1	1	0	0	1	1	2	3	
1430	67	6	53	0	1	0	0	1	2	3	1	
1445	74	5	59	1	4	0	0	0	0	4	1	
1500	131	0	122	0	2	0	0	0	1	2	4	
1515	92	5	78	0	1	0	1	0	1	2	4	
1530	76	0	65	0	1	0	0	0	1	5	4	
1545	57	2	47	0	2	0	0	0	0	5	1	
1600	102	3	91	0	1	0	0	0	1	2	4	
1615	87	4	73	1	2	0	0	0	1	1	5	
1630	64	0	55	1	2	0	0	1	0	2	3	
1645	66	0	55	1	3	0	0	0	2	1	4	
1700	60	0	53	1	2	0	0	0	0	1	3	
1715	64	0	52	0	4	0	0	0	0	3	5	
1730	72	2	57	1	5	0	0	0	0	4	3	
1745	64	2	49	2	2	1	0	0	1	1	6	
1800	90	2	73	2	3	0	1	1	2	3	3	
1815	48	2	39	2	1	0	0	0	0	0	4	
1830	55	1	46	0	2	0	0	1	0	3	2	
1845	53	0	44	3	2	0	0	1	1	1	1	
1900	55	1	47	0	4	0	0	0	0	1	2	
1915	42	0	35	1	3	0	0	0	0	3	0	
1930	29	1	19	0	2	0	0	0	0	3	4	
1945	47	2	36	0	4	0	0	0	0	3	2	
2000	52	0	47	0	1	0	0	0	0	2	2	
2015	34	1	25	1	2	0	0	0	0	2	3	
2030	37	2	31	0	0	0	0	0	0	3	1	
2045	30	0	21	0	0	0	0	0	1	5	3	
2100	35	0	28	0	1	0	0	0	0	4	2	
2115	47	0	43	0	2	0	0	0	0	1	1	
2130	21	1	13	0	0	0	0	0	1	1	5	
2145	26	0	12	1	3	0	0	1	0	3	6	
2200	59	0	53	0	2	0	0	0	0	3	1	
2215	20	0	18	0	0	0	0	0	0	1	1	
2230	23	1	18	1	1	0	0	0	0	0	2	
2245	30	0	23	0	1	0	0	0	0	6	0	
2300	87	0	78	0	1	0	0	0	0	5	3	
2315	23	0	14	0	1	2	0	0	1	1	4	
2330	20	0	11	0	2	0	0	0	1	4	2	
2345	25	0	20	0	1	1	0	0	0	1	2	
07-19	**3419**	**131**	**2815**	**43**	**112**	**3**	**9**	**7**	**32**	**140**	**127**	
06-22	**3985**	**144**	**3244**	**47**	**143**	**3**	**9**	**8**	**36**	**183**	**168**	
06-00	**4272**	**145**	**3479**	**48**	**152**	**6**	**9**	**8**	**38**	**204**	**183**	
00-00	**4622**	**148**	**3716**	**48**	**173**	**7**	**9**	**8**	**44**	**241**	**228**	

Grand Total 710

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
--	**64158**	**694**	**50709**	**374**	**4851**	**253**	**192**	**61**	**914**	**3443**	**2667**	

Period	Total	Per day		
18 hour	49699	9940		
AADT	64158	9165		
AM 5	3218	644	Combined peak 5 day	1861
PM 5	6086	1217		
AM 7	3641	520	Combined peak 7 day	1474
PM 7	6674	953		

18 hr factor 5.3417

AADT factor 6.2199

Report Id - CustomList-40
Site Name - LUTTERWORTH- 02
Description - COVENTRY ROAD [70M]
Direction - East

12 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 70	]PSL% 70	]SL1 79 ACPO	]SL1% 79 ACPO	]SL2 85 DFT	]SL2% 85 DFT	Fix1
0000	0	0	0	0	0	2	1	2	3	4	4	11	4	2	1	1	0	53	61.7	2	5.7	0	0	0	0	
0015	0	0	0	0	0	1	0	6	5	3	1	2	0	0	0	0	0	43.6	49.4	0	0	0	0	0	0	
0030	0	0	0	1	0	0	9	10	12	2	3	0	1	1	0	0	0	40.5	47.4	0	0	0	0	0	0	
0045	0	0	0	0	0	1	3	5	1	1	6	1	1	0	1	0	0	45.4	51.7	1	5	0	0	0	0	
0100	0	0	0	0	0	0	0	1	1	3	0	1	0	0	0	0	0	45.9	-	0	0	0	0	0	0	
0115	0	0	0	0	1	1	0	0	5	3	3	1	0	0	0	0	0	43.7	52.8	0	0	0	0	0	0	
0130	0	0	0	0	1	0	2	0	5	10	0	1	1	0	0	0	0	44.4	49	0	0	0	0	0	0	
0145	0	0	0	0	0	0	6	4	1	5	4	7	1	0	0	0	0	45.9	55.7	0	0	0	0	0	0	
0200	0	0	0	0	3	0	4	4	9	5	10	0	0	0	0	0	0	42.4	50.8	0	0	0	0	0	0	
0215	0	0	0	0	0	3	1	1	3	8	2	1	0	0	0	0	0	43.4	49.9	0	0	0	0	0	0	
0230	0	0	0	0	0	2	0	2	0	11	1	0	0	0	0	0	0	45.3	49.7	0	0	0	0	0	0	
0245	0	0	0	0	1	3	6	1	1	13	7	2	0	0	0	0	0	42.9	50.3	0	0	0	0	0	0	
0300	0	0	0	0	0	0	0	1	1	6	17	4	0	0	0	0	0	50.1	53.2	0	0	0	0	0	0	
0315	0	0	0	0	4	1	1	1	3	5	4	3	1	1	0	0	0	44.5	55.5	0	0	0	0	0	0	
0330	0	0	0	0	0	1	1	0	0	14	1	1	1	0	0	0	0	47.2	48.8	0	0	0	0	0	0	
0345	0	0	0	0	1	6	0	5	1	2	3	1	0	0	0	0	0	37.1	49.9	0	0	0	0	0	0	
0400	0	0	0	0	2	1	9	3	1	12	0	4	0	0	1	0	0	42.5	49.4	1	3	0	0	0	0	
0415	0	0	0	0	0	2	6	1	3	9	4	2	0	1	1	0	0	45.2	54.8	1	3.4	0	0	0	0	
0430	0	0	0	0	0	2	1	5	15	3	3	1	2	0	0	1	0	44.4	50.6	1	3	0	0	0	0	
0445	0	0	0	0	0	2	4	1	11	4	0	5	3	6	1	0	0	49.5	66.4	1	2.7	0	0	0	0	
0500	0	0	0	0	0	1	2	4	4	19	11	3	6	2	1	3	0	50.9	62.9	4	7.1	0	0	0	0	
0515	0	0	0	1	0	3	2	1	4	6	5	5	7	0	3	0	1	51.4	63.8	4	10.5	1	2.6	1	2.6	
0530	0	0	0	0	3	1	3	1	4	4	8	12	7	6	1	0	0	52.3	64	1	2	0	0	0	0	
0545	0	0	0	0	0	5	4	9	5	7	12	14	12	1	3	0	1	50.3	61.5	4	5.5	1	1.4	1	1.4	
0600	0	0	0	0	0	3	15	26	28	19	13	13	10	5	3	3	2	47.2	60.4	8	5.7	3	2.1	0	0	
0615	0	0	0	0	3	4	7	1	11	18	11	11	11	4	3	2	1	50.3	63.3	6	6.9	1	1.1	0	0	
0630	0	0	0	0	0	7	0	7	4	9	12	24	15	10	6	1	2	55.1	65.8	9	9.3	2	2.1	2	2.1	
0645	0	0	0	0	2	6	4	7	4	9	10	22	20	9	6	2	3	54.8	66.7	11	10.6	3	2.9	1	1	
0700	0	0	0	0	0	6	6	8	23	28	31	40	23	16	16	2	4	54.9	67.8	22	10.8	4	2	2	1	
0715	0	0	0	0	1	7	3	5	3	6	29	21	15	9	7	1	1	54.1	65.5	9	8.3	1	0.9	0	0	
0730	0	0	0	0	0	1	7	5	7	15	25	16	22	13	10	1	1	55.4	66.2	12	9.8	1	0.8	0	0	
0745	0	0	0	0	0	1	9	1	7	10	22	20	26	23	9	3	2	57.6	68.2	14	10.5	3	2.3	2	1.5	
0800	0	0	0	1	1	4	6	3	8	17	26	14	26	10	7	7	1	55.1	67.3	15	11.5	2	1.5	1	0.8	
0815	0	0	0	0	1	3	5	1	8	7	18	31	49	28	16	2	2	59.4	68.9	20	11.7	3	1.8	1	0.6	
0830	0	0	0	0	2	7	6	1	15	11	36	27	24	17	7	1	0	53.9	65.5	8	5.2	0	0	0	0	
0845	0	0	0	0	1	7	3	3	15	10	27	41	23	11	11	4	1	55.2	65.8	16	10.2	2	1.3	0	0	
0900	0	0	0	0	0	4	1	10	17	13	17	16	27	12	8	2	3	55	66.9	13	10	4	3.1	1	0.8	
0915	0	0	0	0	1	3	5	7	8	13	14	24	25	6	5	7	1	54.9	65.3	13	10.9	2	1.7	0	0	
0930	0	0	0	0	2	0	1	5	21	18	25	17	19	12	1	0	0	52.8	62.9	1	0.8	0	0	0	0	
0945	0	0	0	0	1	3	6	7	10	15	22	21	22	11	2	2	1	53.6	64.4	5	4.1	1	0.8	0	0	
1000	0	0	0	0	1	4	3	9	10	11	18	17	6	14	8	4	1	53.7	66.7	13	12.3	2	1.9	0	0	
1015	0	0	0	0	2	3	6	5	9	34	18	21	15	5	7	3	0	52.3	62.6	10	7.8	1	0.8	0	0	
1030	0	0	0	0	0	4	1	9	16	19	27	10	10	10	5	0	1	51.9	63.3	6	5.4	1	0.9	0	0	
1045	0	0	0	0	3	10	6	6	14	17	16	22	10	1	1	0	1	48	58.2	2	1.9	1	0.9	1	0.9	
1100	0	0	0	0	0	6	2	9	11	19	19	20	12	6	0	0	1	50.6	61.3	1	1	1	1	1	1	
1115	0	0	0	0	0	3	7	10	23	17	20	6	4	5	2	1	2	48.4	57.3	5	5	2	2	0	0	
1130	0	0	0	0	1	4	5	10	22	13	36	21	6	5	2	1	0	49.7	58.4	3	2.4	0	0	0	0	
1145	0	0	0	0	1	3	3	4	9	27	35	15	14	4	2	2	0	51.9	60.2	4	3.4	0	0	0	0	
1200	0	0	0	0	2	5	9	8	14	30	28	31	14	13	2	0	0	51.1	61.7	2	1.3	0	0	0	0	
1215	0	0	0	0	1	3	5	9	5	28	29	33	14	14	4	1	0	53.1	63.3	5	3.4	0	0	0	0	
1230	0	0	0	0	8	4	10	17	20	35	28	15	8	5	4	1	0	47.1	56.1	5	3.2	0	0	0	0	
1245	0	0	0	0	1	2	4	7	11	21	27	20	24	9	1	3	0	53.2	62.4	4	3.1	1	0.8	0	0	
1300	0	0	0	0	1	4	6	7	12	15	29	15	16	6	4	4	0	52	63.5	8	6.7	0	0	0	0	
1315	0	0	0	0	0	0	1	7	14	32	18	24	18	8	2	1	0	53.1	63.5	3	2.4	0	0	0	0	
1330	0	0	0	0	1	2	4	9	21	22	21	3	6	4	2	0	1	48.3	55.9	3	3.1	1	1	0	0	
1345	0	0	0	0	3	1	4	14	8	26	29	20	13	10	5	2	1	52	64	8	5.9	1	0.7	0	0	
1400	0	0	0	0	1	6	27	71	54	41	45	29	28	8	1	1	1	46.6	58.4	3	1	1	0.3	0	0	
1415	0	0	0	0	2	4	6	16	22	26	23	32	11	5	6	1	1	50.3	59.9	8	5.2	2	1.3	0	0	
1430	0	0	0	0	2	2	8	18	28	31	26	21	12	8	0	1	0	48.6	59.3	1	0.6	0	0	0	0	
1445	0	0	0	0	2	0	2	13	29	23	30	21	17	3	4	1	0	50.6	60.6	5	3.4	0	0	0	0	
1500	0	0	0	0	1	5	22	19	21	32	50	32	37	13	0	2	0	50.5	62.2	2	0.9	0	0	0	0	
1515	0	0	0	0	3	4	14	15	16	16	30	36	13	6	5	3	0	50.2	60.2	8	5	0	0	0	0	
1530	0	0	0	0	0	2	5	20	16	25	36	23	22	22	6	1	1	53.2	65.1	8	4.5	1	0.6	1	0.6	
1545	0	0	0	0	0	4	8	8	14	26	21	31	14	11	5	2	1	52.5	63.1	8	5.5	1	0.7	0	0	
1600	0	0	0	0	0	0	7	20	21	27	44	42	47	14	11	2	2	54.4	63.1	15	6.3	3	1.3	1	0.4	
1615	0	0	0	0	0	2	4	14	16	14	35	28	32	21	10	3	5	56	66.9	18	9.8	6	3.3	1	0.5	
1630	0	0	0	0	0	6	4	15	20	22	37	42	42	31	19	5	5	56.7	69.3	29	11.7	5	2	2	0.8	
1645	0	0	0	0	1	5	3	13	18	25	37	30	41	18	10	8	3	55.3	66.2	21	9.9	3	1.4	0	0	
1700	0	0	0	0	0	1	7	36	14	19	47	51	58	41	20	10	3	56.7	68.2	33	10.7	5	1.6	1	0.3	
1715	0	0	0	0	0	9	10	14	20	33	32	74	45	39	24	3	4	56.1	68.2	31	10.1	5	1.6	1	0.3	
1730	0	0	0	0	2	1	8	17	22	28	48	65	69	40	18	11	2	57	67.8	31	9.4	4	1.2	1	0.3	
1745	0	0	0	0	0	1	1	10	11	37	58	58	64	34	35	5	1	58.1	68.7	41	13	1	0.3	1	0.3	
1800	0	0	0	0	0	4	7	12	17	22	38	41	49	31	13	3	8	56.7	68.5	24	9.8	8	3.3	2	0.8	
1815	0	0	0	0	2	2	3	5	11	15	26	30	26	32	9	8	7	58.9	69.8	24	13.6	8	4.5	5	2.8	
1830	0	0	0	0	2	3	2	8	3	12	22	21	14	11	11	10	0	56.5	70.7	21	17.6	0	0	0	0	
1845	0	0	0	0	0	0	2	4	2	6	20	19	11	9	6	3	5	58.8	70	14	16.1	5	5.7	0	0	
1900	0	0	0	1	0	2	4	8	6	12	13	13	14	20	3	2	4	55.9	68.2	9	8.8	5	4.9	2	2	
1915	0	0	0	0	0	4	3	4	11	10	16	11	8	10	6	4	2	54.6	69.3	12	13.5	3	3.4	2	2.2	
1930	0	0	0	2	1	4	5	0	3	6	5	19	12	6	1	0	1	52.3	64.4	2	3.1	1	1.5	0	0	
1945	0	0	0	1	1	3	4	4	6	5	12	16	4	9	6	1	1	53.3	67.6	8	11	2	2.7	0	0	
2000	0	0	0	0	0	3	10	12	5	3	5	12	7	4	2	0	1	48.1	61.5	3	4.7	1	1.6	0	0	
2015	0	0	0	0	1	2	5	4	2	7	13	10	7	2	0	0	2	51.1	63.1	2	3.6	2	3.6	1	1.8	
2030	0	0	0	0	0	3	1	4	1	4	14	16	7	5	0	0	1	53.9	63.5	1	1.8	1	1.8	1	1.8	
2045	0	0	0	0	0	0	2	4	3	14	8	5	7	5	2	1	2	54.4	65.8	5	9.4	2	3.8	0	0	
2100	0	0	0	0	0	4	2	4	3	14	10	19	4	4	0	2	1	52.2	60.2	3	4.5	1	1.5	1	1.5	
2115	0	0	0	0	0	2	6	5	10	6	5	12	3	5	1	0	1	49.4	61.7	2	3.6	1	1.8	0	0	
2130	0	0	0	0	1	0	3	7	6	13	10	8	3	2	0	0	1	49	58.2	1	1.9	1	1.9	1	1.9	
2145	0	0	0	0	1	2	3	5	7	19	18	16	4	2	1	0	0	49.6	58.8	1	1.3	0	0	0	0	
2200	0	0	0	0	1	7	11	26	12	12	17	27	15	10	3	0	1	49.1	62	4	2.8	1	0.7	0	0	
2215	0	0	0	0	0	1	2	10	13	13	6	4	8	3	2	0	0	49.3	62	2	3.2	0	0	0	0	
2230	0	0	0	0	1	6	4	3	3	7	5	7	4	2	0	0	2	48.5	60.8	2	4.5	2	4.5	2	4.5	
2245	0	0	0	0	1	2	1	10	3	3	3	0	3	4	2	0	0	47.5	65.3	2	6.3	0	0	0	0	
2300	0	0	0	0	3	4	9	23	14	14	28	23	8	5	1	1	1	48.4	59.1	3	2.2	1	0.7	0	0	
2315	0	0	0	0	0	3	3	7	5	13	11	4	1	0	0	0	0	46.1	53.2	0	0	0	0	0	0	
2330	0	0	0	0	0	2	5	5	4	9	6	3	4	2	2	0	0	47.7	61.3	2	4.8	0	0	0	0	
2345	0	0	0	0	1	4	2	12	2	15	4	4	3	2	0	0	0	45.2	57.7	0	0	0	0	0	0	
07-19	**0**	**0**	**0**	**1**	**53**	**165**	**284**	**544**	**736**	**1009**	**1395**	**1307**	**1143**	**684**	**363**	**138**	**74**	**53.7**	**65.5**	**575**	**7.3**	**92**	**1.2**	**25**	**0.3**	
06-22	**0**	**0**	**0**	**5**	**63**	**214**	**358**	**646**	**846**	**1177**	**1570**	**1534**	**1279**	**786**	**403**	**156**	**99**	**53.5**	**65.3**	**658**	**7.2**	**121**	**1.3**	**36**	**0.4**	
06-00	**0**	**0**	**0**	**5**	**70**	**243**	**395**	**742**	**902**	**1263**	**1650**	**1606**	**1325**	**814**	**413**	**157**	**103**	**53.2**	**65.1**	**673**	**6.9**	**125**	**1.3**	**38**	**0.4**	
00-00	**0**	**0**	**0**	**7**	**86**	**281**	**460**	**810**	**1000**	**1422**	**1759**	**1688**	**1372**	**834**	**426**	**162**	**105**	**52.7**	**64.6**	**693**	**6.7**	**127**	**1.2**	**40**	**0.4**	

13 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 70	]PSL% 70	]SL1 79 ACPO	]SL1% 79 ACPO	]SL2 85 DFT	]SL2% 85 DFT	Fix1
0000	0	0	0	0	1	2	7	11	6	13	19	9	2	4	1	0	0	47.3	57.5	1	1.3	0	0	0	0	
0015	0	0	0	0	0	2	3	10	4	6	6	2	2	0	0	1	0	44.4	54.4	1	2.8	0	0	0	0	
0030	0	0	0	0	0	2	3	12	13	1	4	1	1	0	1	1	1	44.3	53.7	3	7.5	1	2.5	1	2.5	
0045	0	0	0	0	0	2	1	4	3	2	8	1	1	0	0	0	0	45.1	53	0	0	0	0	0	0	
0100	0	0	0	0	1	0	1	1	4	1	2	1	1	0	0	0	0	45.3	52.6	0	0	0	0	0	0	
0115	0	0	0	0	0	2	2	4	6	3	2	3	3	0	0	0	0	45.2	55.5	0	0	0	0	0	0	
0130	0	0	0	0	0	1	0	1	4	4	11	5	5	0	1	0	0	52.2	60.2	1	3.1	0	0	0	0	
0145	0	0	0	0	0	0	2	5	3	8	5	5	1	0	0	0	0	47.4	55.3	0	0	0	0	0	0	
0200	0	0	0	0	0	1	3	6	4	3	4	1	0	0	0	0	0	41.9	52.6	0	0	0	0	0	0	
0215	0	0	0	0	3	3	0	10	1	4	7	0	1	0	0	0	0	41.2	52.1	0	0	0	0	0	0	
0230	0	0	0	1	5	3	2	4	1	2	3	4	1	0	0	0	0	39.4	56.1	0	0	0	0	0	0	
0245	0	0	0	0	0	4	0	4	2	9	6	2	0	0	0	0	0	43.8	50.6	0	0	0	0	0	0	
0300	0	0	0	0	3	4	2	4	5	4	4	2	1	1	0	0	0	41.4	54.8	0	0	0	0	0	0	
0315	0	0	0	0	1	2	4	3	1	6	5	0	1	0	0	0	0	42.9	50.8	0	0	0	0	0	0	
0330	0	0	0	1	2	3	4	2	6	2	6	1	2	0	0	0	0	40.9	52.6	0	0	0	0	0	0	
0345	0	0	0	0	3	0	1	5	6	6	4	2	0	0	0	0	0	42.4	52.3	0	0	0	0	0	0	
0400	0	0	0	0	0	2	3	5	14	9	5	0	2	0	0	0	0	44.1	50.3	0	0	0	0	0	0	
0415	0	0	0	1	2	2	0	4	4	9	1	1	1	0	0	0	0	42.2	49.4	0	0	0	0	0	0	
0430	0	0	0	0	2	1	2	1	4	6	12	2	0	1	0	0	0	45.6	51.4	0	0	0	0	0	0	
0445	0	0	0	0	1	2	2	11	4	10	3	3	2	0	0	0	0	43.5	51.7	0	0	0	0	0	0	
0500	0	0	0	0	1	3	4	6	13	3	1	6	4	1	1	0	1	46.3	58.2	2	4.5	1	2.3	0	0	
0515	0	0	0	0	2	2	3	3	11	9	7	3	4	1	0	1	0	46.8	58.8	1	2.2	1	2.2	0	0	
0530	0	0	0	0	0	2	5	10	5	10	12	6	5	3	0	0	1	48.3	58.2	1	1.7	1	1.7	0	0	
0545	0	0	0	0	1	5	4	12	5	7	18	14	6	5	0	1	0	49.1	59.1	1	1.3	0	0	0	0	
0600	0	0	0	0	0	3	14	31	26	14	20	8	7	4	1	2	1	45.9	56.6	4	3.1	1	0.8	0	0	
0615	0	0	0	0	0	0	7	6	5	12	34	8	6	10	3	2	1	53.2	65.1	6	6.4	1	1.1	1	1.1	
0630	0	0	0	0	0	4	3	7	8	9	16	6	8	4	4	2	0	51.4	64.4	6	8.5	0	0	0	0	
0645	0	0	0	0	1	4	5	6	7	17	15	17	16	11	11	3	2	54.8	67.8	16	13.9	2	1.7	1	0.9	
0700	0	0	0	0	0	6	4	9	14	28	33	41	46	17	8	4	2	55.4	64.6	14	6.6	3	1.4	2	0.9	
0715	0	0	0	0	1	4	5	3	8	21	22	29	15	17	9	2	2	55.2	66.7	13	9.4	3	2.2	1	0.7	
0730	0	0	0	0	2	5	3	4	4	15	15	22	25	17	11	3	1	56.3	66.9	15	11.8	3	2.4	0	0	
0745	0	0	0	0	1	5	4	4	22	18	18	20	30	17	4	1	1	53.8	65.1	6	4.1	1	0.7	1	0.7	
0800	0	0	0	0	1	4	1	12	11	19	21	34	32	12	10	8	2	55.9	66	20	12	2	1.2	1	0.6	
0815	0	0	0	0	1	4	6	8	7	9	27	29	52	29	8	5	1	57.5	67.1	14	7.5	3	1.6	0	0	
0830	0	0	0	0	3	8	5	5	7	13	38	37	26	18	16	5	0	55.6	68.5	21	11.6	0	0	0	0	
0845	0	0	0	0	1	5	5	9	8	20	37	47	26	12	6	1	0	54	62.6	7	4	1	0.6	0	0	
0900	0	0	0	0	4	2	9	3	7	21	32	16	20	19	3	3	0	53.2	65.3	6	4.3	0	0	0	0	
0915	0	0	0	0	4	6	5	5	8	16	28	33	14	11	3	2	2	52.8	63.5	7	5.1	2	1.5	1	0.7	
0930	0	0	0	0	1	2	5	6	21	17	26	13	12	5	2	4	0	51.1	62.6	6	5.3	0	0	0	0	
0945	0	0	0	0	0	8	6	2	7	14	15	16	21	7	1	2	1	52.5	62.4	4	4	2	2	0	0	
1000	0	0	0	0	2	11	8	3	11	14	22	16	11	8	2	1	1	49.7	62.6	4	3.6	1	0.9	0	0	
1015	0	0	0	0	0	2	2	7	13	13	11	15	5	6	7	3	0	53	66.7	10	11.9	1	1.2	0	0	
1030	0	0	0	0	0	3	6	11	9	20	21	15	17	6	1	0	1	50.9	61.5	2	1.8	1	0.9	0	0	
1045	0	0	0	0	3	4	4	2	19	18	15	19	11	5	0	2	1	50.4	60.6	3	2.9	1	1	0	0	
1100	0	0	0	0	3	2	4	3	7	26	17	16	9	6	0	0	1	50.7	60.8	1	1.1	1	1.1	0	0	
1115	0	0	0	0	2	4	8	14	26	14	25	22	9	5	1	0	0	48.4	59.5	1	0.8	0	0	0	0	
1130	0	0	0	0	1	2	4	6	9	18	11	20	4	10	3	0	1	52	65.5	4	4.5	1	1.1	0	0	
1145	0	0	0	0	1	6	7	7	15	18	16	15	10	7	0	0	0	48.8	60.2	0	0	0	0	0	0	
1200	0	0	0	0	1	3	3	11	16	23	30	22	15	7	5	1	1	51.9	62	7	5.1	2	1.4	0	0	
1215	0	0	0	0	2	4	9	15	19	23	21	17	9	5	4	0	0	48.3	59.7	4	3.1	0	0	0	0	
1230	0	0	0	0	5	7	10	14	23	12	25	21	16	10	2	1	0	48.7	60.8	3	2.1	0	0	0	0	
1245	0	0	0	0	2	5	5	6	13	13	18	18	13	9	3	0	0	51.2	62.9	3	2.9	0	0	0	0	
1300	0	0	0	1	1	3	7	13	20	18	27	26	15	9	1	0	0	50.1	61.7	1	0.7	0	0	0	0	
1315	0	0	0	0	1	1	9	11	11	13	24	23	12	3	2	2	1	50.9	60.6	5	4.4	1	0.9	1	0.9	
1330	0	0	0	0	0	1	5	15	21	20	23	22	14	7	5	1	2	51.5	63.3	8	5.9	2	1.5	1	0.7	
1345	0	0	0	0	1	2	9	16	21	27	20	23	17	9	2	2	1	50.5	62	5	3.3	3	2	0	0	
1400	0	0	0	0	0	4	33	96	44	45	43	30	19	9	2	1	0	45.4	56.6	3	0.9	0	0	0	0	
1415	0	0	0	0	2	5	6	17	19	19	24	22	10	14	4	0	2	50.5	62.4	6	4.2	2	1.4	2	1.4	
1430	0	0	0	1	1	3	6	18	24	12	46	13	16	5	5	1	0	49.8	60.6	6	4	1	0.7	0	0	
1445	0	0	0	2	0	5	4	8	12	19	22	23	20	10	2	2	0	51.9	63.5	4	3.1	0	0	0	0	
1500	0	0	0	0	0	2	4	24	22	27	27	48	39	22	9	5	3	54.6	65.3	17	7.3	4	1.7	0	0	
1515	0	0	0	0	3	5	2	19	12	18	21	23	23	27	5	6	4	54.7	67.3	15	8.9	4	2.4	0	0	
1530	0	0	0	0	3	1	6	18	16	23	24	39	22	27	10	3	2	54.4	66	15	7.7	2	1	0	0	
1545	0	0	0	0	1	7	7	15	19	26	30	26	19	13	2	6	2	51.6	64	10	5.8	2	1.2	0	0	
1600	0	0	0	0	0	4	7	21	24	19	44	42	32	28	7	10	4	54.9	67.8	21	8.7	7	2.9	1	0.4	
1615	0	0	0	0	0	4	3	15	19	23	29	42	46	21	11	3	4	55.7	66.2	18	8.2	4	1.8	2	0.9	
1630	0	0	0	0	0	0	7	8	31	50	54	42	36	36	4	3	2	54.4	65.3	9	3.3	2	0.7	1	0.4	
1645	0	0	0	0	2	4	6	15	17	32	37	42	40	33	16	5	4	55.8	67.8	25	9.9	4	1.6	0	0	
1700	0	0	0	0	0	4	7	38	23	24	31	48	45	38	34	2	7	55.9	69.3	43	14.3	8	2.7	0	0	
1715	0	0	0	0	0	2	6	17	22	28	40	63	78	50	26	11	12	58.8	69.3	49	13.8	12	3.4	8	2.3	
1730	0	0	0	0	1	4	5	12	16	30	43	83	80	29	25	18	7	58.4	68.9	50	14.2	8	2.3	3	0.8	
1745	0	0	0	0	0	4	3	10	15	22	39	38	56	40	22	16	8	59.5	71.4	46	16.8	8	2.9	4	1.5	
1800	0	0	0	0	0	1	6	16	19	18	41	53	43	39	18	12	3	57.6	68.9	33	12.3	4	1.5	0	0	
1815	0	0	0	0	0	0	4	6	14	11	13	35	31	21	16	11	5	59.7	71.4	32	19.2	7	4.2	2	1.2	
1830	0	0	0	0	0	1	1	8	5	16	22	40	26	18	11	9	1	58.2	68.7	21	13.3	2	1.3	1	0.6	
1845	0	0	0	0	4	0	3	8	2	14	15	22	15	9	9	3	3	55.7	69.3	15	14	4	3.7	2	1.9	
1900	0	0	0	0	0	1	3	7	5	8	13	19	15	10	8	3	4	57.8	70	15	15.6	5	5.2	2	2.1	
1915	0	0	0	0	0	1	3	5	6	7	8	15	9	9	5	2	4	56.8	69.8	11	14.9	4	5.4	1	1.4	
1930	0	0	0	0	0	3	2	4	7	8	11	17	6	4	4	2	1	53.5	65.5	7	10.1	1	1.4	1	1.4	
1945	0	0	0	0	0	6	2	7	8	5	22	17	12	12	10	5	1	55.7	69.8	16	15	1	0.9	1	0.9	
2000	0	0	0	0	1	4	8	12	7	5	9	11	5	5	2	1	1	48.4	63.3	4	5.6	1	1.4	1	1.4	
2015	0	0	0	0	1	1	2	7	12	7	9	6	6	6	2	1	0	50.6	64.4	3	5	0	0	0	0	
2030	0	0	0	1	7	1	2	1	1	7	10	3	5	2	0	0	1	46.5	63.1	1	2.4	1	2.4	1	2.4	
2045	0	0	0	0	1	3	0	3	4	8	10	11	4	3	3	2	0	53.3	63.3	5	9.6	0	0	0	0	
2100	0	0	0	1	0	1	2	7	5	10	15	9	3	3	0	1	2	50.8	59.5	3	5.1	2	3.4	0	0	
2115	0	0	0	0	0	0	3	13	4	8	9	3	7	2	0	0	0	47.9	60.8	0	0	0	0	0	0	
2130	0	0	0	0	2	4	3	3	3	10	9	7	3	1	4	0	1	49.8	61.5	5	10	1	2	0	0	
2145	0	0	0	0	0	5	4	10	6	9	17	12	13	9	4	0	1	51.9	65.1	5	5.6	1	1.1	0	0	
2200	0	0	0	0	0	0	17	22	20	13	19	10	21	9	3	1	1	49.2	62.9	5	3.7	2	1.5	0	0	
2215	0	0	0	0	0	1	6	8	10	4	7	9	8	0	2	0	1	49.2	62	3	5.4	1	1.8	1	1.8	
2230	0	0	0	0	1	2	4	7	11	7	4	14	2	0	1	0	0	46.9	57	1	1.9	0	0	0	0	
2245	0	0	0	0	1	2	5	4	7	6	10	4	3	1	1	0	1	47.7	58.6	2	4.4	1	2.2	1	2.2	
2300	0	0	0	0	1	3	5	18	16	10	32	19	10	9	4	1	0	50.5	62.4	5	3.9	0	0	0	0	
2315	0	0	0	0	0	2	2	15	3	9	9	2	4	3	1	0	0	46.5	60.8	1	2	0	0	0	0	
2330	0	0	0	0	1	2	4	10	6	4	4	3	0	1	1	0	0	43.3	54.6	1	2.8	0	0	0	0	
2345	0	0	0	0	0	0	1	5	2	9	6	4	3	2	0	0	0	49.7	59.7	0	0	0	0	0	0	
07-19	**0**	**0**	**0**	**4**	**61**	**179**	**284**	**613**	**752**	**977**	**1283**	**1421**	**1202**	**782**	**357**	**180**	**95**	**53.9**	**65.8**	**632**	**7.7**	**119**	**1.5**	**34**	**0.4**	
06-22	**0**	**0**	**0**	**6**	**74**	**220**	**347**	**742**	**866**	**1121**	**1510**	**1590**	**1327**	**877**	**418**	**206**	**115**	**53.7**	**65.8**	**739**	**7.8**	**140**	**1.5**	**43**	**0.5**	
06-00	**0**	**0**	**0**	**6**	**78**	**232**	**391**	**831**	**941**	**1183**	**1601**	**1655**	**1378**	**902**	**431**	**208**	**118**	**53.4**	**65.5**	**757**	**7.6**	**144**	**1.4**	**45**	**0.5**	
00-00	**0**	**0**	**0**	**9**	**106**	**282**	**449**	**969**	**1070**	**1320**	**1756**	**1729**	**1424**	**918**	**435**	**212**	**121**	**52.8**	**65.1**	**768**	**7.1**	**148**	**1.4**	**46**	**0.4**	

14 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 70	]PSL% 70	]SL1 79 ACPO	]SL1% 79 ACPO	]SL2 85 DFT	]SL2% 85 DFT	Fix1
0000	0	0	0	0	1	3	4	12	7	18	18	10	10	2	2	1	0	49.1	60.2	3	3.4	0	0	0	0	
0015	0	0	0	0	0	1	1	11	3	4	4	6	3	1	0	0	0	46.7	57.7	0	0	0	0	0	0	
0030	0	0	0	0	1	5	7	11	4	0	3	2	1	2	1	0	0	40.9	54.8	1	2.7	0	0	0	0	
0045	0	0	0	1	0	4	4	1	2	2	9	2	2	0	0	0	0	44	53.9	0	0	0	0	0	0	
0100	0	0	0	0	2	0	3	4	1	7	3	3	0	1	0	0	0	44.7	53.7	0	0	0	0	0	0	
0115	0	0	0	0	2	6	1	8	3	4	4	3	7	0	0	0	0	43.9	59.9	0	0	0	0	0	0	
0130	0	0	0	0	1	10	5	1	7	4	0	1	1	0	0	0	0	37	48.3	0	0	0	0	0	0	
0145	0	0	0	0	1	0	0	5	16	7	5	2	0	0	0	0	0	44.6	51.9	0	0	0	0	0	0	
0200	0	0	0	0	1	1	2	15	6	6	2	1	2	1	0	0	0	42.5	48.3	0	0	0	0	0	0	
0215	0	0	0	0	1	7	0	4	0	11	3	1	0	1	0	0	0	41.7	50.1	0	0	0	0	0	0	
0230	0	0	0	0	0	2	9	10	1	4	1	0	1	0	0	0	0	38	45.6	0	0	0	0	0	0	
0245	0	0	0	0	0	3	3	1	5	5	1	4	0	0	1	1	0	45.4	56.4	2	8.3	0	0	0	0	
0300	0	0	0	0	1	0	1	2	7	6	2	1	1	0	1	0	0	45.8	52.3	1	4.5	0	0	0	0	
0315	0	0	0	1	1	1	4	5	4	10	7	1	3	1	1	1	0	46.7	57	2	5	0	0	0	0	
0330	0	0	0	0	4	1	1	1	6	5	5	3	0	0	0	0	1	45.1	54.1	1	3.7	1	3.7	1	3.7	
0345	0	0	0	1	3	5	3	3	1	4	3	4	0	0	0	0	0	38.6	53.2	0	0	0	0	0	0	
0400	0	0	0	0	0	4	2	0	3	4	16	3	8	0	1	0	0	50.9	61.5	1	2.4	0	0	0	0	
0415	0	0	0	2	0	5	4	2	3	4	8	0	0	0	0	0	0	39.5	52.3	0	0	0	0	0	0	
0430	0	0	0	1	0	6	2	2	8	14	3	1	1	0	0	0	0	42.5	49.2	0	0	0	0	0	0	
0445	0	0	0	0	1	1	2	2	3	2	3	6	2	5	0	0	0	51	65.8	0	0	0	0	0	0	
0500	0	2	1	0	1	3	3	7	4	1	3	5	1	1	1	2	0	43	57.3	3	8.6	0	0	0	0	
0515	0	0	0	0	1	2	6	2	9	11	14	4	5	0	0	0	0	46.7	55.7	0	0	0	0	0	0	
0530	0	0	0	0	0	3	2	4	6	6	8	9	1	2	1	0	1	49.6	59.1	2	4.7	1	2.3	0	0	
0545	0	0	0	0	1	5	2	10	10	6	22	12	11	2	1	1	0	49.7	60.6	2	2.4	0	0	0	0	
0600	0	0	0	0	0	1	24	44	29	26	14	9	14	4	2	1	1	45.1	57.5	4	2.4	1	0.6	0	0	
0615	0	0	0	0	1	6	7	5	1	12	20	8	10	5	2	3	2	51.9	64.6	7	8.5	3	3.7	2	2.4	
0630	0	0	0	0	1	5	7	1	7	14	14	13	9	5	4	1	1	51.7	63.8	6	7.3	2	2.4	1	1.2	
0645	0	0	0	0	1	3	7	8	9	16	10	14	20	9	6	4	1	53.5	65.8	11	10.2	2	1.9	0	0	
0700	0	0	0	0	0	6	7	9	16	19	31	44	46	22	7	6	2	55.7	65.8	15	7	2	0.9	1	0.5	
0715	0	0	0	0	0	7	3	3	12	17	27	21	31	10	11	5	1	55.3	66.4	17	11.5	1	0.7	0	0	
0730	0	0	0	0	0	5	6	7	4	7	10	21	32	14	8	2	2	56.5	67.6	12	10.2	2	1.7	0	0	
0745	0	0	0	0	1	4	5	8	6	11	26	43	26	28	13	3	2	57.3	68	18	10.2	3	1.7	0	0	
0800	0	0	0	0	1	5	4	9	19	19	29	28	28	20	10	5	2	54.8	67.1	17	9.5	2	1.1	0	0	
0815	0	0	0	0	1	8	4	3	12	14	16	26	36	26	10	5	0	56.6	68	15	9.3	0	0	0	0	
0830	0	0	0	0	0	1	4	3	8	17	23	33	25	20	7	5	1	57.2	66.7	13	8.8	1	0.7	0	0	
0845	0	0	0	0	3	1	7	1	14	13	16	37	27	15	3	4	2	55.7	65.5	9	6.3	2	1.4	2	1.4	
0900	0	0	0	0	1	6	3	5	11	16	32	24	21	15	3	3	2	54.3	65.1	8	5.6	2	1.4	0	0	
0915	0	0	0	0	3	0	5	5	10	18	21	23	17	13	3	2	0	53.4	64.9	5	4.2	0	0	0	0	
0930	0	0	0	0	0	3	9	6	7	23	24	18	15	5	4	1	1	52	63.3	6	5.2	1	0.9	1	0.9	
0945	0	0	0	0	4	9	6	5	9	24	21	22	9	6	3	4	1	50.4	62.6	8	6.5	1	0.8	1	0.8	
1000	0	0	0	0	1	10	5	7	14	18	18	17	19	5	6	2	0	50.9	62.6	8	6.6	0	0	0	0	
1015	0	0	0	0	0	2	6	6	7	11	25	23	10	7	2	1	1	52.8	63.5	4	4	1	1	1	1	
1030	0	0	0	0	0	5	2	7	12	17	24	16	8	0	3	1	3	51.2	59.7	7	7.1	3	3.1	3	3.1	
1045	0	0	0	0	1	2	1	3	8	20	18	18	15	3	2	2	0	52.7	61.5	4	4.3	0	0	0	0	
1100	0	0	0	0	0	9	6	8	15	18	13	13	5	9	3	0	3	49.7	64.6	6	5.9	3	2.9	2	2	
1115	0	0	0	0	1	11	10	6	13	22	24	14	15	6	1	3	0	48.9	61.1	4	3.2	0	0	0	0	
1130	0	0	0	0	2	3	7	5	12	15	16	26	16	6	3	0	0	51.3	61.7	3	2.7	0	0	0	0	
1145	0	0	0	0	4	5	11	15	12	14	13	16	11	7	6	2	0	49.1	63.8	8	6.9	0	0	0	0	
1200	0	0	0	0	1	3	7	5	13	19	26	23	14	10	11	1	2	53.7	67.1	14	10.4	2	1.5	0	0	
1215	0	0	0	0	0	5	6	6	14	21	24	13	15	6	5	3	1	52	63.1	9	7.6	2	1.7	0	0	
1230	0	0	0	0	1	4	8	25	17	24	25	24	16	4	6	0	0	49.1	60.8	6	3.9	0	0	0	0	
1245	0	0	0	0	0	5	5	5	11	18	25	30	20	10	5	0	0	53.1	63.5	5	3.7	0	0	0	0	
1300	0	0	0	0	3	3	9	7	15	14	33	34	13	8	4	1	2	51.9	60.8	7	4.8	2	1.4	0	0	
1315	0	0	0	0	2	2	3	4	13	18	31	37	15	13	5	0	1	53.9	63.5	6	4.2	1	0.7	0	0	
1330	0	0	0	0	0	0	2	10	21	26	23	18	13	8	4	2	0	52.2	62	6	4.7	0	0	0	0	
1345	0	0	0	0	0	4	10	9	17	19	31	24	18	10	4	1	4	52.4	63.8	9	6	4	2.6	1	0.7	
1400	0	0	0	0	9	3	13	67	52	33	43	38	21	13	3	1	0	47.1	59.5	4	1.4	1	0.3	0	0	
1415	0	0	0	0	0	3	10	11	23	27	23	19	13	14	6	1	2	51.6	63.8	9	5.9	2	1.3	2	1.3	
1430	0	0	0	0	4	1	11	22	17	22	24	25	23	9	8	0	1	50.7	61.7	9	5.4	1	0.6	1	0.6	
1445	0	0	0	0	2	3	4	15	18	33	34	26	16	14	10	2	4	53.2	66.7	16	8.8	5	2.8	2	1.1	
1500	0	0	0	1	2	4	9	21	19	43	40	48	27	24	6	3	4	53	64.6	13	5.2	5	2	2	0.8	
1515	0	0	0	1	1	4	7	11	16	17	33	19	19	13	7	3	1	52.6	65.5	11	7.2	2	1.3	1	0.7	
1530	0	0	0	1	1	0	6	16	24	33	25	32	25	21	9	5	1	53.7	65.8	15	7.5	1	0.5	0	0	
1545	0	0	0	0	2	5	2	23	16	18	42	34	35	11	6	0	5	53.2	62.6	11	5.5	5	2.5	2	1	
1600	0	0	0	0	0	4	8	29	29	20	43	35	48	27	13	0	1	53.5	65.1	14	5.4	1	0.4	0	0	
1615	0	0	0	0	2	1	3	14	15	12	36	32	33	19	12	5	5	56.4	68.7	22	11.6	5	2.6	2	1.1	
1630	0	0	0	0	1	0	0	17	16	29	37	46	36	26	9	3	4	56	66.2	16	7.1	4	1.8	3	1.3	
1645	0	0	0	0	2	2	8	11	13	17	22	31	33	34	24	7	9	58.5	70.5	40	18.8	9	4.2	3	1.4	
1700	0	0	0	0	0	0	11	25	33	19	39	52	60	43	28	7	8	57.1	68.7	43	13.2	8	2.5	2	0.6	
1715	0	0	0	0	0	1	5	12	17	34	39	63	50	34	20	11	13	58.4	69.3	44	14.7	14	4.7	3	1	
1730	0	0	0	0	1	1	2	10	29	31	38	65	64	41	19	8	3	57.5	67.3	30	9.6	3	1	1	0.3	
1745	0	0	0	0	2	2	5	7	17	19	34	61	46	33	26	8	10	58.9	70	44	16.3	11	4.1	4	1.5	
1800	0	0	0	0	1	2	7	14	24	24	35	55	48	38	22	20	6	58.1	70.2	48	16.2	10	3.4	4	1.4	
1815	0	0	0	0	1	0	2	4	6	17	33	24	28	20	14	5	9	59.5	70.9	28	17.2	10	6.1	5	3.1	
1830	0	0	0	0	0	0	1	7	10	17	14	27	21	14	12	6	5	58.5	70.9	23	17.2	5	3.7	4	3	
1845	0	0	0	1	0	1	4	6	8	9	20	19	14	18	10	4	3	57.1	69.6	17	14.5	3	2.6	0	0	
1900	0	0	0	0	0	2	3	8	3	3	20	19	15	10	9	6	3	58.2	70.7	18	17.8	3	3	2	2	
1915	0	0	0	0	1	3	4	4	7	7	14	10	9	8	5	2	3	54.6	67.3	10	13	3	3.9	1	1.3	
1930	0	0	0	1	0	2	2	1	7	15	14	21	9	5	2	2	1	53.4	63.1	5	6.1	1	1.2	0	0	
1945	0	0	0	0	0	4	5	4	10	13	16	12	10	6	9	3	6	55.1	71.1	18	18.4	7	7.1	1	1	
2000	0	0	0	0	0	2	6	15	5	8	18	13	5	4	2	1	0	49.9	59.7	3	3.8	0	0	0	0	
2015	0	0	0	1	1	0	3	2	3	8	17	11	5	2	0	2	2	53.2	61.5	4	7	2	3.5	1	1.8	
2030	0	0	0	0	1	2	2	6	7	7	11	12	7	9	2	3	1	54	67.1	6	8.6	1	1.4	1	1.4	
2045	0	0	0	0	0	3	2	1	6	6	5	5	10	11	4	0	0	55.1	66.4	4	7.5	0	0	0	0	
2100	0	0	0	0	1	1	1	0	9	2	5	13	11	3	3	3	1	0	52.1	61.7	4	7.7	0	0	0	0
2115	0	0	0	0	1	3	3	3	1	5	10	5	6	4	1	2	1	53.1	66.4	4	8.9	1	2.2	1	2.2	
2130	0	0	0	0	1	2	5	7	10	6	13	6	4	1	1	0	0	47.1	56.8	1	1.8	0	0	0	0	
2145	0	0	0	0	0	3	10	5	6	11	15	11	9	7	3	3	1	52.3	66.2	7	8.3	1	1.2	1	1.2	
2200	0	0	0	0	4	4	13	27	20	29	28	20	16	10	4	0	3	48.8	61.1	7	3.9	3	1.7	2	1.1	
2215	0	0	0	0	0	0	1	4	3	5	10	4	5	7	1	1	2	0	51.1	61.5	3	7	0	0	0	0
2230	0	0	0	0	0	0	8	4	9	6	5	8	4	3	2	1	0	0	44.5	57.3	1	2	0	0	0	0
2245	0	0	0	0	0	0	2	3	5	18	6	6	0	2	1	2	0	1	46.1	54.4	3	6.5	1	2.2	0	0
2300	0	0	0	0	0	2	4	9	15	19	14	20	17	22	5	6	2	0	50.3	62.9	8	5.9	0	0	0	0
2315	0	0	0	0	0	0	4	2	9	7	1	5	5	2	3	0	1	0	46.2	59.1	1	2.6	0	0	0	0
2330	0	0	0	0	0	0	1	4	5	3	10	2	6	4	0	2	0	0	48.4	57.7	2	5.4	0	0	0	0
2345	0	0	0	0	0	0	4	8	14	5	10	3	2	1	2	0	0	0	41.6	51.2	0	0	0	0	0	0
07-19	**0**	**0**	**0**	**4**	**61**	**165**	**279**	**534**	**744**	**966**	**1299**	**1437**	**1196**	**772**	**416**	**163**	**127**	**54.4**	**66.4**	**706**	**8.6**	**140**	**1.7**	**53**	**0.6**	
06-22	**0**	**0**	**0**	**6**	**70**	**207**	**369**	**657**	**857**	**1128**	**1523**	**1617**	**1341**	**865**	**471**	**197**	**150**	**54.1**	**66.2**	**818**	**8.6**	**167**	**1.8**	**64**	**0.7**	
06-00	**0**	**0**	**0**	**6**	**76**	**235**	**416**	**744**	**940**	**1213**	**1599**	**1676**	**1398**	**889**	**487**	**202**	**154**	**53.7**	**66**	**843**	**8.4**	**171**	**1.7**	**66**	**0.7**	
00-00	**0**	**2**	**1**	**12**	**99**	**313**	**487**	**867**	**1059**	**1358**	**1746**	**1760**	**1458**	**908**	**497**	**208**	**156**	**53**	**65.5**	**861**	**7.9**	**173**	**1.6**	**67**	**0.6**	

15 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 70	]PSL% 70	]SL1 79 ACPO	]SL1% 79 ACPO	]SL2 85 DFT	]SL2% 85 DFT	Fix1
0000	0	0	0	0	0	0	3	12	10	8	16	11	8	5	1	2	2	51.9	62.4	5	6.4	2	2.6	0	0	
0015	0	0	0	0	0	2	5	11	1	3	5	2	0	0	0	1	0	42.1	53	1	3.3	0	0	0	0	
0030	0	0	0	1	0	1	6	5	2	5	3	1	2	6	0	0	0	46.3	65.5	0	0	0	0	0	0	
0045	0	0	0	0	2	1	2	2	2	17	3	5	1	0	0	0	0	45.9	55	0	0	0	0	0	0	
0100	0	0	0	0	4	1	2	8	6	3	3	0	0	1	0	0	0	39.2	48.8	0	0	0	0	0	0	
0115	0	0	0	0	1	2	4	5	8	4	9	2	0	0	0	0	0	42.7	51.7	0	0	0	0	0	0	
0130	0	0	0	0	0	6	3	0	3	1	4	2	1	1	0	0	0	42.7	55.3	0	0	0	0	0	0	
0145	0	0	0	0	2	1	0	2	4	3	12	0	2	0	0	0	0	46.8	52.6	0	0	0	0	0	0	
0200	0	0	0	0	0	3	3	8	11	10	4	2	0	0	0	1	0	43.4	50.3	1	2.4	0	0	0	0	
0215	0	0	0	0	1	6	1	2	5	2	3	3	1	0	0	0	0	41.4	52.8	0	0	0	0	0	0	
0230	0	0	0	0	1	5	4	2	3	1	9	3	2	1	1	0	0	44.9	58.4	1	3.1	0	0	0	0	
0245	0	0	0	0	0	1	4	2	0	3	4	1	0	0	0	0	0	42.8	51.4	0	0	0	0	0	0	
0300	0	0	0	0	2	4	0	9	2	3	7	4	4	0	0	0	0	45	56.6	0	0	0	0	0	0	
0315	0	0	0	1	1	2	1	1	5	8	6	2	0	0	0	0	0	44.1	50.8	0	0	0	0	0	0	
0330	0	0	0	0	4	2	1	2	6	16	5	3	0	0	0	0	0	43.6	52.6	0	0	0	0	0	0	
0345	0	1	0	1	4	3	3	1	1	4	1	2	0	0	1	1	1	41.6	57.5	3	12.5	1	4.2	1	4.2	
0400	0	0	0	0	3	2	15	7	4	6	0	1	1	0	0	0	0	37.9	47.2	0	0	0	0	0	0	
0415	0	0	0	0	0	4	4	4	6	4	5	2	0	0	0	0	0	41.5	52.1	0	0	0	0	0	0	
0430	0	0	0	0	5	4	3	4	3	8	3	2	2	0	0	0	0	40.5	53	0	0	0	0	0	0	
0445	0	0	0	0	2	3	8	4	8	3	8	4	2	5	1	0	0	46	63.1	1	2.1	0	0	0	0	
0500	0	0	0	0	1	4	2	2	8	2	4	3	5	2	1	1	1	49.2	64.2	3	8.3	1	2.8	1	2.8	
0515	0	0	1	1	2	4	6	2	12	8	9	3	2	1	1	0	0	43.6	54.8	1	1.9	0	0	0	0	
0530	0	0	0	0	2	0	2	5	4	12	13	4	1	3	1	0	0	48.8	56.6	1	2.1	0	0	0	0	
0545	0	0	0	3	0	2	4	5	11	17	12	18	10	9	4	1	0	51.8	64.9	5	5.2	1	1	0	0	
0600	0	0	0	0	1	4	18	27	29	21	13	24	11	3	3	2	0	46.7	58.6	5	3.2	0	0	0	0	
0615	0	0	0	0	1	4	7	7	7	11	15	11	6	11	1	0	1	50.5	64.9	2	2.4	1	1.2	0	0	
0630	0	0	0	0	1	3	3	6	7	11	15	20	23	11	3	4	1	55.3	65.5	8	7.4	1	0.9	0	0	
0645	0	0	0	0	1	7	3	7	9	5	12	19	13	13	6	2	3	54.8	68	11	11	3	3	1	1	
0700	0	0	0	1	1	1	5	11	18	21	32	36	38	16	4	3	2	54.5	64.2	9	4.8	2	1.1	1	0.5	
0715	0	0	0	0	0	3	3	2	4	12	32	38	21	14	7	3	2	57	66.4	12	8.5	3	2.1	0	0	
0730	0	0	0	0	1	4	5	4	7	20	16	14	20	10	8	3	1	54.4	67.1	12	10.6	2	1.8	0	0	
0745	0	0	0	0	0	5	4	4	6	28	18	37	33	23	11	5	3	57.2	67.8	19	10.7	3	1.7	2	1.1	
0800	0	0	0	0	3	1	6	4	16	22	21	34	18	18	12	2	0	54.8	66.7	14	8.9	0	0	0	0	
0815	0	0	0	0	2	4	7	3	6	15	19	29	35	25	17	5	1	57.6	68.5	23	13.7	3	1.8	0	0	
0830	0	0	0	0	1	2	7	8	2	18	25	22	34	23	8	6	2	56.8	67.3	16	10.1	2	1.3	0	0	
0845	0	0	0	0	0	2	4	5	4	15	32	28	22	12	6	2	5	56.9	66.4	13	9.5	6	4.4	3	2.2	
0900	0	0	0	0	1	4	3	5	10	13	22	9	10	17	7	2	2	54.4	68.5	11	10.5	3	2.9	0	0	
0915	0	0	0	0	2	6	10	4	11	18	17	22	16	7	3	1	1	51.2	63.3	5	4.2	2	1.7	1	0.8	
0930	0	0	0	1	2	5	10	12	18	9	20	11	13	7	0	4	0	48.8	61.3	4	3.6	1	0.9	0	0	
0945	0	0	0	0	3	5	1	10	17	12	23	17	14	1	3	1	0	49.6	60.4	4	3.7	1	0.9	0	0	
1000	0	0	0	0	2	6	9	7	13	13	28	16	4	7	2	0	0	48.5	59.3	2	1.9	0	0	0	0	
1015	0	0	0	0	6	3	9	7	5	19	30	20	9	6	1	1	0	49.1	59.9	2	1.7	0	0	0	0	
1030	0	0	0	0	1	1	7	2	19	20	21	12	12	9	1	1	0	51	61.3	2	1.9	0	0	0	0	
1045	0	0	0	0	1	5	7	18	9	19	21	18	14	5	1	2	2	49.7	60.8	5	4.1	2	1.6	0	0	
1100	0	0	0	0	0	1	6	4	11	16	16	13	7	1	3	1	0	50.5	59.7	4	5.1	0	0	0	0	
1115	0	0	0	1	1	7	7	3	10	17	18	24	21	13	1	1	1	52.4	64.2	3	2.4	1	0.8	0	0	
1130	0	0	0	0	2	4	4	5	14	28	23	21	20	3	4	0	0	51.2	61.5	4	3.1	0	0	0	0	
1145	0	0	0	0	0	5	7	13	10	27	13	17	9	8	2	0	0	49.4	60.8	2	1.8	0	0	0	0	
1200	0	0	0	0	0	4	4	11	18	19	22	26	18	10	7	0	2	52.9	64.4	9	6.4	2	1.4	0	0	
1215	0	0	0	0	0	5	3	4	11	11	40	19	8	6	2	0	2	52.4	60.2	4	3.6	2	1.8	2	1.8	
1230	0	0	0	0	1	3	8	18	18	23	23	29	8	11	4	0	1	50.4	60.2	5	3.4	1	0.7	1	0.7	
1245	0	0	0	1	2	7	12	6	10	17	21	27	13	7	3	0	0	49.7	60.8	3	2.4	0	0	0	0	
1300	0	0	0	0	0	0	2	14	14	22	23	13	21	7	3	0	1	51.9	62.4	4	3.3	1	0.8	1	0.8	
1315	0	0	0	0	0	12	5	9	16	17	20	25	17	5	3	0	1	50.2	61.7	4	3.1	1	0.8	1	0.8	
1330	0	0	0	0	0	0	1	6	17	19	32	21	23	12	7	2	0	0	49.8	59.9	2	1.4	0	0	0	0
1345	0	0	0	0	0	4	4	15	15	19	31	22	13	6	13	0	3	52.9	64.6	16	11	3	2.1	1	0.7	
1400	0	0	0	0	1	6	31	64	44	34	40	40	16	8	1	1	0	46	57	2	0.7	0	0	0	0	
1415	0	0	0	1	1	7	16	18	23	25	17	20	14	10	7	3	2	49.5	63.5	12	7.3	2	1.2	1	0.6	
1430	0	0	0	0	3	8	6	23	12	22	38	27	14	8	2	1	0	49.2	59.7	3	1.8	0	0	0	0	
1445	0	0	0	0	0	2	2	12	15	18	22	27	18	8	4	2	1	53.3	62.2	7	5.3	1	0.8	0	0	
1500	0	0	0	0	0	3	20	39	36	36	64	44	22	21	9	1	1	50.4	61.3	11	3.7	1	0.3	0	0	
1515	0	0	0	0	0	1	11	34	17	15	31	22	17	18	9	2	1	51.3	65.5	12	6.7	1	0.6	0	0	
1530	0	0	0	0	1	3	8	8	22	17	35	36	30	18	6	2	0	53.9	64.6	8	4.3	0	0	0	0	
1545	0	0	0	0	3	4	3	15	17	23	24	20	28	22	10	4	2	54.3	68.2	16	9.1	3	1.7	1	0.6	
1600	0	0	0	0	2	2	11	22	20	35	38	46	38	17	14	4	6	54.1	65.1	24	9.4	6	2.4	2	0.8	
1615	0	0	0	0	1	0	6	7	20	13	25	41	47	17	16	6	6	57.8	68	28	13.7	9	4.4	3	1.5	
1630	0	0	0	0	4	6	0	12	21	28	40	42	45	28	20	6	5	56.3	67.1	31	12.1	7	2.7	3	1.2	
1645	0	0	0	0	0	7	5	9	12	27	43	46	42	31	14	6	6	56.7	68	26	10.5	6	2.4	1	0.4	
1700	0	0	0	0	0	0	1	14	28	24	29	47	47	60	43	20	11	4	56	67.6	35	10.7	5	1.5	3	0.9
1715	0	0	0	0	2	4	3	11	21	30	53	51	53	46	21	16	5	58	69.1	42	13.3	9	2.8	2	0.6	
1730	0	0	0	0	0	3	4	13	18	33	45	72	85	54	23	14	8	58.9	68	45	12.1	9	2.4	4	1.1	
1745	0	0	0	0	1	1	2	12	12	26	39	49	48	29	30	12	2	58.6	70.5	44	16.7	2	0.8	0	0	
1800	0	0	1	0	0	7	0	13	15	24	52	52	46	31	25	5	3	56.7	68.7	33	12	3	1.1	0	0	
1815	0	0	0	0	0	0	3	10	13	10	31	28	32	12	8	3	5	56.9	68	16	10.3	6	3.9	2	1.3	
1830	0	0	0	0	0	0	0	4	18	13	17	27	18	24	15	5	8	59.7	71.4	28	18.8	9	6	5	3.4	
1845	0	0	0	0	1	0	2	9	8	12	14	23	10	18	12	4	13	59.7	73.6	29	23	15	11.9	4	3.2	
1900	0	0	0	0	0	0	3	7	4	16	14	17	21	10	5	4	3	57.1	66	12	11.5	3	2.9	2	1.9	
1915	0	0	0	0	0	2	3	1	12	10	15	8	12	6	5	5	4	56.7	71.4	14	16.9	4	4.8	2	2.4	
1930	0	0	0	0	3	2	1	7	3	7	6	11	7	6	4	1	1	52.7	65.8	6	10.2	1	1.7	0	0	
1945	0	0	0	0	0	3	4	4	4	13	11	12	4	7	5	0	3	53.9	68.2	8	11.4	3	4.3	2	2.9	
2000	0	0	0	0	0	10	17	9	13	9	18	15	7	3	1	2	0	46.4	58.4	3	2.9	0	0	0	0	
2015	0	0	0	1	0	0	2	4	4	8	6	9	9	5	0	2	1	54.1	64.4	3	5.9	1	2	1	2	
2030	0	0	0	1	0	3	0	1	3	10	13	11	8	4	1	1	0	53.1	62.9	2	3.6	0	0	0	0	
2045	0	0	0	0	1	4	0	3	4	9	16	13	6	5	4	0	0	52.9	62.9	4	6.2	0	0	0	0	
2100	0	0	0	0	0	0	1	2	5	5	15	11	9	15	5	3	2	1	54.5	64.9	6	8.1	1	1.4	1	1.4
2115	0	0	0	0	3	0	2	1	5	8	5	12	10	0	2	2	0	52.7	62.9	4	8	0	0	0	0	
2130	0	0	0	0	1	4	0	2	10	13	16	11	6	5	3	0	0	52	61.5	3	4.2	0	0	0	0	
2145	0	0	0	0	1	2	2	8	6	15	21	12	7	1	3	0	0	50.2	58.8	3	3.8	0	0	0	0	
2200	0	0	0	0	0	3	14	46	33	22	15	8	7	6	3	0	0	44.7	54.8	3	1.9	0	0	0	0	
2215	0	0	0	0	2	1	8	8	6	8	9	4	2	2	1	0	0	45.3	56.6	1	2	0	0	0	0	
2230	0	0	0	0	1	4	2	3	7	1	5	4	5	2	0	0	1	48.1	62.6	1	2.9	1	2.9	0	0	
2245	0	0	0	0	1	5	2	4	5	8	7	7	1	2	1	0	1	47	56.4	2	4.5	1	2.3	0	0	
2300	0	0	0	0	0	1	9	15	11	24	32	26	13	10	5	1	1	51.8	64	7	4.7	1	0.7	0	0	
2315	0	0	0	0	0	2	0	11	6	4	7	0	6	6	1	2	1	51.1	67.6	4	8.7	1	2.2	0	0	
2330	0	0	0	0	1	1	7	8	4	5	1	4	4	2	0	0	0	44.4	58.2	0	0	0	0	0	0	
2345	0	0	0	0	1	1	4	7	3	5	7	7	6	1	0	1	0	48.9	61.7	1	2.3	0	0	0	0	
07-19	**0**	**0**	**1**	**5**	**52**	**175**	**312**	**588**	**719**	**992**	**1363**	**1382**	**1163**	**747**	**404**	**151**	**110**	**53.9**	**66**	**665**	**8.1**	**135**	**1.7**	**44**	**0.5**	
06-22	**0**	**0**	**1**	**7**	**65**	**224**	**379**	**687**	**844**	**1173**	**1570**	**1596**	**1328**	**842**	**453**	**178**	**128**	**53.7**	**65.8**	**759**	**8**	**153**	**1.6**	**53**	**0.6**	
06-00	**0**	**0**	**1**	**7**	**71**	**242**	**425**	**789**	**919**	**1250**	**1653**	**1656**	**1372**	**873**	**464**	**182**	**132**	**53.4**	**65.5**	**778**	**7.8**	**157**	**1.6**	**53**	**0.5**	
00-00	**0**	**1**	**2**	**14**	**108**	**305**	**511**	**894**	**1044**	**1401**	**1801**	**1736**	**1416**	**907**	**475**	**189**	**136**	**52.7**	**65.3**	**800**	**7.3**	**162**	**1.5**	**55**	**0.5**	

16 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 70	]PSL% 70	]SL1 79 ACPO	]SL1% 79 ACPO	]SL2 85 DFT	]SL2% 85 DFT	Fix1
0000	0	0	0	0	0	1	4	13	14	12	14	3	10	7	1	0	1	49.7	63.5	2	2.5	1	1.3	1	1.3	
0015	0	0	0	0	0	4	1	3	1	4	8	4	1	1	2	0	0	48.5	59.1	2	6.9	0	0	0	0	
0030	0	0	0	0	2	0	3	18	5	4	4	2	2	1	1	0	0	43.5	54.4	1	2.4	0	0	0	0	
0045	0	0	0	4	2	4	2	2	4	3	8	2	1	0	1	0	0	40.8	53.9	1	3	0	0	0	0	
0100	0	0	0	0	2	4	2	2	6	10	2	2	1	2	0	0	0	43.9	52.8	0	0	0	0	0	0	
0115	0	0	0	0	0	1	2	3	9	4	9	3	1	0	0	0	0	46.2	53.5	0	0	0	0	0	0	
0130	0	0	0	0	2	1	1	2	9	11	2	0	0	1	0	0	0	43.2	49.2	0	0	0	0	0	0	
0145	0	0	0	0	1	5	0	3	5	4	7	4	0	1	0	0	0	44.8	55.7	0	0	0	0	0	0	
0200	0	0	0	0	0	2	9	9	5	7	7	1	3	0	0	0	0	42.8	52.8	0	0	0	0	0	0	
0215	0	0	0	0	1	4	5	3	7	9	0	1	1	1	0	0	0	41.4	48.5	0	0	0	0	0	0	
0230	0	0	0	0	2	6	1	2	8	4	4	2	0	1	0	0	0	40.8	54.4	0	0	0	0	0	0	
0245	0	0	0	0	0	2	3	1	3	0	1	1	0	1	0	0	0	41.4	53.5	0	0	0	0	0	0	
0300	0	0	0	1	3	0	2	2	8	4	7	6	3	0	0	1	0	47.4	59.1	1	2.7	0	0	0	0	
0315	0	0	0	0	1	4	0	1	7	7	3	2	2	0	0	2	0	46.7	55.9	2	6.9	1	3.4	0	0	
0330	0	0	0	0	2	4	7	2	1	10	5	2	1	0	0	0	0	41.4	53.7	0	0	0	0	0	0	
0345	0	0	0	0	2	4	1	1	7	8	8	6	1	0	0	0	0	45.7	55.3	0	0	0	0	0	0	
0400	0	0	0	0	0	2	2	7	8	8	2	1	0	0	0	0	0	41.5	45.4	0	0	0	0	0	0	
0415	0	0	0	0	0	1	4	2	1	7	1	1	1	2	0	0	0	45.7	59.5	0	0	0	0	0	0	
0430	0	0	0	0	1	2	1	3	4	5	10	3	0	1	0	0	0	46.5	54.4	0	0	0	0	0	0	
0445	0	0	0	0	0	8	1	9	3	4	4	1	3	3	0	0	0	43.2	60.4	0	0	0	0	0	0	
0500	0	0	0	3	2	1	6	1	10	3	5	2	3	3	0	0	1	44.3	61.1	1	2.5	1	2.5	0	0	
0515	0	0	0	0	4	2	8	5	5	6	5	4	1	4	0	0	1	44.7	58.2	1	2.2	1	2.2	0	0	
0530	0	0	0	0	0	5	4	9	7	5	10	6	1	3	0	1	1	47.5	58.8	2	3.8	1	1.9	1	1.9	
0545	0	0	0	0	0	4	4	7	10	13	22	25	9	7	1	0	2	52.1	63.3	3	2.9	2	1.9	1	1	
0600	0	0	0	0	0	2	18	32	19	15	18	6	9	7	5	1	1	46.6	60.8	7	5.3	1	0.8	0	0	
0615	0	0	0	0	1	4	5	9	12	16	10	4	2	3	2	2	1	47.6	57	5	7	1	1.4	1	1.4	
0630	0	0	0	0	1	13	4	6	8	13	17	18	22	7	6	2	2	52.5	64.4	10	8.4	2	1.7	2	1.7	
0645	0	0	0	0	1	3	3	8	11	9	11	13	20	6	7	3	2	54.8	66.4	12	12.4	3	3.1	1	1	
0700	0	0	0	0	1	6	4	10	23	25	37	28	26	27	7	4	3	54.4	66.2	14	7	3	1.5	1	0.5	
0715	0	0	0	0	0	2	5	9	12	8	17	18	12	20	8	2	1	55	67.6	11	9.6	1	0.9	0	0	
0730	0	0	0	0	0	5	11	5	19	11	21	22	13	17	11	2	4	53.9	67.1	17	12.1	4	2.8	1	0.7	
0745	0	0	0	0	2	4	7	1	5	13	17	17	27	25	7	3	3	57.2	67.8	13	9.9	3	2.3	0	0	
0800	0	0	0	0	6	6	2	6	12	23	20	15	31	17	14	5	1	55.2	68.7	20	12.7	1	0.6	0	0	
0815	0	0	0	0	2	4	5	7	14	16	25	24	36	26	11	2	3	56.4	67.8	16	9.1	5	2.9	1	0.6	
0830	0	0	0	0	1	4	6	5	13	26	17	22	27	24	9	5	1	55.7	68.7	15	9.4	2	1.3	0	0	
0845	0	0	0	0	2	5	3	6	14	17	27	28	21	18	6	0	4	54.9	66.4	10	6.6	4	2.6	2	1.3	
0900	0	0	0	0	1	4	4	3	14	17	29	17	21	14	8	0	1	54	66.2	9	6.8	1	0.8	1	0.8	
0915	0	0	0	0	2	6	5	7	11	22	19	25	19	10	2	1	1	52.2	63.3	4	3.1	1	0.8	0	0	
0930	0	0	0	0	3	6	12	6	19	20	24	36	9	5	5	3	1	50.4	60.6	9	6	1	0.7	1	0.7	
0945	0	0	0	0	2	4	1	5	13	12	22	15	11	9	5	1	0	52.8	64.9	6	6	1	1	0	0	
1000	0	0	0	0	1	0	7	12	12	15	22	16	12	17	2	1	0	52	65.3	3	2.6	0	0	0	0	
1015	0	0	0	0	0	5	7	6	14	18	26	16	14	7	3	2	1	51.6	62.4	6	5	1	0.8	0	0	
1030	0	0	0	0	0	13	4	3	9	6	26	22	6	8	2	3	2	51.6	64.4	7	6.7	2	1.9	1	1	
1045	0	0	0	0	1	4	4	14	7	15	16	19	7	12	4	2	1	52.1	65.5	7	6.6	1	0.9	0	0	
1100	0	0	0	0	0	4	6	4	14	14	26	20	9	6	3	2	2	52.2	62.9	7	6.4	2	1.8	1	0.9	
1115	0	0	0	0	1	8	7	11	6	23	19	23	11	3	4	0	1	49.7	59.9	5	4.3	1	0.9	1	0.9	
1130	0	0	0	0	2	6	5	6	10	18	26	20	12	11	5	2	1	52.3	64	8	6.5	1	0.8	0	0	
1145	0	0	0	1	0	3	8	12	13	8	17	18	19	7	3	2	0	51.5	62.9	5	4.5	1	0.9	0	0	
1200	0	0	0	0	1	8	9	10	22	25	37	20	15	10	6	1	3	50.9	63.3	10	6	3	1.8	1	0.6	
1215	0	0	0	2	2	6	5	12	20	15	14	21	14	13	8	3	0	51.4	65.5	11	8.1	1	0.7	0	0	
1230	0	0	0	0	2	4	6	16	8	28	32	28	20	14	5	4	1	52.7	64	10	6	1	0.6	1	0.6	
1245	0	0	0	0	1	1	4	9	16	24	19	19	19	15	8	2	2	54.4	68.5	12	8.6	2	1.4	1	0.7	
1300	0	0	0	0	4	1	6	13	18	16	34	42	22	11	5	3	2	53.2	62.2	10	5.6	2	1.1	2	1.1	
1315	0	0	0	0	2	3	9	11	17	20	20	17	23	10	2	4	2	52	63.5	8	5.7	2	1.4	1	0.7	
1330	0	0	0	0	0	2	12	13	23	22	18	23	24	13	8	1	3	52.5	65.1	12	7.4	3	1.9	1	0.6	
1345	0	0	0	0	1	2	4	21	21	18	25	22	22	17	3	6	0	52.7	65.5	9	5.6	0	0	0	0	
1400	0	0	0	0	3	7	20	59	62	46	32	42	29	25	9	0	1	48.5	61.5	10	3	1	0.3	0	0	
1415	0	0	0	0	1	6	9	12	10	27	29	27	23	7	5	1	1	51.4	62.6	7	4.4	1	0.6	0	0	
1430	0	0	0	0	0	2	6	17	23	32	26	36	31	9	5	5	0	52.7	63.5	10	5.2	0	0	0	0	
1445	0	0	0	0	0	6	5	12	12	31	26	36	29	14	5	6	1	54	64.9	12	6.6	2	1.1	0	0	
1500	0	0	0	0	0	3	11	18	22	29	43	50	42	31	11	6	1	54.8	66.2	18	6.7	1	0.4	0	0	
1515	0	0	0	0	2	4	7	18	22	20	31	20	23	19	8	5	0	52.7	66.2	13	7.3	1	0.6	0	0	
1530	0	0	0	1	1	11	2	18	15	26	31	20	30	24	6	3	1	52.7	66	10	5.3	1	0.5	1	0.5	
1545	0	0	0	0	0	6	4	15	23	17	27	49	20	24	10	6	2	54.8	66.7	18	8.9	4	2	2	1	
1600	0	0	0	0	0	2	8	23	30	24	42	46	47	36	18	7	4	55.6	66.9	29	10.1	5	1.7	1	0.3	
1615	0	0	0	0	0	3	3	7	12	15	38	35	41	32	12	11	8	58.7	69.1	31	14.3	8	3.7	4	1.8	
1630	0	0	0	0	1	7	4	15	10	25	36	46	33	41	23	9	7	57.6	69.6	39	15.2	11	4.3	1	0.4	
1645	0	0	0	0	0	7	7	12	12	22	44	42	36	35	24	10	2	57.2	69.6	36	14.2	4	1.6	1	0.4	
1700	0	0	0	0	5	2	7	29	21	24	45	55	51	28	13	6	7	55.1	66.2	26	8.9	7	2.4	4	1.4	
1715	0	0	0	0	3	4	9	11	27	20	36	46	37	31	18	8	8	56.5	68.7	34	13.2	8	3.1	1	0.4	
1730	0	0	0	0	0	1	2	16	14	16	40	54	46	44	23	17	4	59.4	70.7	44	15.9	5	1.8	1	0.4	
1745	0	0	0	0	0	0	5	6	14	18	36	37	37	44	23	8	3	59	69.3	34	14.7	3	1.3	1	0.4	
1800	0	0	0	0	2	0	3	17	22	18	39	41	37	36	14	6	3	56.5	67.6	23	9.7	3	1.3	2	0.8	
1815	0	0	0	0	1	1	1	7	8	13	26	27	17	15	8	5	9	58.3	70	22	15.9	9	6.5	6	4.3	
1830	0	0	0	0	0	1	2	4	10	14	16	19	16	22	7	6	1	57.4	68.5	14	11.9	2	1.7	1	0.8	
1845	0	0	0	0	0	4	3	2	8	12	24	18	13	9	9	5	2	56.2	69.6	16	14.7	4	3.7	1	0.9	
1900	0	0	0	0	1	3	3	3	11	12	22	12	15	7	6	2	5	55.5	66	13	12.7	5	4.9	3	2.9	
1915	0	0	0	0	0	4	10	7	8	9	15	9	10	7	13	1	3	53.6	70.5	17	17.7	3	3.1	1	1	
1930	0	0	0	0	1	2	2	4	10	0	12	12	12	5	3	0	3	54.8	65.5	6	9.1	3	4.5	1	1.5	
1945	0	0	0	0	0	1	5	5	1	9	10	13	7	3	4	3	0	53.8	66.4	7	11.5	0	0	0	0	
2000	0	0	0	0	3	3	9	7	4	7	6	15	8	4	1	1	1	49	62	3	4.3	2	2.9	1	1.4	
2015	0	0	0	0	1	3	3	3	13	6	6	16	8	4	2	0	1	51.2	61.3	3	4.5	1	1.5	0	0	
2030	0	0	0	0	2	1	3	4	5	8	4	16	10	6	1	1	2	54.2	66.4	4	6.3	2	3.2	1	1.6	
2045	0	0	0	0	0	2	5	3	2	6	7	6	4	1	4	0	2	52.4	68.7	6	14.3	2	4.8	1	2.4	
2100	0	0	0	0	0	1	4	8	4	5	14	3	6	1	7	0	0	51.2	63.1	7	13.2	0	0	0	0	
2115	0	0	0	1	0	1	6	8	6	4	3	6	5	6	0	0	0	48.2	62.4	0	0	0	0	0	0	
2130	0	0	0	0	2	1	3	3	5	6	8	4	3	6	1	0	1	50.9	67.6	2	4.7	1	2.3	1	2.3	
2145	0	0	0	0	0	3	2	2	14	8	16	15	12	0	2	2	1	52.4	61.3	5	6.5	1	1.3	0	0	
2200	0	0	0	0	4	5	7	39	19	13	12	8	14	7	4	2	1	46.8	61.5	7	5.2	1	0.7	1	0.7	
2215	0	0	0	0	1	1	5	3	6	8	7	9	3	1	0	1	2	51	59.9	3	6.4	2	4.3	2	4.3	
2230	0	0	0	0	0	3	10	5	4	1	4	3	2	5	2	0	1	47.1	66.4	3	7.5	1	2.5	0	0	
2245	0	0	0	0	1	1	2	3	11	7	8	4	5	2	1	0	1	49.4	61.1	2	4.3	1	2.2	0	0	
2300	0	0	0	0	0	2	5	10	12	19	22	19	11	7	4	2	2	52.4	63.3	8	7	2	1.7	0	0	
2315	0	0	0	0	0	1	2	12	10	2	6	5	3	0	2	0	0	46.2	57.7	2	4.7	0	0	0	0	
2330	0	0	0	0	3	0	5	8	6	5	4	3	1	4	0	0	0	44.8	56.8	0	0	0	0	0	0	
2345	0	0	0	0	1	2	1	5	3	4	8	4	3	1	1	0	0	48.3	58.6	1	3	0	0	0	0	
07-19	**0**	**0**	**0**	**4**	**59**	**203**	**286**	**561**	**776**	**944**	**1319**	**1359**	**1140**	**912**	**415**	**196**	**109**	**54.3**	**66.7**	**720**	**8.7**	**130**	**1.6**	**44**	**0.5**	
06-22	**0**	**0**	**0**	**5**	**72**	**250**	**371**	**673**	**909**	**1077**	**1498**	**1527**	**1293**	**985**	**479**	**214**	**134**	**54**	**66.7**	**827**	**8.7**	**157**	**1.7**	**57**	**0.6**	
06-00	**0**	**0**	**0**	**5**	**82**	**265**	**408**	**758**	**980**	**1136**	**1569**	**1582**	**1335**	**1012**	**493**	**219**	**141**	**53.7**	**66.4**	**853**	**8.5**	**164**	**1.6**	**60**	**0.6**	
00-00	**0**	**0**	**0**	**13**	**109**	**336**	**481**	**868**	**1127**	**1288**	**1717**	**1666**	**1380**	**1051**	**499**	**223**	**147**	**53.1**	**66**	**869**	**8**	**171**	**1.6**	**63**	**0.6**	

17 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 70	]PSL% 70	]SL1 79 ACPO	]SL1% 79 ACPO	]SL2 85 DFT	]SL2% 85 DFT	Fix1
0000	0	0	0	0	0	0	1	6	9	10	12	15	12	2	3	0	1	53.6	63.5	4	5.6	1	1.4	0	0	
0015	0	0	0	0	0	0	1	1	2	11	4	4	0	4	1	0	1	53.6	66.2	2	6.9	1	3.4	1	3.4	
0030	0	0	0	1	2	5	4	8	8	2	3	0	1	0	0	0	0	38.2	46.1	0	0	0	0	0	0	
0045	0	0	0	0	1	1	2	7	2	2	3	3	1	2	0	0	0	45.5	58.6	0	0	0	0	0	0	
0100	0	0	0	0	0	0	5	1	5	5	5	2	1	1	1	0	1	48.5	57.9	2	7.4	1	3.7	0	0	
0115	0	0	0	0	1	1	1	0	5	3	1	1	0	0	0	0	0	42.6	49.4	0	0	0	0	0	0	
0130	0	0	0	1	2	0	1	1	5	7	2	4	0	0	0	0	0	44.6	55.9	0	0	0	0	0	0	
0145	0	0	0	0	0	4	1	3	4	6	2	0	0	1	0	0	0	42.2	48.5	0	0	0	0	0	0	
0200	0	0	0	0	3	1	1	4	5	1	3	4	1	0	0	0	0	43.1	55.7	0	0	0	0	0	0	
0215	0	0	0	0	1	1	0	1	4	2	0	2	1	0	0	0	0	44.6	57.5	0	0	0	0	0	0	
0230	0	0	0	0	1	1	0	4	3	4	9	1	0	0	0	0	0	45.8	54.4	0	0	0	0	0	0	
0245	0	0	0	0	4	0	0	1	8	2	1	4	0	1	0	0	0	43.9	56.1	0	0	0	0	0	0	
0300	0	0	0	0	1	2	0	1	1	3	7	4	7	2	0	0	0	52.5	62.9	0	0	0	0	0	0	
0315	0	0	0	0	0	4	1	1	7	9	2	1	0	0	0	0	0	42.5	49	0	0	0	0	0	0	
0330	0	0	0	0	0	5	2	6	6	3	5	2	0	1	0	0	0	42.4	52.1	0	0	0	0	0	0	
0345	0	0	0	0	0	1	1	1	1	6	3	8	0	0	0	0	0	49.8	57	0	0	0	0	0	0	
0400	0	0	0	0	2	5	4	1	11	2	2	3	2	0	0	1	0	42.1	56.4	1	3	0	0	0	0	
0415	0	0	0	0	2	5	0	4	1	5	0	1	0	0	0	0	0	37.6	47	0	0	0	0	0	0	
0430	0	0	0	0	2	1	1	5	2	8	2	1	1	0	0	0	0	43	50.1	0	0	0	0	0	0	
0445	0	0	0	0	2	0	0	1	3	4	3	1	3	1	0	0	1	50.3	63.8	1	5.3	1	5.3	0	0	
0500	0	0	0	0	1	1	0	1	7	4	4	2	3	0	0	1	0	48.6	56.6	1	4.2	0	0	0	0	
0515	0	0	0	0	1	3	0	0	3	8	2	6	2	3	0	0	0	49.8	62.6	0	0	0	0	0	0	
0530	0	0	0	0	1	6	0	1	5	5	11	5	1	1	1	0	0	46.7	57.3	1	2.7	0	0	0	0	
0545	0	0	0	0	0	3	2	0	6	3	11	3	2	2	3	0	0	50.6	62.2	3	8.6	0	0	0	0	
0600	0	0	0	0	2	3	9	31	16	8	8	2	3	1	0	0	0	41.6	51	0	0	0	0	0	0	
0615	0	0	0	0	0	1	1	4	9	6	5	4	2	1	0	0	0	47.2	55.3	0	0	0	0	0	0	
0630	0	0	0	0	0	2	3	2	2	14	11	7	1	4	1	0	0	50.4	58.8	1	2.1	0	0	0	0	
0645	0	0	0	0	1	1	2	2	4	6	5	6	3	4	0	0	1	51.3	61.3	1	2.9	1	2.9	0	0	
0700	0	0	0	0	1	2	3	13	13	14	26	17	24	10	7	1	2	53.7	64.9	10	7.5	2	1.5	1	0.8	
0715	0	0	0	0	1	0	2	2	2	6	12	10	8	3	2	0	0	54	64	2	4.2	0	0	0	0	
0730	0	0	0	0	1	1	0	1	7	8	9	10	9	5	2	2	2	55.9	66.2	6	10.5	3	5.3	0	0	
0745	0	0	0	0	1	2	1	1	4	2	8	6	6	4	1	1	1	54.2	65.5	3	7.9	1	2.6	0	0	
0800	0	0	0	1	1	0	2	3	3	11	12	16	13	10	6	0	2	56.5	66.9	8	10	2	2.5	1	1.3	
0815	0	0	0	0	0	0	1	1	6	12	12	15	6	3	3	2	2	55.8	65.3	7	11.1	3	4.8	1	1.6	
0830	0	0	0	0	0	5	0	2	4	4	7	10	5	6	3	1	0	53.8	68.5	4	8.5	0	0	0	0	
0845	0	0	0	0	0	4	3	1	5	6	11	13	7	7	6	1	4	56.1	70	11	16.2	4	5.9	0	0	
0900	0	0	1	0	0	2	0	1	7	5	11	19	15	9	2	4	3	57.9	68.2	9	11.4	3	3.8	2	2.5	
0915	0	0	0	0	6	3	2	2	1	6	18	12	9	5	3	2	1	52.4	64.9	6	8.6	1	1.4	0	0	
0930	0	0	0	0	1	2	1	3	5	20	12	17	12	5	5	4	4	55.9	68.5	13	14.3	5	5.5	3	3.3	
0945	0	0	0	0	0	0	1	3	13	13	22	13	24	12	5	2	1	56.3	67.3	8	7.3	1	0.9	0	0	
1000	0	0	0	0	0	1	1	4	2	13	22	15	25	6	10	0	3	57.5	67.3	13	12.7	3	2.9	1	1	
1015	0	0	0	0	0	0	2	1	4	14	10	22	15	9	3	2	3	57.9	65.8	8	9.4	4	4.7	2	2.4	
1030	0	0	0	0	0	4	1	2	4	18	23	20	17	9	4	0	3	55.4	64.9	7	6.7	3	2.9	0	0	
1045	0	0	0	0	0	1	2	4	5	13	21	16	11	8	8	2	4	56.8	69.6	14	14.7	4	4.2	4	4.2	
1100	0	0	0	0	0	6	1	5	10	11	14	13	16	11	5	4	2	54.9	66.2	11	11.2	3	3.1	1	1	
1115	0	0	0	0	0	0	0	1	3	11	15	22	12	9	5	4	5	59.9	70	14	16.1	6	6.9	5	5.7	
1130	0	0	0	0	0	3	2	3	5	16	21	18	24	11	7	1	1	56.1	66	9	8	2	1.8	0	0	
1145	0	0	0	0	0	1	5	4	3	14	24	16	10	14	3	3	2	55.5	66.7	8	8.1	2	2	1	1	
1200	0	0	0	0	0	0	4	5	8	14	15	30	22	8	7	4	3	56.9	67.8	14	11.7	3	2.5	1	0.8	
1215	0	0	0	0	0	1	0	1	5	9	16	17	17	10	2	1	1	56.9	65.1	4	5	1	1.3	0	0	
1230	0	0	0	0	1	0	0	0	11	6	10	29	11	9	10	2	1	58	69.3	13	14.4	1	1.1	0	0	
1245	0	0	0	0	0	1	0	2	3	11	13	14	11	9	4	6	4	59.5	72.7	14	17.9	5	6.4	2	2.6	
1300	0	0	0	0	0	1	1	5	6	9	17	9	15	16	2	4	1	56.9	67.3	7	8.1	2	2.3	0	0	
1315	0	0	0	0	0	0	0	2	10	12	25	11	15	6	3	1	1	55.1	64.2	5	5.8	1	1.2	1	1.2	
1330	0	0	0	0	1	2	1	5	5	9	15	15	13	7	3	2	7	56.8	68	12	14.1	7	8.2	3	3.5	
1345	0	0	0	0	0	0	0	2	5	10	16	19	20	5	6	1	3	58.2	66.2	10	11.5	4	4.6	2	2.3	
1400	0	0	0	0	0	1	1	12	7	14	23	32	18	14	9	6	3	57	68.5	18	12.9	3	2.1	1	0.7	
1415	0	0	0	0	1	0	0	4	4	12	15	15	17	2	5	2	3	57	64.6	10	12.5	3	3.8	3	3.8	
1430	0	0	0	0	0	1	0	4	8	12	11	11	19	8	6	3	1	56.9	66.9	10	11.9	1	1.2	0	0	
1445	0	0	0	0	0	0	0	1	2	6	9	19	14	4	4	3	0	58.7	68	7	11.3	1	1.6	0	0	
1500	0	0	0	0	0	2	1	8	10	15	40	41	14	10	7	2	6	55.7	65.5	15	9.6	7	4.5	2	1.3	
1515	0	0	0	0	0	0	2	3	3	6	10	19	8	9	5	3	2	58.7	69.8	10	14.3	2	2.9	1	1.4	
1530	0	0	0	0	1	2	0	5	7	16	18	13	19	12	8	2	2	56.4	66.9	12	11.4	2	1.9	1	1	
1545	0	0	0	0	1	1	2	1	3	1	9	15	10	10	9	1	1	59	70.9	11	17.2	1	1.6	1	1.6	
1600	0	0	0	0	2	2	1	3	1	9	15	29	13	16	4	4	1	57.4	66.9	9	9	1	1	1	1	
1615	0	0	0	0	0	1	1	4	5	5	12	12	11	14	4	7	2	59.4	70.2	13	16.7	5	6.4	2	2.6	
1630	0	0	0	0	0	3	1	0	3	8	16	19	12	9	5	2	7	58.9	70.9	14	16.5	7	8.2	3	3.5	
1645	0	0	0	0	0	0	0	0	1	4	12	22	19	8	4	0	5	60.9	67.3	9	12	5	6.7	4	5.3	
1700	0	0	0	0	0	0	0	3	6	10	23	19	19	7	5	3	2	57.5	66	10	10.3	2	2.1	2	2.1	
1715	0	0	0	0	1	1	1	2	5	2	15	14	19	10	4	2	5	59.3	68.7	11	13.6	6	7.4	1	1.2	
1730	0	0	0	0	0	0	0	4	4	5	11	15	15	10	5	5	1	59.5	69.1	11	14.7	3	4	1	1.3	
1745	0	0	0	0	1	0	2	3	3	6	18	18	13	7	2	1	1	56.2	64.6	4	5.3	2	2.7	1	1.3	
1800	0	0	0	0	0	0	1	6	5	9	10	19	11	12	4	2	1	56.8	68.2	7	8.8	2	2.5	0	0	
1815	0	0	0	0	0	0	3	1	2	8	9	13	10	4	6	1	8	60.6	72.3	15	23.1	8	12.3	4	6.2	
1830	0	0	0	0	0	1	2	2	4	9	5	11	5	4	2	2	0	54.2	65.1	4	8.5	0	0	0	0	
1845	0	0	0	0	0	0	0	0	3	6	8	14	8	3	4	0	0	57.5	64.4	4	8.7	0	0	0	0	
1900	0	0	0	0	0	0	1	0	4	9	14	12	8	3	2	2	1	55.5	62.9	5	8.9	1	1.8	0	0	
1915	0	0	0	0	0	0	0	1	6	2	9	11	9	9	3	1	2	59.1	69.6	6	11.3	2	3.8	1	1.9	
1930	0	0	0	0	0	2	0	1	2	2	7	12	5	4	3	6	0	58.7	73.8	9	20.5	0	0	0	0	
1945	0	0	0	0	0	1	1	1	3	6	8	3	6	6	1	1	0	55.2	67.1	2	5.4	0	0	0	0	
2000	0	0	0	0	1	1	0	0	2	2	9	10	2	6	1	0	0	55.5	66.9	1	2.9	0	0	0	0	
2015	0	0	0	0	0	0	1	1	0	1	7	8	6	3	1	0	0	56.8	64.4	1	3.6	0	0	0	0	
2030	0	0	0	0	0	3	0	3	2	3	2	6	3	3	1	0	1	52.6	65.3	2	7.4	1	3.7	1	3.7	
2045	0	0	0	0	1	1	1	1	0	3	5	8	7	1	2	1	0	54.9	63.8	3	9.7	0	0	0	0	
2100	0	0	0	0	0	2	1	2	1	1	8	3	2	4	1	0	0	53	65.8	1	4	0	0	0	0	
2115	0	0	0	0	0	0	0	0	2	3	7	6	5	3	0	1	1	57.6	66.2	2	7.1	1	3.6	1	3.6	
2130	0	0	0	0	1	1	0	1	5	1	4	1	4	2	3	1	0	53.8	67.1	4	16.7	0	0	0	0	
2145	0	0	0	0	0	0	0	0	2	1	5	5	2	0	1	0	1	56.5	59.9	2	11.8	1	5.9	0	0	
2200	0	0	0	0	0	0	2	1	3	1	11	8	6	4	0	0	2	56.3	64	2	5.3	2	5.3	2	5.3	
2215	0	0	0	0	0	0	0	1	0	2	3	5	4	3	2	1	0	59.8	66.9	3	14.3	0	0	0	0	
2230	0	0	0	0	0	0	0	2	1	5	7	5	5	2	1	0	0	54.7	63.5	1	3.6	0	0	0	0	
2245	0	0	0	0	0	0	0	0	4	4	4	4	7	2	1	1	1	57.7	65.1	3	10.7	1	3.6	0	0	
2300	0	0	0	0	0	1	0	5	6	9	20	13	12	5	3	1	1	54.5	63.5	5	6.6	1	1.3	0	0	
2315	0	0	0	0	0	0	6	4	0	1	6	9	3	0	1	0	1	50.9	59.7	2	6.5	1	3.2	1	3.2	
2330	0	0	0	0	0	1	2	1	0	4	7	7	2	2	0	0	0	52.2	59.9	0	0	0	0	0	0	
2345	0	0	0	0	0	1	1	1	2	2	3	2	0	0	1	0	0	47.7	55	1	7.7	0	0	0	0	
07-19	**0**	**0**	**1**	**1**	**21**	**57**	**54**	**145**	**245**	**460**	**726**	**814**	**666**	**399**	**229**	**108**	**117**	**56.9**	**67.6**	**454**	**11.2**	**137**	**3.4**	**59**	**1.5**	
06-22	**0**	**0**	**1**	**1**	**27**	**75**	**74**	**195**	**305**	**528**	**840**	**918**	**734**	**453**	**249**	**121**	**124**	**56.4**	**67.3**	**494**	**10.6**	**144**	**3.1**	**62**	**1.3**	
06-00	**0**	**0**	**1**	**1**	**27**	**78**	**85**	**210**	**321**	**556**	**901**	**971**	**773**	**471**	**258**	**124**	**129**	**56.3**	**67.1**	**511**	**10.4**	**149**	**3**	**65**	**1.3**	
00-00	**0**	**0**	**1**	**3**	**54**	**128**	**113**	**269**	**434**	**671**	**998**	**1048**	**811**	**492**	**267**	**126**	**133**	**55.2**	**66.4**	**526**	**9.5**	**153**	**2.8**	**66**	**1.2**	

18 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 70	]PSL% 70	]SL1 79 ACPO	]SL1% 79 ACPO	]SL2 85 DFT	]SL2% 85 DFT	Fix1
0000	0	0	0	0	0	1	0	2	5	4	9	3	3	2	1	1	0	52.2	61.1	2	6.5	0	0	0	0	
0015	0	0	0	0	0	0	0	0	0	6	8	3	2	4	0	0	2	58.1	65.3	2	8	2	8	1	4	
0030	0	0	0	0	0	0	1	2	1	1	0	3	1	0	1	1	0	53.3	61.7	2	18.2	0	0	0	0	
0045	0	0	0	0	0	0	1	0	1	2	3	3	8	0	0	0	0	55.3	63.1	0	0	0	0	0	0	
0100	0	0	0	0	0	0	0	1	2	1	5	3	2	0	0	0	0	52.2	59.7	0	0	0	0	0	0	
0115	0	0	0	0	1	0	0	1	1	3	0	1	1	0	0	0	0	46.3	-	0	0	0	0	0	0	
0130	0	0	0	0	1	1	1	3	3	3	1	0	2	0	0	0	0	43.2	51.9	0	0	0	0	0	0	
0145	0	0	0	0	0	0	0	0	0	4	0	3	1	1	0	0	0	54.8	-	0	0	0	0	0	0	
0200	0	0	0	0	0	1	0	1	1	1	1	2	2	0	0	0	0	49.5	-	0	0	0	0	0	0	
0215	0	0	0	0	0	1	0	1	1	3	0	0	3	0	0	0	0	48.6	-	0	0	0	0	0	0	
0230	0	0	0	0	0	1	6	1	0	3	0	0	0	0	0	0	0	38	46.5	0	0	0	0	0	0	
0245	0	0	0	0	0	1	0	1	2	5	3	0	0	0	0	0	0	45.1	50.3	0	0	0	0	0	0	
0300	0	0	0	0	0	1	1	0	1	2	6	2	1	1	0	0	0	50.9	57.5	0	0	0	0	0	0	
0315	0	0	0	1	0	1	0	0	5	1	1	0	1	0	0	0	0	41.2	-	0	0	0	0	0	0	
0330	0	0	0	0	1	3	4	0	2	1	2	1	0	1	0	0	0	40	54.1	0	0	0	0	0	0	
0345	0	0	0	0	0	1	0	0	0	1	4	0	1	0	0	0	0	49.3	-	0	0	0	0	0	0	
0400	0	0	0	0	0	2	2	0	1	6	1	1	1	1	0	0	0	46.4	56.8	0	0	0	0	0	0	
0415	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	48.2	-	0	0	0	0	0	0	
0430	0	0	0	0	0	1	0	1	11	9	3	0	0	1	1	0	0	46.4	52.1	1	3.7	0	0	0	0	
0445	0	0	0	0	1	1	0	2	4	2	2	2	2	0	1	0	0	47.2	57.3	1	5.9	0	0	0	0	
0500	0	0	0	0	0	0	0	5	1	0	0	0	1	1	0	0	0	44.9	-	0	0	0	0	0	0	
0515	0	0	0	0	1	1	2	5	2	0	2	1	2	1	0	0	0	43.9	56.8	0	0	0	0	0	0	
0530	0	0	0	0	0	1	2	2	3	5	3	2	1	2	0	1	0	49.3	64.4	1	4.5	0	0	0	0	
0545	0	0	0	0	1	1	3	4	0	6	3	1	2	1	0	0	0	45.2	55.9	0	0	0	0	0	0	
0600	0	0	0	0	0	1	3	4	6	7	5	9	3	2	0	2	0	50.6	62.9	2	4.8	0	0	0	0	
0615	0	0	0	1	0	3	2	2	2	1	2	2	1	0	1	0	0	43.3	55	1	5.9	0	0	0	0	
0630	0	0	0	0	0	0	0	3	5	1	5	4	3	5	0	0	1	54.3	65.8	1	3.7	1	3.7	0	0	
0645	0	0	0	0	2	1	1	2	6	1	5	3	2	1	0	0	1	47.8	58.6	1	4	1	4	1	4	
0700	0	0	0	0	0	0	3	9	10	16	12	9	15	10	6	3	3	55.3	67.3	12	12.5	3	3.1	2	2.1	
0715	0	0	0	0	0	3	2	1	1	6	4	6	2	0	0	3	1	52.1	62.2	4	13.8	1	3.4	0	0	
0730	0	0	0	0	0	1	2	2	2	6	2	7	9	2	0	0	0	52.8	62.9	0	0	0	0	0	0	
0745	0	0	0	0	0	3	0	0	1	9	9	5	6	0	0	1	0	51.9	60.4	1	2.9	0	0	0	0	
0800	0	0	0	0	0	3	1	1	3	5	5	16	3	4	1	0	3	55.3	65.1	4	8.9	3	6.7	2	4.4	
0815	0	0	0	0	1	2	0	1	3	2	5	13	2	0	1	1	1	53.6	59.5	3	9.4	1	3.1	0	0	
0830	0	0	0	0	1	0	0	1	4	1	8	12	7	2	3	0	0	55.6	63.3	3	7.7	0	0	0	0	
0845	0	0	0	0	1	3	1	3	1	8	6	12	5	5	3	0	1	53.8	65.8	4	8.2	1	2	1	2	
0900	0	0	1	0	0	2	1	1	2	8	14	10	3	5	6	2	1	55.9	70.7	9	16.1	2	3.6	1	1.8	
0915	0	0	0	2	1	0	2	7	1	3	14	15	18	19	7	5	8	60.8	72.7	20	19.6	8	7.8	5	4.9	
0930	0	0	0	0	1	1	3	2	6	4	15	18	12	3	2	1	2	54.8	63.5	5	7.1	2	2.9	0	0	
0945	0	0	0	0	3	1	0	3	5	11	13	13	11	2	5	0	2	53.8	63.8	7	10.1	2	2.9	0	0	
1000	0	0	0	1	2	2	1	4	5	17	14	9	7	5	4	2	4	54.2	66.2	10	13	4	5.2	3	3.9	
1015	0	0	0	0	1	3	0	1	1	9	22	17	4	12	4	0	3	56.4	67.3	7	9.1	3	3.9	0	0	
1030	0	0	0	0	2	0	0	0	5	18	14	13	6	6	5	2	1	55.3	68	8	11.1	2	2.8	0	0	
1045	0	0	0	2	1	2	2	0	4	14	6	13	12	5	5	2	7	57.5	71.1	14	18.7	8	10.7	6	8	
1100	0	0	0	0	2	1	1	1	3	8	13	13	14	8	1	1	0	55.2	64.6	2	3	0	0	0	0	
1115	0	0	0	0	0	0	1	1	2	16	19	15	11	8	3	0	1	56	62.9	4	5.2	1	1.3	1	1.3	
1130	0	0	0	0	1	2	2	0	3	7	18	8	21	10	2	2	8	59.6	69.3	12	14.3	8	9.5	5	6	
1145	0	0	0	0	1	1	1	1	12	10	10	12	11	7	6	3	7	58.5	72.5	16	19.5	7	8.5	6	7.3	
1200	0	0	0	0	4	0	2	3	7	12	16	14	11	4	5	0	1	53.1	63.3	6	7.6	1	1.3	1	1.3	
1215	0	0	0	0	0	1	1	1	3	15	22	18	9	11	2	0	1	55.4	65.1	3	3.6	1	1.2	0	0	
1230	0	0	0	0	1	3	1	6	3	6	17	20	16	6	4	2	0	54.9	64.6	6	7.1	0	0	0	0	
1245	0	0	0	1	2	3	1	2	5	6	17	17	11	9	3	1	5	55.6	67.6	9	10.8	5	6	1	1.2	
1300	0	0	0	1	1	0	1	3	8	3	10	17	10	5	4	1	0	54.7	64.2	5	7.8	0	0	0	0	
1315	0	0	0	0	0	0	3	4	4	9	16	11	17	8	1	1	1	55.6	64.9	3	4	1	1.3	0	0	
1330	0	0	0	0	2	1	1	0	1	4	12	16	13	4	9	2	5	60	71.6	16	22.9	5	7.1	3	4.3	
1345	0	0	0	1	0	0	1	1	3	9	22	16	8	11	3	1	1	56.2	66.9	5	6.5	1	1.3	0	0	
1400	0	0	0	0	1	0	11	23	21	10	22	20	9	7	9	2	4	51.4	64.9	15	10.8	4	2.9	4	2.9	
1415	0	0	0	1	1	2	1	3	10	10	14	16	7	4	3	2	3	54	63.3	8	10.4	3	3.9	2	2.6	
1430	0	0	0	2	0	2	1	3	5	8	6	21	8	5	4	1	1	54.4	66.2	6	9	1	1.5	0	0	
1445	0	0	0	0	0	2	1	1	6	7	17	15	12	3	6	3	1	56.2	65.8	10	13.5	1	1.4	0	0	
1500	0	0	0	0	0	1	1	8	6	15	38	19	18	12	6	6	1	56.2	67.1	13	9.9	1	0.8	0	0	
1515	0	0	0	1	0	3	4	5	6	11	17	19	10	6	6	1	3	54.3	65.5	10	10.9	3	3.3	0	0	
1530	0	0	0	0	2	6	1	1	4	8	9	20	11	6	7	1	0	54.6	66.7	8	10.5	0	0	0	0	
1545	0	0	0	0	0	1	0	0	4	7	7	15	8	6	7	1	1	58.4	69.8	9	15.8	1	1.8	0	0	
1600	0	0	0	0	0	4	3	2	7	14	16	17	16	16	6	0	1	55.5	66.9	7	6.9	1	1	0	0	
1615	0	0	0	0	2	2	4	2	9	14	13	13	15	5	4	2	2	54	64.6	8	9.2	2	2.3	2	2.3	
1630	0	0	0	0	0	1	1	0	5	5	12	16	8	10	3	0	3	57.9	67.6	6	9.4	3	4.7	1	1.6	
1645	0	0	0	0	1	0	2	4	3	9	13	15	8	5	3	1	2	55	65.8	6	9.1	2	3	0	0	
1700	0	0	0	0	0	1	0	0	2	10	8	18	10	6	4	0	1	57.3	65.1	5	8.3	1	1.7	0	0	
1715	0	0	0	0	1	1	1	3	9	5	9	8	12	8	3	1	3	56	65.3	7	10.9	3	4.7	2	3.1	
1730	0	0	0	0	1	2	2	5	4	5	9	16	12	10	3	2	1	55.7	67.3	6	8.3	2	2.8	0	0	
1745	0	0	0	1	0	0	1	6	3	6	10	14	9	5	7	2	0	55.9	68.5	9	14.1	0	0	0	0	
1800	0	0	0	0	0	1	2	7	7	8	17	17	13	7	7	1	3	55.8	68.5	11	12.2	3	3.3	1	1.1	
1815	0	0	0	0	0	0	3	2	3	8	6	13	5	4	1	2	1	55	64.9	4	8.3	1	2.1	0	0	
1830	0	0	0	0	2	0	0	1	5	7	8	11	6	6	5	2	2	57.3	70	9	16.4	2	3.6	1	1.8	
1845	0	0	0	0	0	0	2	2	0	12	15	5	2	7	1	1	6	57.7	69.3	8	15.1	6	11.3	4	7.5	
1900	0	0	0	0	1	0	1	5	2	11	7	13	8	3	3	1	0	53.9	63.1	4	7.3	0	0	0	0	
1915	0	0	0	0	1	0	3	0	1	4	12	6	7	6	2	0	0	54.8	66	2	4.8	0	0	0	0	
1930	0	0	0	0	1	1	0	1	4	4	4	6	4	2	1	0	1	53.8	64.4	2	6.9	1	3.4	1	3.4	
1945	0	0	0	0	0	1	2	2	0	6	10	8	11	1	2	3	1	56.3	63.5	6	12.8	1	2.1	0	0	
2000	0	0	0	0	1	0	0	3	4	6	10	12	5	5	4	2	0	55.6	66.7	6	11.5	0	0	0	0	
2015	0	0	0	0	0	2	1	3	2	3	10	6	4	2	0	0	1	51.9	61.3	1	2.9	1	2.9	0	0	
2030	0	0	0	0	0	2	2	0	1	6	10	6	2	2	3	2	1	55	67.6	6	16.2	2	5.4	0	0	
2045	0	0	0	0	0	1	0	2	3	5	9	2	5	1	1	1	0	52.6	63.8	2	6.7	0	0	0	0	
2100	0	0	0	0	0	3	0	4	2	7	4	11	1	2	1	0	0	50.6	59.3	1	2.9	0	0	0	0	
2115	0	0	0	0	0	0	1	4	3	3	9	11	4	6	2	2	2	57.2	67.1	6	12.8	2	4.3	2	4.3	
2130	0	0	0	0	1	0	1	0	4	3	1	6	1	0	2	0	2	54.5	72	4	19	2	9.5	1	4.8	
2145	0	0	0	0	2	2	0	7	5	0	5	3	2	0	0	0	0	43.7	55	0	0	0	0	0	0	
2200	0	0	0	0	0	4	7	10	7	6	7	6	3	6	1	1	1	48.1	64.4	3	5.1	1	1.7	0	0	
2215	0	0	0	0	1	0	1	0	2	1	4	5	2	2	1	1	0	55.3	66.2	2	10	0	0	0	0	
2230	0	0	0	0	0	2	0	8	2	2	4	1	3	1	0	0	0	46.6	61.3	0	0	0	0	0	0	
2245	0	0	0	0	1	5	6	2	1	3	2	5	3	2	0	0	0	44.2	61.7	0	0	0	0	0	0	
2300	0	0	0	0	1	4	4	5	3	20	17	18	9	1	4	1	0	51.2	61.3	5	5.7	1	1.1	0	0	
2315	0	0	0	0	1	1	2	4	3	4	2	1	2	1	1	1	0	47.1	60.6	2	8.7	1	4.3	0	0	
2330	0	0	0	0	0	1	0	0	0	7	4	3	3	1	1	0	0	53.5	63.1	1	5	0	0	0	0	
2345	0	0	0	0	2	0	2	4	0	2	2	10	1	0	1	1	0	50.1	59.7	2	8	0	0	0	0	
07-19	**0**	**0**	**1**	**13**	**39**	**67**	**75**	**137**	**227**	**421**	**621**	**673**	**473**	**309**	**190**	**67**	**106**	**55.6**	**67.1**	**363**	**10.6**	**110**	**3.2**	**54**	**1.6**	
06-22	**0**	**0**	**1**	**14**	**48**	**84**	**92**	**179**	**277**	**489**	**729**	**781**	**536**	**347**	**212**	**80**	**116**	**55.3**	**66.9**	**408**	**10.2**	**121**	**3**	**59**	**1.5**	
06-00	**0**	**0**	**1**	**14**	**54**	**101**	**114**	**212**	**295**	**534**	**771**	**830**	**562**	**361**	**221**	**85**	**117**	**54.9**	**66.7**	**423**	**9.9**	**124**	**2.9**	**59**	**1.4**	
00-00	**0**	**0**	**1**	**15**	**60**	**120**	**137**	**245**	**342**	**603**	**830**	**861**	**599**	**377**	**225**	**88**	**119**	**54.4**	**66.2**	**432**	**9.3**	**126**	**2.7**	**60**	**1.3**	

Grand Total

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 70	]PSL% 70	]SL1 79 ACPO	]SL1% 79 ACPO	]SL2 85 DFT	]SL2% 85 DFT	Fix1
--	**0**	**3**	**5**	**73**	**622**	**1765**	**2638**	**4922**	**6076**	**8063**	**10607**	**10488**	**8460**	**5487**	**2824**	**1208**	**917**	**53.2**	**65.5**	**4949**	**7.7**	**1060**	**1.7**	**397**	**0.6**	

TSP Class Profile All Days 15 Mins

Report Id - CustomList-40
Site Name - LUTTERWORTH- 02
Description - COVENTRY ROAD [70M]
Direction - West

12 May 2014

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	19	0	15	0	0	0	0	0	0	3	1	
0015	18	0	11	0	1	1	0	0	0	3	2	
0030	18	0	10	0	0	1	0	0	0	6	1	
0045	15	0	7	0	0	0	0	0	0	6	2	
0100	13	0	10	0	0	0	0	0	0	2	1	
0115	15	0	7	0	1	0	0	0	0	5	2	
0130	19	0	10	0	1	0	0	0	0	4	4	
0145	13	0	7	0	0	0	0	0	0	3	3	
0200	7	0	6	0	0	0	0	0	0	0	1	
0215	19	0	13	0	1	0	0	0	0	2	3	
0230	14	0	6	0	0	0	0	0	1	2	5	
0245	13	0	9	0	0	0	0	0	0	2	2	
0300	14	0	5	0	1	0	0	0	1	5	2	
0315	24	0	15	0	0	1	0	0	0	3	5	
0330	27	0	20	0	1	0	0	0	0	1	5	
0345	34	0	23	0	4	0	0	0	0	1	6	
0400	17	0	14	0	1	0	0	0	1	1	0	
0415	24	0	15	0	0	0	0	0	1	4	4	
0430	30	0	18	0	4	0	0	0	0	3	5	
0445	64	0	48	0	2	1	0	0	3	2	8	
0500	57	0	47	0	1	0	0	0	2	3	4	
0515	76	3	67	0	1	0	0	0	2	1	2	
0530	237	1	219	0	4	2	0	0	2	3	6	
0545	200	3	178	0	2	0	0	0	1	8	8	
0600	78	0	57	1	6	0	0	0	0	9	5	
0615	102	0	78	1	8	0	0	0	2	9	4	
0630	211	0	174	2	8	1	0	0	2	12	12	
0645	158	1	129	0	10	2	1	0	0	7	8	
0700	145	2	118	0	9	0	1	0	2	9	4	
0715	198	0	167	1	10	2	1	0	1	7	9	
0730	270	1	240	3	11	3	1	0	1	4	6	
0745	383	4	345	4	10	0	1	0	5	5	9	
0800	365	2	329	6	13	0	1	0	4	7	3	
0815	333	1	291	1	18	0	2	0	9	5	6	
0830	330	1	286	3	15	1	0	0	3	10	11	
0845	266	1	228	1	13	0	4	1	4	7	7	
0900	217	0	177	1	24	0	2	0	0	6	7	
0915	150	0	118	1	9	1	0	0	1	12	8	
0930	135	0	99	0	19	0	1	0	2	10	4	
0945	131	0	87	1	16	2	1	0	1	10	13	
1000	113	1	76	2	17	1	2	0	2	7	5	
1015	101	1	60	2	14	1	1	1	2	10	9	
1030	94	1	59	0	13	0	1	0	5	8	7	
1045	124	1	92	1	12	2	0	0	1	6	9	
1100	117	1	72	0	14	2	2	0	0	13	13	
1115	108	0	68	2	18	1	0	0	5	7	7	
1130	118	0	85	0	18	0	0	0	3	6	6	
1145	105	0	69	0	16	2	3	0	2	11	2	
1200	112	0	75	1	14	1	2	1	3	6	9	
1215	110	1	81	0	9	0	0	2	4	6	7	
1230	108	0	86	1	10	0	0	0	1	7	3	
1245	130	0	110	1	8	1	0	0	1	6	3	
1300	120	0	98	0	11	1	0	0	1	4	5	
1315	140	2	105	0	17	4	0	0	4	4	4	
1330	208	1	173	2	18	2	0	0	2	4	6	
1345	156	1	124	1	19	1	0	0	3	5	2	
1400	123	0	90	0	17	2	0	0	2	8	4	
1415	129	0	91	0	20	2	1	0	3	1	11	
1430	151	0	122	0	15	1	0	0	1	7	5	
1445	112	1	77	0	17	2	0	0	2	8	5	
1500	119	1	80	0	19	1	0	0	2	9	7	
1515	112	0	79	1	12	4	0	0	6	8	2	
1530	134	0	104	0	10	0	0	0	5	7	8	
1545	108	1	70	2	18	0	0	0	0	11	6	
1600	112	0	82	0	12	1	1	0	2	8	6	
1615	105	0	81	1	8	1	0	0	3	6	5	
1630	128	0	100	0	11	1	0	0	3	4	9	
1645	130	0	94	0	18	0	0	0	4	9	5	
1700	166	0	145	1	12	2	0	0	0	4	2	
1715	131	0	112	1	6	0	1	0	2	4	5	
1730	206	0	181	0	8	0	1	0	3	6	7	
1745	135	0	112	0	12	0	0	0	2	5	4	
1800	109	0	88	0	14	0	0	0	1	1	5	
1815	102	0	82	1	9	0	0	0	1	3	6	
1830	72	0	58	0	5	0	0	0	3	4	2	
1845	86	1	69	0	6	0	0	0	1	2	7	
1900	76	0	50	1	8	0	0	1	3	9	4	
1915	51	0	33	0	4	0	0	0	4	6	4	
1930	61	1	45	0	5	0	0	0	3	5	2	
1945	54	0	44	0	2	0	0	0	0	4	4	
2000	54	0	34	0	4	0	0	0	1	7	8	
2015	36	1	25	0	2	0	0	1	0	1	6	
2030	53	1	34	0	7	2	0	0	2	5	2	
2045	35	0	27	0	3	0	0	0	0	2	3	
2100	57	0	38	0	3	0	0	0	3	8	5	
2115	56	0	43	0	5	1	0	0	1	2	4	
2130	116	0	95	0	8	0	0	0	3	6	4	
2145	77	0	57	1	4	0	0	0	1	3	11	
2200	66	2	39	0	12	0	0	0	1	4	8	
2215	58	0	37	0	2	0	0	0	1	12	6	
2230	74	0	59	0	3	0	0	0	0	4	8	
2245	50	0	33	0	2	0	0	0	2	6	7	
2300	24	0	11	0	3	0	0	0	3	3	4	
2315	23	0	10	1	4	0	0	0	1	3	4	
2330	30	0	15	0	6	0	0	0	1	4	4	
2345	30	0	15	0	2	0	0	0	1	6	6	
07-19	**7357**	**26**	**5835**	**42**	**644**	**45**	**30**	**5**	**118**	**317**	**295**	
06-22	**8632**	**30**	**6798**	**48**	**731**	**51**	**31**	**7**	**143**	**412**	**381**	
06-00	**8987**	**32**	**7017**	**49**	**765**	**51**	**31**	**7**	**153**	**454**	**428**	
00-00	**9974**	**39**	**7797**	**49**	**790**	**57**	**31**	**7**	**167**	**527**	**510**	

8478.6		1889	21.02%		1757
7809.9		2089			**1580.7**

13 May 2014

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	21	0	6	0	4	1	0	0	1	5	4	
0015	24	0	12	0	4	0	0	0	0	5	3	
0030	14	0	4	0	0	0	0	0	0	7	3	
0045	13	0	4	0	2	0	0	0	0	3	4	
0100	14	0	7	0	2	0	0	0	0	2	3	
0115	17	0	5	0	1	0	0	0	1	4	6	
0130	12	0	5	0	1	0	0	0	0	3	3	
0145	26	0	17	0	1	0	0	0	1	3	4	
0200	15	0	5	0	0	0	0	0	1	3	6	
0215	15	0	6	0	2	0	0	0	0	5	2	
0230	12	0	4	0	2	0	0	0	0	1	5	
0245	28	0	16	0	3	0	0	0	0	3	6	
0300	11	0	2	0	3	0	0	0	1	3	2	
0315	23	0	10	0	3	0	0	0	0	5	5	
0330	18	0	11	0	0	0	0	0	0	1	6	
0345	43	0	32	0	1	0	0	0	0	6	4	
0400	22	0	12	0	5	1	0	0	0	2	2	
0415	31	0	16	0	6	0	0	0	0	2	7	
0430	45	1	26	0	1	0	1	0	1	6	9	
0445	58	0	41	0	3	0	0	0	2	5	7	
0500	56	0	39	0	0	0	0	0	0	4	13	
0515	101	2	85	0	3	0	0	0	3	1	7	
0530	256	1	236	1	4	1	0	0	2	4	7	
0545	185	3	162	0	6	0	0	0	1	3	10	
0600	81	1	56	0	7	2	0	0	0	5	10	
0615	105	0	81	1	4	2	0	0	2	6	9	
0630	181	0	155	1	11	0	1	0	0	6	7	
0645	197	0	169	0	9	1	0	0	1	8	9	
0700	161	0	132	1	8	0	1	0	0	8	11	
0715	207	2	170	0	14	1	0	0	6	9	5	
0730	302	5	263	5	12	0	0	0	3	7	7	
0745	321	1	287	4	15	0	1	0	3	7	3	
0800	343	3	301	4	14	1	0	0	4	7	9	
0815	306	1	275	2	8	2	4	0	3	5	6	
0830	311	0	277	4	14	1	1	0	1	4	9	
0845	302	2	259	1	18	0	5	0	2	8	7	
0900	195	0	154	1	15	3	0	0	3	7	12	
0915	141	0	103	2	18	2	1	0	4	4	7	
0930	120	1	92	0	10	2	2	1	0	6	6	
0945	146	1	107	1	14	1	0	0	2	5	15	
1000	121	0	79	3	13	1	1	0	5	8	11	
1015	104	0	65	1	20	0	0	0	7	6	5	
1030	122	0	81	0	15	2	1	0	1	12	10	
1045	110	1	63	3	18	0	3	0	0	8	14	
1100	92	1	53	2	17	1	1	0	2	6	9	
1115	122	0	83	0	14	1	1	0	4	12	7	
1130	97	0	81	1	6	0	0	0	0	6	3	
1145	108	0	81	3	10	2	0	0	2	5	5	
1200	101	0	66	1	16	1	0	0	2	10	5	
1215	111	0	74	0	18	1	1	0	0	7	10	
1230	117	1	85	0	15	2	0	0	2	6	6	
1245	138	0	95	1	23	0	1	0	1	9	8	
1300	127	1	89	1	19	1	0	0	4	7	5	
1315	121	1	94	0	16	0	1	0	5	3	1	
1330	209	2	170	2	17	1	1	1	2	7	6	
1345	170	0	132	2	14	1	1	0	4	6	10	
1400	127	2	100	2	10	1	2	0	3	3	4	
1415	128	1	97	2	15	0	1	0	1	6	5	
1430	154	0	114	1	13	1	0	1	4	10	10	
1445	100	0	75	0	13	0	0	0	2	4	6	
1500	118	2	77	1	12	2	2	1	2	9	10	
1515	126	3	93	1	17	1	0	0	5	4	2	
1530	148	0	113	2	17	0	0	0	2	8	6	
1545	119	1	99	0	11	1	0	0	0	2	5	
1600	115	0	83	1	17	0	1	0	3	5	5	
1615	128	0	95	3	16	1	0	0	2	6	5	
1630	133	0	112	1	11	1	0	0	2	4	2	
1645	131	0	101	1	13	1	0	0	3	4	8	
1700	181	0	159	1	13	0	0	0	1	4	3	
1715	175	1	152	1	14	0	0	0	1	3	3	
1730	177	1	154	2	7	1	0	0	4	2	6	
1745	147	2	117	1	13	0	0	0	3	4	7	
1800	121	1	97	0	9	0	0	0	3	2	9	
1815	122	2	107	0	7	1	0	0	1	4	0	
1830	89	1	70	0	5	0	0	0	3	3	7	
1845	82	1	56	0	7	1	0	1	1	7	8	
1900	73	0	49	0	10	0	0	1	1	8	4	
1915	69	0	49	0	11	0	0	0	0	5	4	
1930	71	1	42	0	10	0	0	0	3	9	6	
1945	51	0	38	0	3	0	0	0	3	2	5	
2000	49	0	37	0	1	0	0	0	2	4	5	
2015	37	0	24	0	2	0	0	0	0	7	4	
2030	49	0	33	0	4	1	0	0	4	5	2	
2045	44	0	32	0	2	0	0	0	2	4	4	
2100	41	0	28	0	1	0	0	0	0	9	3	
2115	68	1	56	1	4	0	0	0	0	5	1	
2130	108	1	84	0	8	0	0	0	2	9	4	
2145	74	0	60	0	4	1	0	0	1	7	1	
2200	81	1	59	0	7	0	0	0	0	7	7	
2215	49	0	40	0	1	0	1	0	1	2	4	
2230	79	0	57	1	5	0	0	0	0	6	10	
2245	48	0	33	0	6	1	0	0	1	3	4	
2300	22	0	10	0	2	0	0	0	1	7	2	
2315	19	0	11	0	0	0	0	0	1	2	5	
2330	24	0	12	0	1	0	0	0	1	6	4	
2345	36	0	19	0	1	0	0	0	0	9	7	
07-19	**7446**	**41**	**5882**	**65**	**651**	**39**	**33**	**5**	**118**	**289**	**323**	
06-22	**8744**	**45**	**6875**	**68**	**742**	**46**	**34**	**6**	**139**	**388**	**401**	
06-00	**9102**	**46**	**7116**	**69**	**765**	**47**	**35**	**6**	**144**	**430**	**444**	
00-00	**10162**	**53**	**7879**	**70**	**822**	**50**	**36**	**6**	**158**	**516**	**572**	
	7442				1871		20.56%			1379.2		

14 May 2014 2160

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	25	1	17	0	1	0	0	0	0	5	1	
0015	19	0	14	0	0	0	0	0	0	3	2	
0030	21	0	13	0	1	0	0	0	0	1	6	
0045	14	0	9	0	1	0	0	0	0	2	2	
0100	22	0	11	0	3	0	0	0	0	4	4	
0115	11	0	9	0	0	0	0	0	0	1	1	
0130	13	0	5	0	1	0	0	0	2	4	1	
0145	26	0	17	0	2	0	0	0	1	3	3	
0200	11	0	4	0	1	0	0	0	0	2	4	
0215	14	0	7	0	0	0	0	0	0	5	2	
0230	21	0	11	0	1	0	0	0	0	5	4	
0245	29	0	21	0	0	1	0	0	0	6	1	
0300	17	0	7	0	2	1	0	0	1	4	2	
0315	12	0	5	0	1	0	0	0	0	1	5	
0330	34	0	25	0	4	0	0	0	0	2	3	
0345	48	1	34	0	1	0	0	0	0	4	8	
0400	32	0	22	1	2	0	0	0	0	6	1	
0415	22	0	9	0	2	0	0	0	1	5	5	
0430	46	0	37	0	0	0	0	0	0	2	7	
0445	68	0	48	0	4	0	0	0	1	8	7	
0500	61	0	51	0	0	0	0	0	2	5	3	
0515	77	2	63	0	2	0	0	0	1	5	4	
0530	225	1	199	0	4	1	0	0	5	7	8	
0545	173	1	153	1	4	1	0	0	0	3	10	
0600	78	0	66	0	2	1	0	0	0	6	3	
0615	106	1	83	1	3	2	0	0	1	5	10	
0630	196	1	163	1	7	1	0	0	0	10	13	
0645	195	1	162	0	9	1	0	0	2	10	10	
0700	140	0	119	0	7	1	0	0	0	5	8	
0715	227	2	186	1	14	1	0	0	3	4	16	
0730	274	3	233	4	13	1	3	0	5	4	8	
0745	316	3	264	5	16	2	2	0	5	7	12	
0800	339	3	297	2	16	1	1	0	5	5	9	
0815	327	2	276	4	18	2	2	0	5	3	15	
0830	293	0	255	8	10	1	1	0	5	4	9	
0845	261	1	221	6	8	2	4	1	3	5	10	
0900	204	0	173	3	14	0	0	0	2	7	5	
0915	177	2	144	1	15	2	2	0	0	4	7	
0930	144	0	106	4	17	0	2	0	1	9	5	
0945	134	0	95	0	8	4	3	0	1	11	12	
1000	109	1	71	3	15	0	1	0	2	11	5	
1015	115	0	76	0	17	0	3	0	2	12	5	
1030	105	0	61	0	15	4	2	0	6	9	8	
1045	101	0	60	3	13	0	1	0	5	10	9	
1100	85	0	54	2	11	0	1	0	3	4	10	
1115	110	0	62	0	23	1	1	0	4	8	11	
1130	126	1	77	2	19	0	0	0	4	11	12	
1145	106	1	75	1	6	2	1	1	2	8	9	
1200	105	1	70	2	10	0	2	1	4	9	6	
1215	103	1	65	1	22	0	1	1	2	5	5	
1230	101	0	75	1	15	1	0	0	0	3	6	
1245	135	1	102	2	19	1	0	0	0	4	6	
1300	119	0	88	0	16	1	1	0	2	7	4	
1315	130	2	100	0	12	2	4	2	0	1	7	
1330	186	5	154	2	11	1	0	0	1	7	5	
1345	170	1	127	1	21	0	1	0	3	9	7	
1400	156	0	123	1	14	0	0	0	2	9	7	
1415	140	0	110	1	14	0	3	0	1	6	5	
1430	162	1	138	0	11	0	0	0	4	3	5	
1445	121	1	86	0	16	0	1	0	1	9	7	
1500	136	1	102	0	15	1	2	0	1	6	8	
1515	112	2	79	0	19	0	0	0	1	7	4	
1530	163	0	125	0	19	0	1	1	4	8	5	
1545	126	3	88	2	14	0	1	1	4	7	6	
1600	127	0	106	0	12	0	1	0	0	4	4	
1615	95	1	60	0	15	1	0	0	4	8	6	
1630	113	0	84	2	15	1	2	0	2	3	4	
1645	145	1	102	1	16	0	1	0	4	8	12	
1700	176	1	152	0	12	0	0	0	2	6	3	
1715	176	1	154	0	6	0	1	0	3	4	7	
1730	179	2	150	1	10	0	0	0	2	4	10	
1745	157	2	125	0	17	0	0	0	0	5	8	
1800	124	4	100	0	5	0	0	0	2	8	5	
1815	113	2	87	0	8	1	0	0	2	5	8	
1830	96	1	74	2	7	1	0	0	2	4	5	
1845	91	0	65	1	10	1	0	0	2	6	6	
1900	76	2	47	0	11	0	0	0	3	5	8	
1915	72	0	45	3	9	1	0	0	1	10	3	
1930	69	1	48	0	4	0	0	0	3	7	6	
1945	66	1	46	0	4	0	0	0	2	8	5	
2000	41	2	27	0	7	0	0	0	0	2	3	
2015	60	2	41	0	6	0	0	0	2	4	5	
2030	47	1	22	0	4	0	0	0	2	9	9	
2045	39	1	24	0	4	0	0	0	3	2	5	
2100	52	1	34	0	3	0	0	0	4	6	4	
2115	66	1	46	0	4	1	0	0	1	9	4	
2130	88	1	72	0	3	0	0	0	3	3	6	
2145	81	0	64	0	4	1	0	0	1	8	3	
2200	59	2	43	0	2	0	0	0	0	5	7	
2215	57	3	38	0	3	0	0	0	2	5	6	
2230	98	0	78	0	5	0	0	0	3	8	4	
2245	42	0	29	0	6	0	0	0	3	2	2	
2300	24	1	10	0	1	0	0	0	0	5	7	
2315	27	0	12	0	0	0	0	0	0	10	5	
2330	33	0	18	0	2	0	0	0	3	3	7	
2345	34	1	12	0	2	0	0	0	1	11	7	
07-19	**7450**	**53**	**5796**	**69**	**656**	**36**	**52**	**8**	**118**	**306**	**356**	
06-22	**8782**	**69**	**6786**	**74**	**740**	**44**	**52**	**8**	**146**	**410**	**453**	
06-00	**9156**	**76**	**7026**	**74**	**761**	**44**	**52**	**8**	**158**	**459**	**498**	
00-00	**10197**	**82**	**7817**	**76**	**798**	**48**	**52**	**8**	**172**	**552**	**592**	

6289.6 1980 21.63% 1005

15 May 2014 2222

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	14	1	5	0	2	0	0	0	0	3	3	
0015	19	1	7	0	3	0	1	0	1	3	3	
0030	21	0	11	0	1	0	0	0	1	4	4	
0045	20	0	9	0	1	0	0	0	1	3	6	
0100	12	0	3	0	0	0	0	0	0	4	5	
0115	13	0	8	0	0	0	0	0	0	2	3	
0130	29	0	14	0	1	1	0	0	0	5	8	
0145	26	0	17	0	1	0	0	0	1	4	3	
0200	12	0	5	0	0	0	0	0	1	4	2	
0215	21	0	15	0	0	0	0	0	0	3	3	
0230	15	0	10	0	0	0	0	0	0	2	3	
0245	26	0	19	0	2	0	0	0	0	2	3	
0300	16	0	6	0	3	0	0	0	0	0	7	
0315	16	0	11	0	0	0	0	0	0	2	3	
0330	30	0	21	1	0	0	0	0	0	4	4	
0345	18	0	13	0	1	0	0	0	0	3	1	
0400	18	0	12	0	1	0	0	0	0	2	3	
0415	27	0	20	0	2	0	0	0	0	1	4	
0430	38	1	19	0	2	0	1	0	2	4	9	
0445	32	0	25	0	1	0	0	0	1	3	2	
0500	37	0	29	0	0	1	0	0	0	4	3	
0515	66	0	56	0	3	0	0	0	1	4	2	
0530	120	0	109	2	1	1	0	0	1	3	3	
0545	88	0	76	0	6	0	1	0	0	4	1	
0600	49	1	34	0	2	1	1	0	0	5	5	
0615	65	1	38	1	1	0	0	0	1	12	11	
0630	92	0	81	1	3	0	0	0	0	3	4	
0645	103	1	77	1	8	0	1	0	1	8	6	
0700	137	0	116	0	8	1	0	0	1	5	6	
0715	190	1	167	1	7	0	0	0	2	4	8	
0730	259	0	230	2	9	4	2	1	2	3	6	
0745	279	1	246	4	7	1	1	0	7	4	8	
0800	269	2	233	2	6	2	2	0	4	12	6	
0815	298	0	270	3	9	0	1	0	4	4	7	
0830	255	0	221	3	13	1	3	1	1	5	7	
0845	272	1	234	0	14	0	6	1	4	4	8	
0900	151	2	120	1	16	1	1	0	0	6	4	
0915	120	0	101	1	7	0	2	0	5	3	1	
0930	125	2	94	3	7	2	0	0	3	4	10	
0945	114	0	77	1	10	1	1	0	2	12	10	
1000	105	0	61	1	12	0	1	0	0	16	14	
1015	108	0	70	1	10	1	1	0	5	11	9	
1030	118	0	82	2	17	0	2	0	2	6	7	
1045	96	0	60	0	18	0	1	0	3	8	6	
1100	89	1	60	2	10	1	4	0	1	5	5	
1115	77	0	53	0	12	0	1	0	3	3	5	
1130	92	0	70	1	8	0	2	0	1	5	5	
1145	80	0	52	1	11	1	1	0	3	6	5	
1200	69	0	58	1	6	0	0	0	0	1	3	
1215	112	0	86	0	12	1	0	0	3	7	3	
1230	86	1	63	1	6	0	1	0	4	5	5	
1245	92	0	69	0	14	0	2	0	0	5	2	
1300	76	1	53	0	10	1	1	0	1	6	3	
1315	109	2	86	0	9	1	2	1	3	2	3	
1330	132	0	100	1	19	1	0	0	3	4	4	
1345	90	0	68	1	11	1	1	0	0	2	6	
1400	104	0	77	0	11	0	0	0	3	5	8	
1415	101	0	78	0	11	1	4	0	1	4	2	
1430	101	0	83	1	9	1	0	0	1	3	3	
1445	102	1	79	0	12	0	1	1	1	4	3	
1500	103	0	84	1	8	1	2	0	1	3	3	
1515	95	0	78	1	10	0	0	1	1	2	2	
1530	106	0	73	2	16	0	2	0	0	10	3	
1545	124	0	91	2	16	0	1	0	3	6	5	
1600	126	0	100	3	11	1	0	1	0	3	7	
1615	128	0	98	0	11	1	0	0	4	6	8	
1630	113	0	90	2	10	0	0	0	0	6	5	
1645	132	3	100	1	13	0	1	1	2	6	5	
1700	159	0	126	0	18	0	1	0	3	7	4	
1715	147	2	120	1	6	1	0	0	4	3	10	
1730	166	0	139	1	7	0	1	0	3	5	10	
1745	158	1	134	1	8	1	0	0	3	3	7	
1800	139	0	117	1	7	1	0	0	2	5	6	
1815	98	1	78	0	12	0	0	0	0	2	5	
1830	112	2	95	0	3	0	1	0	3	3	5	
1845	71	0	59	1	3	0	0	0	1	3	4	
1900	84	0	65	1	6	0	0	0	0	6	6	
1915	55	0	42	0	8	0	0	0	0	3	2	
1930	78	0	62	0	9	0	0	0	2	3	2	
1945	48	0	39	0	0	1	0	0	1	4	3	
2000	44	0	34	0	1	0	0	0	0	2	7	
2015	40	0	25	0	2	0	0	0	1	9	3	
2030	53	0	43	0	0	0	1	0	1	4	4	
2045	50	0	35	1	5	0	0	0	2	2	5	
2100	43	0	35	2	2	0	0	0	0	2	2	
2115	41	1	28	1	1	1	0	0	1	5	3	
2130	42	1	33	0	2	0	0	0	1	3	2	
2145	39	0	25	0	1	0	0	0	0	7	6	
2200	39	0	33	0	1	0	0	0	1	2	2	
2215	35	0	20	0	4	0	0	0	1	7	3	
2230	42	0	31	0	2	0	0	0	2	3	4	
2245	27	0	16	0	2	0	0	0	2	4	3	
2300	40	0	25	1	1	0	0	0	0	7	6	
2315	29	0	18	0	3	0	0	0	0	3	5	
2330	21	0	16	0	1	0	0	0	1	1	2	
2345	21	0	13	0	0	0	0	0	0	2	6	
07-19	**6385**	**24**	**5099**	**51**	**500**	**29**	**53**	**8**	**103**	**247**	**271**	
06-22	**7311**	**29**	**5795**	**59**	**551**	**32**	**56**	**8**	**114**	**325**	**342**	
06-00	**7565**	**29**	**5967**	**60**	**565**	**32**	**56**	**8**	**121**	**354**	**373**	
00-00	**8299**	**32**	**6487**	**63**	**596**	**35**	**59**	**8**	**131**	**427**	**461**	

4458.4 1509 19.95% 609

16 May 2014 1717

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	17	0	8	0	1	0	0	0	0	4	4	
0015	17	0	13	0	0	0	0	0	0	4	0	
0030	22	0	12	0	2	0	0	0	0	4	4	
0045	16	0	8	0	0	0	0	0	0	1	7	
0100	25	0	16	0	0	0	0	0	0	3	6	
0115	19	0	10	0	0	0	1	0	2	2	4	
0130	16	0	9	0	2	0	0	0	1	1	3	
0145	10	0	7	0	0	0	0	0	0	2	1	
0200	7	0	3	0	0	0	0	0	0	3	1	
0215	15	0	8	1	0	0	0	0	1	1	4	
0230	13	0	4	0	1	0	0	0	1	3	4	
0245	12	0	6	0	1	0	0	0	0	3	2	
0300	13	0	5	0	1	0	0	0	0	4	3	
0315	28	1	20	0	0	0	0	0	0	2	5	
0330	22	0	12	0	2	1	0	0	0	4	3	
0345	21	0	12	0	0	0	0	0	0	3	6	
0400	16	0	10	0	1	0	0	0	0	3	2	
0415	15	0	7	0	1	0	0	0	0	3	4	
0430	32	0	22	0	2	0	0	0	1	3	4	
0445	49	0	33	2	0	0	0	0	1	5	8	
0500	41	0	28	0	4	0	1	0	1	2	5	
0515	37	0	25	0	3	1	0	0	1	2	5	
0530	133	1	112	1	3	3	0	0	3	5	5	
0545	136	1	117	0	2	0	0	0	1	7	8	
0600	56	1	37	0	2	0	0	0	0	9	7	
0615	80	0	59	1	4	2	0	0	0	8	6	
0630	108	0	96	2	3	0	0	0	2	3	2	
0645	111	3	84	0	8	0	2	0	3	6	5	
0700	133	1	112	0	5	0	1	0	1	9	4	
0715	173	1	142	2	7	1	0	0	2	11	7	
0730	250	1	216	5	12	1	1	1	0	8	5	
0745	281	0	244	3	11	1	1	0	4	10	7	
0800	262	1	227	1	13	1	4	0	2	6	7	
0815	263	1	230	6	7	1	0	0	1	5	12	
0830	246	1	209	0	15	0	4	0	0	7	10	
0845	246	1	194	3	16	1	2	0	4	14	11	
0900	132	0	103	5	7	2	0	0	2	7	6	
0915	116	0	97	1	8	0	1	1	1	6	1	
0930	103	1	76	1	9	2	4	0	2	5	3	
0945	142	0	108	0	12	1	2	0	3	11	5	
1000	106	0	81	1	10	1	0	0	4	6	3	
1015	76	0	50	0	8	0	1	0	1	8	8	
1030	99	0	70	1	16	0	2	0	0	4	6	
1045	84	0	58	1	6	4	2	0	2	4	7	
1100	98	0	66	1	14	1	1	0	2	11	2	
1115	89	0	62	1	13	0	0	0	1	4	8	
1130	96	1	63	2	13	3	1	0	5	7	1	
1145	77	1	61	1	1	1	0	0	1	6	5	
1200	89	0	68	1	7	1	0	0	2	6	4	
1215	69	0	54	0	11	0	1	0	1	1	1	
1230	100	0	72	1	14	0	0	0	1	5	7	
1245	108	0	90	2	9	1	0	0	0	3	3	
1300	81	1	62	1	9	0	0	1	1	5	1	
1315	125	0	88	0	18	3	0	0	0	8	8	
1330	160	2	125	1	12	1	1	1	4	8	5	
1345	133	1	109	1	9	0	2	1	0	5	5	
1400	116	1	86	1	12	1	0	1	3	8	3	
1415	83	0	58	0	14	1	1	0	0	2	7	
1430	116	1	80	2	16	1	0	0	4	6	6	
1445	100	2	82	1	8	0	0	0	3	1	3	
1500	140	1	106	2	11	1	3	0	0	7	9	
1515	118	0	100	1	5	0	0	0	0	6	6	
1530	127	2	91	4	15	0	0	2	2	6	5	
1545	153	1	119	4	16	1	1	0	3	4	4	
1600	126	0	98	0	10	0	1	0	2	7	8	
1615	107	1	80	0	10	0	1	0	1	6	8	
1630	123	0	94	0	13	0	0	0	3	6	7	
1645	129	1	105	3	14	0	0	0	2	3	1	
1700	149	0	120	3	14	0	1	0	1	8	2	
1715	150	0	131	0	13	0	0	0	0	4	2	
1730	172	5	134	1	17	0	0	0	0	6	9	
1745	142	2	114	0	9	1	0	1	2	4	9	
1800	107	1	89	1	5	0	0	0	2	5	4	
1815	96	0	71	1	10	0	0	0	2	7	5	
1830	99	1	81	0	7	0	0	0	0	5	5	
1845	95	1	72	0	9	0	0	0	5	3	5	
1900	77	0	63	0	7	0	0	0	1	2	4	
1915	54	0	41	1	4	0	0	0	0	2	6	
1930	65	0	46	2	5	0	0	0	2	5	5	
1945	45	0	37	0	2	0	0	0	0	4	2	
2000	29	0	23	0	0	0	0	0	0	4	2	
2015	41	0	30	2	3	0	0	0	1	3	2	
2030	53	0	43	0	1	0	0	0	0	3	6	
2045	48	1	41	0	0	0	0	0	2	3	1	
2100	26	0	18	0	2	1	0	0	0	3	2	
2115	36	0	30	0	3	0	0	0	0	1	2	
2130	40	0	22	1	2	1	0	0	0	11	3	
2145	43	1	31	0	0	0	0	0	2	3	6	
2200	49	0	32	0	2	0	0	0	3	6	6	
2215	45	0	25	0	8	0	0	0	0	6	6	
2230	41	0	26	0	5	0	0	0	2	3	5	
2245	50	0	41	0	3	0	0	0	2	2	2	
2300	21	0	14	0	0	0	0	0	1	3	3	
2315	21	1	12	0	2	0	0	0	2	1	3	
2330	30	0	11	0	1	0	0	0	0	9	9	
2345	29	0	21	0	2	0	0	0	0	3	3	
07-19	**6385**	**34**	**5048**	**66**	**520**	**33**	**39**	**9**	**82**	**294**	**260**	
06-22	**7297**	**40**	**5749**	**75**	**566**	**37**	**41**	**9**	**95**	**364**	**321**	
06-00	**7583**	**41**	**5931**	**75**	**589**	**37**	**41**	**9**	**105**	**397**	**358**	
00-00	**8315**	**44**	**6438**	**79**	**615**	**42**	**43**	**9**	**118**	**471**	**456**	

2945.4 1536 20.26% 307.2

1754

17 May 2014

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	18	0	11	0	0	0	0	0	0	2	5	
0015	14	0	6	0	2	0	0	0	0	1	5	
0030	27	1	16	0	3	0	1	0	1	2	3	
0045	11	0	5	0	1	0	0	0	0	3	2	
0100	23	0	15	0	0	0	0	0	0	4	4	
0115	11	0	5	0	3	0	0	0	0	1	2	
0130	14	0	7	1	2	0	0	0	0	2	2	
0145	9	0	7	0	0	0	0	0	0	1	1	
0200	13	0	6	0	1	0	0	0	1	1	4	
0215	17	0	12	0	0	0	0	0	1	2	2	
0230	9	0	6	1	0	0	0	0	1	1	0	
0245	8	0	5	0	0	0	0	0	0	0	3	
0300	17	0	6	0	3	0	0	0	1	4	3	
0315	17	0	11	0	1	0	0	0	0	1	4	
0330	3	0	3	0	0	0	0	0	0	0	0	
0345	7	0	3	0	2	0	0	0	0	0	2	
0400	10	0	5	0	2	0	0	0	0	2	1	
0415	10	0	8	1	0	0	0	0	0	1	0	
0430	13	0	10	0	1	0	0	0	0	1	1	
0445	28	0	23	0	0	0	0	0	1	0	4	
0500	7	0	4	0	0	0	0	0	0	2	1	
0515	18	0	13	0	0	0	0	0	0	1	4	
0530	31	0	21	1	4	0	0	0	0	2	3	
0545	21	0	14	1	3	1	0	0	0	1	1	
0600	24	0	16	0	0	0	0	0	0	2	6	
0615	21	0	15	0	1	0	0	0	0	1	4	
0630	20	0	16	0	1	1	0	0	0	1	1	
0645	29	0	20	0	2	1	1	0	0	1	4	
0700	20	0	16	0	2	0	0	0	0	0	2	
0715	23	0	22	0	0	0	0	0	0	0	1	
0730	50	0	44	0	0	0	0	0	1	3	2	
0745	56	0	46	0	3	0	0	0	2	2	3	
0800	60	1	43	0	3	1	0	0	2	5	5	
0815	59	0	48	2	3	1	0	0	0	3	2	
0830	51	0	46	0	2	0	0	0	1	1	1	
0845	60	0	52	1	2	1	0	0	0	2	2	
0900	72	0	60	1	3	0	2	0	0	4	2	
0915	58	0	51	0	4	0	0	0	1	0	2	
0930	72	0	60	0	3	0	0	0	2	3	4	
0945	89	0	79	1	2	0	1	0	0	2	4	
1000	75	1	66	0	4	0	0	0	0	3	1	
1015	79	0	60	1	10	0	0	0	1	3	4	
1030	80	0	66	1	6	0	0	0	1	2	4	
1045	69	0	57	0	3	0	0	0	2	5	2	
1100	86	0	72	3	6	0	1	0	0	3	1	
1115	94	0	84	0	4	0	0	0	1	2	3	
1130	106	1	92	0	2	0	0	0	2	3	6	
1145	81	0	76	1	1	0	1	0	0	1	1	
1200	89	0	81	2	3	0	0	0	1	2	0	
1215	100	3	83	0	7	0	0	0	0	3	4	
1230	68	0	56	0	6	0	1	0	1	3	1	
1245	76	0	65	1	4	0	0	0	1	3	2	
1300	83	1	69	1	6	0	0	1	0	4	1	
1315	60	0	50	0	4	1	1	0	1	2	1	
1330	85	0	78	1	1	0	0	1	0	0	4	
1345	76	0	70	0	1	0	0	0	1	3	1	
1400	70	1	64	1	1	0	1	0	1	1	0	
1415	71	0	64	0	2	0	0	0	2	1	2	
1430	67	1	57	0	3	0	0	0	0	2	4	
1445	56	0	53	0	1	0	0	0	0	0	2	
1500	59	1	50	1	2	0	0	0	1	0	4	
1515	65	3	52	1	5	0	0	0	2	0	2	
1530	54	0	47	2	0	0	0	0	0	2	3	
1545	74	1	63	0	1	0	0	0	0	3	6	
1600	63	2	57	1	1	0	0	0	0	0	2	
1615	59	2	50	0	2	0	0	1	0	2	2	
1630	60	0	56	0	0	0	0	0	0	0	4	
1645	45	0	38	0	1	0	1	0	0	1	4	
1700	57	0	52	0	2	0	0	0	0	1	2	
1715	66	0	52	1	5	0	0	0	1	2	5	
1730	60	1	48	3	3	0	0	0	1	2	2	
1745	54	0	50	0	1	0	0	0	1	1	1	
1800	44	0	40	1	0	0	0	0	0	1	2	
1815	51	0	45	0	2	0	0	0	0	4	0	
1830	51	0	47	0	2	0	0	1	0	1	0	
1845	38	0	32	0	0	0	0	0	0	1	5	
1900	55	0	46	0	4	0	0	0	0	3	2	
1915	29	0	25	2	0	0	0	0	0	1	1	
1930	34	0	26	0	3	0	0	0	0	1	4	
1945	24	0	19	0	0	1	0	0	0	2	2	
2000	39	0	37	0	1	0	1	0	0	0	0	
2015	33	0	29	1	2	0	0	0	0	0	1	
2030	32	0	28	1	1	0	0	0	0	1	1	
2045	39	1	32	0	4	1	0	0	0	1	0	
2100	32	0	28	0	0	0	0	0	0	2	2	
2115	28	0	18	1	3	0	0	0	2	0	4	
2130	28	0	21	0	1	0	0	0	0	3	3	
2145	24	1	22	0	0	0	0	0	0	1	0	
2200	31	0	25	1	1	0	0	1	0	2	1	
2215	23	0	20	1	0	0	0	0	0	1	1	
2230	31	0	22	1	2	0	0	0	0	3	3	
2245	24	0	17	1	1	0	0	0	0	2	3	
2300	19	0	14	0	0	0	0	1	0	2	2	
2315	18	0	16	0	1	0	0	0	0	1	0	
2330	13	0	12	0	1	0	0	0	0	0	0	
2345	13	0	8	0	0	0	0	0	0	4	1	
07-19	**3141**	**19**	**2709**	**27**	**129**	**4**	**9**	**4**	**30**	**92**	**118**	
06-22	**3632**	**21**	**3107**	**32**	**152**	**8**	**11**	**4**	**32**	**112**	**153**	
06-00	**3804**	**21**	**3241**	**36**	**158**	**8**	**11**	**6**	**32**	**127**	**164**	
00-00	**4160**	**22**	**3463**	**41**	**186**	**9**	**12**	**6**	**38**	**162**	**221**	

18 May 2014 634

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	7	0	6	0	0	0	0	0	0	1	0	
0015	20	0	15	0	1	0	0	0	1	1	2	
0030	9	0	3	0	0	0	0	0	0	2	4	
0045	10	0	6	0	0	0	0	0	0	2	2	
0100	11	0	8	0	0	0	0	0	0	1	2	
0115	5	0	3	0	0	0	0	0	0	2	0	
0130	5	0	2	0	0	0	0	0	0	0	3	
0145	6	0	4	0	1	0	0	0	0	0	1	
0200	9	0	6	0	1	0	0	0	0	1	1	
0215	13	0	9	0	0	0	0	0	0	1	3	
0230	4	0	1	0	0	0	0	0	0	1	2	
0245	2	0	2	0	0	0	0	0	0	0	0	
0300	7	0	3	0	0	0	0	0	0	1	3	
0315	9	0	6	0	0	0	0	0	0	3	0	
0330	7	0	1	1	1	0	0	0	1	3	0	
0345	3	0	1	0	0	0	0	0	0	1	1	
0400	13	0	8	0	0	0	0	0	0	2	3	
0415	4	0	2	0	0	0	0	0	0	2	0	
0430	13	0	11	0	0	0	0	0	0	1	1	
0445	7	0	6	0	0	0	0	0	0	0	1	
0500	15	0	12	0	0	0	0	0	1	2	0	
0515	9	0	7	0	0	0	0	0	0	0	2	
0530	18	0	13	0	0	1	0	0	0	3	1	
0545	16	0	15	0	0	0	0	0	0	0	1	
0600	17	0	13	0	1	0	0	0	0	0	3	
0615	18	0	13	1	0	0	0	0	0	2	2	
0630	29	0	27	1	0	0	0	0	0	0	1	
0645	29	0	25	0	1	0	0	0	0	1	2	
0700	19	0	16	0	0	0	0	0	0	1	2	
0715	16	0	12	0	2	0	0	0	0	0	2	
0730	18	0	15	0	0	0	0	0	0	2	1	
0745	31	0	27	1	0	0	0	0	0	0	3	
0800	19	0	16	0	1	0	0	0	0	1	1	
0815	26	1	20	1	2	0	0	0	0	1	1	
0830	33	0	30	0	2	0	0	0	0	1	0	
0845	37	0	27	1	2	0	0	0	2	2	3	
0900	32	1	26	2	0	0	0	0	0	2	1	
0915	43	1	36	0	3	0	0	0	1	0	2	
0930	50	0	47	1	1	0	0	0	0	1	0	
0945	56	1	51	0	1	0	0	0	0	2	1	
1000	40	0	36	1	1	0	0	0	1	0	1	
1015	56	1	51	1	1	0	0	0	0	1	1	
1030	62	0	59	1	1	0	0	0	0	1	0	
1045	58	0	50	3	3	0	0	0	0	1	1	
1100	62	2	53	1	3	0	0	0	0	3	0	
1115	69	1	62	1	1	0	0	0	1	1	2	
1130	78	0	69	0	2	0	1	0	0	3	3	
1145	83	1	74	2	0	0	0	0	1	0	5	
1200	92	0	82	3	1	0	0	0	0	3	3	
1215	65	0	59	0	0	0	0	0	0	3	3	
1230	68	0	62	1	0	0	0	0	2	1	2	
1245	72	0	63	1	2	0	0	0	2	1	3	
1300	62	0	56	2	1	0	0	0	0	3	0	
1315	69	0	61	4	2	0	0	0	0	0	2	
1330	67	0	64	0	1	0	0	0	0	0	2	
1345	45	1	42	2	0	0	0	0	0	0	0	
1400	49	0	40	1	2	0	0	0	1	2	3	
1415	58	0	53	1	1	0	0	0	0	3	0	
1430	86	1	73	1	4	0	1	0	1	2	3	
1445	64	1	54	1	2	1	0	0	0	3	2	
1500	57	2	50	1	3	0	0	0	0	0	1	
1515	75	0	66	0	2	0	0	1	1	1	4	
1530	73	0	57	0	2	2	0	0	1	2	9	
1545	56	0	50	0	2	0	0	0	0	2	2	
1600	76	1	64	1	2	0	0	0	1	3	4	
1615	62	1	49	0	4	0	0	0	0	5	3	
1630	56	1	48	0	2	0	0	0	0	1	4	
1645	77	2	68	2	1	0	0	0	0	1	3	
1700	67	0	58	1	3	1	0	0	1	2	1	
1715	58	0	50	1	2	0	0	0	2	1	2	
1730	53	1	48	0	1	0	0	0	1	1	1	
1745	67	1	56	2	3	0	0	0	0	2	3	
1800	34	0	27	0	0	0	0	0	2	3	2	
1815	38	0	29	0	2	0	0	0	0	4	3	
1830	47	0	37	3	3	0	0	1	0	1	2	
1845	52	0	45	1	1	0	0	0	0	3	2	
1900	60	0	53	1	1	0	0	0	1	0	4	
1915	42	0	34	0	1	1	0	1	0	1	4	
1930	37	0	26	1	1	0	0	0	1	2	6	
1945	35	0	30	1	1	0	0	0	0	1	2	
2000	43	1	38	0	1	0	0	0	1	0	2	
2015	31	0	22	1	0	0	0	0	1	4	3	
2030	32	0	27	0	1	0	0	0	0	1	3	
2045	32	0	27	2	0	0	0	0	2	0	1	
2100	30	0	18	0	3	0	0	0	3	4	2	
2115	33	1	22	1	1	0	0	0	1	2	5	
2130	50	0	42	1	3	0	0	0	2	2	0	
2145	19	0	14	0	0	0	0	0	1	2	2	
2200	35	0	25	0	2	0	0	0	1	6	1	
2215	19	0	15	0	1	0	0	0	0	2	1	
2230	20	0	17	0	0	0	0	0	0	2	1	
2245	22	0	11	0	1	0	0	0	0	4	6	
2300	14	0	9	0	0	0	1	0	0	3	1	
2315	21	0	16	0	0	0	0	0	0	1	4	
2330	25	0	22	0	1	0	0	0	0	0	2	
2345	14	0	10	0	1	0	0	0	0	1	2	
07-19	**2633**	**21**	**2288**	**45**	**75**	**4**	**2**	**2**	**21**	**76**	**99**	
06-22	**3170**	**23**	**2719**	**55**	**90**	**5**	**2**	**3**	**34**	**98**	**141**	
06-00	**3340**	**23**	**2844**	**55**	**96**	**5**	**3**	**3**	**35**	**117**	**159**	
00-00	**3562**	**23**	**2994**	**56**	**100**	**6**	**3**	**3**	**38**	**147**	**192**	

Grand Total 489

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
--	**54669**	**295**	**42875**	**434**	**3907**	**247**	**236**	**47**	**822**	**2802**	**3004**	

Period	Total	Per day		
18 hour	42393	8479		
AADT	54669	7810		
AM 5	5887	1177	Combined peak 5 day	1827
PM 5	3249	650		
AM 7	6232	890	Combined peak 7 day	1423
PM 7	3731	533		

18 hr factor 4.6402

AADT factor 5.4872

Report Id - CustomList-40
Site Name - LUTTERWORTH- 02
Description - COVENTRY ROAD [70M]
Direction - West

12 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 70	]PSL% 70	]SL1 79 ACPO	]SL1% 79 ACPO	]SL2 85 DFT	]SL2% 85 DFT	Fix1
0000	0	0	0	0	0	0	0	1	3	5	3	6	0	1	0	0	0	51.4	56.8	0	0	0	0	0	0	
0015	0	0	0	0	0	0	0	2	3	3	7	0	3	0	0	0	0	50.3	53.7	0	0	0	0	0	0	
0030	0	0	0	0	0	0	0	2	2	3	7	2	1	1	0	0	0	50.3	54.8	0	0	0	0	0	0	
0045	0	0	0	0	0	0	1	3	2	2	6	1	0	0	0	0	0	46.7	53	0	0	0	0	0	0	
0100	0	0	0	0	0	0	0	2	2	5	2	2	0	0	0	0	0	46.9	51.9	0	0	0	0	0	0	
0115	0	0	0	0	0	0	0	1	2	6	3	2	1	0	0	0	0	48.9	55.3	0	0	0	0	0	0	
0130	0	0	0	0	0	0	2	2	1	4	6	2	0	2	0	0	0	49.6	56.8	0	0	0	0	0	0	
0145	0	0	0	0	0	0	1	3	1	1	2	3	2	0	0	0	0	48.9	57.9	0	0	0	0	0	0	
0200	0	0	0	0	0	1	0	0	0	3	2	1	0	0	0	0	0	47.6 -		0	0	0	0	0	0	
0215	0	0	0	0	0	0	2	1	5	3	4	3	1	0	0	0	0	47	56.8	0	0	0	0	0	0	
0230	0	0	0	0	0	0	0	3	4	3	2	1	1	0	0	0	0	47.1	54.4	0	0	0	0	0	0	
0245	0	0	0	0	0	0	0	0	3	3	4	1	2	0	0	0	0	51.1	58.6	0	0	0	0	0	0	
0300	0	0	0	0	0	0	0	1	3	3	2	4	1	0	0	0	0	50.8	56.6	0	0	0	0	0	0	
0315	0	0	0	0	0	0	0	2	2	9	2	3	4	2	0	0	0	51.5	60.4	0	0	0	0	0	0	
0330	0	0	0	0	0	0	1	0	4	8	9	3	2	0	0	0	0	50.3	55	0	0	0	0	0	0	
0345	0	0	0	0	0	0	0	2	5	5	10	5	4	3	0	0	0	52.4	60.2	0	0	0	0	0	0	
0400	0	0	0	0	0	0	0	0	2	4	2	5	1	3	0	0	0	54.4	60.2	0	0	0	0	0	0	
0415	0	0	0	0	0	0	0	2	5	10	6	0	1	0	0	0	0	47.9	52.8	0	0	0	0	0	0	
0430	0	0	0	0	0	0	1	2	1	14	3	6	2	1	0	0	0	50.5	56.6	0	0	0	0	0	0	
0445	0	0	0	0	0	0	1	3	14	8	11	7	12	5	2	1	0	53.5	64	3	4.7	0	0	0	0	
0500	0	0	0	0	0	0	1	1	5	9	16	13	8	4	0	0	0	53.8	61.3	0	0	0	0	0	0	
0515	0	0	0	0	0	0	0	1	7	20	25	13	7	1	1	0	1	52.8	58.8	2	2.6	1	1.3	0	0	
0530	0	0	0	0	0	0	0	8	30	62	69	42	17	8	0	1	0	51.7	58.4	1	0.4	1	0.4	0	0	
0545	0	0	0	0	0	0	1	12	27	47	45	30	17	15	3	3	0	52.4	61.3	6	3	0	0	0	0	
0600	0	0	0	0	0	0	0	3	13	11	22	11	8	3	3	0	4	54.1	63.8	7	9	4	5.1	0	0	
0615	0	0	0	0	0	0	0	1	14	19	25	16	19	5	3	0	0	54.3	63.3	3	2.9	0	0	0	0	
0630	0	0	0	0	0	0	2	11	23	56	42	42	20	12	1	2	0	52.1	60.6	3	1.4	0	0	0	0	
0645	0	0	0	0	0	0	0	0	15	21	44	41	22	10	3	2	0	55.2	63.1	5	3.2	0	0	0	0	
0700	0	0	0	0	0	0	0	2	9	28	38	32	20	13	1	0	2	55.1	63.1	3	2.1	2	1.4	0	0	
0715	0	0	0	0	0	0	0	6	21	27	41	42	34	13	9	3	2	55.6	64	14	7.1	2	1	0	0	
0730	0	0	0	0	0	0	0	5	25	47	73	65	34	17	4	0	0	54	62	4	1.5	0	0	0	0	
0745	0	0	0	0	0	0	5	10	52	92	101	68	42	9	4	0	0	51.7	59.5	4	1	0	0	0	0	
0800	0	0	0	0	0	1	3	11	51	91	102	60	35	10	1	0	0	51.4	59.1	1	0.3	0	0	0	0	
0815	0	0	0	0	0	0	1	8	33	78	83	60	45	18	5	2	0	53.4	61.3	7	2.1	0	0	0	0	
0830	0	0	0	0	0	0	1	17	46	61	92	65	34	10	3	1	0	52	59.7	4	1.2	0	0	0	0	
0845	0	0	0	0	0	0	1	7	31	51	74	43	38	12	6	3	0	53.6	61.1	9	3.4	0	0	0	0	
0900	0	0	0	0	0	0	0	8	21	53	52	48	26	6	0	3	0	52.7	60.4	3	1.4	0	0	0	0	
0915	0	0	0	0	0	0	0	1	25	34	30	28	16	8	8	0	0	53.6	62.4	8	5.3	0	0	0	0	
0930	0	0	0	0	0	0	0	2	16	37	37	22	13	5	3	0	0	52.4	60.4	3	2.2	0	0	0	0	
0945	0	0	0	0	0	3	2	6	23	29	30	22	12	3	1	0	0	50.5	58.8	1	0.8	0	0	0	0	
1000	0	0	0	0	0	0	0	7	11	33	22	18	13	6	3	0	0	52.4	60.4	3	2.7	0	0	0	0	
1015	0	0	0	0	0	0	0	7	17	20	26	18	6	5	1	1	0	51.2	59.1	2	2	0	0	0	0	
1030	0	0	0	0	0	0	0	5	12	30	25	16	4	2	0	0	0	50.4	57	0	0	0	0	0	0	
1045	0	0	0	0	0	0	0	4	16	26	47	18	10	2	0	1	0	51.8	58.6	1	0.8	0	0	0	0	
1100	0	0	0	0	0	2	2	5	22	27	30	19	8	1	0	1	0	49.9	57.3	1	0.9	1	0.9	0	0	
1115	0	0	0	0	0	0	0	3	21	25	26	17	9	5	2	0	0	51.4	59.3	2	1.9	0	0	0	0	
1130	0	0	0	0	0	0	0	2	15	38	33	16	10	4	0	0	0	51.5	57.9	0	0	0	0	0	0	
1145	0	0	0	0	0	0	0	5	21	32	19	15	7	5	0	1	0	50.7	59.3	1	1	0	0	0	0	
1200	0	0	0	0	0	0	1	10	21	27	23	19	9	2	0	0	0	50.1	56.8	0	0	0	0	0	0	
1215	0	0	0	0	0	0	0	4	19	28	25	15	6	8	3	0	2	52.4	59.9	5	4.5	2	1.8	0	0	
1230	0	0	0	0	0	0	0	1	9	26	34	23	11	1	1	2	0	53.2	59.5	3	2.8	0	0	0	0	
1245	0	0	0	0	0	0	0	1	13	33	28	25	21	7	2	0	0	53.9	62	2	1.5	0	0	0	0	
1300	0	0	0	0	0	0	0	6	10	28	39	23	9	3	2	0	0	52.1	58.4	2	1.7	0	0	0	0	
1315	0	0	0	0	0	0	0	2	24	34	37	28	10	2	1	2	0	51.7	57.9	3	2.1	0	0	0	0	
1330	0	0	0	0	0	0	0	5	19	54	79	34	14	2	1	0	0	51.7	57.7	1	0.5	0	0	0	0	
1345	0	0	0	0	0	0	0	3	24	33	47	27	14	4	3	1	0	52.3	59.7	4	2.6	0	0	0	0	
1400	0	0	0	0	0	0	0	4	18	40	33	15	8	3	2	0	0	50.8	58.2	2	1.6	0	0	0	0	
1415	0	0	0	0	0	0	0	3	22	41	32	19	7	4	1	0	0	51	57.3	1	0.8	0	0	0	0	
1430	0	0	0	0	0	0	0	1	7	42	55	24	17	4	1	0	0	53	59.7	1	0.7	0	0	0	0	
1445	0	0	0	0	0	0	0	2	14	29	27	20	14	6	0	0	0	52.4	60.6	0	0	0	0	0	0	
1500	0	0	0	0	0	0	0	3	24	40	29	12	7	3	1	0	0	50.1	57.3	1	0.8	0	0	0	0	
1515	0	0	0	0	0	0	0	4	13	17	33	18	22	5	0	0	0	53.2	61.5	0	0	0	0	0	0	
1530	0	0	0	0	0	0	0	1	19	35	42	23	10	3	1	0	0	51.7	57.3	1	0.7	0	0	0	0	
1545	0	0	0	0	0	0	0	6	14	20	30	20	10	6	1	1	0	52.7	61.7	2	1.9	0	0	0	0	
1600	0	0	0	0	0	0	0	5	18	22	26	22	13	5	1	0	0	52.3	60.4	1	0.9	0	0	0	0	
1615	0	0	0	0	0	0	0	1	10	25	20	25	18	4	1	0	1	54.1	61.5	2	1.9	1	1	0	0	
1630	0	0	0	0	0	0	0	3	20	21	24	25	18	11	6	0	0	54.4	64.4	6	4.7	0	0	0	0	
1645	0	0	0	0	0	0	0	3	13	24	36	29	16	8	1	0	0	53.7	61.5	1	0.8	0	0	0	0	
1700	0	0	0	0	0	0	0	1	14	36	42	36	23	10	3	1	0	54.3	62	4	2.4	0	0	0	0	
1715	0	0	0	0	0	0	0	3	6	15	30	34	22	15	3	3	0	56.7	65.3	6	4.6	0	0	0	0	
1730	0	0	0	0	0	0	0	4	8	30	46	56	35	18	7	2	0	56.4	63.8	9	4.4	1	0.5	0	0	
1745	0	0	0	0	0	0	0	1	8	22	35	25	24	13	6	1	0	56.4	64.4	7	5.2	0	0	0	0	
1800	0	0	0	0	0	0	0	0	2	16	23	22	18	19	4	2	3	58.8	67.1	9	8.3	3	2.8	1	0.9	
1815	0	0	0	0	0	0	0	1	5	16	17	22	23	10	4	2	2	57.8	66	8	7.8	2	2	1	1	
1830	0	0	0	0	0	0	0	1	3	9	16	12	14	10	2	3	2	58.7	67.8	7	9.7	3	4.2	0	0	
1845	0	0	0	0	0	0	0	0	4	10	19	21	16	12	2	1	1	57.6	65.8	4	4.7	1	1.2	0	0	
1900	0	0	0	0	0	0	0	1	6	13	18	13	9	9	4	2	1	56.4	65.8	7	9.2	1	1.3	1	1.3	
1915	0	0	0	0	0	0	0	1	6	8	17	8	7	3	1	0	0	53.8	62.2	1	2	0	0	0	0	
1930	0	0	1	0	0	0	0	1	7	10	11	13	11	6	0	1	0	54.3	64	1	1.6	0	0	0	0	
1945	0	0	0	0	0	0	0	1	4	4	12	19	8	4	2	0	0	56	63.1	2	3.7	0	0	0	0	
2000	0	0	0	0	0	0	0	0	7	14	15	4	5	5	3	1	0	53.7	65.5	4	7.4	0	0	0	0	
2015	0	0	0	0	0	0	0	1	4	9	5	11	3	2	1	0	0	53.8	60.4	1	2.8	0	0	0	0	
2030	0	0	0	0	0	0	0	1	7	15	6	7	8	7	0	0	2	55	65.1	2	3.8	2	3.8	1	1.9	
2045	0	0	0	0	0	0	0	2	3	8	8	9	2	2	0	1	0	53.1	59.5	1	2.9	0	0	0	0	
2100	0	0	0	0	0	0	0	3	13	7	21	7	4	1	1	0	0	50.8	57.9	1	1.8	0	0	0	0	
2115	0	0	0	0	0	0	0	3	6	14	15	14	1	2	1	0	0	51.5	57.7	1	1.8	0	0	0	0	
2130	0	0	0	0	0	0	0	2	2	15	27	30	22	8	4	3	2	1	53	60.2	6	5.2	1	0.9	0	0
2145	0	0	0	0	0	0	0	0	3	14	26	17	10	4	0	3	0	0	50.6	57	3	3.9	0	0	0	0
2200	0	0	0	0	0	0	0	1	9	7	22	15	8	2	2	0	0	0	48.9	55.5	0	0	0	0	0	0
2215	0	0	0	0	0	0	1	1	6	14	12	13	6	4	1	0	0	0	48.5	55.5	0	0	0	0	0	0
2230	0	0	0	0	0	0	0	1	4	7	24	15	12	5	4	1	0	1	51.8	59.7	2	2.7	1	1.4	1	1.4
2245	0	0	0	0	0	0	0	0	2	18	3	5	9	4	5	3	1	0	52.4	65.5	4	8	0	0	0	0
2300	0	0	0	0	0	0	0	0	5	4	6	5	1	2	0	1	0	0	48.4	53.9	1	4.2	0	0	0	0
2315	0	0	0	0	0	0	0	2	2	7	5	6	1	0	0	0	0	0	46	54.1	0	0	0	0	0	0
2330	0	0	0	0	0	0	0	1	7	5	6	5	4	2	0	0	0	0	47.1	56.8	0	0	0	0	0	0
2345	0	0	0	0	0	0	1	1	8	11	4	2	3	0	0	0	0	0	48.2	55.3	0	0	0	0	0	0
07-19	**0**	**0**	**0**	**0**	**0**	**6**	**16**	**200**	**869**	**1632**	**1908**	**1366**	**845**	**352**	**111**	**37**	**15**	**53**	**61.1**	**163**	**2.2**	**18**	**0.2**	**2**	**0**	
06-22	**0**	**0**	**1**	**0**	**0**	**6**	**20**	**234**	**1026**	**1894**	**2216**	**1613**	**984**	**427**	**140**	**48**	**23**	**53.1**	**61.1**	**211**	**2.4**	**26**	**0.3**	**4**	**0**	
06-00	**0**	**0**	**1**	**0**	**0**	**7**	**27**	**270**	**1096**	**1983**	**2284**	**1656**	**1006**	**439**	**145**	**49**	**24**	**52.9**	**61.1**	**218**	**2.4**	**27**	**0.3**	**5**	**0.1**	
00-00	**0**	**0**	**1**	**0**	**0**	**8**	**38**	**324**	**1229**	**2223**	**2532**	**1811**	**1093**	**485**	**151**	**54**	**25**	**52.8**	**61.1**	**230**	**2.3**	**29**	**0.3**	**5**	**0.1**	

13 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 70	]PSL% 70	]SL1 79 ACPO	]SL1% 79 ACPO	]SL2 85 DFT	]SL2% 85 DFT	Fix1
0000	0	0	0	0	0	0	1	3	3	6	5	2	0	1	0	0	0	47.7	54.8	0	0	0	0	0	0	
0015	0	0	0	0	0	0	1	2	2	10	7	2	0	0	0	0	0	47.7	50.6	0	0	0	0	0	0	
0030	0	0	0	0	0	0	0	1	2	2	7	0	0	0	1	0	1	52.8	54.8	2	14.3	1	7.1	0	0	
0045	0	0	0	0	0	0	2	3	3	2	3	0	0	0	0	0	0	43.1	50.6	0	0	0	0	0	0	
0100	0	0	0	0	0	0	0	1	6	3	2	1	0	1	0	0	0	46.8	51	0	0	0	0	0	0	
0115	0	0	0	0	0	0	0	0	8	4	5	0	0	0	0	0	0	47.1	51.4	0	0	0	0	0	0	
0130	0	0	0	0	0	0	1	2	3	2	2	0	2	0	0	0	0	47.1	52.8	0	0	0	0	0	0	
0145	0	0	0	0	0	0	0	1	5	13	5	2	0	0	0	0	0	48	52.3	0	0	0	0	0	0	
0200	0	0	0	0	0	0	2	3	2	3	3	2	0	0	0	0	0	44.9	52.6	0	0	0	0	0	0	
0215	0	0	0	0	0	0	0	1	4	5	3	1	1	0	0	0	0	48.3	54.4	0	0	0	0	0	0	
0230	0	0	0	0	0	0	1	3	4	1	2	1	0	0	0	0	0	43	50.3	0	0	0	0	0	0	
0245	0	0	0	0	0	0	0	2	2	11	5	5	2	1	0	0	0	50.7	56.4	0	0	0	0	0	0	
0300	0	0	0	0	0	0	1	0	3	4	1	0	1	1	0	0	0	49.1	49.9	0	0	0	0	0	0	
0315	0	0	0	0	0	0	1	2	6	4	6	2	2	0	0	0	0	48.4	55.7	0	0	0	0	0	0	
0330	0	0	0	0	0	0	3	3	3	1	3	2	2	1	0	0	0	47.6	57.3	0	0	0	0	0	0	
0345	0	0	0	0	0	0	1	0	7	18	8	5	3	1	0	0	0	50.2	59.1	0	0	0	0	0	0	
0400	0	0	0	0	0	0	0	0	9	3	7	2	1	0	0	0	0	49.3	53.9	0	0	0	0	0	0	
0415	0	0	0	0	0	0	0	4	4	6	7	3	4	3	0	0	0	51.4	62	0	0	0	0	0	0	
0430	0	0	0	0	0	0	1	4	6	7	14	8	2	2	0	1	0	50.9	57.5	1	2.2	1	2.2	0	0	
0445	0	0	0	0	0	0	0	6	5	10	18	8	6	4	0	0	1	52.7	61.1	1	1.7	1	1.7	0	0	
0500	0	0	0	0	0	0	0	3	7	16	15	10	2	2	1	0	0	51.1	58.4	1	1.8	0	0	0	0	
0515	0	0	0	0	0	0	1	1	12	20	23	29	12	2	0	1	0	53	59.7	1	1	0	0	0	0	
0530	0	0	0	0	0	0	7	30	38	67	61	36	10	1	5	1	0	49	56.4	6	2.3	0	0	0	0	
0545	0	0	0	0	0	0	7	21	35	28	31	32	14	10	3	3	1	50.7	61.3	7	3.8	1	0.5	1	0.5	
0600	0	0	0	0	0	0	0	6	10	18	20	12	10	3	1	0	1	52	61.3	2	2.5	1	1.2	0	0	
0615	0	0	0	0	0	0	2	4	16	17	24	19	19	2	1	1	0	52.7	61.5	2	1.9	0	0	0	0	
0630	0	0	0	0	0	0	0	2	16	30	56	42	19	10	4	2	0	54.3	60.4	6	3.3	0	0	0	0	
0645	0	0	0	0	0	0	0	3	20	53	45	29	28	16	1	2	0	53.7	63.1	3	1.5	0	0	0	0	
0700	0	0	0	0	0	0	0	7	13	29	41	33	23	9	5	1	0	54.1	62.2	6	3.7	0	0	0	0	
0715	0	0	0	0	0	0	0	7	14	30	54	38	46	15	3	0	0	55.1	63.3	3	1.4	0	0	0	0	
0730	0	0	0	0	0	0	0	5	24	52	80	69	47	17	5	3	0	54.8	62.4	8	2.6	0	0	0	0	
0745	0	0	0	0	0	0	0	11	32	40	79	77	55	17	6	1	3	54.8	62.4	10	3.1	3	0.9	2	0.6	
0800	0	0	0	0	0	0	3	18	40	87	80	72	28	11	3	0	1	51.7	59.3	4	1.2	1	0.3	1	0.3	
0815	0	0	0	0	0	0	1	11	39	54	92	59	32	11	7	0	0	52.9	60.4	7	2.3	0	0	0	0	
0830	0	0	0	0	0	5	10	18	32	68	79	59	25	10	4	1	0	50.9	59.3	5	1.6	0	0	0	0	
0845	0	0	0	0	0	0	0	1	48	60	68	77	29	14	3	2	0	53.1	60.4	5	1.7	0	0	0	0	
0900	0	0	0	0	0	1	0	3	21	40	41	44	22	15	6	1	1	54.3	62.4	8	4.1	1	0.5	0	0	
0915	0	0	0	0	0	0	0	2	16	26	31	29	17	16	3	1	0	54.7	63.8	4	2.8	0	0	0	0	
0930	0	0	0	0	0	0	0	2	22	22	27	24	13	7	2	1	0	53.2	62.4	3	2.5	0	0	0	0	
0945	0	0	0	0	0	0	1	1	10	38	37	27	17	12	1	2	0	54.4	63.8	3	2.1	0	0	0	0	
1000	0	0	0	0	0	0	0	3	5	37	28	27	17	3	1	0	0	53.1	60.6	1	0.8	0	0	0	0	
1015	0	0	0	0	0	1	0	6	20	21	23	19	8	4	2	0	0	50.9	59.3	2	1.9	0	0	0	0	
1030	0	0	0	0	0	0	0	3	19	33	29	23	7	6	2	0	0	51.8	58.6	2	1.6	0	0	0	0	
1045	0	0	0	0	0	5	0	2	14	29	27	14	14	2	2	1	0	51.4	60.6	3	2.7	0	0	0	0	
1100	0	0	0	0	0	0	1	2	13	19	24	16	15	1	0	1	0	52.5	60.4	1	1.1	0	0	0	0	
1115	0	0	0	0	0	0	3	9	15	29	28	23	10	5	0	0	0	50.9	58.2	0	0	0	0	0	0	
1130	0	0	0	0	0	0	0	1	15	26	23	20	8	3	1	0	0	51.8	58.6	1	1	0	0	0	0	
1145	0	0	0	0	0	1	1	5	7	26	31	20	14	2	1	0	0	52.1	59.9	1	0.9	0	0	0	0	
1200	0	0	0	0	0	1	0	5	16	14	25	24	12	4	0	0	0	51.9	59.9	0	0	0	0	0	0	
1215	0	0	0	0	0	0	0	6	11	30	31	18	8	5	1	1	0	52	59.1	2	1.8	0	0	0	0	
1230	0	0	0	0	0	0	0	4	5	17	36	31	14	6	3	1	0	54.7	60.8	4	3.4	1	0.9	0	0	
1245	0	0	0	0	0	0	0	0	9	34	41	30	15	7	1	0	1	53.9	60.2	2	1.4	1	0.7	0	0	
1300	0	0	0	0	0	0	0	2	13	40	34	20	7	10	1	0	0	52.5	59.7	1	0.8	0	0	0	0	
1315	0	0	0	0	0	0	0	2	12	32	27	28	16	2	2	0	0	52.9	59.9	2	1.7	0	0	0	0	
1330	0	0	0	0	0	1	1	8	15	48	65	45	19	5	2	0	0	52.5	59.3	2	1	0	0	0	0	
1345	0	0	0	0	0	0	6	5	14	28	55	35	19	5	2	1	0	52.9	60.2	3	1.8	1	0.6	0	0	
1400	0	0	0	1	0	0	1	5	14	28	31	22	14	7	0	4	0	52.8	60.4	4	3.1	2	1.6	0	0	
1415	0	0	0	0	0	0	0	4	16	27	41	20	15	3	1	1	0	52.2	60.2	2	1.6	0	0	0	0	
1430	0	0	0	0	0	1	0	2	11	35	51	30	14	7	3	0	0	53.2	59.9	3	1.9	0	0	0	0	
1445	0	0	0	0	0	1	0	2	4	24	26	22	14	4	1	1	1	54	61.3	3	3	1	1	1	1	
1500	0	0	0	0	0	0	0	4	19	24	31	15	15	6	2	1	1	52.9	60.8	4	3.4	1	0.8	0	0	
1515	0	0	0	0	0	1	0	3	5	21	33	30	17	13	0	1	2	55.6	64	3	2.4	2	1.6	1	0.8	
1530	0	0	0	0	0	3	1	2	19	24	36	27	15	10	7	2	2	54	64.6	11	7.4	2	1.4	0	0	
1545	0	0	1	0	0	0	0	0	7	26	30	22	20	10	3	0	0	54.9	63.8	3	2.5	0	0	0	0	
1600	0	0	0	0	0	0	0	5	18	16	25	18	15	12	5	1	0	54.3	64.9	6	5.2	0	0	0	0	
1615	0	0	0	0	0	0	0	3	9	32	30	24	19	7	4	0	0	54.1	62.2	4	3.1	0	0	0	0	
1630	0	0	0	0	0	0	0	0	5	31	38	35	18	4	2	0	0	54.6	61.1	2	1.5	0	0	0	0	
1645	0	0	0	0	0	1	0	5	9	20	38	30	18	7	1	1	1	54.1	61.3	3	2.3	1	0.8	0	0	
1700	0	0	0	0	0	0	1	3	18	36	47	46	18	10	1	1	0	53.6	60.4	2	1.1	1	0.6	0	0	
1715	0	0	0	0	0	0	0	1	9	26	36	61	24	14	3	1	0	55.9	62.6	4	2.3	1	0.6	0	0	
1730	0	0	0	0	0	1	1	2	8	27	54	50	11	17	6	0	0	55.1	62.9	6	3.4	0	0	0	0	
1745	0	0	0	0	0	0	0	1	8	21	31	42	27	14	2	1	0	56.3	63.8	3	2	0	0	0	0	
1800	0	0	0	0	0	0	0	0	14	14	26	26	18	17	6	0	0	56.6	65.8	6	5	0	0	0	0	
1815	0	0	0	0	0	0	0	0	1	7	28	43	26	9	4	2	2	58.7	64.9	8	6.6	2	1.6	0	0	
1830	0	0	0	0	0	0	0	2	5	18	11	22	19	7	4	0	1	56.5	64.6	5	5.6	1	1.1	0	0	
1845	0	0	0	0	0	0	0	1	5	12	26	19	6	2	10	1	0	55.9	66.9	11	13.4	0	0	0	0	
1900	0	0	0	0	0	0	0	0	4	11	16	16	15	6	4	1	0	57.2	64.2	5	6.8	0	0	0	0	
1915	0	0	0	0	0	0	0	3	6	13	16	16	10	3	2	0	0	54.2	63.3	2	2.9	0	0	0	0	
1930	0	0	0	0	0	0	0	0	7	16	17	15	7	4	2	2	1	54.8	63.5	5	7	1	1.4	0	0	
1945	0	0	0	0	0	0	0	1	5	13	11	10	5	3	2	0	1	54.4	61.1	3	5.9	1	2	1	2	
2000	0	0	0	0	0	0	0	4	5	10	7	8	11	2	1	0	1	54.1	63.1	2	4.1	1	2	0	0	
2015	0	0	0	0	0	0	0	1	6	5	11	6	4	2	2	0	0	53.9	61.7	2	5.4	0	0	0	0	
2030	0	0	0	0	0	0	0	3	6	9	8	9	9	3	2	0	0	54.3	63.8	2	4.1	0	0	0	0	
2045	0	0	0	0	1	1	0	0	3	13	7	9	6	1	3	0	0	53.2	61.3	3	6.8	0	0	0	0	
2100	0	0	0	0	0	0	0	1	3	8	13	7	4	5	0	0	0	53.9	63.5	0	0	0	0	0	0	
2115	0	0	0	0	0	0	0	2	11	19	21	6	5	2	2	0	0	51.2	56.8	2	2.9	0	0	0	0	
2130	0	0	0	0	0	1	0	4	19	23	30	15	11	2	3	0	0	51.4	59.3	3	2.8	0	0	0	0	
2145	0	0	0	0	0	0	0	4	5	19	21	9	13	1	1	0	1	52.9	61.7	2	2.7	1	1.4	0	0	
2200	0	0	0	0	0	0	0	11	20	20	12	9	7	0	2	0	0	48.7	57.7	2	2.5	0	0	0	0	
2215	0	0	0	0	0	0	1	3	7	13	12	8	0	2	1	1	1	51.1	58.6	3	6.1	1	2	0	0	
2230	0	0	0	0	0	0	1	8	20	13	22	12	2	1	0	0	0	48.5	55.9	0	0	0	0	0	0	
2245	0	0	0	0	0	0	0	5	8	13	5	9	5	2	0	1	0	50.8	60.2	1	2.1	0	0	0	0	
2300	0	0	0	0	0	0	1	1	4	5	9	1	1	0	0	0	0	48.7	54.1	0	0	0	0	0	0	
2315	0	0	0	0	0	0	0	2	3	2	8	3	0	0	1	0	0	49.6	55.7	1	5.3	0	0	0	0	
2330	0	0	0	0	0	0	0	3	9	3	4	4	0	1	0	0	0	47.9	55.3	0	0	0	0	0	0	
2345	0	0	0	0	0	0	1	5	8	8	8	4	1	0	0	1	0	47.9	55	1	2.8	0	0	0	0	
07-19	**0**	**0**	**1**	**1**	**0**	**23**	**31**	**194**	**718**	**1478**	**1905**	**1605**	**900**	**404**	**134**	**36**	**16**	**53.6**	**61.5**	**186**	**2.5**	**22**	**0.3**	**5**	**0.1**	
06-22	**0**	**0**	**1**	**1**	**1**	**25**	**33**	**232**	**860**	**1755**	**2228**	**1833**	**1076**	**469**	**165**	**44**	**21**	**53.6**	**61.7**	**230**	**2.6**	**27**	**0.3**	**6**	**0.1**	
06-00	**0**	**0**	**1**	**1**	**1**	**25**	**37**	**270**	**939**	**1832**	**2308**	**1883**	**1092**	**475**	**169**	**47**	**22**	**53.4**	**61.5**	**238**	**2.6**	**28**	**0.3**	**6**	**0.1**	
00-00	**0**	**0**	**1**	**1**	**1**	**25**	**67**	**366**	**1118**	**2078**	**2551**	**2036**	**1156**	**505**	**179**	**53**	**25**	**53.1**	**61.3**	**257**	**2.5**	**32**	**0.3**	**7**	**0.1**	

14 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 70	]PSL% 70	]SL1 79 ACPO	]SL1% 79 ACPO	]SL2 85 DFT	]SL2% 85 DFT	Fix1
0000	0	0	0	0	0	1	0	5	1	9	3	4	1	0	1	0	0	47.9	55	1	4	0	0	0	0	
0015	0	0	0	0	0	0	1	1	7	8	0	1	1	0	0	0	0	45.7	48.3	0	0	0	0	0	0	
0030	0	0	0	0	0	1	1	4	3	6	4	2	0	0	0	0	0	44.6	51.4	0	0	0	0	0	0	
0045	0	0	0	0	0	0	2	0	7	3	1	1	0	0	0	0	0	44	47.4	0	0	0	0	0	0	
0100	0	0	0	0	0	1	1	11	3	3	3	0	0	0	0	0	0	41.5	49.4	0	0	0	0	0	0	
0115	0	0	0	0	0	0	0	2	6	2	1	0	0	0	0	0	0	43.5	45	0	0	0	0	0	0	
0130	0	0	0	0	0	1	1	3	3	1	2	2	0	0	0	0	0	42.7	51.7	0	0	0	0	0	0	
0145	0	0	0	0	0	0	1	1	9	11	4	0	0	0	0	0	0	45.8	48.8	0	0	0	0	0	0	
0200	0	0	0	0	0	0	1	3	0	4	2	1	0	0	0	0	0	46	51.7	0	0	0	0	0	0	
0215	0	0	0	0	0	0	2	0	5	5	2	0	0	0	0	0	0	44	47	0	0	0	0	0	0	
0230	0	0	0	0	0	0	0	5	8	7	1	0	0	0	0	0	0	42.8	45.9	0	0	0	0	0	0	
0245	0	0	0	0	0	0	0	1	13	8	5	1	0	1	0	0	0	46.5	53.9	0	0	0	0	0	0	
0300	0	0	0	0	0	0	0	4	5	6	1	1	0	0	0	0	0	44.6	47.9	0	0	0	0	0	0	
0315	0	0	0	0	0	1	0	3	4	2	2	0	0	0	0	0	0	42.2	46.5	0	0	0	0	0	0	
0330	0	0	0	0	0	0	2	3	9	13	4	3	0	0	0	0	0	45.7	50.8	0	0	0	0	0	0	
0345	0	0	0	0	0	0	2	6	13	15	7	3	1	1	0	0	0	46.5	52.3	0	0	0	0	0	0	
0400	0	0	0	0	0	0	1	4	13	6	4	3	0	1	0	0	0	46.5	53.9	0	0	0	0	0	0	
0415	0	0	0	0	0	0	2	0	10	5	3	0	2	0	0	0	0	46.3	53	0	0	0	0	0	0	
0430	0	0	0	0	0	0	0	4	12	18	8	1	1	2	0	0	0	47.9	52.1	0	0	0	0	0	0	
0445	0	0	0	0	0	0	1	8	20	12	12	3	8	3	1	0	0	48.8	62.6	1	1.5	0	0	0	0	
0500	0	0	0	0	0	0	0	5	13	19	12	9	2	1	0	0	0	49.3	57.3	0	0	0	0	0	0	
0515	0	0	0	0	0	0	0	4	14	27	16	8	7	1	0	0	0	49.8	56.8	0	0	0	0	0	0	
0530	0	0	0	0	0	0	15	29	51	54	41	25	8	2	0	0	0	46.8	54.8	0	0	0	0	0	0	
0545	0	0	0	0	0	0	2	17	35	45	32	23	13	4	0	1	1	49.5	57.7	2	1.2	1	0.6	0	0	
0600	0	0	0	0	0	0	0	3	14	16	22	13	8	1	1	0	0	51.2	58.2	1	1.3	0	0	0	0	
0615	0	0	0	1	0	0	1	3	14	32	33	14	5	1	1	1	0	50.4	56.4	2	1.9	0	0	0	0	
0630	0	0	0	0	0	0	0	5	23	47	52	46	12	9	1	1	0	52.6	59.1	2	1	1	0.5	0	0	
0645	0	0	0	0	0	0	0	4	19	35	50	42	29	9	7	0	0	54.6	62.2	7	3.6	0	0	0	0	
0700	0	0	0	0	0	0	0	1	12	29	28	33	20	9	4	3	1	55.2	63.8	8	5.7	2	1.4	1	0.7	
0715	0	0	0	0	0	0	3	7	23	44	68	41	28	9	1	1	2	53.2	60.8	4	1.8	2	0.9	1	0.4	
0730	0	0	0	0	0	0	0	5	24	56	76	67	32	12	1	1	0	53.4	60.6	2	0.7	0	0	0	0	
0745	0	0	0	0	0	0	3	18	41	66	81	61	30	8	5	2	1	52.2	59.7	8	2.5	1	0.3	0	0	
0800	0	0	0	0	0	0	1	15	51	81	82	62	34	9	3	1	0	51.7	59.5	4	1.2	0	0	0	0	
0815	0	0	0	0	0	0	6	11	50	76	90	53	32	9	0	0	0	51.1	58.6	0	0	0	0	0	0	
0830	0	0	0	0	0	0	0	9	33	59	84	67	26	9	6	0	0	52.7	59.7	6	2	0	0	0	0	
0845	0	0	0	0	0	0	0	4	27	52	67	59	37	13	1	1	0	53.6	61.1	2	0.8	0	0	0	0	
0900	0	0	0	3	0	0	0	1	16	32	58	33	41	10	7	2	1	54.8	62.9	10	4.9	1	0.5	0	0	
0915	0	0	0	0	0	0	1	5	15	41	43	47	14	6	4	0	1	53.3	59.1	5	2.8	1	0.6	1	0.6	
0930	0	0	0	0	0	0	0	8	28	29	38	24	12	3	2	0	0	51.2	58.8	2	1.4	0	0	0	0	
0945	0	0	0	0	0	0	0	7	20	36	37	17	10	6	1	0	0	50.8	57.5	1	0.7	0	0	0	0	
1000	0	0	0	1	0	0	1	6	17	33	24	14	9	1	2	1	0	50.3	58.6	3	2.8	0	0	0	0	
1015	0	0	0	0	0	0	0	1	10	31	34	16	15	6	1	1	0	53.4	61.7	2	1.7	0	0	0	0	
1030	0	0	0	0	0	0	0	3	18	36	22	12	10	1	3	0	0	50.8	58.4	3	2.9	0	0	0	0	
1045	0	0	0	0	0	0	2	7	11	32	24	12	8	4	1	0	0	50.6	58.8	1	1	0	0	0	0	
1100	0	0	0	0	0	0	1	3	10	19	21	17	9	2	1	0	2	53.2	60.6	3	3.5	2	2.4	1	1.2	
1115	0	0	0	0	0	0	0	4	18	19	35	21	8	2	2	1	0	52	58.4	3	2.7	0	0	0	0	
1130	0	0	0	1	0	0	0	6	23	36	27	18	9	1	4	1	0	50.5	57.9	5	4	0	0	0	0	
1145	0	0	0	0	0	0	0	7	11	32	21	18	10	5	1	1	0	51.8	59.9	2	1.9	0	0	0	0	
1200	0	0	0	0	0	0	0	2	13	27	29	19	12	2	0	1	0	52.1	58.4	1	1	0	0	0	0	
1215	0	0	0	0	0	0	0	3	16	26	26	15	8	7	1	1	0	52.1	61.3	2	1.9	0	0	0	0	
1230	0	0	0	0	0	0	1	2	11	23	30	16	9	5	2	0	2	53.4	60.8	4	4	2	2	1	1	
1245	0	0	0	0	0	0	0	4	18	25	40	28	10	7	0	1	2	53.1	59.7	3	2.2	2	1.5	0	0	
1300	0	0	0	0	0	0	1	1	12	34	32	12	12	12	3	0	0	53.3	63.3	3	2.5	0	0	0	0	
1315	0	0	0	0	0	0	0	2	15	24	38	25	15	8	3	0	0	53.6	61.5	3	2.3	0	0	0	0	
1330	0	0	0	0	0	0	0	2	17	40	63	34	22	7	1	0	0	53.3	60.4	1	0.5	0	0	0	0	
1345	0	0	0	0	0	0	4	6	28	35	48	31	10	6	2	0	0	51.4	59.3	2	1.2	0	0	0	0	
1400	0	0	0	0	0	1	5	12	19	34	39	25	14	4	2	1	0	50.7	58.6	3	1.9	1	0.6	0	0	
1415	0	0	0	1	0	0	0	5	11	36	39	26	13	6	2	1	0	52.8	60.2	3	2.1	1	0.7	0	0	
1430	0	0	0	0	0	0	1	3	12	42	36	36	20	9	3	0	0	53.1	60.6	3	1.9	0	0	0	0	
1445	0	0	0	0	0	0	0	3	12	24	34	23	18	5	1	1	0	53.6	61.1	2	1.7	0	0	0	0	
1500	0	0	0	0	0	0	1	4	13	20	39	24	19	10	4	0	2	54.7	63.5	6	4.4	2	1.5	1	0.7	
1515	0	0	0	0	0	0	0	3	5	21	28	30	11	9	3	1	1	55.3	61.5	5	4.5	1	0.9	1	0.9	
1530	0	0	0	0	0	0	1	10	9	34	38	36	18	7	9	1	0	54	62.9	10	6.1	0	0	0	0	
1545	0	0	0	1	0	0	0	4	10	29	45	18	11	5	2	1	0	52.6	59.7	3	2.4	0	0	0	0	
1600	0	0	0	0	0	0	0	1	13	20	35	28	21	5	2	1	1	54.8	62.9	4	3.1	1	0.8	0	0	
1615	0	0	0	0	0	0	0	2	9	16	27	21	7	8	3	2	0	54.9	63.3	5	5.3	1	1.1	0	0	
1630	0	0	0	0	0	0	0	3	6	29	24	30	10	7	4	0	0	54.1	60.4	4	3.5	0	0	0	0	
1645	0	0	0	0	0	0	0	1	19	34	37	22	12	10	8	0	2	54.2	63.8	10	6.9	2	1.4	1	0.7	
1700	0	0	0	0	0	0	0	2	15	34	46	33	24	16	3	2	1	55.1	64.2	6	3.4	1	0.6	0	0	
1715	0	0	0	0	0	0	0	0	7	35	37	39	37	16	3	1	1	56.4	64	5	2.8	1	0.6	0	0	
1730	0	0	0	0	0	1	0	0	9	27	46	29	25	27	13	0	2	57.5	67.6	15	8.4	2	1.1	0	0	
1745	0	0	0	0	0	1	0	2	6	23	39	37	25	15	5	4	0	56.7	64.9	9	5.7	0	0	0	0	
1800	0	0	0	0	0	0	0	2	6	21	25	20	28	12	8	2	0	57.2	65.5	10	8.1	0	0	0	0	
1815	0	0	0	0	0	0	0	0	10	16	26	27	16	11	6	0	1	56.5	65.1	7	6.2	1	0.9	0	0	
1830	0	0	0	0	0	2	0	0	3	22	27	17	8	12	5	0	0	55.3	65.1	5	5.2	0	0	0	0	
1845	0	0	0	0	0	1	0	1	12	12	22	20	14	7	1	1	0	54.2	62.4	2	2.2	0	0	0	0	
1900	0	0	0	0	0	0	0	2	8	17	20	15	4	6	4	0	0	53.8	61.5	4	5.3	0	0	0	0	
1915	0	0	0	0	0	2	0	1	4	17	19	17	2	7	2	0	1	54.1	63.3	3	4.2	1	1.4	1	1.4	
1930	0	0	0	0	0	0	0	0	10	12	27	9	6	2	2	0	1	53	60.2	3	4.3	1	1.4	0	0	
1945	0	0	0	0	0	0	0	2	9	11	13	19	5	3	2	2	0	54	60.4	4	6.1	0	0	0	0	
2000	0	0	0	0	0	0	0	1	7	5	7	13	0	4	2	2	0	55.1	66.4	4	9.8	0	0	0	0	
2015	0	0	0	0	0	0	0	1	4	12	21	11	6	2	3	0	0	53.8	62.2	3	5	0	0	0	0	
2030	0	0	0	0	0	0	0	4	8	9	13	6	5	1	1	0	0	50.7	58.8	1	2.1	0	0	0	0	
2045	0	0	0	0	0	0	0	1	6	9	11	9	1	1	1	0	0	51.6	57.5	1	2.6	0	0	0	0	
2100	0	0	0	0	0	0	1	4	7	10	13	7	3	1	4	0	2	52.9	63.3	6	11.5	2	3.8	0	0	
2115	0	0	0	0	0	0	0	4	9	16	19	10	4	3	0	1	0	51.5	59.1	1	1.5	0	0	0	0	
2130	0	0	0	0	0	0	2	9	10	12	24	18	4	4	1	3	1	52.4	59.7	5	5.7	1	1.1	0	0	
2145	0	0	0	0	0	2	0	1	14	9	17	25	7	0	3	3	0	53.2	60.4	6	7.4	0	0	0	0	
2200	0	0	0	0	0	0	2	4	11	11	18	3	8	2	0	0	0	49.9	60.4	0	0	0	0	0	0	
2215	0	0	0	0	0	0	2	3	9	11	19	10	1	2	0	0	0	49.8	57.3	0	0	0	0	0	0	
2230	0	0	0	0	0	0	1	5	12	32	17	16	10	5	0	0	0	51.1	59.7	0	0	0	0	0	0	
2245	0	0	0	0	0	0	0	5	7	3	11	6	7	3	0	0	0	52.4	61.1	0	0	0	0	0	0	
2300	0	0	0	0	0	0	2	2	4	6	6	1	2	1	0	0	0	48.5	54.1	0	0	0	0	0	0	
2315	0	0	0	0	0	0	0	0	8	5	11	1	0	0	1	1	0	50.3	54.4	2	7.4	1	3.7	0	0	
2330	0	0	0	0	0	0	0	5	10	7	3	5	1	2	0	0	0	48.1	56.8	0	0	0	0	0	0	
2345	0	0	0	0	0	0	0	3	9	6	7	6	2	1	0	0	0	49.2	56.1	0	0	0	0	0	0	
07-19	**0**	**0**	**0**	**7**	**0**	**6**	**32**	**208**	**794**	**1602**	**1955**	**1413**	**843**	**380**	**149**	**38**	**23**	**53.3**	**61.5**	**210**	**2.8**	**27**	**0.4**	**8**	**0.1**	
06-22	**0**	**0**	**0**	**8**	**0**	**10**	**36**	**253**	**960**	**1871**	**2316**	**1687**	**944**	**434**	**184**	**51**	**28**	**53.2**	**61.3**	**263**	**3**	**33**	**0.4**	**9**	**0.1**	
06-00	**0**	**0**	**0**	**8**	**0**	**10**	**43**	**280**	**1030**	**1952**	**2408**	**1735**	**975**	**450**	**185**	**52**	**28**	**53.1**	**61.3**	**265**	**2.9**	**34**	**0.4**	**9**	**0.1**	
00-00	**0**	**0**	**0**	**8**	**0**	**15**	**78**	**403**	**1294**	**2241**	**2578**	**1826**	**1019**	**466**	**187**	**53**	**29**	**52.5**	**60.8**	**269**	**2.6**	**35**	**0.3**	**9**	**0.1**	

15 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 70	]PSL% 70	]SL1 79 ACPO	]SL1% 79 ACPO	]SL2 85 DFT	]SL2% 85 DFT	Fix1
0000	0	0	0	0	0	0	1	1	3	1	2	3	1	2	0	0	0	52	64.6	0	0	0	0	0	0	
0015	0	0	0	0	0	0	0	1	7	7	4	0	0	0	0	0	0	45.7	50.6	0	0	0	0	0	0	
0030	0	0	0	0	0	0	0	6	7	4	4	0	0	0	0	0	0	44.2	51.4	0	0	0	0	0	0	
0045	0	0	0	0	0	0	0	1	5	5	5	2	0	1	0	1	0	49.9	55.5	1	5	0	0	0	0	
0100	0	0	0	0	0	0	2	2	5	2	0	1	0	0	0	0	0	41.7	45.2	0	0	0	0	0	0	
0115	0	0	0	0	0	0	1	4	1	3	2	1	0	1	0	0	0	45.7	53.2	0	0	0	0	0	0	
0130	0	0	0	0	0	0	0	3	7	8	6	3	2	0	0	0	0	48.1	55.5	0	0	0	0	0	0	
0145	0	0	0	0	0	0	1	0	4	7	9	3	1	1	0	0	0	50.6	59.3	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	1	2	6	2	0	1	0	0	0	0	47.6	49.9	0	0	0	0	0	0	
0215	0	0	0	0	0	0	0	0	3	10	6	2	0	0	0	0	0	49	54.1	0	0	0	0	0	0	
0230	0	0	0	0	0	0	0	1	4	7	2	1	0	0	0	0	0	46.6	51.4	0	0	0	0	0	0	
0245	0	0	0	0	0	0	0	1	3	8	10	4	0	0	0	0	0	50	54.8	0	0	0	0	0	0	
0300	0	0	0	0	0	0	0	4	5	4	1	2	0	0	0	0	0	44.6	50.3	0	0	0	0	0	0	
0315	0	0	0	0	0	0	0	2	2	4	6	0	1	1	0	0	0	49.3	53.7	0	0	0	0	0	0	
0330	0	0	0	0	0	0	0	1	4	14	6	0	3	1	0	1	0	50.5	60.4	1	3.3	0	0	0	0	
0345	0	0	0	0	0	0	1	1	12	2	1	0	1	0	0	0	0	43.7	45.4	0	0	0	0	0	0	
0400	0	0	0	0	0	0	0	8	5	3	1	0	1	0	0	0	0	43.1	47.6	0	0	0	0	0	0	
0415	0	0	0	0	0	3	1	2	5	4	9	1	2	0	0	0	0	46.5	51.2	0	0	0	0	0	0	
0430	0	0	0	0	1	0	3	10	13	6	4	1	0	0	0	0	0	42.3	48.3	0	0	0	0	0	0	
0445	0	0	0	0	0	0	1	3	3	9	13	2	0	1	0	0	0	49.1	51.9	0	0	0	0	0	0	
0500	0	0	0	0	0	3	2	5	6	15	5	1	0	0	0	0	0	43.2	49.7	0	0	0	0	0	0	
0515	0	2	0	0	0	0	0	1	21	28	13	1	0	0	0	0	0	45.2	50.8	0	0	0	0	0	0	
0530	0	0	0	0	0	0	2	7	31	52	19	9	0	0	0	0	0	47.1	51.7	0	0	0	0	0	0	
0545	0	0	0	0	1	4	12	12	16	16	16	7	3	1	0	0	0	44.6	53.2	0	0	0	0	0	0	
0600	0	0	0	0	1	0	0	2	11	14	17	1	1	2	0	0	0	48.1	52.6	0	0	0	0	0	0	
0615	0	0	0	1	0	0	1	8	21	17	9	3	4	1	0	0	0	46.3	52.1	0	0	0	0	0	0	
0630	0	0	0	0	0	0	0	7	11	27	26	14	4	1	2	0	0	50.7	56.8	2	2.2	0	0	0	0	
0645	0	0	0	0	1	0	0	10	15	32	24	11	8	2	0	0	0	49.2	56.8	0	0	0	0	0	0	
0700	0	0	0	0	0	0	0	5	19	39	37	24	7	4	1	0	1	51.3	57.3	2	1.5	1	0.7	1	0.7	
0715	0	0	0	0	0	0	0	6	30	45	39	39	20	7	2	2	0	52.2	60.4	4	2.1	0	0	0	0	
0730	0	0	0	4	1	0	0	6	28	60	82	49	17	8	4	0	0	51.5	58.2	4	1.5	0	0	0	0	
0745	0	0	0	0	0	0	4	18	40	58	70	64	20	4	1	0	0	51	58.2	1	0.4	0	0	0	0	
0800	0	0	0	0	0	0	0	16	34	82	86	35	13	3	0	0	0	50.1	55.7	0	0	0	0	0	0	
0815	0	0	0	0	0	0	0	11	45	73	88	44	28	5	2	1	1	51.3	58.4	4	1.3	1	0.3	0	0	
0830	0	0	0	0	0	0	1	7	32	67	75	42	25	4	1	0	1	51.6	58.6	2	0.8	1	0.4	0	0	
0845	0	0	1	0	1	0	4	8	35	61	89	33	28	12	0	0	0	51.5	59.7	0	0	0	0	0	0	
0900	0	0	2	0	0	0	1	5	19	40	41	22	15	4	2	0	0	51.3	59.5	2	1.3	0	0	0	0	
0915	0	0	0	0	0	0	1	3	14	33	32	24	8	5	0	0	0	51.7	58.8	0	0	0	0	0	0	
0930	0	0	0	0	0	0	0	14	33	41	17	12	7	1	0	0	0	47.6	55	0	0	0	0	0	0	
0945	0	0	0	0	1	1	5	15	31	19	25	12	2	3	0	0	0	46.9	54.6	0	0	0	0	0	0	
1000	0	0	0	0	0	1	2	11	24	38	19	8	2	0	0	0	0	46.9	53	0	0	0	0	0	0	
1015	0	0	0	0	0	0	0	16	17	32	30	10	1	2	0	0	0	48	53.7	0	0	0	0	0	0	
1030	0	0	0	0	0	0	2	5	21	51	23	11	2	3	0	0	0	48.6	54.1	0	0	0	0	0	0	
1045	0	0	0	0	0	0	1	10	24	33	18	9	0	1	0	0	0	47.1	52.8	0	0	0	0	0	0	
1100	0	0	0	0	0	0	1	5	18	34	16	11	3	0	1	0	0	48.8	55.3	1	1.1	0	0	0	0	
1115	0	0	0	0	1	0	0	6	13	23	23	9	2	0	0	0	0	48.6	54.6	0	0	0	0	0	0	
1130	0	0	0	0	0	0	1	3	12	28	27	16	2	2	1	0	0	50.6	56.8	1	1.1	0	0	0	0	
1145	0	0	0	0	0	0	3	7	18	31	14	5	2	0	0	0	0	46.6	52.8	0	0	0	0	0	0	
1200	0	0	0	0	0	0	1	2	10	25	16	9	5	0	0	0	1	50.1	57	1	1.4	1	1.4	0	0	
1215	0	0	0	0	0	0	0	14	18	27	42	8	2	1	0	0	0	48.4	53.5	0	0	0	0	0	0	
1230	0	0	0	0	0	0	1	7	16	27	23	9	3	0	0	0	0	48.6	54.6	0	0	0	0	0	0	
1245	0	0	0	3	0	0	0	8	13	24	26	12	3	2	0	1	0	49	55.9	1	1.1	1	1.1	0	0	
1300	0	2	0	0	0	0	0	4	17	22	19	3	6	2	1	0	0	48.7	55.3	1	1.3	0	0	0	0	
1315	0	0	0	0	0	1	1	4	17	39	30	6	7	4	0	0	0	49.5	55.3	0	0	0	0	0	0	
1330	0	0	0	0	0	0	4	4	30	33	34	17	9	1	0	0	0	49.2	56.1	0	0	0	0	0	0	
1345	0	0	0	0	0	1	0	0	9	39	29	8	3	1	0	0	0	50.1	54.8	0	0	0	0	0	0	
1400	0	0	0	0	0	0	1	9	25	27	28	6	5	2	0	0	1	48.6	54.1	1	1	1	1	0	0	
1415	0	0	0	0	0	1	0	9	29	27	20	10	4	1	0	0	0	48.1	54.8	0	0	0	0	0	0	
1430	0	0	0	0	0	0	1	3	14	39	31	9	3	1	0	0	0	49.4	53.7	0	0	0	0	0	0	
1445	0	0	0	1	0	0	0	2	13	22	29	16	10	6	3	0	0	52.7	62	3	2.9	0	0	0	0	
1500	0	0	0	0	0	1	0	3	20	27	31	13	6	2	0	0	0	49.9	57.9	0	0	0	0	0	0	
1515	0	0	0	0	0	0	1	4	9	24	24	17	10	3	2	1	0	52.6	60.6	3	3.2	0	0	0	0	
1530	0	0	0	0	0	0	1	4	12	27	39	16	6	1	0	0	0	50.9	56.4	0	0	0	0	0	0	
1545	0	0	0	0	0	0	2	4	15	35	36	18	9	3	2	0	0	51.4	58.8	2	1.6	0	0	0	0	
1600	0	0	0	0	0	0	1	8	25	41	30	12	7	2	0	0	0	49.1	55.5	0	0	0	0	0	0	
1615	0	0	0	0	0	0	1	2	11	34	52	20	5	2	0	1	0	51.6	56.4	1	0.8	0	0	0	0	
1630	0	0	0	0	0	0	0	2	11	31	27	24	11	6	0	1	0	53	60.2	1	0.9	0	0	0	0	
1645	0	0	0	0	0	0	0	4	19	41	38	21	6	3	0	0	0	50.6	57	0	0	0	0	0	0	
1700	0	0	0	0	0	0	0	6	25	44	42	31	7	4	0	0	0	50.8	56.4	0	0	0	0	0	0	
1715	0	0	0	0	0	0	1	6	20	24	51	27	14	4	0	0	0	52	59.1	0	0	0	0	0	0	
1730	0	0	0	0	0	0	4	8	8	36	53	34	12	6	4	0	1	52.7	59.3	5	3	1	0.6	0	0	
1745	0	0	0	0	0	0	0	1	12	33	37	36	21	8	9	1	0	55.1	63.3	10	6.3	0	0	0	0	
1800	0	0	0	0	0	0	0	6	10	24	30	35	21	6	2	2	3	55.2	62.2	7	5	3	2.2	2	1.4	
1815	0	0	0	0	0	0	1	1	8	25	29	18	10	3	3	0	0	53.1	59.9	3	3.1	0	0	0	0	
1830	0	0	0	0	1	1	0	1	11	23	36	19	14	2	2	1	1	53	61.7	4	3.6	1	0.9	1	0.9	
1845	0	0	0	0	0	0	1	1	7	12	18	17	13	1	1	0	0	53.4	60.6	1	1.4	0	0	0	0	
1900	0	0	0	0	0	0	1	4	10	23	29	11	6	0	0	0	0	50.4	55.7	0	0	0	0	0	0	
1915	0	0	0	0	0	0	1	3	7	16	13	9	3	2	1	0	0	50.6	57.3	1	1.8	0	0	0	0	
1930	0	0	0	0	0	0	0	3	11	18	25	13	6	1	0	0	1	51.6	56.8	1	1.3	1	1.3	0	0	
1945	0	0	0	0	0	1	0	2	7	11	14	1	6	2	0	4	0	52.7	62.2	4	8.3	0	0	0	0	
2000	0	0	0	0	0	1	0	1	8	12	13	4	5	0	0	0	0	49.9	56.4	0	0	0	0	0	0	
2015	0	0	0	0	0	0	0	6	6	15	6	3	4	0	0	0	0	48.4	57.9	0	0	0	0	0	0	
2030	0	0	0	0	0	0	4	4	13	11	7	8	2	2	1	1	0	48.8	57.3	2	3.8	0	0	0	0	
2045	0	0	0	0	0	0	1	9	8	15	11	5	0	1	0	0	0	47.2	54.4	0	0	0	0	0	0	
2100	0	0	0	0	0	0	1	5	8	13	7	6	3	0	0	0	0	48.3	56.1	0	0	0	0	0	0	
2115	0	0	0	0	0	3	4	2	8	11	8	2	3	0	0	0	0	45.7	53.5	0	0	0	0	0	0	
2130	0	2	0	1	0	0	1	3	9	15	8	3	0	0	0	0	0	44.4	51.4	0	0	0	0	0	0	
2145	0	0	0	0	0	0	3	9	8	11	4	2	1	1	0	0	0	44.5	51.9	0	0	0	0	0	0	
2200	0	0	0	0	0	0	1	7	15	5	8	2	1	0	0	0	0	45.1	52.3	0	0	0	0	0	0	
2215	0	0	0	0	0	0	1	5	7	11	9	0	2	0	0	0	0	46.7	52.3	0	0	0	0	0	0	
2230	0	0	0	0	0	0	0	5	11	14	9	3	0	0	0	0	0	46.7	52.6	0	0	0	0	0	0	
2245	0	0	0	0	0	0	2	4	11	4	2	3	1	0	0	0	0	45.2	50.1	0	0	0	0	0	0	
2300	0	0	0	0	0	0	2	6	9	11	7	3	2	0	0	0	0	46.1	53	0	0	0	0	0	0	
2315	0	0	0	0	0	0	2	5	9	10	2	1	0	0	0	0	0	43.6	48.5	0	0	0	0	0	0	
2330	0	0	0	0	0	0	2	1	4	4	2	6	2	0	0	0	0	49.7	56.6	0	0	0	0	0	0	
2345	0	0	0	0	0	0	4	9	4	1	3	0	0	0	0	0	0	39.6	45.4	0	0	0	0	0	0	
07-19	**0**	**2**	**3**	**8**	**5**	**7**	**48**	**304**	**941**	**1720**	**1751**	**950**	**436**	**145**	**44**	**11**	**10**	**50.7**	**57.9**	**65**	**1**	**11**	**0.2**	**4**	**0.1**	
06-22	**0**	**4**	**3**	**10**	**7**	**12**	**65**	**382**	**1102**	**1981**	**1972**	**1046**	**492**	**160**	**48**	**16**	**11**	**50.5**	**57.7**	**75**	**1**	**12**	**0.2**	**4**	**0.1**	
06-00	**0**	**4**	**3**	**10**	**7**	**12**	**79**	**424**	**1172**	**2041**	**2014**	**1064**	**500**	**160**	**48**	**16**	**11**	**50.3**	**57.7**	**75**	**1**	**12**	**0.2**	**4**	**0.1**	
00-00	**0**	**6**	**3**	**10**	**9**	**22**	**106**	**501**	**1346**	**2266**	**2160**	**1108**	**516**	**169**	**48**	**18**	**11**	**50**	**57.3**	**77**	**0.9**	**12**	**0.1**	**4**	**0**	

16 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 70	]PSL% 70	]SL1 79 ACPO	]SL1% 79 ACPO	]SL2 85 DFT	]SL2% 85 DFT	Fix1
0000	0	0	0	0	0	0	1	3	4	6	2	0	1	0	0	0	0	44.7	48.8	0	0	0	0	0	0	
0015	0	0	0	0	0	0	0	6	9	0	2	0	0	0	0	0	0	42.2	43.2	0	0	0	0	0	0	
0030	0	0	0	0	0	0	2	10	9	1	0	0	0	0	0	0	0	39.8	43.8	0	0	0	0	0	0	
0045	0	0	0	0	0	0	1	1	11	2	1	0	0	0	0	0	0	42	45.6	0	0	0	0	0	0	
0100	0	0	0	0	0	0	0	6	11	7	0	1	0	0	0	0	0	43.9	49.2	0	0	0	0	0	0	
0115	0	0	0	0	0	0	1	2	9	6	1	0	0	0	0	0	0	43.2	46.5	0	0	0	0	0	0	
0130	0	0	0	0	0	0	0	4	6	3	2	0	0	1	0	0	0	44.7	50.8	0	0	0	0	0	0	
0145	0	0	0	0	0	0	3	4	1	2	0	0	0	0	0	0	0	38.8	-	0	0	0	0	0	0	
0200	0	0	0	0	0	0	1	3	2	0	1	0	0	0	0	0	0	40.6	-	0	0	0	0	0	0	
0215	0	0	0	0	0	1	2	2	4	3	2	1	0	0	0	0	0	43	51	0	0	0	0	0	0	
0230	0	0	0	0	0	0	2	4	5	2	0	0	0	0	0	0	0	40.4	44.3	0	0	0	0	0	0	
0245	0	0	0	0	0	0	0	1	7	3	0	0	1	0	0	0	0	44	45.9	0	0	0	0	0	0	
0300	0	0	0	0	0	0	0	2	3	4	2	1	0	0	1	0	0	48	50.6	1	7.7	0	0	0	0	
0315	0	0	0	1	0	0	1	2	16	5	3	0	0	0	0	0	0	43.2	49.7	0	0	0	0	0	0	
0330	0	0	0	0	0	0	1	4	6	3	6	1	1	0	0	0	0	46.5	52.3	0	0	0	0	0	0	
0345	0	0	0	0	0	0	1	3	5	8	2	1	1	0	0	0	0	46.2	51	0	0	0	0	0	0	
0400	0	0	0	0	0	0	1	4	4	2	5	0	0	0	0	0	0	45.2	54.4	0	0	0	0	0	0	
0415	0	0	0	0	0	1	0	3	4	4	3	0	0	0	0	0	0	44.4	51.7	0	0	0	0	0	0	
0430	0	0	0	0	0	0	0	1	21	6	4	0	0	0	0	0	0	44.3	45	0	0	0	0	0	0	
0445	0	0	0	0	0	0	2	6	15	8	13	4	1	0	0	0	0	46.8	53.9	0	0	0	0	0	0	
0500	0	0	0	0	0	0	1	3	8	15	9	2	1	2	0	0	0	48	52.3	0	0	0	0	0	0	
0515	0	0	0	0	0	0	0	2	12	13	7	3	0	0	0	0	0	46.9	50.8	0	0	0	0	0	0	
0530	0	0	1	1	0	0	4	13	36	49	17	6	3	3	0	0	0	46.1	52.1	0	0	0	0	0	0	
0545	0	0	0	0	0	1	2	31	43	18	22	13	3	2	0	0	1	46.1	54.6	1	0.7	1	0.7	1	0.7	
0600	0	0	0	1	0	4	7	9	10	8	10	4	2	0	1	0	0	43.8	53.9	1	1.8	0	0	0	0	
0615	0	0	0	0	0	0	1	6	19	25	15	5	2	5	0	1	1	49.5	55.9	2	2.5	1	1.3	0	0	
0630	0	0	0	0	0	0	0	6	3	34	33	20	6	4	2	0	0	52.2	58.6	2	1.9	0	0	0	0	
0645	0	0	0	0	1	0	1	6	20	23	28	17	10	4	1	0	0	50.9	58.2	1	0.9	0	0	0	0	
0700	0	0	0	0	1	0	0	2	15	27	42	26	12	5	2	0	1	52.9	59.9	3	2.3	1	0.8	0	0	
0715	0	0	0	0	0	0	0	12	28	25	52	31	19	3	2	1	0	51.8	59.7	3	1.7	0	0	0	0	
0730	0	0	0	0	0	0	3	14	32	58	64	50	22	4	2	1	0	51.4	58.6	3	1.2	0	0	0	0	
0745	0	0	0	1	0	0	1	10	41	69	90	45	16	7	1	0	0	51	57.7	1	0.4	0	0	0	0	
0800	0	0	0	0	0	0	0	5	32	58	66	65	24	10	2	0	0	52.8	59.3	2	0.8	0	0	0	0	
0815	0	0	0	2	0	0	0	12	37	67	79	50	10	5	1	0	0	50.7	57	1	0.4	0	0	0	0	
0830	0	0	0	1	5	8	8	27	51	55	49	28	8	3	2	1	0	46.7	55.5	3	1.2	0	0	0	0	
0845	0	0	0	0	0	0	2	14	44	66	62	41	16	0	1	0	0	50	57.3	1	0.4	0	0	0	0	
0900	0	0	0	0	0	0	1	8	29	26	36	18	9	3	2	0	0	50.4	57.9	2	1.5	0	0	0	0	
0915	0	0	0	0	0	1	1	2	17	24	39	21	7	0	2	2	0	51.6	57.7	4	3.4	0	0	0	0	
0930	0	0	0	0	0	0	1	3	19	35	25	17	3	0	0	0	0	49.4	55.3	0	0	0	0	0	0	
0945	0	0	0	0	0	2	0	9	28	37	38	19	5	2	2	0	0	49.4	56.8	2	1.4	0	0	0	0	
1000	0	0	2	0	0	0	2	10	18	42	25	4	2	1	0	0	0	46.8	52.1	0	0	0	0	0	0	
1015	0	0	0	0	0	0	1	8	19	23	19	5	1	0	0	0	0	47.2	52.8	0	0	0	0	0	0	
1030	0	0	0	0	0	0	1	6	24	32	24	7	1	3	0	1	0	48.6	54.4	1	1	0	0	0	0	
1045	0	0	0	0	1	1	1	3	15	26	26	7	1	3	0	0	0	48.9	54.1	0	0	0	0	0	0	
1100	0	0	0	0	0	0	2	6	25	25	24	10	5	1	0	0	0	48.8	55	0	0	0	0	0	0	
1115	0	0	0	0	0	0	2	9	17	26	23	8	3	1	0	0	0	48.1	54.8	0	0	0	0	0	0	
1130	0	0	0	0	1	0	0	7	19	35	19	10	4	1	0	0	0	48.3	55.3	0	0	0	0	0	0	
1145	0	0	0	0	0	0	1	1	10	34	19	8	2	1	1	0	0	49.7	54.8	1	1.3	0	0	0	0	
1200	0	0	0	0	0	0	0	8	21	23	23	9	2	2	1	0	0	48.6	55	1	1.1	0	0	0	0	
1215	0	0	0	0	0	0	0	1	15	17	18	11	4	2	1	0	0	50.8	56.1	1	1.4	0	0	0	0	
1230	0	0	0	0	0	0	5	12	13	23	24	16	5	2	0	0	0	48.8	56.6	0	0	0	0	0	0	
1245	0	0	0	0	0	0	4	7	10	28	26	19	9	3	1	1	0	50.9	58.6	2	1.9	0	0	0	0	
1300	0	0	0	0	0	0	1	7	8	22	13	18	9	2	1	0	0	51.3	59.5	1	1.2	0	0	0	0	
1315	0	0	0	1	0	0	0	6	21	37	32	16	6	4	1	1	0	49.9	56.8	2	1.6	0	0	0	0	
1330	0	0	0	0	0	0	1	4	33	49	43	20	6	4	0	0	0	49.7	55.9	0	0	0	0	0	0	
1345	0	0	0	0	0	0	0	6	16	39	33	19	13	4	3	0	0	51.9	59.7	3	2.3	0	0	0	0	
1400	0	0	0	0	0	0	1	14	19	37	18	20	5	2	0	0	0	48.9	56.4	0	0	0	0	0	0	
1415	0	0	3	0	0	0	0	6	9	23	24	9	6	1	2	0	0	49.5	57.5	2	2.4	0	0	0	0	
1430	0	0	0	0	0	1	3	9	18	28	40	14	2	1	0	0	0	48.7	54.8	0	0	0	0	0	0	
1445	0	0	0	0	1	0	2	5	15	27	22	18	2	5	2	1	0	50.5	57.3	3	3	0	0	0	0	
1500	0	0	0	0	0	0	1	14	30	40	33	13	5	3	1	0	0	48.7	55	1	0.7	0	0	0	0	
1515	0	0	0	0	0	0	0	5	23	24	42	18	5	0	1	0	0	50.1	55.7	1	0.8	0	0	0	0	
1530	0	0	0	0	1	1	0	11	23	27	42	15	5	2	0	0	0	49.2	55	0	0	0	0	0	0	
1545	0	0	0	0	0	0	0	9	20	54	24	28	13	4	1	0	0	50.9	58.8	1	0.7	0	0	0	0	
1600	0	0	0	0	0	0	3	12	21	30	27	26	6	1	0	0	0	49.5	56.4	0	0	0	0	0	0	
1615	0	0	0	0	0	0	1	5	10	26	28	19	9	5	4	0	0	52.6	60.2	4	3.7	0	0	0	0	
1630	0	0	0	0	0	0	1	6	12	24	41	19	12	6	2	0	0	52.3	60.8	2	1.6	0	0	0	0	
1645	0	0	1	0	0	0	0	3	20	28	34	24	17	1	1	0	0	51.8	59.5	1	0.8	0	0	0	0	
1700	0	0	0	0	0	0	1	2	17	35	42	29	18	3	2	0	0	52.8	60.2	2	1.3	0	0	0	0	
1715	0	0	0	0	0	1	0	2	14	20	35	40	28	5	4	1	0	54.9	62	5	3.3	0	0	0	0	
1730	0	0	0	0	0	0	0	4	22	30	45	41	14	12	4	0	0	53.5	60.6	4	2.3	0	0	0	0	
1745	0	0	0	0	0	0	0	2	18	31	37	23	17	7	5	1	1	54	62.2	7	4.9	1	0.7	0	0	
1800	0	0	0	1	0	0	0	11	10	20	27	19	9	6	4	0	0	51.9	60.6	4	3.7	0	0	0	0	
1815	0	0	0	0	0	0	1	5	12	25	15	20	11	7	0	0	0	52	60.2	0	0	0	0	0	0	
1830	0	0	0	0	0	0	0	1	7	29	23	23	6	5	1	2	2	54.1	59.9	5	5.1	3	3	1	1	
1845	0	0	0	0	0	0	0	2	12	26	23	16	7	4	1	2	2	53.1	60.8	5	5.3	2	2.1	0	0	
1900	0	0	0	3	0	0	0	2	10	13	19	13	8	7	0	2	0	52.4	61.7	2	2.6	1	1.3	0	0	
1915	0	0	0	0	0	0	4	1	6	14	13	7	4	3	2	0	0	51.3	61.3	2	3.7	0	0	0	0	
1930	0	0	0	0	0	1	1	2	15	13	17	10	5	0	1	0	0	50.2	57.5	1	1.5	0	0	0	0	
1945	0	0	0	0	0	0	0	1	9	16	12	5	2	0	0	0	0	49.8	54.8	0	0	0	0	0	0	
2000	0	0	0	0	0	0	0	1	11	8	3	2	3	1	0	0	0	49	57.3	0	0	0	0	0	0	
2015	0	0	0	0	0	0	0	5	3	7	14	9	2	1	0	0	0	51	56.8	0	0	0	0	0	0	
2030	0	0	0	0	0	0	0	7	10	23	6	4	2	1	0	0	0	47.6	53	0	0	0	0	0	0	
2045	0	0	0	0	0	0	0	2	9	13	14	10	0	0	0	0	0	49.5	55.9	0	0	0	0	0	0	
2100	0	0	0	0	0	1	1	2	6	10	6	0	0	0	0	0	0	45.5	50.8	0	0	0	0	0	0	
2115	0	0	0	0	0	0	3	3	14	7	4	2	1	2	0	0	0	46.4	51.7	0	0	0	0	0	0	
2130	0	0	0	0	0	0	5	8	7	8	5	4	1	1	0	1	0	46.2	56.6	1	2.5	0	0	0	0	
2145	0	0	0	0	0	1	3	8	9	8	7	4	1	1	1	0	0	46.3	55.3	1	2.3	0	0	0	0	
2200	0	0	0	0	0	1	0	5	9	24	6	3	1	0	0	0	0	46.3	51.7	0	0	0	0	0	0	
2215	0	0	0	0	0	1	6	6	12	14	3	3	0	0	0	0	0	43.4	49.7	0	0	0	0	0	0	
2230	0	0	0	0	0	0	2	5	13	10	6	2	1	1	1	0	0	46.5	51.4	1	2.4	0	0	0	0	
2245	0	0	0	0	0	0	1	3	12	17	11	4	1	0	1	0	0	48	52.1	1	2	0	0	0	0	
2300	0	0	0	0	0	0	2	3	6	2	7	1	0	0	0	0	0	45.2	51.4	0	0	0	0	0	0	
2315	0	0	0	0	0	0	0	2	4	9	2	4	0	0	0	0	0	47.5	55.3	0	0	0	0	0	0	
2330	0	0	0	0	0	0	0	10	8	7	5	0	0	0	0	0	0	43.1	50.3	0	0	0	0	0	0	
2345	0	0	0	0	0	0	0	6	10	10	1	1	0	1	0	0	0	45.4	49	0	0	0	0	0	0	
07-19	**0**	**0**	**6**	**6**	**10**	**15**	**52**	**347**	**989**	**1612**	**1655**	**1032**	**421**	**156**	**63**	**15**	**6**	**50.7**	**57.9**	**84**	**1.3**	**7**	**0.1**	**1**	**0**	
06-22	**0**	**0**	**6**	**10**	**11**	**22**	**78**	**416**	**1150**	**1842**	**1861**	**1148**	**470**	**186**	**71**	**19**	**7**	**50.5**	**57.9**	**97**	**1.3**	**9**	**0.1**	**1**	**0**	
06-00	**0**	**0**	**6**	**10**	**11**	**24**	**89**	**456**	**1224**	**1935**	**1902**	**1166**	**473**	**188**	**73**	**19**	**7**	**50.3**	**57.7**	**99**	**1.3**	**9**	**0.1**	**1**	**0**	
00-00	**0**	**0**	**7**	**12**	**11**	**27**	**115**	**576**	**1475**	**2105**	**2006**	**1199**	**485**	**196**	**74**	**19**	**8**	**49.9**	**57.3**	**101**	**1.2**	**10**	**0.1**	**2**	**0**	

17 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 70	]PSL% 70	]SL1 79 ACPO	]SL1% 79 ACPO	]SL2 85 DFT	]SL2% 85 DFT	Fix1
0000	0	0	0	0	0	0	1	2	5	8	1	0	0	1	0	0	0	45.7	47.9	0	0	0	0	0	0	
0015	0	0	0	0	0	0	3	5	3	2	1	0	0	0	0	0	0	40.8	46.3	0	0	0	0	0	0	
0030	0	0	0	0	0	1	3	2	5	5	9	1	1	0	0	0	0	46	52.3	0	0	0	0	0	0	
0045	0	0	0	0	0	0	1	2	2	4	2	0	0	0	0	0	0	44.8	49	0	0	0	0	0	0	
0100	0	0	0	0	0	1	0	3	5	6	7	1	0	0	0	0	0	45.7	51.9	0	0	0	0	0	0	
0115	0	0	0	0	0	0	0	3	5	1	1	1	0	0	0	0	0	44.3	45.4	0	0	0	0	0	0	
0130	0	0	0	0	0	0	1	3	8	2	0	0	0	0	0	0	0	41.2	44.1	0	0	0	0	0	0	
0145	0	0	0	0	0	0	0	1	7	1	0	0	0	0	0	0	0	42.8	-	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	0	7	4	2	0	0	0	0	0	0	45.3	49.2	0	0	0	0	0	0	
0215	0	0	0	0	0	1	0	2	7	3	3	1	0	0	0	0	0	43.8	49.9	0	0	0	0	0	0	
0230	0	0	0	0	0	0	1	2	4	2	0	0	0	0	0	0	0	41	-	0	0	0	0	0	0	
0245	0	0	0	0	0	0	1	4	1	1	1	0	0	0	0	0	0	40.6	-	0	0	0	0	0	0	
0300	0	0	0	0	0	0	0	10	5	2	0	0	0	0	0	0	0	40	41.6	0	0	0	0	0	0	
0315	0	0	0	0	0	0	0	1	9	6	1	0	0	0	0	0	0	44.8	47.9	0	0	0	0	0	0	
0330	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	43.5	-	0	0	0	0	0	0	
0345	0	0	0	0	0	1	1	3	1	0	1	0	0	0	0	0	0	38.2	-	0	0	0	0	0	0	
0400	0	0	0	0	0	0	0	0	2	6	1	1	0	0	0	0	0	47.9	-	0	0	0	0	0	0	
0415	0	0	0	0	0	0	0	1	2	7	0	0	0	0	0	0	0	44.8	-	0	0	0	0	0	0	
0430	0	2	0	0	0	0	0	4	4	1	2	0	0	0	0	0	0	37.4	46.5	0	0	0	0	0	0	
0445	0	0	0	0	2	0	0	4	10	6	3	3	0	0	0	0	0	44.5	51.7	0	0	0	0	0	0	
0500	0	0	0	0	0	0	0	0	4	1	0	1	1	0	0	0	0	47.5	-	0	0	0	0	0	0	
0515	0	0	0	0	0	0	0	2	5	7	3	0	1	0	0	0	0	46.3	49.9	0	0	0	0	0	0	
0530	0	0	0	0	0	2	0	3	1	8	12	2	3	0	0	0	0	49	53.9	0	0	0	0	0	0	
0545	0	0	0	0	0	0	0	3	2	6	6	2	1	0	1	0	0	49.7	56.8	1	4.8	0	0	0	0	
0600	0	0	0	0	0	5	1	2	9	1	4	1	1	0	0	0	0	41.8	50.3	0	0	0	0	0	0	
0615	0	0	0	0	0	0	1	4	3	5	3	4	1	0	0	0	0	47.1	57.3	0	0	0	0	0	0	
0630	0	0	0	0	0	0	0	1	5	11	3	0	0	0	0	0	0	46.4	49.4	0	0	0	0	0	0	
0645	0	0	0	0	0	0	0	0	8	8	7	4	1	1	0	0	0	49.5	56.6	0	0	0	0	0	0	
0700	0	0	0	0	0	0	0	1	3	6	5	1	4	0	0	0	0	50.7	60.8	0	0	0	0	0	0	
0715	0	0	0	0	0	0	0	0	2	10	8	3	0	0	0	0	0	50.2	54.1	0	0	0	0	0	0	
0730	0	0	0	0	0	0	0	2	6	12	21	6	2	1	0	0	0	51	56.8	0	0	0	0	0	0	
0745	0	0	0	0	0	0	1	1	4	15	24	3	4	3	0	0	1	52.2	59.3	1	1.8	1	1.8	0	0	
0800	0	0	0	0	0	0	1	2	10	23	14	7	2	1	0	0	0	49	55	0	0	0	0	0	0	
0815	0	0	0	0	0	1	0	2	18	12	13	8	4	0	1	0	0	49.4	56.8	1	1.7	0	0	0	0	
0830	0	0	0	0	0	0	0	2	13	13	11	10	2	0	0	0	0	49.3	57	0	0	0	0	0	0	
0845	0	0	0	0	0	0	0	2	9	16	19	7	4	2	0	1	0	51.3	58.2	1	1.7	0	0	0	0	
0900	0	0	0	0	0	0	1	6	11	23	11	13	6	1	0	0	0	49.8	57.7	0	0	0	0	0	0	
0915	0	0	0	0	0	0	0	1	13	21	17	6	0	0	0	0	0	48.7	52.3	0	0	0	0	0	0	
0930	0	0	0	0	0	0	0	1	12	24	25	6	4	0	0	0	0	50.1	54.1	0	0	0	0	0	0	
0945	0	0	0	0	0	0	0	2	11	24	26	15	10	0	1	0	0	51.5	58.6	1	1.1	0	0	0	0	
1000	0	0	0	1	1	0	0	5	9	19	23	9	6	1	1	0	0	49.9	55.9	1	1.3	0	0	0	0	
1015	0	0	0	0	0	0	1	3	13	24	20	13	4	0	1	0	0	50.1	57.3	1	1.3	0	0	0	0	
1030	0	0	0	0	0	1	0	3	9	17	29	17	1	2	0	1	0	51.5	56.4	1	1.3	0	0	0	0	
1045	0	0	0	0	0	0	1	8	11	19	15	11	3	1	0	0	0	48.6	55.9	0	0	0	0	0	0	
1100	0	0	0	0	0	0	0	3	16	28	16	18	2	1	1	1	0	50.6	55.9	2	2.3	0	0	0	0	
1115	0	0	0	0	0	0	0	4	10	36	23	14	6	0	0	1	0	50.6	57	1	1.1	0	0	0	0	
1130	0	0	0	0	0	1	0	7	8	35	27	19	6	2	0	0	1	50.8	57.5	1	0.9	1	0.9	1	0.9	
1145	0	0	0	0	0	0	0	1	11	25	15	18	9	1	0	0	1	52.1	59.5	1	1.2	1	1.2	1	1.2	
1200	0	0	0	0	0	0	0	6	15	30	22	8	6	2	0	0	0	49.4	55.7	0	0	0	0	0	0	
1215	0	0	0	0	0	0	0	5	14	34	21	15	7	3	0	1	0	51	58.6	1	1	0	0	0	0	
1230	0	0	0	0	0	0	2	5	12	23	13	8	4	1	0	0	0	48.9	56.1	0	0	0	0	0	0	
1245	0	0	0	0	0	0	1	3	10	28	20	9	1	2	1	1	0	50.2	56.1	2	2.6	0	0	0	0	
1300	0	0	0	0	0	0	1	5	11	19	32	11	3	0	1	0	0	50	55.9	1	1.2	0	0	0	0	
1315	0	0	0	0	0	0	0	9	14	19	9	2	5	1	1	0	0	47.6	53.2	1	1.7	0	0	0	0	
1330	0	0	0	0	0	0	0	6	9	18	25	17	7	2	0	1	0	51.9	58.6	1	1.2	0	0	0	0	
1345	0	0	0	0	0	0	1	7	12	14	19	12	8	2	1	0	0	51.1	59.3	1	1.3	0	0	0	0	
1400	0	0	0	0	0	0	0	3	9	23	14	15	2	3	1	0	0	51.1	57.9	1	1.4	0	0	0	0	
1415	0	0	0	0	0	0	0	5	13	23	19	9	2	0	0	0	0	48.6	54.4	0	0	0	0	0	0	
1430	0	0	0	0	0	0	0	4	10	23	11	13	6	0	0	0	0	50.2	56.1	0	0	0	0	0	0	
1445	0	0	0	0	0	0	0	3	9	13	19	5	5	2	0	0	0	50.9	58.8	0	0	0	0	0	0	
1500	0	0	3	0	0	2	1	0	12	22	9	7	3	0	0	0	0	46.4	55	0	0	0	0	0	0	
1515	0	0	0	0	0	0	1	2	6	18	20	11	6	1	0	0	0	51.2	57.9	0	0	0	0	0	0	
1530	0	0	0	0	0	0	1	3	11	11	14	6	4	2	2	0	0	51.1	59.5	2	3.7	0	0	0	0	
1545	0	0	0	0	1	0	0	5	14	20	22	10	2	0	0	0	0	49	55	0	0	0	0	0	0	
1600	0	0	0	0	0	0	0	3	8	16	13	14	6	2	1	0	0	52.3	59.5	1	1.6	0	0	0	0	
1615	0	0	0	0	0	0	0	2	10	16	14	13	3	0	1	0	0	50.7	57.9	1	1.7	0	0	0	0	
1630	0	0	0	0	0	0	1	1	16	11	17	5	5	2	2	0	0	50.8	57.3	2	3.3	0	0	0	0	
1645	0	0	0	0	0	0	1	1	5	16	11	4	6	1	0	0	0	50.7	58.4	0	0	0	0	0	0	
1700	0	0	0	0	0	1	0	2	6	18	15	10	4	0	1	0	0	50.5	57.3	1	1.8	0	0	0	0	
1715	0	0	0	0	0	0	0	2	10	24	19	7	1	2	0	0	1	50.3	55.3	1	1.5	1	1.5	0	0	
1730	0	0	0	0	0	1	0	2	8	13	12	18	5	1	0	0	0	51.6	57.3	0	0	0	0	0	0	
1745	0	0	0	0	0	0	0	2	9	11	16	13	3	0	0	0	0	50.8	57.3	0	0	0	0	0	0	
1800	0	0	0	0	0	0	0	2	4	13	13	7	3	1	1	0	0	51.9	57.3	1	2.3	0	0	0	0	
1815	0	0	0	0	0	0	0	0	7	20	15	8	1	0	0	0	0	50.1	55	0	0	0	0	0	0	
1830	0	0	0	0	0	0	0	1	5	18	12	12	2	0	1	0	0	51.2	57	1	2	0	0	0	0	
1845	0	0	0	0	0	0	0	0	5	11	8	9	3	2	0	0	0	52.8	59.9	0	0	0	0	0	0	
1900	0	0	0	0	0	1	2	1	7	9	20	12	3	0	0	0	0	50.5	57	0	0	0	0	0	0	
1915	0	0	0	0	0	0	0	2	3	9	11	3	1	0	0	0	0	50.1	54.8	0	0	0	0	0	0	
1930	0	0	0	0	0	0	0	4	8	10	5	5	0	1	0	1	0	48.6	57.5	1	2.9	0	0	0	0	
1945	0	0	0	0	0	1	0	3	9	6	0	3	2	0	0	0	0	46.1	55	0	0	0	0	0	0	
2000	0	0	0	0	0	0	0	0	9	11	10	3	4	2	0	0	0	51.1	57.9	0	0	0	0	0	0	
2015	0	0	0	0	1	0	0	2	6	7	11	5	1	0	0	0	0	49	55	0	0	0	0	0	0	
2030	0	0	0	0	0	0	0	2	6	7	8	6	2	1	0	0	0	50.5	56.1	0	0	0	0	0	0	
2045	0	0	0	1	0	0	1	2	6	11	3	8	5	1	0	0	1	50.7	60.8	1	2.6	1	2.6	0	0	
2100	0	0	0	0	0	0	0	4	7	9	8	3	1	0	0	0	0	48.2	54.1	0	0	0	0	0	0	
2115	0	0	0	0	0	0	1	3	8	7	7	2	0	0	0	0	0	46.6	53	0	0	0	0	0	0	
2130	0	0	0	0	0	0	0	4	4	10	6	3	1	0	0	0	0	47.8	54.6	0	0	0	0	0	0	
2145	0	0	0	0	0	0	0	2	3	12	5	2	0	0	0	0	0	47.4	50.6	0	0	0	0	0	0	
2200	0	0	0	0	1	0	2	2	13	6	6	1	0	0	0	0	0	44.2	50.8	0	0	0	0	0	0	
2215	0	0	0	0	0	0	1	2	3	6	9	2	0	0	0	0	0	48	54.4	0	0	0	0	0	0	
2230	0	0	0	0	0	0	1	6	8	7	5	4	0	0	0	0	0	46.1	53.7	0	0	0	0	0	0	
2245	0	0	0	0	0	0	1	1	2	7	10	2	0	1	0	0	0	49.6	52.6	0	0	0	0	0	0	
2300	0	0	0	0	0	0	0	7	6	5	0	1	0	0	0	0	0	42.9	46.8	0	0	0	0	0	0	
2315	0	0	0	0	0	0	1	6	2	7	2	0	0	0	0	0	0	43.9	49	0	0	0	0	0	0	
2330	0	0	0	0	0	0	1	0	7	2	0	2	1	0	0	0	0	46.6	57.3	0	0	0	0	0	0	
2345	0	0	0	0	0	0	2	4	4	3	0	0	0	0	0	0	0	41.2	47	0	0	0	0	0	0	
07-19	**0**	**0**	**3**	**1**	**2**	**7**	**15**	**145**	**473**	**927**	**816**	**482**	**192**	**48**	**19**	**7**	**4**	**50.4**	**57.3**	**30**	**1**	**4**	**0.1**	**2**	**0.1**	
06-22	**0**	**0**	**3**	**2**	**3**	**14**	**21**	**181**	**574**	**1060**	**927**	**546**	**215**	**54**	**19**	**8**	**5**	**50.2**	**57.3**	**32**	**0.9**	**5**	**0.1**	**2**	**0.1**	
06-00	**0**	**0**	**3**	**2**	**4**	**14**	**30**	**209**	**619**	**1103**	**959**	**558**	**216**	**55**	**19**	**8**	**5**	**50**	**57**	**32**	**0.8**	**5**	**0.1**	**2**	**0.1**	
00-00	**0**	**2**	**3**	**2**	**6**	**20**	**42**	**269**	**726**	**1192**	**1015**	**571**	**223**	**56**	**20**	**8**	**5**	**49.5**	**56.6**	**33**	**0.8**	**5**	**0.1**	**2**	**0**	

18 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 70	]PSL% 70	]SL1 79 ACPO	]SL1% 79 ACPO	]SL2 85 DFT	]SL2% 85 DFT	Fix1
0000	0	0	0	0	0	0	0	1	5	1	0	0	0	0	0	0	0	42	-	0	0	0	0	0	0	
0015	0	0	0	0	0	0	0	2	9	5	0	2	1	1	0	0	0	47	56.8	0	0	0	0	0	0	
0030	0	0	0	0	0	0	0	5	3	1	0	0	0	0	0	0	0	40.4	-	0	0	0	0	0	0	
0045	0	0	0	0	0	0	2	3	2	0	3	0	0	0	0	0	0	41.9	-	0	0	0	0	0	0	
0100	0	0	0	0	0	0	1	1	7	1	1	0	0	0	0	0	0	42.5	44.5	0	0	0	0	0	0	
0115	0	0	0	0	0	0	1	2	0	1	0	1	0	0	0	0	0	42.3	-	0	0	0	0	0	0	
0130	0	0	0	0	0	0	1	1	2	1	0	0	0	0	0	0	0	39	-	0	0	0	0	0	0	
0145	0	0	0	0	0	0	0	1	4	0	1	0	0	0	0	0	0	44.2	-	0	0	0	0	0	0	
0200	0	0	0	0	0	1	0	0	5	2	0	1	0	0	0	0	0	43.1	-	0	0	0	0	0	0	
0215	0	0	0	0	0	0	0	2	4	5	2	0	0	0	0	0	0	44.1	48.3	0	0	0	0	0	0	
0230	0	0	0	0	0	0	1	1	0	1	1	0	0	0	0	0	0	42.8	-	0	0	0	0	0	0	
0245	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	40.8	-	0	0	0	0	0	0	
0300	0	0	0	0	0	0	1	2	3	1	0	0	0	0	0	0	0	39.9	-	0	0	0	0	0	0	
0315	0	0	0	0	0	0	2	1	4	1	1	0	0	0	0	0	0	39.9	-	0	0	0	0	0	0	
0330	0	0	0	0	0	0	2	1	3	0	1	0	0	0	0	0	0	39.8	-	0	0	0	0	0	0	
0345	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	44.7	-	0	0	0	0	0	0	
0400	0	0	0	0	0	0	0	2	5	6	0	0	0	0	0	0	0	43.2	46.1	0	0	0	0	0	0	
0415	0	0	0	0	0	0	1	2	0	0	1	0	0	0	0	0	0	40.4	-	0	0	0	0	0	0	
0430	0	0	0	0	0	1	2	2	3	3	0	2	0	0	0	0	0	43	47.4	0	0	0	0	0	0	
0445	0	0	0	0	0	0	0	3	1	1	2	0	0	0	0	0	0	43.1	-	0	0	0	0	0	0	
0500	0	0	0	0	0	0	0	0	9	5	1	0	0	0	0	0	0	45.3	45.9	0	0	0	0	0	0	
0515	0	0	0	0	0	0	0	0	3	3	3	0	0	0	0	0	0	47.5	-	0	0	0	0	0	0	
0530	0	0	0	0	0	0	0	2	5	5	4	0	2	0	0	0	0	47.9	51.7	0	0	0	0	0	0	
0545	0	0	0	0	0	0	0	1	1	2	7	4	1	0	0	0	0	52	58.8	0	0	0	0	0	0	
0600	0	0	0	0	0	0	0	1	4	4	7	0	1	0	0	0	0	48.3	51.2	0	0	0	0	0	0	
0615	0	0	0	0	0	0	0	1	5	3	6	1	2	0	0	0	0	49.2	53.5	0	0	0	0	0	0	
0630	0	0	0	0	0	0	1	0	0	7	5	13	2	1	0	0	0	53.8	59.1	0	0	0	0	0	0	
0645	0	0	0	0	0	0	0	2	3	13	4	3	3	1	0	0	0	49.8	59.7	0	0	0	0	0	0	
0700	0	0	0	0	0	0	0	1	3	5	6	2	1	1	0	0	0	50.6	55	0	0	0	0	0	0	
0715	0	0	0	0	0	0	1	0	3	4	3	4	1	0	0	0	0	50.4	58.6	0	0	0	0	0	0	
0730	0	0	0	0	0	0	0	1	2	7	2	3	3	0	0	0	0	51	59.7	0	0	0	0	0	0	
0745	0	0	0	0	0	0	0	2	4	9	6	5	5	0	0	0	0	51.2	59.3	0	0	0	0	0	0	
0800	0	0	0	0	0	0	0	1	3	8	3	3	1	0	0	0	0	49.2	56.4	0	0	0	0	0	0	
0815	0	0	0	0	0	0	0	2	5	6	3	6	3	1	0	0	0	51.2	59.7	0	0	0	0	0	0	
0830	0	0	0	0	0	0	1	0	2	12	9	7	1	1	0	0	0	51.4	58.4	0	0	0	0	0	0	
0845	0	0	0	0	0	0	0	4	6	17	6	3	0	0	1	0	0	48.1	53.7	1	2.7	0	0	0	0	
0900	0	0	0	0	2	0	0	3	8	9	6	3	1	0	0	0	0	46.1	54.4	0	0	0	0	0	0	
0915	0	0	0	0	0	0	0	1	8	15	9	6	3	0	0	0	1	50.8	57.3	1	2.3	1	2.3	1	2.3	
0930	0	0	0	0	0	0	0	2	7	10	20	9	2	0	0	0	0	50.9	57	0	0	0	0	0	0	
0945	0	0	0	1	0	0	1	0	6	15	22	6	2	3	0	0	0	51	55.7	0	0	0	0	0	0	
1000	0	0	0	0	0	0	0	3	1	12	13	7	2	2	0	0	0	51.5	56.4	0	0	0	0	0	0	
1015	0	0	0	0	0	0	1	2	9	11	23	7	1	2	0	0	0	50.2	56.4	0	0	0	0	0	0	
1030	0	0	0	0	0	0	0	0	8	20	19	10	5	0	0	0	0	51.4	58.8	0	0	0	0	0	0	
1045	0	0	0	0	0	0	0	1	7	17	14	13	5	0	0	0	1	51.8	57.5	1	1.7	1	1.7	0	0	
1100	0	0	0	0	1	0	0	1	6	24	14	8	4	3	1	0	0	50.8	58.2	1	1.6	0	0	0	0	
1115	0	0	0	0	0	1	1	2	10	18	21	13	2	0	1	0	0	50.2	56.8	1	1.4	0	0	0	0	
1130	0	0	0	0	0	0	0	10	13	19	24	7	4	1	0	0	0	49	54.6	0	0	0	0	0	0	
1145	0	0	0	0	1	1	4	4	19	27	13	10	3	1	0	0	0	47.4	55.3	0	0	0	0	0	0	
1200	0	0	0	0	0	0	0	4	13	29	28	16	2	0	0	0	0	50	56.1	0	0	0	0	0	0	
1215	0	0	0	0	0	0	0	5	6	23	25	4	2	0	0	0	0	49.6	54.4	0	0	0	0	0	0	
1230	0	0	0	0	0	1	0	2	11	22	19	8	2	2	0	1	0	50.2	57.3	1	1.5	0	0	0	0	
1245	0	0	0	0	0	0	0	5	8	22	21	9	4	3	0	0	0	50.8	56.6	0	0	0	0	0	0	
1300	0	0	0	0	0	0	1	1	8	15	20	8	7	2	0	0	0	51.3	58.6	0	0	0	0	0	0	
1315	0	0	0	0	0	0	0	3	9	18	22	14	3	0	0	0	0	50.9	57.5	0	0	0	0	0	0	
1330	0	0	0	0	0	0	0	0	9	18	25	8	5	2	0	0	0	51.7	57.9	0	0	0	0	0	0	
1345	0	0	0	0	0	0	0	1	6	10	13	11	2	2	0	0	0	51.9	58.8	0	0	0	0	0	0	
1400	0	0	0	0	0	0	1	3	5	14	12	10	2	1	1	0	0	50.7	57.9	1	2	0	0	0	0	
1415	0	0	0	0	0	0	0	2	11	16	15	6	6	2	0	0	0	50.8	57.9	0	0	0	0	0	0	
1430	0	0	0	0	0	0	1	4	11	30	21	12	5	2	0	0	0	50.1	56.6	0	0	0	0	0	0	
1445	0	0	0	0	0	0	0	2	9	13	18	20	1	1	0	0	0	51.6	57.7	0	0	0	0	0	0	
1500	0	0	0	0	1	0	0	1	11	12	13	10	5	3	1	0	0	51.7	58.6	1	1.8	0	0	0	0	
1515	0	0	0	0	0	0	0	2	7	16	28	12	8	1	1	0	0	52.3	58.4	1	1.3	0	0	0	0	
1530	0	0	0	0	0	0	1	6	11	18	15	14	3	2	3	0	0	50.9	58.4	3	4.1	0	0	0	0	
1545	0	0	0	0	0	0	0	0	15	11	14	10	4	1	0	0	1	51.4	58.8	1	1.8	1	1.8	1	1.8	
1600	0	0	1	0	0	0	0	1	16	25	20	8	4	0	0	1	0	49.5	55.5	1	1.3	0	0	0	0	
1615	0	0	0	0	0	0	1	1	10	22	16	12	0	0	0	0	0	49.5	55.5	0	0	0	0	0	0	
1630	0	0	0	0	0	0	0	1	8	13	20	5	3	4	1	1	0	52.4	59.9	2	3.6	0	0	0	0	
1645	0	0	0	0	1	0	0	3	13	12	20	17	8	2	0	0	1	52	58.6	1	1.3	1	1.3	0	0	
1700	0	0	0	0	1	1	0	0	14	20	14	11	4	1	0	1	0	49.8	57.9	1	1.5	1	1.5	0	0	
1715	0	0	0	0	0	0	0	5	9	9	19	10	5	1	0	0	0	50.7	58.4	0	0	0	0	0	0	
1730	0	0	0	0	0	0	1	2	5	11	19	8	4	3	0	0	0	51.8	58.8	0	0	0	0	0	0	
1745	0	0	0	0	2	4	0	2	9	15	10	13	10	2	0	0	0	49.8	59.9	0	0	0	0	0	0	
1800	0	0	0	0	0	2	0	1	6	14	6	3	0	0	1	0	1	48.2	53.5	2	5.9	1	2.9	0	0	
1815	0	0	0	0	0	0	1	1	7	15	10	2	1	1	0	0	0	48.7	53.9	0	0	0	0	0	0	
1830	0	0	0	0	0	1	1	0	9	9	11	11	2	1	1	0	1	51.4	57.3	2	4.3	1	2.1	0	0	
1845	0	0	0	0	0	0	0	3	10	9	19	10	1	0	0	0	0	50	55.5	0	0	0	0	0	0	
1900	0	0	0	0	0	0	0	0	8	15	19	10	5	2	0	1	0	52.5	59.3	1	1.7	0	0	0	0	
1915	0	0	0	0	0	0	0	3	11	21	2	4	0	1	0	0	0	47.2	51.9	0	0	0	0	0	0	
1930	0	0	0	0	0	0	1	2	5	11	10	6	1	0	0	1	0	50	56.6	1	2.7	0	0	0	0	
1945	0	0	0	0	0	0	0	1	4	8	14	6	2	0	0	0	0	51	56.6	0	0	0	0	0	0	
2000	0	0	0	0	0	0	0	2	4	10	11	10	2	1	2	1	0	53.3	59.5	3	7	0	0	0	0	
2015	0	0	0	0	0	0	1	2	3	10	7	6	1	1	0	0	0	49.9	55.5	0	0	0	0	0	0	
2030	0	0	0	0	0	0	1	1	2	3	16	8	1	0	0	0	0	51	55.5	0	0	0	0	0	0	
2045	0	0	0	0	0	0	0	1	7	8	9	4	1	2	0	0	0	50.6	58.2	0	0	0	0	0	0	
2100	0	0	0	0	0	0	0	5	7	6	4	3	4	1	0	0	0	49.1	60.6	0	0	0	0	0	0	
2115	0	0	0	0	0	0	1	4	8	11	4	4	1	0	0	0	0	46.2	52.8	0	0	0	0	0	0	
2130	0	0	0	0	0	0	1	3	12	15	10	5	2	0	1	1	0	49	57	2	4	0	0	0	0	
2145	0	0	0	0	0	0	3	4	3	2	4	0	0	3	0	0	0	46.8	54.8	0	0	0	0	0	0	
2200	0	0	0	0	0	0	2	6	15	5	5	1	1	0	0	0	0	43.8	51.4	0	0	0	0	0	0	
2215	0	0	0	0	0	0	0	4	4	6	4	1	0	0	0	0	0	46.2	51.4	0	0	0	0	0	0	
2230	0	0	0	0	0	0	1	0	5	7	4	2	1	0	0	0	0	48.2	54.4	0	0	0	0	0	0	
2245	0	0	0	0	0	0	2	4	4	7	3	0	2	0	0	0	0	45.7	52.3	0	0	0	0	0	0	
2300	0	0	0	0	0	0	2	4	5	1	1	1	0	0	0	0	0	41.7	45	0	0	0	0	0	0	
2315	0	0	0	0	0	0	0	3	9	9	0	0	0	0	0	0	0	43.8	47.9	0	0	0	0	0	0	
2330	0	0	0	0	0	0	0	3	6	10	3	1	0	1	0	1	0	48.3	53.7	1	4	0	0	0	0	
2345	0	0	0	0	0	0	0	1	2	9	2	0	0	0	0	0	0	47	49.9	0	0	0	0	0	0	
07-19	**0**	**0**	**1**	**1**	**9**	**11**	**17**	**101**	**396**	**726**	**729**	**414**	**152**	**54**	**12**	**4**	**6**	**50.5**	**57.5**	**22**	**0.8**	**7**	**0.3**	**2**	**0.1**	
06-22	**0**	**0**	**1**	**1**	**9**	**11**	**26**	**133**	**482**	**873**	**861**	**497**	**180**	**67**	**15**	**8**	**6**	**50.4**	**57.5**	**29**	**0.9**	**7**	**0.2**	**2**	**0.1**	
06-00	**0**	**0**	**1**	**1**	**9**	**11**	**33**	**158**	**532**	**927**	**883**	**503**	**184**	**68**	**15**	**9**	**6**	**50.2**	**57.3**	**30**	**0.9**	**7**	**0.2**	**2**	**0.1**	
00-00	**0**	**0**	**1**	**1**	**9**	**13**	**48**	**194**	**610**	**975**	**911**	**513**	**188**	**69**	**15**	**9**	**6**	**49.8**	**57**	**30**	**0.8**	**7**	**0.2**	**2**	**0.1**	

Grand Total

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 70	]PSL% 70	]SL1 79 ACPO	]SL1% 79 ACPO	]SL2 85 DFT	]SL2% 85 DFT	Fix1
--	**0**	**8**	**16**	**34**	**36**	**130**	**494**	**2633**	**7798**	**13080**	**13753**	**9064**	**4680**	**1946**	**674**	**214**	**109**	**51.5**	**59.5**	**997**	**1.8**	**130**	**0.2**	**31**	**0.1**	

TSP Class Profile All Days 15 Mins

Globals

Report Id	CustomList-40
Descriptor	TSP Class Profile All Days 15 Mins
Created by	MetroCount Traffic Executive
Creation Time (UTC)	2014-06-10T12:14:26
Legal	Copyright (c)1997 - 2013 MetroCount
Graphic	header.gif
Language	English
Country	United Kingdom
Time	UTC + 120 min
Create Version	4.0.5.0
Metric	Non metric
Speed Unit	mph
Length Unit	ft
Mass Unit	ton

Dataset

Site Name	LUTTERWORTH -03
Site Attribute	LUTTERWORTH
File Name	I:\Present Projects\TSP11713-Lutterworth\LUTTERWORTH -0315May2014.EC0
File Type	Plus
Algorithm	Factory default axle
Description	A5 S [60M]
Lane	0
Direction	7
Direction Text	7 - North bound A]B, South bound B]A.
Layout Text	Axle sensors - Paired (Class/Speed/Count)
Setup Time	2014-05-11T15:23:00
Start Time	2014-05-11T15:23:00
Finish Time	2014-05-15T05:33:00
Operator	DS
Configuration	00000000 80 00 14 6a 6a 00 00 00 00 00 , Standard

Dataset

Site Name	LUTTERWORTH -03
Site Attribute	LUTTERWORTH
File Name	I:\Present Projects\TSP11713-Lutterworth\LUTTERWORTH -0319May2014.EC0
File Type	Plus
Algorithm	Factory default axle
Description	A5 S [60M]
Lane	0
Direction	7
Direction Text	7 - North bound A]B, South bound B]A.
Layout Text	Axle sensors - Paired (Class/Speed/Count)
Setup Time	2014-05-15T05:36:57
Start Time	2014-05-15T05:36:57
Finish Time	2014-05-19T19:25:57
Operator	DS
Configuration	00000000 80 00 14 6a 6a 00 00 00 00 00 , Standard

Profile

Name	TSP Class Profile All Days New15 mins
Title	TSP Traffic Reports
Graphic Logo	C:and SettingsDocuments3.21_on_us_logo_cmyk 50.BMP
Header	
Footer	
Percentile 1	85
Percentile 2	95
Pace	12
Filter Start	2014-05-12T00:00:00
Filter End	2014-05-19T00:00:00
Class Scheme	ARX
Low Speed	0
High Speed	120
Posted Limit	60
Speed Limits	68 75 60 60 60 0 0 0 0 60
Separation	0.000
Separation Type	Headway
Direction	North
Encoded Direction	1

TSP Class Profile All Days 15 Mins

Column	
Time	24-hour time (0000 - 2359)
Total	Number in time step
Cls 1	Class totals
Cls 2	Class totals
Cls 3	Class totals
Cls 4	Class totals
Cls 5	Class totals
Cls 6	Class totals
Cls 7	Class totals
Cls 8	Class totals
Cls 9	Class totals
Cls 10	Class totals
Fix1	User defined fixed text
Time	24-hour time (0000 - 2359)
Vbin 0 5	Speed bin totals
Vbin 5 10	Speed bin totals
Vbin 10 15	Speed bin totals
Vbin 15 20	Speed bin totals
Vbin 20 25	Speed bin totals
Vbin 25 30	Speed bin totals
Vbin 30 35	Speed bin totals
Vbin 35 40	Speed bin totals
Vbin 40 45	Speed bin totals
Vbin 45 50	Speed bin totals
Vbin 50 55	Speed bin totals
Vbin 55 60	Speed bin totals
Vbin 60 65	Speed bin totals
Vbin 65 70	Speed bin totals
Vbin 70 75	Speed bin totals
Vbin 75 80	Speed bin totals
Vbin 80 130	Speed bin totals
Mean	Average speed
Vpp 85	Percentile speed
]PSL 60	Number exceeding Posted Speed Limit
]PSL% 60	Percent exceeding Posted Speed Limit
]SL1 68 ACPO	Number exceeding Speed Limit 1
]SL1% 68 ACPO	Percent exceeding Speed Limit 1
]SL2 75 DFT	Number exceeding Speed Limit 2
]SL2% 75 DFT	Percent exceeding Speed Limit 2
Fix1	User defined fixed text

TSP Class Profile All Days 15 Mins

Report Id - CustomList-40
Site Name - LUTTERWORTH -03
Description - A5 S [60M]
Direction - North

12 May 2014

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	14	0	7	0	1	1	0	0	0	2	3	
0015	10	0	7	0	1	0	0	0	0	1	1	
0030	23	0	14	0	1	0	0	0	0	4	4	
0045	13	0	13	0	0	0	0	0	0	0	0	
0100	14	0	10	0	0	0	0	0	0	1	3	
0115	26	0	24	0	0	0	0	0	0	1	1	
0130	7	0	6	0	0	0	0	0	1	0	0	
0145	15	1	9	0	2	1	0	0	0	0	2	
0200	9	0	8	0	1	0	0	0	0	0	0	
0215	4	0	4	0	0	0	0	0	0	0	0	
0230	15	0	10	0	1	0	1	0	0	2	1	
0245	10	0	9	0	0	0	0	0	0	1	0	
0300	14	0	13	0	0	0	0	0	0	0	1	
0315	14	0	13	0	0	0	0	0	0	0	1	
0330	27	0	21	0	1	0	0	0	0	2	3	
0345	15	0	12	0	0	0	0	0	0	0	3	
0400	14	0	12	0	0	0	0	0	0	1	1	
0415	16	1	14	0	0	0	0	0	0	0	1	
0430	28	0	25	0	0	0	0	0	0	2	1	
0445	36	0	33	0	1	0	0	0	0	0	2	
0500	41	1	35	0	0	0	0	0	0	3	2	
0515	47	0	43	0	1	0	0	0	1	0	2	
0530	112	2	103	0	1	0	1	0	0	2	3	
0545	100	0	92	0	3	0	1	0	0	1	3	
0600	63	0	54	1	1	0	0	0	0	6	1	
0615	69	2	53	0	3	0	1	0	0	1	9	
0630	96	0	88	0	3	0	0	0	1	1	3	
0645	105	0	88	0	3	0	3	0	1	6	4	
0700	113	1	97	1	5	1	0	0	0	3	5	
0715	150	3	133	2	3	0	5	0	0	1	3	
0730	164	0	142	2	8	1	2	1	1	3	4	
0745	180	0	170	0	6	0	0	0	0	2	2	
0800	167	0	151	1	8	0	0	0	0	4	3	
0815	164	1	147	1	4	4	2	0	0	3	2	
0830	137	0	123	0	8	1	0	0	1	3	1	
0845	168	2	147	0	12	1	0	0	0	2	4	
0900	117	1	100	2	8	0	1	0	1	0	4	
0915	99	0	83	0	6	1	2	1	0	3	3	
0930	95	0	69	0	14	1	3	1	1	5	1	
0945	78	1	63	0	10	0	0	0	2	2	0	
1000	77	0	58	0	9	0	2	0	2	3	3	
1015	76	0	43	1	13	0	1	0	2	10	6	
1030	87	1	68	1	7	0	1	0	1	7	1	
1045	80	0	65	0	8	0	0	1	1	4	1	
1100	69	0	60	0	0	0	2	1	0	4	2	
1115	110	1	87	1	10	1	3	0	0	3	4	
1130	101	1	77	0	14	2	1	0	0	4	2	
1145	85	0	64	1	12	1	1	1	0	2	3	
1200	96	0	86	1	4	0	0	0	1	4	0	
1215	89	0	70	1	5	0	0	0	3	3	7	
1230	89	0	71	2	6	1	0	0	3	5	1	
1245	96	0	80	1	7	1	3	0	0	2	2	
1300	94	0	75	1	8	2	0	0	0	8	0	
1315	83	1	68	0	7	0	1	0	1	3	2	
1330	98	1	71	0	11	0	3	1	1	4	6	
1345	124	0	100	2	11	1	0	2	0	2	6	
1400	118	0	89	1	13	2	3	0	1	3	6	
1415	119	2	92	0	14	2	3	0	0	4	2	
1430	106	0	91	0	9	0	1	0	0	2	3	
1445	125	1	97	0	11	0	2	0	1	8	5	
1500	105	1	88	0	8	0	3	0	1	3	1	
1515	129	1	104	0	13	0	0	0	2	5	4	
1530	141	0	120	0	13	0	1	0	2	3	2	
1545	125	0	102	1	9	0	0	0	0	6	7	
1600	143	2	128	0	4	0	0	0	1	4	4	
1615	167	1	141	1	15	0	2	1	2	1	3	
1630	174	0	148	2	13	0	1	1	0	3	6	
1645	176	1	158	0	9	0	0	0	2	1	5	
1700	176	1	155	1	11	2	1	0	1	0	4	
1715	214	1	194	2	8	2	2	0	1	0	4	
1730	191	1	169	1	9	1	0	0	1	4	5	
1745	200	1	182	3	9	0	1	0	2	0	2	
1800	145	1	127	1	9	0	0	1	1	3	2	
1815	134	0	116	0	6	1	0	0	2	4	5	
1830	108	1	94	0	8	0	0	0	1	2	2	
1845	94	0	76	0	8	1	0	0	1	2	6	
1900	81	0	72	0	3	1	0	0	1	2	2	
1915	65	0	62	0	1	0	0	0	0	1	1	
1930	63	1	51	0	4	0	0	0	1	4	2	
1945	62	0	51	1	4	0	1	0	0	2	3	
2000	62	0	53	0	3	0	1	0	3	1	1	
2015	53	1	38	0	3	3	0	0	0	3	5	
2030	58	0	51	0	2	0	1	0	2	2	0	
2045	39	0	31	0	3	0	0	0	0	1	4	
2100	39	0	33	0	1	0	0	0	2	2	1	
2115	45	0	35	0	3	0	1	0	1	2	3	
2130	51	0	40	0	2	0	1	0	3	2	3	
2145	55	0	47	0	4	0	0	0	0	0	4	
2200	62	0	58	0	1	0	0	0	0	3	0	
2215	49	1	41	0	4	0	0	0	1	0	2	
2230	56	0	43	0	2	0	1	0	2	2	6	
2245	40	0	32	0	1	0	1	0	1	2	3	
2300	30	0	27	0	1	0	0	0	1	0	1	
2315	25	1	19	0	0	1	0	0	1	1	2	
2330	41	0	31	0	3	0	1	0	0	4	2	
2345	40	0	28	0	1	0	1	0	2	3	5	
07-19	**5976**	**29**	**5039**	**34**	**423**	**30**	**53**	**12**	**43**	**157**	**156**	
06-22	**6982**	**33**	**5886**	**36**	**466**	**34**	**62**	**12**	**58**	**193**	**202**	
06-00	**7325**	**35**	**6165**	**36**	**479**	**35**	**66**	**12**	**66**	**208**	**223**	
00-00	**7949**	**40**	**6702**	**36**	**493**	**37**	**69**	**12**	**68**	**231**	**261**	

7613.4		1089	14.87%		1389.6
7241		1171			**1270.6**

13 May 2014

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	20	0	17	0	1	0	0	0	0	0	2	
0015	16	0	11	0	0	0	1	0	0	0	4	
0030	26	0	17	1	3	0	0	0	0	1	4	
0045	32	0	23	0	2	0	1	0	2	1	3	
0100	25	0	17	0	0	0	1	0	1	4	2	
0115	24	0	20	0	2	0	0	0	0	1	1	
0130	26	0	22	0	1	0	1	0	0	0	2	
0145	30	0	22	0	4	0	2	0	0	1	1	
0200	24	0	21	0	0	1	0	0	0	0	2	
0215	16	0	15	0	0	1	0	0	0	0	0	
0230	16	0	13	0	0	0	0	0	0	0	3	
0245	10	0	8	0	1	0	0	0	0	1	0	
0300	17	0	17	0	0	0	0	0	0	0	0	
0315	17	0	14	0	1	0	1	0	0	1	0	
0330	17	0	14	0	1	0	0	0	0	0	2	
0345	24	0	23	0	1	0	0	0	0	0	0	
0400	13	0	11	0	0	0	1	0	0	0	1	
0415	33	1	25	0	1	1	0	1	0	2	2	
0430	34	0	30	0	0	0	0	0	0	2	2	
0445	47	0	43	0	1	0	1	0	1	0	1	
0500	35	0	30	0	0	0	1	0	0	1	3	
0515	57	2	46	0	2	0	0	0	0	3	4	
0530	119	2	109	0	2	2	2	0	0	0	2	
0545	94	0	81	0	5	1	1	0	0	2	4	
0600	68	4	59	0	0	2	1	0	0	0	2	
0615	67	0	57	0	1	0	4	0	0	2	3	
0630	122	0	115	0	2	0	1	0	0	1	3	
0645	134	5	107	1	6	5	1	0	0	6	3	
0700	106	2	97	0	4	1	2	0	0	0	0	
0715	147	1	137	0	4	0	2	0	0	3	0	
0730	152	1	135	1	8	1	0	0	0	5	1	
0745	199	0	180	1	9	2	1	0	3	1	2	
0800	164	0	158	1	3	1	0	0	0	0	1	
0815	189	1	161	3	11	2	4	0	0	3	4	
0830	183	1	170	0	5	1	2	0	0	2	2	
0845	151	2	129	0	7	1	4	1	1	3	3	
0900	146	0	128	0	8	1	5	0	1	2	1	
0915	133	0	103	0	9	2	4	0	5	6	4	
0930	153	0	119	1	14	1	3	0	1	9	5	
0945	96	2	59	0	17	1	2	0	0	9	6	
1000	73	0	48	0	9	1	1	0	3	5	6	
1015	83	1	51	0	10	1	5	0	1	6	8	
1030	83	1	53	1	9	1	1	0	3	6	8	
1045	81	0	58	0	8	0	3	0	2	6	4	
1100	100	0	69	0	15	2	0	0	2	6	6	
1115	80	1	57	0	8	0	2	0	1	8	3	
1130	121	2	86	0	20	2	1	0	2	4	4	
1145	104	0	75	0	17	1	0	0	3	5	3	
1200	84	0	56	0	14	0	0	0	3	4	7	
1215	95	0	66	1	9	1	1	0	3	8	6	
1230	73	1	51	0	7	1	1	0	4	4	4	
1245	97	0	63	1	12	1	3	0	2	7	8	
1300	97	0	76	0	9	1	5	1	1	1	3	
1315	105	1	73	3	11	2	0	0	1	7	7	
1330	106	0	85	1	8	0	2	0	3	5	2	
1345	96	0	71	0	15	0	2	0	1	3	4	
1400	121	0	93	1	13	1	3	0	2	4	4	
1415	138	0	101	0	15	0	4	0	4	7	7	
1430	107	2	84	0	11	0	1	0	2	4	3	
1445	106	1	75	2	12	1	2	1	3	5	4	
1500	116	2	86	0	14	1	2	0	2	6	3	
1515	105	0	74	0	13	2	1	0	3	9	3	
1530	138	1	105	0	15	0	6	0	1	7	3	
1545	125	4	99	0	12	0	3	0	1	5	1	
1600	153	0	125	0	10	0	3	0	0	4	11	
1615	191	0	165	1	18	0	1	0	1	4	1	
1630	166	3	135	1	16	1	0	0	1	5	4	
1645	163	0	141	1	14	0	0	0	2	2	3	
1700	174	0	148	2	10	1	0	0	2	4	7	
1715	225	0	197	6	9	3	0	0	1	4	5	
1730	191	0	172	0	11	0	0	0	1	2	5	
1745	174	1	159	1	3	0	0	0	3	5	2	
1800	182	1	157	2	9	0	1	0	2	4	6	
1815	143	5	119	0	8	1	2	1	1	1	5	
1830	122	0	110	0	7	0	0	0	1	4	0	
1845	116	0	102	0	4	0	1	0	3	3	3	
1900	84	0	65	0	9	0	0	0	3	3	4	
1915	72	0	60	1	5	0	1	0	0	2	3	
1930	70	2	55	0	3	1	0	0	3	4	2	
1945	80	0	62	0	4	0	0	0	4	6	4	
2000	68	1	57	0	1	0	0	0	1	7	1	
2015	61	0	52	0	4	0	0	0	1	3	1	
2030	46	0	34	0	1	0	0	0	0	5	6	
2045	48	0	39	0	4	0	1	0	1	2	1	
2100	40	0	32	0	3	0	0	0	2	1	2	
2115	52	0	44	0	2	1	0	0	2	2	1	
2130	59	1	46	0	3	0	1	0	0	3	5	
2145	55	1	32	0	7	1	1	0	2	6	5	
2200	58	0	45	1	3	1	1	1	1	2	3	
2215	55	0	48	0	1	0	0	0	2	1	3	
2230	50	0	45	0	2	0	0	0	0	1	2	
2245	41	0	34	0	4	0	0	0	1	1	1	
2300	26	0	21	0	1	0	0	0	1	0	3	
2315	38	1	32	0	1	0	1	0	1	0	2	
2330	30	0	21	0	3	0	0	0	1	5	0	
2345	29	0	21	0	1	2	0	0	1	2	2	
07-19	**6253**	**37**	**5061**	**31**	**504**	**39**	**86**	**4**	**82**	**217**	**192**	
06-22	**7379**	**51**	**5977**	**33**	**559**	**49**	**97**	**4**	**101**	**270**	**238**	
06-00	**7706**	**52**	**6244**	**34**	**575**	**52**	**99**	**5**	**109**	**282**	**254**	
00-00	**8478**	**57**	**6893**	**35**	**603**	**58**	**112**	**6**	**113**	**302**	**299**	
	6960.4				1376		17.86%			1171.8		

14 May 2014 1493

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	20	0	18	0	0	0	1	0	0	1	0	
0015	25	0	22	0	1	0	0	0	0	1	1	
0030	18	0	14	0	1	0	0	0	0	1	2	
0045	29	0	23	0	0	0	0	0	2	0	4	
0100	25	0	23	0	0	0	0	0	1	0	1	
0115	16	0	11	0	2	0	0	0	0	1	2	
0130	21	0	17	0	0	0	0	0	0	3	1	
0145	13	0	11	0	2	0	0	0	0	0	0	
0200	15	0	12	0	2	1	0	0	0	0	0	
0215	24	0	14	1	3	1	1	0	1	1	2	
0230	8	0	7	0	0	0	1	0	0	0	0	
0245	25	0	21	0	2	0	0	0	0	1	1	
0300	21	0	19	0	1	0	0	0	0	0	1	
0315	13	0	10	0	0	0	2	0	0	0	1	
0330	45	0	41	0	1	0	0	0	0	0	3	
0345	24	0	22	0	0	0	0	0	0	0	2	
0400	26	0	22	0	1	1	0	0	0	0	2	
0415	26	1	20	0	0	0	1	0	0	0	4	
0430	40	0	36	0	1	0	1	0	0	0	2	
0445	42	0	36	0	1	0	2	0	0	0	3	
0500	45	0	39	0	1	1	0	0	0	1	3	
0515	81	2	69	0	1	1	2	0	0	4	2	
0530	109	0	100	0	1	0	2	0	0	2	4	
0545	107	2	90	0	4	0	2	0	1	1	7	
0600	59	1	50	0	1	1	1	0	0	1	4	
0615	73	2	66	0	1	0	1	0	0	2	1	
0630	132	0	114	0	3	1	4	0	1	4	5	
0645	125	2	111	0	5	0	2	0	0	3	2	
0700	110	2	95	0	6	1	1	0	0	3	2	
0715	134	2	116	1	6	1	1	0	0	1	6	
0730	152	1	135	3	6	1	1	0	0	1	4	
0745	196	0	182	1	4	0	2	0	2	2	3	
0800	134	1	118	0	7	2	0	0	0	3	3	
0815	189	0	169	3	6	0	3	0	1	1	6	
0830	131	0	116	0	5	0	2	0	0	1	7	
0845	159	4	133	0	3	1	3	0	3	7	5	
0900	138	1	120	1	5	0	3	0	2	1	5	
0915	109	0	90	0	9	0	2	0	0	5	3	
0930	93	0	72	0	10	0	2	0	4	2	3	
0945	100	3	65	3	10	0	7	0	6	1	5	
1000	77	0	49	0	10	1	1	0	3	8	5	
1015	98	0	59	2	15	1	2	0	4	10	5	
1030	69	2	47	0	8	1	1	0	3	3	4	
1045	99	2	59	1	9	0	5	0	4	13	6	
1100	64	0	39	0	10	1	1	0	3	4	6	
1115	80	1	42	0	18	0	0	0	2	9	8	
1130	98	3	62	1	17	0	4	0	0	7	4	
1145	105	3	66	0	16	0	2	0	4	7	7	
1200	94	0	54	1	21	0	0	1	3	8	6	
1215	92	0	59	0	16	1	1	0	1	7	7	
1230	109	1	70	2	14	2	1	0	6	9	4	
1245	111	0	79	1	12	1	2	0	3	7	6	
1300	102	0	71	0	11	1	2	1	4	7	5	
1315	101	1	70	0	11	0	1	1	3	9	5	
1330	119	0	84	1	19	2	2	0	4	2	5	
1345	109	3	75	2	9	1	1	0	1	11	6	
1400	92	1	61	1	15	2	5	0	1	2	4	
1415	134	3	100	0	16	0	0	1	3	6	5	
1430	115	1	84	1	11	0	3	0	3	8	4	
1445	118	1	83	0	15	1	2	0	3	9	4	
1500	102	1	72	1	11	1	4	1	1	5	5	
1515	124	2	88	2	15	2	2	0	2	9	2	
1530	133	2	100	1	12	0	3	0	3	7	5	
1545	121	0	94	1	12	1	4	0	1	2	6	
1600	191	1	149	1	23	0	2	0	4	7	4	
1615	171	2	139	2	15	0	0	0	1	6	6	
1630	169	0	143	2	16	0	1	0	1	4	2	
1645	172	2	147	1	10	0	0	0	2	5	5	
1700	189	0	165	1	13	0	0	0	1	5	4	
1715	197	3	178	0	4	0	0	0	0	7	5	
1730	163	3	139	1	12	0	0	0	2	4	2	
1745	172	1	157	0	7	0	0	1	1	2	3	
1800	165	0	154	0	6	1	0	0	0	2	2	
1815	139	0	119	0	10	1	0	0	3	4	2	
1830	132	4	113	0	8	0	0	0	1	3	3	
1845	116	1	99	0	5	0	0	0	3	2	6	
1900	99	1	86	0	5	0	0	0	2	3	2	
1915	96	5	68	0	10	1	0	0	2	2	8	
1930	82	2	68	1	1	0	0	0	3	3	4	
1945	57	0	43	0	4	0	0	1	3	4	2	
2000	64	1	51	0	2	0	0	0	1	6	3	
2015	66	4	47	1	4	0	0	0	6	1	3	
2030	61	0	49	0	4	0	0	0	3	4	1	
2045	59	0	49	0	2	0	0	0	1	4	3	
2100	56	0	46	0	5	0	0	0	3	2	0	
2115	55	0	47	1	2	1	0	0	1	1	2	
2130	52	1	46	0	3	0	1	0	0	1	0	
2145	51	1	39	0	7	0	0	0	0	2	2	
2200	60	0	44	0	6	0	0	0	3	4	3	
2215	65	1	55	0	3	0	0	0	0	3	3	
2230	77	2	66	0	3	0	1	0	1	2	2	
2245	48	0	41	0	3	0	0	0	1	3	0	
2300	42	0	37	0	0	1	0	0	0	3	1	
2315	32	1	26	0	0	0	0	0	3	0	2	
2330	28	0	20	0	2	1	0	0	0	3	2	
2345	21	1	16	0	0	0	0	0	0	1	3	
07-19	**6087**	**58**	**4780**	**38**	**529**	**27**	**79**	**6**	**102**	**248**	**220**	
06-22	**7274**	**78**	**5760**	**41**	**588**	**31**	**88**	**7**	**128**	**291**	**262**	
06-00	**7647**	**83**	**6065**	**41**	**605**	**33**	**89**	**7**	**136**	**310**	**278**	
00-00	**8465**	**88**	**6762**	**42**	**630**	**38**	**104**	**7**	**141**	**327**	**326**	

6180 1458 19.07% 896.6

15 May 2014 1573

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	32	0	27	0	1	0	1	0	1	1	1	
0015	25	0	17	0	2	0	0	0	0	2	4	
0030	31	0	25	0	1	1	1	0	0	2	1	
0045	33	1	27	0	1	0	0	0	2	2	0	
0100	21	0	16	0	0	0	0	0	1	3	1	
0115	25	0	22	0	0	0	0	0	2	0	1	
0130	36	0	31	0	1	0	0	0	0	2	2	
0145	25	0	22	0	1	0	0	0	0	1	1	
0200	33	0	30	0	1	0	1	0	0	0	1	
0215	23	0	20	0	0	1	0	0	0	1	1	
0230	26	0	23	0	0	0	2	0	0	1	0	
0245	22	0	19	0	3	0	0	0	0	0	0	
0300	30	0	26	0	0	0	1	0	0	2	1	
0315	11	0	7	0	0	0	1	0	0	0	3	
0330	20	0	16	0	2	0	0	0	0	0	2	
0345	22	0	18	0	2	0	1	0	0	0	1	
0400	28	0	24	0	0	0	1	0	0	0	3	
0415	36	0	31	0	0	0	1	0	0	1	3	
0430	26	0	23	0	0	0	1	0	0	0	2	
0445	54	0	44	0	2	2	1	0	0	3	2	
0500	48	0	37	0	0	0	0	0	0	4	7	
0515	61	1	55	0	2	0	0	0	0	1	2	
0530	116	1	102	1	3	0	2	0	0	1	6	
0545	111	3	100	0	3	0	1	0	0	0	4	
0600	64	3	57	0	2	0	1	0	0	1	0	
0615	82	3	72	0	2	2	0	0	1	1	1	
0630	111	1	103	1	3	0	0	0	0	1	2	
0645	107	3	91	1	6	0	1	0	0	2	3	
0700	118	1	110	1	1	0	2	0	0	2	1	
0715	143	1	130	0	3	3	1	0	0	1	4	
0730	175	1	158	1	5	1	1	0	0	2	6	
0745	181	4	153	3	9	5	0	0	0	1	6	
0800	150	1	131	0	9	0	6	0	0	1	2	
0815	156	2	135	2	9	0	1	0	2	2	3	
0830	164	2	137	2	10	2	4	0	1	4	2	
0845	150	2	128	1	9	1	0	0	1	4	4	
0900	107	0	86	0	8	0	3	0	3	5	2	
0915	93	1	73	1	4	1	1	0	3	4	5	
0930	102	0	75	0	4	2	3	0	0	12	6	
0945	105	0	82	0	8	0	2	1	1	8	3	
1000	90	0	65	0	11	1	2	0	2	4	5	
1015	104	1	81	0	7	0	1	0	0	7	7	
1030	93	1	68	2	10	0	1	1	1	3	6	
1045	109	2	81	0	16	0	1	0	1	5	3	
1100	84	0	59	0	9	0	1	0	5	6	4	
1115	82	1	47	3	14	0	1	0	2	9	5	
1130	101	1	64	2	18	1	1	0	3	8	3	
1145	110	2	69	1	19	0	0	0	2	10	7	
1200	103	1	66	0	15	0	1	1	5	8	6	
1215	105	0	68	1	17	2	0	0	3	6	8	
1230	77	0	52	0	11	1	1	0	1	6	5	
1245	97	1	70	0	12	1	1	1	2	3	6	
1300	116	2	85	0	20	0	1	0	0	2	6	
1315	91	1	61	1	16	0	1	0	2	4	5	
1330	111	1	83	0	8	0	1	0	4	6	8	
1345	122	2	83	0	12	1	6	0	1	10	7	
1400	91	2	65	0	15	1	2	0	2	2	2	
1415	143	0	108	0	12	2	1	1	2	10	7	
1430	99	1	64	0	22	0	3	0	0	4	5	
1445	135	2	94	0	16	0	4	0	2	15	2	
1500	102	2	69	0	8	1	3	0	5	10	4	
1515	102	2	80	1	5	0	1	0	2	7	4	
1530	128	1	95	1	17	0	3	0	4	5	2	
1545	129	2	98	2	14	0	1	0	2	4	6	
1600	153	0	124	1	12	1	2	0	2	6	5	
1615	163	2	131	5	18	0	1	0	1	2	3	
1630	172	0	141	1	10	0	1	0	3	9	7	
1645	188	4	154	2	19	0	0	0	0	4	5	
1700	175	1	157	0	10	0	1	0	2	3	1	
1715	207	4	180	0	10	0	0	0	3	6	4	
1730	172	4	157	1	3	0	0	0	1	2	4	
1745	217	4	191	3	8	0	0	0	2	5	4	
1800	192	3	165	3	6	0	0	0	1	10	4	
1815	139	1	121	4	5	0	1	0	1	4	2	
1830	134	1	114	0	10	1	1	0	1	2	4	
1845	121	3	94	0	8	0	0	1	3	5	7	
1900	117	1	92	0	9	0	1	0	4	4	6	
1915	86	2	67	1	5	0	1	0	1	6	3	
1930	93	2	76	1	4	0	0	0	2	6	2	
1945	65	0	47	0	5	0	0	0	7	3	3	
2000	71	0	53	0	5	1	0	0	4	4	4	
2015	46	1	27	0	6	0	0	0	2	4	6	
2030	51	0	42	0	3	0	0	0	4	0	2	
2045	54	2	33	0	4	0	0	0	5	5	5	
2100	56	1	41	0	5	1	0	0	1	3	4	
2115	46	0	38	0	2	0	0	0	4	2	0	
2130	54	0	40	0	3	0	0	0	2	2	7	
2145	63	1	46	0	4	0	0	0	2	5	5	
2200	48	0	34	0	4	0	0	0	3	7	0	
2215	64	1	48	0	1	0	0	0	5	7	2	
2230	36	0	32	0	0	0	0	0	0	1	3	
2245	50	0	38	0	4	0	0	0	1	5	2	
2300	28	0	15	0	5	0	0	0	0	3	5	
2315	41	1	31	0	0	0	0	0	0	3	6	
2330	41	0	23	0	2	0	1	0	4	4	7	
2345	22	1	14	0	1	0	0	0	1	3	2	
07-19	**6201**	**70**	**4902**	**45**	**522**	**28**	**69**	**6**	**84**	**258**	**217**	
06-22	**7367**	**90**	**5827**	**49**	**590**	**32**	**73**	**6**	**123**	**307**	**270**	
06-00	**7697**	**93**	**6062**	**49**	**607**	**32**	**74**	**6**	**137**	**340**	**297**	
00-00	**8592**	**99**	**6824**	**50**	**632**	**36**	**89**	**6**	**143**	**367**	**346**	

4650.6 1493 19.40% 605

16 May 2014 1619

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	33	1	23	0	0	0	0	0	0	4	5	
0015	8	0	5	0	0	0	0	0	0	0	3	
0030	36	0	29	0	1	0	0	0	1	2	3	
0045	18	0	9	0	0	0	0	0	1	2	6	
0100	30	1	17	0	1	1	1	0	0	3	6	
0115	25	0	21	0	1	0	0	0	1	1	1	
0130	17	0	9	0	3	0	1	0	0	1	3	
0145	18	0	16	0	0	0	1	0	0	1	0	
0200	18	0	7	0	4	0	0	0	0	5	2	
0215	28	1	18	0	1	1	2	0	0	1	4	
0230	20	0	13	0	1	0	0	0	1	1	4	
0245	18	0	11	0	1	0	1	0	0	2	3	
0300	30	0	20	0	1	0	0	0	0	4	5	
0315	15	0	12	0	1	0	0	0	0	1	1	
0330	25	0	21	0	1	0	0	0	0	1	2	
0345	23	0	17	0	1	0	0	0	1	1	3	
0400	24	0	18	0	0	0	1	0	0	1	4	
0415	34	0	26	0	0	0	0	0	0	2	6	
0430	29	0	20	0	0	2	0	0	0	3	4	
0445	46	0	38	0	0	0	1	0	1	3	3	
0500	33	1	25	0	4	0	0	0	0	1	2	
0515	63	1	52	0	3	1	1	0	0	1	4	
0530	101	1	94	0	1	0	1	0	0	1	3	
0545	95	3	79	0	2	1	2	0	0	0	8	
0600	66	1	57	0	3	0	0	0	0	2	3	
0615	75	2	61	0	5	1	0	0	0	2	4	
0630	105	2	87	1	4	0	3	0	1	2	5	
0645	108	3	90	0	3	0	0	0	0	6	6	
0700	100	3	82	0	8	0	1	0	0	4	2	
0715	137	4	114	1	13	0	1	0	0	2	2	
0730	153	1	127	0	14	0	3	2	0	1	5	
0745	156	0	132	0	11	0	1	0	2	2	8	
0800	182	1	155	3	9	1	4	0	1	2	6	
0815	146	1	125	1	8	0	2	2	0	6	1	
0830	167	0	139	1	9	0	5	0	1	4	8	
0845	154	4	121	1	18	1	1	0	1	4	3	
0900	87	0	62	0	7	2	3	0	4	7	2	
0915	100	0	75	0	9	2	3	0	2	6	3	
0930	88	1	51	1	11	1	2	1	5	11	4	
0945	106	3	66	0	16	1	1	1	2	6	10	
1000	93	0	62	2	7	1	2	0	4	8	7	
1015	96	1	65	2	14	0	2	0	1	5	6	
1030	102	2	62	1	20	0	1	0	0	8	8	
1045	112	0	73	1	12	1	2	0	3	12	8	
1100	89	2	60	0	10	1	0	0	2	5	9	
1115	105	1	77	1	9	2	1	0	1	6	7	
1130	104	3	80	0	9	0	0	1	2	6	3	
1145	93	4	59	0	16	0	3	1	2	4	4	
1200	108	3	80	0	10	0	2	0	1	7	5	
1215	129	2	91	2	14	0	2	1	3	5	9	
1230	108	2	77	0	8	1	1	0	5	7	7	
1245	133	4	95	0	13	0	0	1	2	10	8	
1300	93	3	66	0	12	0	3	0	1	6	2	
1315	108	2	74	0	13	2	1	0	6	5	5	
1330	124	1	90	0	7	0	3	0	7	15	1	
1345	120	3	75	2	26	1	1	1	0	6	5	
1400	140	0	113	0	13	1	1	0	3	6	3	
1415	151	2	117	3	17	0	0	0	3	5	4	
1430	117	1	82	1	9	4	3	1	1	9	6	
1445	131	2	98	2	14	0	4	0	1	6	4	
1500	135	0	103	0	20	0	2	0	1	5	4	
1515	122	2	90	1	11	0	1	0	2	9	6	
1530	124	4	90	0	12	0	3	0	2	9	4	
1545	154	2	128	1	10	1	2	0	2	5	3	
1600	171	0	146	0	9	0	2	0	2	6	6	
1615	190	4	158	0	16	0	0	0	3	4	5	
1630	164	4	138	1	6	0	0	0	2	8	5	
1645	183	1	160	1	8	0	0	0	2	5	6	
1700	175	5	151	3	9	0	0	0	0	3	4	
1715	154	2	131	2	10	0	0	0	1	5	3	
1730	164	3	147	5	4	0	0	0	1	2	2	
1745	176	0	157	1	9	0	0	0	0	5	4	
1800	142	0	125	1	9	0	0	0	0	4	3	
1815	140	4	125	0	5	0	0	0	3	1	2	
1830	108	1	94	0	5	0	0	0	1	5	2	
1845	108	1	87	0	4	1	1	0	1	5	8	
1900	96	1	82	0	2	0	0	0	4	6	1	
1915	72	1	61	0	5	0	0	0	0	1	4	
1930	72	2	58	0	2	1	1	0	2	2	4	
1945	68	2	47	0	3	0	0	0	3	8	5	
2000	68	1	53	1	1	0	0	0	2	6	4	
2015	50	1	36	1	4	0	0	0	6	1	1	
2030	57	1	42	0	6	0	0	0	0	3	5	
2045	60	1	44	0	4	0	0	0	2	4	5	
2100	60	0	47	0	5	0	0	0	0	4	4	
2115	50	2	38	0	1	0	2	0	2	3	2	
2130	55	0	42	0	3	0	1	0	2	2	5	
2145	49	1	39	0	1	0	0	0	2	3	3	
2200	50	0	35	0	5	0	0	0	5	2	3	
2215	60	1	53	0	0	0	0	0	1	2	3	
2230	57	1	40	0	3	0	0	0	5	3	5	
2245	37	0	29	0	3	1	0	0	2	1	1	
2300	39	4	25	0	3	1	0	0	0	4	2	
2315	39	0	23	0	2	1	0	0	1	5	7	
2330	32	0	20	0	0	0	1	0	5	3	3	
2345	25	0	16	0	0	0	0	0	1	4	4	
07-19	**6242**	**89**	**4875**	**41**	**533**	**24**	**70**	**12**	**89**	**277**	**232**	
06-22	**7353**	**110**	**5759**	**44**	**585**	**26**	**77**	**12**	**115**	**332**	**293**	
06-00	**7692**	**116**	**6000**	**44**	**601**	**29**	**78**	**12**	**135**	**356**	**321**	
00-00	**8479**	**125**	**6600**	**44**	**628**	**35**	**90**	**12**	**141**	**398**	**406**	

3111.2 1532 19.92% 306.4

17 May 2014 1710

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	31	0	26	0	0	0	0	0	0	3	2	
0015	19	0	14	0	1	1	0	0	1	1	1	
0030	23	1	18	0	2	0	0	0	0	0	2	
0045	16	0	13	0	0	0	0	0	0	2	1	
0100	24	0	15	0	0	0	0	0	2	2	5	
0115	28	0	21	0	1	1	0	0	0	2	3	
0130	15	0	9	0	1	0	0	0	1	2	2	
0145	33	0	23	0	0	0	1	0	1	3	5	
0200	13	0	11	0	1	0	0	0	0	0	1	
0215	11	0	6	0	0	0	0	0	1	1	3	
0230	19	1	11	0	2	0	0	0	1	0	4	
0245	14	0	12	0	1	0	0	0	0	1	0	
0300	24	0	18	0	0	0	1	0	0	2	3	
0315	15	0	12	0	2	0	0	0	0	0	1	
0330	16	0	14	0	0	0	0	0	1	0	1	
0345	11	0	10	0	0	0	1	0	0	0	0	
0400	12	0	9	0	0	0	1	0	0	0	2	
0415	14	0	10	0	0	0	0	0	0	1	3	
0430	18	0	17	0	0	1	0	0	0	0	0	
0445	22	0	17	0	1	0	1	0	0	1	2	
0500	36	0	29	0	1	0	1	0	0	4	1	
0515	22	0	16	0	3	0	0	0	0	1	2	
0530	38	0	36	0	1	0	0	0	0	0	1	
0545	36	2	28	0	1	0	0	0	0	2	3	
0600	32	1	23	0	1	0	0	0	0	3	4	
0615	26	1	20	0	2	0	0	0	0	1	2	
0630	63	0	52	0	5	1	3	0	1	0	1	
0645	44	1	32	0	4	2	0	0	0	1	4	
0700	29	1	24	0	0	0	1	0	0	0	3	
0715	40	0	36	1	1	0	0	0	0	0	2	
0730	49	0	41	0	3	0	0	0	1	2	2	
0745	38	0	23	0	3	1	1	0	0	4	6	
0800	55	1	42	1	3	0	3	0	1	3	1	
0815	60	6	45	0	2	0	0	0	1	2	4	
0830	58	4	43	0	0	0	1	0	0	5	5	
0845	58	6	50	0	1	0	0	0	0	1	0	
0900	55	2	44	0	3	0	0	1	1	3	1	
0915	60	1	49	0	2	0	0	0	0	2	6	
0930	63	1	44	3	4	0	0	0	3	6	2	
0945	59	1	39	0	6	0	2	0	0	8	3	
1000	65	5	51	0	2	1	0	0	0	3	3	
1015	69	4	53	0	5	0	0	0	1	1	5	
1030	62	0	47	0	7	0	0	0	2	4	2	
1045	83	6	61	0	6	0	2	0	0	2	6	
1100	75	1	59	0	4	0	0	0	3	6	2	
1115	71	1	61	0	7	0	0	0	1	1	0	
1130	90	0	78	0	6	0	0	0	2	1	3	
1145	54	2	46	1	3	0	0	0	0	1	1	
1200	97	3	76	2	4	0	1	0	1	5	5	
1215	76	1	62	0	4	1	1	0	2	1	4	
1230	85	2	71	0	4	0	0	0	1	3	4	
1245	82	3	70	0	5	0	1	0	1	1	1	
1300	75	1	60	2	3	0	0	1	0	3	5	
1315	89	6	71	1	1	0	1	0	0	4	5	
1330	89	3	73	1	8	0	0	0	0	3	1	
1345	71	5	54	0	2	2	0	0	1	3	4	
1400	65	2	47	0	7	0	0	0	1	2	6	
1415	98	6	81	0	3	0	0	0	1	3	4	
1430	77	0	62	0	3	1	0	0	0	7	4	
1445	76	2	65	0	3	0	0	0	0	2	4	
1500	63	2	52	0	1	0	0	0	0	4	4	
1515	77	3	66	0	1	0	0	0	0	1	6	
1530	79	6	65	1	4	0	0	0	0	1	2	
1545	67	3	56	0	2	0	0	0	0	1	5	
1600	78	3	63	1	5	0	0	0	0	2	4	
1615	82	2	67	0	4	0	0	1	0	4	4	
1630	62	1	53	1	1	0	0	0	0	2	4	
1645	68	0	61	0	2	0	0	0	0	0	5	
1700	95	1	82	2	5	2	0	0	0	0	3	
1715	66	4	54	0	3	0	0	0	0	4	1	
1730	69	2	61	1	0	0	0	0	1	3	1	
1745	47	3	36	0	4	1	0	0	0	3	0	
1800	57	4	50	0	0	0	0	1	0	2	0	
1815	66	1	59	1	1	0	0	0	0	2	2	
1830	57	1	53	0	1	0	0	0	0	1	1	
1845	54	1	42	1	6	0	0	0	0	2	2	
1900	50	1	34	0	5	0	0	0	0	5	5	
1915	38	0	28	0	3	0	0	0	0	4	3	
1930	31	0	29	0	1	0	0	0	0	0	1	
1945	35	0	28	0	2	0	0	0	0	4	1	
2000	38	1	30	1	2	0	0	0	0	2	2	
2015	34	0	26	0	3	0	0	0	0	1	4	
2030	32	0	27	0	1	0	0	0	0	0	4	
2045	28	0	19	0	2	0	0	0	1	1	5	
2100	26	1	19	1	1	0	0	0	0	2	2	
2115	33	1	30	0	0	0	0	0	0	1	1	
2130	30	0	23	0	2	0	0	0	0	2	3	
2145	31	0	30	0	0	0	0	0	0	1	0	
2200	23	0	21	0	0	0	0	0	0	1	1	
2215	34	0	26	0	2	0	0	0	1	1	4	
2230	38	0	36	0	0	0	0	0	0	2	0	
2245	30	0	24	0	2	0	0	0	0	2	2	
2300	27	0	23	0	1	0	1	0	0	1	1	
2315	27	0	25	0	0	0	0	0	0	0	2	
2330	29	0	22	1	1	0	0	0	0	3	2	
2345	21	0	14	0	1	1	0	0	1	1	3	
07-19	**3260**	**113**	**2648**	**20**	**155**	**9**	**14**	**4**	**25**	**124**	**148**	
06-22	**3831**	**120**	**3098**	**22**	**189**	**12**	**17**	**4**	**27**	**152**	**190**	
06-00	**4060**	**120**	**3289**	**23**	**196**	**13**	**18**	**4**	**29**	**163**	**205**	
00-00	**4570**	**124**	**3684**	**23**	**214**	**16**	**24**	**4**	**37**	**191**	**253**	

18 May 2014 739

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	23	0	21	0	0	0	0	0	0	0	2	
0015	13	0	7	0	0	0	0	0	0	3	3	
0030	23	0	18	0	0	0	0	0	0	1	4	
0045	17	0	13	0	0	0	0	0	0	2	2	
0100	5	0	5	0	0	0	0	0	0	0	0	
0115	17	0	15	0	0	0	0	0	0	2	0	
0130	13	0	11	0	0	0	0	0	0	1	1	
0145	10	1	7	0	1	0	0	0	0	1	0	
0200	3	0	3	0	0	0	0	0	0	0	0	
0215	8	0	8	0	0	0	0	0	0	0	0	
0230	9	0	7	0	0	0	0	0	0	0	2	
0245	7	0	6	0	0	0	0	0	0	1	0	
0300	3	1	0	0	1	0	0	0	0	1	0	
0315	6	0	3	0	0	0	0	0	0	0	3	
0330	7	0	7	0	0	0	0	0	0	0	0	
0345	13	1	9	0	0	0	0	0	0	1	2	
0400	11	0	6	0	1	0	1	0	0	0	3	
0415	12	1	10	0	0	0	0	0	0	0	1	
0430	12	0	8	0	0	0	0	0	0	1	3	
0445	12	0	11	0	0	0	0	0	0	0	1	
0500	15	0	14	0	0	0	0	0	0	1	0	
0515	18	0	15	0	0	0	0	0	0	1	2	
0530	48	2	41	0	2	0	0	0	0	0	3	
0545	45	0	42	0	0	0	0	0	0	1	2	
0600	27	0	25	0	0	0	0	0	0	1	1	
0615	20	0	17	0	1	0	0	0	0	1	1	
0630	42	0	41	0	0	0	1	0	0	0	0	
0645	38	0	33	1	0	0	0	0	0	2	2	
0700	39	0	31	0	4	0	0	0	0	1	3	
0715	33	0	25	0	0	0	0	0	0	2	6	
0730	25	0	22	1	0	0	0	0	0	1	1	
0745	32	0	24	0	2	0	0	0	0	2	4	
0800	31	2	26	0	1	0	0	0	0	0	2	
0815	19	2	10	0	1	0	0	0	0	2	4	
0830	26	4	17	1	2	0	0	0	0	1	1	
0845	42	1	37	0	0	0	1	0	0	1	2	
0900	48	1	38	0	2	0	0	1	0	2	4	
0915	38	1	32	0	1	0	0	0	0	1	3	
0930	44	1	36	0	2	0	0	0	0	2	3	
0945	55	11	37	0	5	0	0	0	0	0	2	
1000	60	3	49	0	2	0	0	0	3	2	1	
1015	48	1	42	0	1	0	0	0	0	1	3	
1030	42	3	35	0	1	0	0	0	0	1	2	
1045	64	7	50	1	1	0	0	1	1	1	2	
1100	51	4	37	1	2	0	0	0	1	4	2	
1115	85	6	72	0	2	0	0	0	0	3	2	
1130	78	5	64	1	0	0	0	0	0	0	8	
1145	78	11	60	1	1	1	0	0	0	3	1	
1200	93	5	82	0	0	0	1	0	0	4	1	
1215	86	7	70	0	2	0	0	1	0	4	2	
1230	85	7	65	2	4	0	2	0	0	2	3	
1245	89	14	61	2	5	1	1	0	0	4	1	
1300	61	8	42	2	2	0	0	0	2	2	3	
1315	72	8	54	0	2	0	0	0	0	2	6	
1330	80	7	61	2	4	1	0	0	0	1	4	
1345	87	16	60	1	1	0	0	0	1	4	4	
1400	69	3	59	0	2	0	0	0	0	0	5	
1415	84	7	61	2	5	0	1	0	0	2	6	
1430	62	5	46	0	2	0	0	1	0	3	5	
1445	88	11	66	1	5	0	0	0	1	2	2	
1500	45	3	38	0	0	0	0	0	0	3	1	
1515	78	9	62	0	1	0	0	0	0	2	4	
1530	61	3	48	0	2	0	0	0	1	2	5	
1545	70	2	58	0	4	0	1	0	0	1	4	
1600	76	0	63	0	4	0	0	0	0	1	8	
1615	68	0	58	1	2	0	0	0	0	4	3	
1630	67	3	49	0	3	0	0	0	0	6	6	
1645	64	0	57	0	3	0	0	0	1	1	2	
1700	74	1	53	4	4	0	0	4	1	4	3	
1715	63	3	53	0	2	0	0	0	2	0	3	
1730	76	3	65	2	0	1	0	0	1	2	2	
1745	65	4	53	0	3	0	0	0	1	1	3	
1800	77	3	66	1	2	0	0	0	1	2	2	
1815	58	4	46	2	1	0	0	0	2	1	2	
1830	64	3	52	0	3	0	0	0	2	0	4	
1845	49	1	41	1	1	0	0	0	1	1	3	
1900	49	1	35	1	1	0	0	2	1	5	3	
1915	49	1	41	0	3	0	0	0	1	0	3	
1930	52	2	39	1	2	0	0	0	0	4	4	
1945	62	0	54	2	0	0	0	0	1	2	3	
2000	58	3	48	1	1	0	0	0	0	1	4	
2015	40	1	31	0	2	0	0	0	0	4	2	
2030	35	0	26	0	1	0	1	0	3	1	3	
2045	42	0	30	1	1	0	0	0	1	5	4	
2100	28	1	18	2	1	0	0	0	1	3	2	
2115	39	1	33	0	2	0	0	0	0	1	2	
2130	38	2	29	0	1	0	0	0	2	1	3	
2145	30	0	23	1	1	0	0	0	0	1	4	
2200	32	1	24	1	2	0	0	0	0	2	2	
2215	28	0	25	1	1	0	1	0	0	0	0	
2230	38	0	33	0	0	0	0	0	0	3	2	
2245	29	0	24	0	0	0	0	0	0	4	1	
2300	10	0	7	0	1	0	0	0	0	0	2	
2315	15	1	11	0	0	0	0	0	0	0	3	
2330	25	0	20	0	0	0	1	0	0	3	1	
2345	29	0	14	0	1	0	0	0	2	6	6	
07-19	**2949**	**203**	**2333**	**29**	**99**	**4**	**7**	**8**	**22**	**91**	**153**	
06-22	**3598**	**215**	**2856**	**39**	**116**	**4**	**9**	**10**	**32**	**123**	**194**	
06-00	**3804**	**217**	**3014**	**41**	**121**	**4**	**11**	**10**	**34**	**141**	**211**	
00-00	**4154**	**223**	**3301**	**41**	**126**	**4**	**12**	**10**	**34**	**158**	**245**	

Grand Total 589

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
--	**50687**	**756**	**40766**	**271**	**3326**	**224**	**500**	**57**	**677**	**1974**	**2136**	

Period	Total	Per day		
18 hour	38067	7613		
AADT	50687	7241		
AM 5	3205	641	Combined peak 5 day	1382
PM 5	3706	741		
AM 7	3554	508	Combined peak 7 day	1116
PM 7	4261	609		

18 hr factor 5.5082

AADT factor 6.4859

Report Id - CustomList-40
Site Name - LUTTERWORTH -03
Description - A5 S [60M]
Direction - North

12 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
0000	0	0	0	0	0	0	0	2	3	4	4	0	1	0	0	0	0	47.1	53.2	1	7.1	0	0	0	0	
0015	0	0	0	0	0	0	0	0	1	0	3	0	3	2	0	1	0	59.3	-	6	60	1	10	1	10	
0030	0	0	0	1	0	0	0	3	3	3	10	1	0	0	1	0	1	49.6	54.8	2	8.7	2	8.7	1	4.3	
0045	0	0	0	0	0	0	0	0	0	0	4	0	7	2	0	0	0	60	61.3	9	69.2	1	7.7	0	0	
0100	0	0	0	0	0	0	0	3	6	1	1	0	1	1	1	0	0	48.5	63.5	3	21.4	1	7.1	0	0	
0115	0	0	0	0	0	0	3	3	0	7	2	9	1	0	1	0	0	49.5	57.7	2	7.7	1	3.8	0	0	
0130	0	0	0	0	0	0	0	0	5	1	0	0	1	0	0	0	0	45.7	-	1	14.3	0	0	0	0	
0145	0	0	0	0	0	0	0	0	0	5	4	5	0	0	0	0	1	55.6	55.9	1	6.7	1	6.7	1	6.7	
0200	0	0	0	0	0	0	0	0	0	0	5	2	2	0	0	0	0	55.1	-	2	22.2	0	0	0	0	
0215	0	0	0	0	0	0	0	0	0	0	2	1	1	0	0	0	0	56	-	1	25	0	0	0	0	
0230	0	0	0	0	0	1	0	1	0	3	2	4	2	1	0	1	0	53.5	61.3	4	26.7	1	6.7	1	6.7	
0245	0	0	0	0	0	0	0	0	1	3	3	1	1	0	1	0	0	52.8	-	2	20	1	10	0	0	
0300	0	0	0	0	0	0	1	0	0	0	2	0	7	0	2	1	1	64.2	72.5	11	78.6	4	28.6	2	14.3	
0315	0	0	0	0	0	0	0	0	1	2	2	6	3	0	0	0	0	55.2	60.2	3	21.4	0	0	0	0	
0330	0	0	0	0	0	0	0	0	2	5	16	1	0	2	0	0	1	54.1	54.1	3	11.1	3	11.1	1	3.7	
0345	0	0	0	0	0	0	0	0	1	3	5	5	1	0	0	0	0	53.1	59.3	1	6.7	0	0	0	0	
0400	0	0	0	0	0	0	0	1	1	1	2	1	7	1	0	0	0	57.4	62.9	8	57.1	0	0	0	0	
0415	0	0	0	0	0	0	0	1	0	8	5	1	0	0	1	0	0	50.4	53.2	1	6.3	1	6.3	0	0	
0430	0	0	0	0	0	0	0	5	4	0	8	5	5	1	0	0	0	51.3	61.3	6	21.4	0	0	0	0	
0445	0	0	0	0	0	0	0	0	7	10	3	6	8	1	0	0	1	53.6	61.3	10	27.8	2	5.6	1	2.8	
0500	0	0	0	0	0	0	0	3	1	3	11	10	10	2	0	0	1	55.7	61.5	13	31.7	1	2.4	1	2.4	
0515	0	0	0	0	0	0	0	2	3	8	17	14	1	1	1	0	0	52.9	57.5	3	6.4	2	4.3	0	0	
0530	0	0	0	0	0	0	0	3	11	35	36	16	11	0	0	0	0	51.5	58.4	11	9.8	0	0	0	0	
0545	0	0	0	0	0	0	0	1	8	13	27	15	27	9	0	0	0	55.6	62.9	36	36	4	4	0	0	
0600	0	0	0	0	0	0	0	7	3	15	15	9	9	4	1	0	0	52.1	61.5	14	22.2	1	1.6	0	0	
0615	0	0	0	0	0	1	1	0	6	13	20	17	4	4	2	0	1	53.4	61.1	11	15.9	4	5.8	1	1.4	
0630	0	0	0	0	0	0	0	0	6	25	29	25	9	2	0	0	0	53.2	59.1	11	11.5	0	0	0	0	
0645	0	0	0	0	0	0	3	11	20	21	27	14	7	1	0	1	0	49.5	56.4	9	8.6	2	1.9	1	1	
0700	0	0	0	0	0	0	2	5	6	34	31	12	14	4	4	1	0	52.6	61.3	23	20.4	6	5.3	1	0.9	
0715	0	0	0	0	1	3	2	17	27	28	42	18	7	3	1	1	0	48.9	57.5	12	8	2	1.3	1	0.7	
0730	0	0	0	0	0	0	6	16	32	45	32	22	10	1	0	0	0	48.4	56.8	11	6.7	1	0.6	0	0	
0745	0	0	0	0	0	0	1	3	33	50	54	19	17	2	1	0	0	50.7	57	20	11.1	2	1.1	0	0	
0800	0	0	0	0	0	0	0	6	25	37	47	33	15	2	0	2	0	51.8	58.8	19	11.4	2	1.2	2	1.2	
0815	0	0	0	0	0	2	1	4	29	46	35	26	15	4	2	0	0	50.9	59.5	21	12.8	3	1.8	0	0	
0830	0	0	0	0	0	0	0	1	14	39	42	21	11	7	1	1	0	52.5	59.7	20	14.6	6	4.4	1	0.7	
0845	0	0	0	0	0	4	7	8	23	27	50	32	13	4	0	0	0	50.2	58.2	17	10.1	2	1.2	0	0	
0900	0	0	0	0	0	0	1	20	15	22	27	12	19	1	0	0	0	50.1	60.2	20	17.1	1	0.9	0	0	
0915	0	0	0	0	0	0	3	4	16	22	30	10	8	5	1	0	0	50.9	59.1	14	14.1	4	4	0	0	
0930	0	0	0	0	0	0	0	2	18	26	29	11	4	3	1	1	0	51	57.7	9	9.5	2	2.1	1	1.1	
0945	0	0	0	0	0	0	0	0	5	21	20	22	4	3	1	1	1	54	59.5	10	12.8	3	3.8	2	2.6	
1000	0	0	0	0	0	0	2	3	5	18	29	13	5	2	0	0	0	51.6	58.8	7	9.1	0	0	0	0	
1015	0	0	0	0	0	0	0	5	12	23	26	8	2	0	0	0	0	49.2	54.6	2	2.6	0	0	0	0	
1030	0	0	0	0	0	0	2	10	18	21	15	15	3	3	0	0	0	48.6	55.7	6	6.9	2	2.3	0	0	
1045	0	0	0	0	0	0	1	9	10	20	22	12	3	2	0	1	0	49.8	56.6	6	7.5	1	1.3	1	1.3	
1100	0	0	0	0	0	2	1	8	13	12	9	16	4	3	0	1	0	50	59.1	8	11.6	4	5.8	1	1.4	
1115	0	0	0	0	0	0	0	6	25	33	34	8	4	0	0	0	0	48.9	54.6	4	3.6	0	0	0	0	
1130	0	0	0	0	0	0	2	14	15	31	15	19	5	0	0	0	0	48.5	56.4	5	5	0	0	0	0	
1145	0	0	0	0	0	0	0	5	8	26	20	18	6	2	0	0	0	51.1	57.7	8	9.4	0	0	0	0	
1200	0	0	0	0	0	0	0	5	15	22	39	11	4	0	0	0	0	49.9	54.8	4	4.2	0	0	0	0	
1215	0	0	0	0	0	1	0	5	16	24	26	8	6	3	0	0	0	49.8	56.8	9	10.1	0	0	0	0	
1230	0	0	0	0	0	0	0	5	21	19	19	19	4	1	1	0	0	50.5	58.4	6	6.7	1	1.1	0	0	
1245	0	0	0	0	0	0	0	6	12	17	25	14	14	3	1	2	2	53.5	62.4	22	22.9	5	5.2	4	4.2	
1300	0	0	0	0	0	0	0	1	6	29	34	16	5	3	0	0	0	51.9	57.3	8	8.5	0	0	0	0	
1315	0	0	0	0	0	0	4	9	8	16	21	12	11	2	0	0	0	50.4	60.4	13	15.7	0	0	0	0	
1330	0	0	0	0	0	0	2	8	18	23	27	12	7	1	0	0	0	49.1	55.3	8	8.2	0	0	0	0	
1345	0	0	0	0	0	0	0	4	15	36	36	18	8	6	1	0	0	51.7	58.2	15	12.1	1	0.8	0	0	
1400	0	0	0	0	0	0	2	20	16	44	21	7	4	4	0	0	0	47.6	53.2	8	6.8	1	0.8	0	0	
1415	0	0	0	0	0	0	3	7	15	45	26	13	7	2	1	0	0	49.3	55.5	10	8.4	2	1.7	0	0	
1430	0	0	0	0	0	0	2	5	7	30	36	18	6	1	0	0	1	51.3	56.8	8	7.5	1	0.9	1	0.9	
1445	0	0	0	0	0	0	1	6	24	38	37	10	4	2	2	1	0	50	54.8	9	7.2	4	3.2	1	0.8	
1500	0	0	0	0	0	0	0	2	8	24	34	24	7	4	1	1	0	53.1	58.4	13	12.4	2	1.9	1	1	
1515	0	0	0	0	0	0	0	11	17	31	27	19	15	6	2	1	0	51.8	60.8	24	18.6	6	4.7	1	0.8	
1530	0	0	0	0	0	1	5	12	17	34	42	25	3	2	0	0	0	49.2	56.8	5	3.5	1	0.7	0	0	
1545	0	0	0	0	0	0	0	5	21	37	32	19	8	0	3	0	0	50.7	57.3	11	8.8	3	2.4	0	0	
1600	0	0	0	0	0	0	1	4	21	35	48	16	15	1	2	0	0	51.1	59.3	18	12.6	3	2.1	0	0	
1615	0	0	0	0	0	0	0	10	31	36	49	28	8	2	1	0	2	50.8	57.3	13	7.8	4	2.4	2	1.2	
1630	0	0	0	0	0	1	12	20	26	28	43	23	14	5	1	1	0	49.1	58.2	21	12.1	4	2.3	1	0.6	
1645	0	0	0	0	0	0	0	6	23	52	54	28	3	9	0	1	0	51.2	57.9	13	7.4	2	1.1	1	0.6	
1700	1	9	10	6	4	1	3	10	28	32	32	33	5	2	0	0	0	43.3	56.6	7	4	1	0.6	0	0	
1715	0	13	24	10	15	7	6	20	12	40	34	23	8	2	0	0	0	38.4	55	10	4.7	2	0.9	0	0	
1730	0	0	0	0	0	0	1	26	26	43	46	33	12	2	2	0	0	49.6	56.8	16	8.4	3	1.6	0	0	
1745	0	0	0	0	0	1	5	24	28	42	40	33	16	8	1	2	0	50.4	59.5	27	13.5	4	2	2	1	
1800	0	0	0	0	0	0	2	13	24	21	30	25	20	9	1	0	0	51.9	61.3	30	20.7	4	2.8	0	0	
1815	0	0	0	0	0	0	0	7	26	34	24	21	12	6	2	2	0	51.9	61.3	22	16.4	5	3.7	2	1.5	
1830	0	0	0	0	0	0	0	0	7	15	25	27	19	12	2	1	0	56.4	63.1	34	31.5	7	6.5	1	0.9	
1845	0	0	0	0	0	0	0	2	17	17	18	11	18	8	1	2	0	54	63.5	29	30.9	6	6.4	2	2.1	
1900	0	0	0	0	0	0	0	1	6	14	18	19	12	10	1	0	0	55.5	62.6	23	28.4	4	4.9	0	0	
1915	0	0	0	0	0	0	0	0	7	6	12	14	16	6	1	3	0	57.4	63.8	26	40	6	9.2	3	4.6	
1930	0	0	0	0	0	0	0	0	1	14	9	13	10	11	2	3	0	58.3	68.7	26	41.3	10	15.9	3	4.8	
1945	0	0	0	0	0	0	0	2	5	12	13	19	6	4	1	0	0	54.2	61.1	11	17.7	3	4.8	0	0	
2000	0	0	0	0	0	0	0	2	8	8	11	13	10	6	4	0	0	56	66.4	20	32.3	7	11.3	0	0	
2015	0	0	0	2	0	0	2	1	7	8	10	11	6	3	1	1	1	52	60.4	12	22.6	3	5.7	2	3.8	
2030	0	0	0	0	0	0	0	2	10	14	14	5	9	4	0	0	0	52	61.1	13	22.4	0	0	0	0	
2045	0	0	0	0	0	0	0	1	4	2	9	12	7	3	1	0	0	55.8	62.4	11	28.2	4	10.3	0	0	
2100	0	0	0	0	0	0	0	3	1	11	11	8	0	3	0	2	0	53	57.3	5	12.8	3	7.7	2	5.1	
2115	0	0	0	0	0	0	2	0	4	10	10	9	5	3	1	0	1	53.8	61.5	10	22.2	2	4.4	1	2.2	
2130	0	0	0	0	0	0	0	3	13	5	13	6	7	3	1	0	0	52.1	62	11	21.6	2	3.9	0	0	
2145	0	0	0	0	0	0	0	8	1	7	19	14	5	1	0	0	0	51.7	57.7	6	10.9	1	1.8	0	0	
2200	0	0	0	0	0	0	3	4	16	13	11	7	3	2	1	1	1	49.8	58.6	8	12.9	4	6.5	2	3.2	
2215	0	0	0	0	0	0	0	1	2	6	17	15	7	0	0	1	0	55	60.8	8	16.3	1	2	1	2	
2230	0	0	0	0	0	0	0	8	6	13	10	9	8	2	0	0	0	50.7	60.6	10	17.9	0	0	0	0	
2245	0	1	0	0	0	0	0	4	5	11	13	1	2	2	0	0	1	49.7	54.6	5	12.5	1	2.5	1	2.5	
2300	0	0	0	0	0	0	0	0	2	12	4	9	2	0	0	1	0	53.4	59.7	3	10	1	3.3	1	3.3	
2315	0	0	0	0	0	0	0	6	7	1	9	1	0	1	0	0	0	47.1	54.4	1	4	0	0	0	0	
2330	0	0	0	0	0	0	2	3	8	16	3	5	2	0	2	0	0	48.8	55.7	4	9.8	2	4.9	0	0	
2345	0	0	0	0	0	0	3	6	8	5	9	7	2	0	0	0	0	47.7	56.4	2	5	0	0	0	0	
07-19	**1**	**22**	**34**	**16**	**20**	**23**	**80**	**399**	**854**	**1445**	**1534**	**893**	**432**	**157**	**37**	**23**	**6**	**50.1**	**58.2**	**655**	**11**	**113**	**1.9**	**29**	**0.5**	
06-22	**1**	**22**	**34**	**18**	**20**	**24**	**88**	**440**	**956**	**1630**	**1774**	**1101**	**554**	**225**	**53**	**33**	**9**	**50.6**	**58.8**	**874**	**12.5**	**165**	**2.4**	**42**	**0.6**	
06-00	**1**	**23**	**34**	**18**	**20**	**24**	**96**	**472**	**1010**	**1707**	**1850**	**1155**	**580**	**232**	**56**	**36**	**11**	**50.6**	**58.8**	**915**	**12.5**	**174**	**2.4**	**47**	**0.6**	
00-00	**1**	**23**	**34**	**19**	**20**	**25**	**100**	**500**	**1068**	**1822**	**2024**	**1258**	**680**	**255**	**64**	**39**	**17**	**50.8**	**59.3**	**1055**	**13.3**	**200**	**2.5**	**56**	**0.7**	

13 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
0000	0	0	0	0	0	0	0	0	2	0	6	11	0	1	0	0	0	54.7	56.6	1	5	0	0	0	0	
0015	0	0	0	0	0	1	0	1	8	3	2	0	0	0	1	0	0	45.8	51.2	1	6.3	1	6.3	0	0	
0030	0	0	0	0	0	0	0	0	3	1	4	9	5	3	0	1	0	57.6	63.1	9	34.6	1	3.8	1	3.8	
0045	0	0	0	0	0	0	1	1	2	8	17	2	0	0	1	0	0	49.8	52.6	1	3.1	1	3.1	0	0	
0100	0	0	0	0	0	0	0	3	3	5	5	3	5	0	0	1	0	52.5	61.3	6	24	1	4	1	4	
0115	0	0	0	0	0	0	0	1	1	12	4	4	2	0	0	0	0	50.7	56.4	2	8.3	0	0	0	0	
0130	0	0	0	0	0	0	0	2	3	10	3	7	1	0	0	0	0	49.9	56.6	1	3.8	0	0	0	0	
0145	0	0	0	0	0	0	0	1	2	6	12	2	4	1	2	0	0	53.6	61.7	7	23.3	3	10	0	0	
0200	0	0	0	0	0	0	0	4	6	5	2	5	1	0	1	0	0	48.8	57.9	2	8.3	1	4.2	0	0	
0215	0	0	0	0	0	1	0	0	1	1	2	0	5	5	1	0	0	58.7	65.5	11	68.8	1	6.3	0	0	
0230	0	0	0	0	0	0	0	3	7	4	2	0	0	0	0	0	0	45.1	49.4	0	0	0	0	0	0	
0245	0	0	0	0	0	0	0	0	1	4	1	2	0	2	0	0	0	53.9	-	2	20	1	10	0	0	
0300	0	0	0	0	0	0	0	0	0	1	2	2	10	0	1	1	0	61.1	64.2	12	70.6	2	11.8	1	5.9	
0315	0	0	0	0	0	0	0	0	2	0	5	2	5	3	0	0	0	57.4	64.2	8	47.1	1	5.9	0	0	
0330	0	0	0	0	0	0	0	1	2	7	6	1	0	0	0	0	0	47.5	52.6	0	0	0	0	0	0	
0345	0	0	0	0	0	0	0	0	0	2	11	4	5	1	1	0	0	56.2	60.4	7	29.2	2	8.3	0	0	
0400	0	0	0	0	0	0	0	0	1	5	4	1	1	0	1	0	0	52.5	55.3	2	15.4	1	7.7	0	0	
0415	0	0	0	0	0	0	1	2	3	7	1	15	2	0	1	0	1	52.9	56.6	4	12.1	2	6.1	1	3	
0430	0	0	0	0	0	0	0	1	1	12	8	9	2	1	0	0	0	52.4	56.6	3	8.8	0	0	0	0	
0445	0	0	0	0	0	0	0	3	2	5	11	12	9	4	0	1	0	55.4	62.6	14	29.8	3	6.4	1	2.1	
0500	0	0	0	0	0	0	0	0	3	11	9	7	1	3	0	0	1	53.7	59.3	5	14.3	3	8.6	1	2.9	
0515	0	0	0	0	0	0	0	0	2	8	20	11	6	7	2	0	1	56.7	65.3	16	28.1	7	12.3	1	1.8	
0530	0	0	0	0	0	0	1	6	28	21	25	26	7	2	1	1	1	50.8	58.2	12	10.1	5	4.2	2	1.7	
0545	0	0	0	0	0	0	0	8	12	21	28	12	6	5	2	0	0	51.2	58.4	13	13.8	4	4.3	0	0	
0600	0	0	0	0	0	2	0	2	1	14	12	17	9	7	2	2	0	55.4	65.3	20	29.4	4	5.9	2	2.9	
0615	0	0	0	0	0	0	0	3	10	8	19	20	3	3	0	1	0	52.9	59.3	7	10.4	2	3	1	1.5	
0630	0	0	0	0	0	0	4	10	14	23	52	17	1	1	0	0	0	49.4	55.3	2	1.6	0	0	0	0	
0645	0	0	0	0	0	0	6	12	20	28	31	29	4	4	0	0	0	49.5	58.2	8	6	1	0.7	0	0	
0700	0	0	0	0	0	0	0	2	8	26	26	17	19	4	4	0	0	54.1	62.4	27	25.5	6	5.7	0	0	
0715	0	0	0	0	0	0	0	2	16	37	47	27	12	2	0	3	1	52.6	58.2	18	12.2	4	2.7	4	2.7	
0730	0	0	0	0	0	0	0	6	16	54	34	26	9	4	2	1	0	51.3	57.3	16	10.5	3	2	1	0.7	
0745	0	0	0	0	0	5	6	14	38	62	38	23	7	4	0	0	2	48.3	55.7	13	6.5	3	1.5	2	1	
0800	0	0	0	0	0	0	0	15	19	33	45	28	15	7	1	0	1	51.7	58.6	24	14.6	5	3	1	0.6	
0815	0	0	0	0	0	4	7	21	37	41	43	17	11	6	1	1	0	48.5	56.6	19	10.1	3	1.6	1	0.5	
0830	0	0	0	0	0	0	1	17	20	46	52	28	13	5	1	0	0	50.6	57.5	19	10.4	3	1.6	0	0	
0845	0	0	0	0	0	0	5	9	19	29	34	29	20	6	0	0	0	51.5	60.4	26	17.2	0	0	0	0	
0900	0	0	0	0	0	0	0	5	18	35	35	33	11	5	1	3	0	52.5	59.7	20	13.7	5	3.4	3	2.1	
0915	0	0	0	0	0	0	2	6	17	27	36	30	10	4	0	1	0	51.9	58.8	15	11.3	1	0.8	1	0.8	
0930	0	0	0	0	0	0	0	16	21	31	41	27	12	3	2	0	0	50.7	58.4	17	11.1	3	2	0	0	
0945	0	0	0	0	0	0	0	9	18	27	14	11	13	2	2	0	0	50.5	60.4	17	17.7	2	2.1	0	0	
1000	0	0	0	0	0	0	1	5	10	19	27	8	2	1	0	0	0	49.9	54.8	3	4.1	0	0	0	0	
1015	0	0	0	0	0	0	0	2	26	20	20	7	4	2	2	0	0	49.9	55.9	8	9.6	4	4.8	0	0	
1030	0	0	0	0	0	0	3	13	17	13	21	9	4	2	1	0	0	48.4	57	7	8.4	1	1.2	0	0	
1045	0	0	0	0	0	0	0	2	9	25	28	11	4	1	1	0	0	51.1	55.9	6	7.4	1	1.2	0	0	
1100	0	0	0	0	1	0	0	10	11	29	30	12	2	4	1	0	0	49.8	55.9	7	7	3	3	0	0	
1115	0	0	0	0	0	0	0	5	13	18	24	12	6	1	0	0	1	51	58.2	8	10	1	1.3	1	1.3	
1130	0	0	0	0	0	1	2	6	18	41	28	10	7	5	3	0	0	50.2	57.9	15	12.4	4	3.3	0	0	
1145	0	0	0	0	1	2	4	4	17	29	28	9	6	1	3	0	0	49	56.4	10	9.6	4	3.8	0	0	
1200	0	0	0	0	0	0	0	7	14	19	22	16	5	1	0	0	0	50.3	57.3	6	7.1	0	0	0	0	
1215	0	0	0	0	0	0	1	3	13	20	33	18	3	3	0	1	0	51.3	57.3	7	7.4	2	2.1	1	1.1	
1230	0	0	0	0	0	2	0	6	11	16	15	14	4	4	0	1	0	51.1	58.8	9	12.3	2	2.7	1	1.4	
1245	0	0	0	0	0	0	5	8	13	23	21	20	7	0	0	0	0	49.7	57.3	7	7.2	0	0	0	0	
1300	0	0	0	0	0	0	0	0	22	22	23	17	7	2	2	0	2	52.1	59.1	13	13.4	5	5.2	2	2.1	
1315	0	0	0	0	0	0	3	11	13	20	34	17	4	1	2	0	0	49.9	56.4	7	6.7	2	1.9	0	0	
1330	0	0	0	0	0	0	1	5	11	24	26	27	7	3	1	0	1	52.1	57.9	12	11.3	2	1.9	1	0.9	
1345	0	0	0	0	0	0	0	2	9	28	26	17	10	3	1	0	0	52.4	59.7	14	14.6	1	1	0	0	
1400	0	0	0	0	0	0	3	14	13	27	25	27	8	3	1	0	0	50.4	57.7	12	9.9	3	2.5	0	0	
1415	0	0	0	0	0	0	0	11	11	39	42	16	15	4	0	0	0	51.2	59.3	19	13.8	2	1.4	0	0	
1430	0	0	0	0	0	0	0	11	15	22	22	18	16	2	1	0	0	51.3	60.4	19	17.8	2	1.9	0	0	
1445	0	0	0	0	2	7	1	4	11	16	31	16	12	5	1	0	0	50.3	60.4	18	17	3	2.8	0	0	
1500	0	0	0	0	0	3	3	3	18	29	33	17	5	3	0	1	1	50.3	56.6	10	8.6	4	3.4	2	1.7	
1515	0	0	0	2	2	0	2	6	16	16	29	13	6	7	5	1	0	51.2	62.2	19	18.1	9	8.6	1	1	
1530	0	0	0	0	0	0	1	11	37	40	29	13	3	1	2	1	0	48.4	54.8	7	5.1	4	2.9	1	0.7	
1545	0	0	0	0	0	0	0	0	3	10	27	43	29	7	4	2	0	0	52.6	58.2	13	10.4	3	2.4	0	0
1600	0	0	0	0	0	0	0	0	9	26	26	31	40	15	6	0	0	0	51.7	59.7	21	13.7	1	0.7	0	0
1615	0	0	0	0	0	0	0	2	10	13	31	76	38	11	7	3	0	0	52.4	58.6	21	11	4	2.1	0	0
1630	0	0	0	0	0	0	0	2	4	33	39	40	26	10	6	5	1	0	51.5	59.1	22	13.3	8	4.8	1	0.6
1645	0	0	0	0	0	0	0	1	9	10	34	52	36	10	5	4	1	1	53.1	58.8	21	12.9	8	4.9	2	1.2
1700	0	0	0	0	0	0	2	4	14	14	40	34	42	14	8	1	1	0	51.5	59.5	24	13.8	5	2.9	1	0.6
1715	0	0	0	0	0	0	7	8	40	28	48	50	27	12	3	1	0	1	47.6	56.8	17	7.6	2	0.9	1	0.4
1730	0	0	0	0	0	0	0	1	3	19	49	47	50	8	13	1	0	0	52.6	58.4	22	11.5	6	3.1	0	0
1745	0	0	0	0	0	0	0	2	12	24	41	39	27	21	5	2	0	1	51.4	60.2	29	16.7	3	1.7	1	0.6
1800	0	0	0	0	0	0	2	3	19	29	36	35	28	20	5	5	0	0	50.7	60.4	30	16.5	7	3.8	0	0
1815	0	0	0	0	0	0	0	0	0	5	37	35	36	22	5	2	1	0	54.6	61.1	30	21	5	3.5	1	0.7
1830	0	0	0	0	0	0	0	0	1	2	14	35	37	19	10	2	1	1	56.7	63.8	33	27	6	4.9	2	1.6
1845	0	0	0	0	0	0	0	3	9	7	19	35	21	12	7	1	1	1	52.8	61.5	22	19	5	4.3	2	1.7
1900	0	0	0	0	0	0	0	1	2	3	10	14	22	20	4	5	1	2	57.7	64.2	32	38.1	9	10.7	3	3.6
1915	0	0	0	0	0	0	0	0	2	6	10	12	19	14	5	4	0	0	56.2	64.2	23	31.9	7	9.7	0	0
1930	0	0	0	0	0	0	0	0	1	3	12	22	10	10	6	5	1	0	56.2	67.1	22	31.4	9	12.9	1	1.4
1945	0	0	0	0	0	0	0	2	3	16	13	22	10	8	4	1	0	1	51.6	60.2	14	17.5	4	5	1	1.3
2000	0	0	0	0	0	0	0	3	9	15	13	10	2	10	3	3	0	54.7	67.3	18	26.5	8	11.8	3	4.4	
2015	0	0	0	0	0	1	0	2	1	11	16	14	12	2	0	1	1	55.2	62.6	16	26.2	3	4.9	2	3.3	
2030	0	0	0	0	0	0	0	4	4	6	7	13	6	5	1	0	0	54.2	63.1	12	26.1	3	6.5	0	0	
2045	0	0	0	0	0	0	0	0	3	13	8	10	9	3	0	1	0	1	50.3	57.9	5	10.4	2	4.2	1	2.1
2100	0	0	0	0	0	0	0	0	3	4	7	10	7	5	1	2	0	1	54.1	63.8	9	22.5	3	7.5	1	2.5
2115	0	0	0	0	0	0	0	0	4	1	12	8	19	5	1	2	0	0	53.5	59.7	8	15.4	3	5.8	0	0
2130	0	0	0	0	0	0	2	0	2	8	9	21	7	5	5	0	0	0	51.7	60.2	10	16.9	2	3.4	0	0
2145	0	0	0	0	0	0	0	0	5	13	13	10	3	7	1	1	2	0	50.6	61.7	11	20	3	5.5	2	3.6
2200	0	0	0	0	0	0	0	1	6	6	10	13	9	8	1	2	2	0	52.7	62.2	13	22.4	4	6.9	2	3.4
2215	0	0	0	0	0	0	1	0	5	4	9	9	12	9	4	1	1	0	53.4	60.6	15	27.3	3	5.5	1	1.8
2230	0	0	0	0	0	0	0	0	1	12	3	16	9	8	0	1	0	0	52.6	61.1	9	18	1	2	0	0
2245	0	0	0	0	0	0	1	0	4	5	5	12	9	4	0	0	1	57	63.1	14	34.1	4	9.8	1	2.4	
2300	0	0	0	0	0	1	0	3	4	5	4	5	1	1	1	1	0	51.2	59.7	4	15.4	2	7.7	1	3.8	
2315	0	0	0	0	0	0	0	0	9	14	6	3	2	3	0	1	0	51.1	58.8	6	15.8	2	5.3	1	2.6	
2330	0	0	0	0	0	0	0	0	2	10	11	1	3	0	2	1	0	53.2	60.8	6	20	3	10	1	3.3	
2345	0	0	0	0	0	0	0	5	5	10	7	0	1	1	0	0	0	47.5	52.3	2	6.9	1	3.4	0	0	
07-19	**0**	**0**	**0**	**2**	**6**	**35**	**77**	**404**	**815**	**1444**	**1614**	**1077**	**480**	**195**	**70**	**20**	**14**	**51.1**	**58.8**	**779**	**12.5**	**160**	**2.6**	**34**	**0.5**	
06-22	**0**	**0**	**0**	**2**	**6**	**40**	**90**	**465**	**941**	**1643**	**1893**	**1303**	**594**	**254**	**97**	**31**	**20**	**51.4**	**59.3**	**996**	**13.5**	**223**	**3**	**51**	**0.7**	
06-00	**0**	**0**	**0**	**2**	**6**	**42**	**92**	**485**	**987**	**1709**	**1964**	**1354**	**635**	**268**	**104**	**37**	**21**	**51.5**	**59.5**	**1065**	**13.8**	**243**	**3.2**	**58**	**0.8**	
00-00	**0**	**0**	**0**	**2**	**6**	**44**	**95**	**522**	**1082**	**1868**	**2154**	**1501**	**712**	**306**	**119**	**42**	**25**	**51.6**	**59.5**	**1204**	**14.2**	**283**	**3.3**	**67**	**0.8**	

14 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
0000	0	0	0	0	0	0	2	1	2	7	3	2	2	1	0	0	0	48.9	59.5	3	15	0	0	0	0	
0015	0	0	0	0	0	0	0	0	2	6	6	9	2	0	0	0	0	53.6	58.8	2	8	0	0	0	0	
0030	0	0	0	0	0	0	0	1	0	6	8	2	0	1	0	0	0	51.7	54.6	1	5.6	0	0	0	0	
0045	0	0	0	0	0	0	0	1	7	5	11	1	2	2	0	0	0	50.5	58.4	4	13.8	1	3.4	0	0	
0100	0	0	0	0	0	0	0	0	2	5	7	10	1	0	0	0	0	53	56.6	1	4	0	0	0	0	
0115	0	0	0	0	0	0	0	2	0	3	8	2	0	0	1	0	0	51.9	56.8	1	6.3	1	6.3	0	0	
0130	0	0	0	0	0	0	0	0	2	3	12	2	2	0	0	0	0	51.3	56.1	2	9.5	0	0	0	0	
0145	0	0	0	0	0	0	0	0	0	3	8	2	0	0	0	0	0	53.2	54.8	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	0	2	10	2	0	0	1	0	0	0	48.7	50.1	1	6.7	1	6.7	0	0	
0215	0	0	0	0	0	0	1	2	6	1	6	5	2	0	1	0	0	50.2	57.5	3	12.5	1	4.2	0	0	
0230	0	0	0	0	0	0	0	0	0	1	7	0	0	0	0	0	0	52 -		0	0	0	0	0	0	
0245	0	0	0	0	0	0	0	0	3	2	7	3	8	2	0	0	0	55.9	60.8	10	40	2	8	0	0	
0300	0	0	0	0	0	0	0	3	2	1	0	8	3	2	1	0	1	57.2	65.1	7	33.3	2	9.5	1	4.8	
0315	0	0	0	0	0	0	0	1	1	2	2	5	1	0	1	0	0	54.8	58.8	2	15.4	1	7.7	0	0	
0330	0	0	0	0	0	0	0	3	8	4	23	5	1	1	0	0	0	50.6	54.4	2	4.4	0	0	0	0	
0345	0	0	0	0	0	0	0	0	0	6	7	5	5	1	0	0	0	54.9	62.6	6	25	0	0	0	0	
0400	0	0	0	0	0	0	0	4	0	12	9	1	0	0	0	0	0	47.8	51.9	0	0	0	0	0	0	
0415	0	0	0	0	0	0	0	0	1	10	11	1	0	3	0	0	0	52.2	53.2	3	11.5	2	7.7	0	0	
0430	0	0	0	0	0	0	3	5	4	9	15	3	1	0	0	0	0	48.2	54.6	1	2.5	0	0	0	0	
0445	0	0	0	0	0	0	0	0	6	19	8	6	2	1	0	0	0	50.3	58.2	3	7.1	0	0	0	0	
0500	0	0	0	0	0	0	0	2	5	5	13	13	5	1	0	1	0	53.8	59.5	7	15.6	2	4.4	1	2.2	
0515	0	0	0	0	0	2	4	10	17	11	18	9	8	1	0	1	0	48.4	58.2	10	12.3	2	2.5	1	1.2	
0530	0	0	0	0	0	3	4	5	14	20	34	18	6	3	1	0	1	50.4	58.2	11	10.1	2	1.8	1	0.9	
0545	0	0	0	0	0	0	1	3	6	15	38	20	10	9	3	1	1	54.7	62.4	24	22.4	6	5.6	2	1.9	
0600	0	0	1	0	0	0	0	2	2	12	18	15	6	2	1	0	0	53.1	59.5	9	15.3	2	3.4	0	0	
0615	0	0	0	0	0	1	0	1	6	14	18	16	8	7	2	0	0	54.6	62.9	17	23.3	5	6.8	0	0	
0630	0	0	0	0	0	0	5	15	29	21	28	14	15	5	0	0	0	49.4	59.1	20	15.2	1	0.8	0	0	
0645	0	0	0	2	2	5	5	12	18	22	28	22	8	0	1	0	0	47.6	56.8	9	7.2	1	0.8	0	0	
0700	0	0	0	0	0	0	4	8	12	17	21	26	11	3	6	1	1	52.9	61.5	22	20	9	8.2	2	1.8	
0715	0	0	0	0	0	0	2	3	15	32	41	25	10	6	0	0	0	51.7	58.4	16	11.9	0	0	0	0	
0730	0	0	0	0	0	0	0	9	13	27	46	25	18	9	3	0	2	53.5	62.4	32	21.1	6	3.9	2	1.3	
0745	0	0	0	0	0	0	0	19	38	39	40	45	10	3	0	1	1	50.3	57.3	15	7.7	2	1	2	1	
0800	0	0	0	0	0	0	0	12	13	20	37	29	11	11	0	1	0	52.6	60.6	23	17.2	5	3.7	1	0.7	
0815	0	0	0	0	0	0	2	39	37	58	32	16	3	0	2	0	0	46.6	53.2	5	2.6	2	1.1	0	0	
0830	0	0	0	0	0	0	1	7	26	29	35	18	8	6	1	0	0	50.7	58.4	15	11.5	1	0.8	0	0	
0845	0	0	0	0	0	0	0	12	24	28	28	29	27	9	1	1	0	52.7	62.6	38	23.9	4	2.5	1	0.6	
0900	0	0	0	0	0	1	5	11	12	31	31	25	13	7	1	1	0	51.2	60.4	22	15.9	5	3.6	1	0.7	
0915	0	0	0	0	0	1	2	10	3	19	39	19	13	0	2	1	0	51.9	59.7	16	14.7	3	2.8	1	0.9	
0930	0	0	0	0	0	0	0	4	16	27	18	14	4	9	1	0	0	51.7	59.5	14	15.1	5	5.4	0	0	
0945	0	0	0	0	0	0	0	6	15	16	28	15	9	8	3	0	0	52.7	61.3	20	20	6	6	0	0	
1000	0	0	0	0	0	1	4	7	10	20	24	6	2	3	0	0	0	48.3	54.6	5	6.5	0	0	0	0	
1015	0	0	0	0	0	1	3	13	11	26	23	14	4	3	0	0	0	48.7	56.8	7	7.1	0	0	0	0	
1030	0	0	0	0	0	2	0	6	6	13	17	8	11	4	1	0	1	52.4	62.4	17	24.6	2	2.9	1	1.4	
1045	0	0	0	0	0	0	0	8	24	26	18	15	5	2	0	1	0	49.1	57.3	8	8.1	1	1	1	1	
1100	0	0	0	0	0	0	0	0	6	19	16	13	8	1	1	0	0	52.8	59.9	10	15.6	2	3.1	0	0	
1115	0	0	0	0	0	0	0	7	13	21	20	9	6	3	0	1	0	50.4	59.1	10	12.5	1	1.3	1	1.3	
1130	0	0	0	0	0	0	0	15	12	27	21	16	4	2	0	1	0	49.3	55.7	7	7.1	1	1	1	1	
1145	0	0	0	0	0	0	4	21	27	19	13	13	1	4	2	1	0	47.2	55.9	8	7.6	4	3.8	1	1	
1200	0	0	0	0	0	0	0	11	27	20	24	3	6	2	1	0	0	48.3	54.1	9	9.6	1	1.1	0	0	
1215	0	0	0	0	0	0	0	6	25	24	18	11	4	2	2	0	0	49.3	55.9	8	8.7	4	4.3	0	0	
1230	0	0	0	0	0	0	0	5	15	29	38	7	10	4	1	0	0	51.1	58.4	15	13.8	1	0.9	0	0	
1245	0	0	0	0	0	0	4	13	23	34	21	9	5	1	0	0	1	47.8	54.1	7	6.3	1	0.9	1	0.9	
1300	0	0	0	0	0	0	1	8	17	22	29	13	9	3	0	0	0	50.5	58.8	12	11.8	1	1	0	0	
1315	0	0	0	0	4	3	3	9	16	15	25	18	3	4	1	0	0	48.5	57.3	8	7.9	3	3	0	0	
1330	0	0	0	0	0	0	1	14	21	23	27	17	12	4	0	0	0	50	58.8	16	13.4	0	0	0	0	
1345	0	0	0	0	0	0	0	4	9	37	36	15	4	4	0	0	0	51	56.1	8	7.3	2	1.8	0	0	
1400	0	0	0	0	0	0	2	11	15	20	23	15	3	2	0	0	1	49.4	57	6	6.5	2	2.2	1	1.1	
1415	0	0	0	0	0	0	3	15	22	37	33	17	7	0	0	0	0	48.5	55.7	7	5.2	0	0	0	0	
1430	0	0	0	0	0	0	0	8	12	30	22	22	9	8	1	0	3	52.7	60.4	21	18.3	5	4.3	3	2.6	
1445	0	0	0	0	0	0	0	13	15	32	25	16	8	5	3	1	0	51	59.3	17	14.4	7	5.9	1	0.8	
1500	0	0	0	0	0	0	3	14	17	16	21	20	6	3	2	0	0	49.8	58.8	11	10.8	3	2.9	0	0	
1515	0	0	1	0	0	1	2	9	8	40	39	15	3	6	0	0	0	50.1	57	9	7.3	4	3.2	0	0	
1530	0	0	0	0	0	0	0	10	32	31	35	11	11	2	0	1	0	49.3	56.1	14	10.5	3	2.3	1	0.8	
1545	0	0	0	0	0	0	0	4	10	29	50	13	10	3	1	1	0	52	57.7	15	12.4	4	3.3	1	0.8	
1600	0	4	6	15	9	5	13	10	44	32	28	16	5	3	0	0	1	41.3	53.7	9	4.7	1	0.5	1	0.5	
1615	0	0	0	0	0	1	7	33	12	37	37	33	7	2	1	1	0	48.7	57.7	11	6.4	3	1.8	1	0.6	
1630	0	0	0	0	0	0	3	25	31	21	44	26	12	3	4	0	0	49.5	58.4	19	11.2	5	3	0	0	
1645	0	0	0	0	0	0	0	2	24	40	36	34	17	11	5	2	1	53.7	62.4	36	20.9	13	7.6	3	1.7	
1700	0	0	0	0	0	1	1	7	26	52	51	21	14	8	7	1	0	51.8	60.2	30	15.9	11	5.8	1	0.5	
1715	0	0	0	0	0	0	5	19	36	33	32	43	18	8	1	2	0	51	59.7	29	14.7	4	2	2	1	
1730	0	0	0	0	0	0	0	2	26	51	41	26	9	4	2	1	1	51.5	58.6	17	10.4	5	3.1	2	1.2	
1745	0	0	0	0	0	1	10	19	8	26	52	33	15	5	0	0	3	51.2	59.1	23	13.4	4	2.3	3	1.7	
1800	0	0	0	0	0	0	0	4	15	35	53	27	15	11	3	1	1	53.7	61.3	31	18.8	6	3.6	2	1.2	
1815	0	0	0	0	0	0	1	1	11	27	43	31	18	4	3	0	0	53.7	60.4	25	18	3	2.2	0	0	
1830	0	0	0	0	0	0	0	1	15	32	26	25	20	10	1	2	0	54.2	62.9	33	25	5	3.8	2	1.5	
1845	0	0	0	1	0	4	2	4	21	30	16	15	15	5	2	1	0	50.5	62.2	23	19.8	5	4.3	1	0.9	
1900	0	0	0	0	0	0	0	0	15	6	13	31	22	7	3	1	1	56.6	63.3	34	34.3	7	7.1	2	2	
1915	0	0	0	0	6	1	2	1	12	19	19	16	13	4	2	0	1	51.1	61.1	20	20.8	4	4.2	1	1	
1930	0	0	0	0	0	0	0	10	16	21	10	8	12	2	1	1	1	50.7	61.1	17	20.7	4	4.9	2	2.4	
1945	0	0	0	0	0	0	0	1	2	8	15	16	8	3	2	1	1	56.7	63.3	15	26.3	6	10.5	2	3.5	
2000	0	0	0	0	0	0	0	1	12	7	12	17	7	4	2	2	0	54.4	63.1	15	23.4	5	7.8	2	3.1	
2015	0	0	0	0	0	2	1	2	6	10	20	16	3	1	4	0	1	53	57.5	9	13.6	5	7.6	1	1.5	
2030	0	0	0	0	0	0	1	3	10	13	11	12	6	4	0	0	1	52.2	61.1	11	18	2	3.3	1	1.6	
2045	0	0	0	0	0	0	0	2	5	8	13	10	17	2	2	0	0	55.3	62.6	21	35.6	2	3.4	0	0	
2100	0	0	0	0	0	0	0	1	6	11	19	14	4	0	0	1	0	52.2	58.4	5	8.9	1	1.8	1	1.8	
2115	0	0	0	0	0	0	1	3	7	23	7	6	3	3	2	0	0	50.6	59.3	8	14.5	4	7.3	0	0	
2130	0	1	0	0	0	0	0	3	4	10	21	11	2	0	0	0	0	50.7	57.3	2	3.8	0	0	0	0	
2145	0	0	0	0	0	0	0	7	7	10	10	13	3	0	0	1	0	50.5	57.7	4	7.8	1	2	1	2	
2200	0	0	0	0	0	0	0	2	11	9	15	11	8	2	2	0	0	52.8	61.5	12	20	3	5	0	0	
2215	0	0	0	0	0	1	0	3	16	18	14	12	0	1	0	0	0	48.8	55.5	1	1.5	0	0	0	0	
2230	0	0	0	0	0	1	5	4	14	10	23	12	7	0	0	1	0	49.6	57.5	8	10.4	1	1.3	1	1.3	
2245	0	0	0	0	0	0	0	0	5	6	10	16	7	3	0	1	0	55.3	63.1	11	22.9	1	2.1	1	2.1	
2300	0	0	0	0	0	0	0	4	1	11	13	6	4	0	2	0	1	53.6	62.9	7	16.7	3	7.1	1	2.4	
2315	0	0	0	0	0	0	0	2	7	5	6	10	0	1	1	0	0	51.3	55.9	2	6.3	1	3.1	0	0	
2330	0	0	0	0	0	0	0	0	1	18	7	1	1	0	0	0	0	49.5	51.7	1	3.6	0	0	0	0	
2345	0	0	0	0	0	0	0	1	4	5	7	1	3	0	0	0	0	50.1	55.3	3	14.3	0	0	0	0	
07-19	**0**	**4**	**7**	**16**	**13**	**22**	**88**	**498**	**886**	**1369**	**1473**	**932**	**453**	**220**	**65**	**24**	**17**	**50.5**	**58.8**	**779**	**12.8**	**165**	**2.7**	**41**	**0.7**	
06-22	**0**	**5**	**8**	**18**	**21**	**31**	**103**	**562**	**1043**	**1584**	**1735**	**1169**	**590**	**264**	**87**	**31**	**23**	**50.8**	**59.3**	**995**	**13.7**	**215**	**3**	**54**	**0.7**	
06-00	**0**	**5**	**8**	**18**	**21**	**33**	**108**	**578**	**1102**	**1666**	**1830**	**1238**	**620**	**271**	**92**	**33**	**24**	**50.8**	**59.3**	**1040**	**13.6**	**224**	**2.9**	**57**	**0.7**	
00-00	**0**	**5**	**8**	**18**	**21**	**38**	**123**	**621**	**1192**	**1832**	**2093**	**1370**	**681**	**300**	**100**	**36**	**27**	**50.9**	**59.3**	**1144**	**13.5**	**247**	**2.9**	**63**	**0.7**	

15 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
0000	0	0	0	0	0	0	1	3	11	8	4	1	2	1	0	0	1	48.1	53	4	12.5	2	6.3	1	3.1	
0015	0	0	0	0	0	0	0	1	2	6	4	4	2	4	1	1	0	56.1	67.1	8	32	2	8	1	4	
0030	0	0	0	0	0	0	0	0	6	12	8	2	1	1	1	0	0	50.8	53	3	9.7	2	6.5	0	0	
0045	0	0	0	0	0	0	0	2	1	7	12	7	2	0	2	0	0	53.7	58.4	4	12.1	2	6.1	0	0	
0100	0	0	0	0	0	0	0	4	0	10	4	2	1	0	0	0	0	48.8	51.9	1	4.8	0	0	0	0	
0115	0	0	0	0	0	0	0	0	0	6	15	1	2	1	0	0	0	53.7	54.8	3	12	0	0	0	0	
0130	0	0	0	0	0	0	0	2	4	10	4	12	3	1	0	0	0	51.7	57.7	4	11.1	1	2.8	0	0	
0145	0	0	0	0	0	0	0	0	2	2	13	7	1	0	0	0	0	52.9	55.5	1	4	0	0	0	0	
0200	0	0	0	0	0	0	0	1	7	2	9	0	1	12	0	0	1	55.5	65.5	14	42.4	1	3	1	3	
0215	0	0	0	0	0	0	0	0	2	6	7	1	0	6	0	0	1	55.5	65.8	7	30.4	1	4.3	1	4.3	
0230	0	0	0	0	0	0	0	1	0	8	5	11	0	1	0	0	0	53.5	57.7	1	3.8	0	0	0	0	
0245	0	0	0	0	0	0	0	0	0	3	4	9	3	3	0	0	0	56.5	63.1	6	27.3	2	9.1	0	0	
0300	0	0	0	0	0	0	3	10	4	2	9	0	1	1	0	0	0	44.3	51.2	2	6.7	1	3.3	0	0	
0315	0	0	0	0	0	0	0	2	1	3	4	1	0	0	0	0	0	47.5	52.1	0	0	0	0	0	0	
0330	0	0	0	0	0	0	0	1	3	9	3	3	0	1	0	0	0	50.1	55.7	1	5	1	5	0	0	
0345	0	0	0	0	0	0	0	6	0	4	3	7	2	0	0	0	0	49.8	57.3	2	9.1	0	0	0	0	
0400	0	0	0	0	0	0	0	2	5	10	7	3	1	0	0	0	0	49.4	54.4	1	3.6	0	0	0	0	
0415	0	0	0	0	0	0	0	2	8	5	11	5	2	2	1	0	0	51.4	58.8	5	13.9	1	2.8	0	0	
0430	0	0	0	0	0	0	0	2	2	8	2	5	5	2	0	0	0	53.7	62.6	7	26.9	2	7.7	0	0	
0445	0	0	0	0	0	1	0	3	5	9	14	17	4	1	0	0	0	51.9	57.5	5	9.3	0	0	0	0	
0500	0	0	0	0	0	0	1	0	9	9	17	5	4	0	3	0	0	51.9	59.3	7	14.6	3	6.3	0	0	
0515	0	0	0	0	0	0	0	2	6	8	30	10	2	2	1	0	0	52.6	56.4	5	8.2	2	3.3	0	0	
0530	0	0	0	0	0	0	1	8	20	33	23	19	8	2	1	1	0	50.4	58.8	12	10.3	3	2.6	1	0.9	
0545	0	0	0	0	0	0	0	5	22	22	21	11	21	6	3	0	0	52.6	63.1	30	27	6	5.4	0	0	
0600	0	0	1	0	0	0	0	2	6	10	16	11	7	10	0	0	1	54.4	65.8	18	28.1	6	9.4	1	1.6	
0615	0	0	0	0	0	1	0	2	2	14	24	21	7	6	2	2	1	55.7	64.2	18	22	8	9.8	3	3.7	
0630	0	0	0	0	0	0	0	13	7	14	37	26	11	2	0	0	1	52.2	59.3	14	12.6	2	1.8	1	0.9	
0645	0	0	0	0	0	0	4	5	15	20	19	13	22	6	3	0	0	52.5	63.1	31	29	5	4.7	0	0	
0700	0	0	0	0	0	0	2	3	12	17	45	26	9	4	0	0	0	52.4	58.6	13	11	2	1.7	0	0	
0715	0	0	0	0	0	0	0	1	18	52	37	22	6	4	3	0	0	51.6	58.8	13	9.1	4	2.8	0	0	
0730	0	0	0	0	0	1	7	13	34	47	38	17	14	3	1	0	0	48.8	57.7	18	10.3	1	0.6	0	0	
0745	0	0	0	0	0	0	0	5	36	63	48	16	10	2	1	0	0	49.7	55.3	13	7.2	2	1.1	0	0	
0800	0	0	0	0	0	0	4	17	22	37	29	28	10	2	1	0	0	49.7	57.7	13	8.7	3	2	0	0	
0815	0	0	0	0	0	0	0	5	20	31	55	36	8	1	0	0	0	51.5	56.8	9	5.8	0	0	0	0	
0830	0	0	0	0	0	0	6	17	30	26	46	26	5	7	0	0	1	49.3	56.1	13	7.9	3	1.8	1	0.6	
0845	0	0	0	0	0	0	1	13	28	43	31	21	6	3	3	1	0	49.6	57.3	13	8.7	5	3.3	1	0.7	
0900	0	0	0	0	0	0	5	4	7	23	33	20	7	4	4	0	0	52	57.9	15	14	6	5.6	0	0	
0915	0	0	0	0	2	0	2	13	15	9	22	18	7	4	0	1	0	49.9	59.1	12	12.9	1	1.1	1	1.1	
0930	0	0	0	0	0	0	4	8	29	30	18	8	3	2	0	0	0	47.2	54.4	5	4.9	0	0	0	0	
0945	0	0	0	0	1	0	5	9	21	31	20	10	4	2	2	0	0	47.9	55.5	8	7.6	2	1.9	0	0	
1000	0	0	0	0	0	0	0	3	15	21	26	16	4	4	0	1	0	51.5	57.5	9	10	2	2.2	1	1.1	
1015	0	0	1	0	0	0	3	19	19	22	23	9	6	2	0	0	0	47	55.5	8	7.7	0	0	0	0	
1030	0	0	0	0	0	0	2	7	24	17	25	16	1	1	0	0	0	48.7	56.4	2	2.2	0	0	0	0	
1045	0	0	0	0	0	0	0	10	14	32	28	21	1	1	2	0	0	49.7	56.6	4	3.7	2	1.8	0	0	
1100	0	0	0	0	0	0	0	4	12	23	27	10	6	2	0	0	0	50.8	56.8	8	9.5	0	0	0	0	
1115	0	0	0	0	4	3	0	2	14	22	20	6	6	2	1	2	0	49.2	59.1	11	13.4	3	3.7	2	2.4	
1130	0	0	0	0	0	0	2	16	15	20	26	17	2	2	1	0	0	49.1	56.4	5	5	3	3	0	0	
1145	0	0	0	0	0	0	0	16	39	24	16	11	2	0	1	0	1	47	54.4	4	3.6	2	1.8	1	0.9	
1200	0	0	0	0	1	0	6	13	24	16	20	11	8	1	2	1	0	48	58.4	12	11.7	4	3.9	1	1	
1215	0	0	0	1	1	0	3	8	10	29	21	20	10	2	0	0	0	50.1	58.8	12	11.4	0	0	0	0	
1230	0	0	0	0	0	0	0	1	10	22	22	12	3	5	1	1	0	52.3	58.4	10	13	3	3.9	1	1.3	
1245	0	0	0	0	0	0	0	9	15	20	21	13	8	6	3	1	1	52.3	60.4	19	19.6	7	7.2	2	2.1	
1300	0	0	0	0	0	1	0	10	20	35	20	18	8	1	3	0	0	49.8	58.2	12	10.3	4	3.4	0	0	
1315	0	0	0	0	0	0	2	5	13	27	24	9	10	0	1	0	0	50	58.6	11	12.1	1	1.1	0	0	
1330	0	0	0	0	0	3	9	16	14	20	25	15	5	1	2	0	1	48.1	55.9	9	8.1	3	2.7	1	0.9	
1345	0	0	0	0	0	6	11	12	23	29	19	10	7	2	1	1	1	46.9	56.8	12	9.8	4	3.3	2	1.6	
1400	0	0	0	0	2	0	0	2	5	34	24	7	10	3	2	1	1	52.1	61.5	17	18.7	4	4.4	2	2.2	
1415	0	0	0	0	1	0	3	21	27	36	25	19	9	1	0	0	1	48.1	57.3	11	7.7	1	0.7	1	0.7	
1430	0	0	0	0	0	0	1	6	8	23	26	21	7	5	2	0	0	52.2	59.3	14	14.1	4	4	0	0	
1445	0	0	0	0	0	0	6	17	28	21	35	13	9	2	3	0	1	49.1	57.3	15	11.1	4	3	1	0.7	
1500	0	0	0	0	0	0	0	1	17	38	26	9	8	3	0	0	0	50.7	55.9	11	10.8	2	2	0	0	
1515	0	0	0	0	0	0	3	4	13	17	30	21	9	3	2	0	0	51.9	59.7	14	13.7	3	2.9	0	0	
1530	0	0	0	0	4	1	8	10	20	20	33	17	7	4	2	1	1	48.9	57.9	15	11.7	6	4.7	2	1.6	
1545	0	0	0	0	0	4	4	8	20	28	27	22	9	7	0	0	0	49.8	59.1	16	12.4	3	2.3	0	0	
1600	0	0	0	0	1	4	3	15	29	28	35	22	8	4	2	2	0	49	58.4	16	10.5	5	3.3	2	1.3	
1615	0	0	0	0	0	0	4	15	15	34	41	32	14	7	1	0	0	51.2	59.1	22	13.5	3	1.8	0	0	
1630	0	0	0	0	0	7	5	16	38	42	29	20	11	3	1	0	0	47.7	56.8	15	8.7	1	0.6	0	0	
1645	0	0	0	2	7	16	12	14	26	35	40	26	9	0	1	0	0	45.3	56.1	10	5.3	1	0.5	0	0	
1700	0	0	0	0	0	0	0	9	30	29	39	39	19	7	2	0	1	52.3	60.4	29	16.6	6	3.4	1	0.6	
1715	0	0	0	0	0	3	8	25	36	36	57	21	8	10	2	0	1	48.8	57.5	21	10.1	7	3.4	1	0.5	
1730	0	0	0	0	0	0	0	1	25	27	45	42	18	11	1	2	0	53.6	60.4	32	18.6	6	3.5	2	1.2	
1745	0	0	0	0	0	4	9	20	51	42	44	26	16	4	0	1	0	48.2	57.3	21	9.7	2	0.9	1	0.5	
1800	0	0	0	0	0	1	10	9	17	43	52	33	20	2	1	3	1	51.4	58.6	27	14.1	5	2.6	4	2.1	
1815	0	0	0	0	0	0	1	1	8	33	37	28	21	8	1	1	0	54.2	60.8	31	22.3	6	4.3	1	0.7	
1830	0	0	0	0	0	0	2	6	7	19	33	35	16	7	5	2	2	55.5	63.8	32	23.9	10	7.5	4	3	
1845	0	0	0	0	0	0	5	12	13	31	26	10	15	5	4	0	0	50.5	62	24	19.8	5	4.1	0	0	
1900	0	0	0	0	0	3	17	13	18	11	18	13	11	9	2	1	1	48.9	62.2	24	20.5	8	6.8	2	1.7	
1915	0	0	0	0	0	0	2	7	8	16	12	24	9	6	2	0	0	53.2	62	17	19.8	6	7	0	0	
1930	0	0	0	0	0	0	0	2	10	14	17	22	12	9	5	1	1	56	65.3	28	30.1	9	9.7	2	2.2	
1945	0	0	0	0	0	0	3	6	4	9	11	10	13	6	2	1	0	54	62.9	22	33.8	4	6.2	1	1.5	
2000	0	0	0	0	0	0	3	6	6	16	13	12	10	1	1	2	1	52.6	60.6	15	21.1	4	5.6	3	4.2	
2015	0	0	0	0	0	0	1	3	5	10	11	7	3	4	2	0	0	52.7	62.2	9	19.6	3	6.5	0	0	
2030	0	0	0	0	0	0	1	3	7	5	10	8	11	3	1	0	2	54.8	62.4	17	33.3	4	7.8	2	3.9	
2045	0	0	0	0	0	0	0	0	6	11	18	10	3	3	2	0	1	53.6	60.2	9	16.7	5	9.3	1	1.9	
2100	0	0	0	0	0	0	0	5	6	8	19	6	5	2	5	0	0	53.2	62.9	12	21.4	5	8.9	0	0	
2115	0	0	0	0	0	0	0	2	6	10	14	10	3	1	0	0	0	51.1	57.3	4	8.7	0	0	0	0	
2130	0	0	0	0	0	0	5	6	13	5	14	5	4	2	0	0	0	48.2	58.8	6	11.1	1	1.9	0	0	
2145	0	0	0	0	0	0	0	5	12	11	19	7	5	3	0	1	0	50.9	59.3	9	14.3	1	1.6	1	1.6	
2200	0	0	0	0	0	1	3	4	3	12	9	11	3	2	0	0	0	50	58.6	5	10.4	0	0	0	0	
2215	0	0	0	0	0	0	0	3	11	20	17	10	1	2	0	0	0	50	55.3	3	4.7	2	3.1	0	0	
2230	0	0	0	0	0	0	0	0	5	4	6	12	6	2	0	0	1	55.8	64.6	9	25	2	5.6	1	2.8	
2245	0	0	0	0	0	0	0	2	4	9	15	10	5	3	0	1	1	54.7	62.4	10	20	2	4	2	4	
2300	0	0	0	0	0	0	0	1	10	9	2	4	1	0	1	0	0	49.6	59.1	2	7.1	1	3.6	0	0	
2315	0	0	0	0	0	0	0	4	2	10	9	8	4	3	0	0	1	53.2	61.3	8	19.5	1	2.4	1	2.4	
2330	0	0	0	0	0	0	1	2	3	10	18	5	1	0	1	0	0	50.4	55	2	4.9	1	2.4	0	0	
2345	0	0	0	0	0	0	0	0	3	6	10	2	0	1	0	0	0	50.8	54.8	1	4.5	1	4.5	0	0	
07-19	**0**	**0**	**1**	**3**	**24**	**54**	**158**	**471**	**986**	**1404**	**1489**	**925**	**419**	**166**	**65**	**22**	**14**	**50**	**58.2**	**686**	**11.1**	**151**	**2.4**	**36**	**0.6**	
06-22	**0**	**0**	**2**	**3**	**24**	**58**	**194**	**551**	**1117**	**1588**	**1761**	**1130**	**555**	**239**	**92**	**30**	**23**	**50.4**	**59.1**	**939**	**12.7**	**222**	**3**	**53**	**0.7**	
06-00	**0**	**0**	**2**	**3**	**24**	**59**	**198**	**567**	**1158**	**1668**	**1847**	**1192**	**576**	**252**	**94**	**31**	**26**	**50.5**	**59.1**	**979**	**12.7**	**232**	**3**	**57**	**0.7**	
00-00	**0**	**0**	**2**	**3**	**24**	**60**	**204**	**624**	**1278**	**1870**	**2080**	**1335**	**644**	**299**	**107**	**33**	**29**	**50.6**	**59.1**	**1112**	**12.9**	**264**	**3.1**	**62**	**0.7**	

16 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
0000	0	0	0	0	0	0	1	1	3	10	10	2	4	1	0	1	0	51.3	60.4	6	18.2	1	3	1	3	
0015	0	0	0	0	0	0	0	1	1	2	2	1	0	0	1	0	0	52	-	1	12.5	1	12.5	0	0	
0030	0	0	0	0	0	0	0	0	1	10	16	2	5	2	0	0	0	53.5	62.9	7	19.4	0	0	0	0	
0045	0	0	0	0	0	0	0	0	3	7	6	0	0	1	0	0	1	51.8	52.6	2	11.1	1	5.6	1	5.6	
0100	0	0	0	0	0	0	2	5	3	6	8	2	4	0	0	0	0	48.3	59.3	4	13.3	0	0	0	0	
0115	0	0	0	0	0	0	0	2	0	9	7	6	0	0	1	0	0	51.6	56.6	1	4	1	4	0	0	
0130	0	0	0	0	0	0	0	0	1	5	6	3	2	0	0	0	0	51.8	56.1	2	11.8	0	0	0	0	
0145	0	0	0	0	0	0	0	0	4	5	7	2	0	0	0	0	0	49.3	52.3	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	0	3	4	5	3	2	0	0	0	1	54	59.7	3	16.7	1	5.6	1	5.6	
0215	0	0	0	0	0	0	0	2	3	5	10	3	3	0	1	1	0	52.6	61.5	5	17.9	2	7.1	1	3.6	
0230	0	0	0	0	0	0	0	2	1	8	2	7	0	0	0	0	0	50.5	57.9	0	0	0	0	0	0	
0245	0	0	0	0	0	0	0	0	1	4	5	3	4	0	1	0	0	54.8	62.2	5	27.8	1	5.6	0	0	
0300	0	0	0	0	0	0	0	5	5	12	1	4	0	2	1	0	0	48.8	56.6	3	10	1	3.3	0	0	
0315	0	0	0	0	0	0	0	1	4	1	4	3	1	1	0	0	0	52	59.7	2	13.3	1	6.7	0	0	
0330	0	0	0	0	0	0	0	0	3	7	8	1	3	2	0	1	0	53.7	60.2	6	24	1	4	1	4	
0345	0	0	0	0	0	0	1	1	6	7	3	2	1	1	1	0	0	49.8	58.2	3	13	2	8.7	0	0	
0400	0	0	0	0	0	0	0	0	6	13	3	0	2	0	0	0	0	48.3	51.9	2	8.3	0	0	0	0	
0415	0	0	0	0	0	0	0	1	8	20	1	2	2	0	0	0	0	48.2	49.7	2	5.9	0	0	0	0	
0430	0	0	0	0	0	0	1	0	4	17	4	0	2	1	0	0	0	49.1	51.9	3	10.3	0	0	0	0	
0445	0	0	0	0	0	0	1	6	9	16	3	8	1	1	0	0	1	48.4	55.3	3	6.5	1	2.2	1	2.2	
0500	0	0	0	0	0	0	0	0	4	5	15	5	0	2	2	0	0	53.4	55.7	4	12.1	3	9.1	0	0	
0515	0	0	0	0	0	0	0	1	10	10	20	9	7	4	1	1	0	53.7	62.2	13	20.6	4	6.3	1	1.6	
0530	0	0	0	0	0	0	0	1	8	25	39	16	9	2	1	0	0	52.8	58.2	12	11.9	1	1	0	0	
0545	0	0	0	1	0	0	0	4	17	20	14	18	13	6	2	0	0	52.7	62.4	21	22.1	4	4.2	0	0	
0600	0	0	0	0	0	0	0	4	7	18	14	10	8	3	2	0	0	52.5	59.9	13	19.7	4	6.1	0	0	
0615	0	0	0	0	0	1	0	2	7	11	22	10	17	3	1	1	0	54	61.5	22	29.3	3	4	1	1.3	
0630	0	0	0	0	0	0	1	14	14	28	31	13	3	1	0	0	0	48.8	54.8	4	3.8	0	0	0	0	
0645	0	0	0	0	0	0	2	2	16	14	25	27	12	8	1	1	0	53.7	61.3	22	20.4	6	5.6	1	0.9	
0700	0	0	0	0	0	0	1	1	7	15	19	32	14	8	3	0	0	55.3	61.5	25	25	5	5	0	0	
0715	0	0	0	0	0	0	0	5	24	29	30	19	18	9	3	0	0	52.6	61.1	30	21.9	6	4.4	0	0	
0730	0	0	0	0	0	2	0	5	16	50	33	20	21	4	1	1	0	51.8	60.6	27	17.6	2	1.3	1	0.7	
0745	0	0	0	0	0	0	0	16	21	36	47	20	11	2	1	1	1	50.5	57.7	16	10.3	4	2.6	2	1.3	
0800	0	0	0	0	0	0	11	12	27	31	47	36	10	5	3	0	0	50.1	58.2	18	9.9	5	2.7	0	0	
0815	0	0	0	0	0	0	0	3	24	39	27	30	17	4	2	0	0	52.2	59.9	23	15.8	2	1.4	0	0	
0830	0	0	0	0	0	3	7	11	31	43	28	30	5	2	4	2	1	49.6	57.9	14	8.4	8	4.8	3	1.8	
0845	0	0	0	0	1	1	1	9	22	35	33	33	11	6	1	1	0	51.4	59.7	19	12.3	2	1.3	1	0.6	
0900	0	0	0	0	0	0	0	3	11	19	24	19	7	2	1	1	0	52.4	59.3	11	12.6	2	2.3	1	1.1	
0915	0	0	3	4	5	6	0	7	9	12	25	15	11	1	2	0	0	46.7	59.7	14	14	3	3	0	0	
0930	0	0	0	0	0	0	0	11	20	17	13	16	6	3	2	0	0	49.7	57.7	11	12.5	4	4.5	0	0	
0945	0	0	0	0	1	0	3	9	27	19	23	10	9	2	2	1	0	48.9	57	14	13.2	3	2.8	1	0.9	
1000	0	0	0	0	0	0	0	9	13	22	34	10	2	2	0	1	0	49.9	55	5	5.4	2	2.2	1	1.1	
1015	0	0	1	0	1	0	0	7	13	15	26	17	11	4	1	0	0	51.6	60.6	16	16.7	2	2.1	0	0	
1030	0	0	0	0	0	0	4	7	17	28	23	15	5	3	0	0	0	49.2	57.3	8	7.8	0	0	0	0	
1045	0	0	0	0	0	0	0	23	21	25	26	11	3	3	0	0	0	47.6	54.1	6	5.4	0	0	0	0	
1100	0	0	0	0	0	0	3	9	24	18	13	18	3	0	0	0	1	48.5	57.7	4	4.5	1	1.1	1	1.1	
1115	0	0	0	0	0	0	0	12	22	39	16	10	3	1	2	0	0	47.9	53.7	6	5.7	3	2.9	0	0	
1130	0	0	0	0	1	7	6	12	11	14	23	15	14	0	1	0	0	48.3	59.1	15	14.4	1	1	0	0	
1145	0	0	0	0	0	0	0	9	19	26	14	15	4	3	1	2	0	49.9	57.7	10	10.8	5	5.4	2	2.2	
1200	0	0	0	0	0	0	0	12	21	19	28	17	7	2	1	1	0	50.2	58.4	11	10.2	2	1.9	1	0.9	
1215	0	0	0	0	6	6	3	11	24	35	26	15	2	1	0	0	0	45.8	54.6	3	2.3	0	0	0	0	
1230	0	0	0	0	1	0	2	15	25	24	20	6	9	4	2	0	0	48.2	56.8	15	13.9	3	2.8	0	0	
1245	0	0	1	0	0	0	1	17	31	33	31	10	6	2	0	0	1	48.1	54.6	9	6.8	1	0.8	1	0.8	
1300	0	0	0	0	0	0	2	6	20	23	23	10	5	1	2	1	0	49.8	56.4	9	9.7	4	4.3	1	1.1	
1315	0	0	0	3	2	0	3	12	14	25	24	11	10	1	1	1	1	48.6	57.9	14	13	3	2.8	2	1.9	
1330	0	0	0	0	0	9	3	22	25	25	19	15	2	2	1	1	0	45.9	55	6	4.8	3	2.4	1	0.8	
1345	0	0	0	0	0	0	2	7	20	30	29	21	5	4	1	1	0	50.6	58.4	11	9.2	4	3.3	1	0.8	
1400	0	0	0	0	2	0	5	11	23	37	32	19	4	7	0	0	0	49.1	56.8	11	7.9	2	1.4	0	0	
1415	0	0	0	0	2	1	7	6	38	30	33	19	4	5	4	0	2	49.2	56.4	15	9.9	7	4.6	2	1.3	
1430	0	0	0	0	1	4	4	2	20	27	25	18	12	0	3	1	0	50.2	59.3	16	13.7	4	3.4	1	0.9	
1445	0	0	0	0	0	0	7	22	24	18	20	19	15	4	1	1	0	49.1	59.9	21	16	3	2.3	1	0.8	
1500	0	0	0	0	0	0	4	5	24	34	30	20	13	2	2	1	0	50.8	58.6	18	13.3	4	3	1	0.7	
1515	0	0	0	0	0	0	1	8	19	33	37	12	10	0	1	0	1	50.3	56.4	12	9.8	2	1.6	1	0.8	
1530	0	0	0	0	0	0	0	13	27	24	23	18	9	4	4	1	1	50.8	59.9	19	15.3	6	4.8	2	1.6	
1545	0	0	0	0	0	6	3	22	22	31	35	20	10	3	2	0	0	48.5	57.7	15	9.7	3	1.9	0	0	
1600	0	0	0	0	0	0	8	25	35	33	36	20	9	4	1	0	0	48.1	56.6	14	8.2	2	1.2	0	0	
1615	0	0	0	0	0	0	7	17	25	56	40	27	11	4	2	1	0	49.5	57.3	18	9.5	4	2.1	1	0.5	
1630	0	0	0	0	0	0	1	5	22	40	46	31	8	6	3	2	0	52	58.4	19	11.6	6	3.7	2	1.2	
1645	0	0	0	0	1	3	9	18	36	28	48	24	10	5	1	0	0	48.7	57.3	16	8.7	1	0.5	0	0	
1700	0	0	0	0	0	1	9	11	23	40	39	31	13	5	3	0	0	50.2	58.8	21	12	3	1.7	0	0	
1715	0	0	0	0	0	0	0	7	20	31	39	36	10	5	6	0	0	52.6	59.7	21	13.6	7	4.5	0	0	
1730	0	0	0	0	4	6	23	12	20	33	27	19	12	3	2	2	1	47.1	57	20	12.2	7	4.3	3	1.8	
1745	0	0	0	0	0	0	1	4	13	50	49	34	15	8	2	0	0	52.5	59.7	25	14.2	3	1.7	0	0	
1800	0	0	0	0	1	1	4	21	10	12	24	38	17	11	2	1	0	52.3	62	31	21.8	3	2.1	1	0.7	
1815	0	0	0	0	0	0	2	7	10	19	35	33	20	8	4	2	0	54.6	62.6	34	24.3	9	6.4	2	1.4	
1830	0	0	0	0	0	0	0	7	12	17	32	15	17	4	2	1	1	53.5	62.4	25	23.1	4	3.7	2	1.9	
1845	0	0	0	0	0	0	1	12	14	21	26	14	14	5	1	0	0	51.1	60.4	20	18.5	1	0.9	0	0	
1900	0	0	0	0	0	0	1	3	7	14	28	12	20	7	3	1	0	55.3	64.6	31	32.3	6	6.3	1	1	
1915	0	0	0	0	0	0	0	0	8	8	13	18	16	7	1	1	0	56.6	63.8	25	34.7	3	4.2	1	1.4	
1930	0	0	0	0	0	1	0	5	7	11	17	16	8	4	1	1	1	53.3	60.4	15	20.8	4	5.6	2	2.8	
1945	0	0	0	0	0	0	1	4	7	11	19	8	7	4	1	4	2	54.6	64.9	18	26.5	8	11.8	6	8.8	
2000	0	0	0	0	0	1	3	9	4	14	12	13	7	4	1	0	0	51	60.6	12	17.6	2	2.9	0	0	
2015	0	0	0	0	0	0	1	4	5	8	7	11	6	5	2	1	0	53.8	67.1	14	28	5	10	1	2	
2030	0	0	0	0	0	0	0	3	6	11	17	12	5	2	1	0	0	52.4	59.1	8	14	1	1.8	0	0	
2045	0	0	0	0	0	0	0	4	2	8	20	8	9	2	3	0	4	56.3	64.6	18	30	7	11.7	4	6.7	
2100	0	0	0	0	0	0	0	0	2	10	14	14	9	6	2	2	0	1	52.6	62	11	18.3	3	5	1	1.7
2115	0	0	0	0	0	0	0	3	5	7	9	8	7	10	1	0	0	0	50.6	62.6	11	22	0	0	0	0
2130	0	0	0	0	0	0	0	1	11	4	15	12	8	1	1	1	0	49	55.7	4	7.3	3	5.5	1	1.8	
2145	0	0	0	0	0	0	0	0	2	10	16	10	5	3	2	1	0	0	50.5	57.9	6	12.2	3	6.1	0	0
2200	0	0	0	0	0	0	0	0	2	10	4	15	16	1	1	1	0	0	51.9	57.5	3	6	2	4	0	0
2215	0	0	0	0	1	0	0	2	1	13	21	13	7	1	1	0	0	53	59.7	9	15	1	1.7	0	0	
2230	0	0	0	0	0	0	0	4	5	15	15	6	5	5	1	1	0	53.2	64	12	21.1	3	5.3	1	1.8	
2245	0	0	0	0	0	0	0	0	1	2	14	6	7	3	3	0	1	0	53.5	60.8	7	18.9	1	2.7	1	2.7
2300	0	0	0	0	0	0	1	5	10	6	6	7	1	3	0	0	0	49.4	58.6	4	10.3	2	5.1	0	0	
2315	0	0	0	0	0	0	0	1	1	7	18	2	4	4	1	0	1	54.7	64.4	10	25.6	3	7.7	1	2.6	
2330	0	0	0	0	0	0	0	3	6	5	4	6	3	2	3	0	0	53.4	63.3	8	25	4	12.5	0	0	
2345	0	0	0	0	0	0	0	3	4	1	6	8	0	2	1	0	0	52.4	59.3	3	12	2	8	0	0	
07-19	**0**	**0**	**5**	**7**	**29**	**56**	**148**	**517**	**996**	**1360**	**1400**	**963**	**464**	**174**	**84**	**28**	**11**	**50.1**	**58.8**	**761**	**12.2**	**161**	**2.6**	**39**	**0.6**	
06-22	**0**	**0**	**5**	**7**	**29**	**59**	**161**	**591**	**1117**	**1570**	**1669**	**1150**	**602**	**230**	**105**	**39**	**19**	**50.5**	**59.3**	**995**	**13.5**	**219**	**3**	**58**	**0.8**	
06-00	**0**	**0**	**5**	**7**	**30**	**59**	**162**	**612**	**1156**	**1635**	**1760**	**1215**	**626**	**251**	**113**	**41**	**20**	**50.6**	**59.3**	**1051**	**13.7**	**237**	**3.1**	**61**	**0.8**	
00-00	**0**	**0**	**5**	**8**	**30**	**59**	**168**	**645**	**1264**	**1863**	**1959**	**1317**	**691**	**277**	**125**	**45**	**23**	**50.7**	**59.5**	**1161**	**13.7**	**263**	**3.1**	**68**	**0.8**	

17 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
0000	0	0	0	0	0	0	0	3	1	13	4	8	0	1	0	0	1	52.1	57.9	2	6.5	1	3.2	1	3.2	
0015	0	0	0	0	0	0	0	0	2	4	4	2	4	2	0	0	1	55.9	60.8	7	36.8	2	10.5	1	5.3	
0030	0	0	0	0	0	0	0	3	1	7	10	2	0	0	0	0	0	49.1	52.6	0	0	0	0	0	0	
0045	0	0	0	0	0	0	0	1	2	6	2	2	2	1	0	0	0	51.3	59.9	3	18.8	1	6.3	0	0	
0100	0	0	0	0	0	0	1	1	7	7	6	1	1	0	0	0	0	47.5	51.9	1	4.2	0	0	0	0	
0115	0	0	0	0	0	0	0	0	2	4	12	8	1	0	1	0	0	53.5	56.6	2	7.1	1	3.6	0	0	
0130	0	0	0	0	0	0	0	0	0	5	8	0	1	1	0	0	0	52.3	54.1	2	13.3	1	6.7	0	0	
0145	0	0	0	0	0	0	1	2	8	3	13	4	0	2	0	0	0	49.4	55	2	6.1	1	3	0	0	
0200	0	0	0	0	0	0	0	0	2	4	3	0	3	0	0	1	0	53.8	62	4	30.8	1	7.7	1	7.7	
0215	0	0	0	0	0	0	0	0	2	2	5	1	1	0	0	0	0	51.2	51.2	1	9.1	0	0	0	0	
0230	0	0	1	0	0	0	0	0	1	10	3	2	1	1	0	0	0	48.5	56.1	2	10.5	0	0	0	0	
0245	0	0	0	0	0	0	0	1	0	3	7	1	0	2	0	0	0	53.7	56.8	2	14.3	1	7.1	0	0	
0300	0	0	0	0	0	0	0	1	5	8	5	4	0	0	1	0	0	49.2	55.3	1	4.2	1	4.2	0	0	
0315	0	0	0	0	0	0	0	0	0	0	5	6	4	0	0	0	0	57.3	59.9	4	26.7	0	0	0	0	
0330	0	0	0	0	0	0	0	0	0	2	3	5	5	0	1	0	0	56.8	59.9	6	37.5	1	6.3	0	0	
0345	0	0	0	0	0	0	0	1	1	2	4	3	0	0	0	0	0	51	55.9	0	0	0	0	0	0	
0400	0	0	0	0	0	0	0	2	3	3	3	1	0	0	0	0	0	46.9	53	0	0	0	0	0	0	
0415	0	0	0	0	0	0	0	1	1	6	4	1	1	0	0	0	0	50.1	52.6	1	7.1	0	0	0	0	
0430	0	0	0	0	0	0	0	1	1	8	2	2	3	1	0	0	0	52.4	61.5	4	22.2	0	0	0	0	
0445	0	0	0	0	0	0	0	3	1	2	6	2	5	1	1	0	1	55.8	64.6	8	36.4	2	9.1	1	4.5	
0500	0	0	0	0	0	0	0	4	2	16	11	0	0	0	0	1	2	51.2	54.1	3	8.3	3	8.3	3	8.3	
0515	0	0	0	0	0	0	0	1	0	1	11	5	3	0	1	0	0	54.9	60.4	4	18.2	1	4.5	0	0	
0530	0	0	0	0	0	0	0	2	2	3	14	9	4	1	3	0	0	55.1	62.4	8	21.1	3	7.9	0	0	
0545	0	0	0	0	0	1	0	1	3	8	13	6	2	1	0	0	1	52.7	58.4	4	11.1	2	5.6	1	2.8	
0600	0	0	0	0	0	0	0	3	3	1	6	7	7	4	0	1	0	56.1	64.9	12	37.5	1	3.1	1	3.1	
0615	0	0	0	0	0	0	0	0	3	5	7	6	4	1	0	0	0	54.2	61.3	5	19.2	1	3.8	0	0	
0630	0	0	0	0	0	0	0	4	7	9	14	10	11	5	2	0	1	54.5	64.2	19	30.2	4	6.3	1	1.6	
0645	0	0	0	0	0	0	1	1	3	5	10	8	4	6	3	2	1	57.7	68	16	36.4	9	20.5	3	6.8	
0700	0	0	0	0	0	0	1	1	5	2	4	8	6	1	1	0	0	53.9	63.3	8	27.6	1	3.4	0	0	
0715	0	0	0	0	0	0	0	4	2	5	12	7	7	2	1	0	0	53.7	61.5	10	25	1	2.5	0	0	
0730	0	0	0	0	0	1	0	1	4	8	11	9	7	6	1	0	1	54.8	64.9	15	30.6	4	8.2	1	2	
0745	0	0	0	0	0	0	0	3	4	6	15	3	2	3	1	0	1	53.3	61.3	7	18.4	3	7.9	1	2.6	
0800	0	0	0	0	0	0	0	0	4	13	10	11	12	4	1	0	0	55.2	61.7	17	30.9	3	5.5	0	0	
0815	0	0	0	0	0	0	0	3	5	8	12	7	13	4	3	3	2	56.9	67.3	25	41.7	9	15	5	8.3	
0830	0	0	0	0	0	0	0	4	9	7	15	14	4	2	2	0	1	53.1	59.7	9	15.5	3	5.2	1	1.7	
0845	0	0	0	0	1	0	0	1	0	7	8	11	16	8	3	1	2	60.1	67.8	30	51.7	9	15.5	3	5.2	
0900	0	0	0	0	0	0	0	2	1	7	12	12	12	7	0	2	0	57.2	65.1	21	38.2	4	7.3	2	3.6	
0915	0	0	0	0	0	0	0	1	3	14	14	12	13	3	0	0	0	54.6	62.4	16	26.7	1	1.7	0	0	
0930	0	0	0	0	0	0	0	0	12	8	21	13	5	0	3	0	1	53.4	59.9	9	14.3	4	6.3	1	1.6	
0945	0	0	0	0	0	0	0	2	6	5	17	14	8	6	0	1	0	54.9	61.5	15	25.4	3	5.1	1	1.7	
1000	0	0	0	0	0	0	0	0	5	10	17	12	10	6	2	1	2	56.7	65.5	21	32.3	8	12.3	3	4.6	
1015	0	0	0	0	0	0	0	3	5	13	16	17	8	5	2	0	0	54	61.5	15	21.7	5	7.2	0	0	
1030	0	0	0	0	0	0	0	0	9	14	17	13	4	5	0	0	0	52.6	59.9	9	14.5	2	3.2	0	0	
1045	0	0	0	0	0	0	0	5	5	17	24	12	13	4	2	1	0	54.2	63.5	20	24.1	5	6	1	1.2	
1100	0	0	0	0	0	0	2	2	11	18	17	11	10	4	0	0	0	51.5	60.4	14	18.7	1	1.3	0	0	
1115	0	0	0	0	0	1	0	2	5	13	15	13	14	6	0	1	1	55.1	62.9	22	31	6	8.5	2	2.8	
1130	0	0	0	0	0	0	0	1	10	25	20	20	7	5	1	0	1	53.1	59.9	14	15.6	3	3.3	1	1.1	
1145	0	0	0	0	0	0	0	4	3	1	16	16	7	5	2	0	0	55.9	63.8	14	25.9	3	5.6	0	0	
1200	0	0	0	0	0	0	2	10	10	18	25	15	11	5	1	0	0	51.5	60.2	17	17.5	2	2.1	0	0	
1215	0	0	0	0	0	0	0	8	5	20	18	9	10	4	1	1	0	52.5	62.6	16	21.1	5	6.6	1	1.3	
1230	0	0	0	0	0	0	0	1	19	20	17	14	8	2	2	2	0	52	60.4	14	16.5	5	5.9	2	2.4	
1245	0	1	0	0	0	0	2	4	3	12	23	19	11	5	1	1	0	53.6	60.8	18	22	2	2.4	1	1.2	
1300	0	0	0	0	0	0	3	4	4	12	23	15	5	4	4	1	0	53.4	62	14	18.7	6	8	1	1.3	
1315	0	0	0	0	0	0	0	4	10	21	24	17	8	2	2	1	0	52.5	58.8	13	14.6	3	3.4	1	1.1	
1330	0	0	0	0	0	0	1	1	11	15	20	22	13	5	0	0	1	54.1	61.5	19	21.3	2	2.2	1	1.1	
1345	0	0	0	0	0	0	0	1	7	15	12	11	14	5	3	2	1	55.9	64.9	25	35.2	8	11.3	3	4.2	
1400	0	0	0	0	0	0	0	5	6	12	23	11	4	3	0	1	0	51.7	58.4	8	12.3	1	1.5	1	1.5	
1415	0	0	0	0	0	0	1	2	10	14	24	23	13	5	2	2	2	55	61.3	24	24.5	6	6.1	4	4.1	
1430	0	0	0	0	0	0	0	1	11	17	14	10	15	6	2	1	0	54.4	63.3	24	31.2	5	6.5	1	1.3	
1445	0	0	0	0	0	0	0	4	7	17	18	7	11	7	2	1	2	54.8	65.1	23	30.3	7	9.2	3	3.9	
1500	0	0	0	0	0	0	0	3	3	12	15	12	10	5	0	1	2	55.5	64	18	28.6	4	6.3	3	4.8	
1515	0	0	0	1	0	0	0	4	7	6	15	18	16	6	2	1	1	55.4	64.4	26	33.8	7	9.1	2	2.6	
1530	0	0	0	0	0	0	0	2	4	16	21	16	11	3	3	1	2	55.2	63.8	20	25.3	7	8.9	3	3.8	
1545	0	0	0	0	0	0	0	7	2	10	16	15	6	4	4	1	2	55.5	65.5	17	25.4	10	14.9	3	4.5	
1600	0	0	0	0	0	0	0	3	20	7	21	15	7	5	0	0	0	51.9	59.7	12	15.4	0	0	0	0	
1615	0	0	0	0	0	2	2	2	12	11	15	18	12	6	1	1	0	53.3	63.1	20	24.4	3	3.7	1	1.2	
1630	0	0	0	0	0	0	0	2	5	13	16	10	8	3	1	2	2	55.5	63.8	16	25.8	5	8.1	4	6.5	
1645	0	0	0	0	0	0	1	4	2	19	13	18	6	3	0	2	0	53.3	60.4	11	16.2	3	4.4	2	2.9	
1700	0	0	0	0	0	1	0	4	4	14	20	28	12	8	3	1	0	55.4	63.3	24	25.3	7	7.4	1	1.1	
1715	0	0	0	0	0	0	0	0	2	6	14	18	11	9	2	4	0	59	66	26	39.4	6	9.1	4	6.1	
1730	0	0	0	0	0	0	0	2	6	5	17	11	18	9	0	0	1	56.9	64.6	28	40.6	5	7.2	1	1.4	
1745	0	0	0	0	0	0	1	0	1	7	6	6	11	8	2	2	3	60.8	69.3	26	55.3	10	21.3	5	10.6	
1800	0	0	0	0	0	0	0	0	3	5	13	20	9	6	0	1	0	56.7	63.3	16	28.1	2	3.5	1	1.8	
1815	0	0	0	0	0	0	0	0	0	9	13	20	13	5	3	2	1	58.8	65.5	24	36.4	8	12.1	3	4.5	
1830	0	0	0	0	0	0	0	0	0	8	13	17	12	5	1	1	0	57.5	63.8	19	33.3	3	5.3	1	1.8	
1845	0	0	0	0	0	0	0	2	1	8	11	15	11	3	1	2	0	56.8	64	17	31.5	4	7.4	2	3.7	
1900	0	0	0	0	0	0	0	6	5	8	11	8	7	3	2	0	0	52.8	62.2	12	24	3	6	0	0	
1915	0	0	0	0	0	0	0	3	7	4	8	10	4	2	0	0	0	52.3	59.7	6	15.8	1	2.6	0	0	
1930	0	0	0	0	0	0	1	1	0	5	12	4	2	4	0	2	0	55.5	65.3	8	25.8	4	12.9	2	6.5	
1945	0	0	0	0	0	0	0	2	4	5	5	5	5	6	1	0	2	57.3	68.2	14	40	7	20	2	5.7	
2000	0	0	0	0	0	0	0	3	0	11	4	5	11	2	1	0	1	55.4	64	15	39.5	3	7.9	1	2.6	
2015	0	0	0	0	0	0	0	2	3	3	10	9	6	1	0	0	0	53.9	59.9	7	20.6	0	0	0	0	
2030	0	0	0	0	0	0	0	2	6	3	7	7	5	1	0	1	0	53.4	61.7	7	21.9	1	3.1	1	3.1	
2045	0	0	0	0	0	0	0	1	2	9	3	7	6	0	0	0	0	52.6	60.6	6	21.4	0	0	0	0	
2100	0	0	0	0	0	0	0	1	3	4	9	3	5	1	0	0	0	53.7	61.1	6	23.1	1	3.8	0	0	
2115	0	0	0	0	0	0	0	1	2	6	5	9	6	3	1	0	0	55.7	63.1	10	30.3	1	3	0	0	
2130	0	0	0	0	0	0	0	2	2	5	10	2	5	4	0	0	0	53.8	63.5	9	30	1	3.3	0	0	
2145	0	0	0	0	0	0	1	2	1	2	7	11	3	1	2	1	0	55.8	62.6	7	22.6	4	12.9	1	3.2	
2200	0	0	0	0	0	0	0	1	1	4	7	2	5	2	1	0	0	55.8	64	8	34.8	3	13	0	0	
2215	0	0	0	0	0	0	0	5	2	5	6	11	4	0	1	0	0	52.2	59.5	5	14.7	1	2.9	0	0	
2230	0	0	0	0	0	0	0	1	3	6	11	9	6	1	0	0	1	54.4	61.5	8	21.1	2	5.3	1	2.6	
2245	0	0	0	0	0	0	0	0	3	10	6	2	4	2	1	1	1	54.8	65.5	9	30	3	10	2	6.7	
2300	0	0	0	0	0	0	0	1	2	8	3	8	1	3	0	1	0	53.9	63.8	5	18.5	2	7.4	1	3.7	
2315	0	0	0	0	0	0	0	1	2	6	3	2	5	7	0	1	0	56.8	65.5	13	48.1	4	14.8	1	3.7	
2330	0	0	0	0	0	0	0	3	4	7	5	5	4	1	0	0	0	51.3	60.4	5	17.2	0	0	0	0	
2345	0	0	0	0	0	0	0	0	3	3	8	3	2	2	0	0	0	53.8	61.5	4	19	0	0	0	0	
07-19	**0**	**1**	**0**	**1**	**1**	**5**	**16**	**119**	**283**	**550**	**773**	**665**	**474**	**227**	**68**	**45**	**32**	**54.7**	**63.3**	**846**	**26**	**214**	**6.6**	**77**	**2.4**	
06-22	**0**	**1**	**0**	**1**	**1**	**5**	**19**	**153**	**334**	**635**	**901**	**776**	**565**	**271**	**80**	**52**	**37**	**54.7**	**63.3**	**1005**	**26.2**	**255**	**6.7**	**89**	**2.3**	
06-00	**0**	**1**	**0**	**1**	**1**	**5**	**19**	**165**	**354**	**684**	**950**	**818**	**596**	**289**	**83**	**55**	**39**	**54.7**	**63.5**	**1062**	**26.2**	**270**	**6.7**	**94**	**2.3**	
00-00	**0**	**1**	**1**	**1**	**1**	**6**	**21**	**193**	**401**	**811**	**1108**	**893**	**637**	**303**	**91**	**57**	**45**	**54.4**	**63.1**	**1133**	**24.8**	**292**	**6.4**	**102**	**2.2**	

18 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
0000	0	0	0	0	0	0	0	2	1	4	2	8	2	2	2	0	0	55.9	67.6	6	26.1	3	13	0	0	
0015	0	0	0	0	0	0	0	4	1	3	4	0	0	0	1	0	0	47.6	53.5	1	7.7	1	7.7	0	0	
0030	0	0	0	0	0	0	2	3	0	1	5	0	9	3	0	0	0	53.5	64.4	12	52.2	1	4.3	0	0	
0045	0	0	0	0	0	0	0	1	3	6	1	1	3	1	0	1	0	52.9	63.1	5	29.4	2	11.8	1	5.9	
0100	0	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0	41.2 -		0	0	0	0	0	0	
0115	0	0	0	0	0	0	0	1	3	2	6	3	1	1	0	0	0	51.7	55.5	2	11.8	0	0	0	0	
0130	0	0	0	0	0	0	0	0	1	3	3	3	1	0	1	1	0	56.4	64.9	3	23.1	2	15.4	1	7.7	
0145	0	0	0	0	0	0	0	0	2	1	2	0	2	1	2	0	0	57.9 -		5	50	2	20	0	0	
0200	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	47.6 -		0	0	0	0	0	0	
0215	0	0	0	0	0	0	0	2	1	0	1	3	1	0	0	0	0	51.7 -		1	12.5	0	0	0	0	
0230	0	0	0	0	0	0	0	1	0	2	4	1	0	1	0	0	0	50.8 -		1	11.1	0	0	0	0	
0245	0	0	0	0	0	0	0	0	1	1	5	0	0	0	0	0	0	49.4 -		0	0	0	0	0	0	
0300	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	64.5 -		2	66.7	1	33.3	1	33.3	
0315	0	0	0	0	0	0	0	0	2	3	1	0	0	0	0	0	0	47 -		0	0	0	0	0	0	
0330	0	0	0	0	0	0	0	0	1	1	1	3	1	0	0	0	0	54.2 -		1	14.3	0	0	0	0	
0345	0	0	0	0	0	0	0	0	1	3	1	5	2	1	0	0	0	55.2	60.6	3	23.1	1	7.7	0	0	
0400	0	0	0	0	0	0	0	0	2	8	1	0	0	0	0	0	0	47.1	48.5	0	0	0	0	0	0	
0415	0	0	0	0	0	0	0	1	0	6	3	1	1	0	0	0	0	50.5	52.6	1	8.3	0	0	0	0	
0430	0	0	0	0	0	0	0	2	0	6	2	0	2	0	0	0	0	49.5	54.1	2	16.7	0	0	0	0	
0445	0	0	0	0	0	0	0	0	1	0	8	2	1	0	0	0	0	52.8	56.6	1	8.3	0	0	0	0	
0500	0	0	0	0	0	0	0	0	1	3	7	1	2	1	0	0	0	53.4	62.4	3	20	0	0	0	0	
0515	0	0	0	0	0	0	0	1	0	7	3	5	1	1	0	0	0	52.6	56.4	2	11.1	0	0	0	0	
0530	0	0	0	0	0	0	1	2	3	4	10	11	10	6	1	0	0	55.9	64.4	17	35.4	1	2.1	0	0	
0545	0	0	0	0	0	0	0	2	1	3	7	9	15	4	3	1	0	58.8	66.7	23	51.1	6	13.3	1	2.2	
0600	0	0	0	0	0	0	0	0	1	4	5	6	2	4	2	2	1	60.7	71.8	11	40.7	8	29.6	3	11.1	
0615	0	0	0	0	0	0	0	0	1	3	8	1	4	3	0	0	0	55.4	62.2	7	35	1	5	0	0	
0630	0	0	0	0	0	0	0	0	3	1	9	15	6	6	0	2	0	58.3	65.5	14	33.3	5	11.9	2	4.8	
0645	0	0	0	0	0	0	0	5	1	7	9	10	3	2	0	0	1	52.9	59.3	6	15.8	1	2.6	1	2.6	
0700	0	0	0	0	0	0	0	2	0	3	3	15	10	4	1	0	1	58.9	64.2	16	41	5	12.8	1	2.6	
0715	0	0	0	0	0	1	0	3	4	7	7	2	5	3	1	0	0	51.6	63.5	9	27.3	2	6.1	0	0	
0730	0	0	0	0	0	0	0	1	2	4	6	1	9	1	0	1	0	55.5	63.3	11	44	1	4	1	4	
0745	0	0	0	0	0	0	0	0	5	8	10	1	2	2	1	1	2	55.2	66.9	8	25	4	12.5	3	9.4	
0800	0	0	0	0	0	0	0	1	3	6	2	3	4	5	2	5	0	59.9	71.1	16	51.6	10	32.3	5	16.1	
0815	0	0	0	0	0	0	0	2	1	1	2	3	5	5	0	0	0	57.5	66	10	52.6	0	0	0	0	
0830	0	0	0	0	0	0	0	0	2	3	4	3	5	5	3	1	0	59.6	69.1	14	53.8	5	19.2	1	3.8	
0845	0	0	0	0	0	0	0	0	4	6	12	8	3	3	3	1	2	57.2	68.9	12	28.6	7	16.7	3	7.1	
0900	0	0	0	0	0	0	1	2	2	7	12	13	4	4	2	0	1	55.1	64.6	11	22.9	5	10.4	1	2.1	
0915	0	0	0	0	0	0	0	1	2	6	5	8	11	4	1	0	0	57.2	62.9	16	42.1	2	5.3	0	0	
0930	0	0	0	0	0	0	0	1	4	9	13	9	4	2	0	0	2	54.5	60.4	8	18.2	2	4.5	2	4.5	
0945	0	0	0	1	0	0	1	1	2	6	13	16	11	1	2	0	1	55.4	62.2	15	27.3	3	5.5	1	1.8	
1000	0	0	0	0	0	0	0	0	0	9	20	15	6	7	2	1	0	56.6	64.9	16	26.7	5	8.3	1	1.7	
1015	0	0	0	0	0	0	0	5	4	5	10	11	5	6	0	1	1	54.8	65.3	13	27.1	4	8.3	2	4.2	
1030	0	0	0	0	0	0	0	0	1	4	9	7	11	6	3	1	0	59.1	67.1	21	50	5	11.9	1	2.4	
1045	0	0	0	0	0	0	0	1	3	7	22	12	11	2	5	1	0	56.7	64	19	29.7	7	10.9	1	1.6	
1100	0	0	0	0	0	0	0	2	3	5	15	9	9	3	4	0	1	56.6	64.6	17	33.3	7	13.7	1	2	
1115	0	0	0	0	0	0	1	3	12	15	12	18	7	7	6	2	2	55.6	68	24	28.2	14	16.5	4	4.7	
1130	0	0	0	0	0	0	0	5	12	11	16	19	8	3	3	0	1	53.2	61.5	15	19.2	4	5.1	1	1.3	
1145	0	0	0	0	0	0	0	4	11	5	15	20	6	6	7	0	4	56.8	68	23	29.5	13	16.7	4	5.1	
1200	0	0	0	0	0	0	0	2	1	14	27	25	13	9	1	1	0	56	63.3	24	25.8	5	5.4	1	1.1	
1215	0	0	0	0	0	0	0	4	11	7	26	19	4	9	5	0	1	55.2	66	19	22.1	10	11.6	1	1.2	
1230	0	0	0	0	0	0	0	3	15	11	19	20	9	3	3	1	1	53.6	61.3	17	20	7	8.2	2	2.4	
1245	0	0	0	0	0	0	0	4	7	6	16	26	16	13	1	0	0	56.5	65.5	30	33.7	5	5.6	0	0	
1300	0	0	0	0	0	0	0	3	8	18	20	9	2	1	0	0	0	50.4	56.6	3	4.9	0	0	0	0	
1315	0	0	0	0	0	0	0	3	9	11	18	14	6	7	1	0	3	54.9	64.2	17	23.6	6	8.3	3	4.2	
1330	0	0	0	0	0	0	0	6	6	6	16	21	14	5	3	2	1	55.9	64.6	25	31.3	6	7.5	3	3.8	
1345	0	0	0	0	0	0	0	2	7	8	22	17	19	9	3	0	0	56.4	64.6	31	35.6	6	6.9	0	0	
1400	0	0	0	0	0	0	0	3	5	18	13	10	13	3	1	3	0	54.6	63.8	20	29	6	8.7	3	4.3	
1415	0	0	0	0	0	0	1	8	12	13	8	20	13	5	0	2	2	53.2	62.4	22	26.2	5	6	4	4.8	
1430	0	0	0	0	0	0	2	1	2	2	18	14	11	7	2	1	2	57.6	65.8	23	37.1	5	8.1	3	4.8	
1445	0	0	0	0	0	0	0	5	8	13	21	14	13	3	6	5	0	55.4	67.1	27	30.7	13	14.8	5	5.7	
1500	0	0	0	0	0	0	0	3	4	4	12	12	2	4	2	0	2	55.6	65.1	10	22.2	6	13.3	2	4.4	
1515	0	0	0	0	0	0	0	5	0	14	23	16	13	5	1	0	1	54.9	62.6	20	25.6	4	5.1	1	1.3	
1530	0	0	0	0	0	0	0	2	4	9	12	14	7	6	4	2	1	57	67.6	20	32.8	9	14.8	3	4.9	
1545	0	0	0	0	0	0	0	0	3	12	17	17	11	7	2	1	0	56.5	63.1	21	30	5	7.1	1	1.4	
1600	0	0	0	0	0	0	0	9	12	14	13	9	7	9	1	2	0	52.5	64.9	19	25	5	6.6	2	2.6	
1615	0	0	0	0	0	0	0	8	9	5	10	20	9	3	0	1	3	54.7	63.5	16	23.5	4	5.9	4	5.9	
1630	0	0	0	0	0	0	0	1	11	13	13	14	8	5	0	2	0	53.8	63.1	15	22.4	3	4.5	2	3	
1645	0	0	0	0	0	0	0	1	2	5	18	17	10	9	1	1	0	57.3	65.1	21	32.8	5	7.8	1	1.6	
1700	0	0	0	0	1	4	4	9	11	12	14	8	6	2	1	1	1	48.1	57.5	11	14.9	4	5.4	2	2.7	
1715	0	0	0	0	0	0	3	6	3	10	7	15	14	3	1	1	0	53.9	64	19	30.2	2	3.2	1	1.6	
1730	0	0	0	0	0	0	0	2	7	10	15	19	9	7	6	0	1	56.3	65.8	23	30.3	10	13.2	1	1.3	
1745	0	0	0	0	0	0	0	4	10	15	5	5	7	6	12	0	1	55.6	70.2	26	40	16	24.6	1	1.5	
1800	0	0	0	0	0	0	0	4	1	4	21	17	16	7	4	1	2	57.8	67.6	30	39	12	15.6	3	3.9	
1815	0	0	0	0	0	0	0	0	1	9	13	17	12	4	1	1	0	56.8	61.3	18	31	3	5.2	1	1.7	
1830	0	0	0	0	0	0	0	2	4	4	14	20	13	6	0	1	0	56.7	63.5	20	31.3	4	6.3	1	1.6	
1845	0	0	0	0	0	0	0	1	2	8	9	8	9	7	0	2	3	58.7	68	21	42.9	8	16.3	5	10.2	
1900	0	0	0	0	0	0	0	0	5	7	10	12	9	2	3	1	0	56	63.1	15	30.6	5	10.2	1	2	
1915	0	0	0	0	0	0	1	3	4	5	7	11	8	6	1	3	0	56.4	66.4	18	36.7	7	14.3	3	6.1	
1930	0	0	0	0	0	0	1	4	1	11	18	5	5	3	1	3	0	54.1	63.8	12	23.1	5	9.6	3	5.8	
1945	0	0	0	0	0	0	0	6	3	12	14	13	6	4	2	2	0	54.2	63.8	14	22.6	4	6.5	2	3.2	
2000	0	0	0	0	0	0	0	4	4	6	14	12	8	5	3	1	1	55.8	65.1	18	31	7	12.1	2	3.4	
2015	0	0	0	0	0	0	0	1	2	5	13	5	8	4	1	0	1	56.2	63.8	14	35	3	7.5	1	2.5	
2030	0	0	0	0	0	0	0	1	0	6	10	8	6	3	1	0	0	55.4	63.5	10	28.6	1	2.9	0	0	
2045	0	0	0	0	0	0	0	3	5	7	8	8	4	4	2	1	0	54.5	65.3	11	26.2	4	9.5	1	2.4	
2100	0	0	0	0	0	0	0	1	4	4	8	3	0	5	2	1	0	55.1	68.5	8	28.6	5	17.9	1	3.6	
2115	0	1	0	0	0	0	0	1	5	10	8	7	3	3	1	0	0	51.7	60.2	7	17.9	1	2.6	0	0	
2130	0	0	0	0	0	0	0	3	3	8	8	8	4	2	1	0	1	54.2	62.2	8	21.1	2	5.3	1	2.6	
2145	0	0	0	0	0	0	2	4	5	5	5	2	3	2	0	1	1	51.1	61.7	7	23.3	2	6.7	2	6.7	
2200	0	0	0	0	0	0	1	2	2	6	12	5	1	1	2	0	0	52.5	57.7	4	12.5	2	6.3	0	0	
2215	0	0	0	0	0	0	0	1	12	4	4	5	1	1	0	0	0	48.6	56.4	2	7.1	0	0	0	0	
2230	0	0	0	0	0	0	0	4	3	4	7	14	4	1	1	0	0	53.1	59.5	6	15.8	1	2.6	0	0	
2245	0	0	0	0	0	0	0	0	1	6	12	3	4	3	0	0	0	54.2	60.8	7	24.1	1	3.4	0	0	
2300	0	0	0	0	0	0	0	1	0	5	1	1	2	0	0	0	0	51.1 -		2	20	0	0	0	0	
2315	0	0	0	0	0	0	0	1	1	2	6	4	0	1	0	0	0	53	56.4	1	6.7	0	0	0	0	
2330	0	0	0	0	0	0	0	0	2	7	5	8	3	0	0	0	0	52.9	57.9	3	12	0	0	0	0	
2345	0	0	0	0	0	0	0	0	1	10	12	4	1	1	0	0	0	52	56.4	2	6.9	0	0	0	0	
07-19	**0**	**0**	**0**	**1**	**1**	**5**	**13**	**135**	**252**	**402**	**648**	**630**	**422**	**243**	**108**	**46**	**43**	**55.5**	**64.9**	**862**	**29.2**	**279**	**9.5**	**89**	**3**	
06-22	**0**	**1**	**0**	**1**	**1**	**5**	**17**	**171**	**299**	**503**	**802**	**756**	**501**	**301**	**128**	**63**	**49**	**55.4**	**64.9**	**1042**	**29**	**340**	**9.4**	**112**	**3.1**	
06-00	**0**	**1**	**0**	**1**	**1**	**5**	**18**	**180**	**321**	**547**	**861**	**800**	**517**	**309**	**131**	**63**	**49**	**55.2**	**64.6**	**1069**	**28.1**	**344**	**9**	**112**	**2.9**	
00-00	**0**	**1**	**0**	**1**	**1**	**5**	**21**	**203**	**350**	**618**	**938**	**856**	**571**	**332**	**141**	**67**	**49**	**55.1**	**64.6**	**1160**	**27.9**	**364**	**8.8**	**116**	**2.8**	

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
--	**1**	**30**	**50**	**52**	**103**	**237**	**732**	**3308**	**6635**	**10684**	**12356**	**8530**	**4616**	**2072**	**747**	**319**	**215**	**51.6**	**60.2**	**7969**	**15.7**	**1913**	**3.8**	**534**	**1.1**	

TSP Class Profile All Days 15 Mins

Report Id - CustomList-40
Site Name - LUTTERWORTH -03
Description - A5 S [60M]
Direction - South

12 May 2014

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	20	0	13	0	1	0	0	0	0	3	3	
0015	13	0	5	0	1	0	0	0	0	4	3	
0030	29	0	18	0	1	1	0	0	0	2	7	
0045	14	0	10	0	0	0	0	0	0	1	3	
0100	17	0	7	0	1	0	0	0	0	7	2	
0115	24	0	19	0	1	0	0	0	0	2	2	
0130	14	0	6	0	1	0	0	0	0	3	4	
0145	14	0	6	0	2	0	0	0	0	2	4	
0200	19	0	12	0	0	0	0	0	1	2	4	
0215	12	0	5	0	1	0	0	0	0	4	2	
0230	14	0	8	0	1	0	0	0	0	2	3	
0245	15	0	7	0	0	0	0	0	0	4	4	
0300	19	0	9	0	0	0	0	0	1	3	6	
0315	24	0	12	0	4	0	0	0	0	4	4	
0330	26	0	15	0	5	0	0	0	1	4	1	
0345	25	1	8	0	4	1	0	0	2	2	7	
0400	18	0	7	0	4	0	0	0	3	2	2	
0415	29	0	19	0	4	0	0	0	1	1	4	
0430	38	0	22	0	5	0	0	0	1	4	6	
0445	33	0	22	0	3	1	1	0	0	2	4	
0500	54	0	33	0	7	0	2	1	0	5	6	
0515	79	2	59	0	9	0	1	0	0	1	7	
0530	101	0	82	0	6	0	1	0	1	3	8	
0545	85	0	64	0	8	0	0	0	1	5	7	
0600	106	1	89	0	4	0	3	0	1	3	5	
0615	98	1	74	0	13	0	1	0	1	3	5	
0630	149	0	122	2	16	0	2	0	0	3	4	
0645	174	1	142	0	19	0	4	0	2	3	3	
0700	202	1	165	1	22	0	3	0	1	8	1	
0715	226	0	200	1	14	1	1	0	0	4	5	
0730	256	0	214	0	17	0	4	1	1	5	14	
0745	247	1	218	0	14	0	0	0	1	7	6	
0800	248	2	217	2	12	1	4	0	1	3	6	
0815	267	0	230	1	17	0	3	1	3	8	4	
0830	197	1	162	4	12	1	2	0	2	2	11	
0845	154	0	127	0	14	0	1	0	2	6	4	
0900	153	0	117	2	16	1	2	0	1	5	9	
0915	137	0	104	0	15	1	3	0	2	6	6	
0930	104	1	75	0	10	0	2	0	0	10	6	
0945	90	0	62	2	15	0	0	0	0	4	7	
1000	97	1	64	1	10	1	1	0	4	10	5	
1015	86	2	59	1	8	1	1	1	1	8	4	
1030	102	0	73	1	12	0	4	0	1	6	5	
1045	106	0	75	0	9	1	3	0	1	9	8	
1100	81	0	58	0	10	0	0	0	1	6	6	
1115	98	0	81	1	3	0	2	0	0	6	5	
1130	101	0	72	1	9	2	1	0	0	6	10	
1145	104	0	69	0	20	1	2	0	1	4	7	
1200	95	1	70	2	8	3	0	0	2	5	4	
1215	71	0	56	1	7	0	0	0	2	5	0	
1230	86	0	64	0	11	0	0	0	3	6	2	
1245	81	0	64	0	8	0	0	0	1	2	6	
1300	81	1	67	0	3	1	1	1	1	3	3	
1315	91	1	70	0	8	0	2	0	1	7	2	
1330	96	1	73	1	7	4	2	0	1	3	4	
1345	85	0	65	0	9	0	2	0	1	2	6	
1400	112	3	89	0	9	0	1	0	2	6	2	
1415	128	0	102	0	12	1	3	0	1	5	4	
1430	107	0	90	1	7	0	0	0	1	6	2	
1445	86	0	75	0	3	0	2	0	0	4	2	
1500	120	2	99	0	8	1	1	1	0	3	5	
1515	137	0	97	2	13	2	4	0	4	8	7	
1530	135	1	113	1	9	0	0	1	2	4	4	
1545	112	2	89	0	10	0	0	0	0	6	5	
1600	153	1	128	1	14	2	0	1	0	4	2	
1615	137	1	115	1	7	0	0	0	3	5	5	
1630	120	1	101	1	10	0	1	0	1	4	1	
1645	159	2	133	0	7	0	0	0	3	7	7	
1700	153	2	132	1	8	2	2	0	3	1	2	
1715	156	0	144	1	3	1	0	0	0	2	5	
1730	162	2	151	1	4	0	0	0	0	2	2	
1745	124	1	106	0	9	0	0	0	0	4	4	
1800	107	1	94	0	5	0	0	0	0	4	3	
1815	120	1	103	1	0	0	0	0	1	5	9	
1830	102	1	91	0	1	0	0	0	0	6	3	
1845	75	0	59	0	4	0	0	0	3	7	2	
1900	64	0	51	1	4	0	0	0	0	5	3	
1915	55	0	41	0	1	0	1	0	2	5	5	
1930	62	1	49	1	0	0	0	1	1	3	6	
1945	54	0	48	0	1	1	0	0	1	2	1	
2000	54	0	43	0	2	0	0	0	3	3	3	
2015	34	2	24	0	4	0	0	0	1	1	2	
2030	44	0	34	0	4	0	0	0	0	3	3	
2045	45	0	37	0	1	0	0	0	1	5	1	
2100	37	0	28	0	1	0	0	0	3	3	2	
2115	49	0	38	0	5	1	0	0	2	2	1	
2130	46	0	36	0	3	1	0	0	2	2	2	
2145	44	1	31	0	0	0	0	0	6	4	2	
2200	67	0	55	0	2	0	0	0	3	5	2	
2215	38	0	27	0	1	0	0	0	3	2	5	
2230	42	0	32	0	3	0	0	0	2	2	3	
2245	35	3	19	0	0	0	0	0	5	5	3	
2300	59	1	48	0	0	0	0	0	0	7	3	
2315	42	0	31	1	2	0	0	0	1	5	2	
2330	42	0	29	0	0	0	0	0	3	8	2	
2345	36	0	22	0	2	0	0	1	0	7	4	
07-19	**6247**	**34**	**5082**	**33**	**463**	**28**	**60**	**7**	**59**	**249**	**232**	
06-22	**7362**	**41**	**5969**	**37**	**541**	**31**	**71**	**8**	**85**	**299**	**280**	
06-00	**7723**	**45**	**6232**	**38**	**551**	**31**	**71**	**9**	**102**	**340**	**304**	
00-00	**8459**	**48**	**6700**	**38**	**620**	**34**	**76**	**10**	**114**	**412**	**407**	

7633.6 1408 18.23% 1474.2

13 May 2014

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	37	1	24	0	3	0	0	0	4	3	2	
0015	22	1	13	0	4	0	0	0	0	0	4	
0030	27	0	14	0	4	0	0	0	0	6	3	
0045	23	0	14	0	0	0	0	0	4	3	2	
0100	21	0	13	0	1	0	0	0	2	1	4	
0115	26	0	14	0	4	0	0	0	2	3	3	
0130	28	0	19	0	2	0	0	0	0	4	3	
0145	25	0	12	0	1	0	0	0	4	5	3	
0200	34	0	28	0	0	0	0	0	1	4	1	
0215	21	0	12	0	1	0	0	0	3	3	2	
0230	26	0	13	0	2	0	0	0	1	6	4	
0245	15	0	7	0	0	0	0	0	0	1	7	
0300	30	0	14	0	4	0	0	0	2	3	7	
0315	28	0	18	0	2	0	0	0	0	6	2	
0330	33	0	10	0	8	0	0	1	3	5	6	
0345	30	0	17	0	0	1	0	0	4	4	4	
0400	31	1	10	0	5	0	0	0	4	5	6	
0415	36	0	23	1	4	0	0	1	1	4	2	
0430	45	0	22	0	10	1	0	0	1	6	5	
0445	39	0	27	0	2	0	1	0	1	6	2	
0500	52	2	29	0	7	0	0	0	4	3	7	
0515	68	1	51	0	7	0	0	0	2	4	3	
0530	106	0	86	0	7	0	1	0	0	8	4	
0545	81	0	67	0	3	1	0	0	0	8	2	
0600	107	1	84	1	8	1	0	0	0	4	8	
0615	102	1	75	0	7	1	0	0	2	8	8	
0630	162	0	135	1	12	1	1	0	1	6	5	
0645	173	4	144	1	11	2	1	0	1	6	3	
0700	226	0	192	0	17	0	1	1	1	5	9	
0715	240	0	206	2	18	0	0	0	0	10	4	
0730	240	0	210	1	16	1	2	0	1	4	5	
0745	230	0	200	0	15	1	3	0	1	5	5	
0800	252	1	219	4	15	1	0	0	1	6	5	
0815	235	3	208	0	12	1	0	0	1	8	2	
0830	227	0	189	1	15	1	3	0	3	3	12	
0845	148	1	119	0	11	0	1	1	1	8	6	
0900	152	0	113	2	12	1	2	0	0	10	12	
0915	117	0	84	0	17	1	3	0	3	5	4	
0930	127	0	101	1	13	0	0	0	1	5	6	
0945	107	2	75	1	12	0	3	0	2	4	8	
1000	90	0	64	1	7	2	4	0	1	5	6	
1015	88	0	57	0	14	0	0	0	0	8	9	
1030	82	0	57	0	7	1	5	0	2	5	5	
1045	84	0	55	0	10	0	1	0	0	10	8	
1100	71	0	48	1	10	0	3	0	1	5	3	
1115	66	1	47	0	9	0	0	0	2	3	4	
1130	80	0	55	1	12	1	0	0	2	6	3	
1145	77	0	52	0	5	0	3	0	3	7	7	
1200	132	1	92	0	19	0	2	0	0	10	8	
1215	86	1	59	0	6	1	1	0	2	12	4	
1230	75	0	50	0	10	0	4	1	1	4	5	
1245	86	1	70	0	3	2	1	0	1	4	4	
1300	83	0	67	0	7	0	0	0	0	5	4	
1315	102	0	77	1	4	1	3	0	2	8	6	
1330	90	0	65	1	9	0	2	0	1	6	6	
1345	93	0	58	1	22	0	1	0	1	5	5	
1400	132	2	102	1	12	1	1	0	1	6	6	
1415	112	0	88	0	7	0	3	0	3	5	6	
1430	75	0	59	1	8	0	1	0	2	3	1	
1445	91	1	76	1	8	0	0	1	2	2	0	
1500	109	3	87	0	8	1	1	0	2	0	7	
1515	114	2	86	0	13	1	2	0	0	4	6	
1530	118	1	93	2	14	0	0	0	2	2	4	
1545	92	0	74	0	9	2	1	0	0	4	2	
1600	138	0	113	3	10	1	0	1	1	3	6	
1615	132	1	113	0	8	0	1	1	0	5	3	
1630	137	0	119	0	7	0	0	0	1	5	5	
1645	140	1	112	2	11	1	1	0	1	4	7	
1700	195	1	180	0	4	0	0	0	3	2	5	
1715	184	1	167	0	12	0	0	0	1	2	1	
1730	172	1	159	1	7	0	0	0	1	1	2	
1745	137	0	118	0	5	0	0	0	2	4	8	
1800	115	0	100	0	4	2	0	0	0	5	4	
1815	89	3	75	1	1	0	0	0	2	2	5	
1830	97	0	81	0	3	0	1	0	0	7	5	
1845	75	0	61	0	6	0	0	0	2	5	1	
1900	79	0	62	0	3	0	0	0	2	4	8	
1915	59	0	42	0	5	0	0	0	1	8	3	
1930	51	0	44	0	1	0	1	0	0	5	0	
1945	54	0	43	0	3	1	0	0	0	6	1	
2000	52	1	41	0	0	0	0	0	2	5	3	
2015	40	0	26	0	4	0	0	0	0	6	4	
2030	36	0	30	1	2	0	0	0	0	2	1	
2045	38	1	25	0	2	0	0	0	2	7	1	
2100	41	1	25	0	2	0	0	0	7	5	1	
2115	64	1	45	0	8	0	0	0	4	4	2	
2130	43	0	34	0	4	0	0	0	2	2	1	
2145	39	0	30	0	1	0	0	0	1	4	3	
2200	71	0	62	0	0	0	0	0	0	3	6	
2215	39	0	30	0	1	0	0	0	2	3	3	
2230	41	0	31	0	1	0	0	0	2	3	4	
2245	34	0	23	0	1	1	0	0	1	5	3	
2300	51	1	38	0	1	1	0	0	2	4	4	
2315	47	0	34	0	1	0	0	0	2	7	3	
2330	31	0	18	0	2	0	0	0	3	5	3	
2345	41	1	25	0	2	1	0	0	1	8	3	
07-19	**6140**	**28**	**4952**	**30**	**484**	**24**	**60**	**6**	**60**	**247**	**249**	
06-22	**7280**	**38**	**5837**	**34**	**557**	**30**	**63**	**6**	**85**	**329**	**301**	
06-00	**7635**	**40**	**6098**	**34**	**566**	**33**	**63**	**6**	**98**	**367**	**330**	
00-00	**8519**	**46**	**6655**	**35**	**647**	**36**	**65**	**8**	**141**	**468**	**418**	
	6896.6				1463		19.16%			1192.6		

14 May 2014

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	35	0	23	0	1	0	0	0	1	6	4	
0015	38	1	22	0	1	0	0	0	3	6	5	
0030	28	0	16	0	3	0	0	0	4	4	1	
0045	22	0	15	0	1	0	0	0	1	4	1	
0100	28	2	17	0	0	0	0	0	1	4	4	
0115	13	0	5	0	1	0	0	0	1	2	4	
0130	29	0	19	0	0	0	0	0	3	1	6	
0145	17	0	6	0	1	0	0	0	4	4	2	
0200	21	0	14	0	0	0	0	0	0	3	4	
0215	15	0	7	0	1	0	0	0	0	5	2	
0230	32	0	17	0	2	0	0	0	2	9	2	
0245	27	0	15	0	4	0	0	0	0	4	4	
0300	28	0	15	0	3	0	0	0	1	1	8	
0315	35	0	15	0	7	0	0	0	1	3	9	
0330	53	0	33	0	8	0	0	0	7	3	2	
0345	31	0	13	0	5	0	0	1	4	3	5	
0400	46	0	29	0	5	1	0	1	2	4	4	
0415	24	0	13	1	3	0	0	0	1	1	5	
0430	59	0	44	0	6	0	0	0	1	2	6	
0445	46	0	23	0	3	0	1	0	2	9	8	
0500	59	0	43	0	7	0	0	0	1	0	8	
0515	99	1	77	0	13	0	1	0	1	3	3	
0530	112	1	92	0	8	0	0	0	0	5	6	
0545	90	0	65	0	6	1	0	0	3	7	8	
0600	97	0	77	0	8	0	3	0	0	4	5	
0615	102	0	78	1	11	0	3	1	1	3	4	
0630	175	1	131	0	18	1	7	0	6	5	6	
0645	196	0	163	0	18	1	1	0	0	4	9	
0700	230	3	191	2	18	1	1	0	0	7	7	
0715	240	1	201	0	19	0	0	0	3	5	11	
0730	260	2	217	0	19	2	3	0	2	4	11	
0745	259	4	219	1	20	0	2	0	1	4	8	
0800	273	2	227	1	15	2	8	0	3	6	9	
0815	244	0	200	2	19	1	2	0	1	8	11	
0830	212	1	183	1	13	0	1	0	1	4	8	
0845	175	3	145	0	14	0	2	1	2	5	3	
0900	139	1	107	0	14	0	0	1	1	6	9	
0915	125	4	92	2	10	1	2	0	0	5	9	
0930	108	1	83	1	7	1	1	0	2	6	6	
0945	87	2	56	0	6	4	4	0	3	5	7	
1000	89	1	52	0	9	0	0	1	4	6	16	
1015	71	1	46	1	11	1	1	0	1	5	4	
1030	89	1	55	0	13	0	2	1	2	10	5	
1045	75	0	50	2	13	0	2	0	1	4	3	
1100	66	0	47	1	7	1	1	0	0	5	4	
1115	73	0	43	0	11	0	0	0	3	10	6	
1130	90	0	61	0	10	0	0	0	3	10	6	
1145	83	0	61	1	9	0	2	1	3	2	4	
1200	98	1	70	0	9	0	1	1	1	7	8	
1215	88	0	62	1	9	0	3	0	1	7	5	
1230	90	0	71	1	5	0	3	1	1	4	4	
1245	93	0	66	1	9	3	2	0	3	3	6	
1300	89	0	68	0	8	2	2	0	0	6	3	
1315	84	2	59	0	11	1	0	0	0	5	6	
1330	90	0	63	0	11	2	2	0	0	8	4	
1345	117	1	84	0	14	0	1	0	1	8	8	
1400	133	2	109	0	10	1	0	0	2	7	2	
1415	88	4	58	1	11	1	2	0	1	7	3	
1430	93	1	65	1	13	0	2	0	0	3	8	
1445	92	0	74	0	7	1	2	0	0	4	4	
1500	116	2	90	2	9	0	1	1	1	3	7	
1515	97	0	75	0	9	0	1	0	3	4	5	
1530	102	0	77	1	11	1	1	0	1	6	4	
1545	117	0	94	2	10	0	1	0	0	7	3	
1600	125	3	102	0	9	0	1	0	0	6	4	
1615	112	1	96	0	7	0	0	0	1	5	2	
1630	141	1	120	0	9	0	0	0	1	4	6	
1645	152	4	131	2	6	1	1	0	1	4	2	
1700	176	2	157	0	12	0	0	0	0	4	1	
1715	169	0	159	0	4	0	0	1	0	2	3	
1730	147	3	131	0	5	0	0	0	2	3	3	
1745	141	1	121	1	7	0	0	1	0	2	8	
1800	125	3	100	0	6	0	0	0	1	8	7	
1815	111	4	87	1	5	0	0	0	1	8	5	
1830	93	2	85	0	0	0	0	0	0	2	4	
1845	79	1	62	0	4	0	1	0	0	3	8	
1900	80	2	59	2	4	1	0	0	2	7	3	
1915	60	2	48	2	2	0	1	0	0	2	3	
1930	63	2	47	0	2	0	0	0	1	6	5	
1945	64	3	46	0	5	0	0	0	2	4	4	
2000	52	2	39	0	2	0	0	0	1	6	2	
2015	54	2	38	0	3	0	0	0	2	4	5	
2030	67	0	47	0	4	0	0	0	2	7	7	
2045	37	1	26	0	2	0	0	0	2	2	4	
2100	41	2	27	0	3	0	0	0	2	4	3	
2115	50	2	31	0	5	0	0	0	3	6	3	
2130	55	0	38	1	1	0	0	0	4	4	7	
2145	43	0	28	0	3	0	0	0	4	3	5	
2200	71	0	61	0	2	0	0	0	2	3	3	
2215	40	0	31	0	0	0	0	0	3	2	4	
2230	44	0	36	0	1	0	0	0	0	5	2	
2245	41	1	31	0	0	1	0	0	2	1	5	
2300	78	0	64	0	0	0	0	0	0	7	7	
2315	42	1	31	0	1	0	0	0	2	4	3	
2330	49	0	25	0	3	0	0	0	3	11	7	
2345	28	1	16	0	3	0	0	0	0	3	5	
07-19	**6146**	**65**	**4872**	**29**	**487**	**27**	**61**	**10**	**58**	**257**	**280**	
06-22	**7382**	**84**	**5795**	**35**	**578**	**30**	**76**	**11**	**90**	**328**	**355**	
06-00	**7775**	**87**	**6090**	**35**	**588**	**31**	**76**	**11**	**102**	**364**	**391**	
00-00	**8762**	**92**	**6728**	**36**	**677**	**33**	**78**	**13**	**146**	**457**	**502**	
	6130				1563		20.10%			900		

15 May 2014

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	38	0	23	0	0	0	0	0	2	7	6	
0015	21	0	11	0	1	0	0	0	1	5	3	
0030	38	0	27	0	3	0	0	0	3	3	2	
0045	38	1	20	0	2	1	0	0	3	8	3	
0100	28	2	16	0	2	0	0	0	1	1	6	
0115	29	0	19	0	1	0	0	0	1	3	5	
0130	32	0	25	0	0	0	0	0	2	2	3	
0145	20	1	11	0	0	0	0	0	0	5	3	
0200	39	0	25	0	0	0	0	0	2	10	2	
0215	23	0	16	0	0	0	0	0	0	2	5	
0230	36	0	19	0	3	0	0	0	0	9	5	
0245	23	0	9	0	2	0	0	0	2	3	7	
0300	42	0	24	0	4	1	0	0	2	6	5	
0315	23	0	4	0	4	0	0	0	3	4	8	
0330	34	0	14	0	5	0	0	1	4	8	2	
0345	27	0	10	0	4	1	0	0	5	4	3	
0400	42	0	24	0	7	0	0	0	1	5	5	
0415	37	0	20	0	1	0	0	1	2	4	9	
0430	41	0	23	0	4	0	0	0	5	3	6	
0445	51	0	36	0	7	0	0	0	1	4	3	
0500	55	0	40	0	4	0	0	0	2	5	4	
0515	71	1	50	0	10	0	0	0	1	4	5	
0530	92	1	73	0	7	0	0	0	3	5	3	
0545	112	0	85	0	8	0	0	1	2	6	10	
0600	93	0	76	0	7	1	0	0	2	3	4	
0615	101	1	68	1	11	0	1	0	0	11	8	
0630	145	0	119	0	15	0	1	0	0	5	5	
0645	185	5	149	1	10	2	3	0	1	8	6	
0700	219	2	183	1	18	1	1	1	4	4	4	
0715	249	1	212	0	22	0	3	0	0	4	7	
0730	259	0	214	1	27	1	1	0	0	5	10	
0745	257	0	228	0	12	1	2	0	1	5	8	
0800	234	2	202	0	9	1	4	1	0	4	11	
0815	224	1	188	0	16	1	3	1	1	6	7	
0830	204	2	179	1	10	0	0	0	0	6	6	
0845	171	0	138	0	14	1	4	0	2	7	5	
0900	129	1	96	1	15	0	1	0	2	8	5	
0915	120	0	89	0	14	1	1	0	3	6	6	
0930	96	0	74	0	8	0	2	0	2	6	4	
0945	124	0	89	1	16	0	1	0	2	6	9	
1000	103	0	71	1	8	1	2	0	2	11	7	
1015	92	0	66	1	11	0	2	0	0	5	7	
1030	89	1	61	0	8	0	1	2	3	5	8	
1045	104	1	81	0	10	1	2	0	1	5	3	
1100	80	1	52	1	8	1	4	0	1	6	6	
1115	72	0	47	1	10	1	1	0	2	5	5	
1130	92	7	61	0	12	1	1	0	2	4	4	
1145	96	2	64	0	10	0	0	0	5	8	7	
1200	93	2	70	0	7	0	0	0	0	7	7	
1215	78	2	61	0	3	0	2	1	1	3	5	
1230	92	0	65	1	13	2	0	0	0	5	6	
1245	95	1	69	0	10	1	3	0	0	5	6	
1300	86	0	66	1	6	0	0	0	0	6	7	
1315	103	1	73	0	16	2	0	0	2	5	4	
1330	82	0	58	0	9	0	5	0	2	6	2	
1345	94	1	74	0	10	0	2	0	1	3	3	
1400	119	3	92	0	10	2	2	0	1	4	5	
1415	100	0	78	0	6	0	3	0	2	4	7	
1430	109	0	82	2	12	0	2	0	1	5	5	
1445	104	0	89	0	5	0	1	1	0	4	4	
1500	135	2	107	2	12	0	1	0	1	3	7	
1515	117	0	91	1	9	0	2	0	3	9	2	
1530	107	1	81	0	12	0	2	0	3	6	2	
1545	127	1	108	0	8	1	0	0	1	2	6	
1600	145	1	122	2	12	1	2	0	0	2	3	
1615	129	1	113	1	6	1	0	0	1	2	4	
1630	125	2	112	0	5	0	1	0	0	3	2	
1645	148	2	111	6	13	0	0	0	2	9	5	
1700	162	3	135	1	11	0	0	0	0	7	5	
1715	154	4	134	1	8	0	0	0	0	4	3	
1730	180	4	162	0	4	0	0	0	1	3	6	
1745	136	0	117	0	10	0	0	0	1	5	3	
1800	128	1	113	0	6	0	0	0	1	3	4	
1815	103	1	89	0	3	0	0	0	2	5	3	
1830	106	5	87	0	5	0	0	0	0	6	3	
1845	80	2	57	0	3	0	1	0	0	8	9	
1900	79	1	64	1	7	0	0	0	0	2	4	
1915	65	3	48	1	2	0	0	0	0	7	4	
1930	63	2	46	0	1	0	0	0	0	9	5	
1945	54	1	40	1	3	0	0	0	1	4	4	
2000	59	3	41	0	3	0	0	0	1	8	3	
2015	44	1	31	0	1	0	0	0	0	7	4	
2030	62	0	49	0	2	0	0	0	2	6	3	
2045	40	2	21	0	2	1	0	0	3	4	7	
2100	42	1	29	0	3	0	0	0	2	2	5	
2115	49	0	38	1	1	0	0	0	2	5	2	
2130	37	0	28	0	2	0	0	0	3	2	2	
2145	46	0	34	0	1	0	0	0	3	6	2	
2200	64	1	50	0	2	0	0	0	1	7	3	
2215	52	0	37	0	1	0	0	0	2	8	4	
2230	37	0	27	0	0	0	0	0	4	5	1	
2245	28	0	18	0	2	0	0	0	3	3	2	
2300	45	1	38	0	3	0	0	0	1	1	1	
2315	46	2	32	0	0	0	0	0	1	5	6	
2330	36	0	23	0	2	0	0	0	5	3	3	
2345	27	1	15	0	1	0	0	0	2	5	3	
07-19	**6251**	**61**	**5011**	**27**	**492**	**22**	**65**	**7**	**59**	**250**	**257**	
06-22	**7415**	**81**	**5892**	**33**	**563**	**26**	**70**	**7**	**79**	**339**	**325**	
06-00	**7750**	**86**	**6132**	**33**	**574**	**26**	**70**	**7**	**98**	**376**	**348**	
00-00	**8742**	**92**	**6756**	**33**	**653**	**29**	**70**	**10**	**146**	**492**	**461**	

4575 1499 19.34% 587.4

16 May 2014

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	31	0	24	0	1	0	0	0	1	3	2	
0015	21	0	9	0	2	0	0	0	3	4	3	
0030	37	0	23	0	1	0	0	0	3	5	5	
0045	24	1	6	0	2	0	0	0	4	5	6	
0100	25	0	11	0	1	0	0	0	0	8	5	
0115	25	0	15	0	1	0	0	0	3	2	4	
0130	17	0	5	0	1	0	0	0	1	4	6	
0145	26	0	10	0	1	0	0	0	1	7	7	
0200	26	0	11	0	0	0	0	0	4	6	5	
0215	31	0	12	0	1	0	0	0	4	8	6	
0230	32	0	13	0	5	0	1	0	1	7	5	
0245	12	0	4	0	1	0	0	0	1	3	3	
0300	35	1	22	0	0	0	0	0	2	4	6	
0315	24	0	9	0	5	1	0	1	0	5	3	
0330	42	1	19	0	8	0	0	1	0	4	9	
0345	29	0	12	0	4	0	0	0	5	6	2	
0400	43	1	15	0	7	1	0	1	8	4	6	
0415	35	0	18	0	3	0	0	0	1	7	6	
0430	36	0	18	0	5	0	0	0	2	4	7	
0445	47	1	25	0	9	0	0	1	1	5	5	
0500	37	0	21	0	8	0	1	0	0	4	3	
0515	80	2	59	1	5	0	2	0	1	3	7	
0530	100	0	78	0	10	0	0	0	3	5	4	
0545	94	0	68	0	4	0	0	0	2	12	8	
0600	95	0	72	1	13	0	1	0	0	2	6	
0615	93	3	67	1	13	0	0	0	0	3	6	
0630	135	1	103	0	15	1	2	0	0	5	8	
0645	156	4	131	1	11	0	1	0	1	3	4	
0700	216	2	177	0	24	1	2	0	0	4	6	
0715	218	5	180	0	15	3	1	0	0	8	6	
0730	218	2	185	1	21	0	2	0	0	2	5	
0745	229	1	193	2	16	0	4	0	0	4	9	
0800	221	1	195	0	10	0	4	0	0	7	4	
0815	213	1	175	2	18	1	2	0	0	6	8	
0830	165	4	134	0	15	0	1	0	2	2	7	
0845	145	2	117	1	6	0	1	0	3	5	10	
0900	90	1	59	1	13	1	2	0	3	4	6	
0915	101	0	74	0	11	1	0	1	0	10	4	
0930	110	0	74	1	11	2	1	0	2	5	14	
0945	110	2	70	2	12	2	1	0	6	5	10	
1000	66	2	44	0	9	2	0	0	1	6	2	
1015	99	0	72	1	14	0	2	0	0	3	7	
1030	88	1	65	1	6	0	1	0	2	10	2	
1045	91	0	68	0	7	0	1	0	1	6	8	
1100	75	0	53	0	11	0	0	0	0	3	8	
1115	88	2	65	1	10	0	3	0	1	3	3	
1130	95	2	61	1	8	0	1	0	2	11	9	
1145	96	1	67	0	13	0	2	0	1	4	8	
1200	80	1	61	0	5	2	3	0	1	2	5	
1215	93	2	73	1	9	2	0	1	0	2	3	
1230	88	2	68	0	7	1	1	0	2	3	4	
1245	97	0	67	1	9	0	2	0	0	10	8	
1300	108	2	77	0	11	1	4	0	2	7	4	
1315	89	1	62	2	11	1	0	0	2	3	7	
1330	103	6	72	1	15	0	0	0	0	4	5	
1345	99	1	65	1	18	2	3	0	2	4	3	
1400	153	6	124	0	8	0	0	0	1	5	9	
1415	105	3	81	1	6	0	2	0	1	6	5	
1430	83	1	66	0	3	0	2	0	1	5	5	
1445	111	2	83	1	12	0	2	0	1	2	8	
1500	121	1	96	1	9	0	2	0	0	6	6	
1515	133	2	105	0	8	0	1	1	4	7	5	
1530	101	1	80	2	5	0	2	0	1	6	4	
1545	116	1	91	1	7	2	1	0	1	4	8	
1600	140	2	121	1	5	1	0	0	0	3	7	
1615	126	1	108	0	8	0	1	0	0	6	2	
1630	131	0	109	2	7	0	0	0	2	3	8	
1645	120	1	100	0	9	0	0	0	2	4	4	
1700	144	2	127	0	7	2	0	1	0	2	3	
1715	139	0	126	1	1	1	0	0	2	3	5	
1730	155	2	136	1	7	0	1	0	0	4	4	
1745	139	0	121	2	3	0	0	0	1	3	9	
1800	112	2	99	1	3	0	0	0	3	4	0	
1815	112	3	95	0	4	0	0	0	0	4	6	
1830	77	3	58	0	2	0	0	0	0	9	5	
1845	74	0	59	0	5	0	0	0	3	2	5	
1900	79	2	66	1	2	0	0	0	0	4	4	
1915	64	1	55	1	2	0	0	0	1	3	1	
1930	59	1	37	0	7	0	0	0	0	10	4	
1945	63	1	47	0	1	0	0	0	2	6	6	
2000	48	8	30	0	1	0	0	0	1	1	7	
2015	42	2	26	0	1	0	2	0	2	4	5	
2030	48	1	30	0	5	0	0	0	1	6	5	
2045	54	0	42	0	3	0	0	0	4	2	3	
2100	48	0	34	0	3	0	0	0	2	5	4	
2115	43	1	33	0	1	0	0	0	0	5	3	
2130	47	0	36	0	3	0	0	0	4	1	3	
2145	39	0	28	0	3	0	0	0	1	3	4	
2200	59	0	51	0	2	0	0	0	2	4	0	
2215	48	2	33	0	0	0	0	0	1	8	4	
2230	26	0	20	0	1	0	0	0	1	1	3	
2245	32	0	18	0	2	0	0	0	3	3	6	
2300	51	2	37	0	2	0	0	0	2	5	3	
2315	28	2	18	0	1	0	0	0	2	3	2	
2330	21	0	13	0	2	0	0	0	2	2	2	
2345	24	2	13	0	2	0	0	0	1	3	3	
07-19	**5883**	**77**	**4658**	**34**	**454**	**28**	**58**	**4**	**56**	**231**	**283**	
06-22	**6996**	**102**	**5495**	**39**	**538**	**29**	**64**	**4**	**75**	**294**	**356**	
06-00	**7285**	**110**	**5698**	**39**	**550**	**29**	**64**	**4**	**89**	**323**	**379**	
00-00	**8194**	**117**	**6205**	**40**	**635**	**31**	**68**	**8**	**140**	**448**	**502**	

3025 1438 19.74% 287.6

17 May 2014

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	43	0	31	0	0	1	0	0	1	6	4	
0015	19	0	10	0	1	0	0	0	2	3	3	
0030	41	0	24	0	1	0	0	0	3	7	6	
0045	26	2	10	0	0	0	0	0	4	4	6	
0100	24	0	16	0	0	0	0	0	2	5	1	
0115	26	0	16	0	0	1	0	0	0	5	4	
0130	19	0	11	0	1	0	0	0	1	3	3	
0145	20	0	13	0	0	0	0	0	4	1	2	
0200	27	0	15	0	0	0	0	0	1	2	9	
0215	21	0	10	0	1	0	0	0	3	6	1	
0230	17	0	11	0	1	0	0	0	1	3	1	
0245	15	0	8	0	0	0	0	0	0	2	5	
0300	31	0	20	0	1	1	0	0	1	3	5	
0315	23	1	11	0	1	0	0	0	1	3	6	
0330	35	0	10	0	4	1	0	0	8	7	5	
0345	22	0	8	0	5	0	0	0	4	1	4	
0400	25	0	10	0	2	0	0	0	2	7	4	
0415	18	0	7	0	4	0	0	0	1	3	3	
0430	19	0	10	0	0	0	0	0	1	4	4	
0445	26	0	15	0	4	0	0	0	0	2	5	
0500	30	1	23	0	0	0	0	0	0	4	2	
0515	41	1	31	0	1	0	0	1	1	3	3	
0530	49	1	33	0	2	0	0	0	2	7	4	
0545	39	0	30	0	3	0	0	0	0	3	3	
0600	51	2	38	0	7	0	0	0	0	3	1	
0615	45	1	34	1	5	0	0	0	0	1	3	
0630	56	0	39	0	4	0	0	0	2	5	6	
0645	63	1	46	0	8	0	0	0	1	3	4	
0700	70	0	62	0	4	1	0	0	1	1	1	
0715	59	2	43	0	5	0	0	0	3	2	4	
0730	65	1	52	1	2	0	3	0	1	2	3	
0745	69	0	46	0	11	0	0	0	4	2	6	
0800	60	1	49	0	6	0	0	0	1	1	2	
0815	63	4	46	1	3	0	0	0	1	3	5	
0830	70	2	50	3	5	1	0	0	2	3	4	
0845	75	0	61	0	4	0	3	0	0	2	5	
0900	70	3	54	0	2	0	1	0	0	5	5	
0915	89	6	72	0	5	1	1	0	0	1	3	
0930	71	0	64	2	1	0	0	0	0	3	1	
0945	76	4	64	1	3	0	0	0	0	3	1	
1000	68	1	60	0	3	0	0	0	0	1	3	
1015	78	0	63	0	6	0	1	0	1	1	6	
1030	83	4	64	1	5	0	1	0	0	3	5	
1045	78	0	66	1	2	0	2	0	1	0	6	
1100	80	3	69	1	2	0	0	0	0	1	4	
1115	97	0	83	1	4	1	0	0	1	1	6	
1130	90	4	77	1	2	0	0	1	0	1	4	
1145	81	2	69	2	1	1	0	0	2	1	3	
1200	76	2	67	0	1	0	0	0	0	2	4	
1215	75	1	65	0	4	0	0	0	0	3	2	
1230	65	2	51	0	1	0	0	1	1	4	5	
1245	80	3	68	0	5	0	0	0	0	3	1	
1300	65	2	59	0	2	1	0	0	0	1	0	
1315	74	6	54	1	6	0	1	0	0	2	4	
1330	72	3	62	0	0	0	0	0	0	4	3	
1345	73	4	63	0	3	0	0	0	1	1	1	
1400	71	0	62	0	1	0	0	0	1	1	6	
1415	65	4	57	0	1	0	0	0	1	0	2	
1430	68	1	52	1	5	0	0	0	1	4	4	
1445	60	4	52	0	1	0	0	0	1	1	1	
1500	67	2	55	0	5	0	0	0	0	2	3	
1515	61	1	56	0	0	0	0	0	0	2	2	
1530	56	6	45	0	3	1	0	0	0	0	1	
1545	58	3	46	1	2	0	1	0	0	3	2	
1600	59	0	52	0	4	0	0	0	0	1	2	
1615	72	0	64	0	2	0	0	0	0	4	2	
1630	61	4	51	0	2	0	0	0	0	2	2	
1645	71	3	65	0	1	0	0	0	0	2	0	
1700	64	1	53	1	4	0	0	0	0	2	3	
1715	56	1	50	0	0	0	0	0	0	2	3	
1730	47	2	40	0	0	0	0	0	1	3	1	
1745	56	4	45	0	2	0	0	0	0	1	4	
1800	58	0	51	0	2	0	0	0	0	0	5	
1815	59	0	52	0	4	0	0	0	0	1	2	
1830	42	0	36	0	0	0	0	0	0	2	4	
1845	39	1	31	0	2	0	0	0	0	1	4	
1900	41	0	37	0	1	0	0	0	1	0	2	
1915	39	2	31	0	0	0	0	0	0	2	4	
1930	40	2	28	0	2	0	0	0	0	3	5	
1945	34	0	29	1	1	0	0	0	0	2	1	
2000	42	1	34	0	3	0	0	0	0	4	0	
2015	33	0	29	0	0	0	0	0	0	3	1	
2030	30	1	24	0	0	0	0	0	0	4	1	
2045	27	0	25	0	0	0	0	0	0	2	0	
2100	27	0	22	0	0	0	0	0	0	4	1	
2115	19	0	14	0	0	0	0	0	0	3	2	
2130	29	0	25	0	1	0	0	0	0	1	2	
2145	17	0	16	0	0	0	0	0	0	1	0	
2200	34	0	28	0	0	0	0	0	0	3	3	
2215	23	0	21	0	1	0	0	0	0	1	0	
2230	16	0	13	0	1	0	0	0	0	0	2	
2245	24	0	18	0	0	0	0	0	1	3	2	
2300	23	0	19	0	0	0	0	0	0	3	1	
2315	31	2	25	0	0	0	0	0	0	1	3	
2330	15	0	12	0	0	0	0	0	0	2	1	
2345	17	0	11	0	1	0	0	0	0	2	3	
07-19	**3262**	**97**	**2718**	**19**	**139**	**7**	**14**	**2**	**25**	**91**	**150**	
06-22	**3855**	**107**	**3189**	**21**	**171**	**7**	**14**	**2**	**29**	**132**	**183**	
06-00	**4038**	**109**	**3336**	**21**	**174**	**7**	**14**	**2**	**30**	**147**	**198**	
00-00	**4694**	**115**	**3719**	**21**	**206**	**11**	**14**	**3**	**73**	**241**	**291**	

18 May 2014

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
0000	15	0	10	0	1	0	0	0	1	2	1	
0015	14	0	10	0	0	0	0	0	1	2	1	
0030	16	0	12	0	0	0	0	0	0	3	1	
0045	7	0	5	0	0	0	0	0	0	2	0	
0100	11	0	8	0	0	0	0	0	0	1	2	
0115	11	0	8	0	0	0	0	0	1	1	1	
0130	14	0	8	0	0	0	0	0	0	4	2	
0145	9	0	5	0	0	0	0	0	0	2	2	
0200	14	0	10	0	1	0	0	0	0	1	2	
0215	14	0	8	0	1	0	0	0	0	3	2	
0230	11	0	5	0	1	0	0	0	0	3	2	
0245	10	0	7	0	0	0	0	0	0	1	2	
0300	6	0	4	0	0	0	0	0	0	1	1	
0315	15	0	7	0	1	0	0	0	0	2	5	
0330	13	0	8	0	0	0	0	0	0	3	2	
0345	17	0	8	0	1	0	0	0	0	6	2	
0400	11	0	7	0	0	0	0	0	0	1	3	
0415	13	0	6	0	2	0	0	0	0	3	2	
0430	12	0	8	0	0	0	0	0	0	4	0	
0445	12	0	8	0	1	0	0	0	0	1	2	
0500	21	0	13	0	0	0	0	0	0	3	5	
0515	18	0	13	0	2	0	0	0	0	0	3	
0530	26	1	22	0	0	0	0	0	0	2	1	
0545	21	0	17	0	2	0	0	0	0	1	1	
0600	17	0	11	0	1	0	0	0	0	2	3	
0615	23	0	17	0	0	1	0	0	0	4	1	
0630	30	1	23	1	3	0	0	0	0	2	0	
0645	25	0	18	0	2	0	0	0	0	3	2	
0700	47	1	41	0	3	0	0	0	0	1	1	
0715	32	3	21	2	2	0	0	0	0	3	1	
0730	35	0	29	1	2	0	0	0	2	0	1	
0745	22	1	15	0	2	0	0	0	0	3	1	
0800	32	3	23	1	0	0	0	0	0	2	3	
0815	36	2	26	1	2	0	0	0	0	2	3	
0830	38	3	26	0	1	0	0	0	0	3	5	
0845	45	2	32	1	2	0	0	0	1	5	2	
0900	52	3	42	0	3	0	0	0	0	1	3	
0915	58	2	47	1	3	0	0	0	1	4	0	
0930	61	4	46	0	2	0	0	1	1	0	7	
0945	84	13	57	1	4	0	2	1	1	3	2	
1000	73	10	54	1	3	0	0	0	0	0	5	
1015	68	5	57	1	1	0	0	0	0	2	2	
1030	91	5	71	2	2	1	0	0	0	5	5	
1045	91	9	76	0	2	0	0	0	0	2	2	
1100	89	10	70	1	1	0	3	1	0	1	2	
1115	77	2	65	0	3	0	0	0	1	4	2	
1130	87	15	68	0	0	0	0	0	0	1	3	
1145	90	7	75	1	1	0	0	1	0	2	3	
1200	94	9	79	0	3	0	0	0	1	2	0	
1215	63	3	55	1	3	0	0	0	0	1	0	
1230	78	8	62	0	2	0	0	0	0	2	4	
1245	84	5	67	0	3	0	0	0	0	1	8	
1300	70	3	64	0	1	0	0	0	0	1	1	
1315	73	7	58	0	3	0	0	0	0	3	2	
1330	57	0	51	0	1	0	0	0	1	1	3	
1345	60	3	49	0	6	0	0	0	0	1	1	
1400	88	8	72	0	2	0	0	0	1	2	3	
1415	55	0	48	1	1	0	0	0	1	1	3	
1430	54	5	45	0	2	0	0	0	1	1	0	
1445	70	2	64	1	0	0	0	0	0	3	0	
1500	82	7	71	0	1	0	0	0	0	0	3	
1515	62	2	50	1	5	0	1	0	0	1	2	
1530	71	3	59	0	2	0	0	0	2	2	3	
1545	57	1	45	0	3	0	0	0	1	3	4	
1600	57	1	47	1	3	0	0	0	0	4	1	
1615	76	5	63	0	2	0	0	0	0	2	4	
1630	56	3	40	0	2	0	0	0	1	2	8	
1645	76	1	68	0	1	0	0	0	1	3	2	
1700	63	2	48	0	1	0	1	0	0	6	5	
1715	66	2	59	0	1	0	0	0	1	1	2	
1730	68	1	57	2	2	0	0	0	1	2	3	
1745	62	9	45	0	4	0	0	1	0	1	2	
1800	67	4	58	0	0	0	0	1	0	2	2	
1815	47	0	43	0	1	0	0	0	0	1	2	
1830	56	1	46	1	1	0	0	0	1	5	1	
1845	53	3	39	1	3	0	0	1	0	2	4	
1900	41	3	32	0	1	0	0	0	1	2	2	
1915	36	1	31	0	2	0	0	0	0	1	1	
1930	45	0	31	1	3	0	0	0	1	5	4	
1945	48	0	36	0	4	0	0	0	1	5	2	
2000	59	1	47	1	0	1	0	0	0	4	5	
2015	33	0	29	0	3	0	0	0	0	0	1	
2030	28	1	21	0	2	0	0	0	0	4	0	
2045	36	0	24	0	1	0	0	0	0	4	7	
2100	39	1	28	0	2	0	0	0	0	4	4	
2115	36	1	28	0	0	0	0	0	0	3	4	
2130	36	0	31	0	0	0	0	0	0	4	1	
2145	18	0	15	0	1	0	0	0	0	1	1	
2200	31	0	27	1	0	0	0	0	0	0	3	
2215	25	0	18	0	0	0	0	0	1	4	2	
2230	21	0	15	0	0	0	0	0	0	4	2	
2245	22	0	15	0	1	0	0	0	0	5	1	
2300	30	1	23	0	0	0	0	0	0	1	5	
2315	19	0	9	0	0	0	0	0	2	4	4	
2330	18	0	11	0	0	0	0	0	2	3	2	
2345	13	0	8	0	0	1	0	0	0	4	0	
07-19	**3073**	**198**	**2493**	**23**	**98**	**1**	**7**	**7**	**20**	**100**	**126**	
06-22	**3623**	**207**	**2915**	**26**	**123**	**3**	**7**	**7**	**23**	**148**	**164**	
06-00	**3802**	**208**	**3041**	**27**	**124**	**4**	**7**	**7**	**28**	**173**	**183**	
00-00	**4133**	**209**	**3258**	**27**	**137**	**4**	**7**	**7**	**31**	**225**	**228**	

Grand Total

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Fix1
--	**51503**	**719**	**40021**	**230**	**3575**	**178**	**378**	**59**	**791**	**2743**	**2809**	

Period	Total	Per day		
18 hour	38168	7634		
AADT	51503	7358		
AM 5	4209	842	Combined peak 5 day	1467
PM 5	3125	625		
AM 7	4628	661	Combined peak 7 day	1176
PM 7	3607	515		

18 hr factor 5.2043

AADT factor 6.2542

Report Id - CustomList-40
Site Name - LUTTERWORTH -03
Description - A5 S [60M]
Direction - South

12 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
0000	0	0	0	0	0	0	0	1	4	3	5	3	1	1	2	0	0	52.5	60.4	4	20	3	15	0	0	
0015	0	0	0	0	0	0	0	1	3	8	1	0	0	0	0	0	0	46	48.5	0	0	0	0	0	0	
0030	0	0	0	3	0	0	0	5	6	8	5	2	0	0	0	0	0	43.3	50.8	0	0	0	0	0	0	
0045	0	0	0	0	0	0	0	2	2	9	1	0	0	0	0	0	0	45.6	47.6	0	0	0	0	0	0	
0100	0	0	0	0	0	0	0	2	8	3	1	2	1	0	0	0	0	46.1	54.1	1	5.9	0	0	0	0	
0115	0	0	0	0	0	0	5	3	2	2	11	0	1	0	0	0	0	45.8	53.5	1	4.2	0	0	0	0	
0130	0	0	0	0	0	0	0	5	3	3	0	2	1	0	0	0	0	46	57.5	1	7.1	0	0	0	0	
0145	0	0	0	0	0	0	1	1	6	5	0	0	0	0	1	0	0	44.8	45.2	1	7.1	1	7.1	0	0	
0200	0	0	0	0	0	0	1	3	4	5	4	2	0	0	0	0	0	46.5	53.2	0	0	0	0	0	0	
0215	0	0	0	0	0	0	0	5	1	2	1	2	0	0	1	0	0	47.2	56.8	1	8.3	1	8.3	0	0	
0230	0	0	0	0	0	1	1	1	5	1	3	1	1	0	0	0	0	44.8	53	1	7.1	0	0	0	0	
0245	0	0	0	0	0	1	0	4	6	1	0	1	1	0	1	0	0	44.9	55.5	2	13.3	1	6.7	0	0	
0300	0	0	0	0	0	0	0	2	9	4	2	0	1	0	1	0	0	46.4	51	2	10.5	1	5.3	0	0	
0315	0	0	0	0	0	0	1	2	6	7	3	4	1	0	0	0	0	47.4	55.5	1	4.2	0	0	0	0	
0330	0	0	0	0	0	0	0	2	6	11	5	1	1	0	0	0	0	47.3	50.3	1	3.8	0	0	0	0	
0345	0	0	0	0	0	0	1	4	5	4	7	2	1	0	1	0	0	48	53.9	2	8	1	4	0	0	
0400	0	0	0	0	0	0	0	2	2	12	2	0	0	0	0	0	0	46.3	48.8	0	0	0	0	0	0	
0415	0	0	0	0	0	0	2	2	3	9	8	4	0	1	0	0	0	49	55	1	3.4	0	0	0	0	
0430	0	0	0	0	0	0	0	4	10	11	7	4	1	1	0	0	0	48.1	53.7	2	5.3	0	0	0	0	
0445	0	0	0	0	0	0	0	5	10	3	5	7	2	1	0	0	0	49.2	57	3	9.1	0	0	0	0	
0500	0	0	0	0	0	0	0	4	10	15	12	7	5	1	0	0	0	49.7	58.2	6	11.1	0	0	0	0	
0515	0	0	0	0	0	0	1	6	15	20	22	10	2	1	0	2	0	49.7	55.9	5	6.3	2	2.5	2	2.5	
0530	0	0	0	0	0	0	7	4	12	20	21	18	12	6	1	0	0	51.6	60.4	19	18.8	1	1	0	0	
0545	0	0	0	0	0	1	1	4	12	13	15	20	11	4	2	1	1	53.2	61.5	19	22.4	4	4.7	2	2.4	
0600	0	0	0	1	0	0	2	8	13	23	26	18	9	4	2	0	0	51.1	59.3	15	14.2	3	2.8	0	0	
0615	0	0	1	0	0	1	2	4	14	18	28	16	10	3	1	0	0	51.1	59.5	14	14.3	1	1	0	0	
0630	0	0	0	0	0	0	0	6	19	31	36	35	14	4	3	1	0	52.7	59.9	22	14.8	4	2.7	1	0.7	
0645	0	0	0	0	0	1	0	11	35	22	52	30	13	8	2	0	0	51.5	59.1	23	13.2	3	1.7	0	0	
0700	0	0	0	0	0	0	0	4	25	39	60	49	17	6	2	0	0	52.5	59.3	25	12.4	3	1.5	0	0	
0715	0	0	0	0	0	0	0	22	29	47	61	50	13	2	2	0	0	50.7	57.7	17	7.5	3	1.3	0	0	
0730	0	0	0	0	0	0	2	25	47	66	62	40	9	5	0	0	0	49.2	56.6	14	5.5	2	0.8	0	0	
0745	0	0	0	0	0	0	1	17	38	47	62	60	17	4	1	0	0	51.1	58.2	22	8.9	1	0.4	0	0	
0800	0	0	0	0	0	0	1	4	35	65	76	42	22	3	0	0	0	51.4	57.7	25	10.1	1	0.4	0	0	
0815	0	0	0	0	0	4	2	16	36	89	71	34	9	2	3	1	0	49.7	55.9	15	5.6	4	1.5	1	0.4	
0830	0	0	0	0	0	0	2	18	35	46	51	30	12	3	0	0	0	49.5	56.6	15	7.6	1	0.5	0	0	
0845	0	0	0	0	0	2	0	15	27	21	42	31	13	3	0	0	0	50.3	57.9	16	10.4	0	0	0	0	
0900	0	0	0	0	0	1	1	15	36	32	29	34	4	0	0	0	1	49.1	57.3	5	3.3	1	0.7	1	0.7	
0915	0	0	0	0	0	1	2	9	29	35	35	12	7	7	0	0	0	49.3	56.8	14	10.2	2	1.5	0	0	
0930	0	0	0	0	0	0	0	2	23	29	25	14	9	1	0	0	1	50.6	56.4	11	10.6	1	1	1	1	
0945	0	0	0	0	0	1	4	6	18	20	24	11	3	3	0	0	0	48.6	56.1	6	6.7	0	0	0	0	
1000	0	0	0	0	0	0	3	4	27	24	20	13	6	0	0	0	0	48.5	55.9	6	6.2	0	0	0	0	
1015	0	0	0	0	0	0	0	5	22	16	20	19	3	1	0	0	0	49.5	56.6	4	4.7	0	0	0	0	
1030	0	0	0	0	0	1	2	17	21	28	16	14	1	1	0	0	1	47.1	55.5	3	2.9	1	1	1	1	
1045	0	0	0	0	0	1	2	10	26	29	19	13	5	1	0	0	0	47.9	55.9	6	5.7	0	0	0	0	
1100	0	0	0	0	0	1	0	4	8	29	24	7	4	3	0	1	0	50.3	55.3	8	9.9	1	1.2	1	1.2	
1115	0	0	0	0	0	1	6	4	25	29	23	5	4	1	0	0	0	47.3	53.9	5	5.1	0	0	0	0	
1130	0	0	0	0	0	0	5	8	25	20	27	12	2	1	1	0	0	47.9	55	4	4	1	1	0	0	
1145	0	0	0	0	0	0	2	13	28	27	22	6	5	1	0	0	0	47.1	53.9	6	5.8	0	0	0	0	
1200	0	0	0	0	6	1	1	14	21	19	20	10	2	1	0	0	0	46	54.8	3	3.2	0	0	0	0	
1215	0	0	0	0	0	0	2	2	13	23	10	13	5	3	0	0	0	50.4	58.2	8	11.3	1	1.4	0	0	
1230	0	0	0	0	0	0	0	8	10	28	17	13	5	2	2	1	0	50.4	58.4	10	11.6	3	3.5	1	1.2	
1245	0	0	0	0	0	0	0	5	13	15	30	13	4	0	1	0	0	50.2	57	5	6.2	1	1.2	0	0	
1300	0	0	0	0	0	1	2	4	21	22	16	11	1	2	0	1	0	48.3	55.3	4	4.9	2	2.5	1	1.2	
1315	0	0	0	0	1	0	0	7	22	21	17	16	6	0	1	0	0	49.3	56.8	7	7.7	1	1.1	0	0	
1330	0	0	0	0	1	1	0	4	19	20	28	12	6	5	0	0	0	50.2	56.6	11	11.5	1	1	0	0	
1345	0	0	0	0	0	0	4	4	19	27	14	8	8	0	1	0	0	48.7	56.4	9	10.6	1	1.2	0	0	
1400	0	0	0	0	0	0	1	7	17	36	27	18	5	1	0	0	0	49.8	56.1	6	5.4	0	0	0	0	
1415	0	0	0	0	0	1	0	12	21	34	45	10	4	1	0	0	0	49	54.4	5	3.9	0	0	0	0	
1430	0	0	0	0	0	0	0	2	15	27	40	17	5	1	0	0	0	50.9	56.4	6	5.6	0	0	0	0	
1445	0	0	0	0	0	1	2	3	6	20	26	19	8	1	0	0	0	51.4	57.7	9	10.5	0	0	0	0	
1500	0	0	0	0	1	0	2	9	14	25	35	28	4	1	1	0	0	50.5	57.5	6	5	1	0.8	0	0	
1515	0	0	0	0	0	0	5	9	30	34	34	14	7	4	0	0	0	49	55	11	8	1	0.7	0	0	
1530	0	0	0	0	1	1	1	7	16	32	41	26	6	3	0	1	0	50.8	57.3	10	7.4	3	2.2	1	0.7	
1545	0	0	0	0	0	0	3	6	19	20	35	18	8	2	1	0	0	50.5	57.5	11	9.8	1	0.9	0	0	
1600	0	0	0	0	0	0	0	0	22	37	49	30	8	4	1	1	1	52.2	57.9	15	9.8	3	2	2	1.3	
1615	0	0	0	0	0	0	0	5	21	30	40	25	10	6	0	0	0	51.6	58.2	16	11.7	3	2.2	0	0	
1630	0	0	0	0	0	0	1	0	7	36	28	30	15	1	2	0	0	53.1	59.5	18	15	2	1.7	0	0	
1645	0	0	0	0	2	1	1	6	17	33	45	41	11	1	0	0	1	51.4	58.2	13	8.2	2	1.3	1	0.6	
1700	1	0	1	0	0	1	0	12	11	28	46	35	16	2	0	0	0	51.3	58.8	18	11.8	1	0.7	0	0	
1715	0	0	2	0	0	0	0	2	20	39	46	32	12	1	2	0	0	51.4	59.1	15	9.6	2	1.3	0	0	
1730	0	0	0	0	0	2	0	5	11	32	45	48	8	8	1	1	1	53.2	59.1	19	11.7	4	2.5	2	1.2	
1745	0	0	0	0	0	0	0	6	13	19	29	31	15	8	2	0	1	53.8	61.1	26	21	5	4	1	0.8	
1800	0	0	0	0	0	0	0	0	9	20	33	24	10	10	0	0	1	54.4	61.7	21	19.6	3	2.8	1	0.9	
1815	0	0	0	0	0	0	0	9	16	18	26	28	13	6	3	1	0	52.9	60.6	23	19.2	4	3.3	1	0.8	
1830	0	0	0	0	4	0	0	4	4	19	24	25	15	6	1	0	0	53.1	62.2	22	21.6	4	3.9	0	0	
1845	0	0	0	1	0	0	1	2	13	12	16	6	12	10	2	0	0	53.6	65.1	24	32	6	8	0	0	
1900	0	0	0	0	0	1	0	2	6	12	17	11	7	5	3	0	0	53.7	63.3	15	23.4	5	7.8	0	0	
1915	0	0	0	0	0	0	0	3	6	7	15	10	8	4	2	0	0	54.3	62.6	14	25.5	4	7.3	0	0	
1930	0	0	0	0	0	0	0	3	10	12	18	10	3	2	2	1	1	52.8	59.1	9	14.5	6	9.7	2	3.2	
1945	0	0	0	0	1	1	1	0	2	10	13	17	8	1	0	0	0	52.8	60.2	9	16.7	0	0	0	0	
2000	0	0	0	0	0	0	0	3	9	16	11	7	3	4	0	1	0	51.3	59.7	8	14.8	3	5.6	1	1.9	
2015	0	0	0	1	0	1	0	0	6	5	9	7	3	1	1	0	0	51.1	58.4	5	14.7	2	5.9	0	0	
2030	0	0	0	0	0	0	1	4	5	4	14	10	4	1	0	1	0	52.8	58.6	6	13.6	1	2.3	1	2.3	
2045	0	0	0	0	0	0	0	1	5	10	9	13	5	1	1	0	0	53.5	59.3	7	15.6	1	2.2	0	0	
2100	0	0	0	0	0	0	0	5	4	15	5	4	2	1	0	1	0	49.6	55.7	4	10.8	2	5.4	1	2.7	
2115	0	0	0	0	0	0	2	0	8	14	11	12	1	0	0	1	0	50.3	56.4	2	4.1	1	2	1	2	
2130	0	0	0	1	0	0	0	1	7	10	17	8	2	0	0	0	0	50.1	56.4	2	4.3	0	0	0	0	
2145	0	0	0	0	0	0	0	3	9	12	10	6	3	1	0	0	0	50	56.8	4	9.1	1	2.3	0	0	
2200	0	0	0	0	0	0	0	4	16	15	15	13	2	2	0	0	0	49.9	56.4	4	6	1	1.5	0	0	
2215	0	0	0	0	0	0	0	2	10	10	5	8	3	0	0	0	0	50	56.8	3	7.9	0	0	0	0	
2230	0	0	0	0	0	0	0	4	6	20	4	4	3	1	0	0	0	49.1	56.4	4	9.5	0	0	0	0	
2245	0	2	2	0	0	0	1	2	8	10	5	0	3	1	0	0	1	45.3	51.9	5	14.3	1	2.9	1	2.9	
2300	0	0	0	0	0	0	0	3	9	17	11	15	3	1	0	0	0	51	58.6	4	6.8	0	0	0	0	
2315	0	0	0	0	0	0	0	3	6	13	14	4	2	0	0	0	0	49.1	54.8	2	4.8	0	0	0	0	
2330	0	0	0	0	0	0	0	1	11	15	8	4	1	2	0	0	0	49	55	3	7.1	0	0	0	0	
2345	0	0	0	0	0	1	2	6	9	9	4	4	0	1	0	0	0	45.6	52.8	1	2.8	0	0	0	0	
07-19	**1**	**0**	**3**	**1**	**16**	**23**	**61**	**372**	**1000**	**1464**	**1631**	**1097**	**394**	**138**	**30**	**8**	**8**	**50.4**	**57.7**	**578**	**9.3**	**77**	**1.2**	**16**	**0.3**	
06-22	**1**	**0**	**4**	**4**	**17**	**28**	**69**	**426**	**1158**	**1685**	**1922**	**1311**	**489**	**178**	**47**	**14**	**9**	**50.7**	**57.9**	**737**	**10**	**114**	**1.5**	**23**	**0.3**	
06-00	**1**	**2**	**6**	**4**	**17**	**29**	**72**	**451**	**1233**	**1794**	**1988**	**1363**	**506**	**186**	**47**	**14**	**10**	**50.6**	**57.9**	**763**	**9.9**	**116**	**1.5**	**24**	**0.3**	
00-00	**1**	**2**	**6**	**7**	**17**	**32**	**93**	**525**	**1383**	**1973**	**2129**	**1455**	**549**	**202**	**57**	**17**	**11**	**50.4**	**57.9**	**836**	**9.9**	**131**	**1.5**	**28**	**0.3**	

13 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
0000	0	0	0	0	0	0	0	0	6	13	9	6	2	1	0	0	0	51	56.1	3	8.1	1	2.7	0	0	
0015	0	0	0	0	0	0	0	0	4	7	8	3	0	0	0	0	0	49.9	53.5	0	0	0	0	0	0	
0030	0	0	0	0	0	0	1	3	10	7	4	1	1	0	0	0	0	46.1	51.9	1	3.7	0	0	0	0	
0045	0	0	0	0	0	0	0	2	4	8	6	2	1	0	0	0	0	49	53.5	1	4.3	0	0	0	0	
0100	0	0	0	0	0	0	0	0	7	8	6	0	0	0	0	0	0	47.6	51.4	0	0	0	0	0	0	
0115	0	0	0	0	1	0	2	3	9	8	1	0	0	0	2	0	0	44.8	47.9	2	7.7	2	7.7	0	0	
0130	0	0	0	0	0	0	1	6	8	10	3	0	0	0	0	0	0	44.4	48.3	0	0	0	0	0	0	
0145	0	0	0	0	0	0	0	1	5	13	5	1	0	0	0	0	0	47.8	50.6	0	0	0	0	0	0	
0200	0	0	0	0	0	0	1	2	4	8	14	5	0	0	0	0	0	49.6	53.5	0	0	0	0	0	0	
0215	0	0	0	0	0	0	0	0	12	5	2	1	1	0	0	0	0	46	51.9	1	4.8	0	0	0	0	
0230	0	0	0	0	0	0	0	5	4	12	2	2	1	0	0	0	0	47.1	51.4	1	3.8	0	0	0	0	
0245	0	0	0	0	0	0	0	4	5	2	0	1	1	1	1	0	0	48.2	63.3	3	20	1	6.7	0	0	
0300	0	0	0	0	0	0	0	5	8	7	8	2	0	0	0	0	0	46.3	51.9	0	0	0	0	0	0	
0315	0	0	0	0	0	0	0	0	11	6	4	4	3	0	0	0	0	49.4	55	3	10.7	0	0	0	0	
0330	0	0	0	0	0	0	0	3	10	9	9	1	1	0	0	0	0	47.2	51.7	1	3	0	0	0	0	
0345	0	0	0	0	0	0	1	2	6	12	8	0	1	0	0	0	0	47	51.4	1	3.3	0	0	0	0	
0400	0	0	0	0	0	0	0	4	5	14	3	3	1	1	0	0	0	48.4	53.2	2	6.5	0	0	0	0	
0415	0	0	0	0	0	0	0	1	5	12	13	3	2	0	0	0	0	49.8	54.4	2	5.6	0	0	0	0	
0430	0	0	0	0	0	0	0	5	15	18	5	0	1	1	0	0	0	46.2	49.9	2	4.4	0	0	0	0	
0445	0	0	0	0	0	0	1	8	5	12	9	3	0	1	0	0	0	47	53	1	2.6	0	0	0	0	
0500	0	0	0	1	1	1	1	6	12	11	5	11	1	2	0	0	0	46.7	57.3	3	5.8	2	3.8	0	0	
0515	0	0	0	0	0	0	0	5	8	20	17	16	0	2	0	0	0	50.3	55.7	2	2.9	1	1.5	0	0	
0530	0	0	0	0	0	0	2	0	16	27	22	27	11	1	0	0	0	51.4	58.6	12	11.3	0	0	0	0	
0545	0	0	0	0	0	0	0	7	5	8	22	21	14	4	0	0	0	53.4	60.6	18	22.2	0	0	0	0	
0600	0	0	0	0	1	0	7	8	19	16	26	22	6	0	2	0	0	49.3	57.9	8	7.5	2	1.9	0	0	
0615	0	0	0	0	0	1	1	4	24	33	16	14	6	2	0	0	1	49.3	56.1	9	8.8	2	2	1	1	
0630	0	0	0	0	0	0	9	8	25	31	43	30	10	4	2	0	0	50.2	56.8	16	9.9	3	1.9	0	0	
0645	0	0	0	0	0	0	0	9	35	45	35	30	13	4	2	0	0	50.6	58.8	19	11	4	2.3	0	0	
0700	0	0	0	0	0	0	0	15	45	53	47	50	13	2	1	0	0	50.3	57.9	16	7.1	1	0.4	0	0	
0715	0	0	0	0	0	5	3	19	25	43	60	54	21	7	2	1	0	51.3	59.3	31	12.9	3	1.3	1	0.4	
0730	0	0	0	0	0	0	0	12	31	56	78	45	14	4	0	0	0	50.9	57.3	18	7.5	1	0.4	0	0	
0745	0	0	0	0	0	0	7	15	41	50	63	38	14	2	0	0	0	49.6	56.6	16	7	0	0	0	0	
0800	0	0	0	0	0	1	4	11	36	56	80	44	17	3	0	0	0	50.6	57.5	20	7.9	1	0.4	0	0	
0815	0	0	0	0	0	3	1	9	38	49	73	39	13	10	0	0	0	50.9	57.3	23	9.8	1	0.4	0	0	
0830	0	0	0	1	0	3	5	18	53	51	50	29	13	3	1	0	0	48.4	55.7	17	7.5	2	0.9	0	0	
0845	0	0	0	0	0	0	2	6	31	30	33	33	10	2	0	1	0	50.7	57.9	13	8.8	2	1.4	1	0.7	
0900	0	0	0	0	0	1	0	9	30	31	50	27	3	0	1	0	0	49.7	55.7	4	2.6	1	0.7	0	0	
0915	0	0	0	1	1	0	1	11	28	19	33	17	4	2	0	0	0	48.7	55.7	6	5.1	0	0	0	0	
0930	0	0	0	0	0	1	0	11	35	39	22	14	3	2	0	0	0	47.8	54.1	5	3.9	1	0.8	0	0	
0945	0	1	0	0	0	1	1	8	16	20	26	25	5	3	0	0	1	50.4	57.3	9	8.4	2	1.9	1	0.9	
1000	0	0	1	2	1	2	6	2	18	28	10	16	2	0	2	0	0	46.6	56.1	4	4.4	2	2.2	0	0	
1015	0	0	0	0	0	1	0	6	21	22	16	15	6	1	0	0	0	49.2	58.2	7	8	0	0	0	0	
1030	0	0	0	0	0	0	0	3	22	23	18	10	4	1	0	1	0	49.4	55.5	6	7.3	1	1.2	1	1.2	
1045	0	0	0	0	0	0	4	7	9	25	19	16	3	1	0	0	0	49.4	56.8	4	4.8	1	1.2	0	0	
1100	0	0	0	0	0	1	0	3	12	23	18	4	7	1	2	0	0	50.1	56.6	10	14.1	2	2.8	0	0	
1115	0	0	0	0	0	0	0	1	14	14	16	15	4	0	2	0	0	51.5	58.2	6	9.1	2	3	0	0	
1130	0	0	0	0	0	0	1	5	13	23	20	13	3	2	0	0	0	49.7	56.1	5	6.3	0	0	0	0	
1145	0	0	0	0	0	0	1	5	19	16	16	16	3	0	1	0	0	49.5	56.4	4	5.2	1	1.3	0	0	
1200	0	0	0	0	2	0	0	16	40	35	22	11	5	0	1	0	0	47.2	53.7	6	4.5	1	0.8	0	0	
1215	0	0	0	0	0	0	0	6	15	24	18	18	5	0	0	0	0	50	56.6	5	5.8	0	0	0	0	
1230	0	0	0	0	0	2	0	13	17	13	14	10	3	2	0	0	1	48.3	57.5	6	8	3	4	1	1.3	
1245	0	0	0	0	0	0	0	0	12	23	25	15	6	5	0	0	0	52	58.6	11	12.8	1	1.2	0	0	
1300	0	0	0	0	0	0	3	4	18	18	19	11	5	4	1	0	0	50.3	59.1	10	12	3	3.6	0	0	
1315	0	0	0	0	0	0	1	5	30	22	21	12	8	1	2	0	0	49.4	56.6	11	10.8	3	2.9	0	0	
1330	0	0	0	0	0	0	3	2	14	29	15	15	8	2	2	0	0	50.9	59.5	12	13.3	3	3.3	0	0	
1345	0	0	0	0	0	2	0	8	16	23	24	15	3	2	0	0	0	49.5	57.9	5	5.4	0	0	0	0	
1400	0	0	0	0	0	1	0	3	15	52	37	16	6	1	0	0	1	50.5	55.9	8	6.1	2	1.5	1	0.8	
1415	0	0	0	0	0	0	1	7	16	31	31	19	5	2	0	0	0	50.1	56.8	7	6.3	1	0.9	0	0	
1430	0	0	0	0	0	0	0	1	17	11	26	14	4	0	2	0	0	51.2	57.7	6	8	2	2.7	0	0	
1445	0	0	0	0	1	0	1	3	10	17	29	21	8	1	0	0	0	51.8	57.7	9	9.9	1	1.1	0	0	
1500	0	0	0	1	0	0	0	10	16	25	26	15	9	4	3	0	0	50.8	59.5	16	14.7	4	3.7	0	0	
1515	0	0	0	0	1	0	0	11	13	26	35	18	8	1	0	1	0	50.3	57	10	8.8	1	0.9	1	0.9	
1530	0	0	0	0	0	0	1	7	13	24	38	17	13	3	1	0	1	52.2	59.3	18	15.3	3	2.5	1	0.8	
1545	0	0	0	0	0	0	0	5	13	12	31	17	4	5	4	1	0	53	58.8	14	15.2	6	6.5	1	1.1	
1600	0	0	0	0	0	0	1	6	20	29	42	33	3	2	2	0	0	50.9	56.4	7	5.1	2	1.4	0	0	
1615	0	0	0	0	0	0	0	8	12	20	40	26	20	4	1	1	0	53.1	60.4	26	19.7	2	1.5	1	0.8	
1630	0	0	0	0	0	0	0	11	15	27	39	25	12	7	1	0	0	51.9	58.8	20	14.6	1	0.7	0	0	
1645	0	0	0	0	0	1	3	7	21	28	35	30	13	1	0	0	1	51	58.2	15	10.7	1	0.7	1	0.7	
1700	0	0	0	0	0	0	0	7	16	43	68	44	17	0	0	0	0	52	57.7	17	8.7	0	0	0	0	
1715	0	0	0	0	0	0	1	4	9	31	72	43	15	8	0	1	0	53.4	58.6	24	13	2	1.1	1	0.5	
1730	0	0	0	0	0	0	2	2	10	31	47	47	24	7	2	0	0	54.2	61.1	33	19.2	3	1.7	0	0	
1745	0	0	0	0	0	3	1	2	18	28	37	32	11	3	1	1	0	51.9	58.6	16	11.7	3	2.2	1	0.7	
1800	0	0	0	0	0	0	1	2	11	21	28	32	13	6	1	0	0	53.6	61.1	20	17.4	6	5.2	0	0	
1815	0	0	0	0	0	0	2	1	12	14	18	22	14	4	1	1	0	53.9	62.4	20	22.5	5	5.6	1	1.1	
1830	0	0	0	0	0	0	2	5	13	20	20	23	10	1	2	1	0	52.2	59.7	14	14.4	4	4.1	1	1	
1845	0	0	0	0	0	0	0	4	7	16	21	8	11	5	2	1	0	53.9	63.3	19	25.3	4	5.3	1	1.3	
1900	0	0	0	0	1	5	1	2	25	11	14	7	9	3	1	0	0	48.7	61.1	13	16.5	1	1.3	0	0	
1915	0	0	0	0	0	0	2	6	5	10	18	10	2	3	1	1	1	51.7	57.9	8	13.6	3	5.1	2	3.4	
1930	0	0	0	0	0	0	0	0	4	12	6	12	13	2	1	1	0	55.5	62.9	17	33.3	3	5.9	1	2	
1945	0	0	0	1	3	1	1	2	2	7	20	10	4	2	1	0	0	50.4	58.8	7	13	2	3.7	0	0	
2000	0	0	0	0	0	0	1	5	3	25	10	5	2	0	0	1	0	49.4	53.2	3	5.8	1	1.9	1	1.9	
2015	0	0	0	0	1	0	0	3	13	4	9	8	2	0	0	0	0	48.6	57	2	5	0	0	0	0	
2030	0	0	0	0	0	0	0	0	4	6	6	12	3	5	0	0	0	55.4	64.2	8	22.2	3	8.3	0	0	
2045	0	0	0	0	0	0	0	2	8	11	6	7	1	1	2	0	0	50.3	57.9	4	10.5	3	7.9	0	0	
2100	0	0	0	0	0	0	0	2	11	10	10	3	2	1	0	0	2	51.5	59.5	5	12.2	3	7.3	2	4.9	
2115	0	0	1	1	1	2	2	3	10	19	12	8	4	1	0	0	0	47.3	56.6	5	7.8	0	0	0	0	
2130	0	0	0	0	0	1	0	0	3	18	13	3	2	1	1	0	1	51.4	55	5	11.6	2	4.7	1	2.3	
2145	0	0	0	0	0	0	3	2	4	17	6	0	4	1	2	0	0	49.5	60.2	7	17.9	2	5.1	0	0	
2200	0	0	0	0	0	0	0	8	12	20	20	7	4	0	0	0	0	48.6	54.4	4	5.6	0	0	0	0	
2215	0	0	0	0	0	1	0	1	8	14	9	5	0	1	0	0	0	48.5	54.6	1	2.6	0	0	0	0	
2230	0	0	0	0	0	0	1	2	7	12	12	4	1	2	0	0	0	49.4	55.9	3	7.3	0	0	0	0	
2245	0	0	0	0	0	1	1	2	5	9	8	5	2	1	0	0	0	49.2	55.7	3	8.8	0	0	0	0	
2300	0	0	0	0	0	0	0	6	6	13	12	6	6	1	1	0	0	50.9	58.4	8	15.7	1	2	0	0	
2315	0	0	0	0	0	0	0	4	11	12	14	3	1	1	1	0	0	48.6	53.5	3	6.4	2	4.3	0	0	
2330	0	0	0	0	0	0	0	2	8	14	4	3	0	0	0	0	0	47.2	52.3	0	0	0	0	0	0	
2345	0	0	0	0	0	0	0	11	10	6	4	7	3	0	0	0	0	47.3	56.6	3	7.3	0	0	0	0	
07-19	**0**	**1**	**1**	**5**	**6**	**28**	**59**	**336**	**976**	**1364**	**1626**	**1129**	**425**	**127**	**41**	**11**	**5**	**50.8**	**57.9**	**609**	**9.9**	**91**	**1.5**	**16**	**0.3**	
06-22	**0**	**1**	**2**	**7**	**13**	**38**	**86**	**392**	**1171**	**1639**	**1876**	**1310**	**508**	**157**	**56**	**14**	**10**	**50.7**	**58.2**	**745**	**10.2**	**125**	**1.7**	**24**	**0.3**	
06-00	**0**	**1**	**2**	**7**	**13**	**40**	**88**	**428**	**1238**	**1739**	**1959**	**1350**	**525**	**163**	**58**	**14**	**10**	**50.6**	**57.9**	**770**	**10.1**	**128**	**1.7**	**24**	**0.3**	
00-00	**0**	**1**	**2**	**8**	**15**	**41**	**98**	**500**	**1422**	**1996**	**2144**	**1463**	**567**	**177**	**61**	**14**	**10**	**50.4**	**57.9**	**829**	**9.7**	**135**	**1.6**	**24**	**0.3**	

14 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
0000	0	0	0	0	0	0	3	2	5	10	8	1	4	2	0	0	0	49.5	62.2	6	17.1	1	2.9	0	0	
0015	0	0	0	0	0	0	0	2	9	21	3	1	2	0	0	0	0	47.3	49.9	2	5.3	0	0	0	0	
0030	0	0	0	0	1	0	0	1	5	9	11	0	1	0	0	0	0	48.2	53.7	1	3.6	0	0	0	0	
0045	0	0	0	0	0	0	0	2	5	10	4	1	0	0	0	0	0	46.7	52.3	0	0	0	0	0	0	
0100	0	0	0	1	0	0	2	2	9	4	8	1	0	1	0	0	0	45.4	52.1	1	3.6	1	3.6	0	0	
0115	0	0	0	0	0	0	1	2	1	6	3	0	0	0	0	0	0	46.3	52.1	0	0	0	0	0	0	
0130	0	0	0	0	0	0	0	5	8	6	7	2	1	0	0	0	0	46.8	52.1	1	3.4	0	0	0	0	
0145	0	0	0	0	0	0	1	0	2	4	6	3	1	0	0	0	0	49.7	55	1	5.9	0	0	0	0	
0200	0	0	0	0	0	0	0	1	8	6	5	1	0	0	0	0	0	46.5	51.4	0	0	0	0	0	0	
0215	0	0	0	0	0	0	0	0	8	3	4	0	0	0	0	0	0	46.3	51	0	0	0	0	0	0	
0230	0	0	0	0	0	0	0	3	8	8	9	4	0	0	0	0	0	48.5	53.5	0	0	0	0	0	0	
0245	0	0	0	0	0	0	0	4	13	7	0	2	0	1	0	0	0	45.5	48.5	1	3.7	1	3.7	0	0	
0300	0	0	0	0	0	1	0	11	4	9	1	1	1	0	0	0	0	43.7	49.2	1	3.6	0	0	0	0	
0315	0	0	0	0	0	0	0	3	11	15	2	3	0	1	0	0	0	47	51	1	2.9	1	2.9	0	0	
0330	0	0	0	0	0	0	0	5	5	22	15	3	2	0	1	0	0	49.4	53	3	5.7	1	1.9	0	0	
0345	0	0	0	0	0	0	1	2	7	12	4	3	2	0	0	0	0	47.9	51.9	2	6.5	0	0	0	0	
0400	0	0	0	0	0	0	0	1	6	24	11	3	1	0	0	0	0	48.8	53	1	2.2	0	0	0	0	
0415	0	0	0	0	0	0	0	2	1	16	0	4	1	0	0	0	0	48.8	55.3	1	4.2	0	0	0	0	
0430	0	0	0	0	0	0	2	5	14	22	11	4	0	0	1	0	0	46.8	51	1	1.7	1	1.7	0	0	
0445	0	0	0	0	0	0	1	4	14	14	12	1	0	0	0	0	0	46.8	53.5	0	0	0	0	0	0	
0500	0	0	0	0	0	0	0	6	7	8	22	10	3	3	0	0	0	51.1	58.4	6	10.2	0	0	0	0	
0515	0	0	0	0	0	0	0	9	23	21	23	18	3	0	1	1	0	49.4	56.6	5	5.1	2	2	1	1	
0530	0	0	0	0	0	0	2	5	21	17	26	23	15	2	1	0	0	51.7	60.2	18	16.1	1	0.9	0	0	
0545	0	0	0	0	0	0	0	4	17	30	22	5	5	4	1	1	1	50.5	56.4	12	13.3	4	4.4	2	2.2	
0600	0	0	0	0	2	1	3	2	11	30	24	10	8	4	1	1	0	50.2	58.8	14	14.4	4	4.1	1	1	
0615	0	0	0	1	2	1	0	2	13	22	36	17	6	1	0	1	0	50.6	57	8	7.8	2	2	1	1	
0630	0	0	0	0	0	0	0	8	41	39	50	25	9	1	2	0	0	49.9	56.4	12	6.9	3	1.7	0	0	
0645	0	0	0	0	1	0	0	9	45	38	38	42	14	8	1	0	0	50.9	58.8	23	11.7	4	2	0	0	
0700	0	0	1	0	0	0	1	10	23	63	66	45	12	5	3	1	0	51.4	57.9	21	9.1	5	2.2	1	0.4	
0715	0	0	0	0	0	0	3	16	45	49	52	47	18	7	3	0	0	50.7	58.8	28	11.7	5	2.1	0	0	
0730	0	0	0	0	0	0	6	12	31	54	73	64	18	2	0	0	0	51.2	58.2	20	7.7	1	0.4	0	0	
0745	0	0	0	0	0	0	2	22	30	52	59	58	23	8	3	2	0	51.8	59.3	36	13.9	9	3.5	2	0.8	
0800	0	0	0	0	0	0	0	12	48	73	92	32	9	4	2	0	1	50	55.7	16	5.9	4	1.5	1	0.4	
0815	0	0	0	0	0	0	2	28	34	51	61	47	17	1	2	1	0	50.1	57.9	21	8.6	4	1.6	1	0.4	
0830	0	0	0	0	0	2	6	7	20	40	53	54	21	7	1	0	1	52.1	59.5	30	14.2	4	1.9	1	0.5	
0845	0	0	0	0	0	2	2	6	34	30	39	47	11	3	0	1	0	51.2	58.8	15	8.6	2	1.1	1	0.6	
0900	0	0	1	2	0	1	3	15	35	25	27	19	6	5	0	0	0	47.8	56.4	11	7.9	1	0.7	0	0	
0915	0	0	0	0	0	0	2	10	21	35	35	15	5	1	1	0	0	48.9	55.5	7	5.6	1	0.8	0	0	
0930	0	0	0	0	0	0	0	4	24	16	37	18	6	3	0	0	0	50.8	58.2	9	8.3	2	1.9	0	0	
0945	0	0	0	0	1	0	2	14	24	11	17	9	2	4	1	1	1	48.5	56.8	9	10.3	3	3.4	2	2.3	
1000	0	0	0	0	1	3	0	12	18	23	17	12	1	2	0	0	0	47.2	56.1	3	3.4	0	0	0	0	
1015	0	0	0	1	3	1	0	2	9	20	13	13	6	3	0	0	0	49.6	58.2	9	12.7	0	0	0	0	
1030	0	0	0	0	0	0	5	9	14	21	18	13	4	3	2	0	0	49.5	58.2	9	10.1	3	3.4	0	0	
1045	0	0	0	0	0	0	0	4	10	11	24	13	7	6	0	0	0	52.4	60.2	13	17.3	4	5.3	0	0	
1100	0	0	0	0	1	0	1	6	7	14	8	17	5	2	3	1	1	52.9	61.5	12	18.2	5	7.6	2	3	
1115	0	0	0	1	0	0	2	3	11	23	16	10	4	2	1	0	0	49.7	56.6	7	9.6	1	1.4	0	0	
1130	0	0	0	0	0	0	1	8	22	18	18	19	3	1	0	0	0	48.9	56.6	4	4.4	1	1.1	0	0	
1145	0	0	0	0	0	1	3	6	18	20	17	11	5	2	0	0	0	48.7	56.6	7	8.4	1	1.2	0	0	
1200	0	0	0	0	1	0	0	8	11	26	27	14	9	1	0	1	0	50.5	58.2	11	11.2	1	1	1	1	
1215	0	0	0	0	0	0	0	2	14	29	20	14	6	3	0	0	0	50.9	58.8	9	10.2	0	0	0	0	
1230	0	0	0	0	0	0	1	13	11	16	15	22	6	5	1	0	0	51.2	59.7	12	13.3	1	1.1	0	0	
1245	0	0	0	0	0	0	0	5	18	28	19	12	9	2	0	0	0	50.2	57.7	11	11.8	0	0	0	0	
1300	0	0	0	0	0	0	0	3	15	17	27	14	9	1	1	1	1	52.2	59.7	13	14.6	3	3.4	2	2.2	
1315	0	0	0	0	0	0	2	11	12	17	23	12	5	2	0	0	0	49.4	56.4	7	8.3	1	1.2	0	0	
1330	0	0	0	0	0	0	2	3	14	26	22	18	4	1	0	0	0	50.1	57.7	5	5.6	0	0	0	0	
1345	0	0	0	0	0	0	0	7	18	29	35	16	6	3	2	0	1	51.2	57	12	10.3	4	3.4	1	0.9	
1400	0	0	0	0	0	1	0	8	23	32	41	22	3	2	1	0	0	49.8	56.6	6	4.5	1	0.8	0	0	
1415	0	0	0	0	0	0	2	4	18	21	18	13	8	1	0	2	1	50.9	59.7	12	13.6	3	3.4	3	3.4	
1430	0	0	0	0	0	0	0	1	25	17	24	17	4	3	0	1	1	51.5	57.3	9	9.7	3	3.2	2	2.2	
1445	0	0	0	0	0	0	0	1	20	12	31	20	6	1	1	0	0	51.8	58.2	8	8.7	2	2.2	0	0	
1500	0	0	0	0	0	0	2	7	24	29	27	17	6	2	2	0	0	50	57.3	10	8.6	4	3.4	0	0	
1515	0	0	1	0	0	4	0	8	18	16	26	17	4	1	1	1	0	49	57.3	7	7.2	2	2.1	1	1	
1530	0	0	0	0	0	0	0	7	7	33	36	12	7	0	0	0	0	50.5	56.8	7	6.9	0	0	0	0	
1545	0	0	0	0	0	0	0	6	11	21	36	25	12	5	1	0	0	52.7	59.7	18	15.4	5	4.3	0	0	
1600	0	0	0	0	0	1	2	7	27	31	29	16	10	2	0	0	0	49.6	56.8	12	9.6	0	0	0	0	
1615	0	0	0	0	0	0	0	5	11	20	27	34	8	6	1	0	0	53.1	59.5	15	13.4	3	2.7	0	0	
1630	0	0	0	0	0	0	0	11	19	29	46	24	8	1	2	1	0	50.9	57.9	12	8.5	3	2.1	1	0.7	
1645	0	0	0	0	0	1	2	2	9	32	37	41	16	9	1	1	1	54	61.1	28	18.4	5	3.3	2	1.3	
1700	0	0	0	0	0	0	0	2	20	37	62	35	16	2	2	0	0	52.6	58.8	20	11.4	2	1.1	0	0	
1715	0	0	0	0	0	0	0	9	9	25	44	55	16	9	2	0	0	54	61.3	27	16	4	2.4	0	0	
1730	0	0	0	0	0	0	0	1	14	31	34	42	18	6	1	0	0	53.8	60.4	25	17	3	2	0	0	
1745	0	0	0	0	0	0	0	4	14	33	39	33	10	5	2	0	1	52.8	59.3	18	12.8	4	2.8	1	0.7	
1800	0	0	0	0	1	0	4	8	16	29	31	18	9	6	0	2	1	50.9	59.3	18	14.4	4	3.2	3	2.4	
1815	0	0	0	0	0	0	2	4	21	19	28	20	11	4	2	0	0	51.9	59.5	17	15.3	4	3.6	0	0	
1830	0	0	0	0	0	0	0	2	10	16	19	22	8	13	1	2	0	55	65.3	24	25.8	5	5.4	2	2.2	
1845	0	0	1	0	1	0	0	2	13	14	19	13	7	8	1	0	0	52.4	62.6	16	20.3	3	3.8	0	0	
1900	0	0	0	0	1	0	0	2	10	16	28	13	6	2	1	0	1	52.3	58.8	10	12.5	3	3.8	1	1.3	
1915	0	0	0	0	1	1	0	2	7	14	12	11	8	2	1	0	1	52.4	61.3	12	20	3	5	1	1.7	
1930	0	0	0	0	0	0	0	4	9	10	19	5	10	5	1	0	0	52.9	61.7	16	25.4	3	4.8	0	0	
1945	0	0	0	0	0	0	0	8	6	11	19	12	4	2	1	0	1	51.6	58.2	8	12.5	2	3.1	1	1.6	
2000	0	0	0	0	0	0	0	2	11	14	9	6	8	0	1	1	0	51.7	61.7	10	19.2	2	3.8	1	1.9	
2015	0	0	0	0	0	1	0	3	13	10	10	10	4	2	1	0	0	50.8	59.3	7	13	2	3.7	0	0	
2030	0	0	0	0	0	0	0	4	15	13	14	14	2	3	1	0	1	51.2	59.1	7	10.4	2	3	1	1.5	
2045	0	0	0	0	0	0	2	2	6	4	8	6	5	2	1	1	0	52.6	62.2	9	24.3	2	5.4	1	2.7	
2100	0	0	0	0	0	0	0	4	2	12	13	4	3	1	0	0	2	52.4	59.7	6	14.6	3	7.3	2	4.9	
2115	0	0	0	0	0	0	0	6	9	16	7	7	4	1	0	0	0	49.4	56.6	5	10	1	2	0	0	
2130	0	0	0	0	0	0	0	4	15	9	16	4	5	1	0	0	1	49.5	56.4	7	12.7	1	1.8	1	1.8	
2145	0	0	0	0	0	0	1	0	9	12	12	7	1	1	0	0	0	50.1	56.8	2	4.7	1	2.3	0	0	
2200	0	0	0	0	0	0	0	2	7	13	25	14	9	0	1	0	0	52.6	59.1	10	14.1	1	1.4	0	0	
2215	0	0	0	0	0	0	0	1	2	13	9	10	4	1	0	0	0	52.5	58.8	5	12.5	0	0	0	0	
2230	0	0	0	0	0	0	3	3	12	4	16	3	3	0	0	0	0	47.9	54.8	3	6.8	0	0	0	0	
2245	0	0	0	0	0	0	0	5	6	13	5	8	1	0	0	2	1	51.6	55.5	4	9.8	3	7.3	3	7.3	
2300	0	0	0	0	0	0	1	6	9	24	17	8	11	1	0	0	1	50.7	60.4	13	16.7	1	1.3	1	1.3	
2315	0	0	0	0	0	0	0	3	6	10	15	4	3	0	1	0	0	50.5	56.4	4	9.5	1	2.4	0	0	
2330	0	0	0	0	0	0	1	3	10	20	9	4	2	0	0	0	0	47.6	53.7	2	4.1	0	0	0	0	
2345	0	0	0	0	0	0	0	1	6	9	8	1	2	1	0	0	0	49.2	53.9	3	10.7	0	0	0	0	
07-19	**0**	**0**	**4**	**4**	**9**	**17**	**60**	**357**	**920**	**1334**	**1584**	**1181**	**424**	**175**	**47**	**19**	**11**	**51.1**	**58.6**	**676**	**11**	**126**	**2.1**	**30**	**0.5**	
06-22	**0**	**0**	**4**	**5**	**16**	**21**	**66**	**419**	**1142**	**1604**	**1899**	**1374**	**521**	**211**	**59**	**23**	**18**	**51.1**	**58.6**	**832**	**11.3**	**164**	**2.2**	**41**	**0.6**	
06-00	**0**	**0**	**4**	**5**	**16**	**21**	**71**	**443**	**1200**	**1710**	**2003**	**1426**	**556**	**214**	**61**	**25**	**20**	**51**	**58.6**	**876**	**11.3**	**170**	**2.2**	**45**	**0.6**	
00-00	**0**	**0**	**4**	**6**	**17**	**22**	**84**	**524**	**1411**	**2014**	**2220**	**1520**	**598**	**228**	**66**	**27**	**21**	**50.8**	**58.4**	**940**	**10.7**	**183**	**2.1**	**48**	**0.5**	

15 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
0000	0	0	0	0	0	0	0	1	10	17	5	1	2	2	0	0	0	48.7	51.4	4	10.5	1	2.6	0	0	
0015	0	0	0	0	0	0	0	1	5	11	2	2	0	0	0	0	0	47.4	51.9	0	0	0	0	0	0	
0030	0	0	0	0	0	1	0	3	5	12	9	4	4	0	0	0	0	49.3	57.9	4	10.5	0	0	0	0	
0045	0	0	0	0	0	2	5	3	12	6	7	2	0	0	1	0	0	44.5	51.9	1	2.6	1	2.6	0	0	
0100	0	0	0	0	2	0	0	3	10	5	4	3	0	1	0	0	0	45	54.1	1	3.6	0	0	0	0	
0115	0	0	0	0	0	0	1	1	5	9	4	2	6	1	0	0	0	50.5	60.4	7	24.1	0	0	0	0	
0130	0	0	0	0	0	0	0	0	8	17	5	1	1	0	0	0	0	47.5	51	1	3.1	0	0	0	0	
0145	0	0	0	0	0	0	0	1	12	2	3	0	2	0	0	0	0	45.7	51.2	2	10	0	0	0	0	
0200	0	0	0	0	0	0	0	1	9	25	4	0	0	0	0	0	0	46.2	48.5	0	0	0	0	0	0	
0215	0	0	0	0	0	0	0	3	8	3	8	1	0	0	0	0	0	46	51.9	0	0	0	0	0	0	
0230	0	0	0	0	0	0	0	0	12	17	6	0	1	0	0	0	0	46.9	51.9	1	2.8	0	0	0	0	
0245	0	0	0	0	1	0	1	1	14	4	1	0	0	1	0	0	0	43.5	48.5	1	4.3	0	0	0	0	
0300	0	0	0	1	1	1	5	10	7	11	4	1	1	0	0	0	0	42	49.9	1	2.4	0	0	0	0	
0315	0	0	0	0	0	0	1	6	5	9	2	0	0	0	0	0	0	43.8	48.8	0	0	0	0	0	0	
0330	0	0	0	0	0	0	1	0	15	11	4	2	1	0	0	0	0	46.3	51.2	1	2.9	0	0	0	0	
0345	0	0	0	0	0	0	1	3	2	14	6	1	0	0	0	0	0	46.9	50.8	0	0	0	0	0	0	
0400	0	0	0	0	0	0	0	4	16	16	5	0	1	0	0	0	0	45.7	49.9	1	2.4	0	0	0	0	
0415	0	0	0	0	0	0	0	8	13	11	3	1	1	0	0	0	0	44.4	48.1	1	2.7	0	0	0	0	
0430	0	0	0	0	0	0	0	2	12	14	7	3	2	1	0	0	0	48.6	54.4	3	7.3	1	2.4	0	0	
0445	0	0	0	0	0	0	0	3	8	16	15	3	3	3	0	0	0	50	55.3	6	11.8	1	2	0	0	
0500	0	0	0	0	0	0	0	4	10	12	12	11	4	2	0	0	0	50.7	58.2	6	10.9	0	0	0	0	
0515	0	0	0	0	0	0	2	4	10	19	22	10	3	1	0	0	0	49.4	55.7	4	5.6	0	0	0	0	
0530	0	0	0	0	0	0	1	4	19	22	17	19	9	0	0	0	1	50.5	58.2	10	10.9	1	1.1	1	1.1	
0545	0	0	0	0	2	2	2	7	16	15	37	18	7	5	1	0	0	50.3	59.3	13	11.6	3	2.7	0	0	
0600	0	0	0	0	0	0	0	2	19	21	24	19	4	1	1	2	0	51.3	56.4	8	8.6	3	3.2	2	2.2	
0615	0	0	0	1	0	0	1	4	17	23	29	18	6	2	0	0	0	50.3	57.3	8	7.9	0	0	0	0	
0630	0	0	0	0	0	3	0	8	16	28	35	38	13	1	2	1	0	51.9	58.8	17	11.7	4	2.8	1	0.7	
0645	0	0	0	0	0	1	2	5	25	37	40	40	26	4	3	1	1	52.9	60.6	35	18.9	5	2.7	2	1.1	
0700	0	0	0	0	0	0	1	10	39	51	45	53	18	2	0	0	0	51.1	58.6	20	9.1	0	0	0	0	
0715	0	0	0	1	3	1	2	8	22	66	79	37	17	10	3	0	0	51.2	57.3	30	12	7	2.8	0	0	
0730	0	0	0	0	0	0	0	15	34	75	63	50	15	5	2	0	0	50.9	57.7	22	8.5	2	0.8	0	0	
0745	0	0	0	0	0	0	6	18	41	46	71	43	31	1	0	0	0	50.7	58.8	32	12.5	1	0.4	0	0	
0800	0	0	0	0	0	0	0	13	51	47	61	43	7	9	2	0	1	50.6	57.5	19	8.1	7	3	1	0.4	
0815	0	0	0	0	0	0	9	3	35	39	67	43	18	7	2	1	0	51.5	58.2	28	12.5	6	2.7	1	0.4	
0830	0	0	0	0	0	0	0	18	28	34	64	41	10	6	1	1	1	51.3	57.7	19	9.3	6	2.9	2	1	
0845	0	0	0	0	1	0	2	9	45	30	37	26	14	4	2	0	1	50.1	57.9	21	12.3	5	2.9	1	0.6	
0900	0	0	0	0	0	1	2	8	19	27	30	25	13	2	2	0	0	50.9	58.6	17	13.2	4	3.1	0	0	
0915	0	0	0	0	1	0	4	5	18	24	31	23	11	3	0	0	0	50.9	59.1	14	11.7	0	0	0	0	
0930	0	0	0	0	0	2	5	6	17	23	16	17	8	1	0	1	0	49.1	57.5	10	10.4	1	1	1	1	
0945	0	0	0	0	0	3	0	9	39	28	23	17	2	2	1	0	0	47.8	55.3	5	4	1	0.8	0	0	
1000	0	0	0	0	0	0	0	1	19	43	18	14	6	1	1	0	0	50	57	8	7.8	2	1.9	0	0	
1015	0	0	0	0	0	0	0	4	17	29	27	10	3	2	0	0	0	49.7	55.3	5	5.4	1	1.1	0	0	
1030	0	0	0	0	0	0	0	4	25	27	21	8	3	1	0	0	0	48.2	54.6	4	4.5	0	0	0	0	
1045	0	0	0	0	0	0	1	10	19	29	24	14	4	2	1	0	0	49.3	56.8	7	6.7	3	2.9	0	0	
1100	0	0	0	0	3	0	0	12	16	15	18	8	5	1	1	0	1	48.6	56.4	8	10	2	2.5	1	1.3	
1115	0	0	0	0	0	1	2	9	8	16	23	11	1	1	0	0	0	48.7	55.7	2	2.8	0	0	0	0	
1130	0	0	0	0	0	1	4	5	11	24	25	18	2	1	1	0	0	50	57	4	4.3	2	2.2	0	0	
1145	0	0	0	0	0	0	1	16	25	20	16	14	3	1	0	0	0	47.4	55.3	4	4.2	0	0	0	0	
1200	0	0	0	0	0	0	0	17	18	15	27	9	6	1	0	0	0	48.1	55.3	7	7.5	1	1.1	0	0	
1215	0	1	0	0	0	0	0	5	8	20	16	18	5	5	0	0	0	51.2	59.5	10	12.8	0	0	0	0	
1230	0	0	0	0	0	0	1	10	17	19	25	11	4	3	2	0	0	49.6	55.9	9	9.8	4	4.3	0	0	
1245	0	0	0	0	0	0	1	9	16	16	26	14	9	2	1	0	1	51	58.8	13	13.7	4	4.2	1	1.1	
1300	0	0	0	1	1	3	1	5	13	15	20	15	11	0	1	0	0	49.8	59.3	12	14	1	1.2	0	0	
1315	0	0	1	0	0	0	3	2	22	32	22	16	4	0	1	0	0	48.9	55.9	5	4.9	1	1	0	0	
1330	0	0	0	0	0	0	0	6	18	19	19	14	6	0	0	0	0	49.6	57.3	6	7.3	0	0	0	0	
1345	0	0	0	0	0	0	2	3	28	28	16	10	6	1	0	0	0	48.3	55	7	7.4	1	1.1	0	0	
1400	0	0	0	0	0	0	1	1	12	39	32	28	5	0	1	0	0	51.3	56.8	6	5	1	0.8	0	0	
1415	0	0	0	0	0	0	3	11	15	36	24	8	3	0	0	0	0	47.4	53.5	3	3	0	0	0	0	
1430	0	0	0	0	0	0	4	5	10	33	24	22	5	3	2	0	1	51.1	57.7	11	10.1	3	2.8	1	0.9	
1445	0	0	0	0	0	0	0	1	9	30	30	19	8	5	2	0	0	52.8	59.5	15	14.4	4	3.8	0	0	
1500	0	0	0	0	0	2	4	9	18	30	37	24	10	1	0	0	0	50	57.7	11	8.1	0	0	0	0	
1515	0	0	0	0	1	1	0	7	20	25	36	19	6	2	0	0	0	49.7	56.1	8	6.8	0	0	0	0	
1530	0	0	0	0	0	0	1	3	8	28	32	26	6	0	3	0	0	52.1	57.9	9	8.4	3	2.8	0	0	
1545	0	0	0	0	0	1	0	1	20	32	37	23	6	6	1	0	0	51.5	58.4	13	10.2	5	3.9	0	0	
1600	0	0	0	0	0	0	2	16	12	32	36	33	11	2	1	0	0	51	58.2	14	9.7	2	1.4	0	0	
1615	0	0	0	1	0	7	2	5	14	24	29	33	4	4	2	3	1	51.2	59.1	14	10.9	6	4.7	4	3.1	
1630	0	0	0	0	0	0	2	5	17	28	28	29	13	1	1	0	1	52	59.1	16	12.8	2	1.6	1	0.8	
1645	0	0	0	0	0	0	1	6	16	37	41	34	7	5	0	1	0	51.8	59.1	13	8.8	1	0.7	1	0.7	
1700	0	0	0	0	0	0	0	5	15	34	62	26	12	7	1	0	0	52.3	58.6	20	12.3	2	1.2	0	0	
1715	0	0	0	0	0	0	0	5	26	21	50	33	15	3	0	1	0	52.1	59.3	19	12.3	3	1.9	1	0.6	
1730	0	0	0	0	0	0	0	1	13	28	54	48	24	7	1	3	1	54.9	61.1	36	20	5	2.8	4	2.2	
1745	0	0	0	0	0	0	0	9	13	20	32	43	13	3	2	1	0	53.2	59.5	19	14	3	2.2	1	0.7	
1800	0	0	0	0	0	0	5	5	7	26	31	28	11	11	2	2	0	53.5	62.2	26	20.3	11	8.6	2	1.6	
1815	0	0	0	0	0	0	0	4	9	6	28	29	21	3	0	3	0	55.3	61.5	27	26.2	4	3.9	3	2.9	
1830	0	0	0	0	0	1	0	7	11	18	24	26	9	3	5	1	1	53.5	60.6	19	17.9	8	7.5	2	1.9	
1845	0	0	0	0	1	1	5	8	20	15	15	7	5	2	1	0	0	47.5	55.7	8	10	2	2.5	0	0	
1900	0	0	0	0	1	6	1	0	9	16	18	10	10	6	1	1	0	51.4	63.8	18	22.8	3	3.8	1	1.3	
1915	0	0	0	0	0	0	4	6	8	9	18	12	4	3	0	1	0	50.3	56.8	8	12.3	3	4.6	1	1.5	
1930	0	0	0	0	0	1	0	12	8	10	9	14	6	2	0	1	0	50.1	59.3	9	14.3	1	1.6	1	1.6	
1945	0	0	0	0	0	0	0	5	9	14	5	11	6	2	1	0	1	52	61.1	10	18.5	3	5.6	1	1.9	
2000	0	0	0	0	0	0	0	4	10	12	16	8	3	3	2	1	0	51.9	59.7	9	15.3	3	5.1	1	1.7	
2015	0	0	0	0	0	0	2	2	7	10	13	4	4	2	0	0	0	50.2	59.3	6	13.6	1	2.3	0	0	
2030	0	0	1	0	0	0	0	0	9	19	17	7	5	2	2	0	0	51.5	59.3	9	14.5	2	3.2	0	0	
2045	0	0	1	0	0	1	0	7	8	8	6	5	4	0	0	0	0	47	56.4	4	10	0	0	0	0	
2100	0	0	0	0	0	0	0	1	11	11	9	4	5	1	0	0	0	50.2	57.7	6	14.3	1	2.4	0	0	
2115	0	0	0	0	0	0	2	2	5	6	19	10	2	1	1	0	1	52.5	58.8	5	10.2	3	6.1	1	2	
2130	0	0	0	0	0	0	0	0	7	12	8	5	3	0	0	2	0	51.6	57.3	5	13.5	2	5.4	2	5.4	
2145	0	0	0	0	0	0	0	1	13	6	15	6	1	4	0	0	0	50.6	56.8	5	10.9	0	0	0	0	
2200	0	0	0	0	0	0	1	2	14	19	19	7	2	0	0	0	0	49.1	54.6	2	3.1	0	0	0	0	
2215	0	0	0	0	0	0	2	4	9	16	12	6	1	2	0	0	0	48.5	55.3	3	5.8	2	3.8	0	0	
2230	0	0	0	0	0	0	2	5	5	3	6	13	2	0	1	0	0	50.5	57.7	3	8.1	1	2.7	0	0	
2245	0	0	0	0	1	0	0	1	4	12	6	3	1	0	0	0	0	48.6	54.4	1	3.6	0	0	0	0	
2300	0	0	0	0	0	0	0	0	2	13	17	7	6	0	0	0	0	53	57.9	6	13.3	0	0	0	0	
2315	0	0	0	0	0	0	0	3	11	10	7	7	5	2	0	0	1	51.5	59.9	8	17.4	1	2.2	1	2.2	
2330	0	0	0	0	0	0	0	1	7	12	11	4	0	0	0	1	0	49.9	54.8	1	2.8	1	2.8	1	2.8	
2345	0	0	0	0	0	0	0	2	2	6	11	6	0	0	0	0	0	50.7	55.3	0	0	0	0	0	0	
07-19	**0**	**1**	**1**	**3**	**11**	**25**	**77**	**354**	**953**	**1399**	**1612**	**1160**	**436**	**142**	**49**	**18**	**10**	**50.8**	**58.2**	**655**	**10.5**	**127**	**2**	**28**	**0.4**	
06-22	**0**	**1**	**3**	**4**	**12**	**37**	**89**	**413**	**1134**	**1641**	**1893**	**1371**	**538**	**176**	**62**	**28**	**13**	**50.9**	**58.4**	**817**	**11**	**161**	**2.2**	**41**	**0.6**	
06-00	**0**	**1**	**3**	**4**	**13**	**37**	**94**	**431**	**1188**	**1732**	**1982**	**1424**	**555**	**180**	**63**	**29**	**14**	**50.9**	**58.4**	**841**	**10.9**	**166**	**2.1**	**43**	**0.6**	
00-00	**0**	**1**	**3**	**5**	**19**	**43**	**114**	**504**	**1431**	**2030**	**2174**	**1509**	**603**	**197**	**65**	**29**	**15**	**50.5**	**58.2**	**909**	**10.4**	**174**	**2**	**44**	**0.5**	

16 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
0000	0	0	0	0	0	0	0	0	3	10	12	3	1	1	0	1	0	52	55.7	3	9.7	1	3.2	1	3.2	
0015	0	0	0	0	0	0	0	2	2	6	7	2	2	0	0	0	0	50.3	59.5	2	9.5	0	0	0	0	
0030	0	0	0	0	0	0	0	2	9	16	6	2	0	2	0	0	0	48.3	53	2	5.4	0	0	0	0	
0045	0	0	0	0	0	0	1	6	4	3	7	2	0	0	1	0	0	46.7	53.2	1	4.2	1	4.2	0	0	
0100	0	0	0	0	0	0	4	2	5	5	4	3	1	1	0	0	0	46.6	57	2	8	0	0	0	0	
0115	0	0	0	0	0	1	0	5	12	3	2	1	1	0	0	0	0	43.6	47.6	1	4	0	0	0	0	
0130	0	0	0	0	0	0	0	3	6	6	2	0	0	0	0	0	0	44.6	47.4	0	0	0	0	0	0	
0145	0	0	0	0	0	1	0	7	6	3	4	4	1	0	0	0	0	45.6	55	1	3.8	0	0	0	0	
0200	0	0	0	0	0	2	1	0	8	6	7	1	0	0	0	1	0	46.9	51.2	1	3.8	1	3.8	1	3.8	
0215	0	0	0	0	0	0	0	2	9	10	6	2	1	0	1	0	0	48.2	51.9	2	6.5	1	3.2	0	0	
0230	0	0	0	0	0	1	0	2	5	11	10	0	2	1	0	0	0	48.5	52.8	3	9.4	0	0	0	0	
0245	0	0	0	0	0	0	0	1	4	3	3	1	0	0	0	0	0	46.9	52.3	0	0	0	0	0	0	
0300	0	0	0	1	0	0	0	5	6	8	4	9	1	1	0	0	0	48.8	57	2	5.7	1	2.9	0	0	
0315	0	0	0	0	0	0	0	2	11	7	1	1	1	0	1	0	0	46.8	49	2	8.3	1	4.2	0	0	
0330	0	0	0	0	0	0	1	6	6	17	9	0	0	3	0	0	0	47.3	53.2	3	7.1	0	0	0	0	
0345	0	0	0	0	0	0	0	0	8	13	5	3	0	0	0	0	0	47.6	51.9	0	0	0	0	0	0	
0400	0	0	0	0	0	0	2	3	11	14	9	3	0	1	0	0	0	47.1	52.3	1	2.3	0	0	0	0	
0415	0	0	0	0	0	0	0	8	18	7	0	2	0	0	0	0	0	43.4	46.8	0	0	0	0	0	0	
0430	0	0	0	0	0	0	0	1	12	11	9	3	0	0	0	0	0	47	52.3	0	0	0	0	0	0	
0445	0	0	0	0	0	0	0	3	10	18	7	6	1	0	1	1	0	49.4	55.7	3	6.4	2	4.3	1	2.1	
0500	0	0	0	0	0	0	0	1	15	11	5	2	3	0	0	0	0	47.6	52.3	3	8.1	0	0	0	0	
0515	0	0	0	0	0	0	0	6	16	19	16	16	4	1	2	0	0	50.6	59.1	7	8.8	2	2.5	0	0	
0530	0	0	0	0	0	0	0	9	16	22	14	20	13	4	1	0	1	52.2	61.7	19	19	4	4	1	1	
0545	0	0	0	0	0	0	0	3	20	19	26	14	11	0	0	1	0	51.1	58.8	12	12.8	1	1.1	1	1.1	
0600	0	0	0	0	0	0	0	4	10	26	21	22	5	4	1	1	1	52.2	58.8	12	12.6	5	5.3	2	2.1	
0615	0	0	1	0	0	1	1	0	12	23	22	18	9	6	0	0	0	51.9	60.2	15	16.1	4	4.3	0	0	
0630	0	0	0	0	0	0	0	5	29	19	40	20	12	8	0	2	0	51.9	60.4	22	16.3	4	3	2	1.5	
0645	0	0	0	0	0	1	7	8	16	15	33	43	25	4	2	2	0	53.3	61.1	33	21.2	6	3.8	2	1.3	
0700	0	0	0	0	0	0	6	18	34	41	57	37	10	10	1	1	1	50.7	58.4	23	10.6	5	2.3	2	0.9	
0715	0	0	0	0	0	0	0	5	28	64	51	41	21	6	2	0	0	51.8	58.4	29	13.3	6	2.8	0	0	
0730	0	0	0	0	0	0	6	6	24	59	50	49	19	2	3	0	0	51.4	58.4	24	11	4	1.8	0	0	
0745	0	0	0	0	0	0	10	10	43	32	81	36	11	2	4	0	0	50.1	57.3	17	7.4	4	1.7	0	0	
0800	0	0	0	0	0	0	1	3	36	47	69	46	14	2	1	2	0	51.4	57.3	19	8.6	3	1.4	2	0.9	
0815	0	0	0	0	0	2	1	8	47	40	60	38	13	3	1	0	0	50.2	56.4	17	8	1	0.5	0	0	
0830	0	0	0	0	0	0	5	6	35	26	40	33	15	4	1	0	0	50.8	58.8	20	12.1	1	0.6	0	0	
0845	0	0	0	0	0	0	1	11	28	17	36	30	19	2	1	0	0	51.4	59.7	22	15.2	2	1.4	0	0	
0900	0	0	0	0	0	2	0	12	17	23	20	10	4	2	0	0	0	47.9	55.7	6	6.7	1	1.1	0	0	
0915	0	0	2	0	0	0	2	1	21	21	28	12	11	3	0	0	0	50.4	59.3	14	13.9	0	0	0	0	
0930	0	0	0	0	1	3	4	8	25	34	17	7	7	2	2	0	0	47.5	55.3	11	10	3	2.7	0	0	
0945	0	0	0	0	6	1	0	7	26	16	32	13	3	3	1	0	2	48.7	56.1	9	8.2	4	3.6	2	1.8	
1000	0	0	0	0	0	2	1	2	12	17	15	10	7	0	0	0	0	49.7	58.2	7	10.6	0	0	0	0	
1015	0	0	0	0	0	0	0	5	14	29	22	25	4	0	0	0	0	50.2	56.8	4	4	0	0	0	0	
1030	0	0	0	0	0	2	2	8	14	22	23	14	2	1	0	0	0	48.7	56.1	3	3.4	0	0	0	0	
1045	0	0	0	0	0	0	2	5	18	22	21	15	5	2	0	0	1	50.1	57.9	8	8.8	1	1.1	1	1.1	
1100	0	0	0	0	0	0	1	5	14	20	12	17	3	3	0	0	0	50.5	58.4	6	8	3	4	0	0	
1115	0	0	0	0	1	4	4	2	12	23	21	16	3	0	1	1	0	48.7	56.6	5	5.7	2	2.3	1	1.1	
1130	0	0	0	0	0	0	4	11	20	19	23	13	4	1	0	0	0	48	55	5	5.3	0	0	0	0	
1145	0	0	0	0	0	0	3	6	28	23	21	10	4	0	0	1	0	48	55	5	5.2	1	1	1	1	
1200	0	0	0	0	0	0	2	8	13	23	18	11	4	0	1	0	0	48.4	55.5	5	6.3	1	1.3	0	0	
1215	0	0	0	0	0	0	4	4	12	18	30	20	2	1	1	0	1	50.8	56.8	5	5.4	2	2.2	1	1.1	
1230	0	0	0	0	2	3	4	7	5	25	20	13	5	3	1	0	0	49	57	9	10.2	4	4.5	0	0	
1245	0	0	0	0	1	3	3	10	19	29	16	7	5	3	1	0	0	47.6	56.4	9	9.3	2	2.1	0	0	
1300	0	0	0	0	0	1	5	8	27	19	30	15	3	0	0	0	0	47.9	55.3	3	2.8	0	0	0	0	
1315	0	0	0	0	0	0	2	9	14	15	26	14	7	0	1	0	1	50.4	57.9	9	10.1	2	2.2	1	1.1	
1330	0	0	0	0	0	2	4	5	17	24	31	12	5	1	1	1	0	49.5	56.1	8	7.8	2	1.9	1	1	
1345	0	0	0	0	0	0	4	4	14	26	22	20	7	1	1	0	0	50.3	57.7	9	9.1	1	1	0	0	
1400	0	0	0	0	5	3	5	8	18	43	42	20	8	1	0	0	0	48.6	56.6	9	5.9	1	0.7	0	0	
1415	0	0	0	0	0	0	3	7	24	33	22	9	2	4	1	0	0	48.4	54.8	7	6.7	1	1	0	0	
1430	0	0	0	0	0	0	0	10	12	19	24	14	2	2	0	0	0	49.9	56.4	4	4.8	1	1.2	0	0	
1445	0	0	0	0	0	0	0	8	20	29	32	15	4	3	0	0	0	49.6	55.9	7	6.3	0	0	0	0	
1500	0	0	0	0	1	0	2	10	19	28	29	23	7	1	0	1	0	49.8	57.5	9	7.4	2	1.7	1	0.8	
1515	0	0	0	0	0	1	2	2	33	38	36	12	6	1	1	1	0	49.3	55.5	9	6.8	2	1.5	1	0.8	
1530	0	0	0	0	0	0	0	6	8	33	27	17	5	2	2	1	0	51.4	57.5	10	9.9	3	3	1	1	
1545	0	0	0	0	0	1	0	5	25	33	33	14	2	2	0	0	1	49.5	55.3	5	4.3	3	2.6	1	0.9	
1600	0	0	0	0	0	0	2	11	19	30	30	33	11	3	0	1	0	51.2	58.8	15	10.7	3	2.1	1	0.7	
1615	0	0	0	0	1	1	2	8	9	32	24	33	11	4	1	0	0	51.5	59.1	16	12.7	1	0.8	0	0	
1630	0	0	0	0	2	1	0	6	16	28	38	26	9	2	2	1	0	51.4	58.6	14	10.7	4	3.1	1	0.8	
1645	0	0	0	0	0	0	2	7	12	24	33	21	14	5	1	1	0	52.2	60.4	21	17.5	3	2.5	1	0.8	
1700	0	0	0	0	0	0	0	0	21	18	42	40	18	2	0	1	2	53.9	59.9	23	16	3	2.1	3	2.1	
1715	0	0	0	0	0	2	1	8	11	20	45	29	17	4	2	0	0	52.7	60.6	23	16.5	3	2.2	0	0	
1730	0	0	0	0	1	3	3	10	12	23	30	45	16	5	4	1	2	53	61.3	28	18.1	9	5.8	3	1.9	
1745	0	0	0	0	0	0	0	10	22	23	35	35	10	4	0	0	0	51.2	58.2	14	10.1	1	0.7	0	0	
1800	0	0	0	0	2	2	4	3	8	11	29	34	12	6	1	0	0	52.8	61.1	19	17	1	0.9	0	0	
1815	0	0	0	0	0	0	0	0	19	12	30	34	8	5	3	0	1	53.8	59.7	17	15.2	6	5.4	1	0.9	
1830	0	0	0	0	0	0	1	4	7	12	19	12	10	7	3	1	1	54.4	64.4	22	28.6	7	9.1	2	2.6	
1845	0	0	0	0	0	0	0	4	10	13	13	18	8	5	1	2	0	53.5	61.7	16	21.6	7	9.5	2	2.7	
1900	0	0	0	1	0	0	0	7	11	18	15	14	10	0	1	1	1	51.2	59.9	13	16.5	3	3.8	2	2.5	
1915	0	0	0	0	0	0	0	1	4	15	18	8	10	4	0	0	4	55.9	63.3	18	28.1	5	7.8	4	6.3	
1930	0	0	0	0	0	0	1	5	8	9	15	10	3	4	1	1	2	53	62.6	11	18.6	6	10.2	3	5.1	
1945	0	0	0	0	0	0	1	5	15	18	7	9	5	2	1	0	0	49.6	59.5	8	12.7	1	1.6	0	0	
2000	0	0	0	0	0	2	1	2	3	8	14	10	2	2	0	0	4	54	61.1	8	16.7	5	10.4	4	8.3	
2015	0	0	0	0	0	0	0	1	7	9	14	5	5	0	0	0	1	52.2	59.3	6	14.3	1	2.4	1	2.4	
2030	0	0	0	0	0	0	0	2	7	7	10	13	3	3	1	1	1	54.6	62.2	9	18.8	3	6.3	2	4.2	
2045	0	0	0	0	1	0	0	4	11	10	9	11	6	1	1	0	0	50.5	58.8	8	14.8	2	3.7	0	0	
2100	0	0	0	0	0	0	0	9	13	10	9	5	2	0	0	0	0	46.8	54.4	2	4.2	0	0	0	0	
2115	0	0	0	0	1	0	0	4	8	12	10	6	2	0	0	0	0	48.9	55.9	2	4.7	0	0	0	0	
2130	0	0	0	0	0	0	0	3	6	15	15	6	1	0	1	0	0	49.9	55	2	4.3	1	2.1	0	0	
2145	0	0	0	0	0	0	0	3	7	15	8	2	4	0	0	0	0	49.1	53.9	4	10.3	0	0	0	0	
2200	0	0	0	0	0	1	0	2	4	14	17	19	2	0	0	0	0	51.2	56.6	2	3.4	0	0	0	0	
2215	0	0	0	0	0	0	1	5	14	11	5	8	1	0	2	0	1	49.2	57	4	8.3	3	6.3	1	2.1	
2230	0	0	0	0	0	0	1	3	3	2	11	3	3	0	0	0	0	50.3	57.3	3	11.5	0	0	0	0	
2245	0	0	0	0	0	0	0	3	6	9	6	7	1	0	0	0	0	49.6	57	1	3.1	0	0	0	0	
2300	0	0	0	0	0	0	0	1	9	16	13	7	3	1	1	0	0	50.8	55.9	5	9.8	1	2	0	0	
2315	0	0	0	1	0	0	0	2	4	6	8	4	3	0	0	0	0	49.4	57.5	3	10.7	0	0	0	0	
2330	0	0	0	0	0	0	0	2	4	8	1	5	1	0	0	0	0	48.3	56.4	1	4.8	0	0	0	0	
2345	0	0	0	0	1	0	1	3	3	6	5	1	4	0	0	0	0	47.9	59.7	4	16.7	0	0	0	0	
07-19	**0**	**0**	**2**	**0**	**23**	**39**	**108**	**321**	**942**	**1276**	**1505**	**1068**	**397**	**125**	**47**	**17**	**13**	**50.5**	**58.2**	**599**	**10.2**	**116**	**2**	**30**	**0.5**	
06-22	**0**	**0**	**3**	**1**	**25**	**43**	**119**	**384**	**1109**	**1505**	**1765**	**1270**	**501**	**163**	**56**	**25**	**27**	**50.7**	**58.4**	**772**	**11**	**162**	**2.3**	**52**	**0.7**	
06-00	**0**	**0**	**3**	**2**	**26**	**44**	**122**	**405**	**1156**	**1577**	**1831**	**1324**	**519**	**164**	**59**	**25**	**28**	**50.7**	**58.4**	**795**	**10.9**	**166**	**2.3**	**53**	**0.7**	
00-00	**0**	**0**	**3**	**3**	**26**	**49**	**131**	**484**	**1378**	**1825**	**2006**	**1424**	**562**	**179**	**66**	**29**	**29**	**50.5**	**58.2**	**865**	**10.6**	**181**	**2.2**	**58**	**0.7**	

17 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
0000	0	0	0	0	0	0	0	2	10	14	9	3	3	2	0	0	0	49.6	55.9	5	11.6	0	0	0	0	
0015	0	0	0	0	0	0	0	1	6	4	3	4	1	0	0	0	0	48.8	55.3	1	5.3	0	0	0	0	
0030	0	0	0	0	0	0	0	8	6	12	10	3	1	1	0	0	0	47.9	53.2	2	4.9	0	0	0	0	
0045	0	0	0	1	0	0	2	4	5	5	4	2	2	1	0	0	0	45.8	56.4	3	11.5	1	3.8	0	0	
0100	0	0	0	0	0	0	0	3	4	5	8	3	1	0	0	0	0	49.4	54.4	1	4.2	0	0	0	0	
0115	0	0	0	0	0	0	0	4	4	14	4	0	0	0	0	0	0	46.5	49.9	0	0	0	0	0	0	
0130	0	0	0	0	0	0	0	0	6	7	2	3	0	1	0	0	0	49.3	58.4	1	5.3	1	5.3	0	0	
0145	0	0	0	0	0	0	0	0	4	14	2	0	0	0	0	0	0	47	49.7	0	0	0	0	0	0	
0200	0	0	0	0	0	0	1	5	7	5	5	0	1	2	0	1	0	48.1	54.4	4	14.8	2	7.4	1	3.7	
0215	0	0	0	0	0	0	0	2	4	9	2	1	1	1	1	0	0	50.2	59.5	3	14.3	2	9.5	0	0	
0230	0	0	0	0	0	0	0	1	2	3	7	3	1	0	0	0	0	50.7	55	1	5.9	0	0	0	0	
0245	0	0	0	0	0	0	1	4	3	4	2	1	0	0	0	0	0	44.3	50.3	0	0	0	0	0	0	
0300	0	0	0	0	0	0	1	5	6	9	5	3	1	1	0	0	0	47	51.2	2	6.5	0	0	0	0	
0315	0	0	0	1	0	0	1	3	7	7	1	2	1	0	0	0	0	44.3	50.8	1	4.3	0	0	0	0	
0330	0	0	0	0	0	0	0	8	9	10	5	3	0	0	0	0	0	46	52.3	0	0	0	0	0	0	
0345	0	0	0	0	0	0	0	0	6	6	7	3	0	0	0	0	0	49.3	53.7	0	0	0	0	0	0	
0400	0	0	0	0	0	1	0	2	5	5	9	1	2	0	0	0	0	48	52.3	2	8	0	0	0	0	
0415	0	0	0	0	0	0	0	2	8	4	4	0	0	0	0	0	0	45.9	50.8	0	0	0	0	0	0	
0430	0	0	0	0	0	0	1	1	6	9	1	1	0	0	0	0	0	45.3	47.2	0	0	0	0	0	0	
0445	0	0	0	0	0	0	0	4	10	4	5	2	0	1	0	0	0	47.1	53	1	3.8	0	0	0	0	
0500	0	0	0	0	0	0	0	2	4	12	5	3	3	1	0	0	0	50	59.5	4	13.3	0	0	0	0	
0515	0	0	0	0	0	0	0	4	1	6	9	12	7	1	0	1	0	54.3	60.8	9	22	1	2.4	1	2.4	
0530	0	0	0	0	0	0	1	4	13	7	10	9	1	1	2	0	1	50.5	57	5	10.2	3	6.1	1	2	
0545	0	0	0	0	0	0	0	3	4	10	7	6	4	1	2	2	0	53.7	62	9	23.1	4	10.3	2	5.1	
0600	0	0	0	0	0	0	0	2	7	14	10	13	3	2	0	0	0	51.4	57.3	5	9.8	0	0	0	0	
0615	0	0	0	0	0	0	2	1	4	3	12	12	7	1	3	0	0	54.4	61.3	11	24.4	4	8.9	0	0	
0630	0	0	0	0	0	2	2	6	11	3	16	8	7	0	1	0	0	49.4	59.5	8	14.3	1	1.8	0	0	
0645	0	0	0	0	0	0	1	5	8	13	15	10	6	3	1	1	0	51.8	61.1	11	17.5	3	4.8	1	1.6	
0700	0	0	0	0	0	0	0	0	4	9	31	18	7	1	0	0	0	53.8	58.6	8	11.4	0	0	0	0	
0715	0	0	0	0	1	0	0	3	11	8	8	15	12	1	0	0	0	52	60.4	13	22	1	1.7	0	0	
0730	0	0	0	0	0	0	0	3	8	17	13	11	5	3	4	1	0	53.1	60.4	13	20	6	9.2	1	1.5	
0745	0	0	0	0	0	0	0	4	10	16	19	9	8	3	0	0	0	51.1	60.4	11	15.9	2	2.9	0	0	
0800	0	0	0	0	0	0	0	3	7	6	18	15	5	3	1	0	2	54.3	61.5	11	18.3	4	6.7	2	3.3	
0815	0	0	0	0	0	0	0	2	6	19	13	13	2	5	2	1	0	53.4	62	10	15.9	4	6.3	1	1.6	
0830	0	0	0	0	0	0	0	4	18	10	12	13	9	3	0	1	0	51.5	60.4	13	18.6	2	2.9	1	1.4	
0845	0	0	0	0	0	0	0	3	12	16	23	10	6	4	0	0	1	51.9	57.3	11	14.7	2	2.7	1	1.3	
0900	0	0	0	0	0	0	0	2	9	8	16	21	7	4	2	0	1	54.6	61.3	14	20	4	5.7	1	1.4	
0915	0	0	0	0	0	1	0	3	7	18	26	20	9	2	1	1	1	53.5	60.6	14	15.7	4	4.5	2	2.2	
0930	0	0	0	0	0	0	2	1	5	11	21	14	11	4	2	0	0	54.1	63.1	17	23.9	2	2.8	0	0	
0945	0	0	0	0	0	0	0	2	4	19	19	12	12	5	1	1	1	54.9	62.6	20	26.3	6	7.9	2	2.6	
1000	0	0	0	0	0	0	0	0	8	10	17	17	13	2	1	0	0	54.5	62	16	23.5	1	1.5	0	0	
1015	0	0	0	0	0	0	6	7	11	14	19	15	3	2	1	0	0	49.7	57.9	6	7.7	3	3.8	0	0	
1030	0	0	0	0	0	0	0	5	9	15	23	18	10	1	0	0	2	52.8	59.9	13	15.7	2	2.4	2	2.4	
1045	0	0	0	0	0	0	2	1	6	17	21	22	6	3	0	0	0	52.8	59.3	9	11.5	0	0	0	0	
1100	0	0	0	0	0	0	0	5	4	20	21	20	6	1	1	2	0	52.9	58.8	10	12.5	4	5	2	2.5	
1115	0	0	0	0	0	1	4	14	6	25	23	15	5	1	1	2	0	49.5	57.5	9	9.3	3	3.1	2	2.1	
1130	0	0	0	0	0	1	1	3	7	20	25	18	9	2	0	2	2	53.2	60.8	15	16.7	5	5.6	4	4.4	
1145	0	0	0	0	0	0	3	6	9	10	26	11	12	2	1	1	0	52	60.4	16	19.8	2	2.5	1	1.2	
1200	0	0	0	1	1	1	1	1	11	14	23	8	11	2	1	0	1	51.3	60.8	15	19.7	2	2.6	1	1.3	
1215	0	0	0	0	0	1	0	0	14	15	17	14	9	3	1	0	1	52.6	60.4	14	18.7	3	4	1	1.3	
1230	0	0	0	0	0	1	0	1	17	6	16	13	6	0	3	0	2	52.6	60.2	11	16.9	5	7.7	2	3.1	
1245	0	0	0	0	0	0	0	6	6	15	25	19	4	2	2	1	0	52.7	58.4	9	11.3	4	5	1	1.3	
1300	0	0	0	0	0	0	0	1	1	14	24	19	2	0	2	1	1	54.3	57.9	6	9.2	4	6.2	2	3.1	
1315	0	0	0	0	0	1	2	11	6	12	15	12	10	0	2	2	1	51.8	60.8	15	20.3	5	6.8	3	4.1	
1330	0	0	0	0	0	0	0	3	10	6	21	16	11	3	2	0	0	53.8	61.7	16	22.2	4	5.6	0	0	
1345	0	0	0	0	1	0	0	0	6	15	20	15	9	4	1	0	2	54.3	61.1	16	21.9	4	5.5	2	2.7	
1400	0	0	0	0	0	0	1	3	5	13	22	20	5	2	0	0	0	52.8	59.3	7	9.9	0	0	0	0	
1415	0	0	0	0	0	0	1	0	7	4	15	26	6	3	1	2	0	55.2	60.8	12	18.5	4	6.2	2	3.1	
1430	0	0	0	0	0	0	0	3	11	14	13	13	8	5	1	0	0	52.8	61.3	14	20.6	2	2.9	0	0	
1445	0	0	0	0	0	2	2	2	2	7	19	13	8	2	0	1	2	54.3	61.5	13	21.7	3	5	3	5	
1500	0	0	0	1	0	0	1	1	10	12	13	21	7	1	0	0	0	52	58.8	8	11.9	1	1.5	0	0	
1515	0	0	0	0	0	0	0	2	2	7	25	17	6	0	2	0	0	53.9	58.8	8	13.1	2	3.3	0	0	
1530	0	0	0	0	0	0	0	1	1	12	12	14	6	9	0	1	0	56.2	65.8	16	28.6	3	5.4	1	1.8	
1545	0	0	0	0	0	0	0	6	5	11	16	15	5	0	0	0	0	51.5	57.7	5	8.6	0	0	0	0	
1600	0	0	0	0	0	0	0	2	10	12	13	14	6	0	1	0	1	52.4	58.4	8	13.6	2	3.4	1	1.7	
1615	0	0	0	0	0	0	0	1	6	10	28	16	7	3	1	0	0	54	59.7	11	15.3	3	4.2	0	0	
1630	0	0	0	0	0	0	0	3	4	13	15	12	7	4	3	0	0	54.2	60.8	14	23	5	8.2	0	0	
1645	0	0	0	0	0	0	0	1	3	11	21	21	7	3	2	0	2	55.7	62.9	14	19.7	4	5.6	2	2.8	
1700	0	0	0	0	0	1	1	0	8	15	12	15	9	2	1	0	0	52.8	60.2	12	18.8	1	1.6	0	0	
1715	0	0	0	0	0	0	1	1	4	11	12	10	12	3	0	2	0	54.9	63.8	17	30.4	2	3.6	2	3.6	
1730	0	0	0	0	0	0	0	0	5	7	16	12	3	2	2	0	0	54.4	59.9	7	14.9	2	4.3	0	0	
1745	0	0	0	0	0	0	0	1	3	10	16	10	8	3	3	0	2	56	63.1	16	28.6	6	10.7	2	3.6	
1800	0	0	0	1	0	1	1	2	4	10	15	19	4	1	0	0	0	51.9	58.8	5	8.6	0	0	0	0	
1815	0	0	0	0	0	0	0	1	2	12	17	15	9	1	1	1	0	54.8	61.7	12	20.3	3	5.1	1	1.7	
1830	0	0	0	0	1	0	0	2	2	9	18	6	4	0	0	0	0	51.2	56.1	4	9.5	0	0	0	0	
1845	0	0	0	0	0	0	0	2	4	7	9	10	5	1	1	0	0	53.2	60.6	7	17.9	1	2.6	0	0	
1900	0	0	0	0	0	2	2	1	0	6	8	13	6	2	1	0	0	53.3	60.8	9	22	2	4.9	0	0	
1915	0	0	0	0	0	0	0	3	4	2	9	11	5	3	0	1	1	55	63.3	10	25.6	3	7.7	2	5.1	
1930	0	0	0	0	0	0	0	1	9	5	8	7	6	3	0	1	0	53.1	60.8	10	25	1	2.5	1	2.5	
1945	0	0	0	0	0	0	0	0	1	9	8	6	9	1	0	0	0	54.8	61.7	10	29.4	0	0	0	0	
2000	0	0	0	0	0	0	1	3	2	9	11	6	6	3	0	1	0	53	62.4	10	23.8	1	2.4	1	2.4	
2015	0	0	0	0	0	0	0	2	1	3	9	13	4	1	0	0	0	54.7	59.3	5	15.2	0	0	0	0	
2030	0	0	0	0	0	0	0	1	5	9	5	7	1	0	0	0	2	53	58.6	3	10	2	6.7	2	6.7	
2045	0	0	0	0	0	0	0	1	2	4	10	9	1	0	0	0	0	52.7	57.7	1	3.7	0	0	0	0	
2100	0	0	0	0	0	0	0	0	5	11	5	5	0	1	0	0	0	49.9	55.3	1	3.7	0	0	0	0	
2115	0	0	0	0	0	0	0	2	5	5	2	5	0	0	0	0	0	48.3	56.8	0	0	0	0	0	0	
2130	0	0	0	0	0	0	1	1	3	5	8	7	2	1	0	1	0	52.5	59.7	4	13.8	1	3.4	1	3.4	
2145	0	0	0	0	0	0	0	0	2	2	4	6	1	2	0	0	0	54.5	59.5	3	17.6	1	5.9	0	0	
2200	0	0	0	0	1	1	0	2	7	6	3	5	4	2	2	1	0	51.7	61.7	9	26.5	4	11.8	1	2.9	
2215	0	0	0	0	0	0	0	1	0	8	7	6	0	0	0	1	0	53.1	57.3	1	4.3	1	4.3	1	4.3	
2230	0	0	0	0	0	0	0	0	2	3	4	3	2	2	0	0	0	53.7	61.5	4	25	2	12.5	0	0	
2245	0	0	0	0	0	0	1	1	2	7	7	0	3	3	0	0	0	51.7	64.2	6	25	1	4.2	0	0	
2300	0	0	0	0	0	0	0	0	2	4	10	5	1	1	0	0	0	52.5	59.5	2	8.7	1	4.3	0	0	
2315	0	0	1	0	0	0	1	1	8	6	9	5	0	0	0	0	0	47.5	54.1	0	0	0	0	0	0	
2330	0	0	0	0	0	0	1	0	2	4	6	2	0	0	0	0	0	49.4	53.7	0	0	0	0	0	0	
2345	0	0	0	0	0	0	0	1	2	3	5	4	2	0	0	0	0	52.2	59.7	2	11.8	0	0	0	0	
07-19	**0**	**0**	**0**	**3**	**4**	**11**	**29**	**128**	**330**	**592**	**882**	**722**	**351**	**111**	**51**	**23**	**25**	**53.1**	**60.6**	**561**	**17.2**	**132**	**4**	**48**	**1.5**	
06-22	**0**	**0**	**0**	**3**	**4**	**15**	**38**	**157**	**399**	**695**	**1022**	**860**	**415**	**134**	**57**	**28**	**28**	**53**	**60.6**	**662**	**17.2**	**151**	**3.9**	**56**	**1.5**	
06-00	**0**	**0**	**1**	**3**	**5**	**16**	**41**	**163**	**424**	**736**	**1073**	**890**	**427**	**142**	**59**	**30**	**28**	**53**	**60.4**	**686**	**17**	**160**	**4**	**58**	**1.4**	
00-00	**0**	**0**	**1**	**5**	**5**	**17**	**49**	**235**	**564**	**921**	**1199**	**958**	**457**	**156**	**64**	**34**	**29**	**52.4**	**60.2**	**740**	**15.8**	**174**	**3.7**	**63**	**1.3**	

18 May 2014

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
0000	0	0	0	0	0	0	0	3	1	2	6	1	2	0	0	0	0	49.9	59.7	2	13.3	0	0	0	0	
0015	0	0	0	0	0	0	0	0	4	3	2	2	2	0	1	0	0	51.9	62.2	3	21.4	1	7.1	0	0	
0030	0	0	0	0	0	0	0	1	0	4	1	3	4	0	2	1	0	57.6	72	7	43.8	3	18.8	1	6.3	
0045	0	0	0	0	0	0	0	1	1	1	1	2	0	0	0	1	0	53.2	-	1	14.3	1	14.3	1	14.3	
0100	0	0	0	0	0	0	0	1	4	4	0	2	0	0	0	0	0	47.2	49.4	0	0	0	0	0	0	
0115	0	0	0	0	0	0	0	3	1	0	3	1	1	2	0	0	0	52	60.2	3	27.3	1	9.1	0	0	
0130	0	0	0	0	0	0	0	0	8	1	3	2	0	0	0	0	0	47.4	54.4	0	0	0	0	0	0	
0145	0	0	0	0	0	2	0	0	2	0	1	2	1	1	0	0	0	48	-	2	22.2	0	0	0	0	
0200	0	0	0	0	0	1	0	0	4	3	3	1	2	0	0	0	0	49.1	56.1	2	14.3	0	0	0	0	
0215	0	0	0	0	0	0	1	3	5	2	0	3	0	0	0	0	0	44.2	55.9	0	0	0	0	0	0	
0230	0	0	0	0	0	0	0	0	6	3	0	1	1	0	0	0	0	46.9	47	1	9.1	0	0	0	0	
0245	0	0	0	0	0	0	0	2	3	3	2	0	0	0	0	0	0	45.1	-	0	0	0	0	0	0	
0300	0	0	0	0	0	0	0	2	1	1	0	0	1	1	0	0	0	49.5	-	2	33.3	1	16.7	0	0	
0315	0	0	0	0	0	0	0	2	7	3	1	2	0	0	0	0	0	46	54.4	0	0	0	0	0	0	
0330	0	0	0	0	0	0	0	1	4	1	6	0	1	0	0	0	0	48.2	51.9	1	7.7	0	0	0	0	
0345	0	0	0	0	0	0	0	3	7	3	1	1	1	1	0	0	0	46	51.4	2	11.8	0	0	0	0	
0400	0	0	0	0	1	0	0	1	5	3	0	0	1	0	0	0	0	42.9	45.4	1	9.1	0	0	0	0	
0415	0	0	0	0	0	0	0	2	3	6	1	0	0	0	1	0	0	47.5	48.8	1	7.7	1	7.7	0	0	
0430	0	0	0	0	0	1	0	1	2	1	4	1	1	1	0	0	0	50	59.7	2	16.7	0	0	0	0	
0445	0	0	0	0	0	1	0	0	2	7	1	1	0	0	0	0	0	46	47.6	0	0	0	0	0	0	
0500	0	0	0	0	0	0	0	4	7	3	5	0	1	1	0	0	0	46.9	53.5	2	9.5	1	4.8	0	0	
0515	0	0	0	0	0	0	0	1	1	6	6	3	1	0	0	0	0	51.2	55.7	1	5.6	0	0	0	0	
0530	0	0	0	0	0	0	0	2	0	7	8	4	4	0	0	0	1	54.3	60.8	5	19.2	1	3.8	1	3.8	
0545	0	0	0	0	0	0	0	0	1	2	4	7	4	2	1	0	0	57.2	64.6	7	33.3	1	4.8	0	0	
0600	0	0	0	0	0	0	0	1	2	4	4	5	0	1	0	0	0	51.7	59.1	1	5.9	0	0	0	0	
0615	0	0	0	0	0	0	0	1	3	3	3	4	5	4	0	0	0	55	66	9	39.1	3	13	0	0	
0630	0	0	0	0	0	0	0	0	2	5	14	3	3	3	0	0	0	54.2	62.6	6	20	2	6.7	0	0	
0645	0	0	0	0	0	0	1	3	1	4	8	6	2	0	0	0	0	51	58.8	2	8	0	0	0	0	
0700	0	0	0	0	0	0	0	0	2	12	19	9	3	2	0	0	0	53.2	59.3	5	10.6	1	2.1	0	0	
0715	0	0	0	1	0	0	1	1	3	2	10	6	6	1	0	0	1	53.7	61.7	8	25	1	3.1	1	3.1	
0730	0	0	0	0	0	0	0	1	5	4	14	5	2	1	1	2	0	53.6	62	6	17.1	3	8.6	2	5.7	
0745	0	0	0	0	0	0	0	2	3	5	3	1	7	1	0	0	0	53.1	61.7	8	36.4	1	4.5	0	0	
0800	0	0	0	0	0	0	0	4	2	5	7	7	4	3	0	0	0	53.1	61.5	7	21.9	1	3.1	0	0	
0815	0	0	0	0	0	0	0	1	3	4	5	15	4	3	1	0	0	55.8	63.1	8	22.2	3	8.3	0	0	
0830	0	0	0	0	0	0	2	2	2	9	13	7	2	1	0	0	0	50.6	56.4	3	7.9	1	2.6	0	0	
0845	0	0	0	0	0	0	0	2	8	9	15	8	1	1	0	1	0	51.2	57.9	3	6.7	2	4.4	1	2.2	
0900	0	0	0	0	0	0	1	2	5	8	11	15	6	3	1	0	0	53.6	61.3	10	19.2	2	3.8	0	0	
0915	0	0	0	0	0	0	0	3	8	6	14	12	6	3	1	3	2	55.3	63.5	15	25.9	6	10.3	5	8.6	
0930	0	0	0	0	0	0	0	5	6	8	14	11	11	3	3	0	0	54	62	17	27.9	3	4.9	0	0	
0945	0	0	0	0	0	0	1	0	9	13	26	19	5	7	3	0	1	54.4	63.1	16	19	6	7.1	1	1.2	
1000	0	0	0	0	0	1	1	0	6	8	18	15	12	7	4	0	1	56.3	65.1	24	32.9	8	11	1	1.4	
1015	0	0	0	0	0	0	0	1	8	6	24	18	7	2	1	1	0	54.2	60.6	11	16.2	2	2.9	1	1.5	
1030	0	0	0	0	0	0	0	8	6	14	27	23	8	4	0	1	0	52.7	59.1	13	14.3	2	2.2	1	1.1	
1045	0	0	0	0	0	0	0	2	9	11	34	23	6	2	2	0	2	54.3	59.1	12	13.2	4	4.4	2	2.2	
1100	0	0	0	0	0	0	0	3	6	12	22	23	14	4	3	0	2	56	63.3	23	25.8	6	6.7	2	2.2	
1115	0	0	0	0	0	0	1	1	3	19	22	21	6	2	2	0	0	53.5	58.4	10	13	3	3.9	0	0	
1130	0	0	0	0	0	0	0	3	9	17	19	18	9	7	3	2	0	54.5	64	21	24.1	6	6.9	2	2.3	
1145	0	0	0	1	0	1	4	13	3	22	27	9	6	2	1	1	0	49.2	58.2	10	11.1	2	2.2	1	1.1	
1200	0	0	0	0	0	0	0	1	12	14	27	25	11	3	0	0	1	53.7	60.4	15	16	3	3.2	1	1.1	
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1245	0	0	0	0	0	0	0	14	7	13	21	20	6	1	1	0	1	51.4	58.4	9	10.7	3	3.6	1	1.2	
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1315	0	0	0	0	0	0	1	0	4	18	23	14	6	0	2	3	2	54.8	62.2	13	17.8	7	9.6	5	6.8	
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1345	0	0	0	0	0	0	0	2	9	9	15	11	8	6	0	0	0	53.5	62.2	14	23.3	3	5	0	0	
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1430	0	0	0	0	0	0	0	1	7	5	7	24	3	3	3	0	1	55.9	61.3	10	18.5	5	9.3	1	1.9	
1445	0	0	0	0	0	0	0	0	3	10	29	17	7	4	0	0	0	54.1	60.4	11	15.7	1	1.4	0	0	
1500	0	0	0	0	0	0	1	2	9	9	25	20	10	2	2	0	2	54.5	60.6	16	19.5	4	4.9	2	2.4	
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1530	0	0	0	0	0	0	1	1	6	10	22	16	11	2	0	2	0	54.3	60.6	15	21.1	4	5.6	2	2.8	
1545	0	0	0	0	0	0	0	3	4	17	11	13	5	2	2	0	0	52.7	59.3	9	15.8	2	3.5	0	0	
1600	0	0	0	0	0	0	0	3	8	9	13	12	7	1	3	0	1	53.6	60.6	12	21.1	4	7	1	1.8	
1615	0	0	0	0	0	0	0	4	9	9	32	12	3	4	2	0	1	52.9	59.5	10	13.2	5	6.6	1	1.3	
1630	0	0	0	0	0	0	0	1	13	5	16	12	3	4	0	1	1	53.3	59.9	9	16.1	4	7.1	2	3.6	
1645	0	0	0	0	0	0	0	2	5	6	19	25	8	6	3	1	1	56.5	63.8	19	25	7	9.2	2	2.6	
1700	0	0	0	0	0	0	0	4	8	7	13	15	8	6	2	0	0	54.2	64.2	16	25.4	4	6.3	0	0	
1715	0	0	0	1	0	0	0	5	5	18	16	11	5	3	0	2	0	51.7	59.5	10	15.2	3	4.5	2	3	
1730	0	0	0	0	0	0	0	0	6	13	23	12	10	3	1	0	0	54	60.8	14	20.6	1	1.5	0	0	
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1845	0	0	0	0	0	0	1	4	5	5	16	10	7	1	2	0	2	54.4	61.7	12	22.6	4	7.5	2	3.8	
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1915	0	0	0	0	0	0	0	2	0	3	14	8	4	5	0	0	0	55.5	63.5	9	25	0	0	0	0	
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2015	0	0	0	0	0	0	0	0	2	4	10	8	7	2	0	0	0	55.4	62.6	9	27.3	1	3	0	0	
2030	0	0	0	0	0	1	1	1	3	3	10	6	1	1	0	0	1	52.1	57.9	3	10.7	1	3.6	1	3.6	
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2115	0	0	0	0	0	0	0	1	2	7	9	6	6	0	2	1	1	1	52	59.9	5	13.9	3	8.3	2	5.6
2130	0	0	0	0	0	0	0	0	2	4	10	10	8	0	0	1	0	1	51.9	57.7	2	5.6	2	5.6	1	2.8
2145	0	0	0	0	0	0	0	1	1	3	2	3	7	0	0	1	0	0	51.1	56.6	1	5.6	1	5.6	0	0
2200	0	0	0	0	0	0	0	0	1	7	5	12	3	2	1	0	0	0	50.9	56.1	3	9.7	0	0	0	0
2215	0	0	0	0	0	0	1	1	1	5	9	3	5	0	0	0	0	0	46.9	55	0	0	0	0	0	0
2230	0	0	0	0	0	0	0	1	2	4	4	6	3	0	1	0	0	0	48.2	55.7	1	4.8	0	0	0	0
2245	0	0	0	0	0	0	0	1	1	3	9	3	1	1	0	1	0	2	52.6	61.7	4	18.2	3	13.6	2	9.1
2300	0	0	0	0	0	0	0	0	2	4	12	5	3	3	0	1	0	0	50.6	58.4	4	13.3	1	3.3	0	0
2315	0	0	0	0	0	0	0	0	2	7	5	1	4	0	0	0	0	0	47.2	55.3	0	0	0	0	0	0
2330	0	0	0	0	0	0	0	1	2	1	6	7	1	0	0	0	0	0	48.4	52.8	0	0	0	0	0	0
2345	0	0	0	0	0	0	0	0	1	4	6	1	0	1	0	0	0	0	47.2	49.7	1	7.7	0	0	0	0
07-19	**0**	**0**	**0**	**4**	**1**	**2**	**16**	**130**	**275**	**470**	**901**	**698**	**306**	**148**	**63**	**26**	**33**	**53.9**	**61.5**	**576**	**18.7**	**168**	**5.5**	**59**	**1.9**	
06-22	**0**	**0**	**0**	**4**	**3**	**4**	**23**	**163**	**338**	**554**	**1057**	**808**	**354**	**173**	**74**	**29**	**39**	**53.7**	**61.5**	**669**	**18.5**	**198**	**5.5**	**68**	**1.9**	
06-00	**0**	**0**	**0**	**4**	**3**	**5**	**27**	**175**	**373**	**610**	**1095**	**828**	**361**	**175**	**76**	**29**	**41**	**53.5**	**61.3**	**682**	**17.9**	**202**	**5.3**	**70**	**1.8**	
00-00	**0**	**0**	**0**	**4**	**4**	**10**	**28**	**208**	**452**	**679**	**1154**	**867**	**389**	**184**	**81**	**31**	**42**	**53.2**	**61.1**	**727**	**17.6**	**213**	**5.2**	**73**	**1.8**	

Grand Total

Time	Vbin 0 5	Vbin 5 10	Vbin 10 15	Vbin 15 20	Vbin 20 25	Vbin 25 30	Vbin 30 35	Vbin 35 40	Vbin 40 45	Vbin 45 50	Vbin 50 55	Vbin 55 60	Vbin 60 65	Vbin 65 70	Vbin 70 75	Vbin 75 80	Vbin 80 130	Mean	Vpp 85	]PSL 60	]PSL% 60	]SL1 68 ACPO	]SL1% 68 ACPO	]SL2 75 DFT	]SL2% 75 DFT	Fix1
--	**1**	**4**	**19**	**38**	**103**	**214**	**597**	**2980**	**8041**	**11438**	**13026**	**9196**	**3725**	**1323**	**460**	**181**	**157**	**50.9**	**58.6**	**5846**	**11.4**	**1191**	**2.3**	**338**	**0.7**	

Magna Park Extension: Hybrid Application
Transport Assessment

Appendix N – Traffic Flow Diagrams

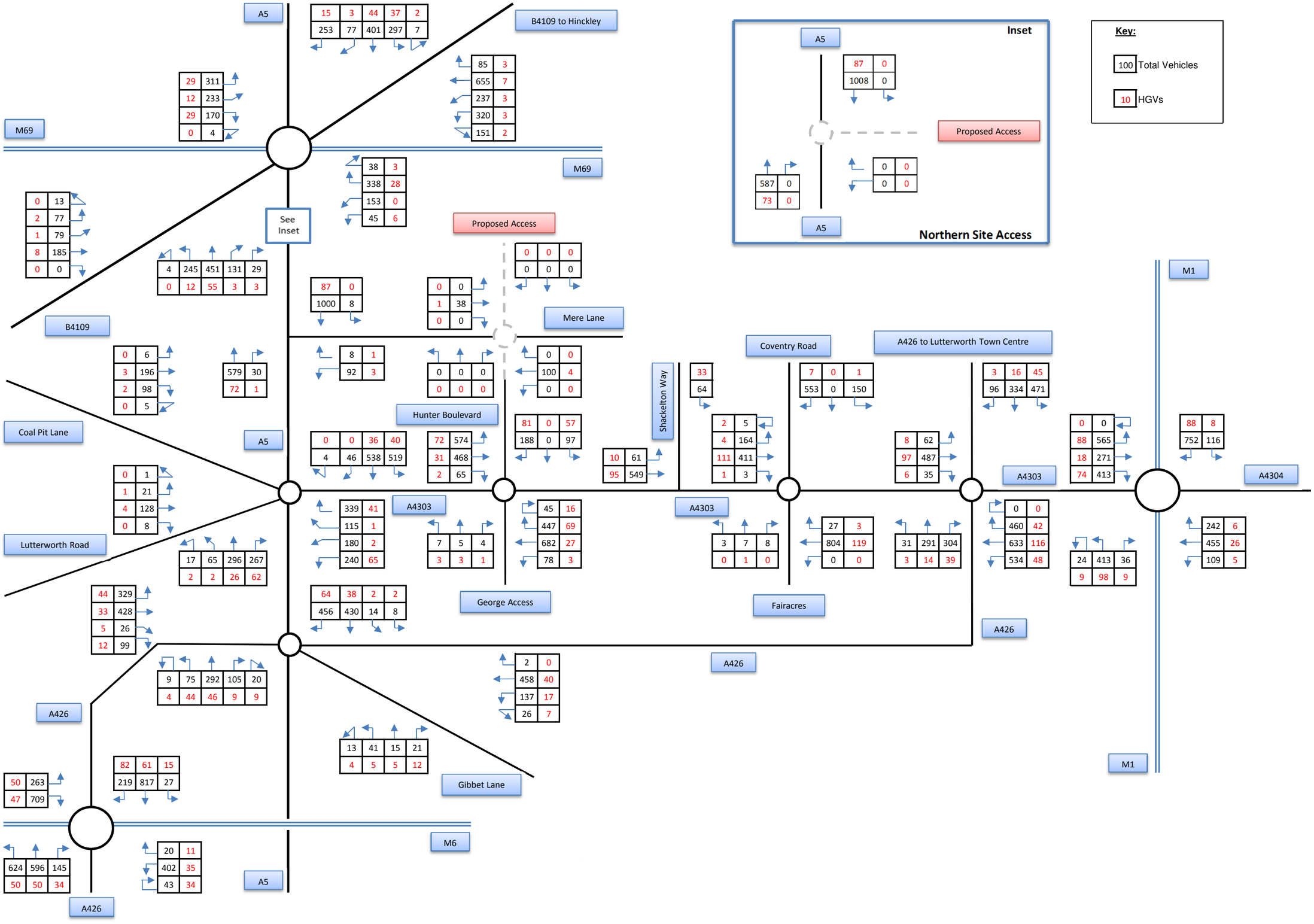

Figure 5.1: 2014 AM Peak Base Flows

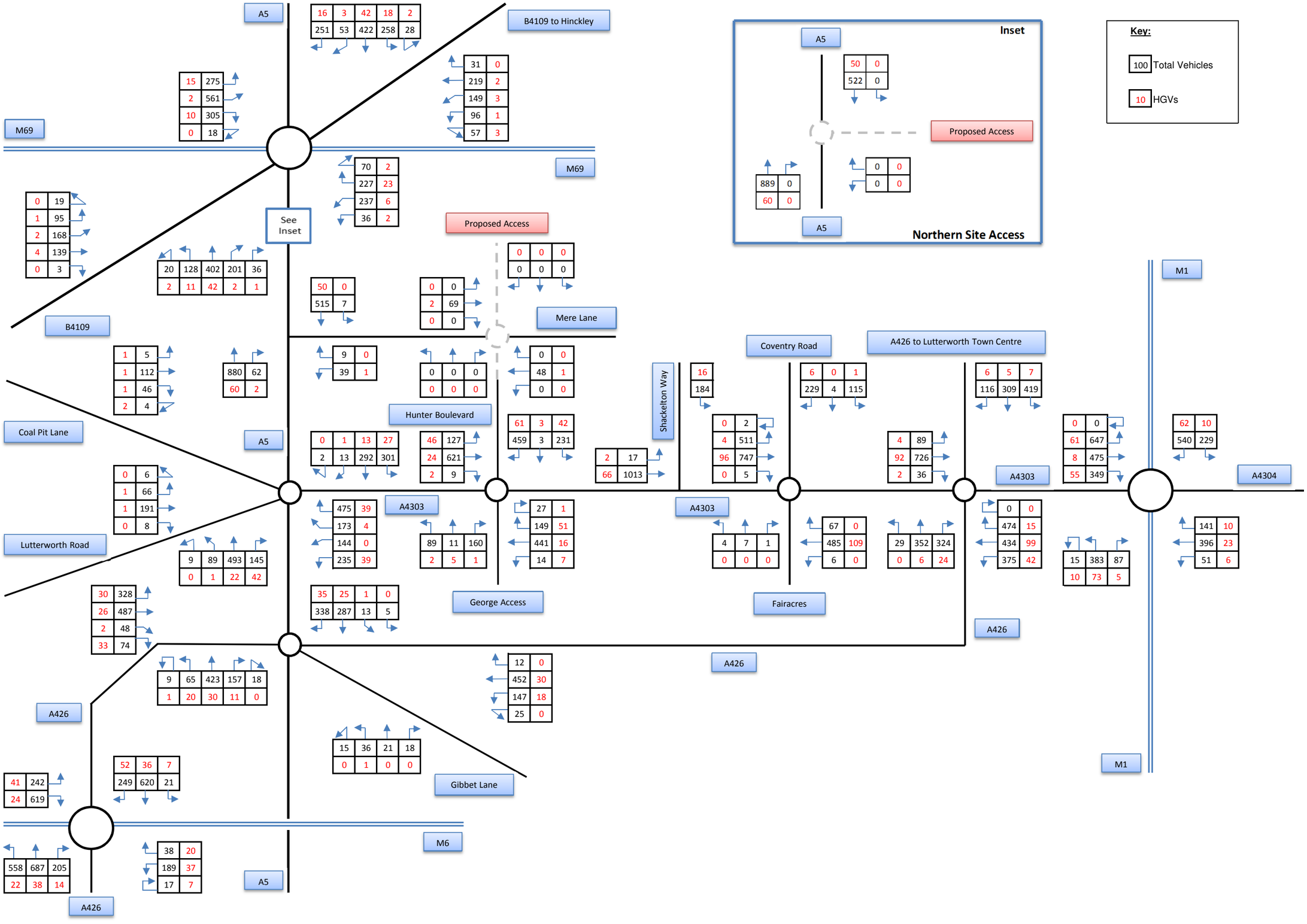

Figure 5.2: 2014 PM Peak Base Flows

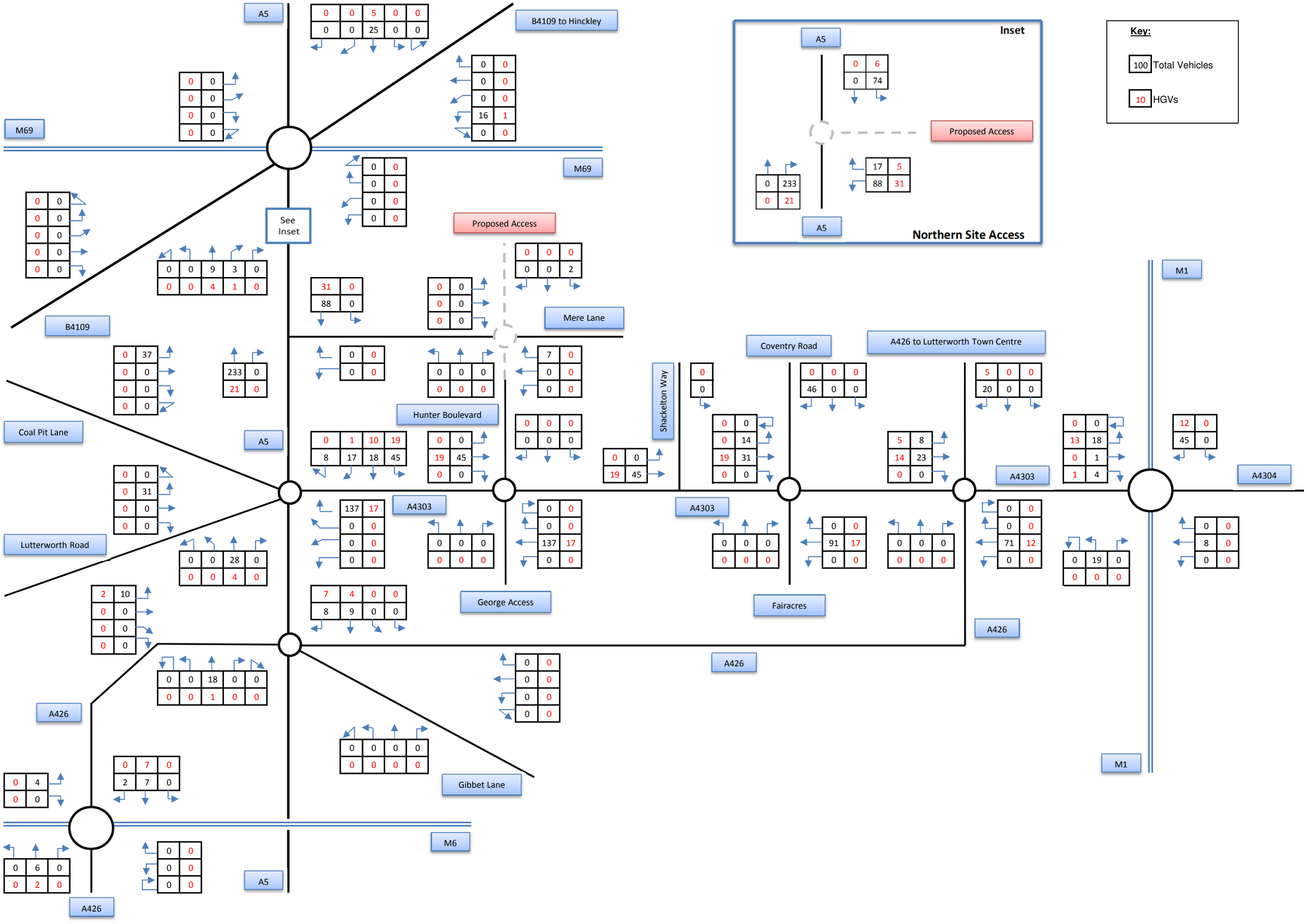

Figure 6.1: AM Peak Development Flows - B8 Development North of Magna Park Hub

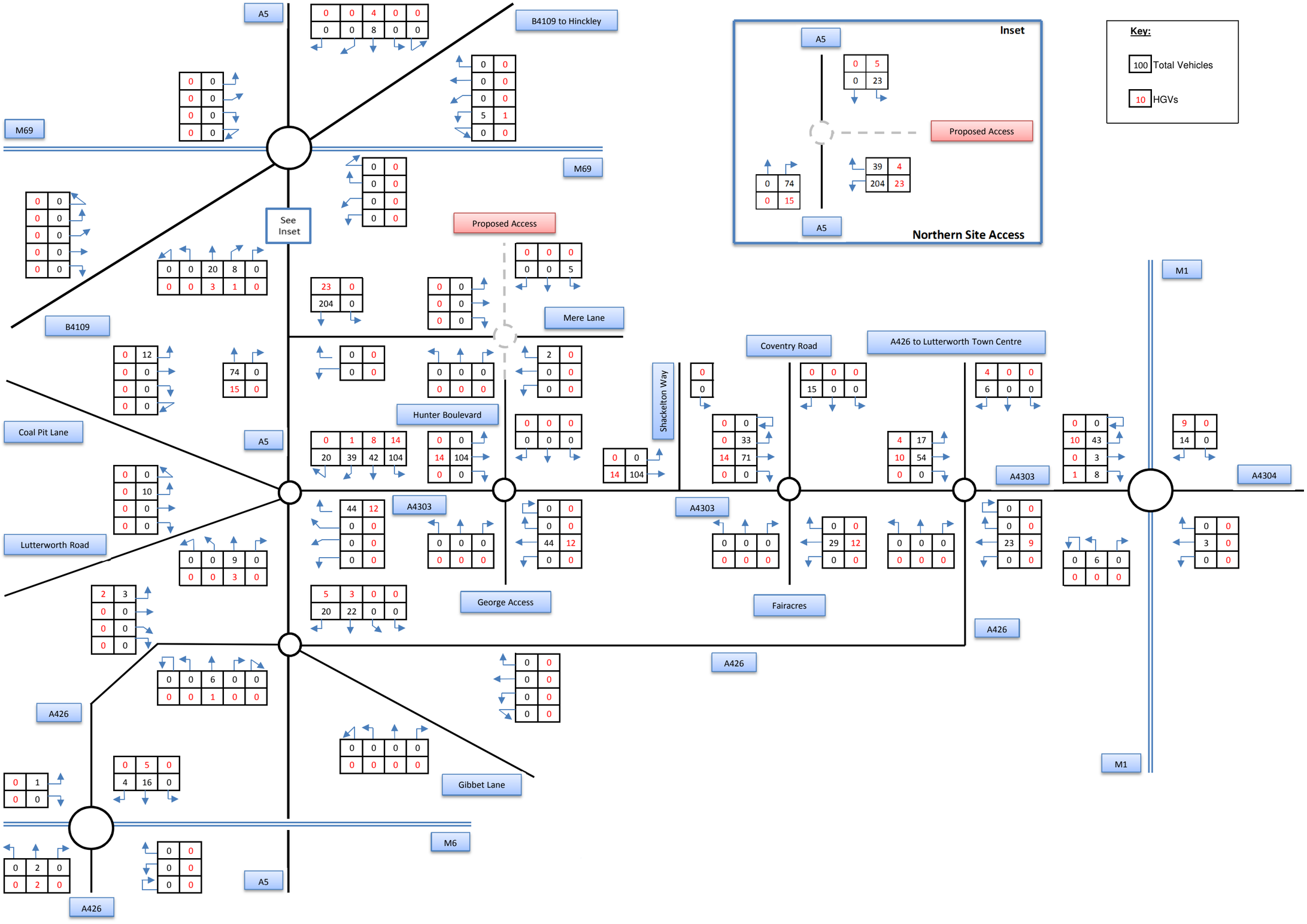

Figure 6.2: PM Peak Development Flows - B8 Development North of Magna Park Hub

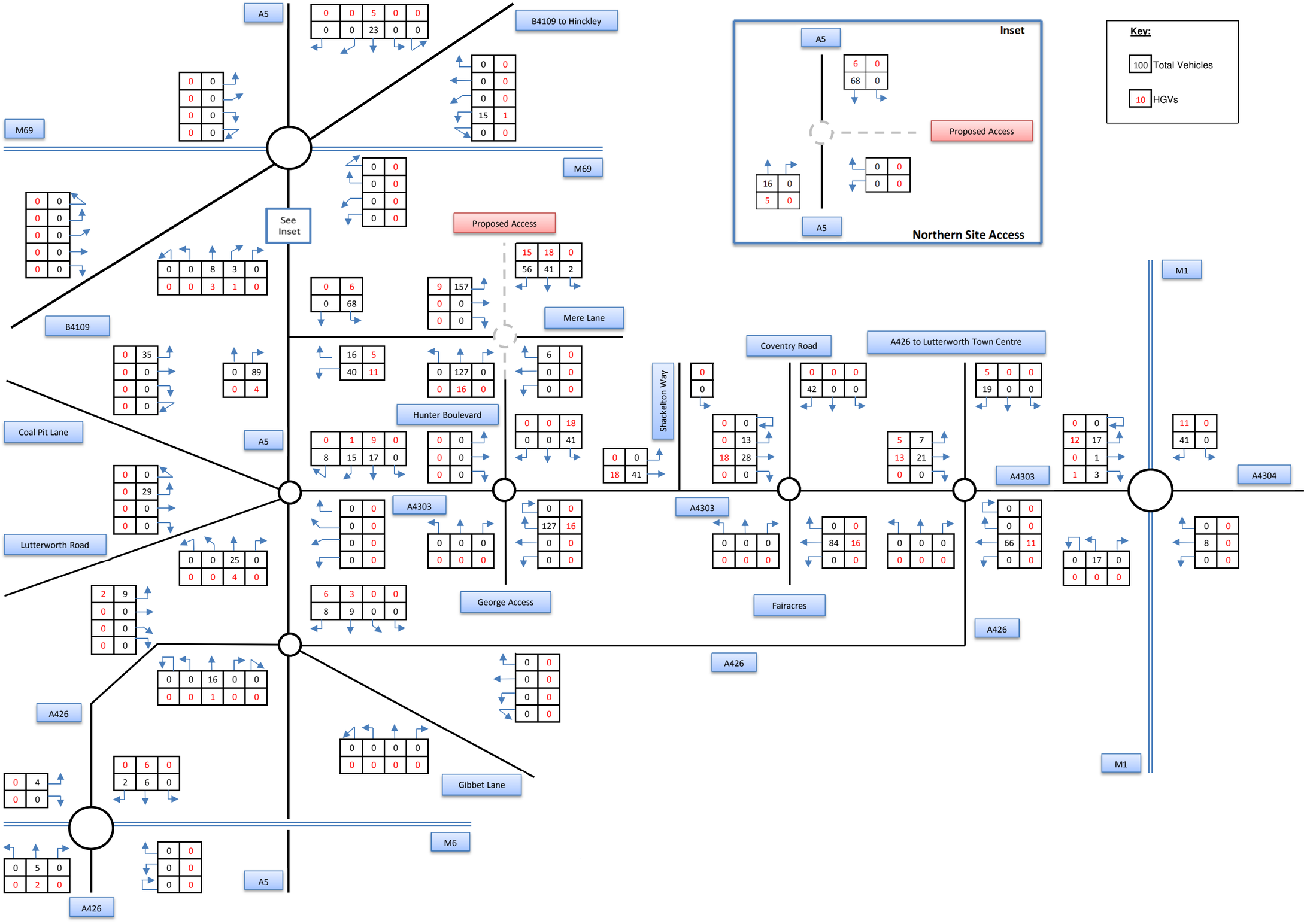

Figure 6.3: AM Peak Development Flows - B8 Development South of Magna Park Hub

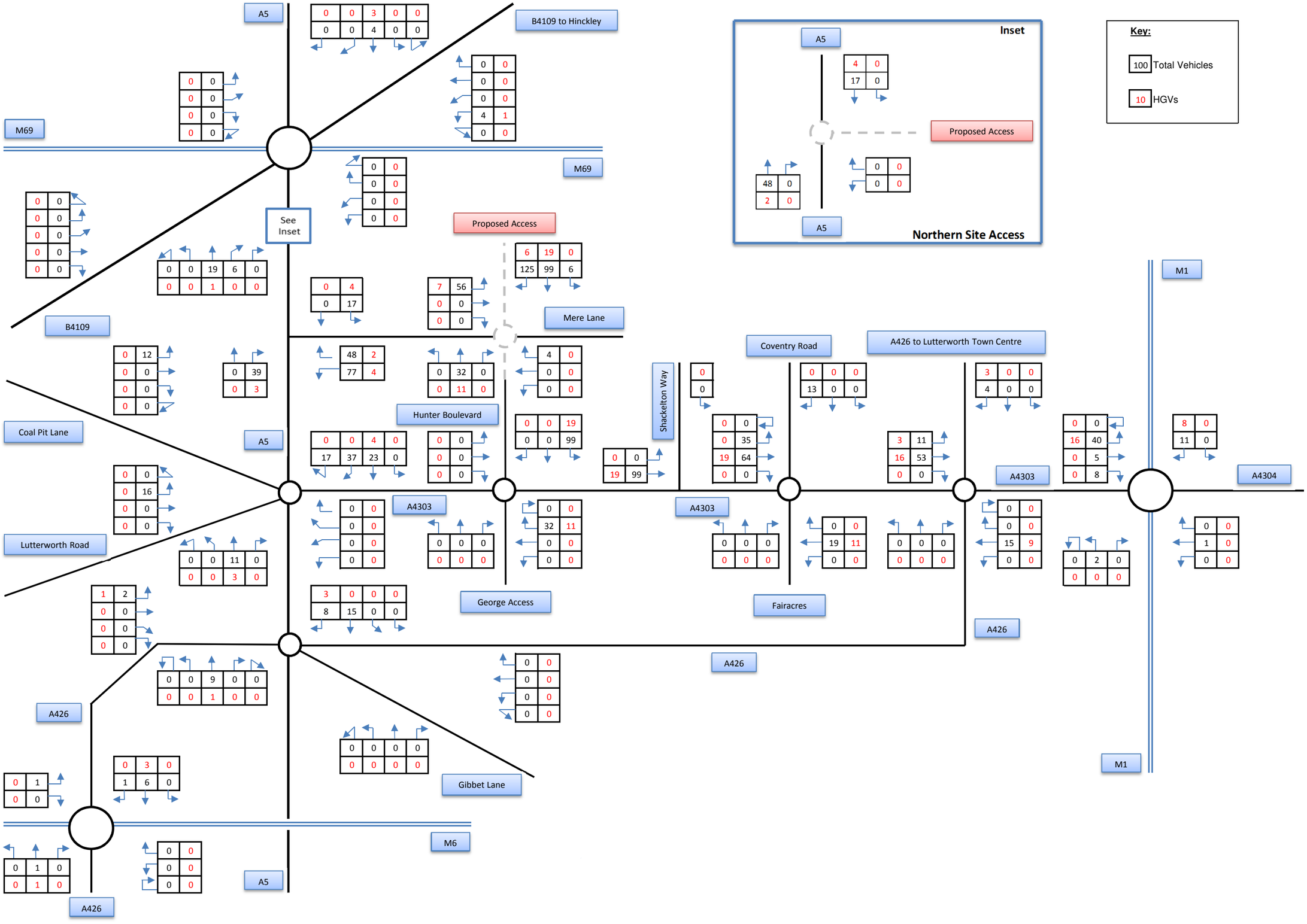

Figure 6.4: PM Peak Development Flows - B8 South of Magna Park Hub

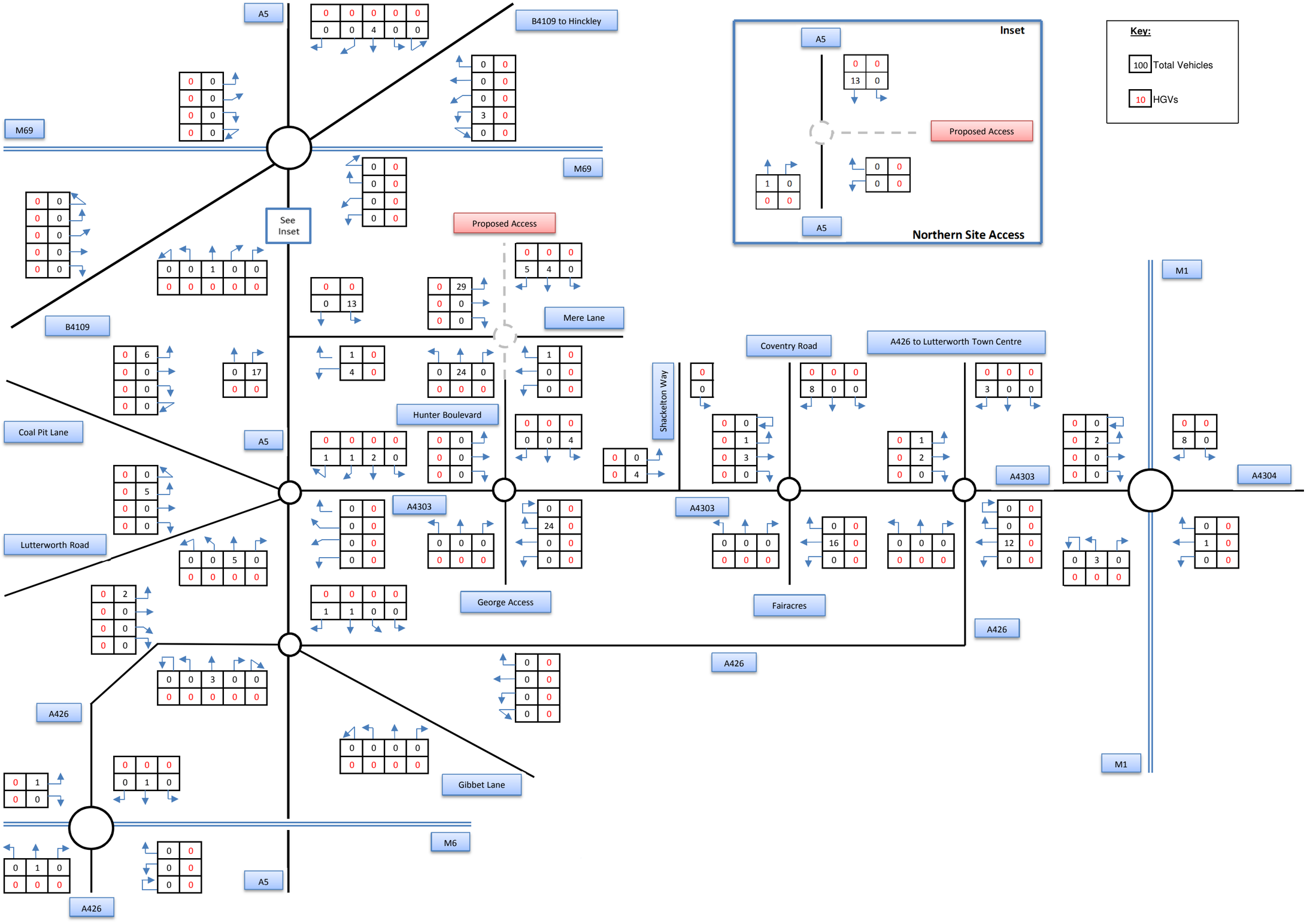

Figure 6.5: AM Peak Development Flows - B1 Innovation Centre

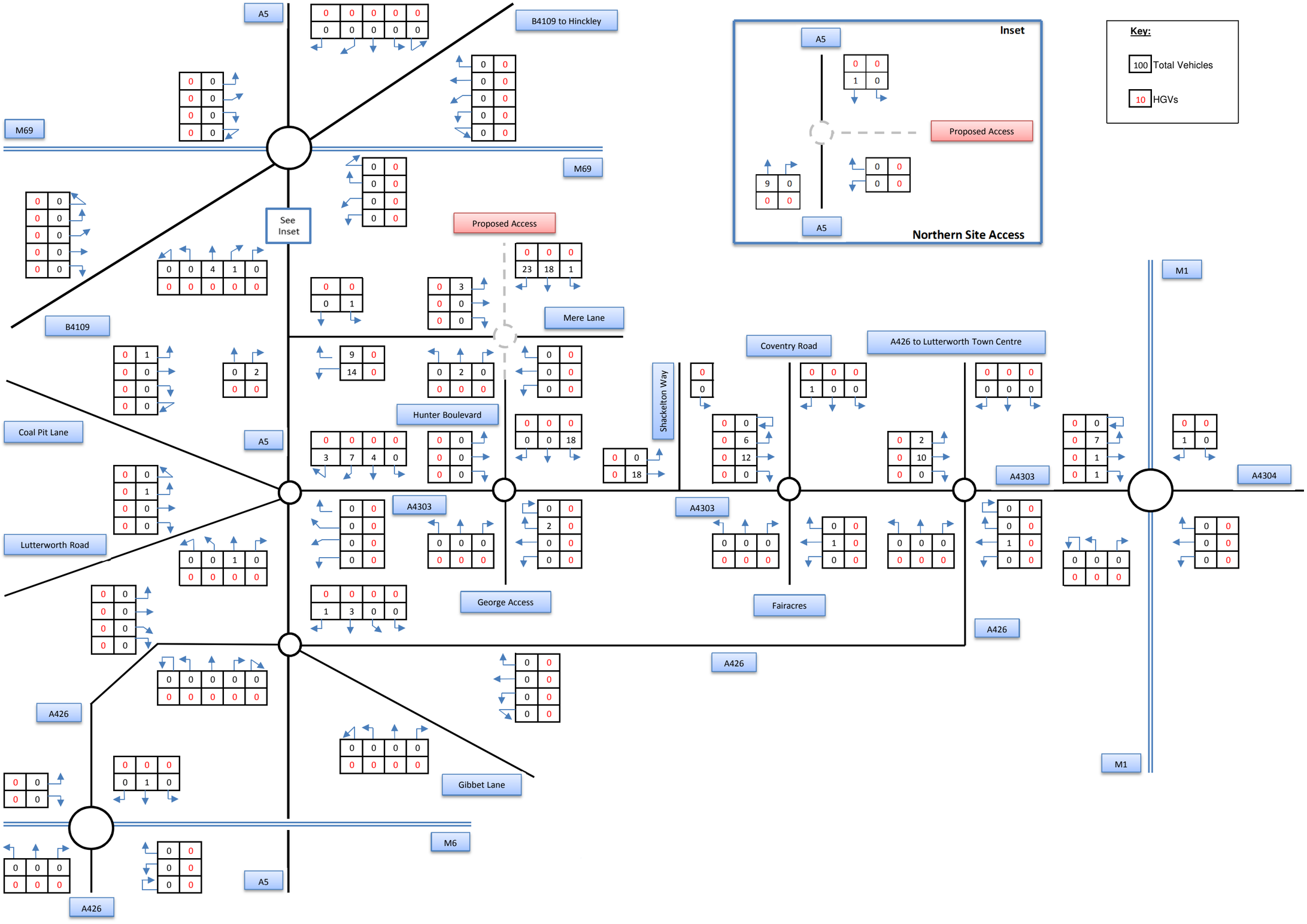

Figure 6.6: PM Peak Development Flows - B1 Innovation Centre

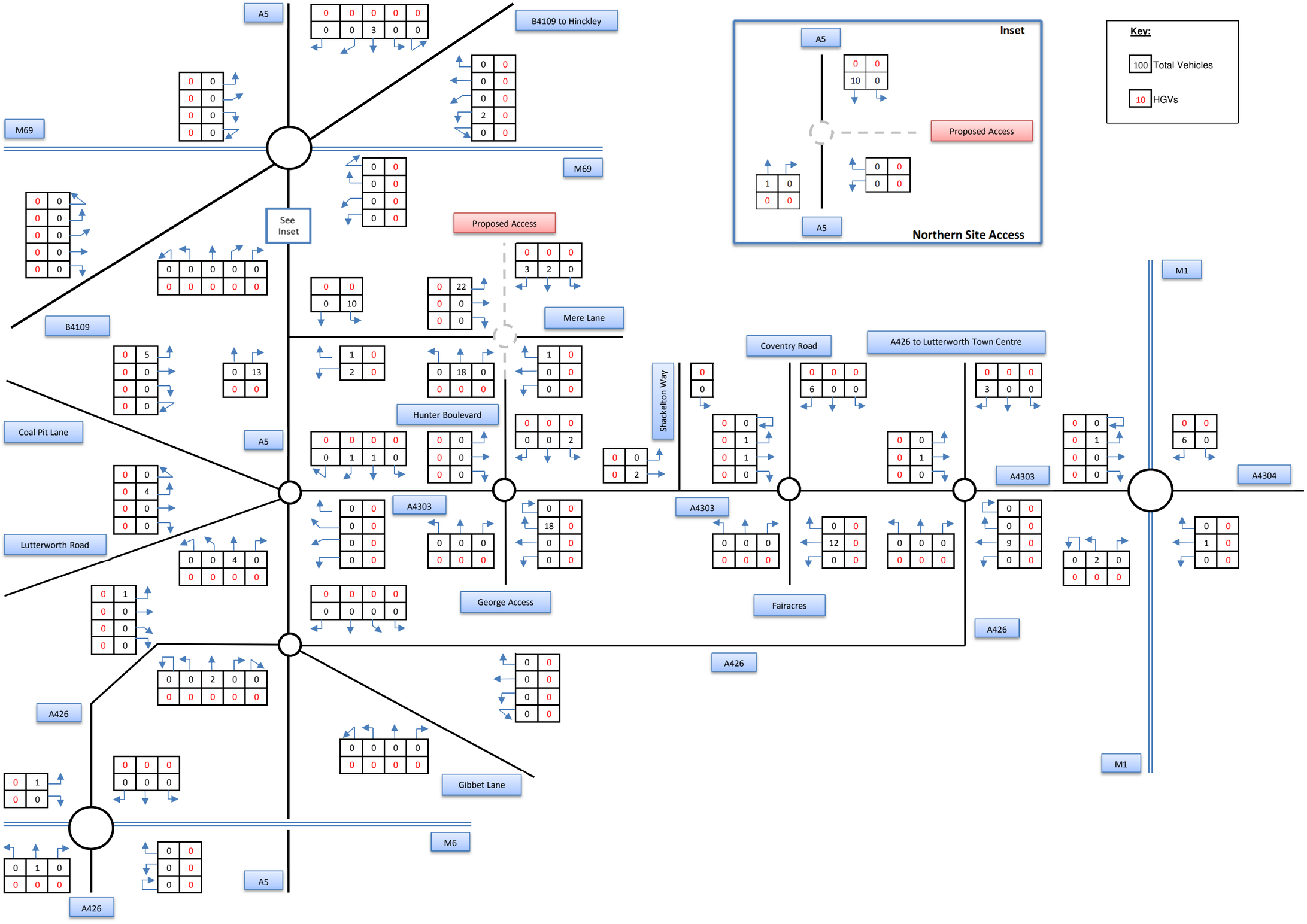

Figure 6.7: AM Peak Development Flows - B1 Holovis

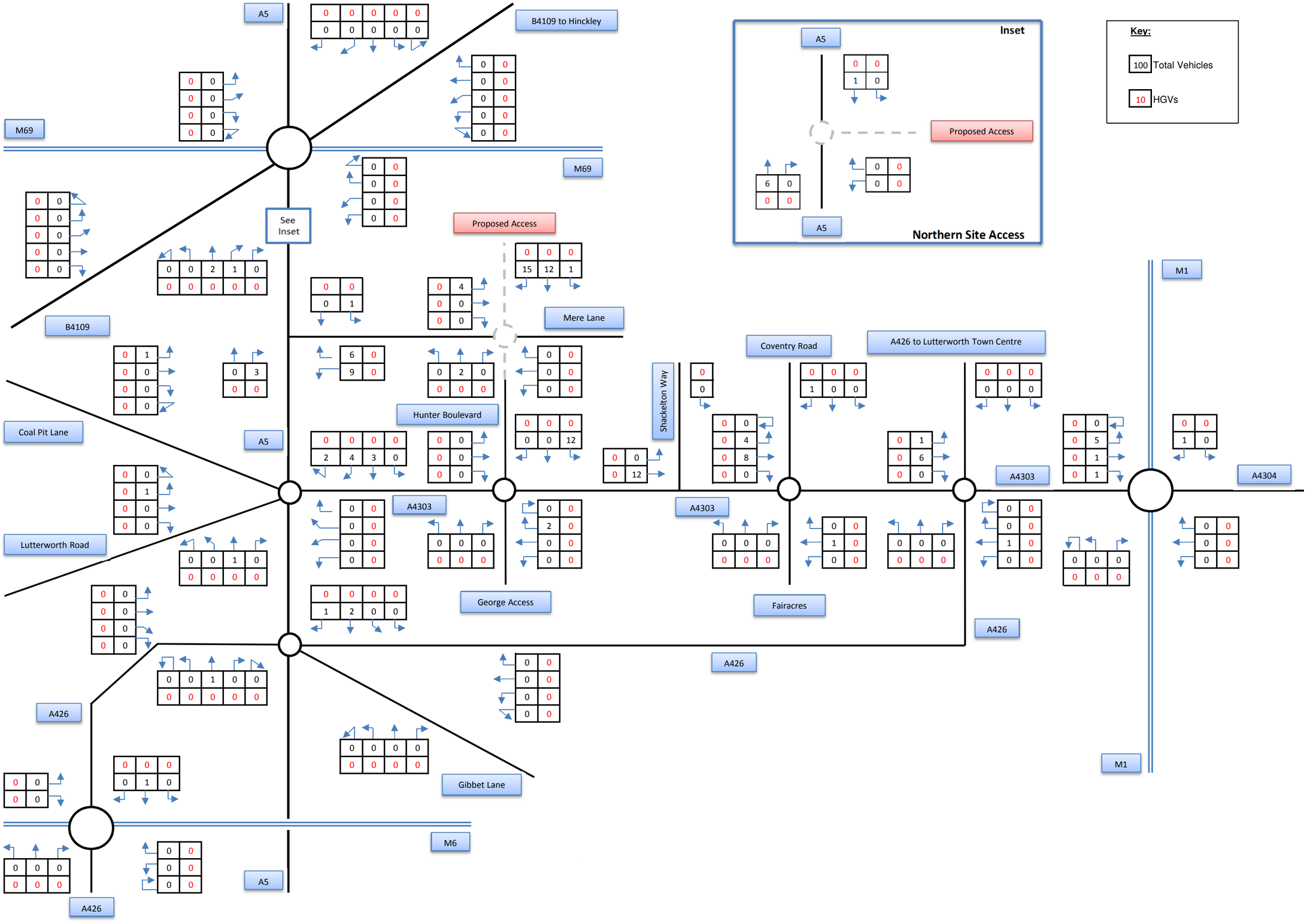

Figure 6.8: AM Peak Development Flows - B1 Holovis

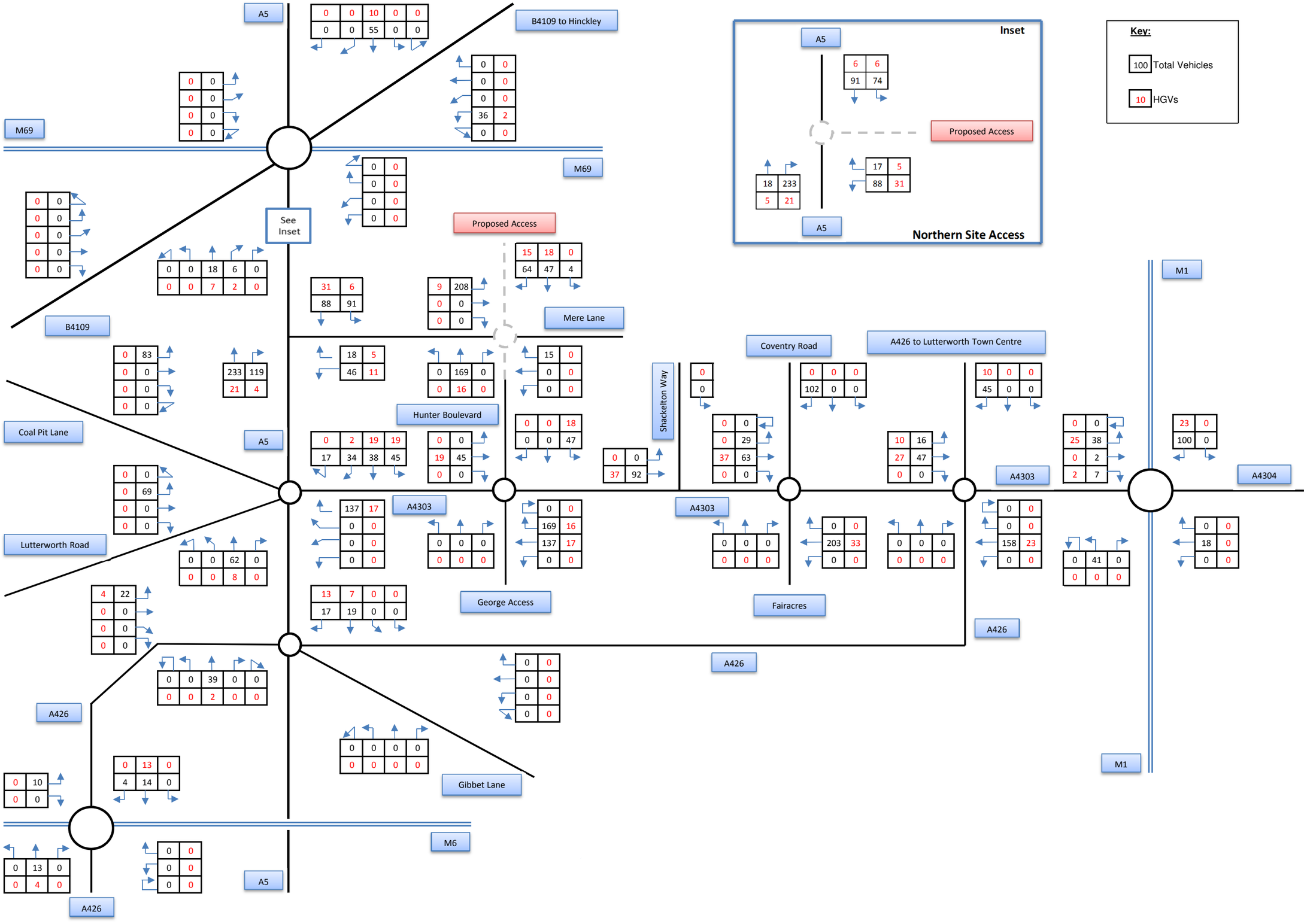

Figure 6.9: AM Peak Total Employment Development Flows

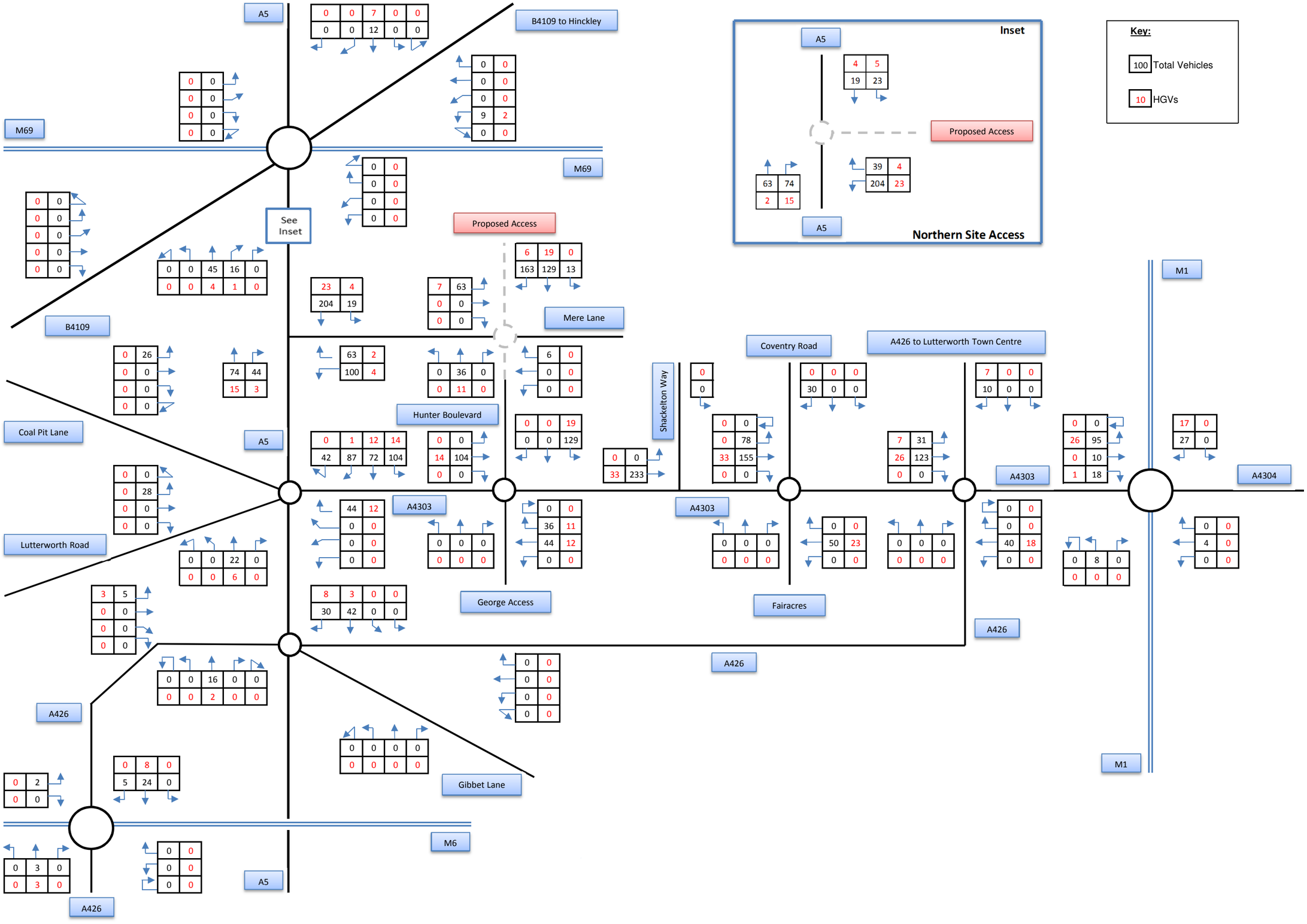

Figure 6.10: PM Peak Total Employment Development Flows

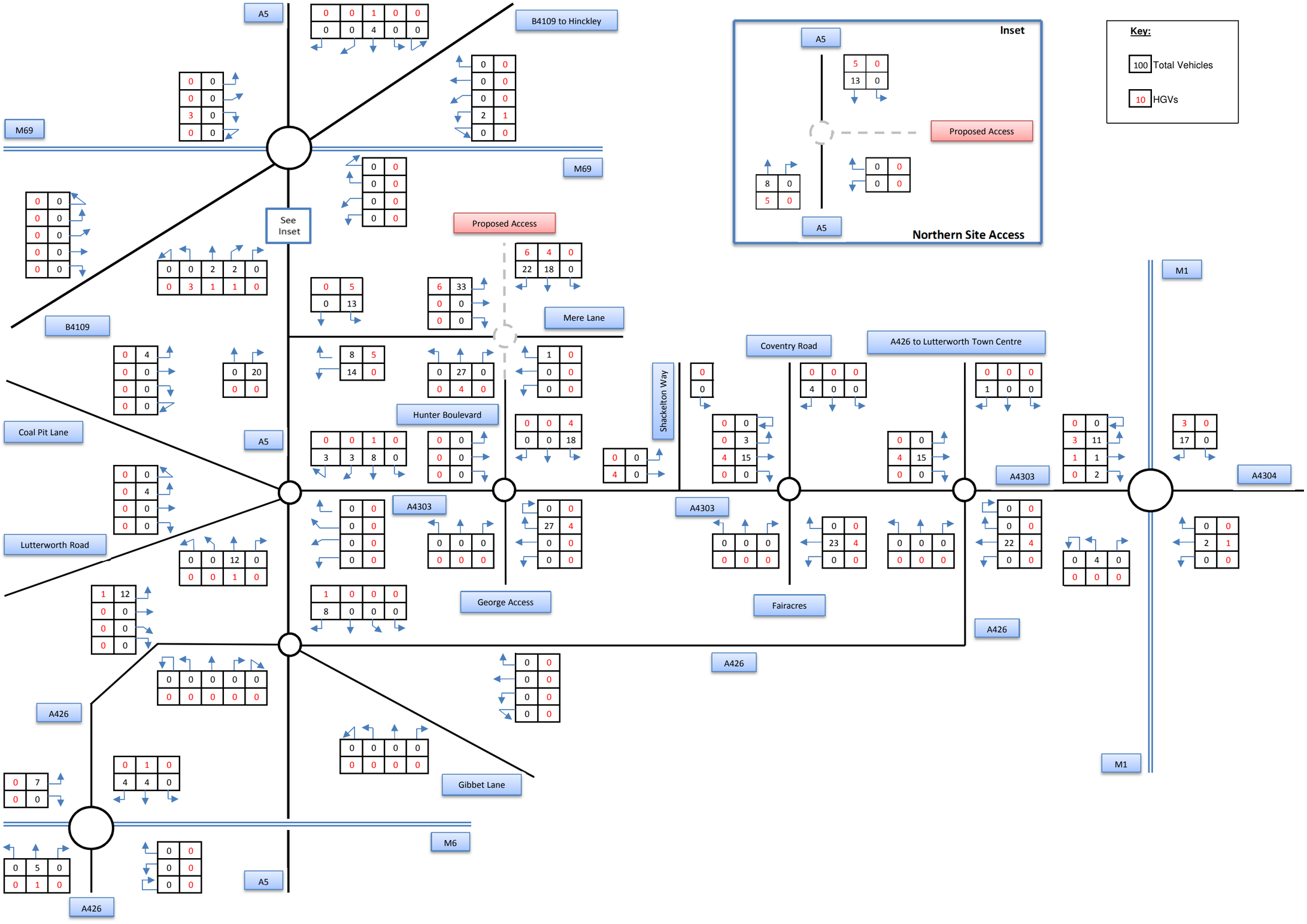

Figure 6.11: AM Peak Student Trips Logistics Institute

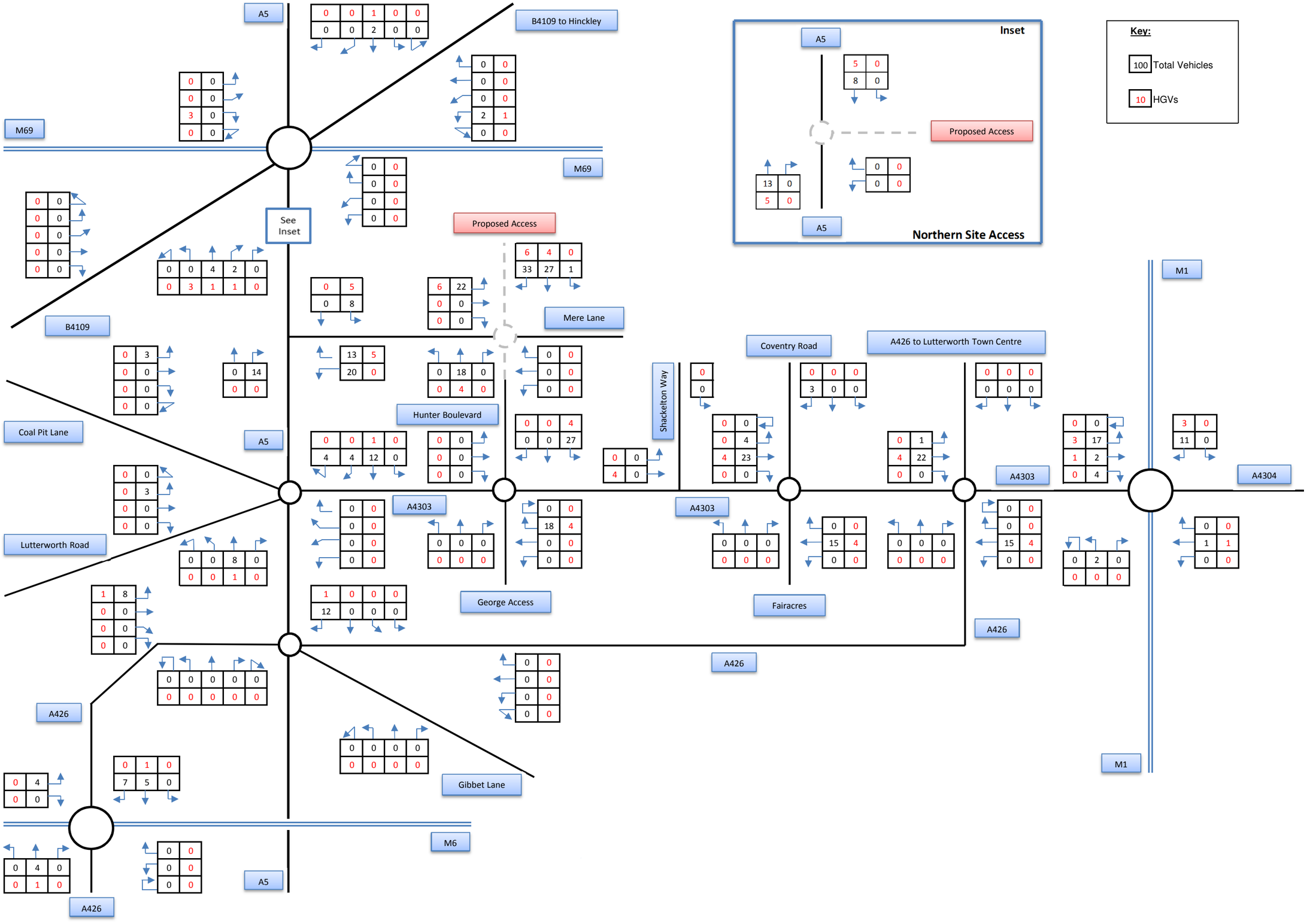

Figure 6.12: PM Peak Student Trips Logistics Institute

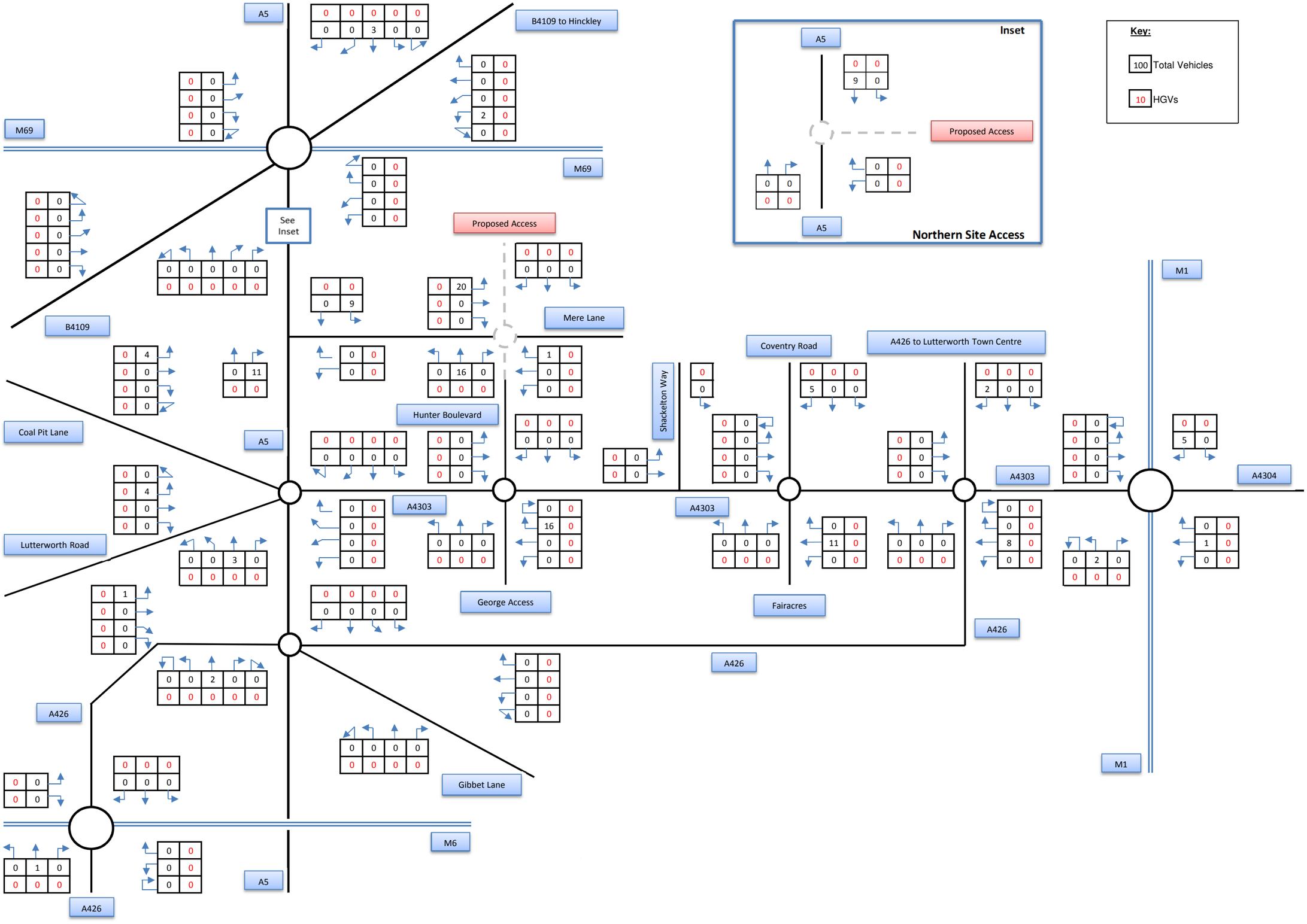

Figure 6.13: AM Peak Staff Trips Logistics Institute

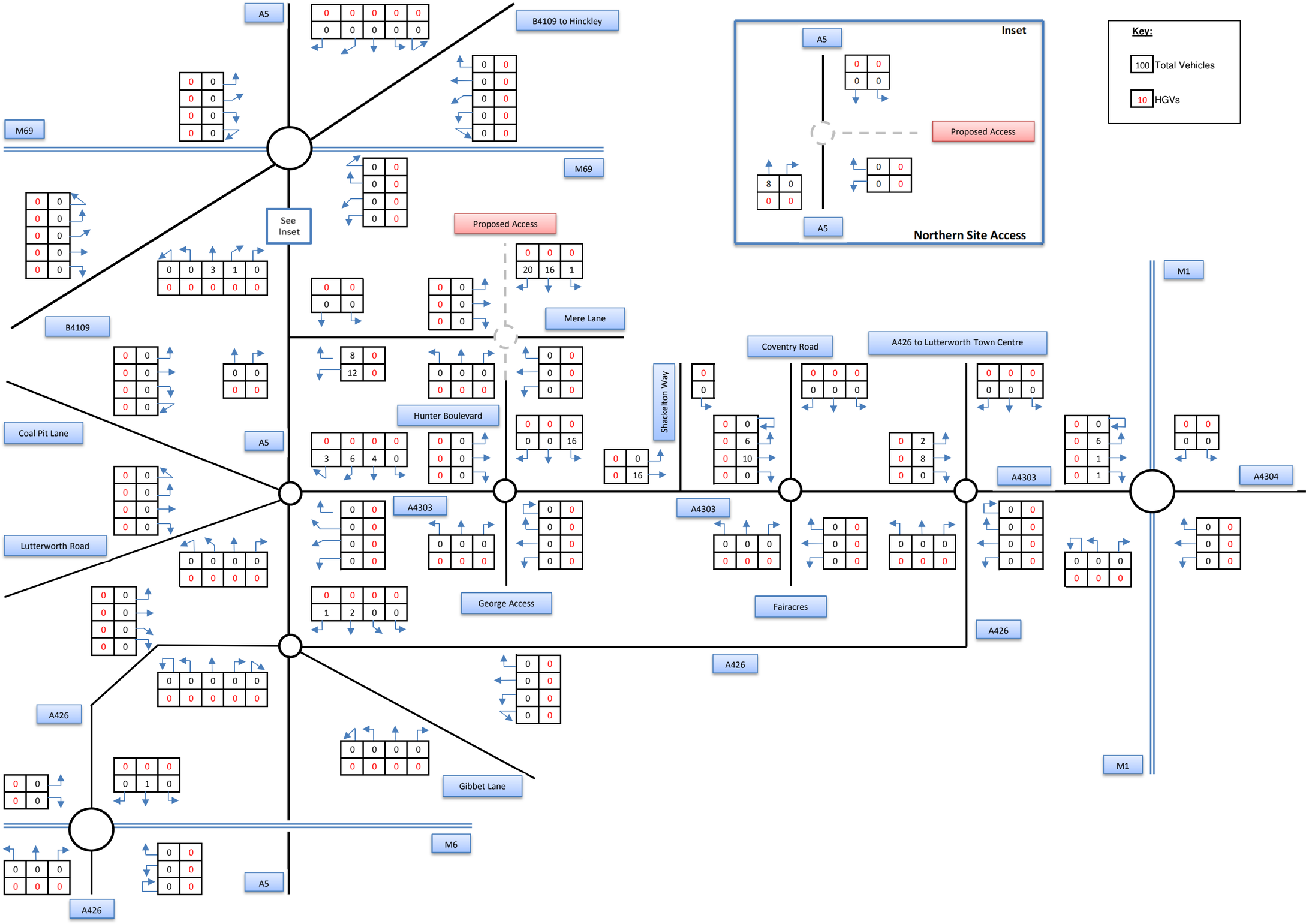

Figure 6.14: PM Peak Staff Trips Logistics Institute

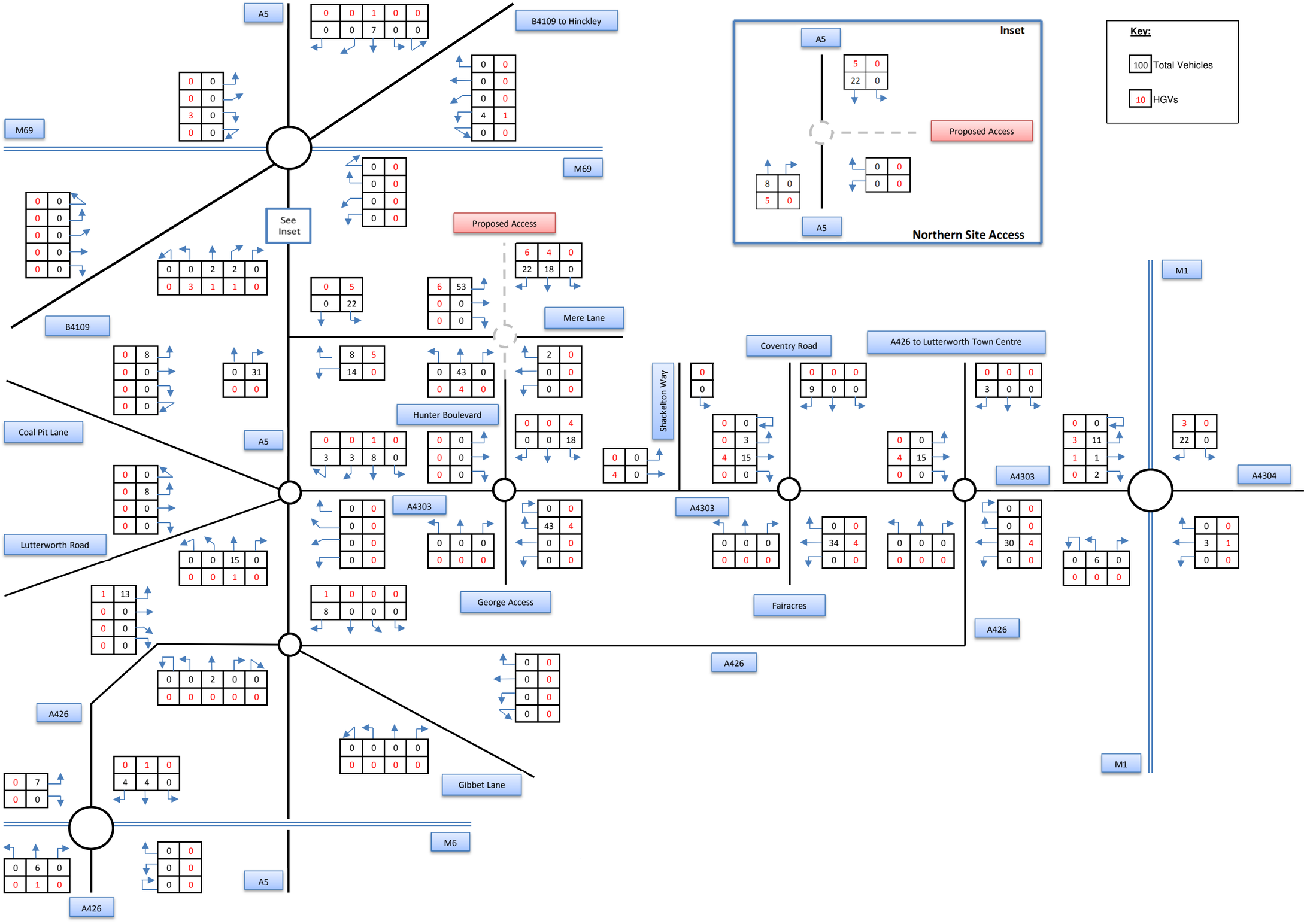

Figure 6.15: AM Peak Total Trips Logistics Institute

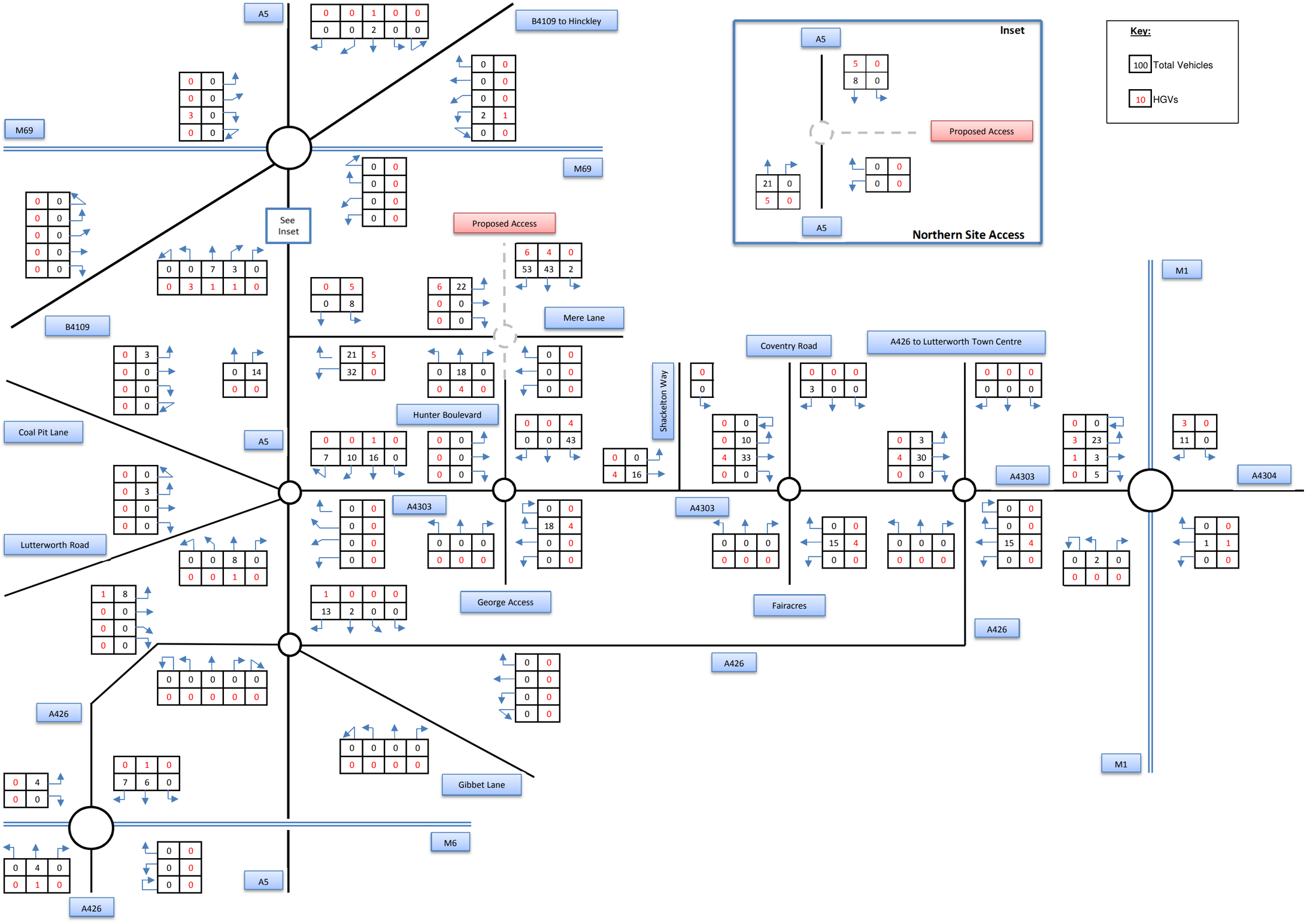

Figure 6.16: PM Peak Total Trips Logistics Institute

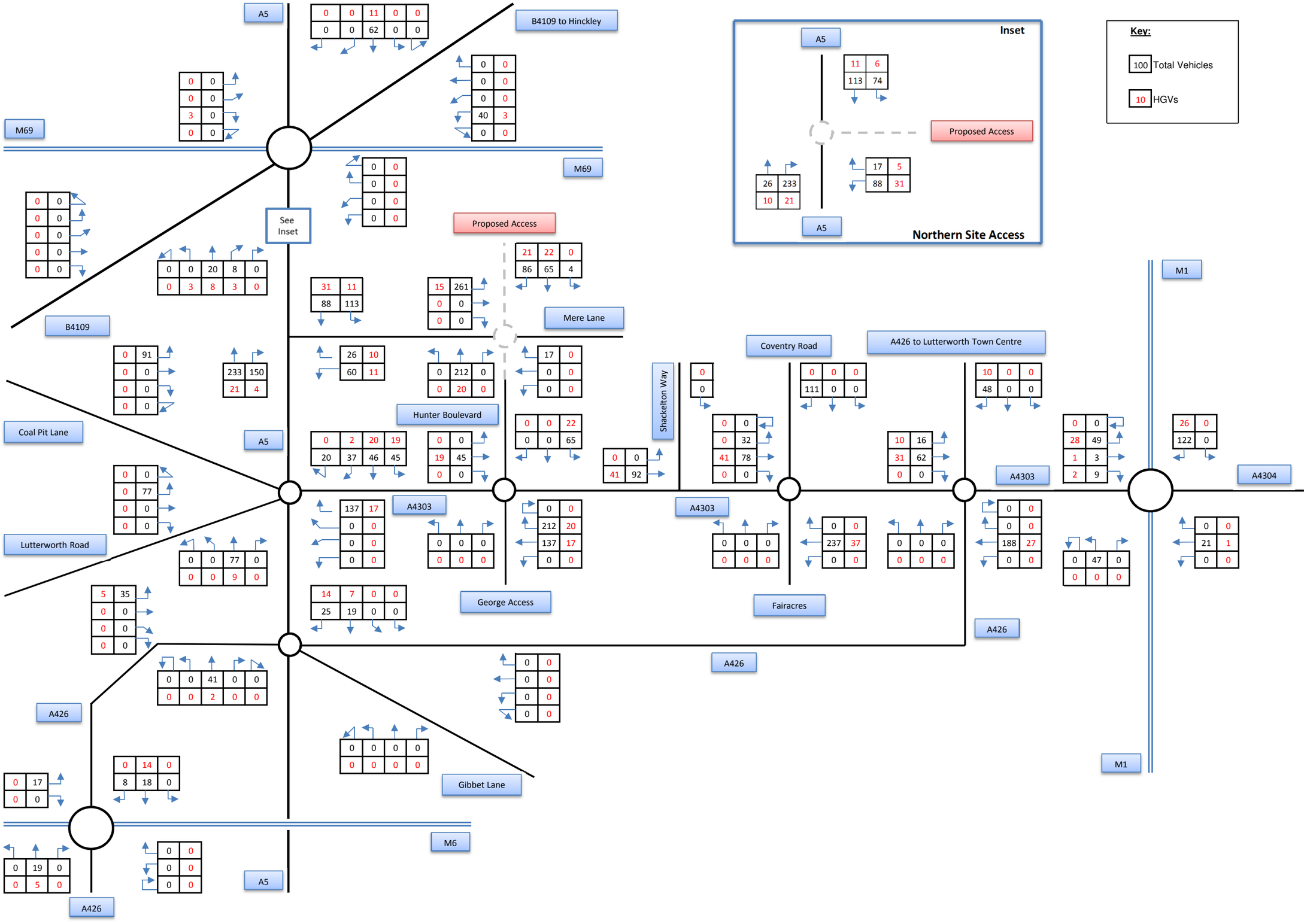

Figure 6.17: AM Peak Total Development Trips

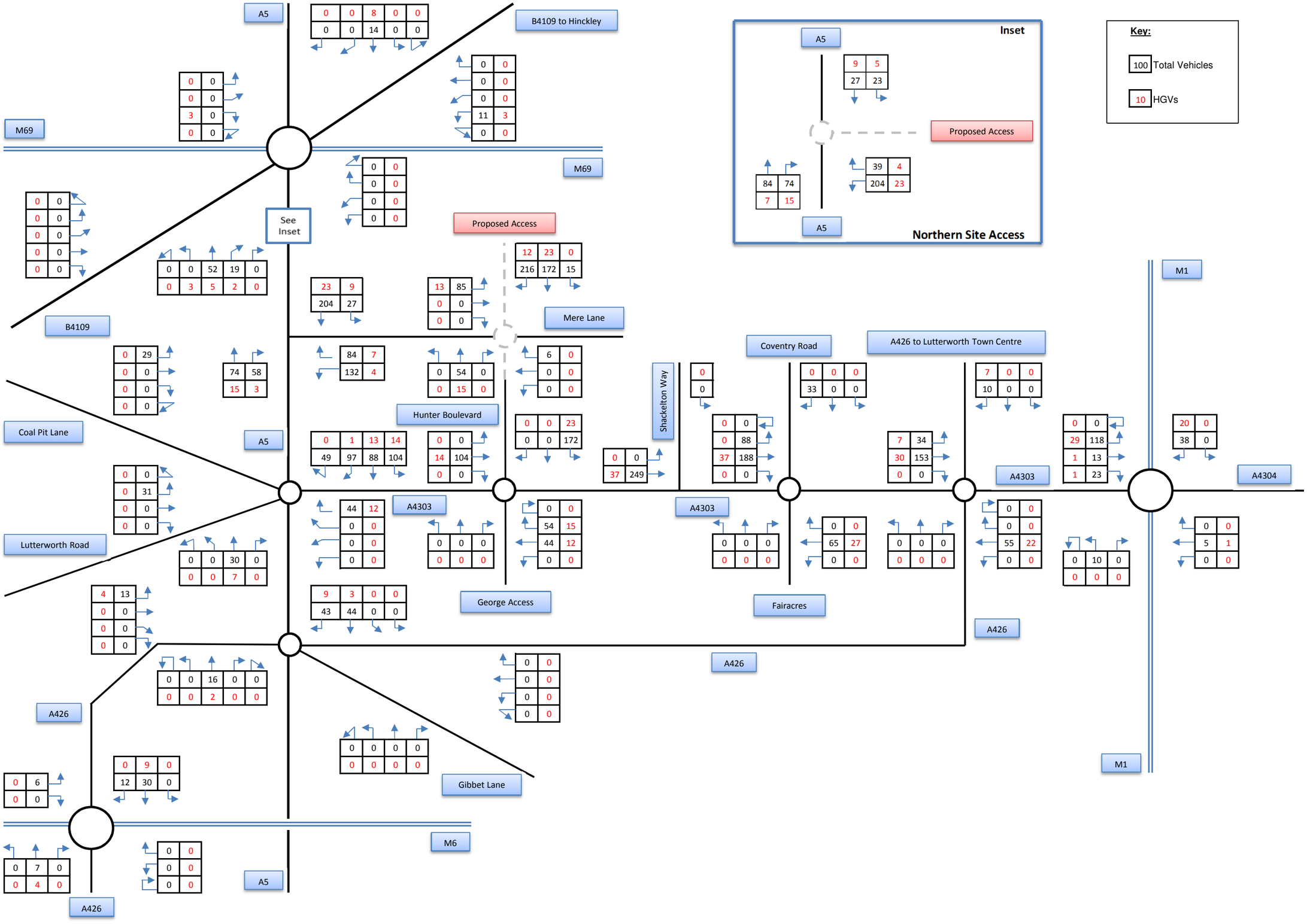

Figure 6.18: PM Peak Total Development Trips

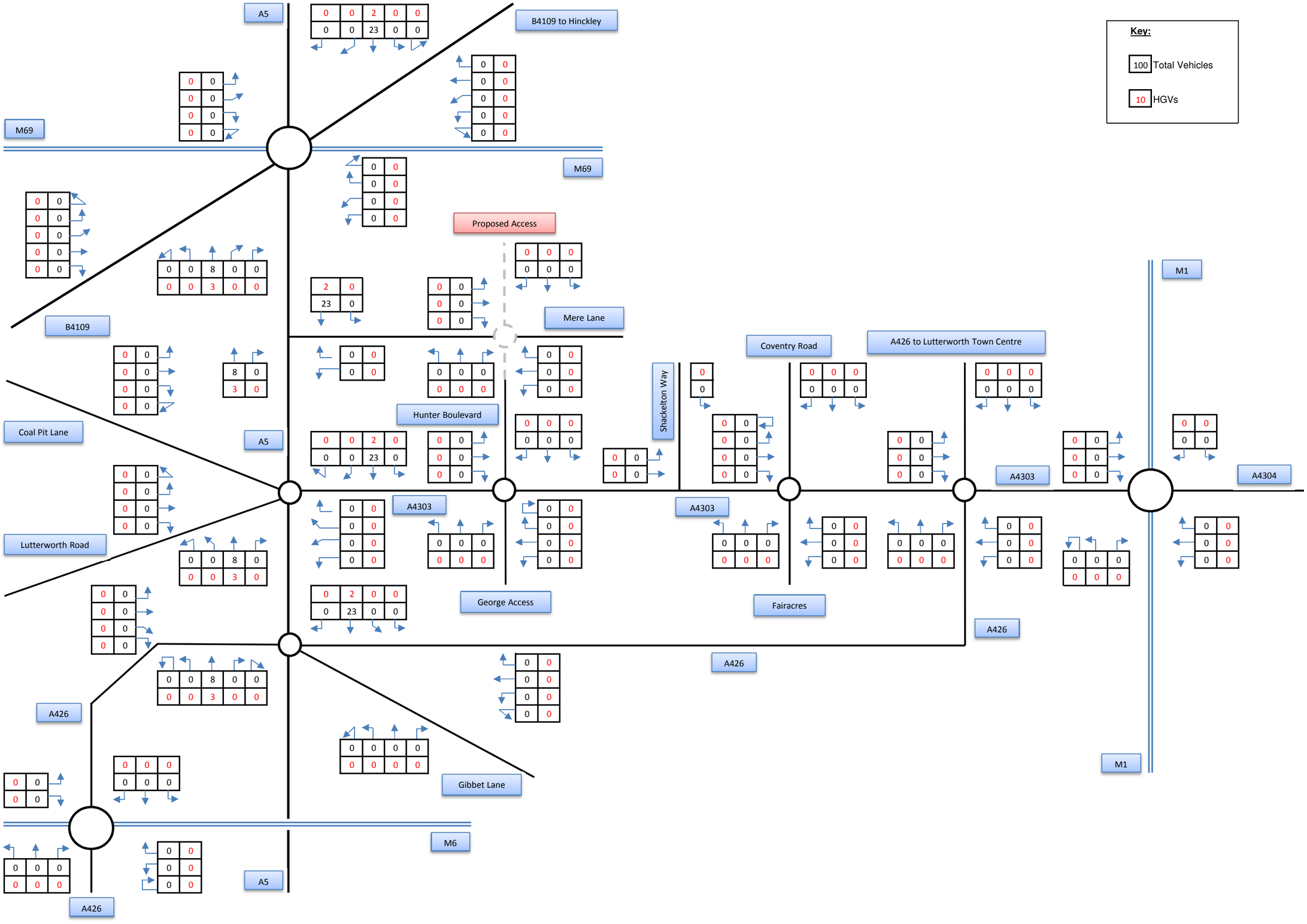

Figure 7.1: DIRFT II Committed Development Trips AM Peak

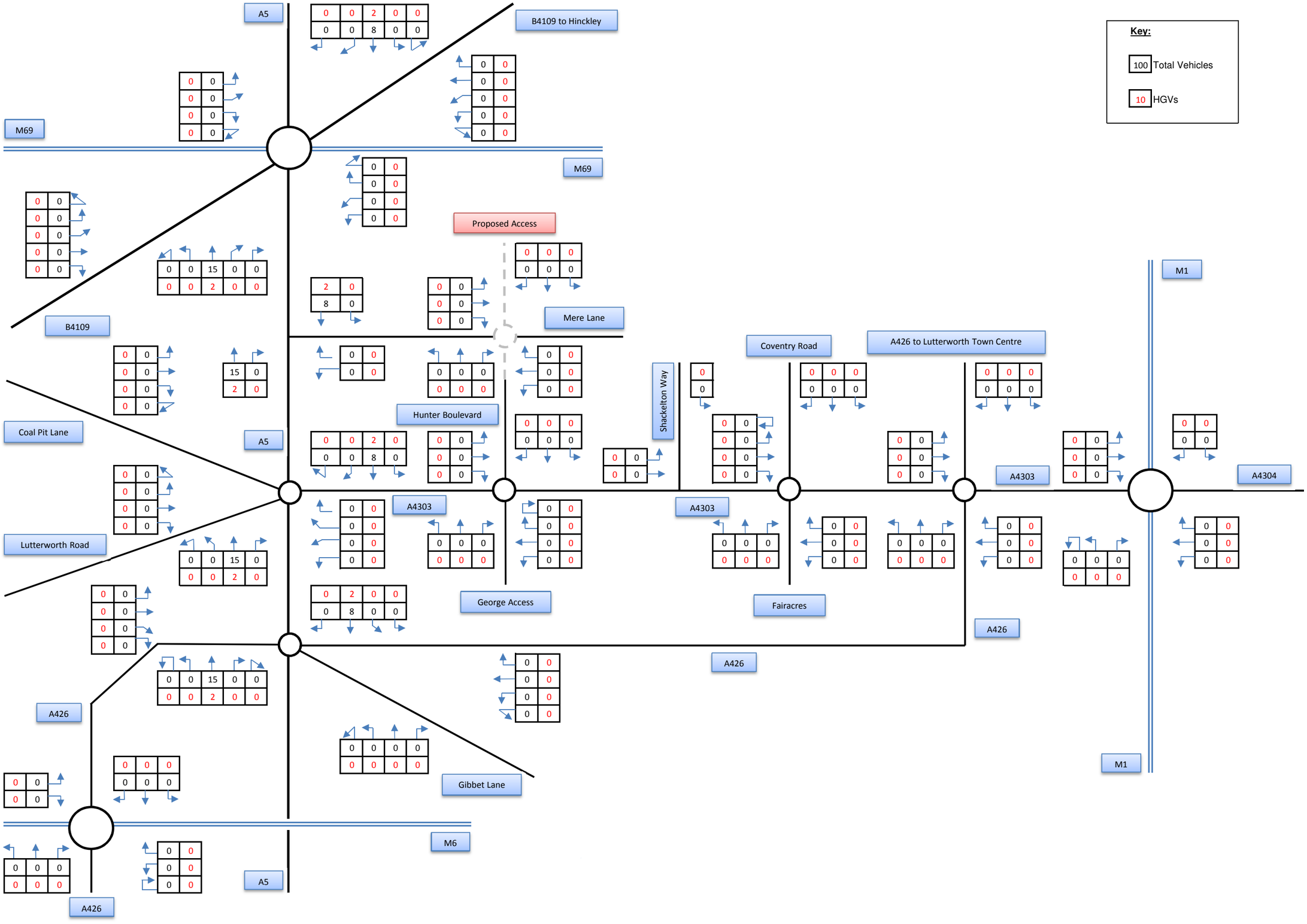

Figure 7.2: DIRFT II Committed Development Trips PM Peak

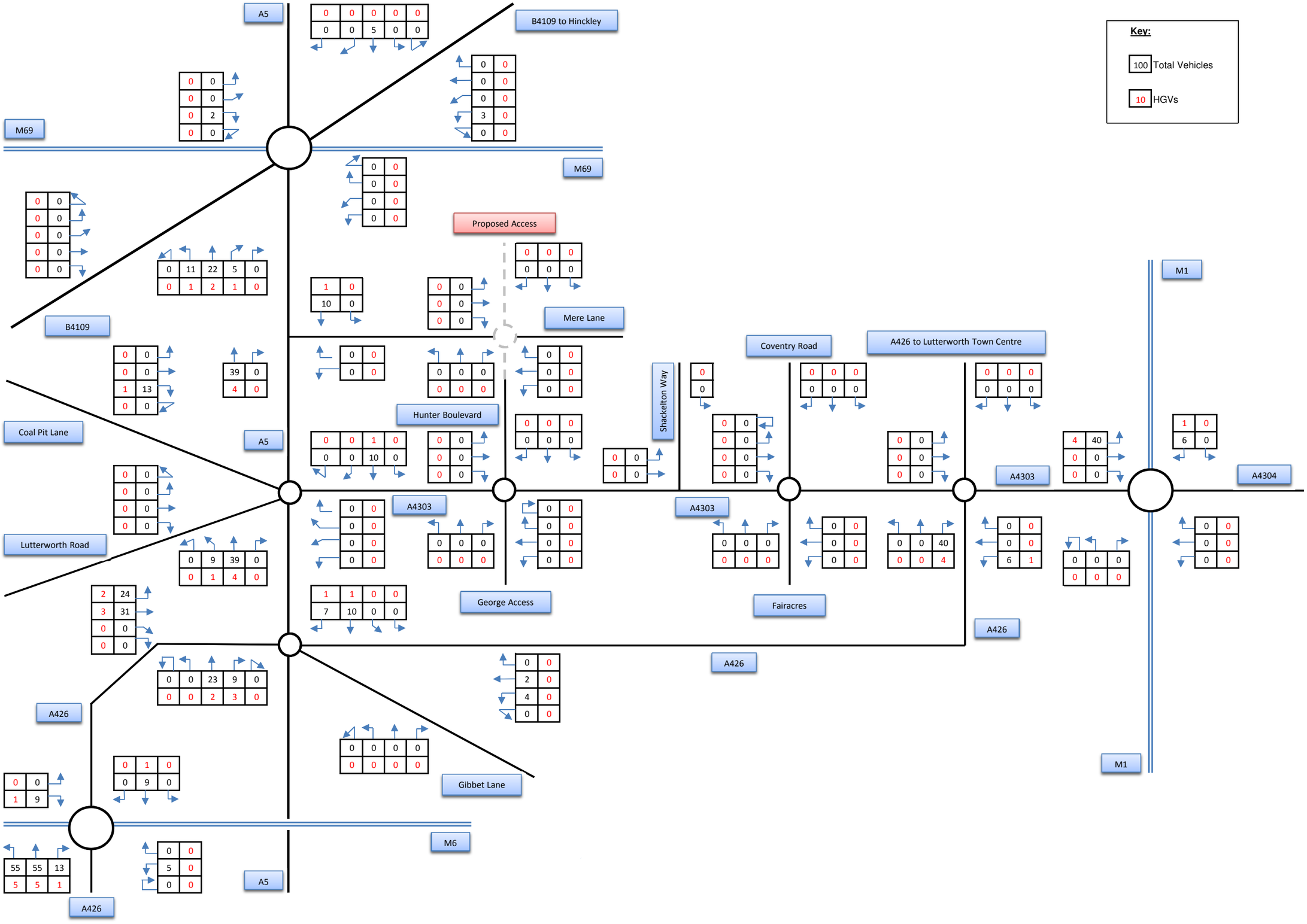

Figure 7.3: DIRFT III, Rugby Radio and Rugby Gateway Committed Development Trips AM Peak

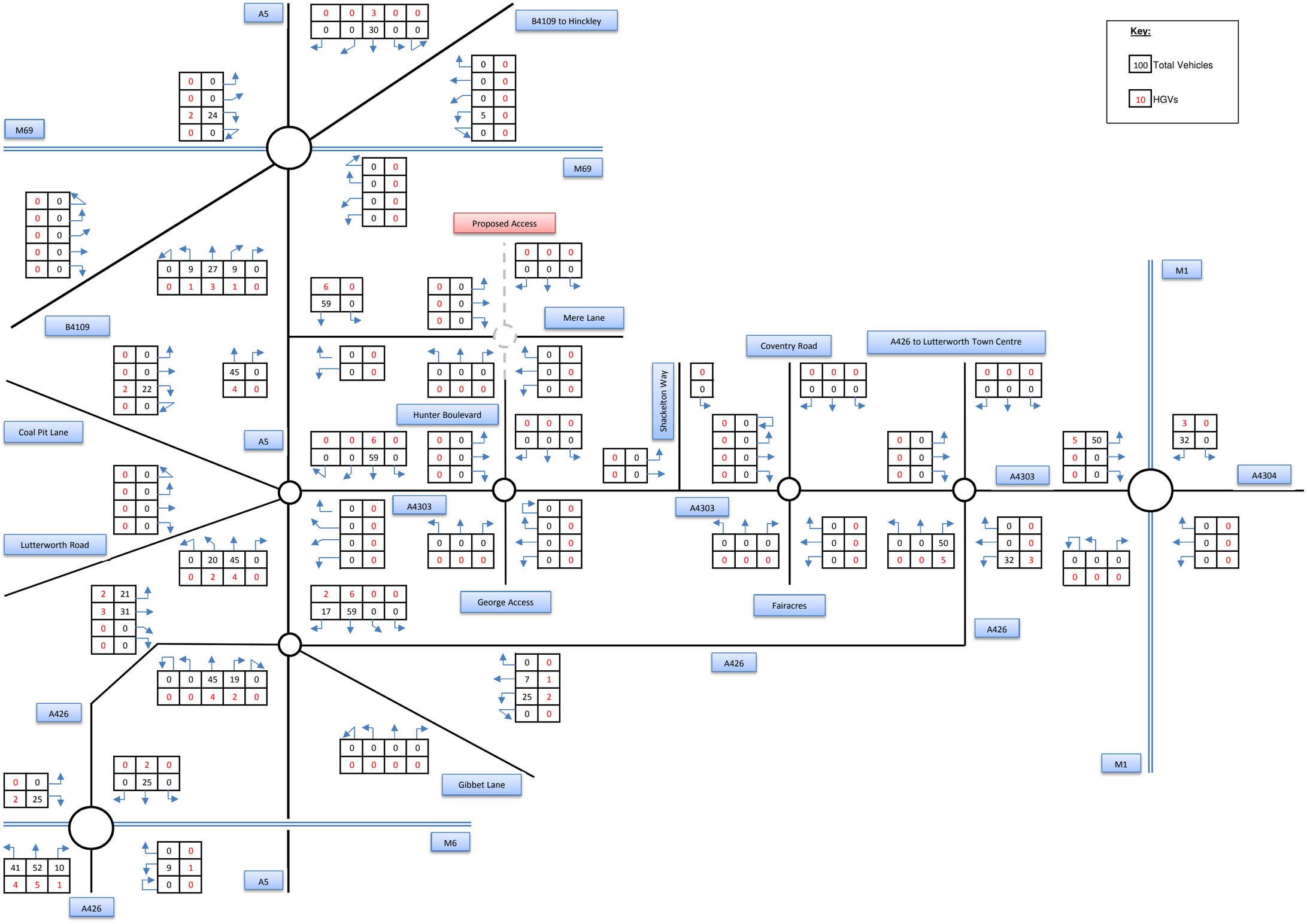

Figure 7.4: DIRFT III, Rugby Radio and Rugby Gateway Committed Development Trips PM Peak

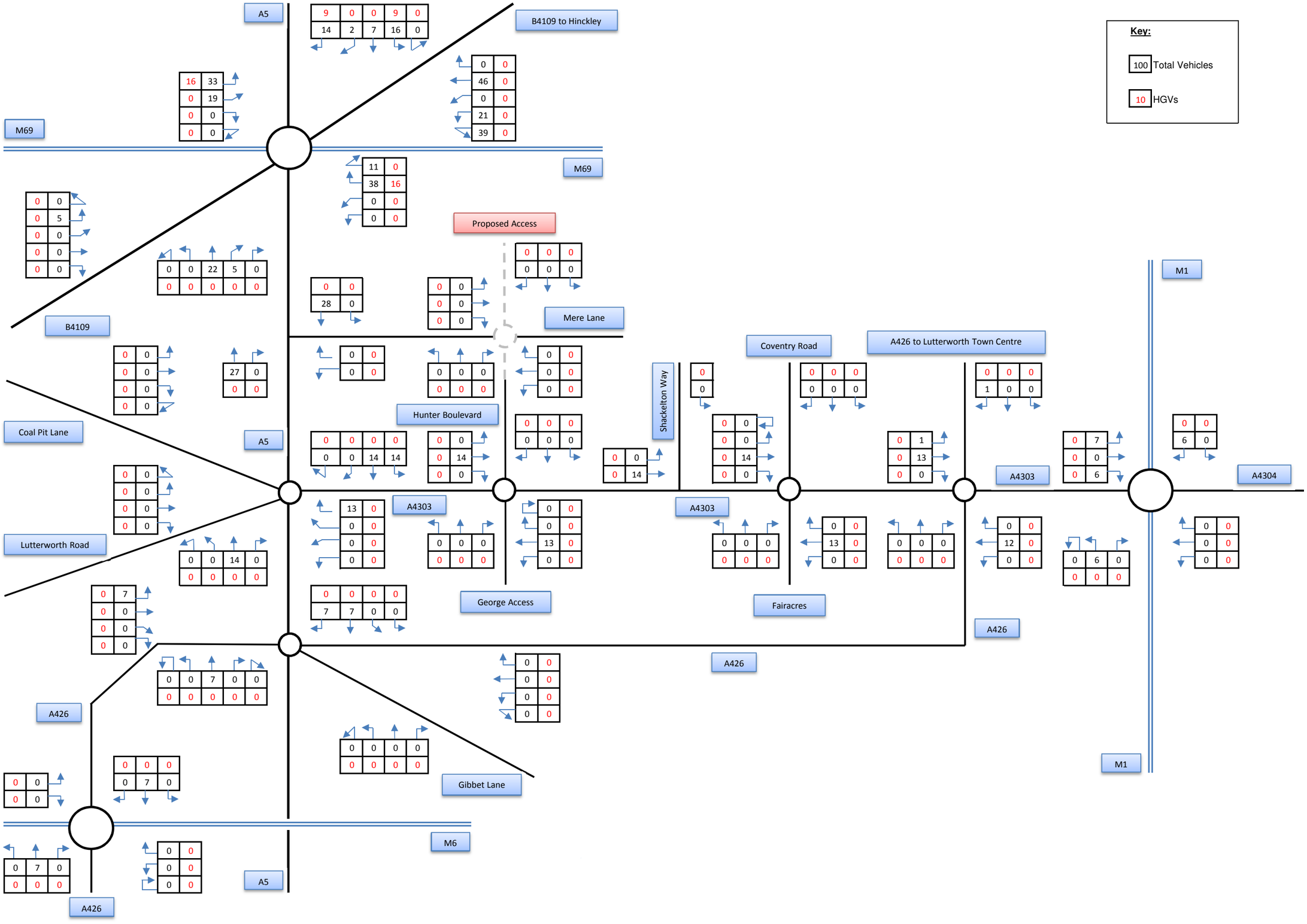

Figure 7.5: Ashby Canal, Hinckley Committed Development Trips AM Peak

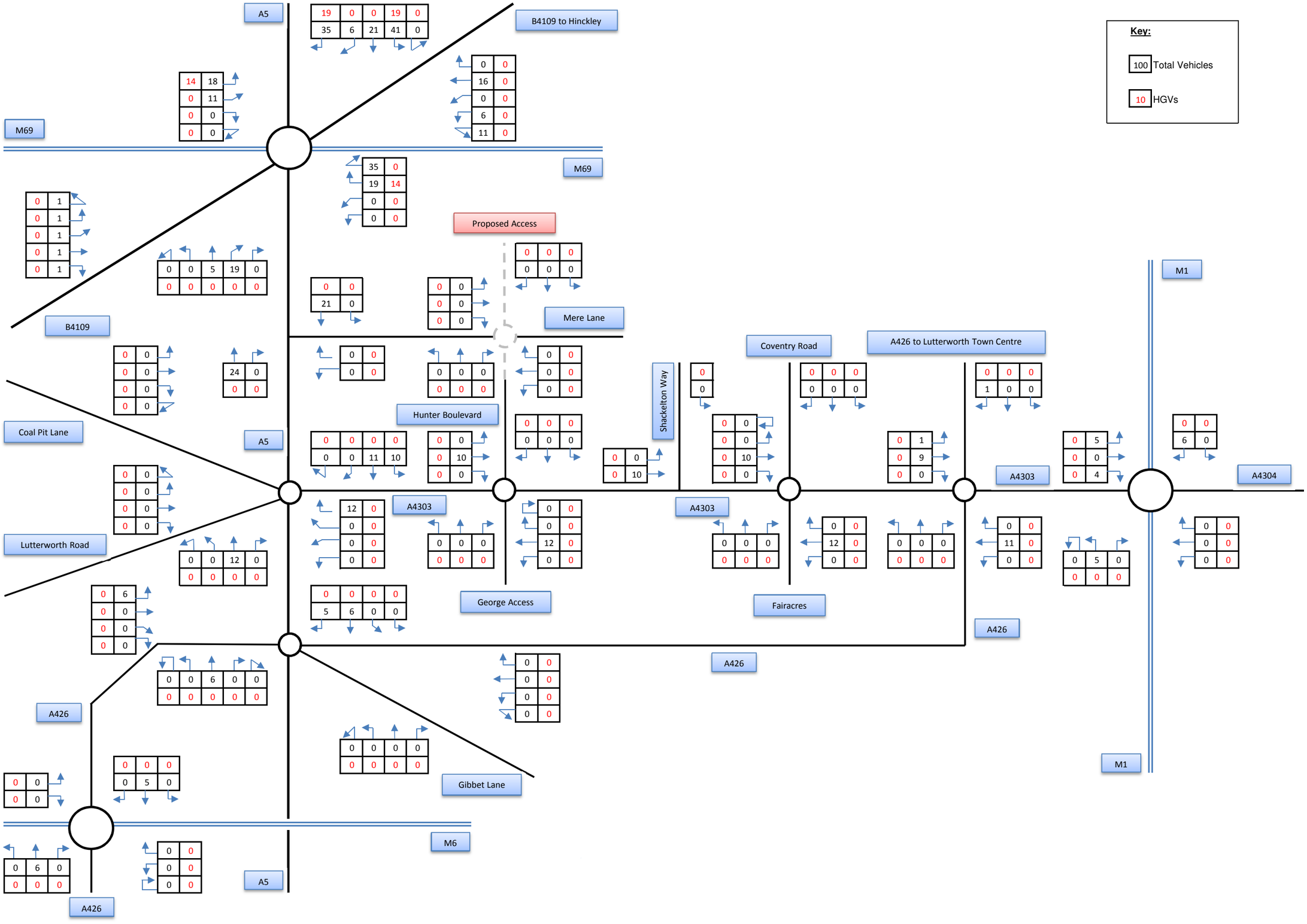

Figure 7.6: Ashby Canal, Hinckley Committed Development Trips PM Peak

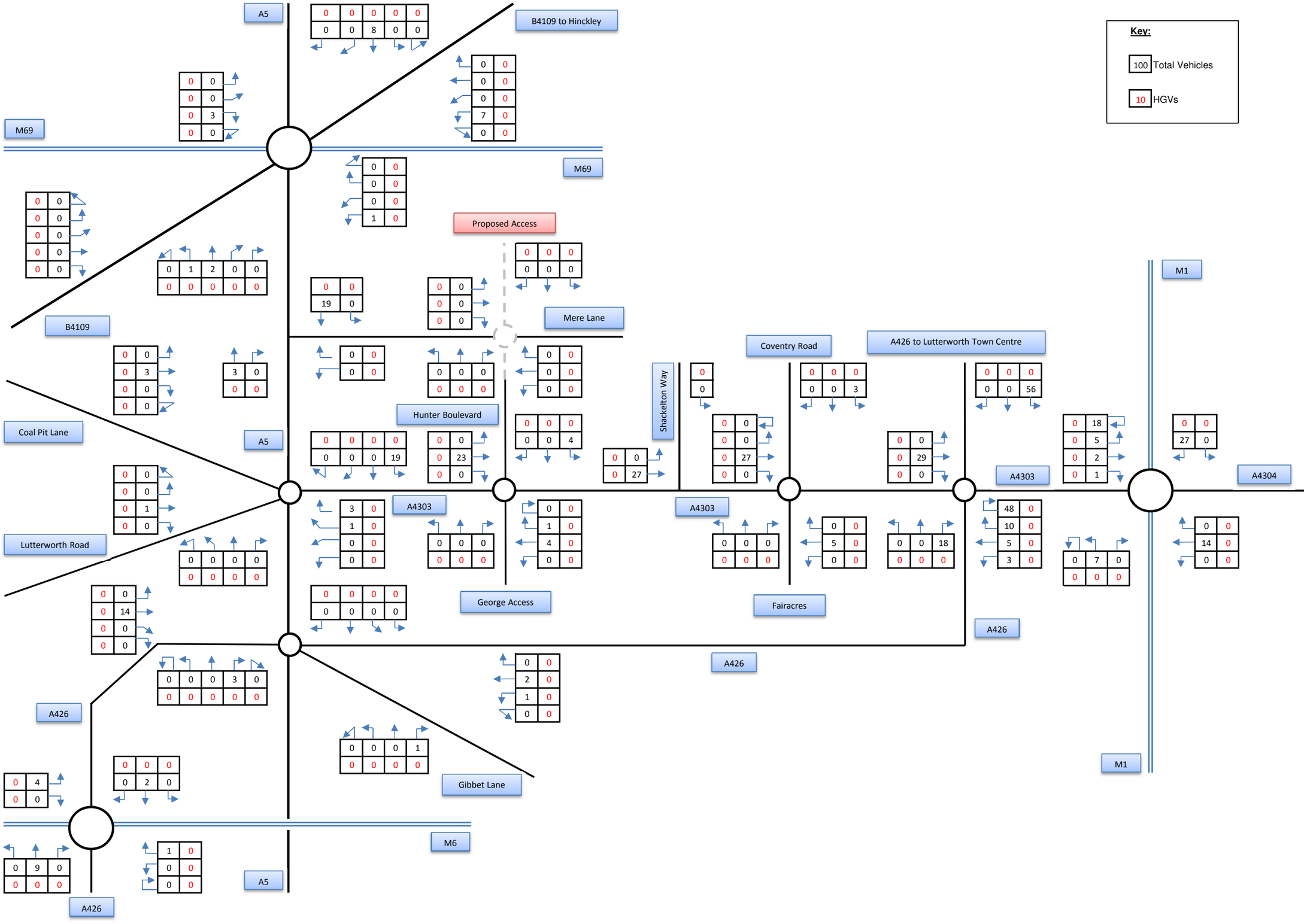

Figure 7.7: Land North of Lutterworth Road, Lutterworth Committed Development Trips AM Peak

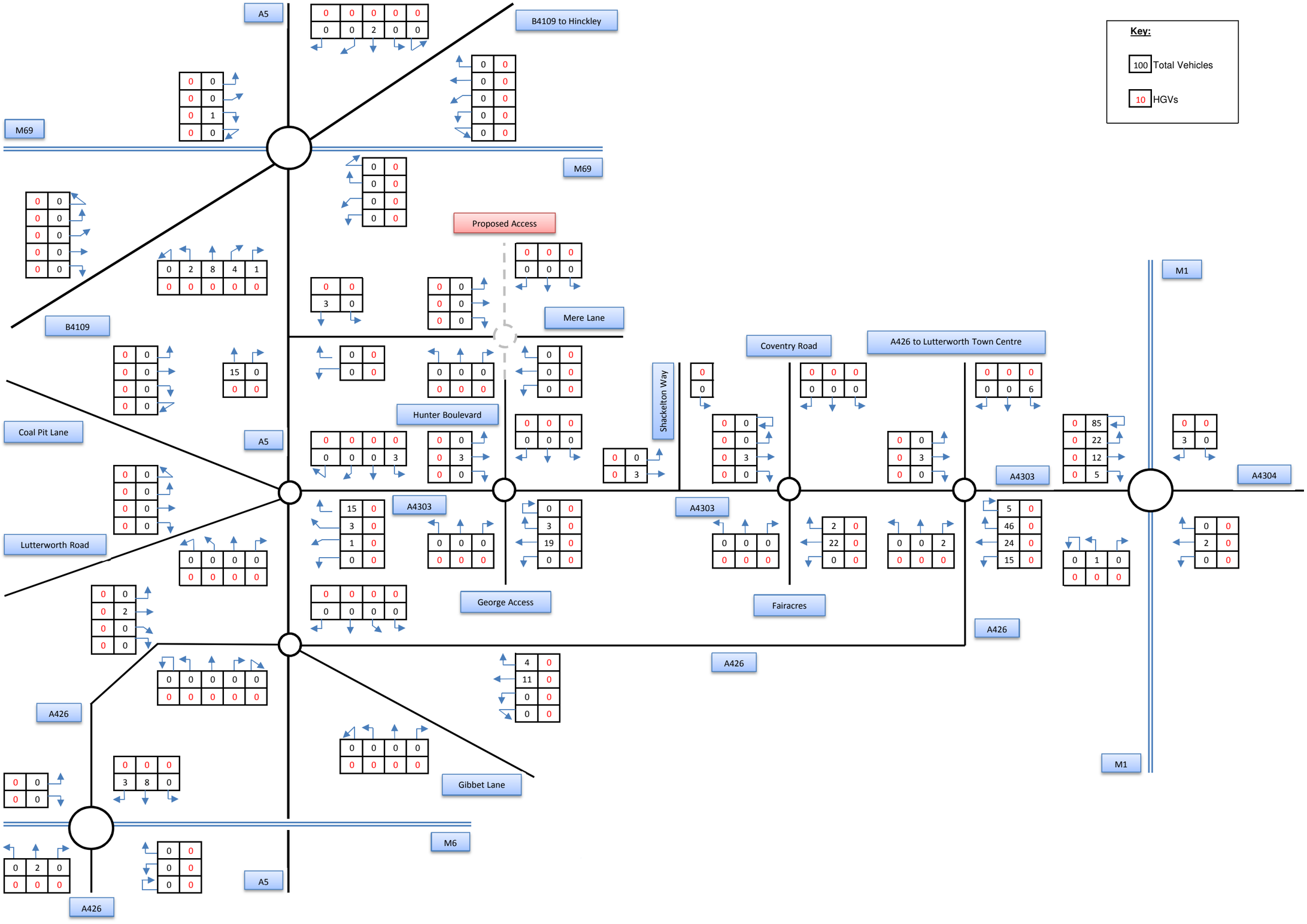

Figure 7.8: Land North of Lutterworth Road, Lutterworth Committed Development Trips PM Peak

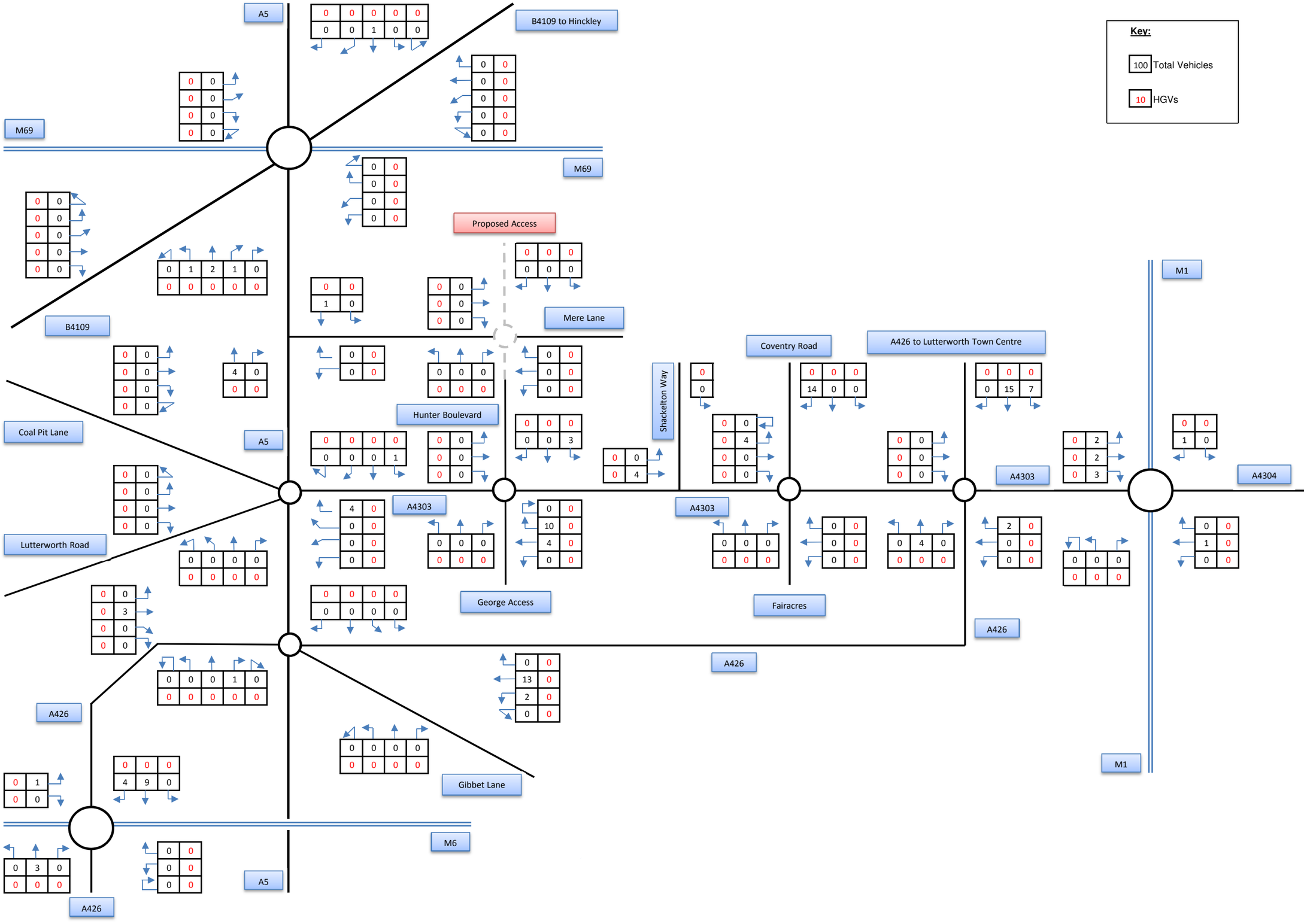

Figure 7.9: Land North of Bill Crane Way, Lutterworth Committed Development Trips AM Peak

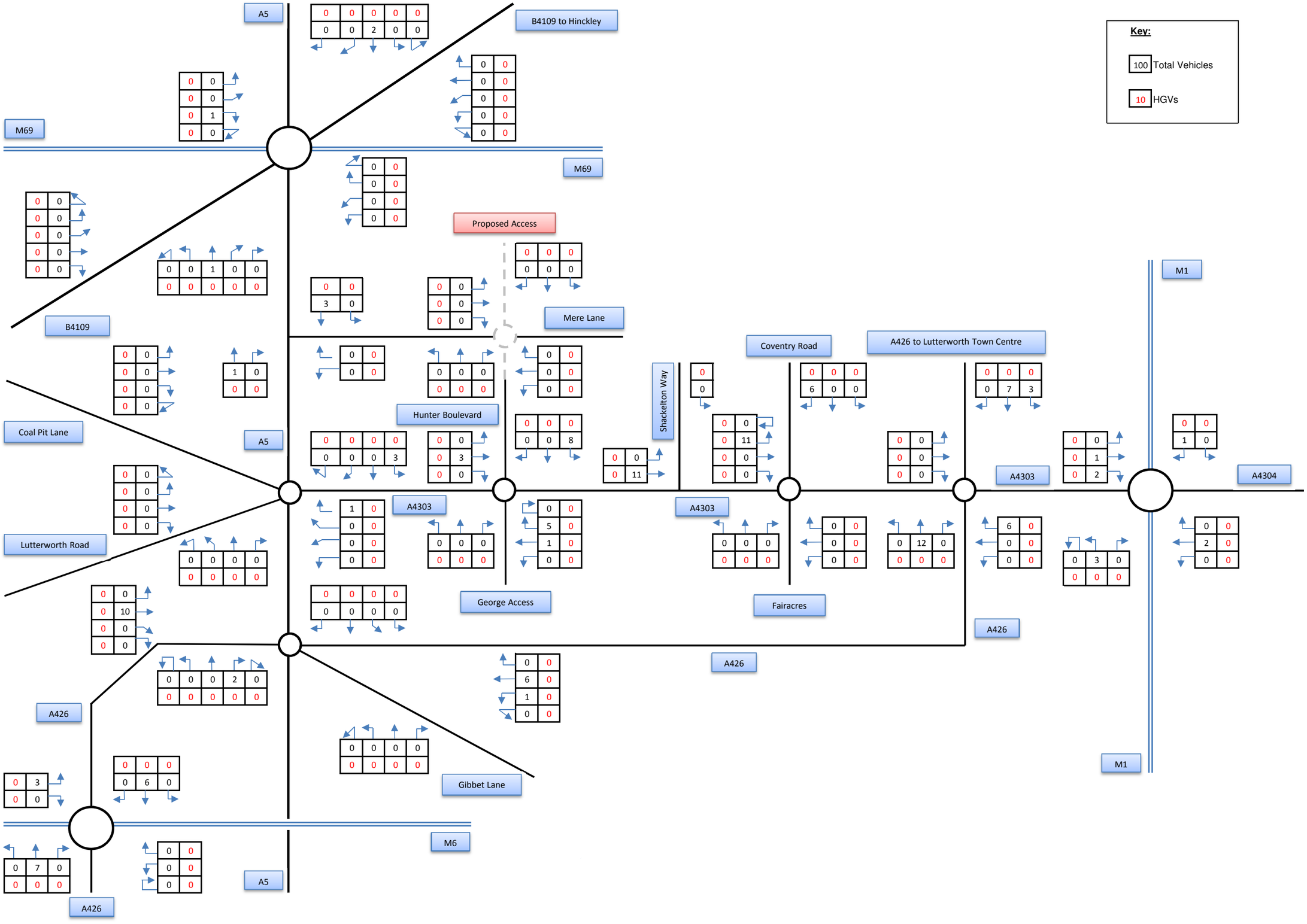

Figure 7.10: Land North of Bill Crane Way, Lutterworth Committed Development Trips PM Peak

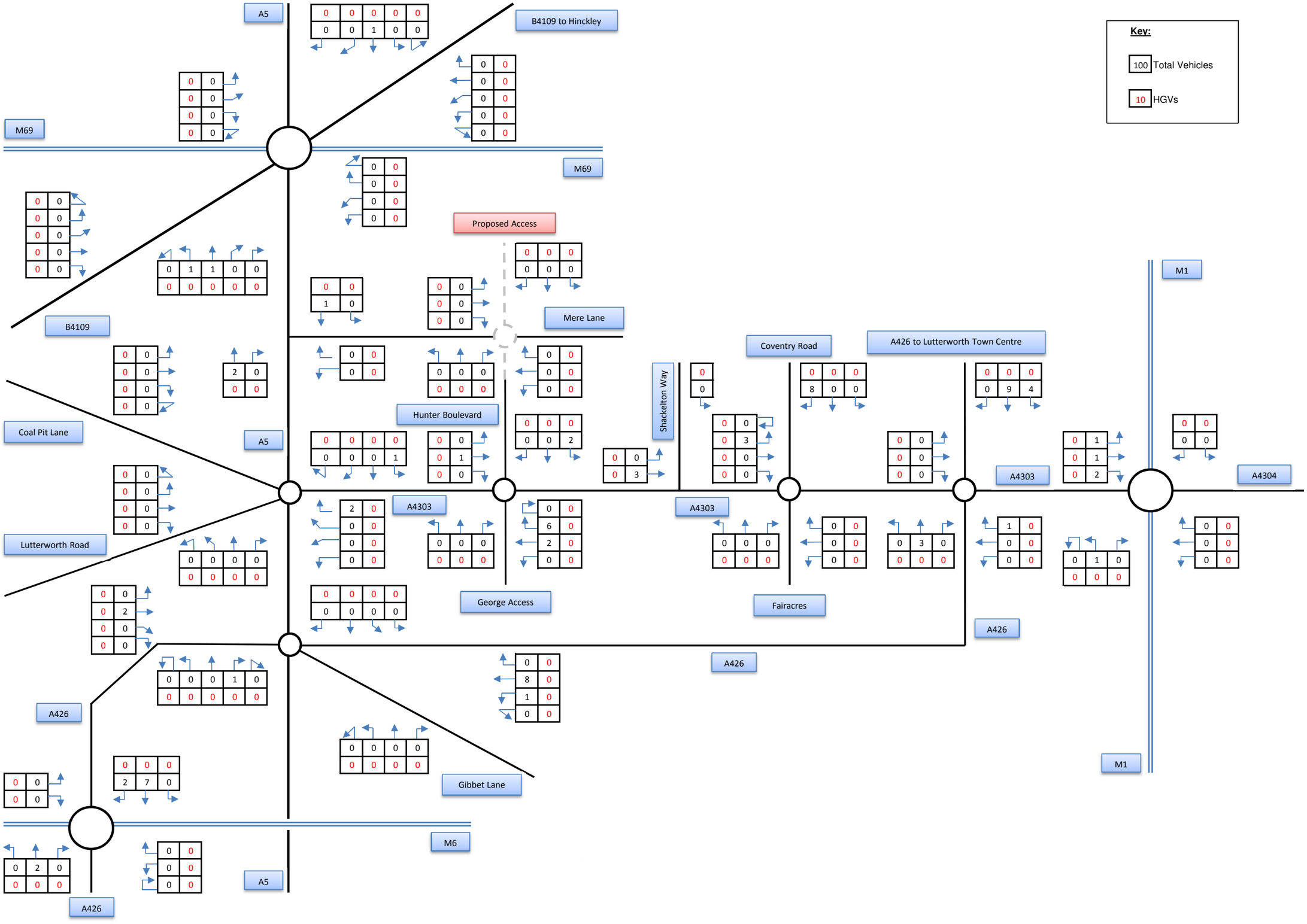

Figure 7.11: Land East of Leicester Road, Lutterworth Committed Development Trips AM Peak

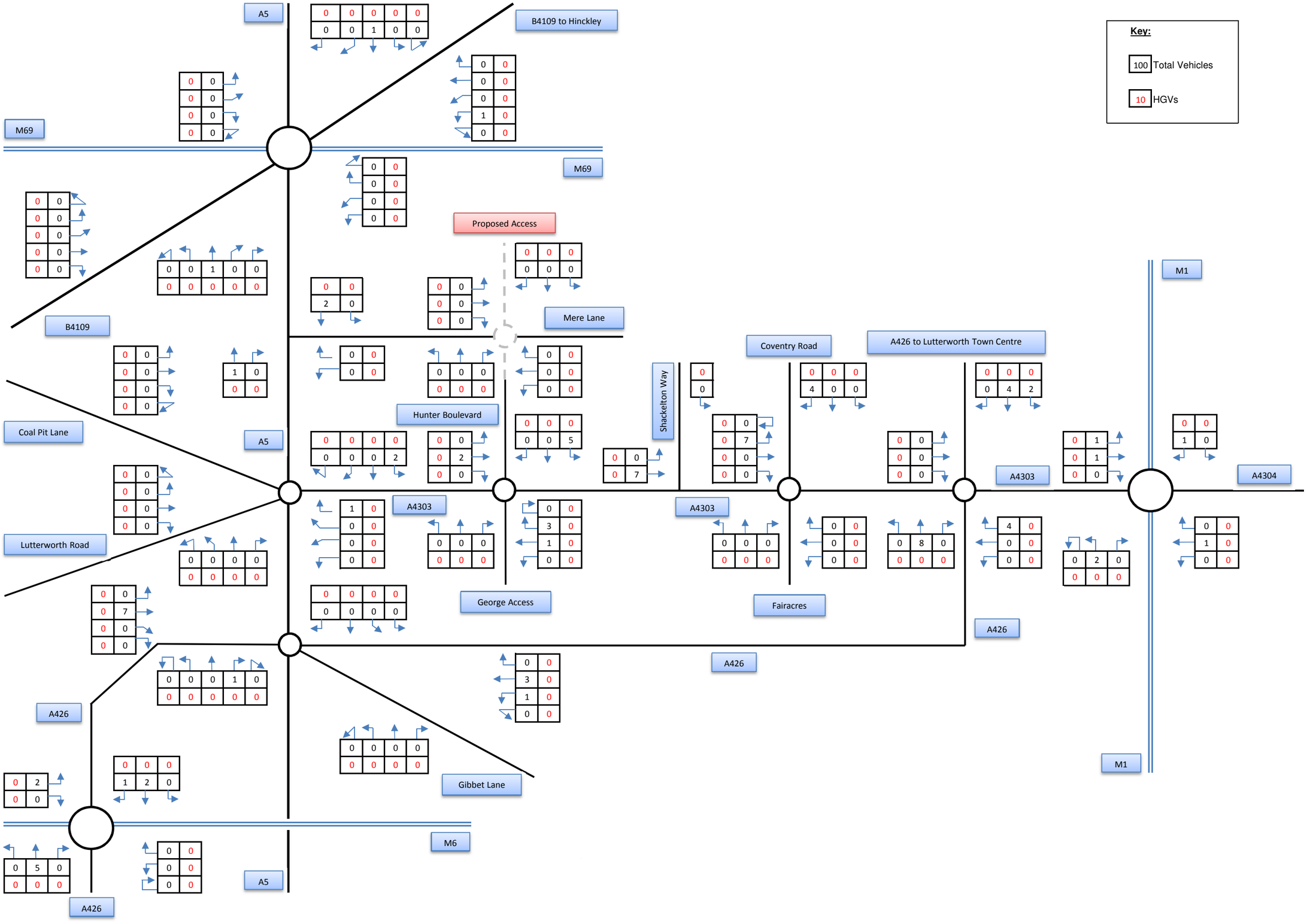

Figure 7.12: Land East of Leicester Road, Lutterworth Committed Development Trips PM Peak

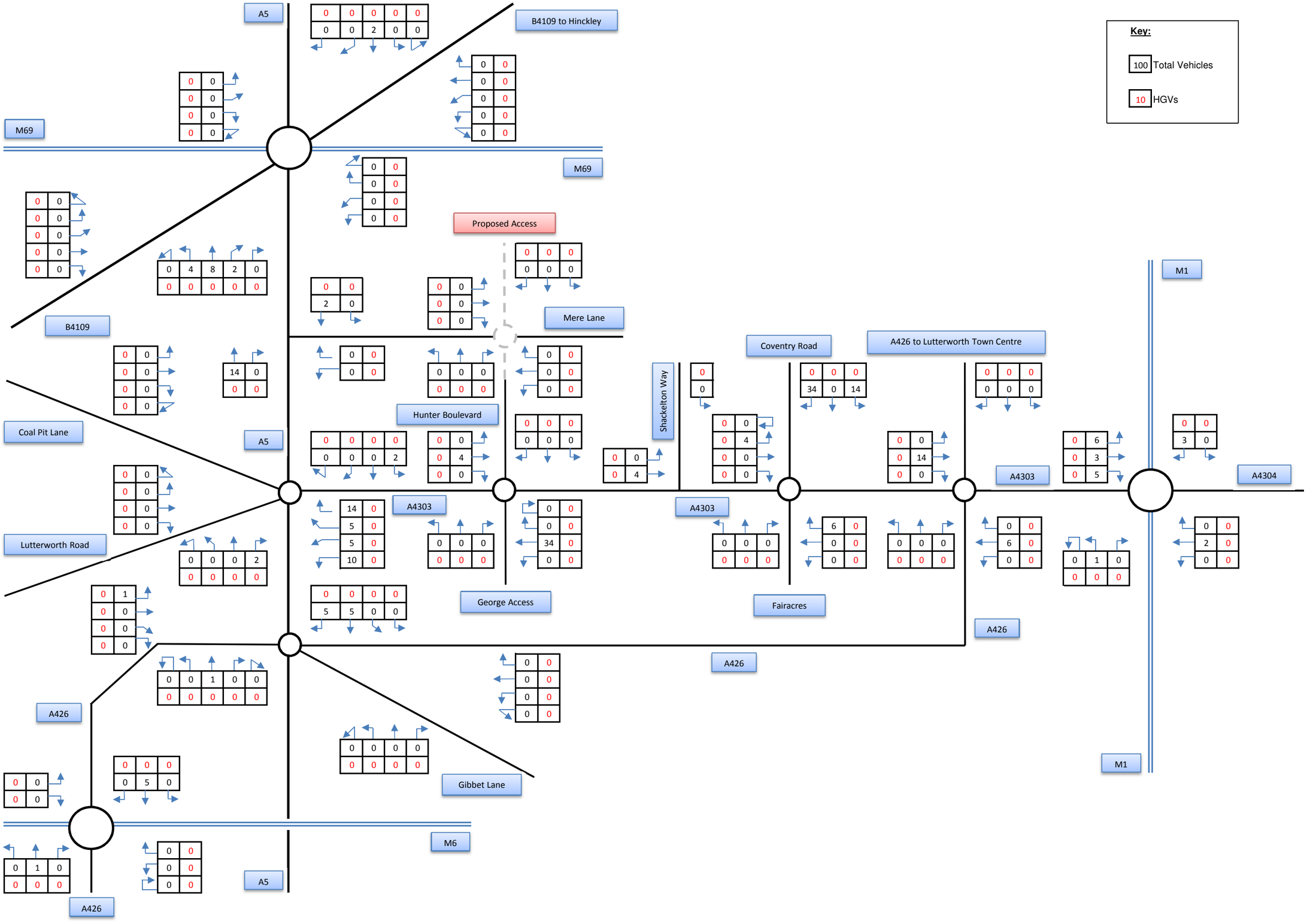

Figure 7.13: Leaders Farm, Coventry Road, Lutterworth Committed Development Trips AM Peak

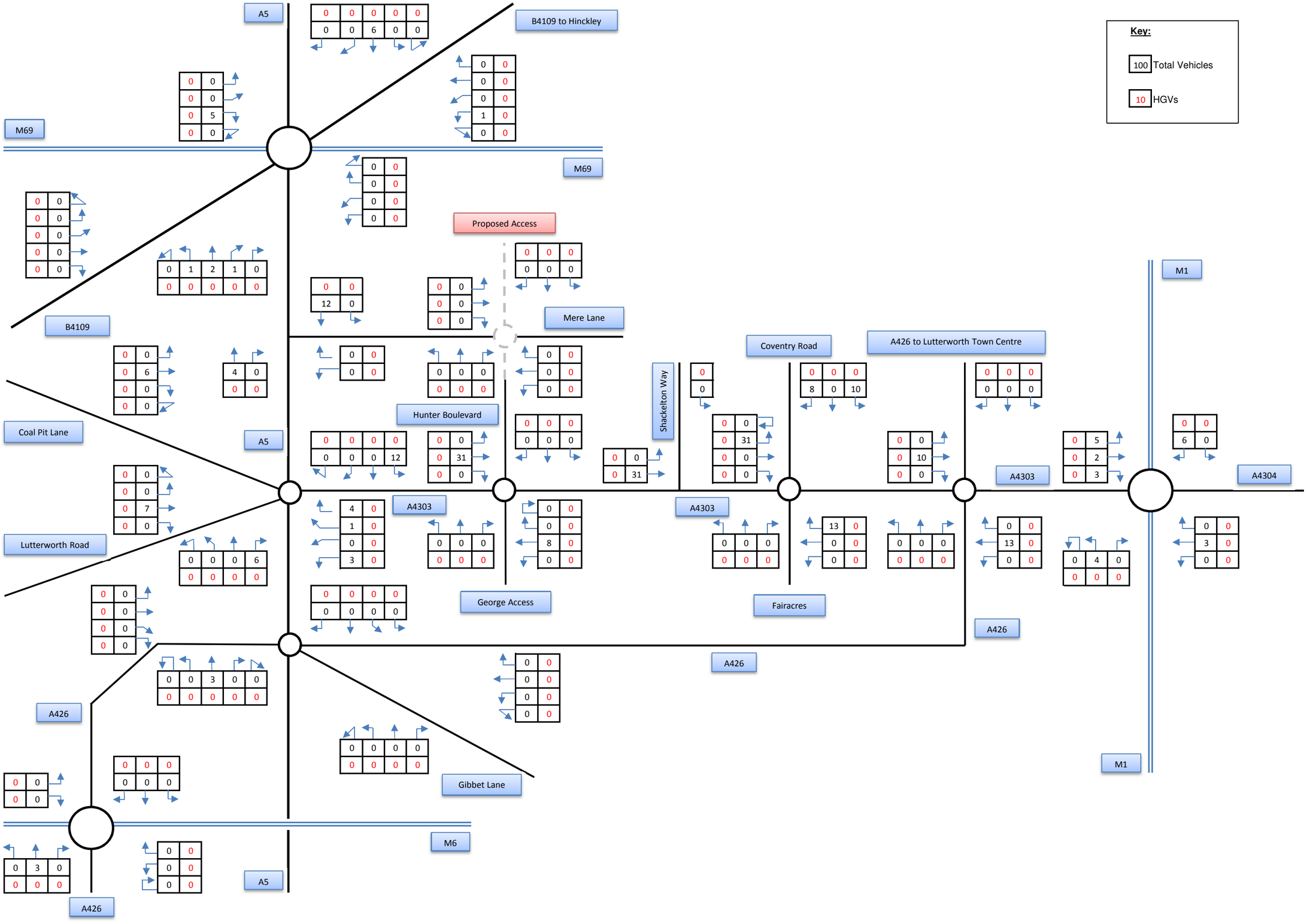

Figure 7.14: Leaders Farm, Coventry Road, Lutterworth Committed Development Trips PM Peak

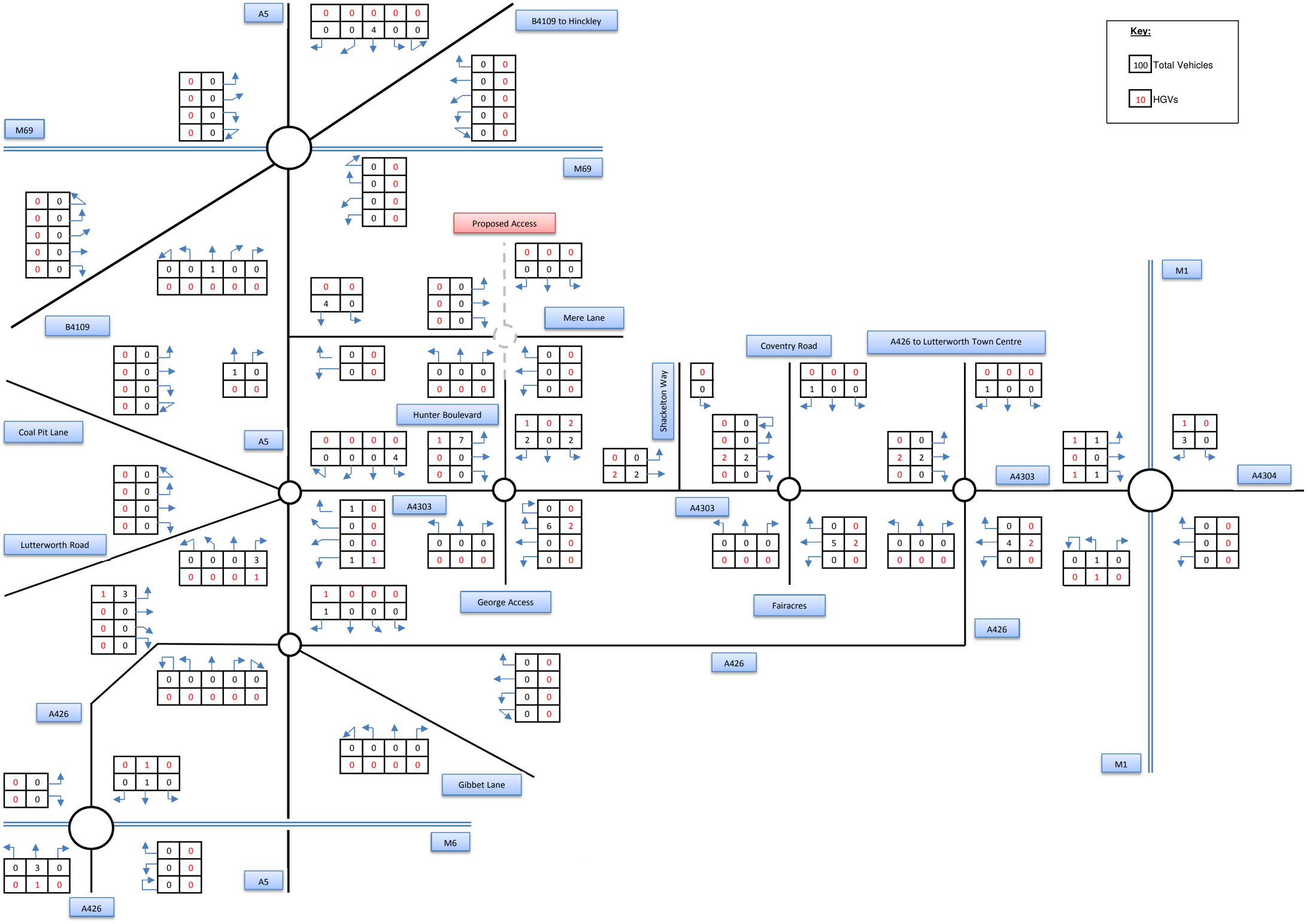

Figure 7.15: Former George House, Hunter Boulevard, Magna Park Committed Development Trips AM Peak

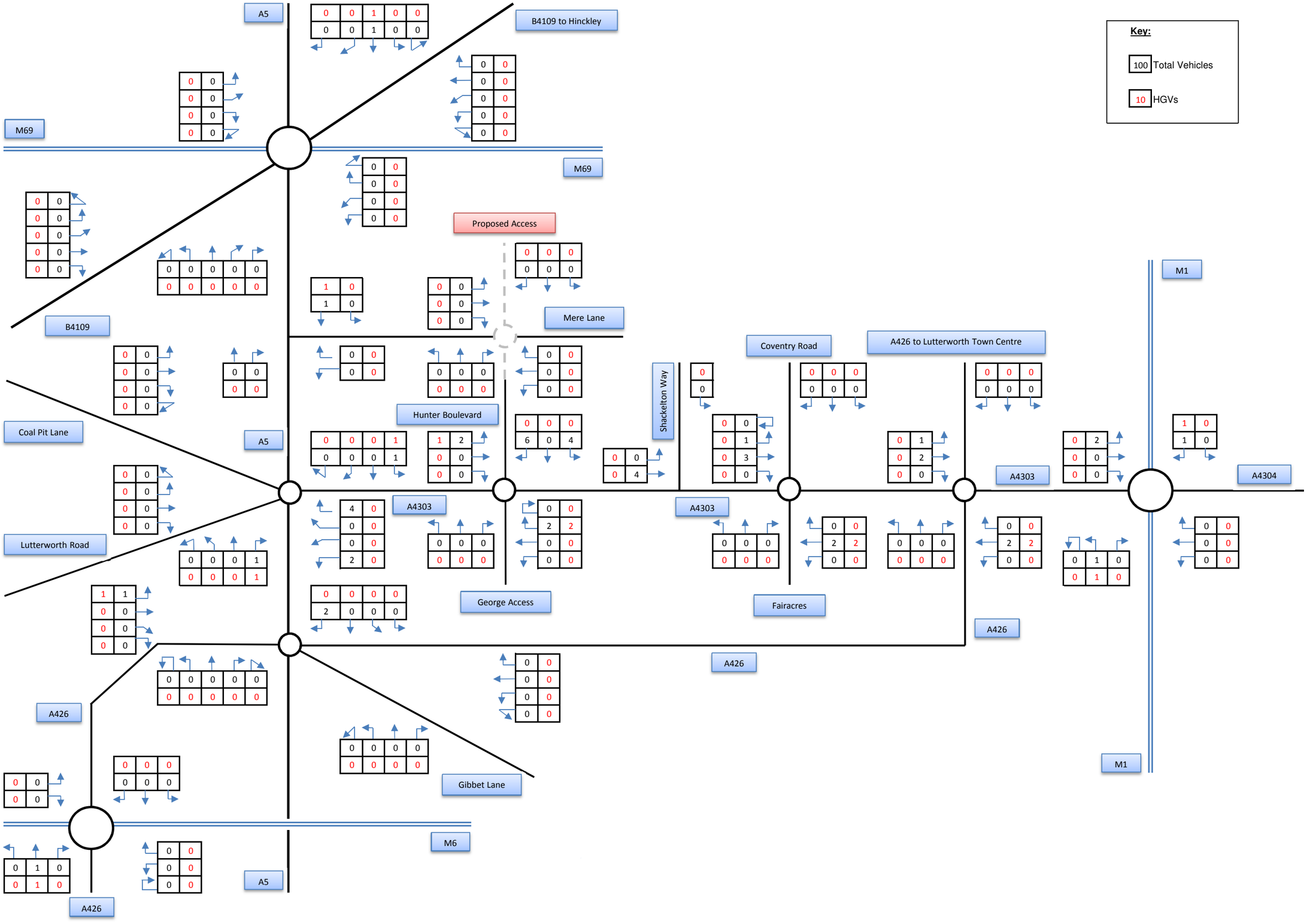

Figure 7.16: Former George House, Hunter Boulevard, Magna Park Committed Development Trips PM Peak

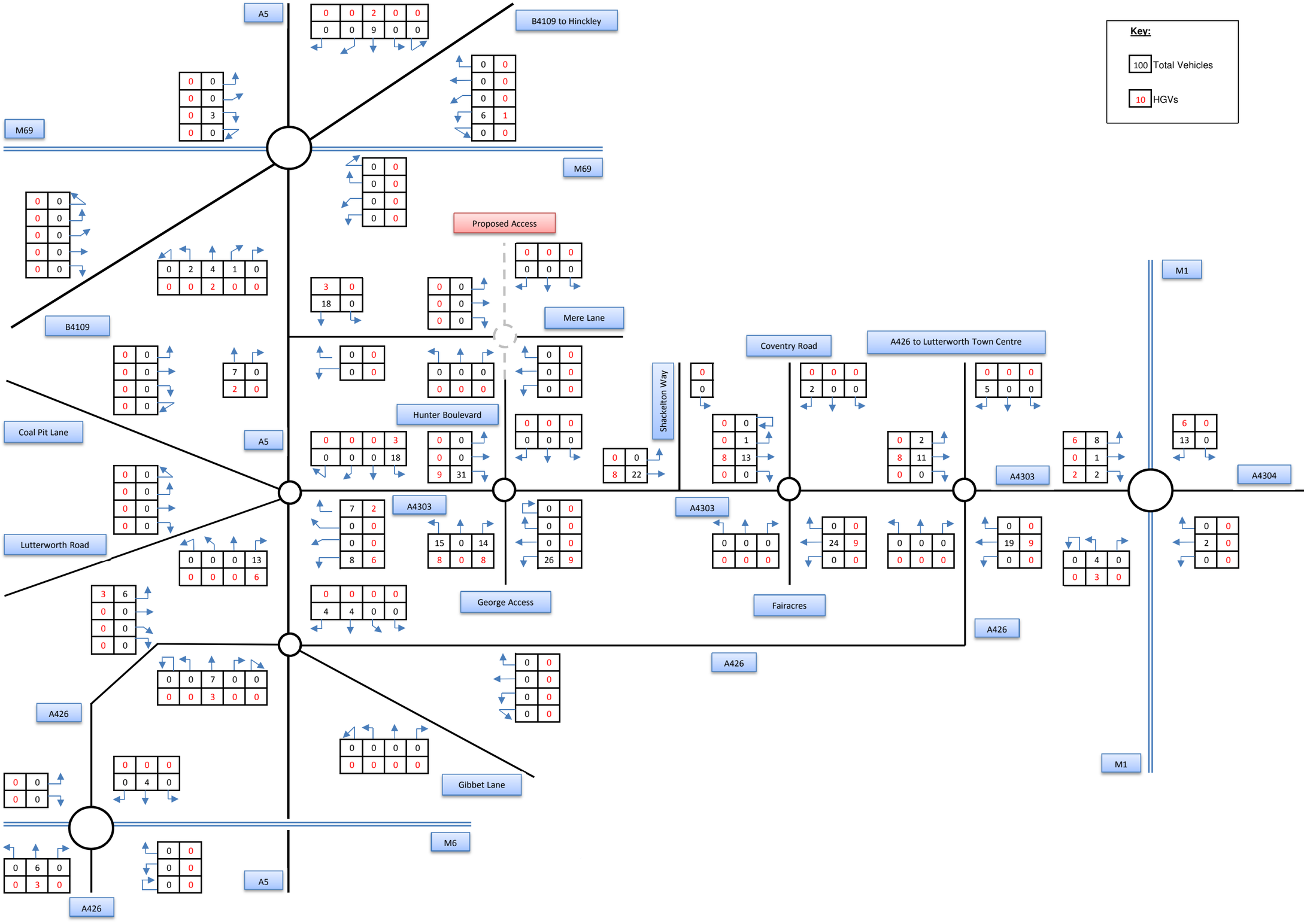

Figure 7.17: Plot 7300, Magna Park Committed Development Trips AM Peak

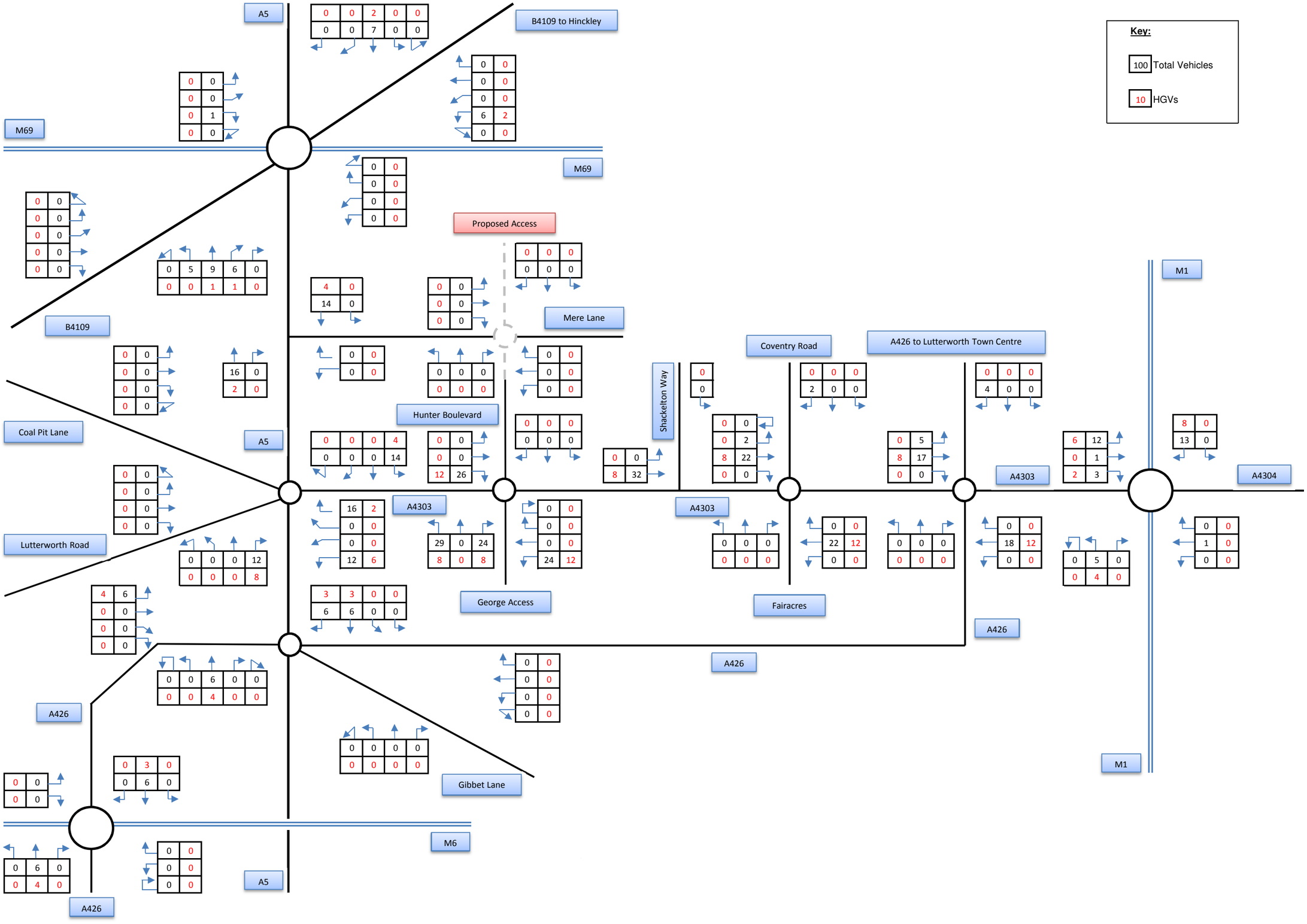

Figure 7.18: Plot 7300, Magna Park Committed Development Trips PM Peak

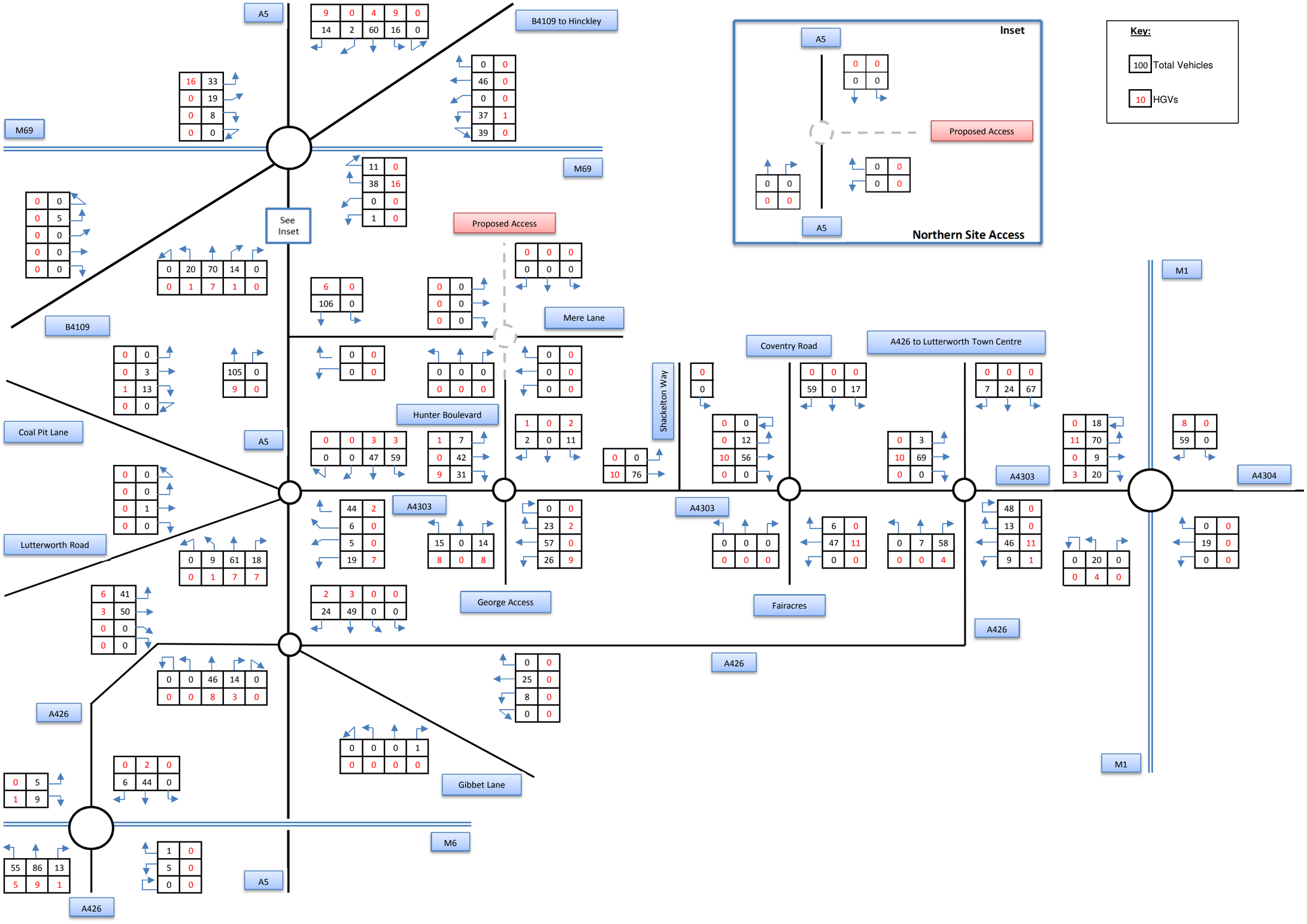

Figure 7.19: AM Peak Total Committed Development Flows

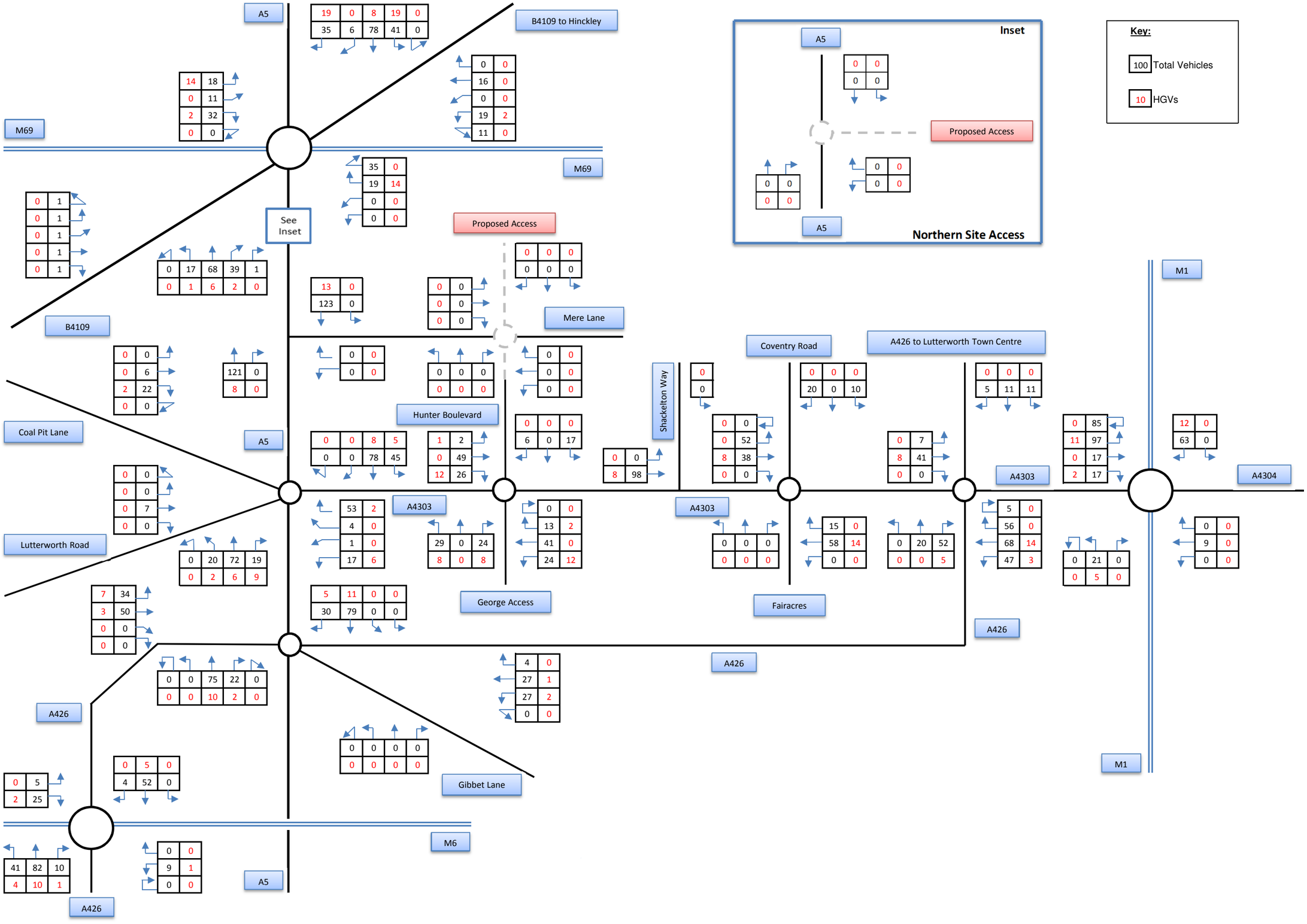

Figure 7.20: PM Peak Total Committed Development Flows

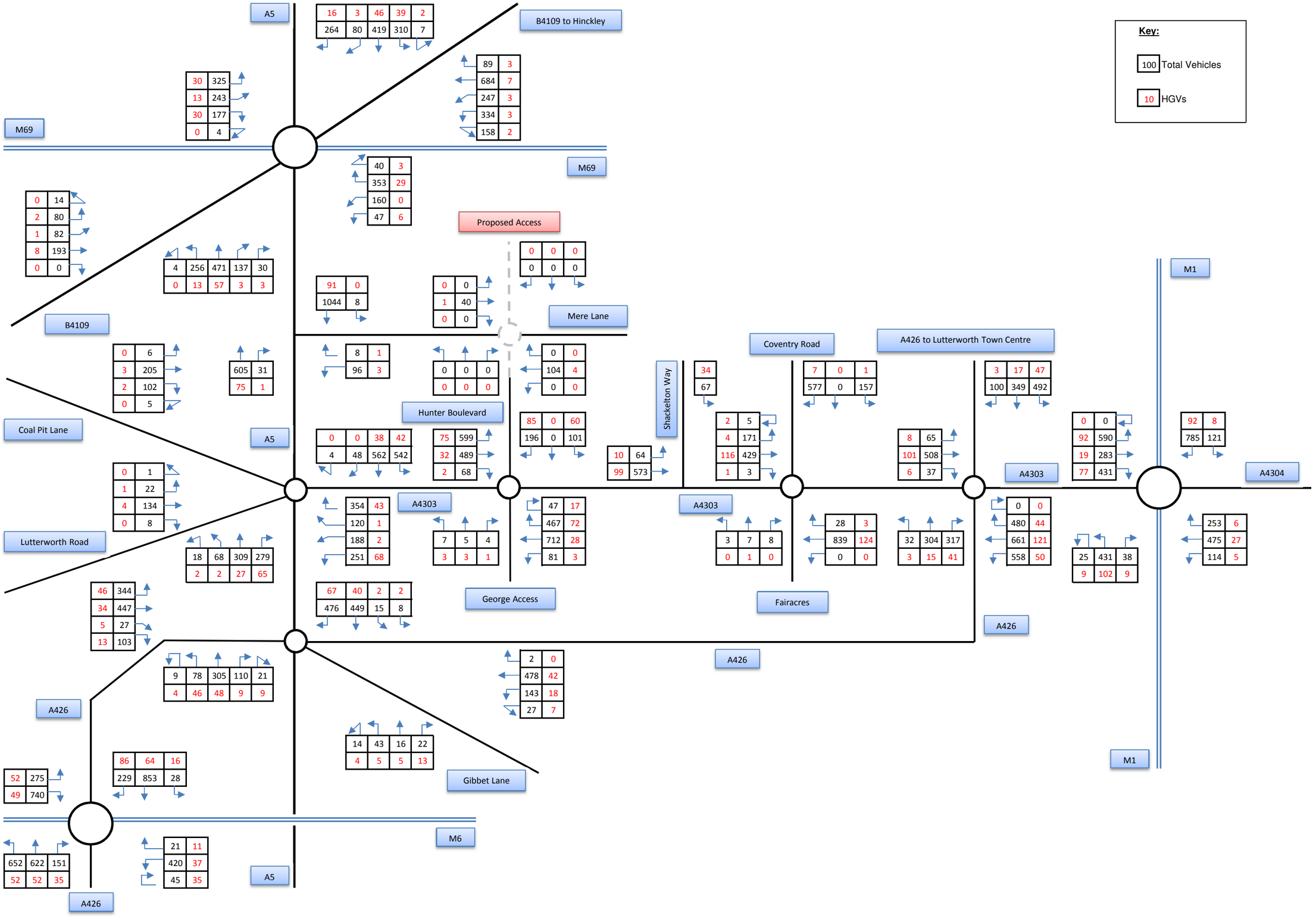

Figure 8.1: 2017 AM Peak Without Development

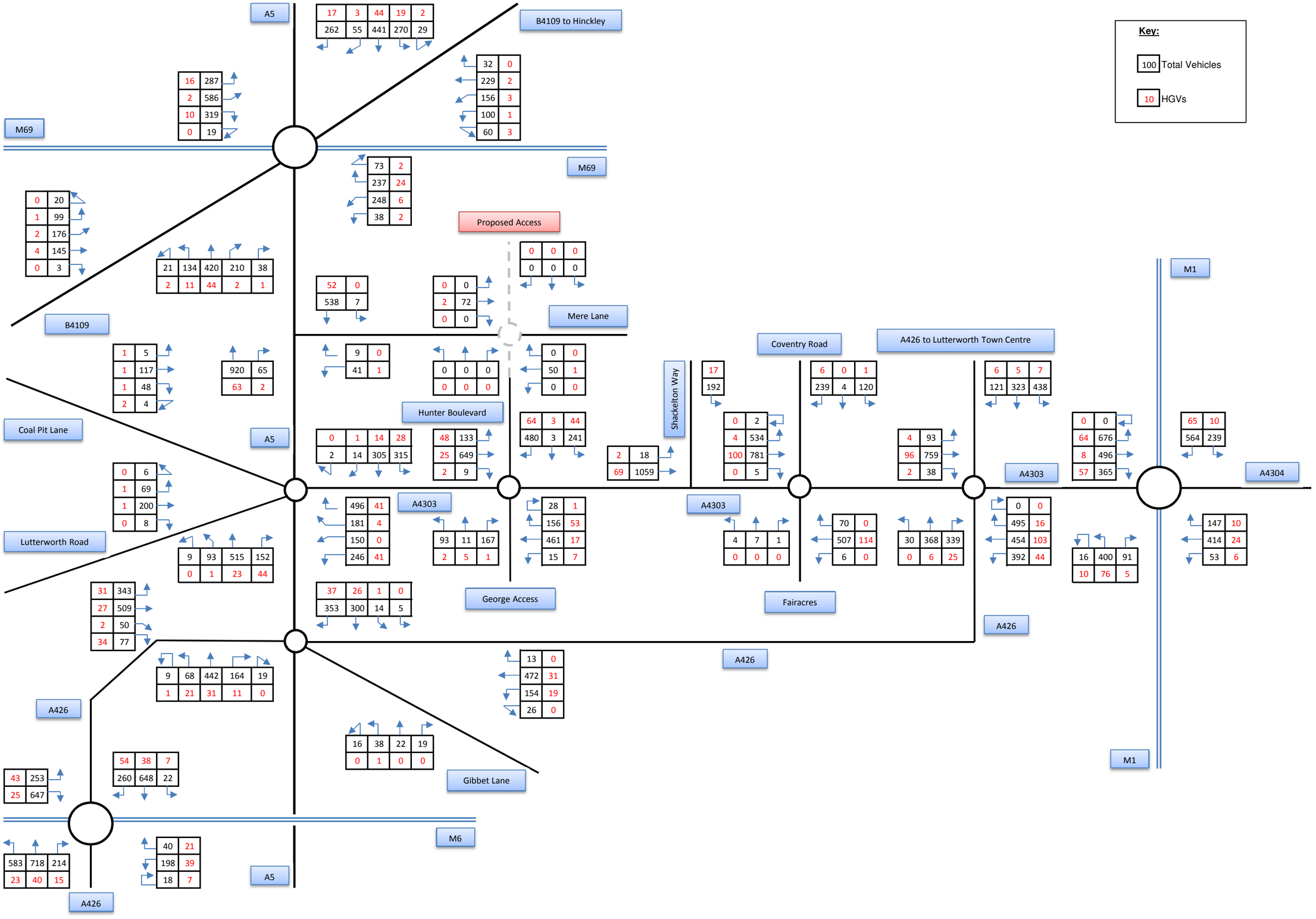

Figure 8.2: 2017 PM Peak Without Development

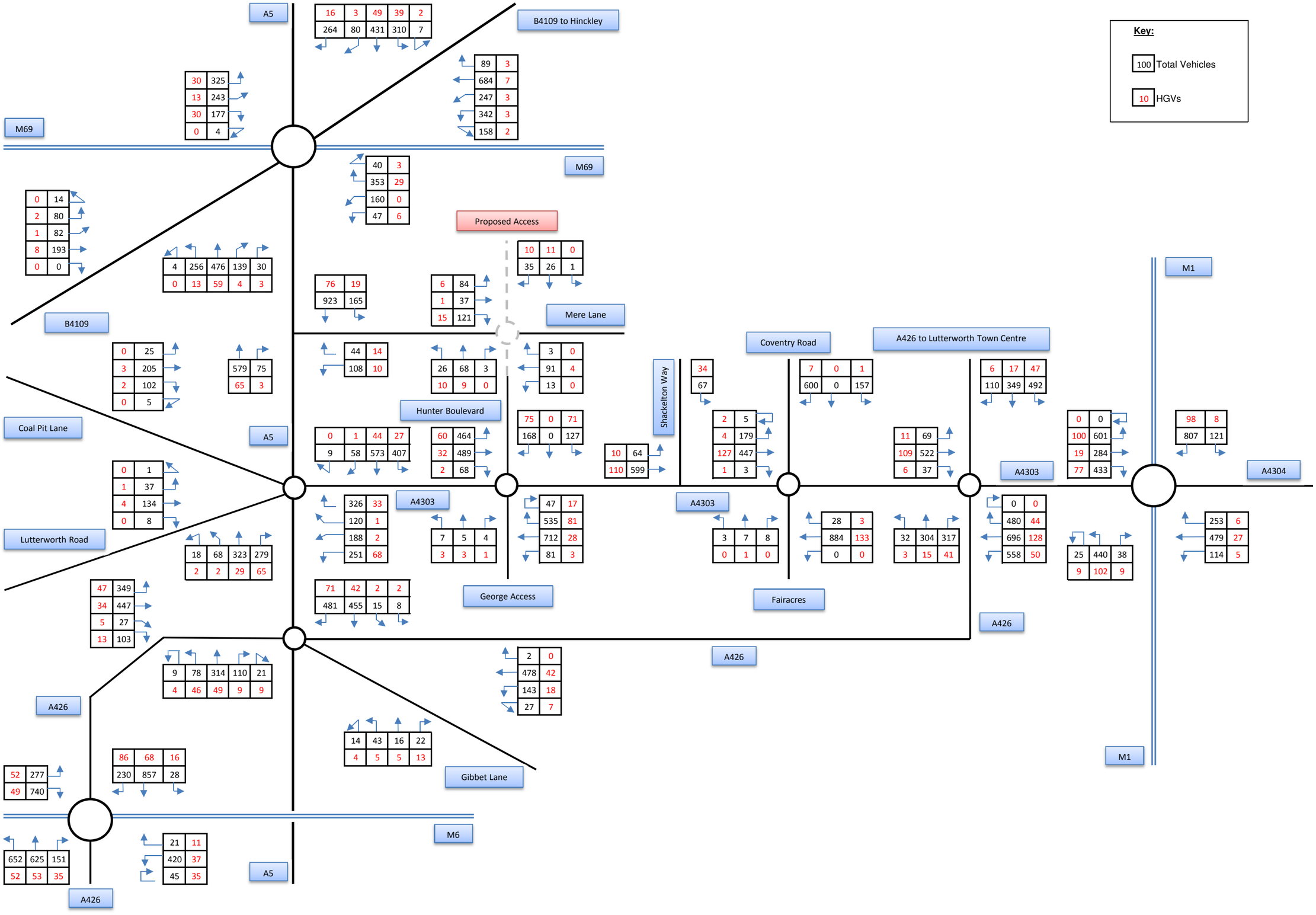

Figure 8.3: 2017 AM Peak With Development

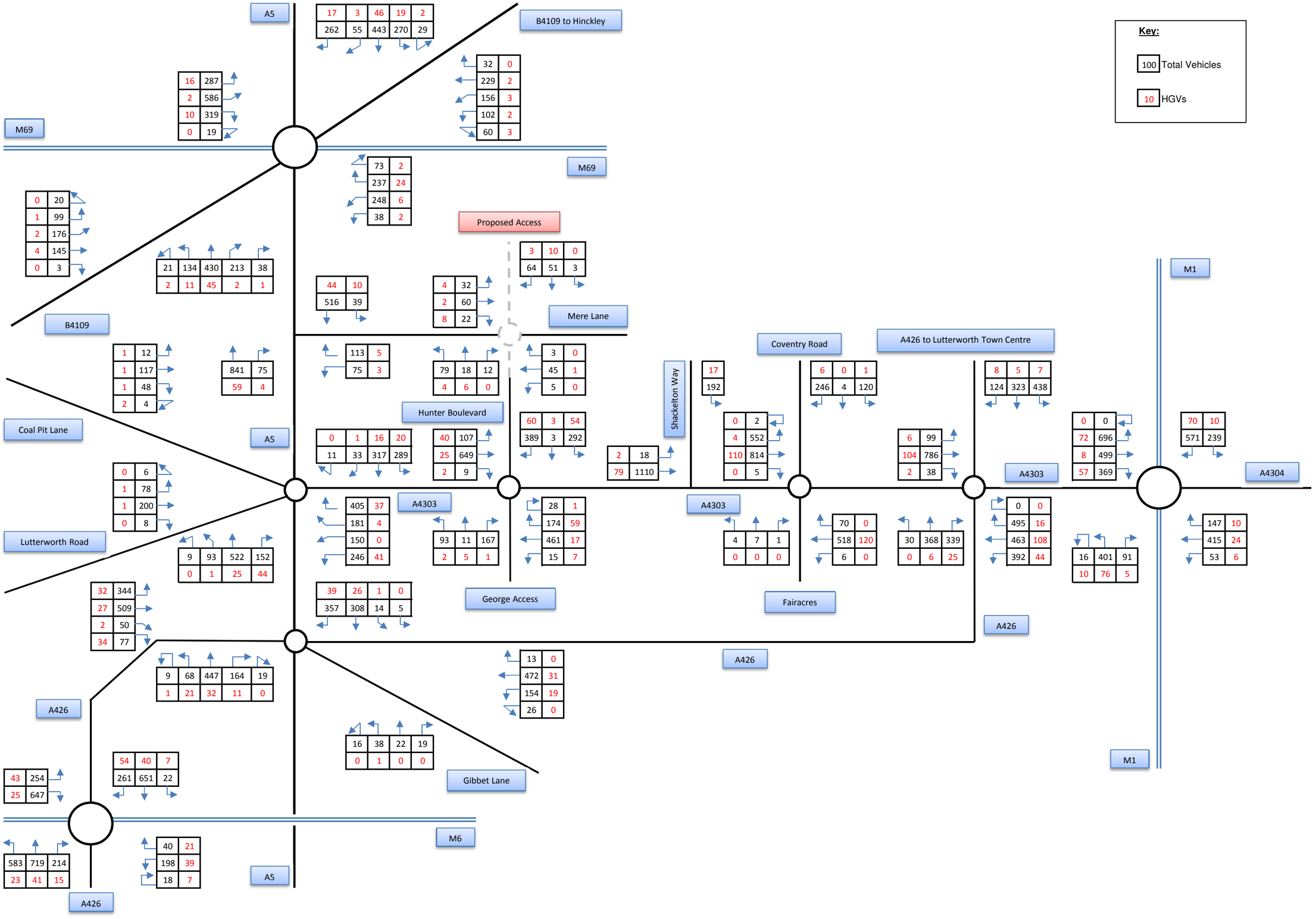

Figure 8.4: 2017 PM Peak With Development

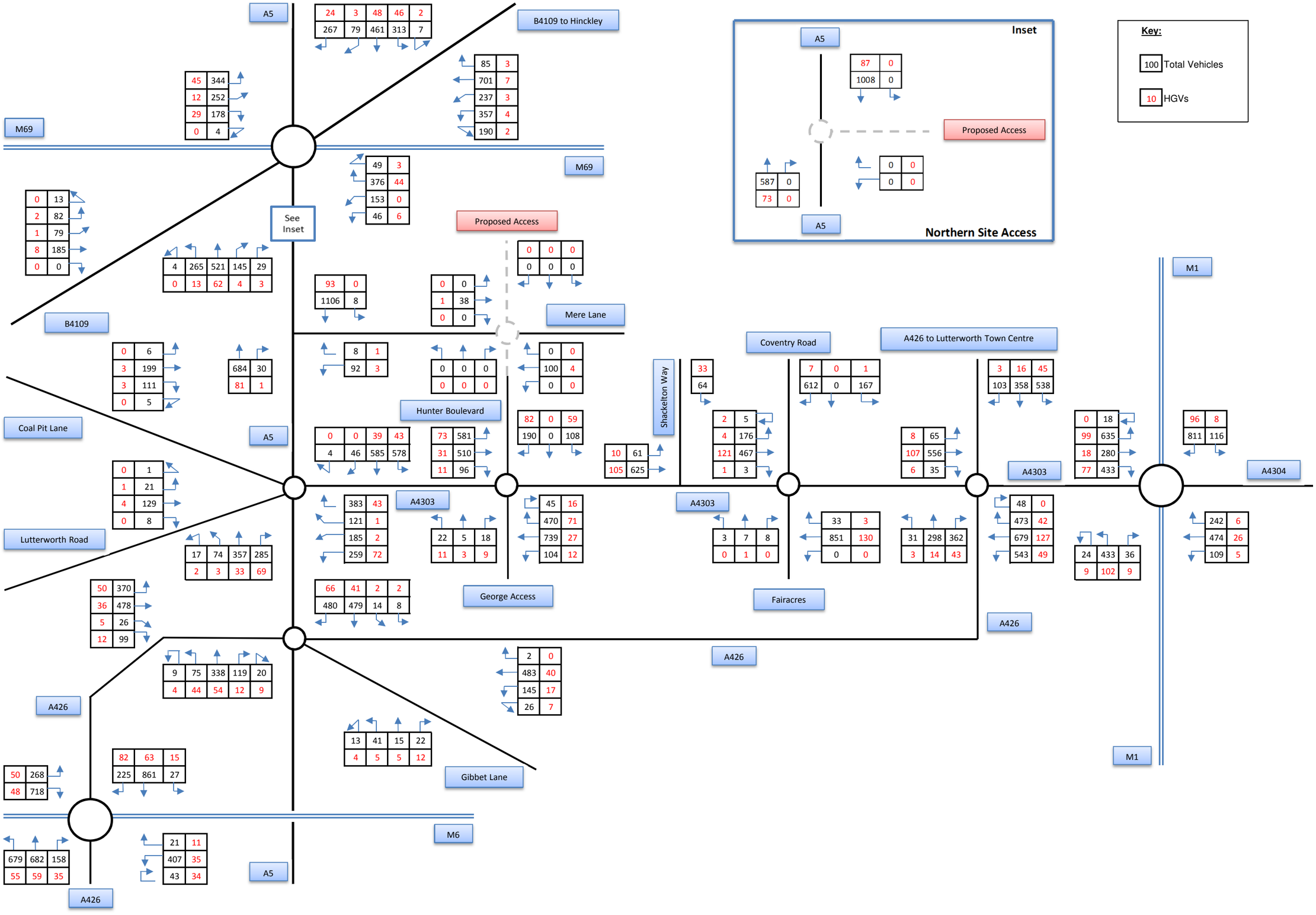

Figure 8.5: 2026 AM Peak Without Development

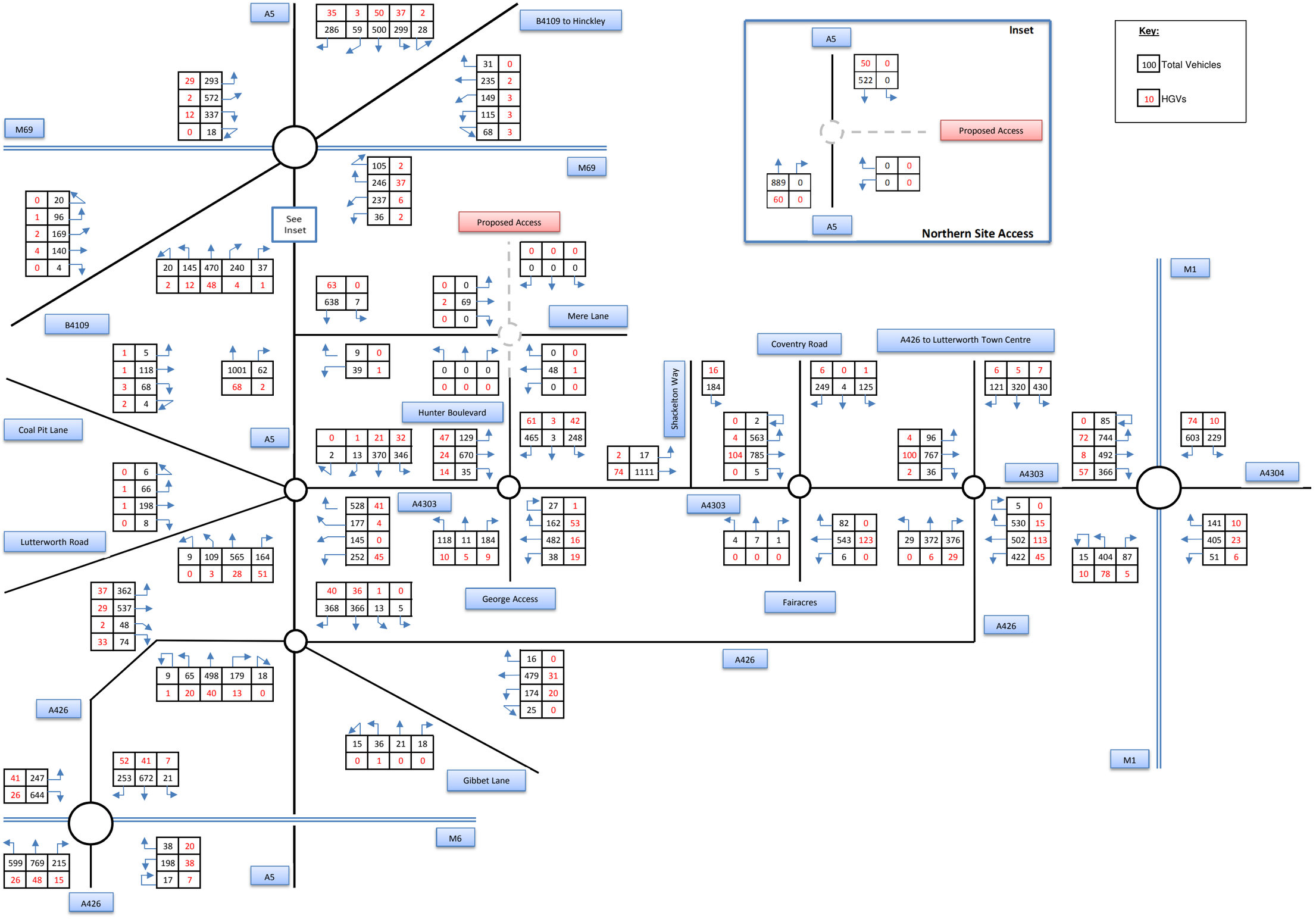

Figure 8.6: 2026 PM Peak Without Development

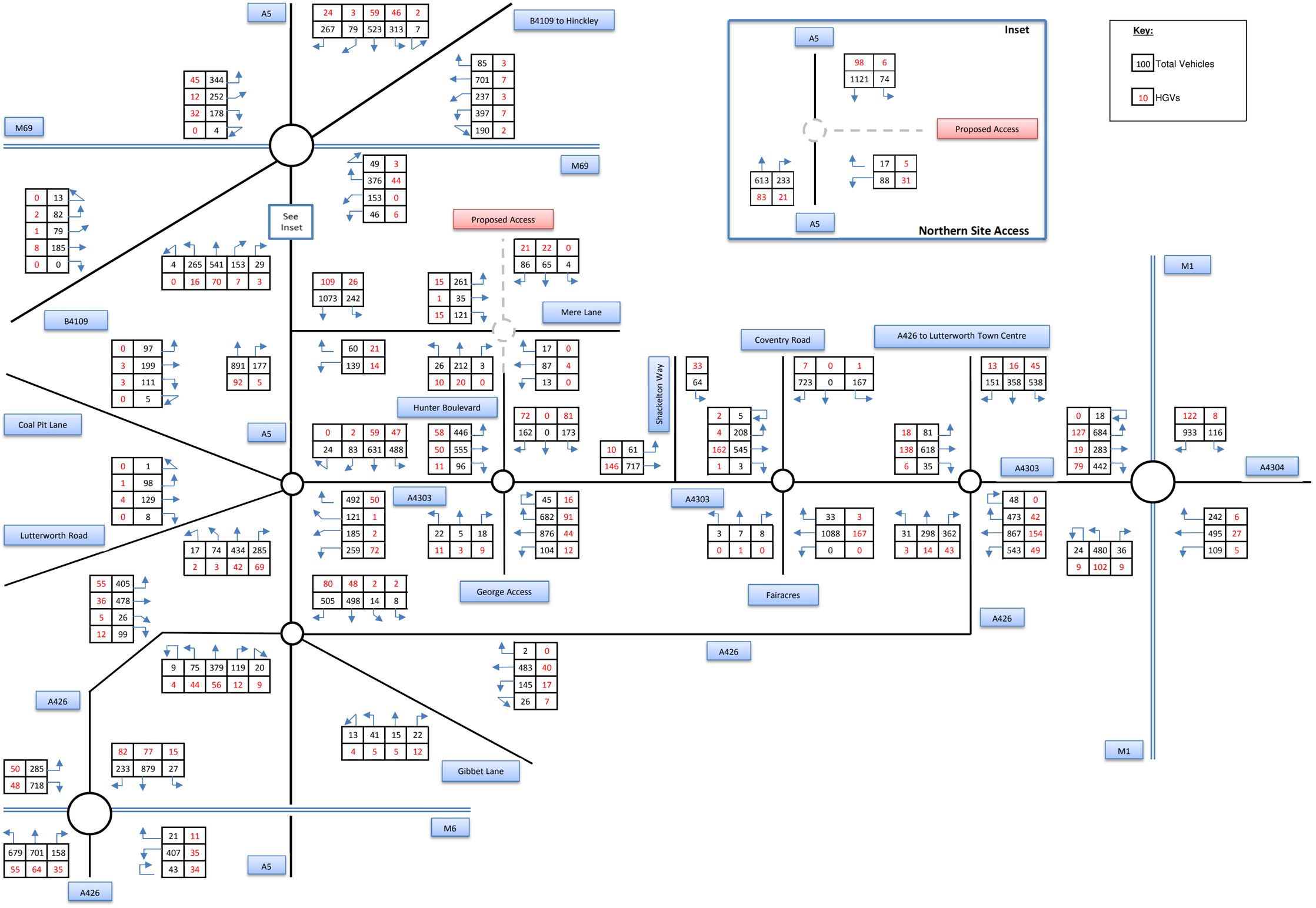

Figure 8.7: 2016 AM Peak With Development

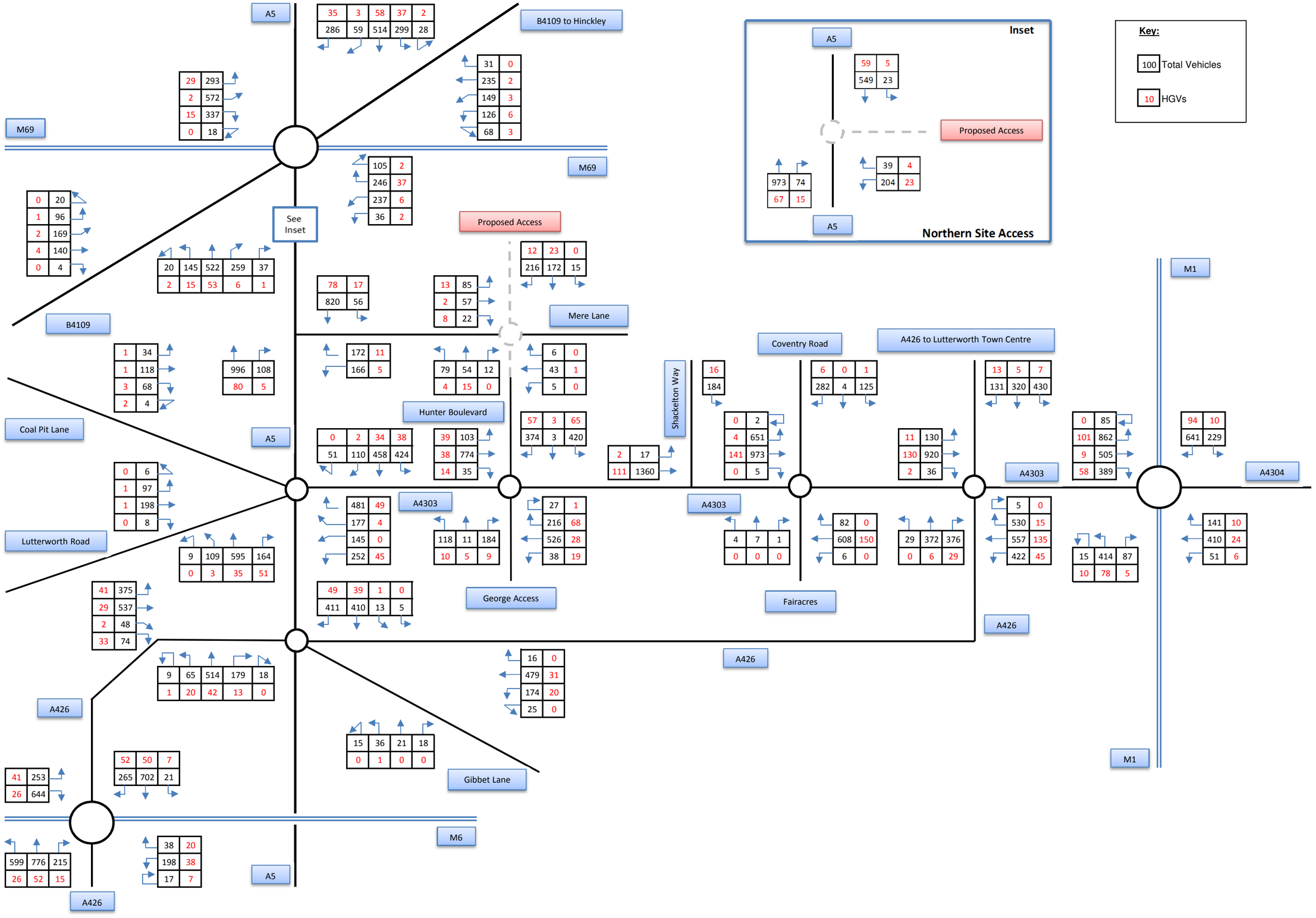

Figure 8.8: 2026 PM Peak With Development

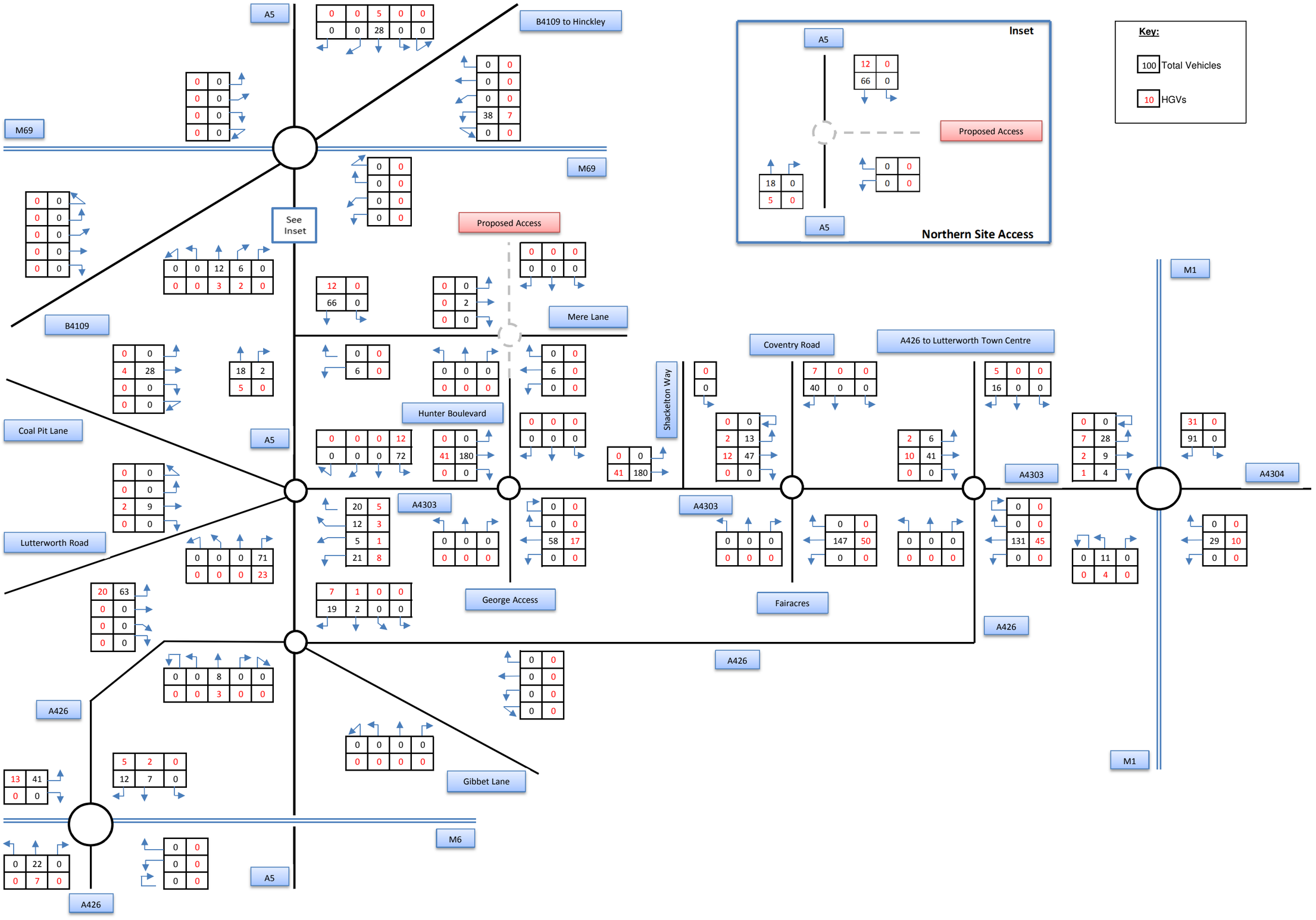

Figure 9.1: AM Peak Symmetry Park Flows

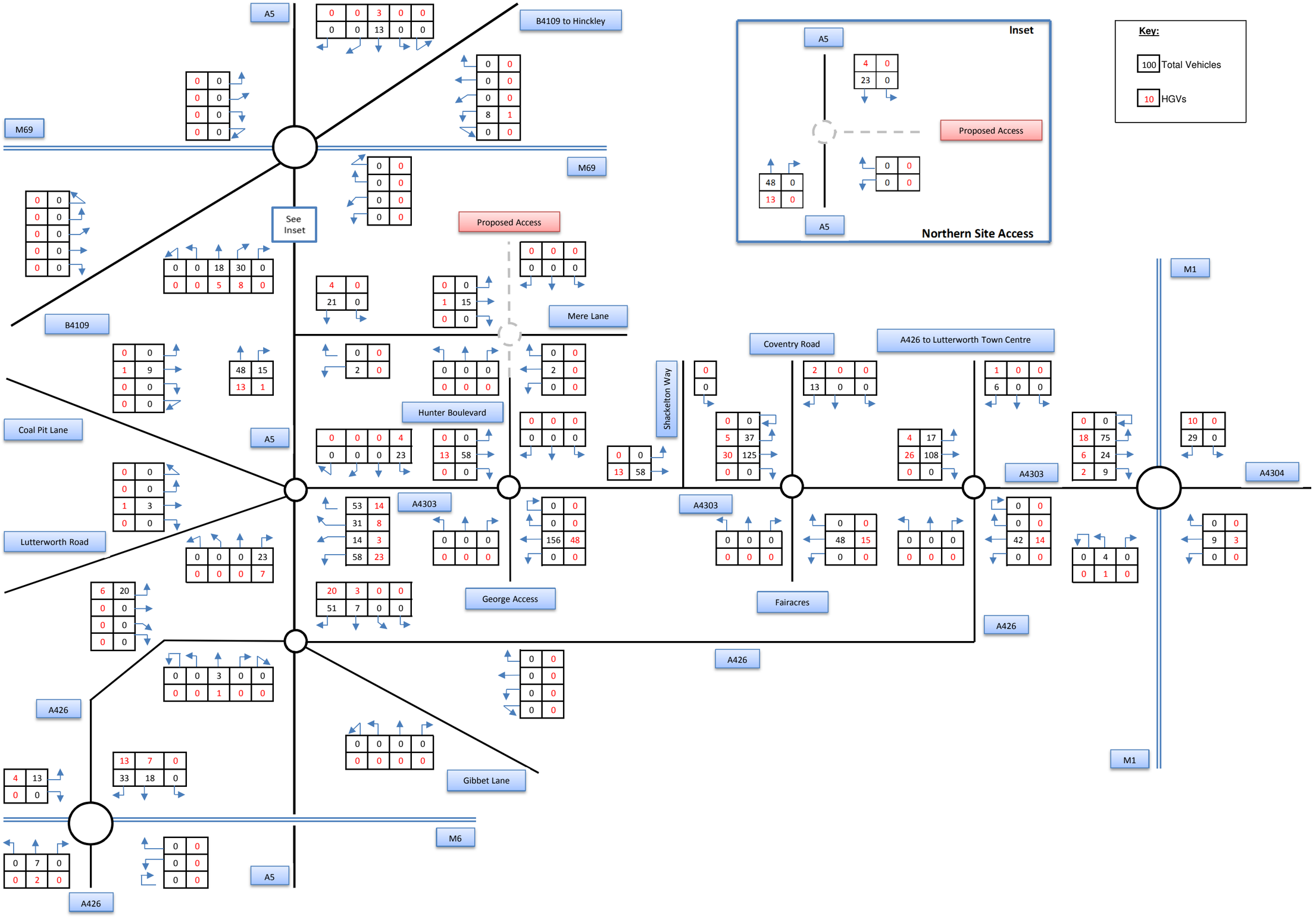

Figure 9.2: PM Peak Symmetry Park Flows

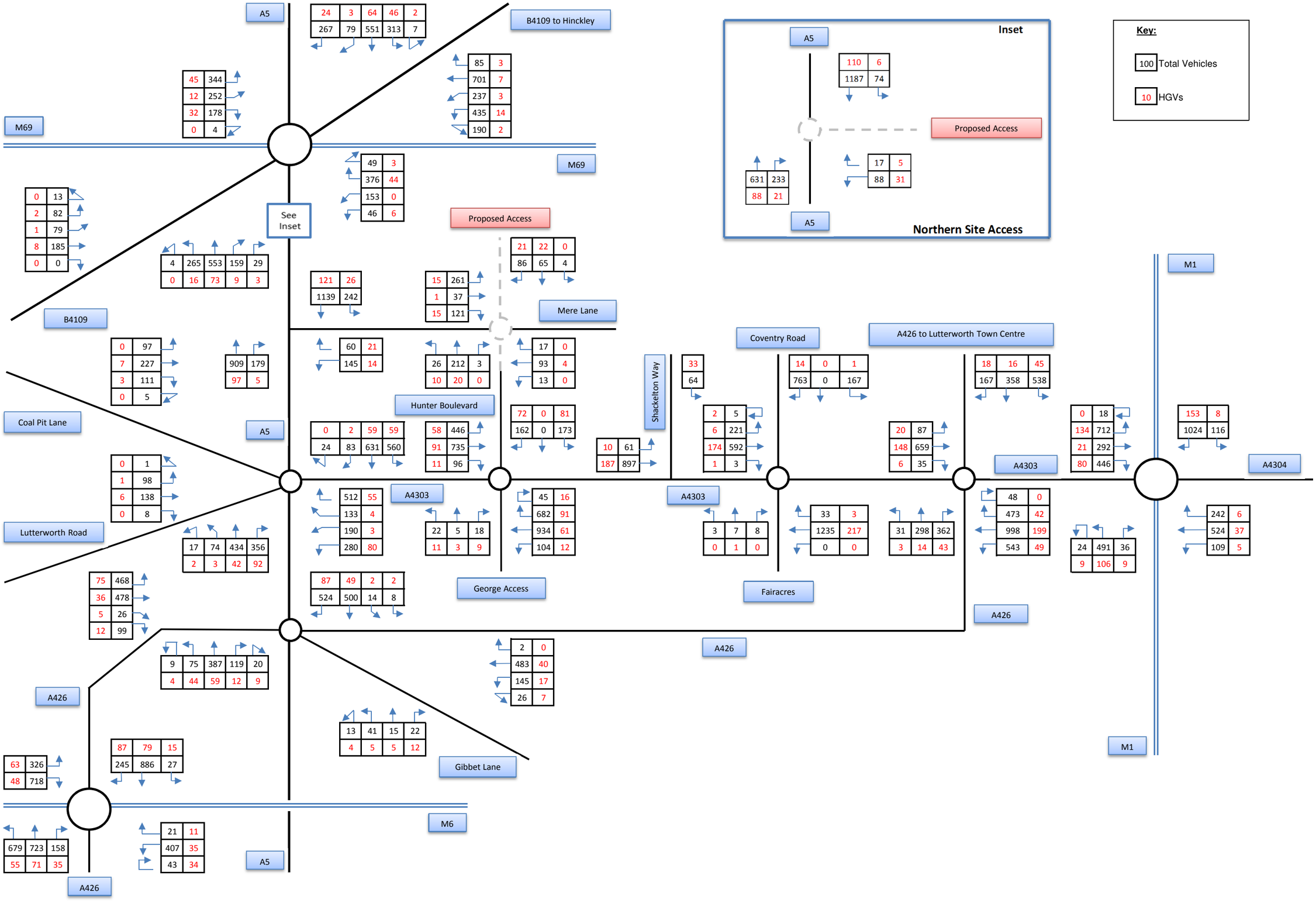

Figure 9.3: 2026 AM Peak With Development and Symmetry Park

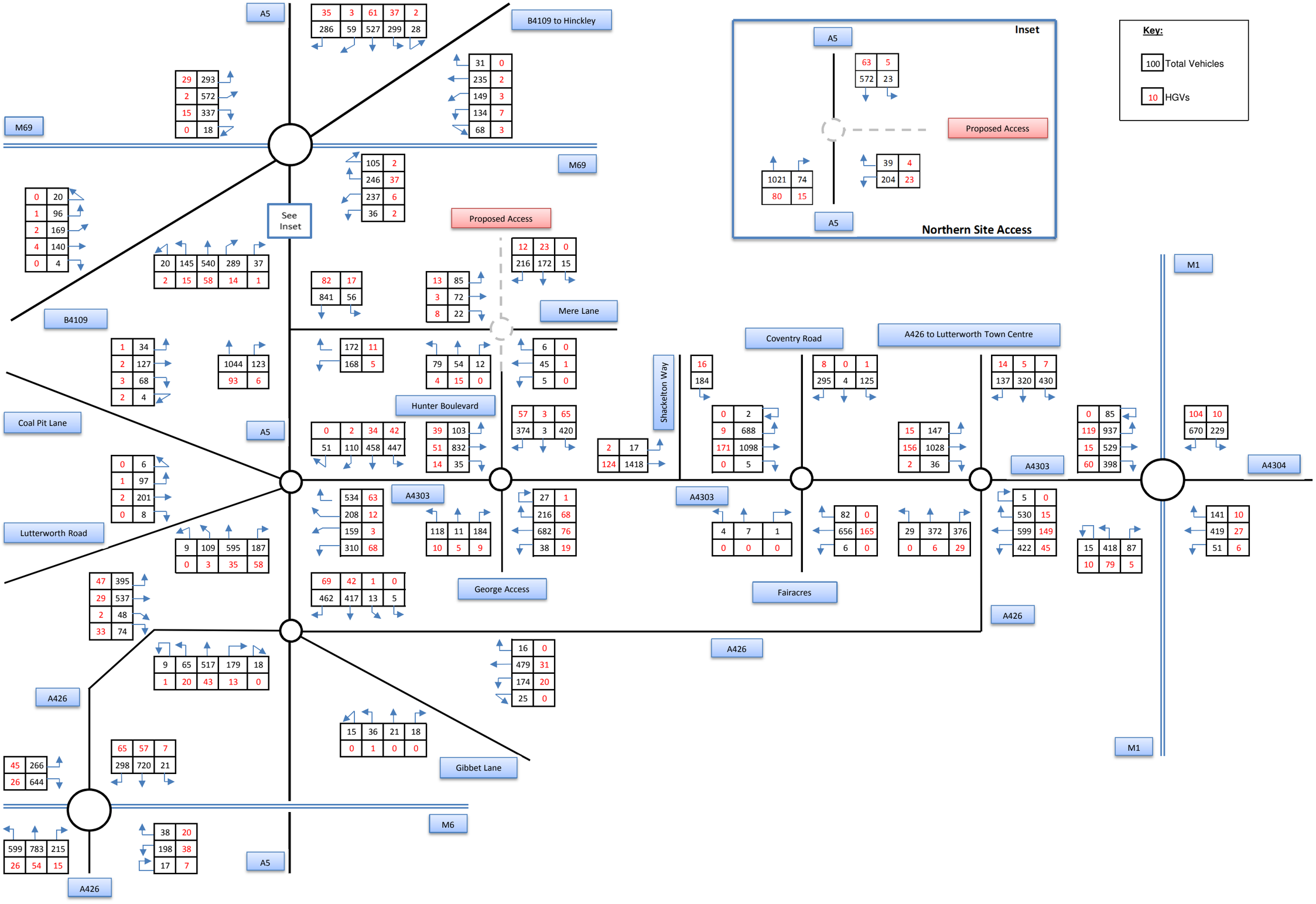

Figure 9.4: 2026 PM Peak With Development and Symmetry Park

Magna Park Extension: Hybrid Application
Transport Assessment

Appendix O – Queue Validation Exercise

Client:	URS
Project Number:	TSP11713
Project Name:	Lutterworth
Survey Type:	Queue Length Survey
Survey Date:	15 May 2014
Survey Time:	07:00 - 10:00 and 16:00 - 19:00
Weather:	Dry and Sunny
Comments:	

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **1**
Location: **A5/ A4303/ Lutterworth Road/ Coal Pit Lane Roundabout**

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **1**
Location: **A5/ A4303/ Lutterworth Road/ Coal Pit Lane Roundabout**
Date: **15 May 2014, Thursday**

max Queue in metres

Time	Arm A		Arm B		Arm C		Arm D		Arm E	
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2
07:00 - 10:00										
7:00	25	0	15	10	0	25	5	5	0	15
7:05	20	0	10	35	20	15	0	0	10	10
7:10	20	0	15	20	30	15	0	0	5	5
7:15	25	5	35	30	20	20	5	10	20	40
7:20	40	10	30	25	20	15	0	10	5	5
7:25	45	0	25	15	10	5	0	5	10	10
7:30	20	0	25	25	15	0	0	5	15	10
7:35	40	0	45	15	20	20	5	30	5	15
7:40	35	15	55	35	25	70	5	5	15	15
7:45	50	35	25	15	10	35	0	10	25	15
7:50	35	25	15	5	40	15	5	10	50	15
7:55	15	10	40	10	20	20	0	10	10	15
8:00	15	5	35	40	50	30	0	0	10	10
8:05	25	5	20	20	10	45	0	20	15	10
8:10	35	10	35	15	10	25	5	10	45	5
8:15	30	5	15	20	20	10	5	15	20	10
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8:55	60	0	25	5	0	15	0	10	20	5
9:00	35	0	30	20	0	30	0	0	40	5
9:05	0	0	30	5	0	20	0	0	5	0
9:10	0	0	25	20	5	0	0	10	5	0
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9:45	25	0	5	5	15	15	5	0	10	0
9:50	0	0	20	0	45	0	5	0	5	0
9:55	20	10	25	25	0	20	0	15	5	15
16:00 - 19:00										
16:00	0	0	0	0	35	30	10	0	30	0
16:05	5	5	25	20	55	25	10	15	25	10
16:10	20	0	10	30	30	20	10	5	5	15
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18:40	5	0	5	0	10	15	15	10	15	5
18:45	0	0	0	0	0	10	5	5	5	0
18:50	5	0	5	5	10	15	0	15	15	0
18:55	0	0	20	0	0	20	5	0	0	0

Average pcu lengt 5.75

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **1**
Location: **A5/ A4303/ Lutterworth Road/ Coal Pit Lane Roundabout**
Date: **15 May 2014, Thursday**

Max Queue in pcus (Conversion 1pcu = 5.75 metres)

Time	Arm A		Arm B		Arm C		Arm D		Arm E	
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2
07:00 - 10:00										
7:00	4	0	3	2	0	4	1	1	0	3
7:05	3	0	2	6	3	3	0	0	2	2
7:10	3	0	3	3	5	3	0	0	1	1
7:15	4	1	6	5	3	3	1	2	3	7
7:20	7	2	5	4	3	3	0	2	1	1
7:25	8	0	4	3	2	1	0	1	2	2
7:30	3	0	4	4	3	0	0	1	3	2
7:35	7	0	8	3	3	3	1	5	1	3
7:40	6	3	10	6	4	12	1	1	3	3
7:45	9	6	4	3	2	6	0	2	4	3
7:50	6	4	3	1	7	3	1	2	9	3
7:55	3	2	7	2	3	3	0	2	2	3
8:00	3	1	6	7	9	5	0	0	2	2
8:05	4	1	3	3	2	8	0	3	3	2
8:10	6	2	6	3	2	4	1	2	8	1
8:15	5	1	3	3	3	2	1	3	3	2
8:20	7	3	4	10	3	2	1	1	4	1
8:25	8	3	3	3	2	3	0	2	3	2
8:30	6	2	8	7	10	4	1	2	2	3
8:35	5	1	1	3	0	3	0	3	2	1
8:40	5	3	5	3	4	3	1	3	4	1
8:45	17	5	3	3	2	4	0	0	1	1
8:50	5	0	5	1	0	2	3	2	2	1
8:55	10	0	4	1	0	3	0	2	3	1
9:00	6	0	5	3	0	5	0	0	7	1
9:05	0	0	5	1	0	3	0	0	1	0
9:10	0	0	4	3	1	0	0	2	1	0
9:15	8	0	2	3	3	0	0	0	2	3
9:20	2	0	0	3	1	3	0	1	1	1
9:25	0	0	0	3	0	0	0	0	1	0
9:30	2	0	0	2	7	3	0	0	1	1
9:35	0	0	5	2	4	3	1	0	1	0
9:40	3	1	1	3	5	1	0	0	3	0
9:45	4	0	1	1	3	3	1	0	2	0
9:50	0	0	3	0	8	0	1	0	1	0
9:55	3	2	4	4	0	3	0	3	1	3
16:00 - 19:00										
16:00	0	0	0	0	6	5	2	0	5	0
16:05	1	1	4	3	10	4	2	3	4	2
16:10	3	0	2	5	5	3	2	1	1	3
16:15	3	0	3	0	3	3	1	1	2	2
16:20	1	0	1	2	0	1	1	2	2	0
16:25	1	0	1	1	3	2	0	2	1	0
16:30	3	1	2	1	2	3	5	3	1	1
16:35	3	0	5	3	2	10	4	3	2	1
16:40	3	0	2	4	6	9	2	4	2	0
16:45	4	1	1	1	3	3	2	4	1	1
16:50	4	0	0	5	4	7	8	3	3	3
16:55	3	0	4	2	7	3	1	3	3	2
17:00	4	0	1	5	2	6	0	3	6	1
17:05	2	0	2	2	3	4	4	5	2	3
17:10	2	0	1	2	4	3	3	4	2	1
17:15	6	0	1	3	4	3	2	5	3	2
17:20	3	0	2	8	4	3	2	4	2	2
17:25	3	2	3	2	6	6	2	2	3	1
17:30	0	1	6	1	3	5	2	2	2	3
17:35	3	1	8	3	8	1	1	7	2	2
17:40	2	0	4	2	5	5	1	6	6	1
17:45	3	0	2	3	6	2	0	9	4	2
17:50	2	4	1	3	4	2	7	5	3	1
17:55	3	1	2	2	12	3	3	3	1	1
18:00	0	0	1	2	7	0	0	3	2	1
18:05	3	0	1	7	4	6	1	2	1	1
18:10	3	1	2	1	3	0	1	2	2	0
18:15	4	0	1	2	5	1	2	3	3	1
18:20	3	0	0	6	0	1	1	0	2	1
18:25	0	0	1	2	5	3	0	1	1	0
18:30	4	0	3	0	3	1	3	1	0	3
18:35	0	0	1	3	5	3	1	0	0	0
18:40	1	0	1	0	2	3	3	2	3	1
18:45	0	0	0	0	0	2	1	1	1	0
18:50	1	0	1	1	2	3	0	3	3	0
18:55	0	0	3	0	0	3	1	0	0	0

Time	Arm A	Arm B	Arm C	Arm D	Arm E
	All Lanes	All Lanes	All Lanes	All Lanes	All Lanes
07:30 - 08:30					
7:30	3	8	3	1	5
7:35	7	11	6	6	4
7:40	9	16	16	2	6
7:45	15	7	8	2	7
7:50	10	4	10	3	12
7:55	5	9	6	2	5
8:00	4	13	14	0	4
8:05	5	6	10	3	5
8:10	8	9	6	3	9
8:15	6	6	5	4	5
8:20	10	14	5	2	5
8:25	11	6	5	2	5
8:30	8	15	14	3	5
Average Queue	**8**	**10**	**8**	**3**	**6**
17:00 - 18:00					
17:00	4	6	8	3	7
17:05	2	4	7	9	5
17:10	2	3	7	7	3
17:15	6	4	7	7	5
17:20	3	10	7	6	4
17:25	5	5	12	4	4
17:30	1	7	8	4	5
17:35	4	11	9	8	4
17:40	2	6	10	7	7
17:45	3	5	8	9	6
17:50	6	4	6	12	4
17:55	4	4	15	6	2
18:00	0	3	7	3	3
Average Queue	**3**	**6**	**9**	**7**	**5**

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **2**
Location: **Hunter Boulevard/ A4303 Roundabout**

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **2**
Location: **Hunter Boulevard/ A4303 Roundabout**
Date: **15 May 2014, Thursday**

max Queue in metres

Time	Arm A		Arm B		Arm C		Arm D	
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2
07:00 - 10:00								
7:00	40	0	5	15	0	15	5	15
7:05	10	5	5	25	0	0	0	0
7:10	0	0	5	30	5	0	0	0
7:15	30	5	0	30	0	15	30	10
7:20	5	10	0	25	15	0	15	10
7:25	15	5	0	25	15	0	30	10
7:30	15	10	5	25	0	20	15	0
7:35	15	5	25	15	0	5	15	5
7:40	30	10	0	0	0	0	25	5
7:45	0	10	20	30	15	5	20	10
7:50	30	5	5	25	0	0	50	20
7:55	5	5	5	35	0	0	50	5
8:00	25	5	30	30	15	5	15	5
8:05	15	10	5	30	15	0	10	0
8:10	30	5	5	35	5	5	30	5
8:15	0	10	5	30	0	0	30	10
8:20	15	5	20	5	0	30	40	25
8:25	30	5	15	20	5	0	5	5
8:30	30	5	0	25	0	0	10	5
8:35	0	5	10	0	0	0	25	20
8:40	30	0	0	5	15	0	30	10
8:45	15	10	10	25	0	5	15	10
8:50	5	5	10	20	5	0	40	15
8:55	20	5	0	15	0	5	15	10
9:00	30	5	0	30	0	0	20	5
9:05	0	5	0	15	15	0	20	0
9:10	0	5	0	0	0	5	10	5
9:15	15	15	0	0	0	0	25	20
9:20	5	10	0	0	0	0	5	0
9:25	5	10	5	35	0	5	5	10
9:30	15	5	15	0	0	15	5	5
9:35	15	10	20	35	15	0	15	5
9:40	15	5	0	0	0	0	10	5
9:45	20	5	0	5	0	0	0	10
9:50	15	5	5	10	15	0	0	5
9:55	0	15	0	5	15	5	0	25
16:00 - 19:00								
16:00	20	5	15	30	5	5	0	0
16:05	10	0	20	10	5	5	5	0
16:10	20	20	0	35	10	0	5	0
16:15	10	10	0	0	5	20	20	5
16:20	15	5	0	0	15	5	10	0
16:25	20	0	5	15	15	0	20	10
16:30	5	0	0	15	15	0	0	0
16:35	15	5	0	15	15	15	15	5
16:40	0	0	5	15	20	5	0	0
16:45	35	15	20	20	0	5	10	5
16:50	5	5	0	20	15	5	15	10
16:55	25	10	5	20	20	0	0	5
17:00	10	5	0	60	15	10	5	5
17:05	15	5	30	20	25	10	15	5
17:10	30	10	10	30	5	25	10	20
17:15	15	0	15	20	0	10	10	10
17:20	20	15	0	15	15	5	10	0
17:25	55	0	20	5	15	15	10	10
17:30	15	5	0	0	5	10	20	15
17:35	30	10	5	15	35	55	20	10
17:40	15	10	0	25	30	50	25	5
17:45	30	5	30	5	15	30	25	5
17:50	25	5	15	5	30	15	5	15
17:55	15	10	0	15	10	10	15	15
18:00	30	5	0	40	5	15	25	0
18:05	15	0	15	20	15	10	20	0
18:10	25	5	0	20	15	0	0	0
18:15	5	10	0	15	15	30	10	5
18:20	0	0	0	0	5	0	0	5
18:25	20	5	0	0	15	0	5	0
18:30	20	0	0	15	5	5	5	5
18:35	0	5	0	0	0	15	0	0
18:40	15	5	0	0	15	0	0	0
18:45	0	5	0	0	5	0	0	0
18:50	15	10	15	15	0	0	0	0
18:55	15	0	0	0	0	0	0	0

Average pcu lengt 5.75

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **2**
Location: **Hunter Boulevard/ A4303 Roundabout**
Date: **15 May 2014, Thursday**

Max Queue in pcus (Conversion 1pcu = 5.75 metres)

Time	Arm A		Arm B		Arm C		Arm D	
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2
07:00 - 10:00								
7:00	7	0	1	3	0	3	1	3
7:05	2	1	1	4	0	0	0	0
7:10	0	0	1	5	1	0	0	0
7:15	5	1	0	5	0	3	5	2
7:20	1	2	0	4	3	0	3	2
7:25	3	1	0	4	3	0	5	2
7:30	3	2	1	4	0	3	3	0
7:35	3	1	4	3	0	1	3	1
7:40	5	2	0	0	0	0	4	1
7:45	0	2	3	5	3	1	3	2
7:50	5	1	1	4	0	0	9	3
7:55	1	1	1	6	0	0	9	1
8:00	4	1	5	5	3	1	3	1
8:05	3	2	1	5	3	0	2	0
8:10	5	1	1	6	1	1	5	1
8:15	0	2	1	5	0	0	5	2
8:20	3	1	3	1	0	5	7	4
8:25	5	1	3	3	1	0	1	1
8:30	5	1	0	4	0	0	2	1
8:35	0	1	2	0	0	0	4	3
8:40	5	0	0	1	3	0	5	2
8:45	3	2	2	4	0	1	3	2
8:50	1	1	2	3	1	0	7	3
8:55	3	1	0	3	0	1	3	2
9:00	5	1	0	5	0	0	3	1
9:05	0	1	0	3	3	0	3	0
9:10	0	1	0	0	0	1	2	1
9:15	3	3	0	0	0	0	4	3
9:20	1	2	0	0	0	0	1	0
9:25	1	2	1	6	0	1	1	2
9:30	3	1	3	0	0	3	1	1
9:35	3	2	3	6	3	0	3	1
9:40	3	1	0	0	0	0	2	1
9:45	3	1	0	1	0	0	0	2
9:50	3	1	1	2	3	0	0	1
9:55	0	3	0	1	3	1	0	4
16:00 - 19:00								
16:00	3	1	3	5	1	1	0	0
16:05	2	0	3	2	1	1	1	0
16:10	3	3	0	6	2	0	1	0
16:15	2	2	0	0	1	3	3	1
16:20	3	1	0	0	3	1	2	0
16:25	3	0	1	3	3	0	3	2
16:30	1	0	0	3	3	0	0	0
16:35	3	1	0	3	3	3	3	1
16:40	0	0	1	3	3	1	0	0
16:45	6	3	3	3	0	1	2	1
16:50	1	1	0	3	3	1	3	2
16:55	4	2	1	3	3	0	0	1
17:00	2	1	0	10	3	2	1	1
17:05	3	1	5	3	4	2	3	1
17:10	5	2	2	5	1	4	2	3
17:15	3	0	3	3	0	2	2	2
17:20	3	3	0	3	3	1	2	0
17:25	10	0	3	1	3	3	2	2
17:30	3	1	0	0	1	2	3	3
17:35	5	2	1	3	6	10	3	2
17:40	3	2	0	4	5	9	4	1
17:45	5	1	5	1	3	5	4	1
17:50	4	1	3	1	5	3	1	3
17:55	3	2	0	3	2	2	3	3
18:00	5	1	0	7	1	3	4	0
18:05	3	0	3	3	3	2	3	0
18:10	4	1	0	3	3	0	0	0
18:15	1	2	0	3	3	5	2	1
18:20	0	0	0	0	1	0	0	1
18:25	3	1	0	0	3	0	1	0
18:30	3	0	0	3	1	1	1	1
18:35	0	1	0	0	0	3	0	0
18:40	3	1	0	0	3	0	0	0
18:45	0	1	0	0	1	0	0	0
18:50	3	2	3	3	0	0	0	0
18:55	3	0	0	0	0	0	0	0

Time	Arm A	Arm B	Arm C	Arm D
	All Lanes	All Lanes	All Lanes	All Lanes
07:30 - 08:30				
7:30	5	5	3	3
7:35	4	7	1	4
7:40	7	0	0	5
7:45	2	8	4	5
7:50	6	5	0	12
7:55	2	7	0	10
8:00	5	10	4	4
8:05	5	6	3	2
8:10	6	7	2	6
8:15	2	6	0	7
8:20	4	4	5	11
8:25	6	6	1	2
8:30	6	4	0	3
Average Queue	**5**	**6**	**2**	**6**
17:00 - 18:00				
17:00	3	10	5	2
17:05	4	8	6	4
17:10	7	7	5	5
17:15	3	6	2	4
17:20	6	3	4	2
17:25	10	4	6	4
17:30	4	0	3	6
17:35	7	4	16	5
17:40	5	4	14	5
17:45	6	6	8	5
17:50	5	4	8	4
17:55	5	3	4	6
18:00	6	7	4	4
Average Queue	**5**	**5**	**7**	**4**

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **3**
Location: **Coventry Road/ A4303/ Fairacres Roundabout**

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **3**
Location: **Coventry Road/ A4303/ Fairacres Roundabout**
Date: **15 May 2014, Thursday**

traffic survey partners

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **3**
Location: **Coventry Road/ A4303/ Fairacres Roundabout**
Date: **15 May 2014, Thursday**

max Queue in metres

Time	Arm A		Arm B		Arm C		Arm D	
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2
07:00 - 10:00								
7:00	5	10	0	0	0	0	0	0
7:05	5	15	45	0	0	0	0	0
7:10	0	5	0	0	0	0	0	0
7:15	15	5	0	0	0	0	0	0
7:20	5	15	15	5	0	0	0	0
7:25	5	5	20	0	0	0	0	0
7:30	5	15	15	0	5	0	0	0
7:35	5	15	25	15	5	0	0	0
7:40	10	30	15	5	0	0	0	0
7:45	10	30	0	10	5	0	0	0
7:50	5	20	15	5	5	0	0	0
7:55	5	15	0	5	15	0	0	0
8:00	5	35	20	25	5	0	0	0
8:05	10	30	15	20	0	0	0	0
8:10	10	35	30	0	5	0	0	0
8:15	20	40	15	0	5	0	0	0
8:20	15	10	20	15	0	0	20	0
8:25	5	45	10	5	10	0	0	0
8:30	10	25	15	0	5	0	0	0
8:35	10	20	0	10	5	0	0	0
8:40	5	20	15	5	10	0	0	0
8:45	10	10	5	0	10	0	0	0
8:50	5	20	5	5	15	0	0	0
8:55	5	15	0	0	5	0	0	0
9:00	5	10	0	0	5	0	0	0
9:05	5	10	0	0	0	0	0	0
9:10	10	5	0	0	0	0	0	0
9:15	5	5	0	0	0	0	0	0
9:20	5	5	0	0	0	0	0	0
9:25	0	10	0	0	0	0	0	0
9:30	5	10	0	0	0	0	0	0
9:35	10	10	0	0	5	0	0	0
9:40	0	15	0	0	0	0	0	0
9:45	0	10	0	5	0	0	0	0
9:50	0	5	0	0	5	0	0	0
9:55	0	5	0	0	0	0	0	0
16:00 - 19:00								
16:00	10	20	5	0	5	0	0	0
16:05	5	15	0	0	5	0	0	0
16:10	5	10	30	0	0	0	0	0
16:15	5	5	5	0	0	0	0	0
16:20	5	5	15	0	5	0	0	0
16:25	0	10	0	5	5	0	0	0
16:30	0	5	0	0	0	0	0	0
16:35	5	5	0	0	0	0	0	0
16:40	5	5	0	0	0	0	0	0
16:45	5	10	20	0	0	0	0	0
16:50	10	5	0	0	0	0	0	0
16:55	15	5	0	0	0	0	0	0
17:00	5	5	0	0	0	0	0	0
17:05	15	15	0	0	0	0	0	0
17:10	10	20	0	0	0	0	0	0
17:15	10	60	5	5	0	0	0	0
17:20	10	15	5	0	0	0	0	0
17:25	10	15	0	5	0	0	0	0
17:30	15	65	0	15	0	0	0	15
17:35	10	55	0	0	0	0	0	0
17:40	10	20	15	5	5	0	0	0
17:45	10	30	15	5	5	0	0	0
17:50	10	10	0	10	5	0	0	0
17:55	10	20	15	0	5	0	0	0
18:00	0	15	0	0	5	0	0	0
18:05	0	15	15	0	0	0	0	0
18:10	10	5	0	0	0	0	0	0
18:15	5	5	0	0	0	0	0	0
18:20	5	10	0	0	5	0	0	0
18:25	5	10	0	0	0	0	0	0
18:30	0	10	0	0	5	0	0	0
18:35	5	10	0	0	0	0	0	0
18:40	5	5	0	0	5	0	0	0
18:45	0	10	0	0	0	0	0	0
18:50	5	5	0	0	0	0	0	0
18:55	5	5	0	0	0	0	0	0

Average pcu lengt 5.75

Max Queue in pcus (Conversion 1pcu = 5.75 metres)

Time	Arm A		Arm B		Arm C		Arm D	
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2
07:00 - 10:00								
7:00	1	2	0	0	0	0	0	0
7:05	1	3	8	0	0	0	0	0
7:10	0	1	0	0	0	0	0	0
7:15	3	1	0	0	0	0	0	0
7:20	1	3	3	1	0	0	0	0
7:25	1	1	3	0	0	0	0	0
7:30	1	3	3	0	1	0	0	0
7:35	1	3	4	3	1	0	0	0
7:40	2	5	3	1	0	0	0	0
7:45	2	5	0	2	1	0	0	0
7:50	1	3	3	1	1	0	0	0
7:55	1	3	0	1	3	0	0	0
8:00	1	6	3	4	1	0	0	0
8:05	2	5	3	3	0	0	0	0
8:10	2	6	5	0	1	0	0	0
8:15	3	7	3	0	1	0	0	0
8:20	3	2	3	3	0	0	3	0
8:25	1	8	2	1	2	0	0	0
8:30	2	4	3	0	1	0	0	0
8:35	2	3	0	2	1	0	0	0
8:40	1	3	3	1	2	0	0	0
8:45	2	2	1	0	2	0	0	0
8:50	1	3	1	1	3	0	0	0
8:55	1	3	0	0	1	0	0	0
9:00	1	2	0	0	1	0	0	0
9:05	1	2	0	0	0	0	0	0
9:10	2	1	0	0	0	0	0	0
9:15	1	1	0	0	0	0	0	0
9:20	1	1	0	0	0	0	0	0
9:25	0	2	0	0	0	0	0	0
9:30	1	2	0	0	0	0	0	0
9:35	2	2	0	0	1	0	0	0
9:40	0	3	0	0	0	0	0	0
9:45	0	2	0	1	0	0	0	0
9:50	0	1	0	0	1	0	0	0
9:55	0	1	0	0	0	0	0	0
16:00 - 19:00								
16:00	2	3	1	0	1	0	0	0
16:05	1	3	0	0	1	0	0	0
16:10	1	2	5	0	0	0	0	0
16:15	1	1	1	0	0	0	0	0
16:20	1	1	3	0	1	0	0	0
16:25	0	2	0	1	1	0	0	0
16:30	0	1	0	0	0	0	0	0
16:35	1	1	0	0	0	0	0	0
16:40	1	1	0	0	0	0	0	0
16:45	1	2	3	0	0	0	0	0
16:50	2	1	0	0	0	0	0	0
16:55	3	1	0	0	0	0	0	0
17:00	1	1	0	0	0	0	0	0
17:05	3	3	0	0	0	0	0	0
17:10	2	3	0	0	0	0	0	0
17:15	2	10	1	1	0	0	0	0
17:20	2	3	1	0	0	0	0	0
17:25	2	3	0	1	0	0	0	0
17:30	3	11	0	3	0	0	0	3
17:35	2	10	0	0	0	0	0	0
17:40	2	3	3	1	1	0	0	0
17:45	2	5	3	1	1	0	0	0
17:50	2	2	0	2	1	0	0	0
17:55	2	3	3	0	1	0	0	0
18:00	0	3	0	0	1	0	0	0
18:05	0	3	3	0	0	0	0	0
18:10	2	1	0	0	0	0	0	0
18:15	1	1	0	0	0	0	0	0
18:20	1	2	0	0	1	0	0	0
18:25	1	2	0	0	0	0	0	0
18:30	0	2	0	0	1	0	0	0
18:35	1	2	0	0	0	0	0	0
18:40	1	1	0	0	1	0	0	0
18:45	0	2	0	0	0	0	0	0
18:50	1	1	0	0	0	0	0	0
18:55	1	1	0	0	0	0	0	0

Time	Arm A	Arm B	Arm C	Arm D
	All Lanes	All Lanes	All Lanes	All Lanes
07:30 - 08:30				
7:30	4	3	1	0
7:35	4	7	1	0
7:40	7	4	0	0
7:45	7	2	1	0
7:50	4	4	1	0
7:55	4	1	3	0
8:00	7	7	1	0
8:05	7	6	0	0
8:10	8	5	1	0
8:15	10	3	1	0
8:20	5	6	0	3
8:25	9	3	2	0
8:30	6	3	1	0
Average Queue	**6**	**4**	**1**	**0**
17:00 - 18:00				
17:00	2	0	0	0
17:05	6	0	0	0
17:10	5	0	0	0
17:15	12	2	0	0
17:20	5	1	0	0
17:25	5	1	0	0
17:30	14	3	0	3
17:35	12	0	0	0
17:40	5	4	1	0
17:45	7	4	1	0
17:50	4	2	1	0
17:55	5	3	1	0
18:00	3	0	1	0
Average Queue	**7**	**2**	**0**	**0**

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **4**
Location: **A426 Rugby Road/ A4303 Lutterworth Road Roundabout**

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **4**
Location: **A426 Rugby Road/ A4303 Lutterworth Road Roundabout**
Date: **15 May 2014, Thursday**

max Queue in metres

Time	Arm A		Arm B		Arm C		Arm D	
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2
07:00 - 10:00								
7:00	40	5	15	15	10	30	20	10
7:05	40	0	30	15	5	15	20	10
7:10	15	5	5	0	15	30	20	5
7:15	25	0	30	0	20	25	20	10
7:20	105	10	20	40	10	65	30	10
7:25	70	5	15	25	5	20	20	10
7:30	50	5	10	20	15	85	10	0
7:35	55	0	45	15	25	45	35	20
7:40	50	5	25	5	25	55	30	35
7:45	60	50	35	10	45	35	50	30
7:50	25	20	30	5	20	85	15	10
7:55	20	0	15	20	15	45	60	25
8:00	55	10	35	25	65	60	20	10
8:05	40	5	0	0	25	95	30	5
8:10	15	25	65	40	70	20	30	25
8:15	40	5	20	25	100	70	35	10
8:20	35	5	35	50	85	30	20	5
8:25	50	5	30	30	25	55	40	25
8:30	35	10	20	0	50	15	60	10
8:35	60	5	40	30	35	60	75	10
8:40	35	15	30	25	20	70	45	10
8:45	15	0	45	20	35	65	10	5
8:50	35	5	75	10	15	30	40	10
8:55	25	5	0	0	55	25	25	5
9:00	0	0	15	25	25	65	45	15
9:05	10	60	35	10	30	45	15	0
9:10	25	5	30	15	55	20	30	10
9:15	30	0	5	5	55	20	20	10
9:20	45	0	0	0	15	40	10	5
9:25	35	0	20	10	35	105	20	20
9:30	15	5	20	20	50	15	30	5
9:35	35	10	20	10	75	5	30	5
9:40	20	5	45	5	25	25	25	0
9:45	15	0	20	5	10	25	50	10
9:50	15	5	0	0	20	20	5	0
9:55	35	0	10	5	20	15	30	5
16:00 - 19:00								
16:00	35	15	35	25	15	30	20	10
16:05	15	5	15	10	35	15	15	5
16:10	15	15	15	15	30	25	35	15
16:15	15	5	20	25	30	15	35	20
16:20	30	5	0	35	10	45	20	10
16:25	55	10	0	10	20	75	20	10
16:30	20	5	35	10	25	45	15	5
16:35	20	10	35	25	30	15	55	30
16:40	25	5	20	20	20	40	45	10
16:45	15	5	20	15	25	15	45	20
16:50	0	0	45	10	40	40	25	10
16:55	20	0	20	20	25	25	30	5
17:00	15	10	55	20	15	40	35	20
17:05	30	15	35	20	30	25	40	15
17:10	30	10	50	15	20	35	30	15
17:15	30	5	45	15	15	20	35	120
17:20	20	15	20	15	10	60	50	20
17:25	10	10	20	20	65	70	35	20
17:30	15	10	35	10	20	20	40	35
17:35	20	5	35	25	70	45	65	30
17:40	25	15	30	30	20	30	35	55
17:45	20	25	40	35	30	25	55	25
17:50	60	5	15	10	15	30	60	40
17:55	20	15	35	20	20	40	45	10
18:00	50	15	35	15	15	15	35	20
18:05	45	0	10	10	30	35	50	15
18:10	35	5	0	5	15	15	35	20
18:15	50	5	30	25	20	30	25	10
18:20	10	5	15	10	20	20	30	15
18:25	10	5	0	15	25	30	20	10
18:30	15	10	40	10	10	25	25	0
18:35	15	0	10	10	10	30	35	10
18:40	25	5	10	10	10	25	25	15
18:45	30	5	15	10	10	30	25	5
18:50	45	5	0	25	10	15	15	5
18:55	15	5	10	15	5	15	5	5

Average pcu lengt 5.75

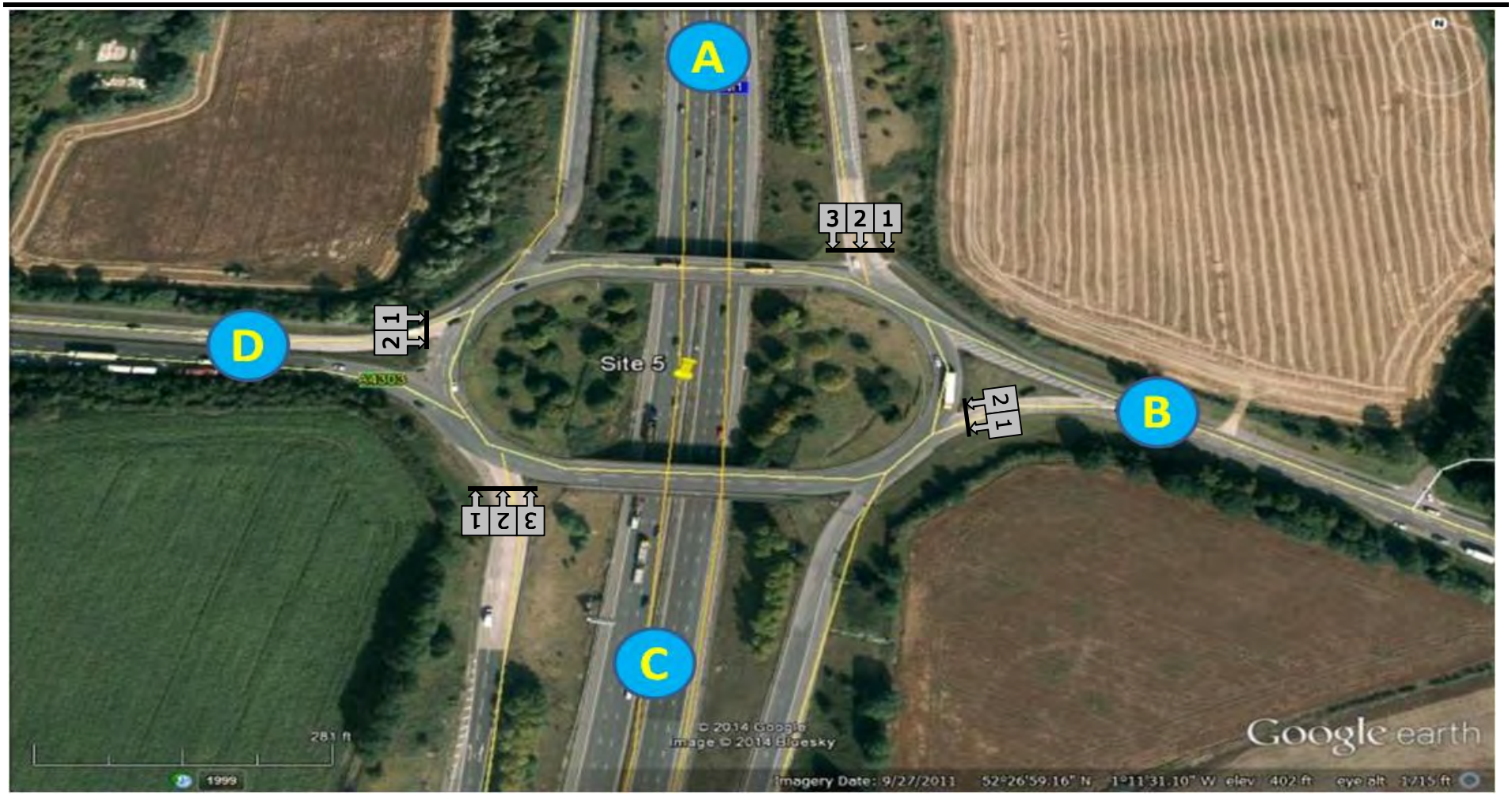
Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **4**
Location: **A426 Rugby Road/ A4303 Lutterworth Road Roundabou**
Date: **15 May 2014, Thursday**

Max Queue in pcus (Conversion 1pcu = 5.75 metres)

Time	Arm A		Arm B		Arm C		Arm D	
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2
07:00 - 10:00								
7:00	7	1	3	3	2	5	3	2
7:05	7	0	5	3	1	3	3	2
7:10	3	1	1	0	3	5	3	1
7:15	4	0	5	0	3	4	3	2
7:20	18	2	3	7	2	11	5	2
7:25	12	1	3	4	1	3	3	2
7:30	9	1	2	3	3	15	2	0
7:35	10	0	8	3	4	8	6	3
7:40	9	1	4	1	4	10	5	6
7:45	10	9	6	2	8	6	9	5
7:50	4	3	5	1	3	15	3	2
7:55	3	0	3	3	3	8	10	4
8:00	10	2	6	4	11	10	3	2
8:05	7	1	0	0	4	17	5	1
8:10	3	4	11	7	12	3	5	4
8:15	7	1	3	4	17	12	6	2
8:20	6	1	6	9	15	5	3	1
8:25	9	1	5	5	4	10	7	4
8:30	6	2	3	0	9	3	10	2
8:35	10	1	7	5	6	10	13	2
8:40	6	3	5	4	3	12	8	2
8:45	3	0	8	3	6	11	2	1
8:50	6	1	13	2	3	5	7	2
8:55	4	1	0	0	10	4	4	1
9:00	0	0	3	4	4	11	8	3
9:05	2	10	6	2	5	8	3	0
9:10	4	1	5	3	10	3	5	2
9:15	5	0	1	1	10	3	3	2
9:20	8	0	0	0	3	7	2	1
9:25	6	0	3	2	6	18	3	3
9:30	3	1	3	3	9	3	5	1
9:35	6	2	3	2	13	1	5	1
9:40	3	1	8	1	4	4	4	0
9:45	3	0	3	1	2	4	9	2
9:50	3	1	0	0	3	3	1	0
9:55	6	0	2	1	3	3	5	1
16:00 - 19:00								
16:00	6	3	6	4	3	5	3	2
16:05	3	1	3	2	6	3	3	1
16:10	3	3	3	3	5	4	6	3
16:15	3	1	3	4	5	3	6	3
16:20	5	1	0	6	2	8	3	2
16:25	10	2	0	2	3	13	3	2
16:30	3	1	6	2	4	8	3	1
16:35	3	2	6	4	5	3	10	5
16:40	4	1	3	3	3	7	8	2
16:45	3	1	3	3	4	3	8	3
16:50	0	0	8	2	7	7	4	2
16:55	3	0	3	3	4	4	5	1
17:00	3	2	10	3	3	7	6	3
17:05	5	3	6	3	5	4	7	3
17:10	5	2	9	3	3	6	5	3
17:15	5	1	8	3	3	3	6	21
17:20	3	3	3	3	2	10	9	3
17:25	2	2	3	3	11	12	6	3
17:30	3	2	6	2	3	3	7	6
17:35	3	1	6	4	12	8	11	5
17:40	4	3	5	5	3	5	6	10
17:45	3	4	7	6	5	4	10	4
17:50	10	1	3	2	3	5	10	7
17:55	3	3	6	3	3	7	8	2
18:00	9	3	6	3	3	3	6	3
18:05	8	0	2	2	5	6	9	3
18:10	6	1	0	1	3	3	6	3
18:15	9	1	5	4	3	5	4	2
18:20	2	1	3	2	3	3	5	3
18:25	2	1	0	3	4	5	3	2
18:30	3	2	7	2	2	4	4	0
18:35	3	0	2	2	2	5	6	2
18:40	4	1	2	2	2	4	4	3
18:45	5	1	3	2	2	5	4	1
18:50	8	1	0	4	2	3	3	1
18:55	3	1	2	3	1	3	1	1

Time	Arm A	Arm B	Arm C	Arm D
	All Lanes	All Lanes	All Lanes	All Lanes
07:30 - 08:30				
7:30	10	5	18	2
7:35	10	11	12	9
7:40	10	5	14	11
7:45	19	8	14	14
7:50	7	6	18	5
7:55	3	6	11	14
8:00	12	10	21	5
8:05	8	0	21	6
8:10	7	18	15	9
8:15	8	7	29	8
8:20	7	15	20	4
8:25	10	10	14	11
8:30	8	3	12	12
Average Queue	**9**	**8**	**17**	**8**
17:00 - 18:00				
17:00	5	13	10	9
17:05	8	9	9	10
17:10	7	12	9	8
17:15	6	11	6	27
17:20	6	6	12	12
17:25	4	6	23	9
17:30	5	8	6	13
17:35	4	10	20	16
17:40	7	10	8	16
17:45	7	13	9	14
17:50	11	5	8	17
17:55	6	9	10	10
18:00	12	9	6	9
Average Queue	**7**	**9**	**10**	**13**

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **5**
Location: **M1/ A4304/ A4303 Roundabout**



Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **5**
Location: **M1/ A4304/ A4303 Roundabout**
Date: **15 May 2014, Thursday**

max Queue in metres

Time	Arm A			Arm B		Arm C			Arm D	
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2
07:00 - 10:00										
7:00	0	5	15	5	15	20	5	5	5	0
7:05	0	15	10	0	0	25	15	15	5	5
7:10	0	20	20	5	0	0	5	45	0	0
7:15	0	30	20	10	0	5	5	15	0	30
7:20	0	55	10	10	20	40	10	15	0	0
7:25	0	50	5	5	30	25	5	5	0	15
7:30	0	20	20	10	30	30	5	30	5	5
7:35	15	15	25	0	15	20	20	5	60	5
7:40	30	10	40	5	15	20	15	5	0	5
7:45	0	15	20	0	10	35	10	15	25	20
7:50	10	15	25	5	15	40	10	5	0	30
7:55	0	25	35	10	10	65	20	15	20	10
8:00	0	15	25	25	0	20	15	0	0	30
8:05	0	45	25	0	5	50	15	25	25	20
8:10	0	15	60	20	10	35	10	15	0	0
8:15	0	30	40	45	10	40	5	5	0	0
8:20	0	15	30	55	15	25	5	5	0	10
8:25	0	20	30	85	15	45	15	15	35	0
8:30	0	30	40	85	25	20	20	10	0	40
8:35	20	15	25	20	20	40	10	30	20	15
8:40	0	15	35	15	15	40	10	10	15	0
8:45	15	15	40	45	15	65	5	20	15	15
8:50	0	30	25	25	0	35	10	20	15	10
8:55	0	30	30	60	15	5	5	15	0	0
9:00	15	0	30	10	5	30	0	20	0	0
9:05	15	15	20	0	5	30	5	10	0	0
9:10	0	15	15	15	15	5	5	20	0	5
9:15	0	0	10	0	0	15	0	15	0	0
9:20	0	15	40	5	0	5	5	15	0	0
9:25	0	0	5	0	0	0	0	5	0	0
9:30	0	30	15	10	0	5	0	0	0	0
9:35	0	15	15	0	0	25	0	0	0	0
9:40	0	60	5	10	0	15	0	5	0	0
9:45	0	15	15	0	5	25	15	5	0	0
9:50	0	0	10	5	30	40	5	20	0	0
9:55	0	5	10	0	0	35	5	5	0	15
16:00 - 19:00										
16:00	5	0	15	0	15	20	10	5	0	0
16:05	0	5	10	0	0	15	0	10	30	0
16:10	10	30	10	20	25	20	0	25	10	0
16:15	0	15	15	35	15	35	15	30	0	0
16:20	0	0	15	20	15	30	15	40	0	10
16:25	0	15	10	10	30	5	10	5	25	0
16:30	0	15	10	15	5	15	0	5	0	0
16:35	0	5	15	30	15	0	5	20	20	5
16:40	5	15	25	30	5	30	10	10	40	0
16:45	0	25	40	15	10	10	15	5	0	30
16:50	5	30	20	25	0	60	10	25	0	0
16:55	0	5	5	15	20	45	10	20	20	0
17:00	5	20	30	0	25	25	5	15	10	0
17:05	0	15	25	0	20	0	0	15	25	25
17:10	10	25	20	5	20	15	5	30	0	15
17:15	5	15	15	10	0	20	20	10	35	15
17:20	15	20	35	0	0	35	5	15	25	25
17:25	10	35	15	0	5	75	15	20	0	0
17:30	10	25	20	15	5	20	0	15	30	5
17:35	15	15	25	0	0	30	5	15	5	15
17:40	10	5	20	0	0	25	5	15	25	30
17:45	10	30	15	0	0	10	10	15	25	10
17:50	0	10	15	10	5	10	0	15	25	15
17:55	10	30	30	5	0	25	5	25	20	20
18:00	10	0	15	5	10	15	10	25	15	0
18:05	0	5	20	10	5	30	5	10	20	5
18:10	10	0	25	15	10	25	10	15	15	5
18:15	0	30	20	15	10	10	5	10	40	10
18:20	0	5	10	10	15	15	10	5	0	5
18:25	0	30	10	10	5	30	10	15	0	5
18:30	5	5	5	20	5	5	5	15	0	0
18:35	0	15	10	0	0	5	5	15	0	0
18:40	0	5	5	0	0	0	5	5	0	15
18:45	0	5	10	5	5	5	5	5	10	5
18:50	5	5	5	0	0	20	0	5	0	15
18:55	0	15	15	0	0	45	0	15	0	5

Average pcu lengt 5.75

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **5**
Location: **M1/ A4304/ A4303 Roundabout**
Date: **15 May 2014, Thursday**

Max Queue in pcus (Conversion 1pcu = 5.75 metres)

Time	Arm A			Arm B		Arm C			Arm D	
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2
07:00 - 10:00										
7:00	0	1	3	1	3	3	1	1	1	0
7:05	0	3	2	0	0	4	3	3	1	1
7:10	0	3	3	1	0	0	1	8	0	0
7:15	0	5	3	2	0	1	1	3	0	5
7:20	0	10	2	2	3	7	2	3	0	0
7:25	0	9	1	1	5	4	1	1	0	3
7:30	0	3	3	2	5	5	1	5	1	1
7:35	3	3	4	0	3	3	3	1	10	1
7:40	5	2	7	1	3	3	3	1	0	1
7:45	0	3	3	0	2	6	2	3	4	3
7:50	2	3	4	1	3	7	2	1	0	5
7:55	0	4	6	2	2	11	3	3	3	2
8:00	0	3	4	4	0	3	3	0	0	5
8:05	0	8	4	0	1	9	3	4	4	3
8:10	0	3	10	3	2	6	2	3	0	0
8:15	0	5	7	8	2	7	1	1	0	0
8:20	0	3	5	10	3	4	1	1	0	2
8:25	0	3	5	15	3	8	3	3	6	0
8:30	0	5	7	15	4	3	3	2	0	7
8:35	3	3	4	3	3	7	2	5	3	3
8:40	0	3	6	3	3	7	2	2	3	0
8:45	3	3	7	8	3	11	1	3	3	3
8:50	0	5	4	4	0	6	2	3	3	2
8:55	0	5	5	10	3	1	1	3	0	0
9:00	3	0	5	2	1	5	0	3	0	0
9:05	3	3	3	0	1	5	1	2	0	0
9:10	0	3	3	3	3	1	1	3	0	1
9:15	0	0	2	0	0	3	0	3	0	0
9:20	0	3	7	1	0	1	1	3	0	0
9:25	0	0	1	0	0	0	0	1	0	0
9:30	0	5	3	2	0	1	0	0	0	0
9:35	0	3	3	0	0	4	0	0	0	0
9:40	0	10	1	2	0	3	0	1	0	0
9:45	0	3	3	0	1	4	3	1	0	0
9:50	0	0	2	1	5	7	1	3	0	0
9:55	0	1	2	0	0	6	1	1	0	3
16:00 - 19:00										
16:00	1	0	3	0	3	3	2	1	0	0
16:05	0	1	2	0	0	3	0	2	5	0
16:10	2	5	2	3	4	3	0	4	2	0
16:15	0	3	3	6	3	6	3	5	0	0
16:20	0	0	3	3	3	5	3	7	0	2
16:25	0	3	2	2	5	1	2	1	4	0
16:30	0	3	2	3	1	3	0	1	0	0
16:35	0	1	3	5	3	0	1	3	3	1
16:40	1	3	4	5	1	5	2	2	7	0
16:45	0	4	7	3	2	2	3	1	0	5
16:50	1	5	3	4	0	10	2	4	0	0
16:55	0	1	1	3	3	8	2	3	3	0
17:00	1	3	5	0	4	4	1	3	2	0
17:05	0	3	4	0	3	0	0	3	4	4
17:10	2	4	3	1	3	3	1	5	0	3
17:15	1	3	3	2	0	3	3	2	6	3
17:20	3	3	6	0	0	6	1	3	4	4
17:25	2	6	3	0	1	13	3	3	0	0
17:30	2	4	3	3	1	3	0	3	5	1
17:35	3	3	4	0	0	5	1	3	1	3
17:40	2	1	3	0	0	4	1	3	4	5
17:45	2	5	3	0	0	2	2	3	4	2
17:50	0	2	3	2	1	2	0	3	4	3
17:55	2	5	5	1	0	4	1	4	3	3
18:00	2	0	3	1	2	3	2	4	3	0
18:05	0	1	3	2	1	5	1	2	3	1
18:10	2	0	4	3	2	4	2	3	3	1
18:15	0	5	3	3	2	2	1	2	7	2
18:20	0	1	2	2	3	3	2	1	0	1
18:25	0	5	2	2	1	5	2	3	0	1
18:30	1	1	1	3	1	1	1	3	0	0
18:35	0	3	2	0	0	1	1	3	0	0
18:40	0	1	1	0	0	0	1	1	0	3
18:45	0	1	2	1	1	1	1	1	2	1
18:50	1	1	1	0	0	3	0	1	0	3
18:55	0	3	3	0	0	8	0	3	0	1

Time	Arm A	Arm B	Arm C	Arm D
	All Lanes	All Lanes	All Lanes	All Lanes
07:30 - 08:30				
7:30	6	7	11	2
7:35	10	3	7	11
7:40	14	4	7	1
7:45	6	2	11	7
7:50	9	4	10	5
7:55	10	4	17	5
8:00	7	4	6	5
8:05	12	1	16	7
8:10	13	5	11	0
8:15	12	10	9	0
8:20	8	13	6	2
8:25	8	18	14	6
8:30	12	19	8	7
Average Queue	**10**	**7**	**10**	**4**
17:00 - 18:00				
17:00	9	4	8	2
17:05	7	3	3	8
17:10	9	4	9	3
17:15	7	2	8	9
17:20	12	0	10	8
17:25	11	1	19	0
17:30	9	4	6	6
17:35	10	0	9	4
17:40	6	0	8	9
17:45	10	0	7	6
17:50	5	3	5	7
17:55	12	1	9	6
18:00	5	3	9	3
Average Queue	**9**	**2**	**8**	**5**

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **6**
Location: **A426 Rugby Road / A5 Roundabout**

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **6**
Location: **A426 Rugby Road / A5 Roundabout**
Date: **15 May 2014, Thursday**

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **6**
Location: **A426 Rugby Road / A5 Roundabout**
Date: **15 May 2014, Thursday**

max Queue in metres

Time	Arm A		Arm B	Arm C		Arm D		Arm E	
	Lane 1	Lane 2	Lane 1	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2
07:00 - 10:00									
7:00	45	20	5	25	10	15	0	15	35
7:05	25	10	0	100	5	5	5	5	20
7:10	40	15	35	20	20	10	5	40	10
7:15	60	10	15	40	0	25	5	50	40
7:20	45	5	35	55	15	10	15	40	45
7:25	35	0	35	60	10	30	0	35	35
7:30	60	0	20	15	20	25	0	30	50
7:35	80	5	30	85	65	20	5	35	35
7:40	45	5	5	45	10	25	10	30	15
7:45	40	20	15	110	35	40	10	15	0
7:50	30	20	15	30	15	15	0	30	55
7:55	45	5	15	65	10	55	0	45	10
8:00	20	5	15	40	15	35	0	10	20
8:05	35	0	20	80	15	30	0	35	40
8:10	50	15	30	85	15	20	15	25	40
8:15	25	5	20	45	10	25	0	30	35
8:20	60	20	10	50	25	40	0	0	0
8:25	60	5	20	70	15	55	5	45	15
8:30	50	15	15	90	5	25	15	40	20
8:35	60	5	20	105	10	65	20	25	40
8:40	40	0	10	55	10	50	20	10	25
8:45	25	0	25	40	10	35	15	0	10
8:50	10	10	15	20	0	15	0	0	0
8:55	15	0	20	25	15	30	0	5	10
9:00	20	5	0	20	35	15	0	0	5
9:05	45	0	5	20	35	15	5	10	30
9:10	10	10	15	35	10	25	0	10	30
9:15	50	0	30	0	15	15	0	40	5
9:20	35	5	5	30	10	5	5	0	45
9:25	5	5	15	50	20	5	10	0	20
9:30	45	0	0	75	20	40	0	0	35
9:35	25	10	30	45	25	50	5	0	20
9:40	55	0	0	20	30	5	0	0	30
9:45	45	0	30	30	5	5	5	10	5
9:50	15	0	15	15	5	35	0	0	30
9:55	10	0	0	20	0	10	0	5	0
16:00 - 19:00									
16:00	55	0	15	60	15	10	5	15	35
16:05	35	20	15	50	0	15	5	20	30
16:10	0	0	0	75	5	35	20	0	15
16:15	20	20	0	15	5	15	15	10	35
16:20	35	10	5	20	5	35	0	25	25
16:25	35	0	5	70	40	75	10	10	15
16:30	35	15	15	20	30	30	40	20	5
16:35	40	0	0	75	0	40	30	15	10
16:40	70	0	20	30	20	20	5	35	15
16:45	15	15	15	35	5	55	10	0	5
16:50	25	5	5	40	5	5	10	5	10
16:55	35	5	5	15	5	30	20	0	30
17:00	50	10	5	70	20	15	15	15	40
17:05	0	5	15	80	45	35	5	15	10
17:10	45	10	10	35	15	35	10	10	25
17:15	30	15	0	20	5	20	5	10	50
17:20	35	0	15	30	10	50	5	5	40
17:25	45	0	10	20	10	45	5	10	20
17:30	30	10	15	20	5	30	15	30	20
17:35	20	5	5	35	5	10	15	30	10
17:40	35	0	5	35	5	30	10	10	15
17:45	25	10	5	40	10	0	15	0	30
17:50	35	5	5	45	0	20	20	5	25
17:55	35	0	5	10	10	35	15	10	20
18:00	25	0	5	45	15	25	35	25	25
18:05	15	5	5	60	20	40	0	25	60
18:10	0	5	0	10	5	95	20	0	5
18:15	0	0	0	40	5	25	0	30	20
18:20	20	0	5	15	15	10	10	20	20
18:25	40	65	0	40	5	35	0	5	0
18:30	15	5	0	55	0	10	15	15	35
18:35	10	0	0	0	0	25	0	0	0
18:40	35	5	10	0	0	0	0	15	45
18:45	15	0	10	25	0	5	0	5	10
18:50	45	0	0	10	0	15	0	0	35
18:55	0	0	10	0	0	30	5	0	20

Average pcu lengt 5.75

Max Queue in pcus (Conversion 1pcu = 5.75 metres)

Time	Arm A		Arm B	Arm C		Arm D		Arm E	
	Lane 1	Lane 2	Lane 1	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2
07:00 - 10:00									
7:00	8	3	1	4	2	3	0	3	6
7:05	4	2	0	17	1	1	1	1	3
7:10	7	3	6	3	3	2	1	7	2
7:15	10	2	3	7	0	4	1	9	7
7:20	8	1	6	10	3	2	3	7	8
7:25	6	0	6	10	2	5	0	6	6
7:30	10	0	3	3	3	4	0	5	9
7:35	14	1	5	15	11	3	1	6	6
7:40	8	1	1	8	2	4	2	5	3
7:45	7	3	3	19	6	7	2	3	0
7:50	5	3	3	5	3	3	0	5	10
7:55	8	1	3	11	2	10	0	8	2
8:00	3	1	3	7	3	6	0	2	3
8:05	6	0	3	14	3	5	0	6	7
8:10	9	3	5	15	3	3	3	4	7
8:15	4	1	3	8	2	4	0	5	6
8:20	10	3	2	9	4	7	0	0	0
8:25	10	1	3	12	3	10	1	8	3
8:30	9	3	3	16	1	4	3	7	3
8:35	10	1	3	18	2	11	3	4	7
8:40	7	0	2	10	2	9	3	2	4
8:45	4	0	4	7	2	6	3	0	2
8:50	2	2	3	3	0	3	0	0	0
8:55	3	0	3	4	3	5	0	1	2
9:00	3	1	0	3	6	3	0	0	1
9:05	8	0	1	3	6	3	1	2	5
9:10	2	2	3	6	2	4	0	2	5
9:15	9	0	5	0	3	3	0	7	1
9:20	6	1	1	5	2	1	1	0	8
9:25	1	1	3	9	3	1	2	0	3
9:30	8	0	0	13	3	7	0	0	6
9:35	4	2	5	8	4	9	1	0	3
9:40	10	0	0	3	5	1	0	0	5
9:45	8	0	5	5	1	1	1	2	1
9:50	3	0	3	3	1	6	0	0	5
9:55	2	0	0	3	0	2	0	1	0
16:00 - 19:00									
16:00	10	0	3	10	3	2	1	3	6
16:05	6	3	3	9	0	3	1	3	5
16:10	0	0	0	13	1	6	3	0	3
16:15	3	3	0	3	1	3	3	2	6
16:20	6	2	1	3	1	6	0	4	4
16:25	6	0	1	12	7	13	2	2	3
16:30	6	3	3	3	5	5	7	3	1
16:35	7	0	0	13	0	7	5	3	2
16:40	12	0	3	5	3	3	1	6	3
16:45	3	3	3	6	1	10	2	0	1
16:50	4	1	1	7	1	1	2	1	2
16:55	6	1	1	3	1	5	3	0	5
17:00	9	2	1	12	3	3	3	3	7
17:05	0	1	3	14	8	6	1	3	2
17:10	8	2	2	6	3	6	2	2	4
17:15	5	3	0	3	1	3	1	2	9
17:20	6	0	3	5	2	9	1	1	7
17:25	8	0	2	3	2	8	1	2	3
17:30	5	2	3	3	1	5	3	5	3
17:35	3	1	1	6	1	2	3	5	2
17:40	6	0	1	6	1	5	2	2	3
17:45	4	2	1	7	2	0	3	0	5
17:50	6	1	1	8	0	3	3	1	4
17:55	6	0	1	2	2	6	3	2	3
18:00	4	0	1	8	3	4	6	4	4
18:05	3	1	1	10	3	7	0	4	10
18:10	0	1	0	2	1	17	3	0	1
18:15	0	0	0	7	1	4	0	5	3
18:20	3	0	1	3	3	2	2	3	3
18:25	7	11	0	7	1	6	0	1	0
18:30	3	1	0	10	0	2	3	3	6
18:35	2	0	0	0	0	4	0	0	0
18:40	6	1	2	0	0	0	0	3	8
18:45	3	0	2	4	0	1	0	1	2
18:50	8	0	0	2	0	3	0	0	6
18:55	0	0	2	0	0	5	1	0	3

Time	Arm A	Arm B	Arm C	Arm D	Arm E
	All Lanes	All Lanes	All Lanes	All Lanes	All Lanes
07:30 - 08:30					
7:30	10	3	6	4	14
7:35	15	5	26	4	12
7:40	9	1	10	6	8
7:45	10	3	25	9	3
7:50	8	3	8	3	15
7:55	9	3	13	10	10
8:00	4	3	10	6	5
8:05	6	3	17	5	13
8:10	12	5	18	6	11
8:15	5	3	10	4	11
8:20	13	2	13	7	0
8:25	11	3	15	11	11
8:30	12	3	17	7	10
Average Queue	**10**	**3**	**14**	**6**	**9**
17:00 - 18:00					
17:00	11	1	15	6	10
17:05	1	3	22	7	5
17:10	10	2	9	8	6
17:15	8	0	4	4	11
17:20	6	3	7	10	8
17:25	8	2	5	9	5
17:30	7	3	4	8	8
17:35	4	1	7	5	7
17:40	6	1	7	7	5
17:45	6	1	9	3	5
17:50	7	1	8	6	5
17:55	6	1	4	9	5
18:00	4	1	11	10	8
Average Queue	**6**	**2**	**9**	**7**	**7**

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **7**
Location: **A426 / M6 Junction**

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **7**
Location: **A426 / M6 Junction**
Date: **15 May 2014, Thursday**

max Queue in metres

Time	Arm A		Arm B			Arm C		Arm D		
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 1	Lane 2	Lane 3
07:00 - 10:00										
7:00	20	20	10	0	0	0	0	35	20	15
7:05	20	10	20	5	30	5	10	40	25	10
7:10	25	25	25	20	15	15	0	20	30	20
7:15	30	10	25	20	15	20	10	5	30	25
7:20	25	35	30	20	30	35	20	25	30	20
7:25	40	30	25	10	15	20	15	40	30	15
7:30	10	45	15	10	15	15	0	30	45	15
7:35	35	25	25	5	30	15	10	50	20	15
7:40	25	15	40	15	15	0	15	15	30	40
7:45	35	30	40	20	15	20	30	10	25	30
7:50	40	30	20	10	30	20	10	35	30	35
7:55	40	30	55	10	15	20	10	30	15	20
8:00	35	15	20	10	5	10	20	15	25	20
8:05	25	15	40	20	20	15	15	30	25	15
8:10	55	30	40	20	15	25	0	40	35	20
8:15	30	35	30	20	15	10	5	40	20	15
8:20	30	20	30	20	30	45	5	25	15	40
8:25	30	35	70	25	20	5	5	40	50	45
8:30	30	20	45	40	15	25	20	30	15	10
8:35	45	30	15	10	5	30	15	30	20	15
8:40	35	15	25	10	5	5	5	25	15	30
8:45	35	35	50	15	30	5	0	40	15	15
8:50	30	20	20	10	5	0	0	10	30	25
8:55	30	15	35	10	35	0	0	15	15	30
9:00	25	35	20	15	15	0	5	10	10	10
9:05	35	25	20	5	15	5	0	35	30	20
9:10	25	15	20	10	0	10	5	15	30	15
9:15	40	20	25	10	15	0	0	35	25	25
9:20	15	15	5	5	15	10	10	30	25	15
9:25	40	35	55	15	45	5	5	20	10	15
9:30	25	25	15	0	15	15	20	20	20	15
9:35	35	20	35	10	15	0	0	10	20	15
9:40	20	40	15	5	5	0	5	15	35	10
9:45	25	10	25	10	0	5	0	20	15	20
9:50	30	30	30	0	15	5	0	20	30	25
9:55	25	15	10	0	15	0	5	5	15	10
16:00 - 19:00										
16:00	35	20	15	0	10	25	15	10	15	25
16:05	35	30	15	0	15	15	25	45	25	30
16:10	20	40	35	0	15	0	0	30	15	25
16:15	30	35	25	0	10	15	5	55	10	15
16:20	10	20	10	0	5	0	0	15	30	20
16:25	35	40	20	5	20	20	5	30	30	10
16:30	5	5	10	5	15	10	0	30	10	25
16:35	20	35	20	0	15	15	0	15	25	15
16:40	15	30	15	0	5	50	5	25	20	30
16:45	30	15	20	15	15	0	5	35	10	30
16:50	15	15	20	0	30	20	5	15	15	15
16:55	15	0	15	15	10	15	15	20	10	15
17:00	25	10	15	5	5	10	10	50	15	20
17:05	15	20	45	10	5	0	20	60	20	30
17:10	15	20	20	10	5	30	20	10	15	15
17:15	35	30	10	5	20	15	20	65	25	10
17:20	35	15	50	5	15	15	20	35	30	30
17:25	20	25	15	20	15	0	5	40	20	15
17:30	20	15	25	0	0	15	5	25	30	20
17:35	20	20	50	15	0	0	10	30	20	20
17:40	35	25	20	5	15	5	5	15	20	20
17:45	30	25	10	5	0	0	10	15	35	15
17:50	25	25	30	0	15	0	5	35	15	25
17:55	20	20	15	20	5	40	10	20	15	15
18:00	20	5	15	10	5	10	5	55	10	25
18:05	25	10	25	15	5	0	0	55	25	15
18:10	15	25	35	10	15	15	0	40	40	40
18:15	15	5	30	10	30	0	15	10	15	10
18:20	30	10	15	0	0	0	0	15	10	15
18:25	15	15	25	5	15	0	0	5	35	20
18:30	30	15	20	5	15	0	0	10	30	10
18:35	30	30	15	0	15	0	0	30	30	5
18:40	30	30	20	0	0	5	10	25	20	25
18:45	35	10	15	0	5	0	0	20	20	15
18:50	25	0	15	0	0	0	15	30	15	15
18:55	30	5	10	0	5	0	0	15	5	10

Average pcu lengt 5.75

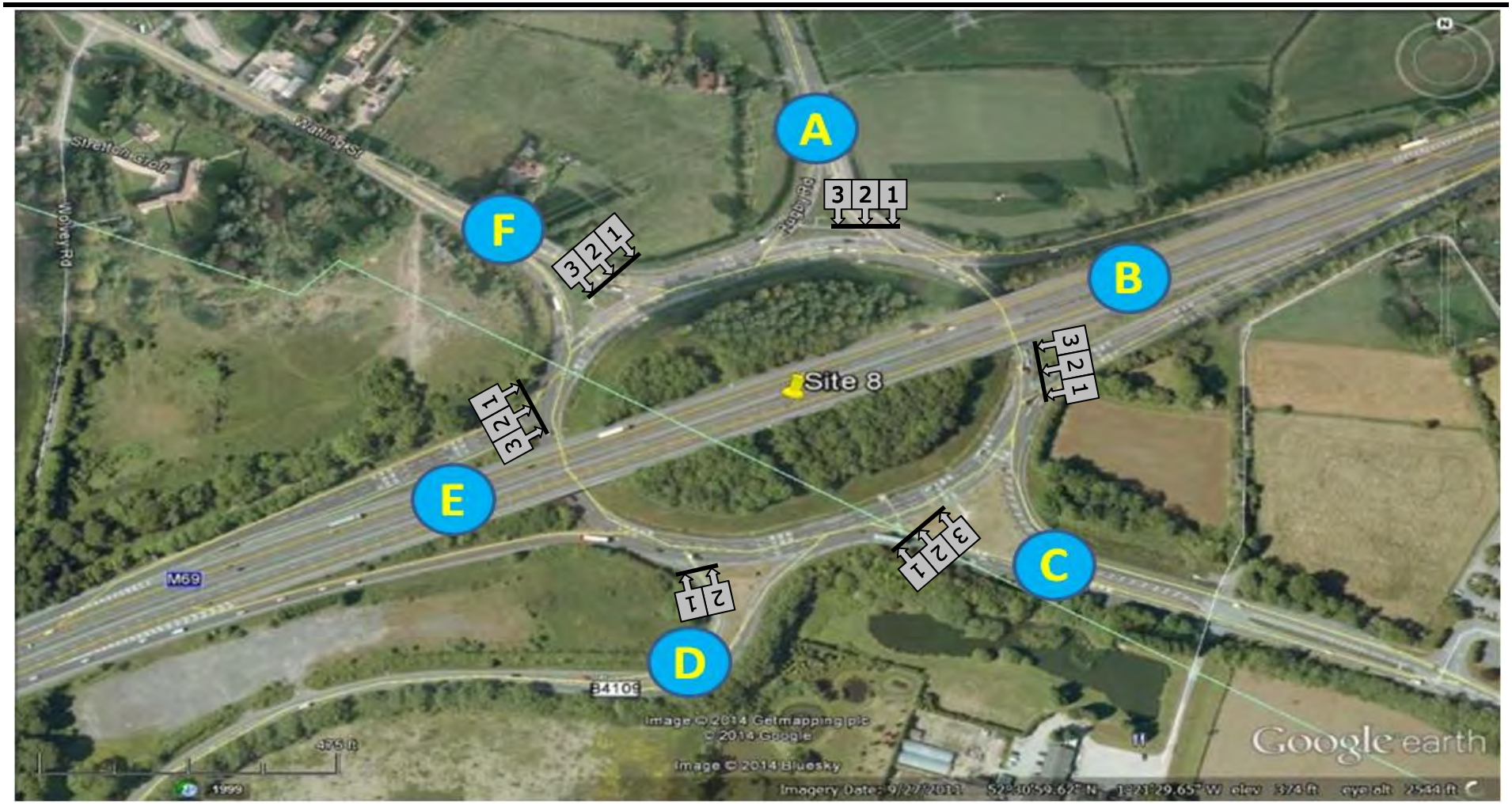
Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **7**
Location: **A426 / M6 Junction**
Date: **15 May 2014, Thursday**

Max Queue in pcus (Conversion 1pcu = 5.75 metres)

Time	Arm A		Arm B			Arm C		Arm D		
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 1	Lane 2	Lane 3
07:00 - 10:00										
7:00	3	3	2	0	0	0	0	6	3	3
7:05	3	2	3	1	5	1	2	7	4	2
7:10	4	4	4	3	3	3	0	3	5	3
7:15	5	2	4	3	3	3	2	1	5	4
7:20	4	6	5	3	5	6	3	4	5	3
7:25	7	5	4	2	3	3	3	7	5	3
7:30	2	8	3	2	3	3	0	5	8	3
7:35	6	4	4	1	5	3	2	9	3	3
7:40	4	3	7	3	3	0	3	3	5	7
7:45	6	5	7	3	3	3	5	2	4	5
7:50	7	5	3	2	5	3	2	6	5	6
7:55	7	5	10	2	3	3	2	5	3	3
8:00	6	3	3	2	1	2	3	3	4	3
8:05	4	3	7	3	3	3	3	5	4	3
8:10	10	5	7	3	3	4	0	7	6	3
8:15	5	6	5	3	3	2	1	7	3	3
8:20	5	3	5	3	5	8	1	4	3	7
8:25	5	6	12	4	3	1	1	7	9	8
8:30	5	3	8	7	3	4	3	5	3	2
8:35	8	5	3	2	1	5	3	5	3	3
8:40	6	3	4	2	1	1	1	4	3	5
8:45	6	6	9	3	5	1	0	7	3	3
8:50	5	3	3	2	1	0	0	2	5	4
8:55	5	3	6	2	6	0	0	3	3	5
9:00	4	6	3	3	3	0	1	2	2	2
9:05	6	4	3	1	3	1	0	6	5	3
9:10	4	3	3	2	0	2	1	3	5	3
9:15	7	3	4	2	3	0	0	6	4	4
9:20	3	3	1	1	3	2	2	5	4	3
9:25	7	6	10	3	8	1	1	3	2	3
9:30	4	4	3	0	3	3	3	3	3	3
9:35	6	3	6	2	3	0	0	2	3	3
9:40	3	7	3	1	1	0	1	3	6	2
9:45	4	2	4	2	0	1	0	3	3	3
9:50	5	5	5	0	3	1	0	3	5	4
9:55	4	3	2	0	3	0	1	1	3	2
16:00 - 19:00										
16:00	6	3	3	0	2	4	3	2	3	4
16:05	6	5	3	0	3	3	4	8	4	5
16:10	3	7	6	0	3	0	0	5	3	4
16:15	5	6	4	0	2	3	1	10	2	3
16:20	2	3	2	0	1	0	0	3	5	3
16:25	6	7	3	1	3	3	1	5	5	2
16:30	1	1	2	1	3	2	0	5	2	4
16:35	3	6	3	0	3	3	0	3	4	3
16:40	3	5	3	0	1	9	1	4	3	5
16:45	5	3	3	3	3	0	1	6	2	5
16:50	3	3	3	0	5	3	1	3	3	3
16:55	3	0	3	3	2	3	3	3	2	3
17:00	4	2	3	1	1	2	2	9	3	3
17:05	3	3	8	2	1	0	3	10	3	5
17:10	3	3	3	2	1	5	3	2	3	3
17:15	6	5	2	1	3	3	3	11	4	2
17:20	6	3	9	1	3	3	3	6	5	5
17:25	3	4	3	3	3	0	1	7	3	3
17:30	3	3	4	0	0	3	1	4	5	3
17:35	3	3	9	3	0	0	2	5	3	3
17:40	6	4	3	1	3	1	1	3	3	3
17:45	5	4	2	1	0	0	2	3	6	3
17:50	4	4	5	0	3	0	1	6	3	4
17:55	3	3	3	3	1	7	2	3	3	3
18:00	3	1	3	2	1	2	1	10	2	4
18:05	4	2	4	3	1	0	0	10	4	3
18:10	3	4	6	2	3	3	0	7	7	7
18:15	3	1	5	2	5	0	3	2	3	2
18:20	5	2	3	0	0	0	0	3	2	3
18:25	3	3	4	1	3	0	0	1	6	3
18:30	5	3	3	1	3	0	0	2	5	2
18:35	5	5	3	0	3	0	0	5	5	1
18:40	5	5	3	0	0	1	2	4	3	4
18:45	6	2	3	0	1	0	0	3	3	3
18:50	4	0	3	0	0	0	3	5	3	3
18:55	5	1	2	0	1	0	0	3	1	2

Time	Arm A	Arm B	Arm C	Arm D
07:30 - 08:30				
7:30	10	8	3	16
7:35	10	10	5	15
7:40	7	13	3	15
7:45	11	13	8	11
7:50	12	10	5	17
7:55	12	15	5	11
8:00	9	6	5	10
8:05	7	13	6	12
8:10	15	13	4	16
8:15	11	11	3	13
8:20	8	13	9	14
8:25	11	19	2	24
8:30	8	18	7	10
Average Queue	**10**	**12**	**5**	**14**
17:00 - 18:00				
17:00	6	5	4	15
17:05	6	11	3	18
17:10	6	6	8	8
17:15	11	6	6	17
17:20	9	13	6	16
17:25	7	9	1	13
17:30	6	4	4	12
17:35	6	12	2	11
17:40	10	7	2	9
17:45	9	3	2	12
17:50	8	8	1	13
17:55	6	7	9	9
18:00	4	6	3	16
Average Queue	**7**	**7**	**4**	**13**

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **8**
Location: **M69 / A5 Roundabout**



Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **8**
Location: **M69 / A5 Roundabout**
Date: **15 May 2014, Thursday**

max Queue in metres

Time	Arm A			Arm B			Arm C			Arm D		Arm E			Arm F		
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3
07:00 - 10:00																	
7:00	10	25	60	5	35	10	40	20	15	0	10	40	20	0	20	50	25
7:05	15	30	85	20	30	20	60	45	25	5	10	35	10	35	25	60	30
7:10	15	30	85	5	10	25	45	45	55	0	15	45	15	15	40	85	20
7:15	15	50	125	20	35	40	50	50	30	10	40	55	5	10	65	55	35
7:20	10	35	65	15	10	30	45	55	30	10	45	50	10	20	50	80	45
7:25	15	40	55	30	35	15	35	15	20	0	20	40	20	10	50	55	35
7:30	15	35	85	20	35	25	60	90	40	5	60	65	10	25	50	80	40
7:35	15	50	90	20	50	30	40	55	45	20	45	50	20	35	60	85	65
7:40	20	65	85	15	35	35	55	70	45	15	60	105	30	25	50	65	35
7:45	35	50	45	30	30	30	50	35	25	25	65	95	35	25	65	40	30
7:50	5	40	45	25	25	25	30	75	60	40	80	45	35	10	50	75	0
7:55	15	55	55	25	30	20	50	50	55	5	50	70	20	40	45	75	55
8:00	15	50	35	15	30	20	50	40	40	10	80	40	15	60	30	70	35
8:05	10	30	60	15	40	25	40	40	25	10	25	60	45	15	70	35	35
8:10	25	45	65	20	40	15	20	70	30	15	15	50	30	30	80	80	25
8:15	15	50	50	30	40	25	20	70	55	25	65	60	15	35	30	75	40
8:20	10	50	55	20	20	20	20	40	20	10	55	85	25	10	40	95	40
8:25	5	45	50	50	35	10	45	30	30	65	60	80	20	15	40	50	35
8:30	5	50	30	15	25	15	50	50	35	5	20	30	15	15	45	55	15
8:35	10	40	20	10	20	25	20	55	40	25	25	50	15	20	10	70	30
8:40	5	20	25	5	35	10	20	30	30	20	35	40	10	65	20	60	30
8:45	10	25	35	20	20	15	20	45	30	0	25	25	10	20	35	40	25
8:50	5	40	35	35	30	20	20	75	20	20	45	30	10	45	30	35	30
8:55	25	30	50	45	15	15	25	25	15	30	20	40	5	15	55	70	20
9:00	15	25	35	15	20	5	25	25	15	10	15	25	15	30	20	80	25
9:05	10	40	25	40	45	25	5	20	15	5	15	95	5	10	25	90	50
9:10	15	35	40	10	20	15	20	20	15	5	25	30	10	30	20	40	20
9:15	5	20	25	20	30	5	35	20	20	10	10	20	5	15	20	45	35
9:20	5	25	35	15	15	5	15	25	25	5	5	20	10	30	25	25	20
9:25	15	15	20	10	25	5	10	15	20	5	15	25	20	15	25	35	15
9:30	15	20	25	5	30	30	5	30	20	5	5	30	5	10	30	25	10
9:35	5	10	25	5	15	10	5	40	35	5	5	20	5	15	35	30	15
9:40	15	15	30	15	10	10	20	55	35	5	10	35	45	15	30	55	40
9:45	5	15	35	10	30	10	40	50	10	20	20	55	15	20	10	55	20
9:50	5	10	10	5	30	15	5	20	15	0	10	45	5	10	20	40	15
9:55	20	10	20	20	20	10	35	20	10	0	20	45	10	15	5	20	15
16:00 - 19:00																	
16:00	5	25	30	10	25	10	25	30	20	0	20	35	10	20	25	25	25
16:05	15	25	15	10	20	10	25	50	30	5	20	50	10	10	10	40	45
16:10	30	35	25	15	15	10	10	35	40	10	5	40	15	35	50	35	10
16:15	10	30	20	10	25	10	10	40	20	5	30	25	20	10	25	50	35
16:20	10	25	15	30	30	20	5	45	35	10	15	35	30	40	15	45	30
16:25	0	40	25	30	20	20	5	40	15	0	15	45	15	15	25	35	15
16:30	10	20	25	20	15	15	15	20	25	10	15	50	15	25	20	60	30
16:35	20	20	20	40	15	15	15	45	20	10	10	30	10	20	30	55	35
16:40	5	35	20	20	25	10	20	40	25	15	20	25	25	25	25	35	30
16:45	10	10	30	30	20	15	5	55	40	5	5	40	15	45	40	80	30
16:50	10	25	20	10	10	15	5	35	15	25	90	60	45	20	65	70	30
16:55	20	25	30	25	15	10	10	30	30	15	15	55	15	30	30	45	30
17:00	5	35	30	25	10	10	15	20	30	15	20	60	25	25	40	50	35
17:05	10	15	30	25	45	20	40	30	15	5	10	55	20	50	20	65	50
17:10	5	20	25	40	35	25	10	20	25	15	35	35	15	30	55	40	30
17:15	5	50	25	25	25	10	10	50	20	15	15	50	20	30	40	30	30
17:20	15	30	35	25	30	25	35	50	25	5	40	55	15	30	30	50	35
17:25	10	30	40	15	30	15	35	55	35	5	10	45	25	25	35	65	20
17:30	15	20	30	30	25	15	10	45	50	5	15	45	15	35	40	30	20
17:35	15	55	25	25	25	10	40	35	40	5	25	45	20	50	30	45	35
17:40	5	30	25	45	20	10	5	30	25	5	20	0	0	40	40	25	
17:45	5	25	25	25	20	20	25	20	55	0	15	50	35	35	20	50	25
17:50	10	35	10	10	20	20	20	60	20	15	10	50	20	25	35	40	35
17:55	0	20	20	20	10	20	40	45	25	5	10	60	10	45	35	35	25
18:00	20	30	15	5	10	20	25	70	20	30	15	55	15	20	10	60	60
18:05	5	30	20	15	20	15	15	50	25	5	5	40	15	15	30	35	75
18:10	5	15	35	5	20	10	30	55	25	10	5	45	10	20	30	35	25
18:15	5	25	20	20	15	5	15	20	45	5	10	75	20	15	20	25	10
18:20	5	35	25	5	15	15	10	35	35	5	5	35	20	35	20	45	10
18:25	10	30	25	15	20	20	20	35	45	5	10	30	25	10	30	30	25
18:30	5	15	20	5	25	5	10	25	25	10	20	50	20	15	15	50	40
18:35	20	10	15	20	30	5	15	10	10	5	10	30	10	30	25	45	25
18:40	15	15	15	5	15	0	5	25	15	5	10	45	20	20	15	25	20
18:45	0	15	10	15	20	5	15	15	15	0	15	35	0	10	15	25	5
18:50	5	15	20	20	10	10	15	20	20	0	5	30	10	15	5	50	15
18:55	0	40	45	5	25	5	20	65	50	0	5	30	10	15	20	20	0

Average pcu lengt 5.75

Project Number: **TSP11713**
Project Name: **Lutterworth**
Survey Type: **Queue Length Survey**
Site No: **8**
Location: **M69 / A5 Roundabout**
Date: **15 May 2014, Thursday**

Max Queue in pcus (Conversion 1pcu = 5.75 metres)

Time	Arm A			Arm B			Arm C			Arm D		Arm E			Arm F		
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3
07:00 - 10:00																	
7:00	2	4	10	1	6	2	7	3	3	0	2	7	3	0	3	9	4
7:05	3	5	15	3	5	3	10	8	4	1	2	6	2	6	4	10	5
7:10	3	5	15	1	2	4	8	8	10	0	3	8	3	3	7	15	3
7:15	3	9	22	3	6	7	9	9	5	2	7	10	1	2	11	10	6
7:20	2	6	11	3	2	5	8	10	5	2	8	9	2	3	9	14	8
7:25	3	7	10	5	6	3	6	3	3	0	3	7	3	2	9	10	6
7:30	3	6	15	3	6	4	10	16	7	1	10	11	2	4	9	14	7
7:35	3	9	16	3	9	5	7	10	8	3	8	9	3	6	10	15	11
7:40	3	11	15	3	6	6	10	12	8	3	10	18	5	4	9	11	6
7:45	6	9	8	5	5	5	9	6	4	4	11	17	6	4	11	7	5
7:50	1	7	8	4	4	4	5	13	10	7	14	8	6	2	9	13	0
7:55	3	10	10	4	5	3	9	9	10	1	9	12	3	7	8	13	10
8:00	3	9	6	3	5	3	9	7	7	2	14	7	3	10	5	12	6
8:05	2	5	10	3	7	4	7	7	4	2	4	10	8	3	12	6	6
8:10	4	8	11	3	7	3	3	12	5	3	3	9	5	5	14	14	4
8:15	3	9	9	5	7	4	3	12	10	4	11	10	3	6	5	13	7
8:20	2	9	10	3	3	3	3	7	3	2	10	15	4	2	7	17	7
8:25	1	8	9	9	6	2	8	5	5	11	10	14	3	3	7	9	6
8:30	1	9	5	3	4	3	9	9	6	1	3	5	3	3	8	10	3
8:35	2	7	3	2	3	4	3	10	7	4	4	9	3	3	2	12	5
8:40	1	3	4	1	6	2	3	5	5	3	6	7	2	11	3	10	5
8:45	2	4	6	3	3	3	3	8	5	0	4	4	2	3	6	7	4
8:50	1	7	6	6	5	3	3	13	3	3	8	5	2	8	5	6	5
8:55	4	5	9	8	3	3	4	4	3	5	3	7	1	3	10	12	3
9:00	3	4	6	3	3	1	4	4	3	2	3	4	3	5	3	14	4
9:05	2	7	4	7	8	4	1	3	3	1	3	17	1	2	4	16	9
9:10	3	6	7	2	3	3	3	7	3	1	4	5	2	5	3	7	3
9:15	1	3	4	3	5	1	6	3	3	2	2	3	1	3	3	8	6
9:20	1	4	6	3	3	1	3	4	4	1	1	3	2	5	4	4	3
9:25	3	3	3	2	4	1	2	8	3	1	3	4	3	3	4	6	3
9:30	3	3	4	1	5	5	1	5	3	1	1	5	1	2	5	4	2
9:35	1	2	4	1	3	2	1	7	6	1	1	3	1	3	6	5	3
9:40	3	3	5	3	2	2	3	10	6	1	2	6	8	3	5	10	7
9:45	1	3	6	2	5	2	7	9	2	3	3	10	3	3	2	10	3
9:50	1	2	2	1	5	3	1	3	3	0	2	8	1	2	3	7	3
9:55	3	2	3	3	3	2	6	3	2	0	3	8	2	3	1	3	3
16:00 - 19:00																	
16:00	1	4	5	2	4	2	4	5	3	0	3	6	2	3	4	4	4
16:05	3	4	3	2	3	2	4	9	5	1	3	9	2	2	2	7	8
16:10	5	6	4	3	3	2	2	6	7	2	1	7	3	6	9	6	2
16:15	2	5	3	2	4	2	2	7	3	1	5	4	3	2	4	9	6
16:20	2	4	3	5	5	3	1	8	6	2	3	6	5	7	3	8	5
16:25	0	7	4	5	3	3	1	7	3	0	3	8	3	3	4	6	3
16:30	2	3	4	3	3	3	3	3	4	2	3	9	3	4	3	10	5
16:35	3	3	3	7	3	3	3	8	3	2	2	5	2	3	5	10	6
16:40	1	6	3	3	4	2	3	7	4	3	3	4	4	4	4	6	5
16:45	2	2	5	5	3	3	1	10	7	1	1	7	3	8	7	14	5
16:50	2	4	3	2	2	3	1	6	3	4	16	10	8	3	11	12	5
16:55	3	4	5	4	3	2	2	5	5	3	3	10	3	5	5	8	5
17:00	1	6	5	4	2	2	3	3	5	3	3	10	4	4	7	9	6
17:05	2	3	5	4	8	3	7	5	3	1	2	10	3	9	3	11	9
17:10	1	3	4	7	6	4	2	3	4	3	6	6	3	5	10	7	5
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18:55	0	7	8	1	4	1	3	11	9	0	1	5	2	3	3	3	0

Time	Arm A	Arm B	Arm C	Arm D	Arm E	Arm F
	All Lanes	All Lanes	All Lanes	All Lanes	All Lanes	All Lanes
07:30 - 08:30						
7:30	24	13	33	11	17	30
7:35	28	17	25	11	18	36
7:40	29	15	30	13	27	26
7:45	23	15	19	15	27	23
7:50	16	12	28	21	16	22
7:55	23	12	28	10	22	31
8:00	18	11	23	16	20	23
8:05	17	14	18	6	21	24
8:10	23	13	20	6	19	32
8:15	21	16	25	15	19	25
8:20	21	9	13	12	21	31
8:25	18	17	18	21	20	22
8:30	15	10	24	4	11	21
Average Queue	**21**	**13**	**23**	**12**	**20**	**27**
17:00 - 18:00						
17:00	12	8	11	6	18	22
17:05	10	15	15	3	22	23
17:10	8	17	9	9	14	22
17:15	14	10	14	6	17	17
17:20	14	13	19	8	18	20
17:25	14	11	22	3	16	20
17:30	11	12	19	4	17	15
17:35	17	10	20	5	20	19
17:40	10	13	10	4	0	18
17:45	9	10	17	3	21	16
17:50	10	8	16	5	16	19
17:55	6	8	15	3	20	16
18:00	11	6	19	8	16	22
Average Queue	**11**	**11**	**16**	**21**	**17**	**19**

Magna Park Extension: Hybrid Application
Transport Assessment

Appendix P – ATC Survey Report

URS

Magna Park Lutterworth

Traffic Survey Report

47066811

Prepared for:
Gazeley UK Ltd

UNITED KINGDOM & IRELAND

REVISION SCHEDULE					
Rev	**Date**	**Details**	**Prepared by**	**Reviewed by**	**Approved by**
1	August 2013	Final Report	Jon Ashcroft Associate	Paget Fulcher Technical Director	Paget Fulcher Technical Director

URS Infrastructure & Environment UK Limited
URS House, Horne Lane
Bedford
MK40 1TS
United Kingdom
Tel: +44 (0)1234 349 641
Fax: +44 (0)1234 216 268
www.ursglobal.com

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The methodology adopted and the sources of information used by URS in providing its services are outlined in this Report. The work described in this Report was undertaken between [1 June 2013] and [31 August 2013] and is based on the conditions encountered and the information available during the said period of time. The scope of this Report and the services are accordingly factually limited by these circumstances.

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TABLE OF CONTENTS

1 INTRODUCTION 1
1.1 General 1
2 MAGNA PARK 2
2.1 Existing Site 2
3 SURVEY DATA 3
3.1 ATC Surveys 3
3.2 Summary of Results 3
4 SUMMARY AND CONCLUSIONS 8

1 INTRODUCTION

1.1 General

1.1.1 Gazeley UK Ltd has commissioned URS to undertake Automatic Traffic Counts (ATC) at a variety of locations surrounding Magna Park near Lutterworth. The purpose of the surveys is to establish whether the shift changeover at Magna Park coincides with an increase in traffic volumes on roads that pass through some local villages, particularly those situated to the north. Residents of Bitteswell are especially concerned about the impact of Magna Park and there is a local perception that large numbers of Magna Park employees cut through the village to avoid travelling through Lutterworth and on the A4303 Lutterworth Bypass.

1.1.2 Magna Park is one of the largest dedicated distribution developments in Europe. It occupies some 200 hectares and provides over 8 million sq.ft. (750,000m^2) of floorspace. The site has been established for some 20 years, comprises over 30 units and provides in the region of 6,000 jobs. The location of Magna Park is identified on a plan contained within **Appendix A**.

1.1.3 To establish whether the shift patterns at Magna Park result in a corresponding increase in traffic flows through neighbouring villages, a number of ATCs were commissioned. These were located in strategic locations within Bitteswell and on minor roads to the east and west of the A5 to effectively form a cordon to the north of Magna Park.

1.1.4 Two sites to the east of the M1 in the village of South Kilworth were also selected on the basis that they are far enough away from Magna Park not to be significantly influenced by the shift changeover. Traffic flows through the village of South Kilworth provide a useful comparison with other data collected locally and should emphasise any discrepancies in traffic flows at sites that are closer to Magna Park during the shift changeover.

1.1.5 At the same time ATCs were also located at the two access points to Magna Park (Hunter Boulevard and Shackelton Way). This provided a continuous record of vehicles entering and leaving Magna Park to help determine whether the periods of peak activity that occurs during the shift changeover coincides with atypical increases in traffic flows through the villages to the north.

2 MAGNA PARK

2.1 Existing Site

2.1.1 Gazeley has unrivalled experience in the provision, operation and management of medium to large distribution employment parks throughout the UK and the largest site is Magna Park near Lutterworth. Over the past 25 years the site has developed to become Europe's largest dedicated distribution park and currently provides over 8 million sq.ft. of floorspace.

2.1.2 There are currently over 30 units occupied at Magna Park. The Park is home to a diverse range of occupiers and many of the units function as national or regional distribution centres though some perform a combination of other functions including operating as Headquarters or administrative centres. Occupiers include, Argos, ASDA, Britvic, BT, Disney, Nissan and other top UK, European and Global businesses.

2.1.3 Magna Park benefits from a central location within the UK and has excellent connections to the Motorway network with Junction 20 of the M1 and Junction 1 of the M6 reachable in less than 5 minutes.

2.1.4 Magna Park has an established internal highway network, which although not adopted by the Highway Authority, has been constructed to adoptable standards. The internal road network operates efficiently at all times of the day with most of the roads constructed to dual carriageway standard. On-street parking is not permitted anywhere within Magna Park and this is strictly enforced by the Park Management. The adopted highway begins at the A4303, Lutterworth Bypass, which provides a direct link to the M1 and the A5.

2.1.5 Magna Park has 24 hour unrestricted operation with most occupiers operating standard continental shift patterns where shift changes occur at 6am, 2pm and 10pm. Referring forward to the ATC data collected at the accesses to Magna Park, it is apparent however that some companies change shifts an hour later than the standard model at 7am, 3pm and 11pm. Presumably this is to spread the load on the highway network in and around the Park.

2.1.6 A roundabout on the Lutterworth Bypass provides the main access to Magna Park. It has four arms with the northern arm, Hunter Boulevard, providing access to the main part of the Park. Hunter Boulevard is a dual carriageway. Approximately 400 metres to the east there is an alternative access to Magna Park via Shackelton Way. This is a single carriageway and forms a left in/ left out junction with the A4303.

2.1.7 The southern arm of the main access roundabout provides access to the new Headquarters for George Clothing and to a separate unit occupied by CERT Drinks Network. Traffic movements to these units were not included in the survey.

3 SURVEY DATA

3.1 ATC Surveys

3.1.1 To establish whether the shift patterns at Magna Park coincide with an increase in traffic flows through neighbouring villages, a number of ATCs were commissioned. A plan contained within **Appendix B** shows the exact location of the ATCs.

3.1.2 Sites denoted by a red square are permanent count sites maintained by Leicestershire County Council (LCC). Sites denoted by a green square are sites maintained by Warwickshire County Council (WCC) while a blue square denotes temporary ATC sites that were commissioned directly by Gazeley.

3.1.3 For the purposes of this analysis LCC has provided data for all sites denoted by a red square and has liaised with WCC to secure data from the two sites to the west of the A5. K&M Traffic Surveys were commissioned to collect data at the temporary sites.

3.1.4 The ATCs shown on the plan contained in **Appendix B** were activated between Monday 3 June and Sunday 30 June 2013 providing 24 hour data for a continuous four week period. Vehicles were classified based on axle length although for the purposes of this analysis vehicle types have been combined to show the general trend for all vehicles.

3.2 Summary of Results

3.2.1 The ATC data has been summarised in a sequence of Excel charts which are presented in **Appendix C**. The first set of charts show the general pattern of arrivals and departures at Magna Park while subsequent charts show the total flow by direction at all ATC sites identified on the plan in **Appendix B**. A brief commentary on the charts is set out below.

Arrivals at Magna Park – All Vehicles

3.2.2 The first four charts show the total number of arrivals at Magna Park and as can be seen during the weekdays there were distinct peaks during the hour prior to and the hour following the traditional shift changeover (6am, 2pm and 10pm). A tendency for a large number of arrivals during the hour following the traditional shift changeover implies that some companies operate a shift pattern that starts an hour later than the traditional model probably to avoid overloading the road network in and around the Park.

3.2.3 There were also peaks during the traditional morning peak hours (7am to 8am and 8am to 9am) which probably consisted mostly of management and administrative staff working more standard office hours.

3.2.4 Peaks at the shift changeover were also evident at the weekend although the number of arrivals was significantly lower to reflect a much smaller workforce on a Saturday and a Sunday.

Departures at Magna Park – All Vehicles

3.2.5 The next four charts show the total number of departures from Magna Park and as can be seen during the weekdays there were identifiable peaks during the two hours after the traditional shift changeover. This again implies that some companies stagger their working arrangements to spread the load on the network.

3.2.6 There were also peaks during the traditional evening peak hours (5pm to 6pm and 6pm to 7pm) which is likely to have consisted mostly of management and administrative staff finishing work for the day.

3.2.7 Peaks at the shift changeover were also evident at the weekend although the number of departures was significantly lower to reflect a much smaller workforce on a Saturday and a Sunday.

3.2.8 In summary the data clearly identifies peaks in demand at 6am, 2pm and 10pm confirming that flows into and out of Magna Park are heavily influenced by the shift changeover.

LCC Site 21,408: Lutterworth Road, Bitteswell

3.2.9 This site is located on Lutterworth Road at the eastern end of the village of Bitteswell just before its junction with Bill Crane Way. The first four charts show the eastbound flow and as can be seen there was a peak during the traditional morning commuter hours and to a lesser extent during the evening commuter hours. This pattern is entirely consistent with most roads in the United Kingdom which during the week are at their busiest from 7am to 9am and 4pm to 6pm. There was no evidence of an unexpected increase in traffic flows at 6am, 2pm or 10pm which suggests that the shift changeover at Magna Park does not significantly affect traffic flows through Bitteswell.

3.2.10 The next four charts show the westbound flow and again there is no evidence that the shift changeover at Magna Park affects traffic flows through Bitteswell. The evening peak is the busiest period with around 250 vehicle movements between 5pm and 6pm.

Temporary Site 1: Ullesthorpe Road, Bitteswell

3.2.11 This site is located on Ullesthorpe Road at the western end of the village just before its junction with Woodby Lane. The first four charts show the eastbound flow and as can be seen traffic flows remained reasonably consistent from 8am to 6pm with generally between 90 and 120 vehicles per hour throughout this period. During the week there is no discernible peak and as above there is no evidence that the shift changeover at Magna Park affects traffic flows through this part of the village.

3.2.12 The next four charts show the westbound flow and the pattern is similar to that recorded in the opposite direction. During the week there was a tendency for slightly higher flows during the evening peak and again there was no evidence that the shift changeover at Magna Park affects traffic flows through the village.

LCC Site 21,413: Mere Lane, Bittesby

3.2.13 This site is located on Mere Lane close to its junction with the A5. Mere Lane forms the north western boundary of Magna Park and given its proximity to the Park it could be expected to carry reasonable levels of traffic, particularly around the shift changeover, if the minor roads to the north are being used by significant numbers of Magna Park employees to avoid travelling through Lutterworth and on the A4303.

3.2.14 However reference to the charts summarising the traffic flows at this site confirm that there was no evidence to suggest a significant increase in traffic flows on Mere Lane to coincide with the shift changeovers at Magna Park. The charts also confirm that flows on Mere Lane are low with generally less than 100 vehicles per hour in either direction throughout the day.

3.2.15 There is evidence of tidality with a discernible peak in the westbound flow between 8am and 9am and in the eastbound flow between 5pm and 6pm.

Temporary Site 2: Woodway Lane, Claybrooke Parva

3.2.16 This site is located on Woodway Lane close to its junction with the A5. Just to the east are the villages of Claybrooke Parva and Ullesthorpe. As above, Woodway Lane could be expected to carry reasonable levels of traffic if the minor roads to the north are being used by significant numbers of Magna Park employees to avoid travelling through Lutterworth and on the A4303.

3.2.17 However reference to the charts summarising the traffic flows at this site confirm that there was no evidence of a significant increase in traffic flows on Woodway Lane to coincide with the shift changeovers at Magna Park. The charts also confirm that flows on Woodway Lane are low with less than 40 vehicles per hour in either direction outside the peak commuter hours.

3.2.18 As above there is evidence of tidality with a distinct peak in the westbound flow between 8am and 9am and in the eastbound flow between 5pm and 6pm. During these periods the peak flow generally increased to between 50 and 70 vehicles per hour.

LCC Site 23,201: High Cross Road, Claybrooke Magna

3.2.19 This site is located on High Cross Road between the village of Claybrooke Magna and the A5. Reference to the charts summarising the traffic flows at this site indicates that the pattern of movement was very similar to that recorded on Woodway Lane with no evidence of a significant increase in traffic flows to coincide with the shift changeovers at Magna Park and evidence of a morning peak in a westbound direction and an evening peak in an eastbound direction.

3.2.20 The main difference with Woodway Lane is that flows on High Cross Road were much higher with peak hour flows of between 180 and 200 vehicles per hour.

LCC Site 25,136: Brookfield Way, Lutterworth

3.2.21 This site is located on Brookfield Way which bounds the town of Lutterworth to the west. Brookfield Way is a residential distributor road and forms the primary route between northern and western parts of the town and the A4303.

3.2.22 Reference to the charts summarising the traffic flows at this site show a pattern of movement that is entirely predictable of a residential distributor road with a distinct peak in a southbound direction during the morning and a peak in the opposite direction during the evening. This is consistent with residents of Lutterworth travelling towards the major routes to the south of the town during the morning peak and returning home from the south in the evening. The peak morning and evening flows were approximately 350 and 300 vehicles per hour respectively.

3.2.23 Unlike the sites on the minor roads to the north of Magna Park there is evidence of small increases in traffic flows to coincide with the shift changeovers at 6am, 2pm and 10pm. However on the basis that Brookfield Way is a residential distributor road and that a significant number of Magna Park employees are likely to live in Lutterworth, this pattern is not unexpected.

LCC Site 21,407: Coventry Road, Lutterworth

3.2.24 This site is located on Coventry Road between the A4303 and a route to the town centre which is also called Coventry Road. It is a continuation of Brookfield Way and therefore has a dual function as a residential distributor road and a primary route to the town centre from the west.

3.2.25 Reference to the charts summarising the traffic flows at this site indicates that the pattern of movement was very similar to that recorded on Brookfield Way. The main difference is that flows on Coventry Road are higher with peak hour flows of around 600 vehicles per hour.

3.2.26 There is also evidence of increases in traffic flows to coincide with the shift changeovers at Magna Park, which if anything are more pronounced than on Brookfield Way. Again this is not unexpected as Coventry Road forms part of an established route between Lutterworth and Magna Park.

WCC Site 973,878: Coal Pit Lane, Willey

3.2.27 This site is located on Coal Pit Lane just to the east of the village of Willey. It provides an alternative to the A5 from junction 1 of the M69 and from the West Midlands town of Nuneaton and surrounding areas.

3.2.28 Referring to the charts showing the westbound flow it can be seen that there is little evidence of an increase in traffic flows to coincide with the shift changeovers at Magna Park. The peak flow occurs between 5pm and 6pm when there were generally between 250 and 300 vehicles per hour. The morning peak extends from 7am to 9am when there were between 150 and 200 vehicles per hour.

3.2.29 In an eastbound direction the pattern is reversed with between 250 and 300 vehicles per hour in the morning peak and between 150 and 200 vehicles per hour during the evening peak. Unlike the westbound movement there is evidence of small increases in traffic flows to coincide with the shift changeovers at 6am, 2pm and 10pm. This suggests that Magna Park employees are more likely to use Coal Pit Lane when travelling to work than when travelling from work.

WCC Site 982,416: Coventry Road, Pailton

3.2.30 This site is located on the B4112 towards the western end of Pailton. The B4112 leads to the B4428 which provides a route to Magna Park from the west. The B4428 joins the A5 at a roundabout with the A4303 Lutterworth Bypass forming the eastern arm.

3.2.31 Referring to the charts in the appendices it can be seen that the peak hour flows in both directions were generally around 250 vehicles per hour with a tendency for the eastbound direction being slightly busier in the morning peak.

3.2.32 As above there is evidence of a small increase in traffic flows during the shift changeover in the eastbound direction but little no evidence in a westbound direction. Again this suggests that Magna Park employees are more likely to use the B4112 when travelling to work than when travelling from work.

LCC Site 21,416: Rugby Road, South Kilworth

3.2.33 This site is located on Rugby Road just to the south west of the village of South Kilworth. South Kilworth is situated to the east of the M1 and is considered to be far enough away from Magna Park not to be influenced by the shift changeover.

3.2.34 Referring to the charts in the appendices it can be seen that flows on this road are tidal with a distinct peak in the morning in a south westerly direction and a distinct peak in the evening in a north easterly direction. The morning peak is the busier of the two with generally between 120 and 140 vehicles per hour compared with between 70 and 80 vehicles per hour during the evening peak. The off-peak flow was generally between 40 and 60 vehicles per hour.

3.2.35 It is also clear that there is no evidence of any increase in traffic flows to coincide with the shift changeovers at Magna Park.

LCC Site 21,417: Welford Road, South Kilworth

3.2.36 This site is situated on Welford Road to the south east of the village of South Kilworth.

3.2.37 Referring to the charts in the appendices it can be seen that there was less evidence of peak hour tidality at this site than at the other site in South Kilworth particularly in a north westerly direction where there were generally between 60 and 80 vehicles per hour during both peaks. In a south easterly direction the morning peak was slightly busier with generally around 50 vehicles per hour compared with around 40 vehicles per hour during the evening peak. The off-peak flows in both directions were generally between 20 and 30 vehicles per hour.

3.2.38 As above there is no evidence of any increase in traffic flows to coincide with the shift changeovers at Magna Park.

4 SUMMARY AND CONCLUSIONS

4.1.1 The purpose of this analysis was to establish whether the shift changeover at Magna Park coincides with an increase in traffic volumes on roads that pass through some local villages, particularly those situated to the north. Residents of Bitteswell are especially concerned about the impact of Magna Park and there is a local perception that large numbers of Magna Park employees cut through the village to avoid travelling through Lutterworth and on the A4303 Lutterworth Bypass.

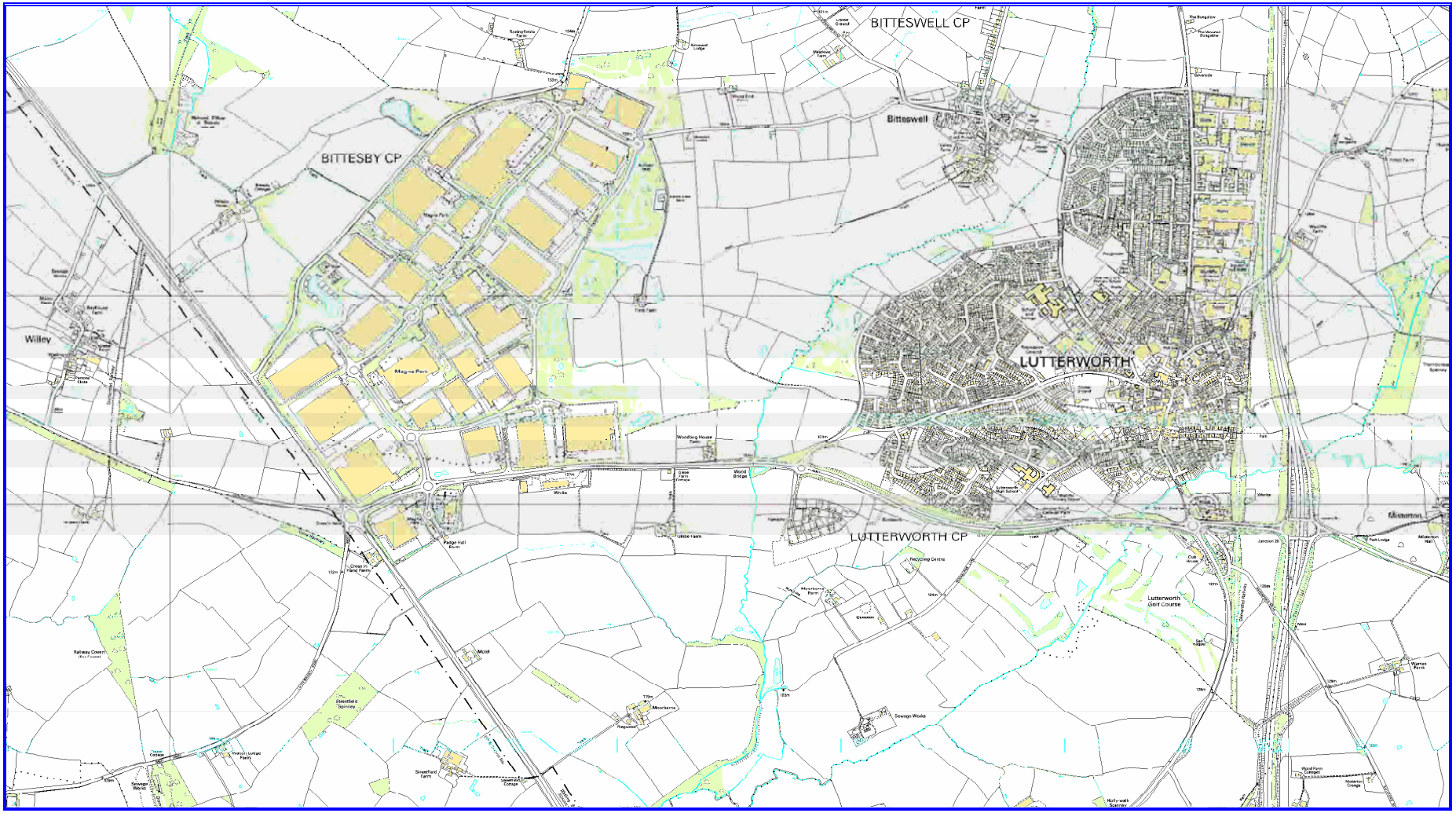
4.1.2 To establish whether the shift patterns at Magna Park coincide with an increase in traffic flows through neighbouring villages, a number of ATCs were commissioned. To increase the validity of the surveys data was collected over a continuous four week period at a range of sites.

4.1.3 Data collected at Magna Park clearly identifies peaks in demand at 6am, 2pm and 10pm confirming that flows into and out of the Park are heavily influenced by the shift changeover.

4.1.4 However at all sites to the north of Magna Park including two sites through the village of Bitteswell there was no evidence of a significant increase in traffic flows to coincide with the shift changeovers at Magna Park. This suggests that Magna Park employees are not using the minor roads to the north of the Park to travel to and from work.

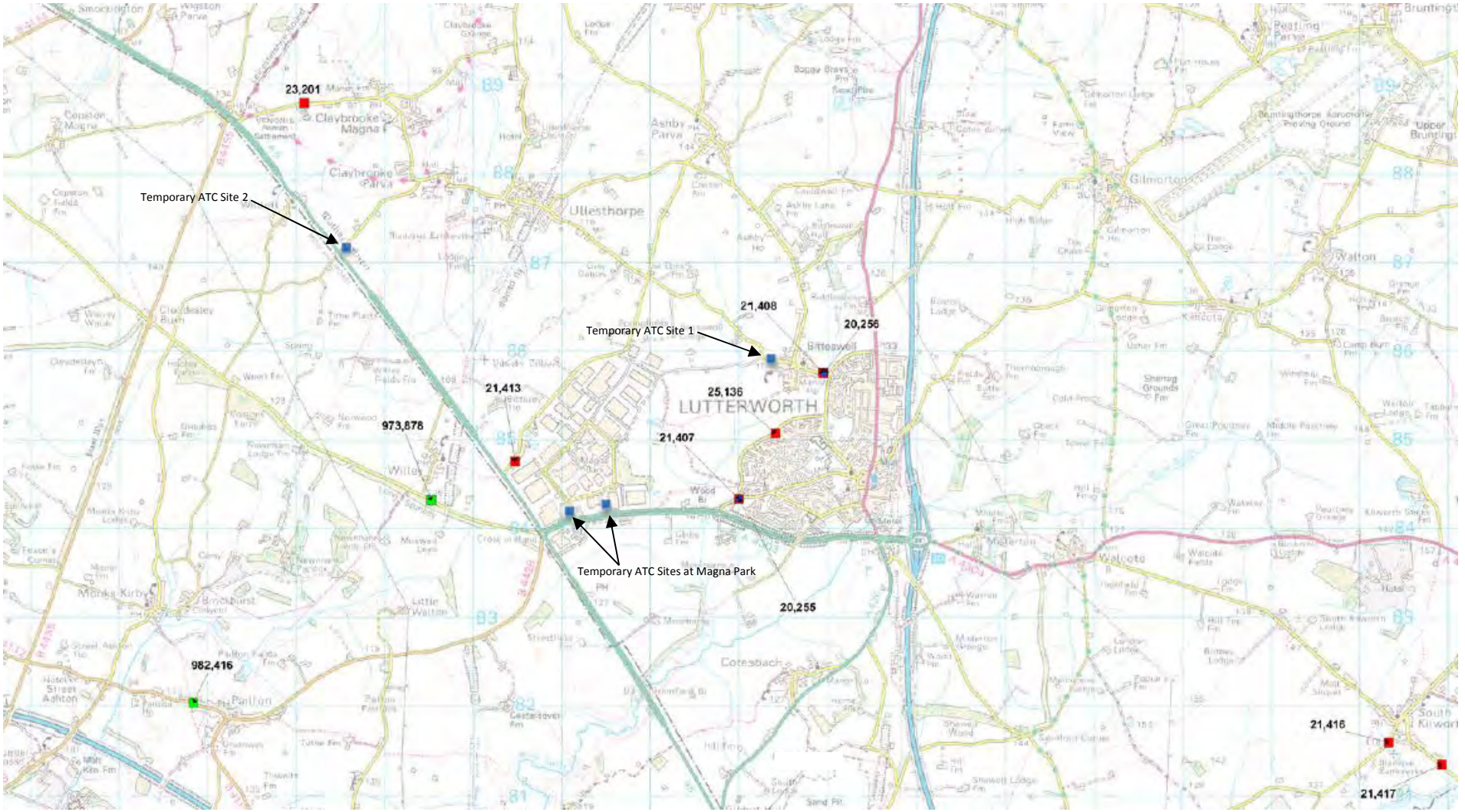
4.1.5 On Brookfield Way and Coventry Road there is evidence of small increases in traffic flows to coincide with the shift changeovers at Magna Park. However this is not unexpected as they form part of an established route between Magna Park and Lutterworth where a significant number of Park employees are likely to live.

Appendix A – Site Location Plan



Appendix A: Site Location Plan

Appendix B – Location of ATC Sites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Temporary ATC Site 2
21,408
20,256
Temporary ATC Site 1
21,413
25,136
LUTTERWORTH
973,878
21,407
Temporary ATC Sites at Magna Park
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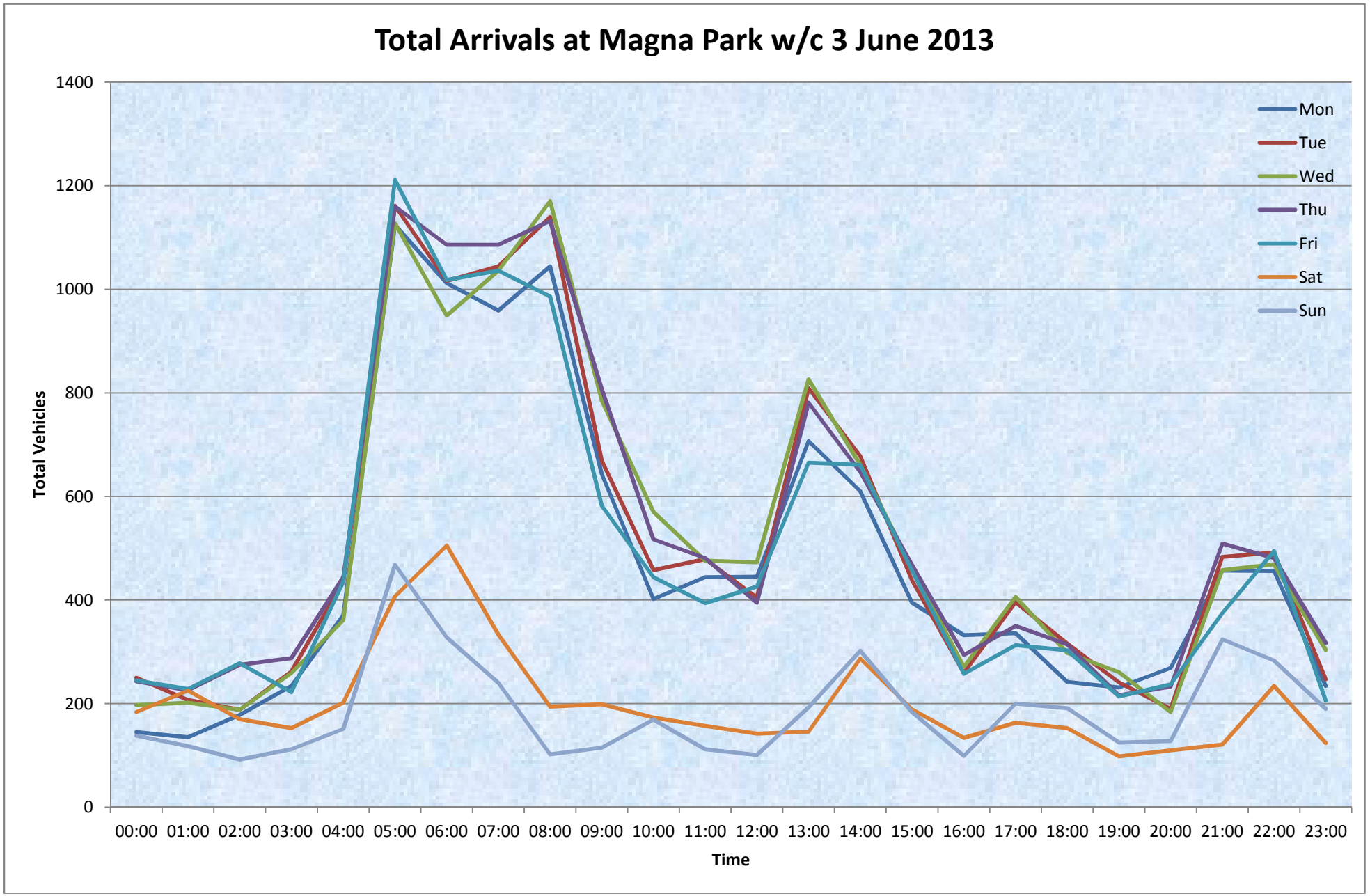
982,416
21,416
21,417

Appendix C – Summary of ATC Data

Arrivals at Magna Park – All Vehicles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600
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200
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16:00
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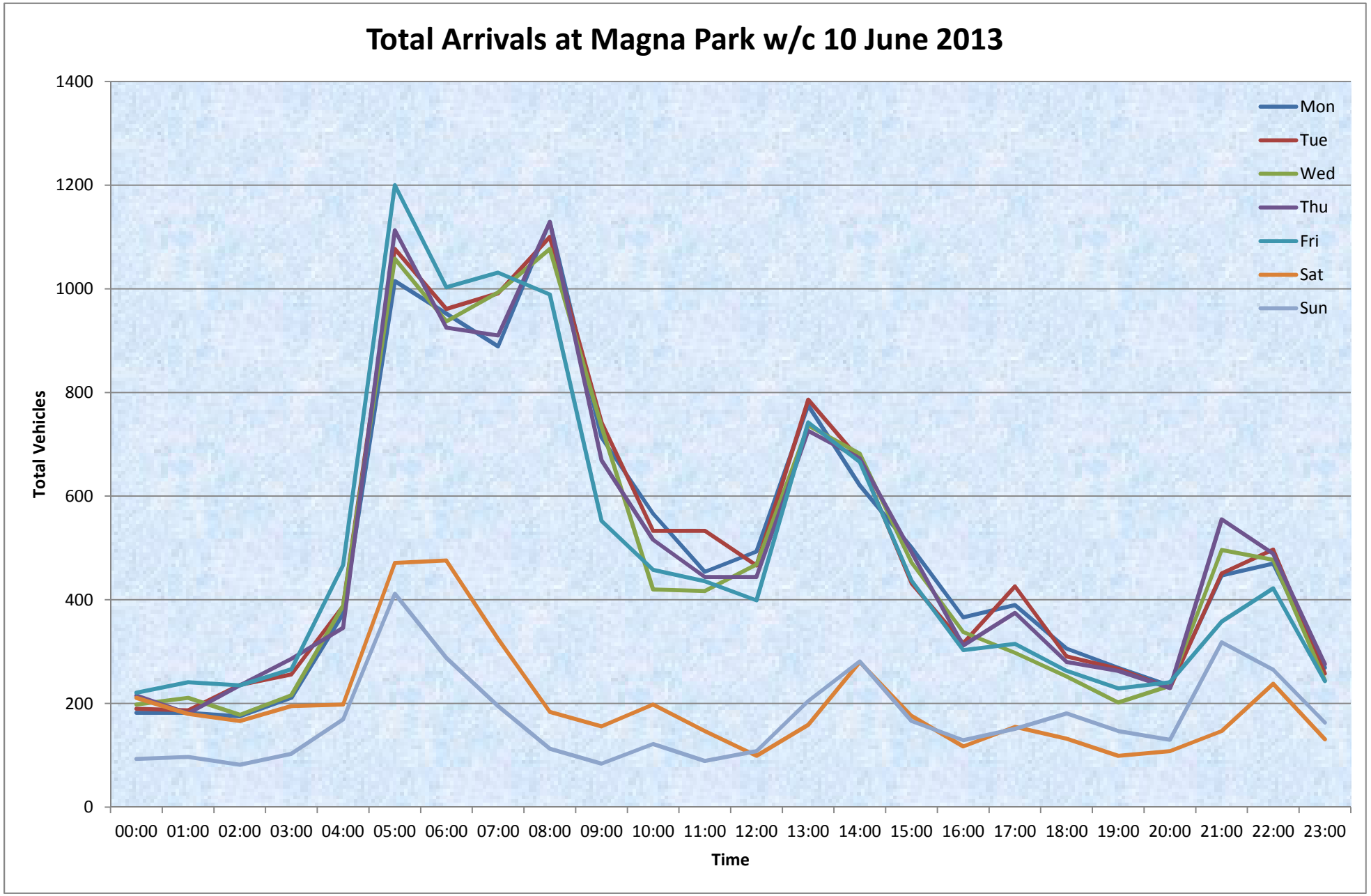
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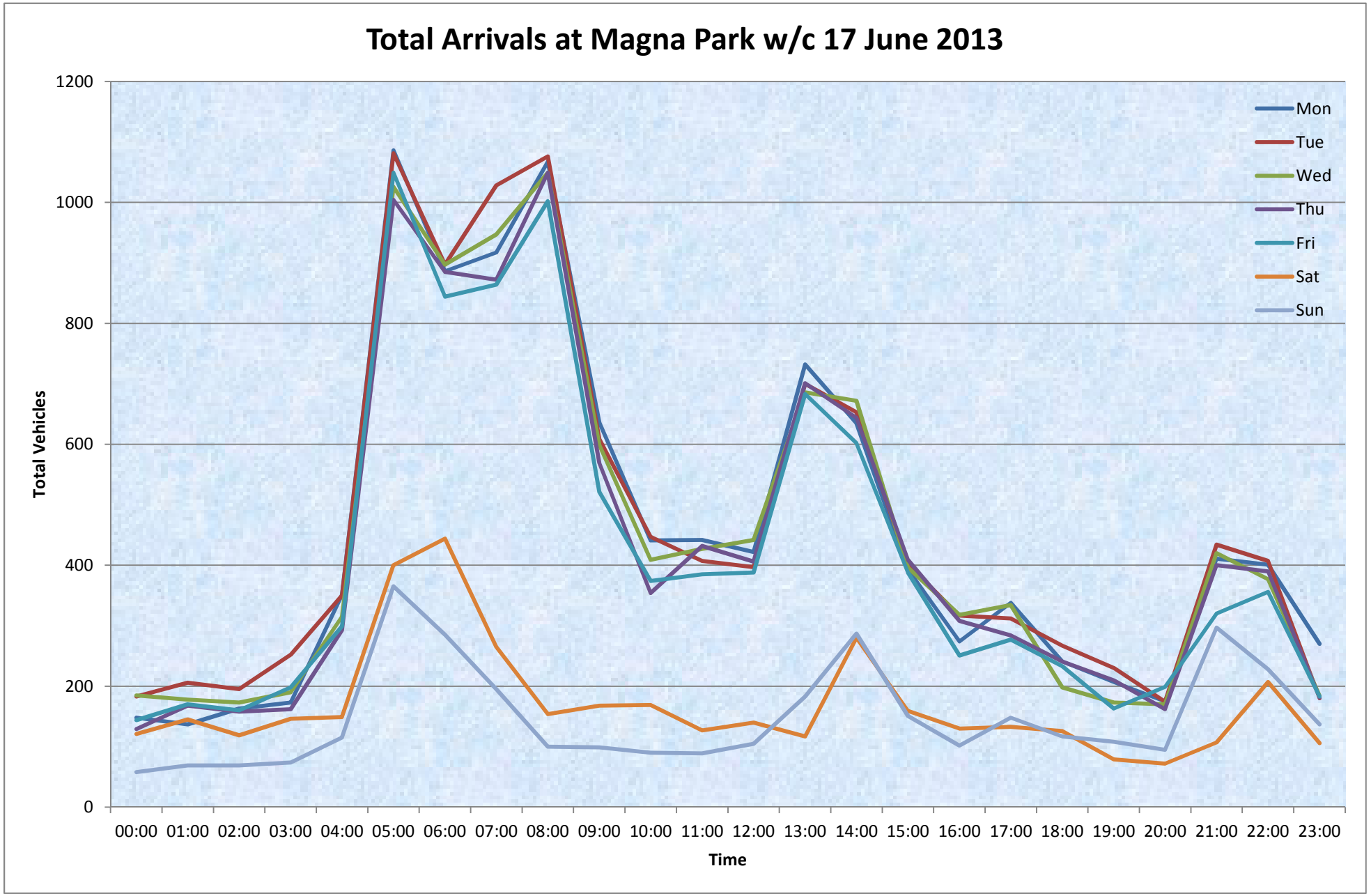
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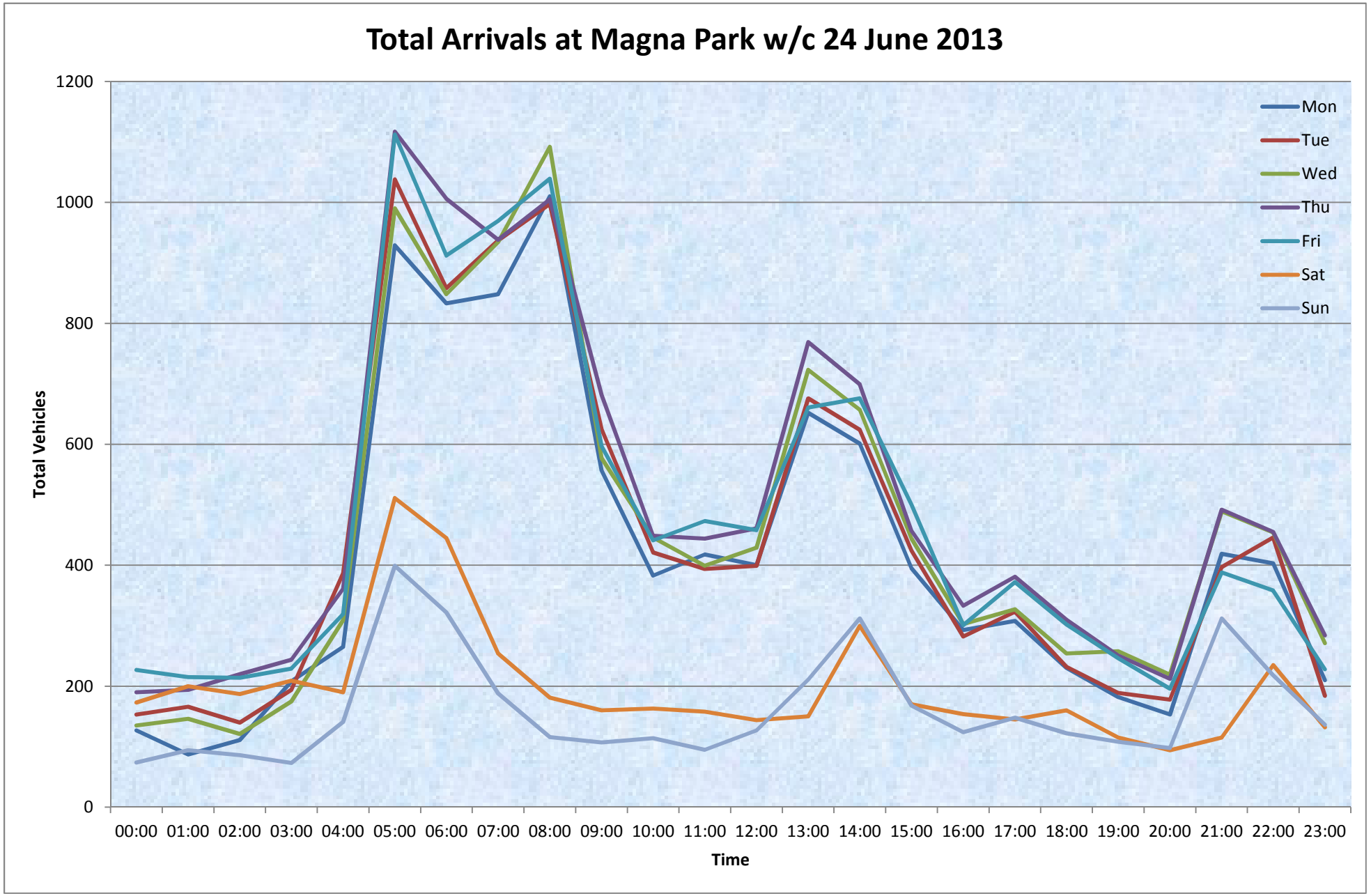
Total Arrivals at Magna Park w/c 24 June 2013
1200
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Total Vehicles
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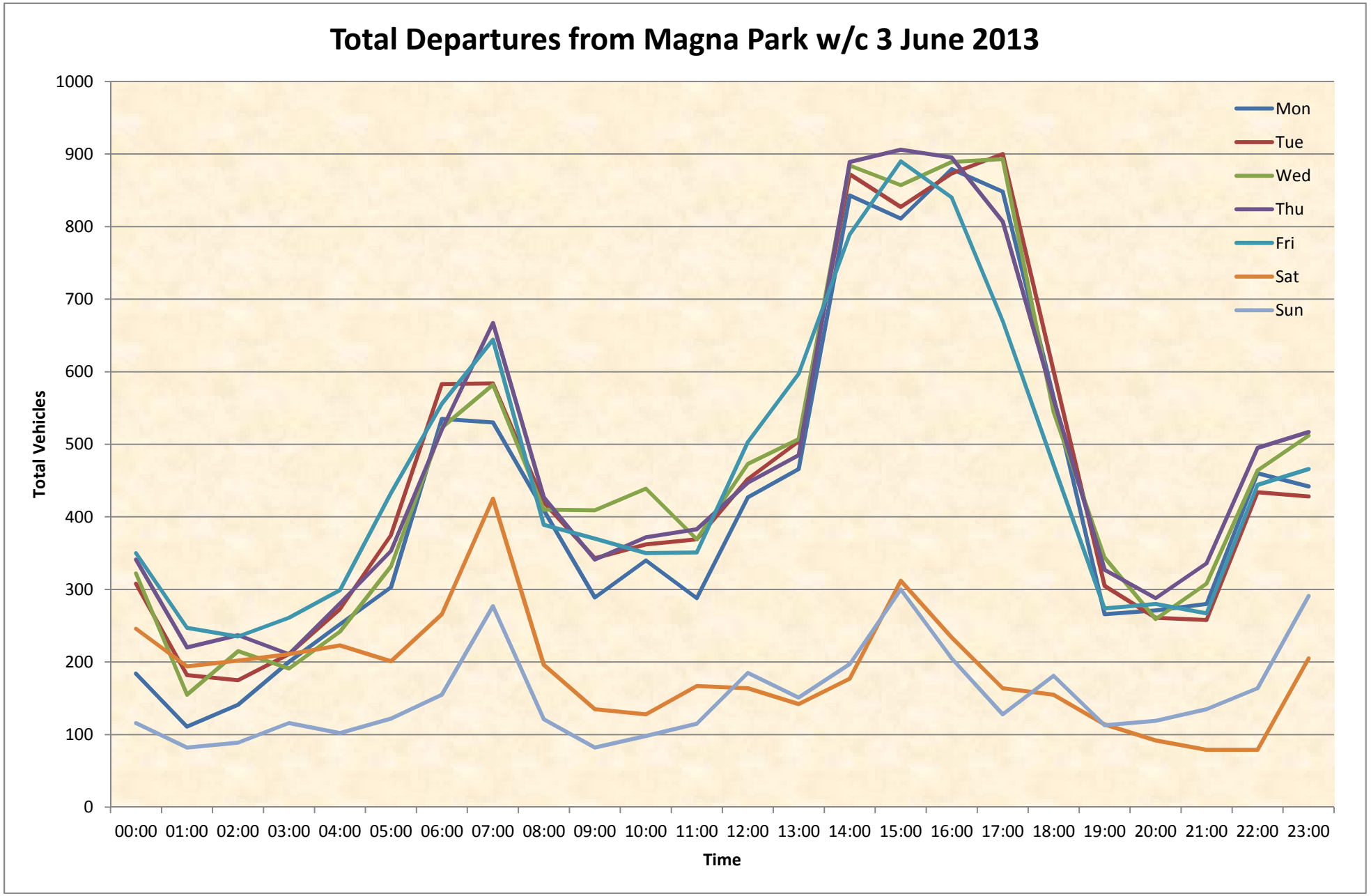
Departures from Magna Park – All Vehicles


Total Departures from Magna Park w/c 3 June 2013
Total Vehicles
1000
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200
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00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00
Time
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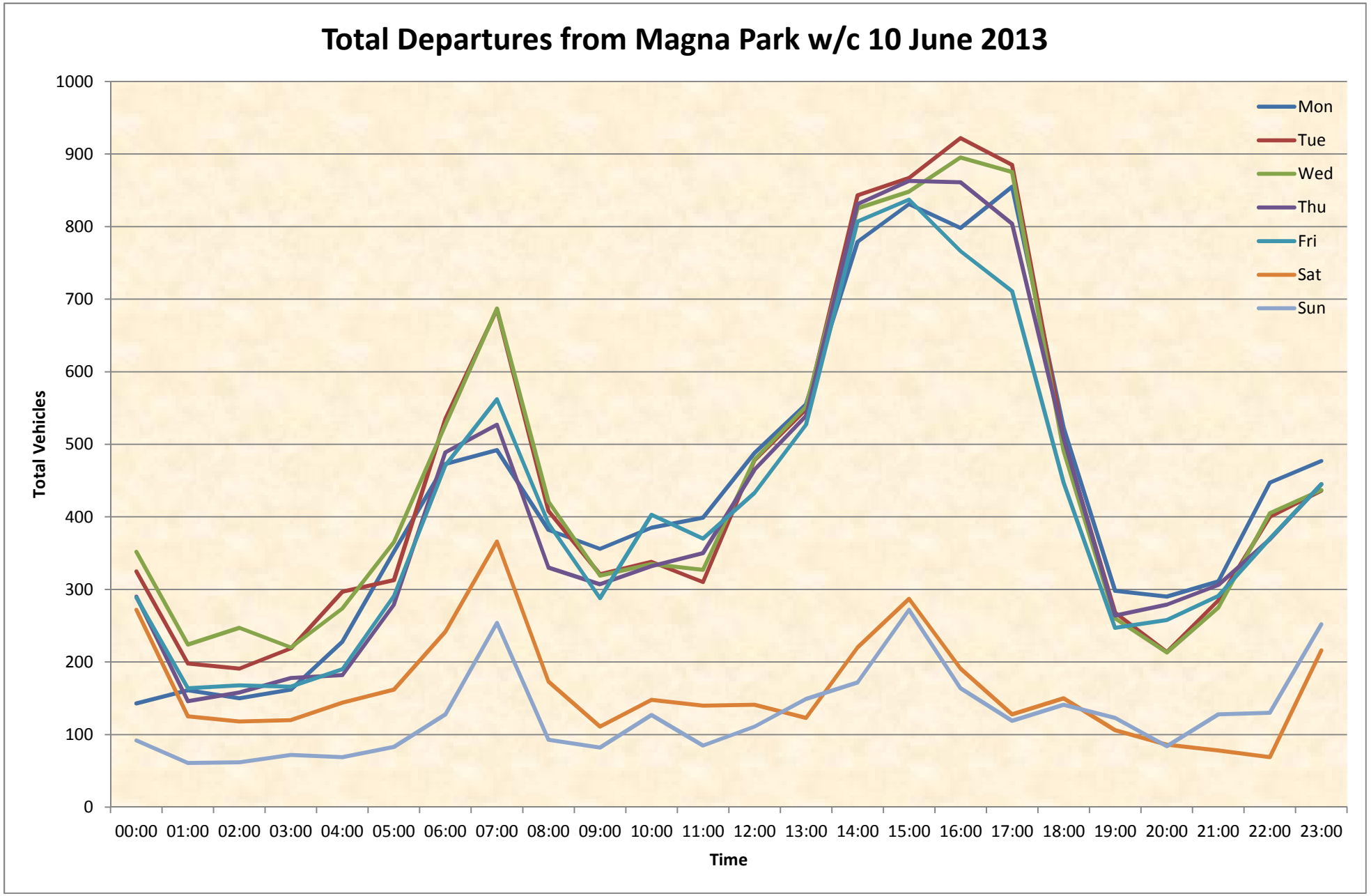
Total Departures from Magna Park w/c 10 June 2013
Total Vehicles
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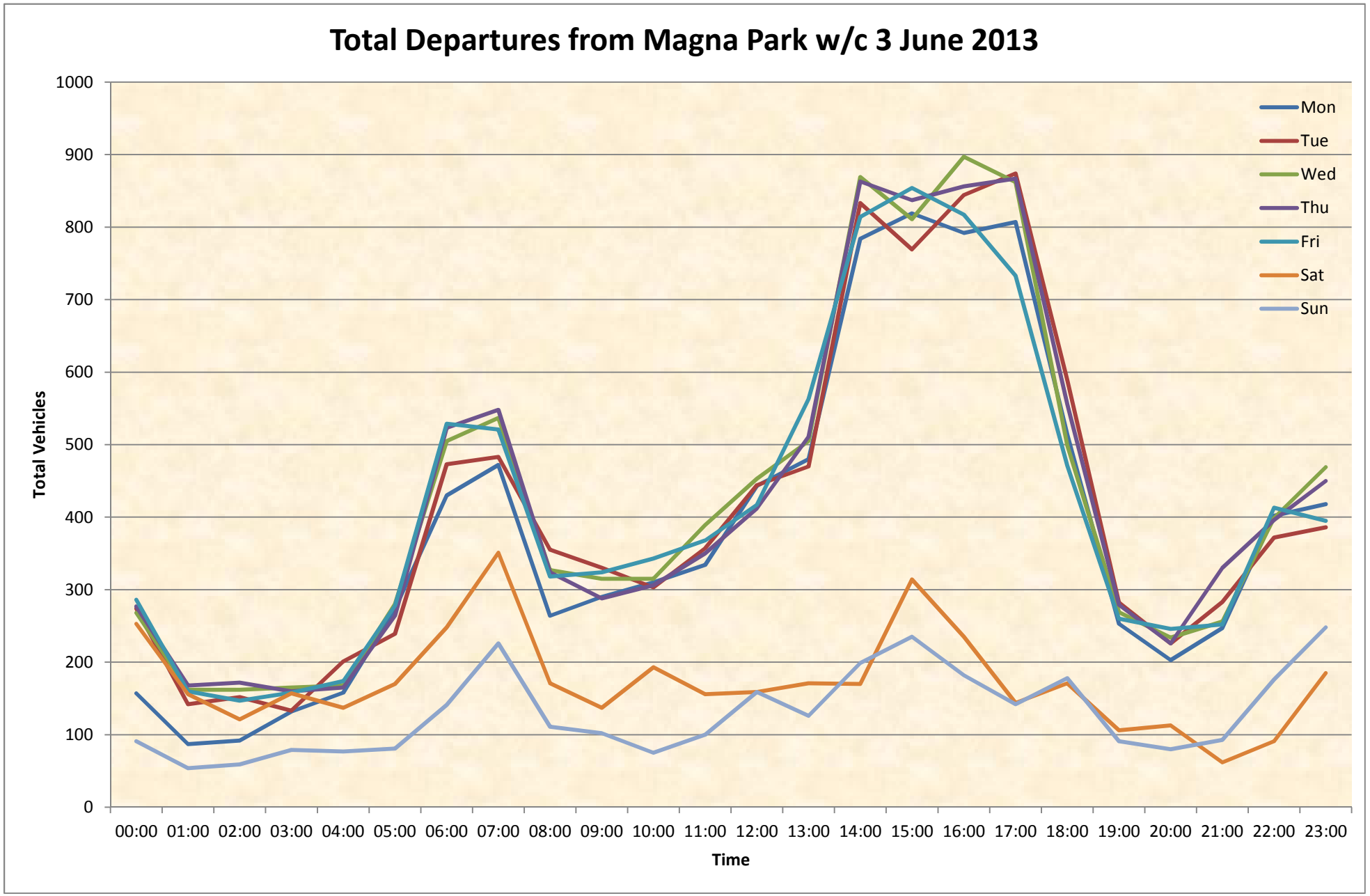
Total Departures from Magna Park w/c 3 June 2013
Total Vehicles
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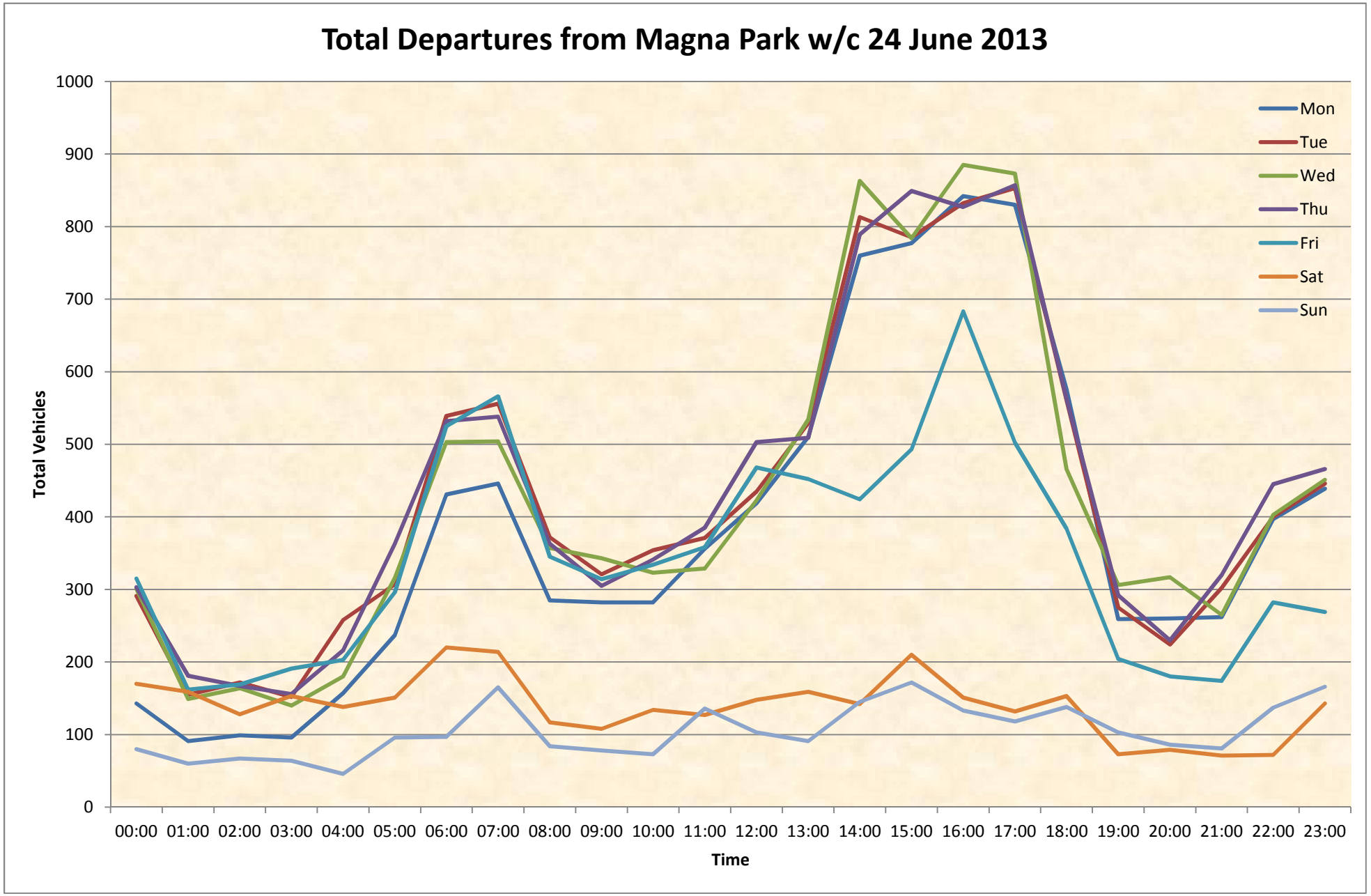
Total Departures from Magna Park w/c 24 June 2013
Total Vehicles
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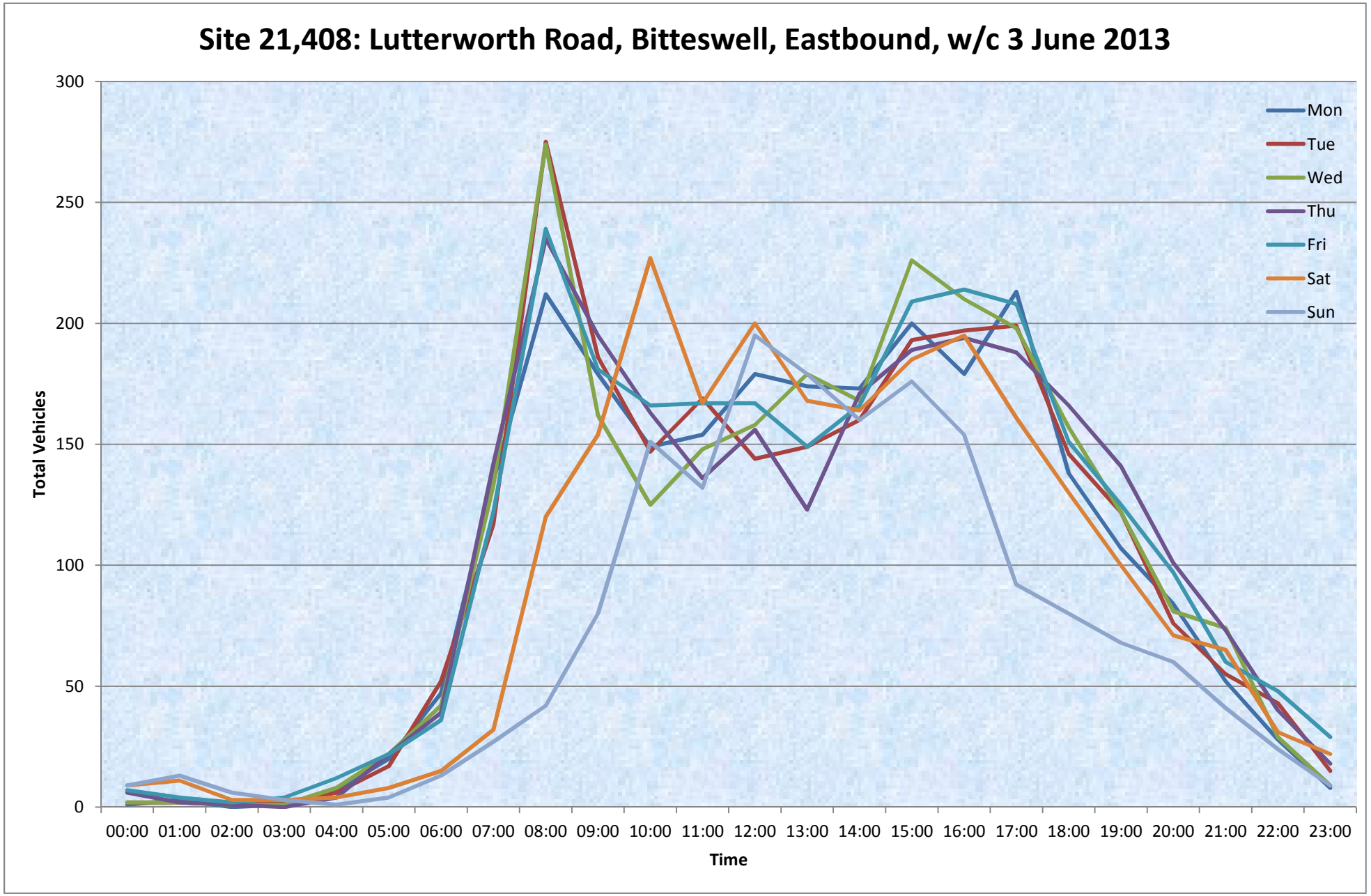
LCC Site 21,408: Lutterworth Road, Bitteswell


Site 21,408: Lutterworth Road, Bitteswell, Eastbound, w/c 3 June 2013
Total Vehicles
300
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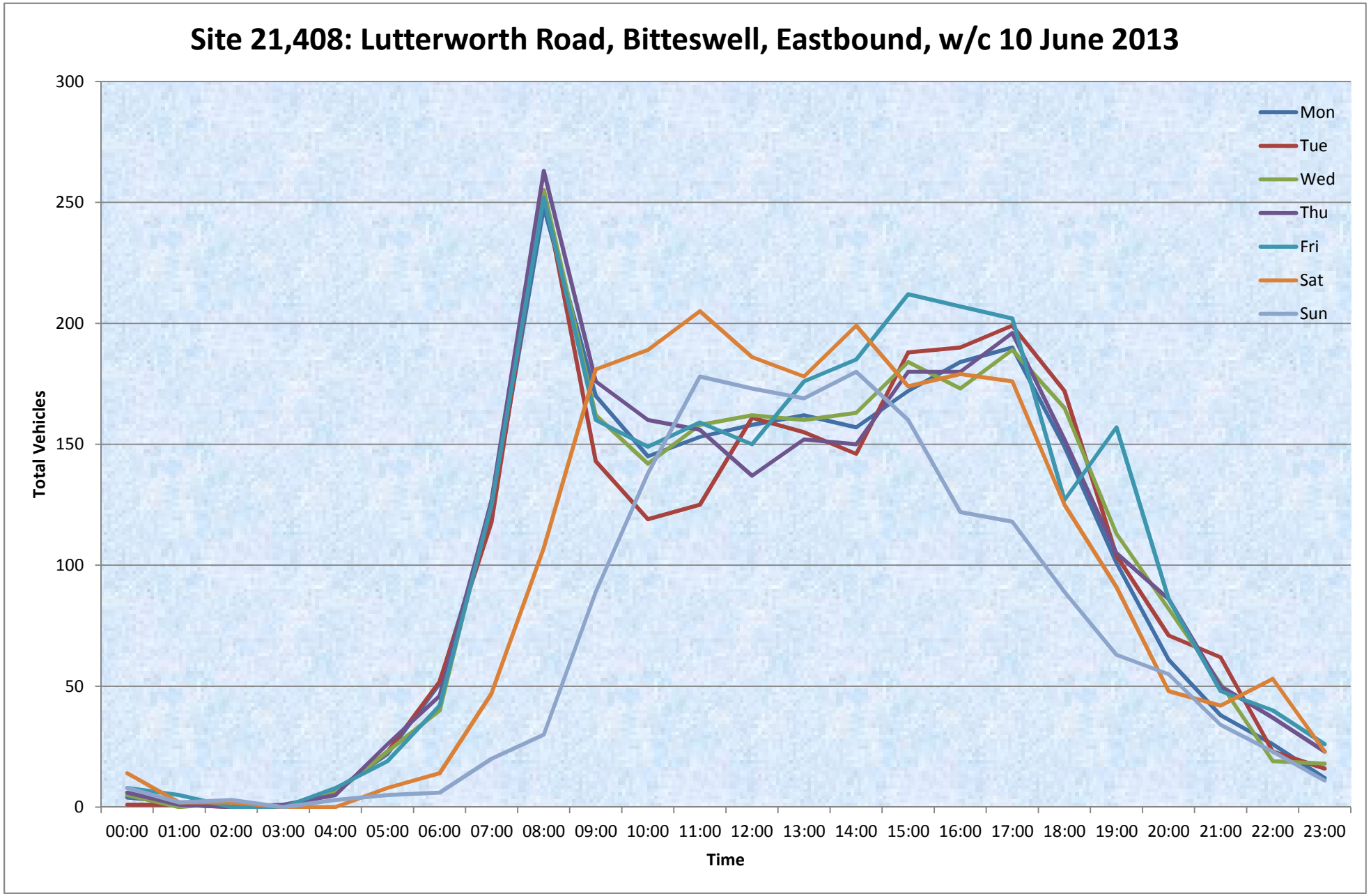
Site 21,408: Lutterworth Road, Bitteswell, Eastbound, w/c 10 June 2013
Total Vehicles
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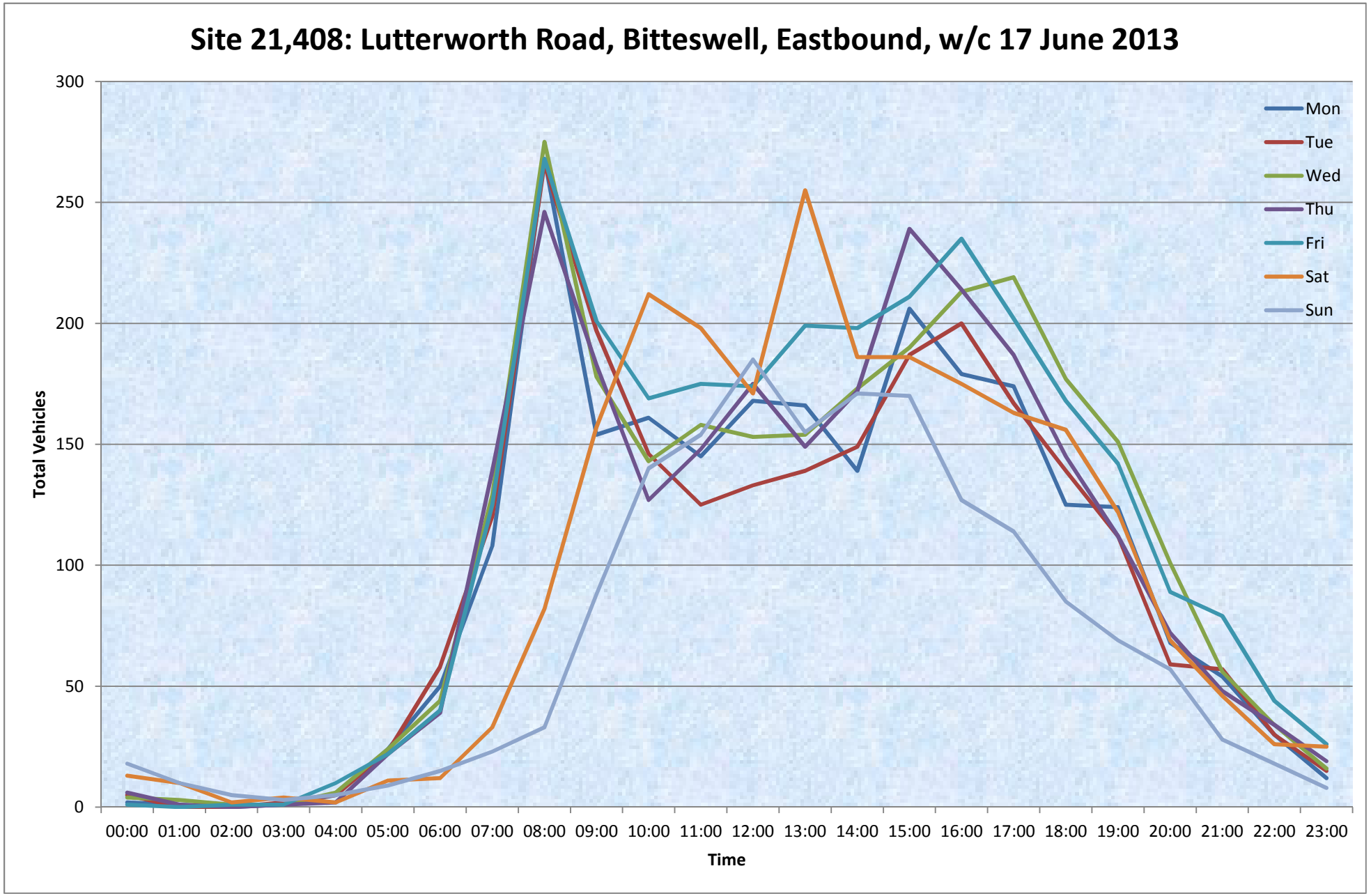
Site 21,408: Lutterworth Road, Bitteswell, Eastbound, w/c 17 June 2013
Total Vehicles
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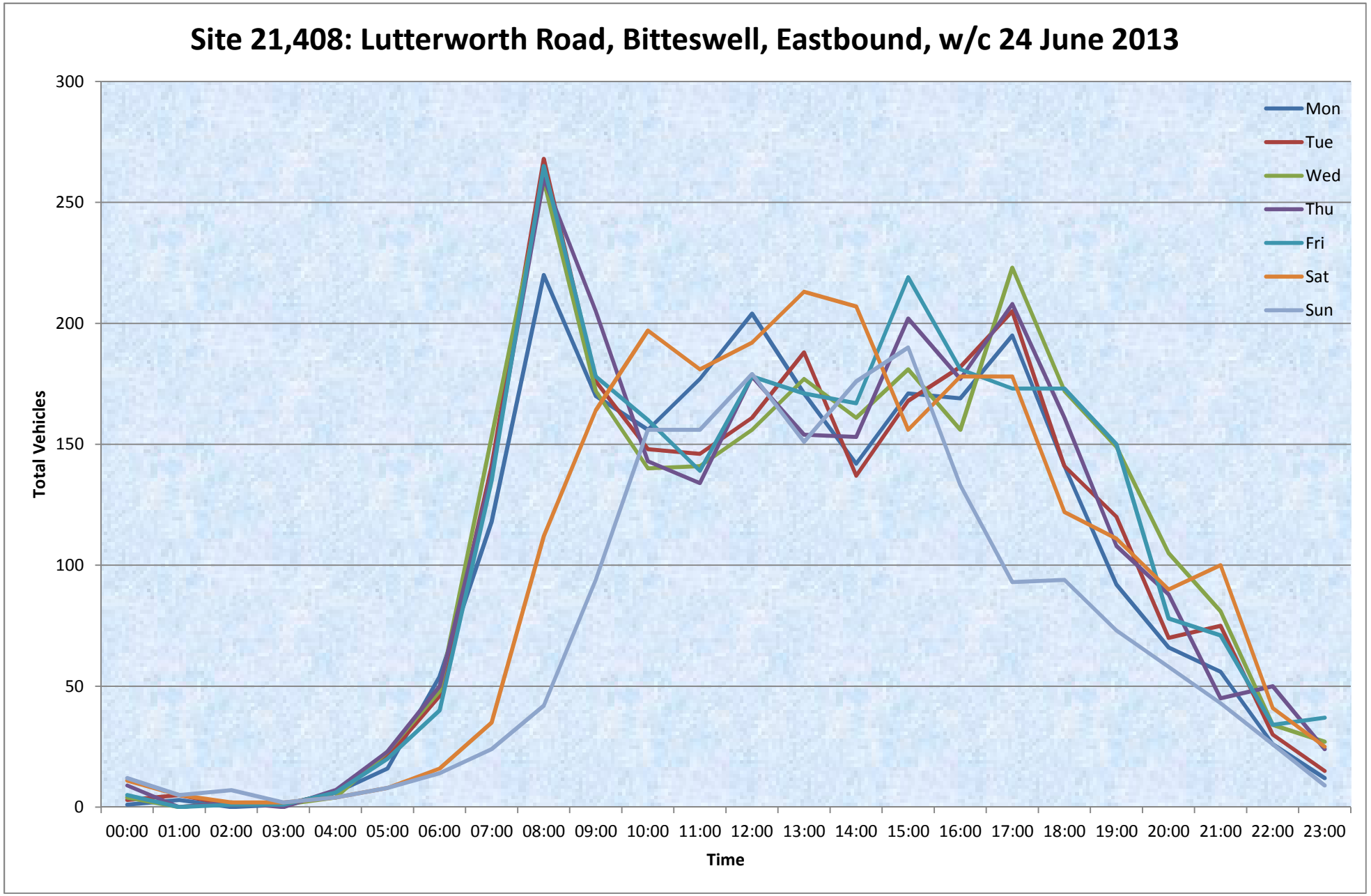
Site 21,408: Lutterworth Road, Bitteswell, Eastbound, w/c 24 June 2013
Total Vehicles
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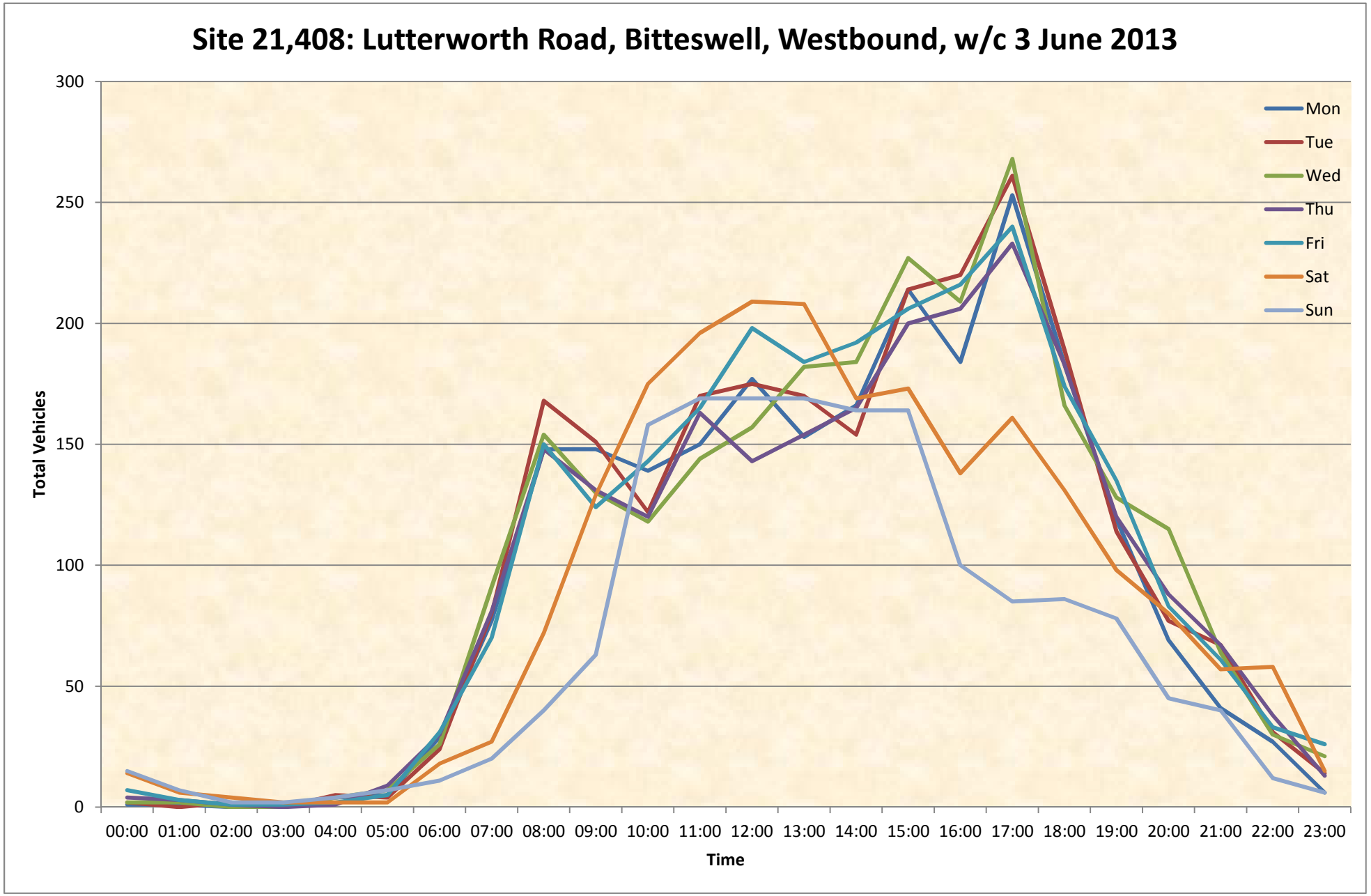
Site 21,408: Lutterworth Road, Bitteswell, Westbound, w/c 3 June 2013
Total Vehicles
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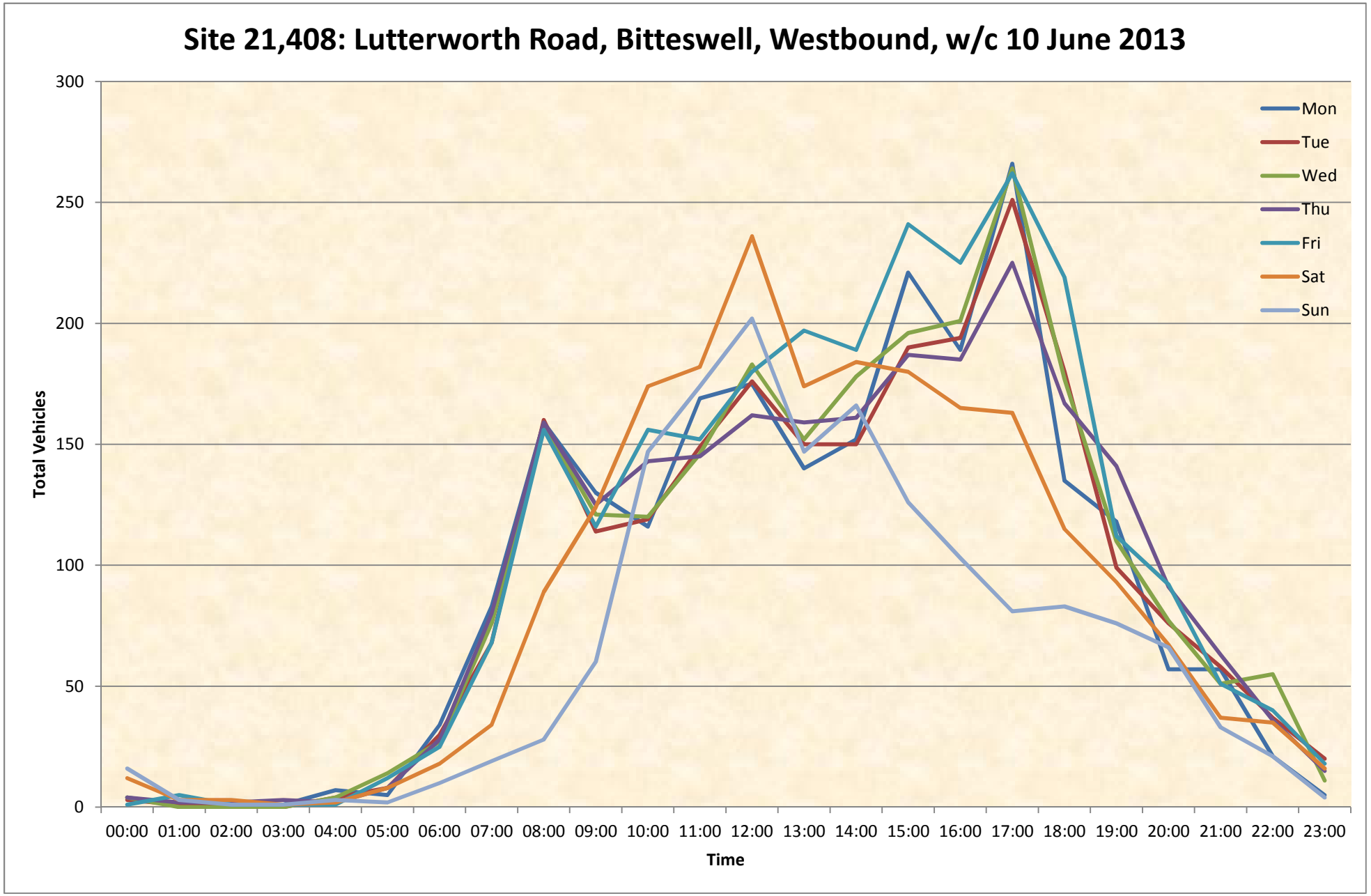
Site 21,408: Lutterworth Road, Bitteswell, Westbound, w/c 10 June 2013
Total Vehicles
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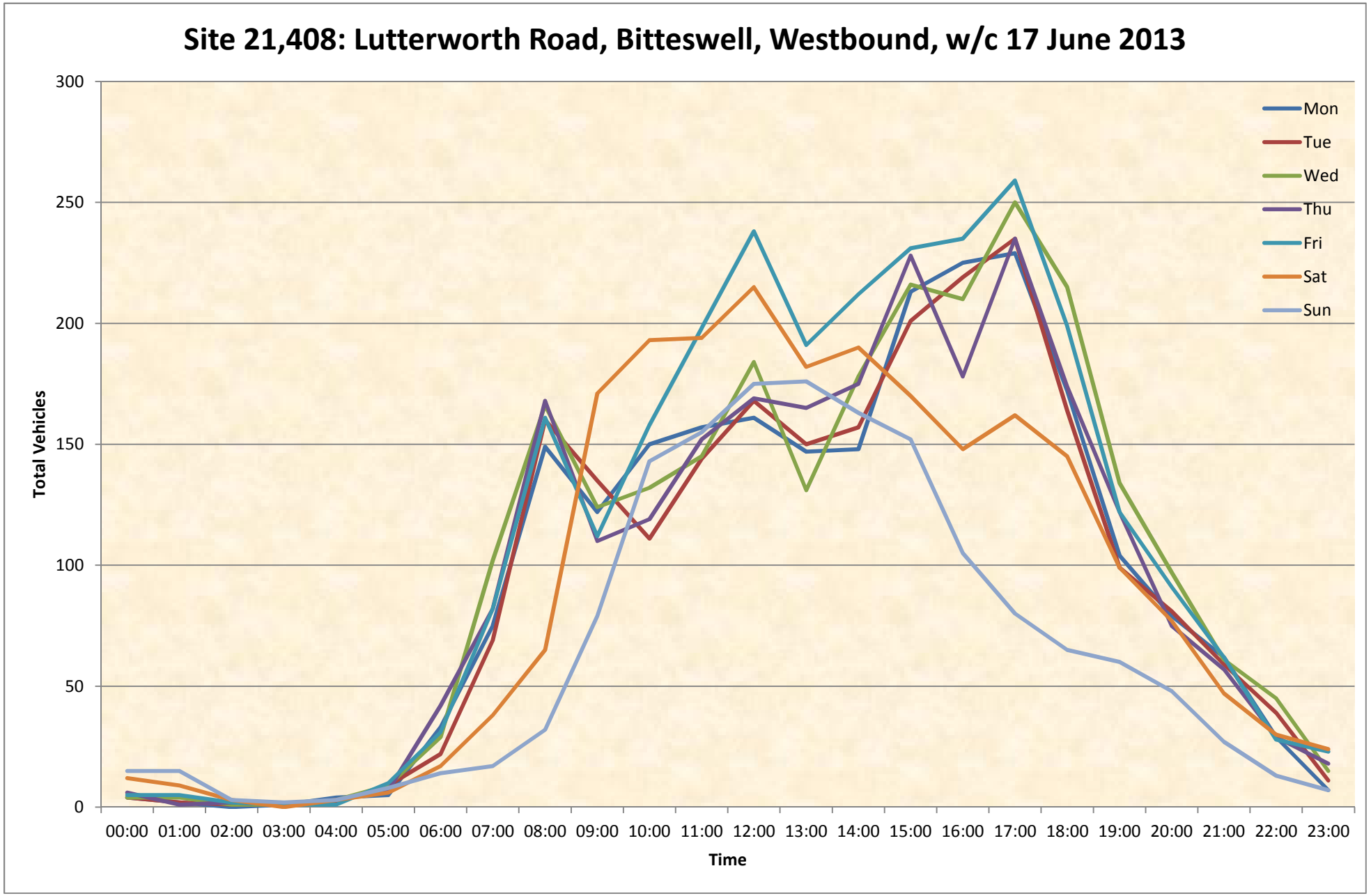
Site 21,408: Lutterworth Road, Bitteswell, Westbound, w/c 17 June 2013
Total Vehicles
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00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00
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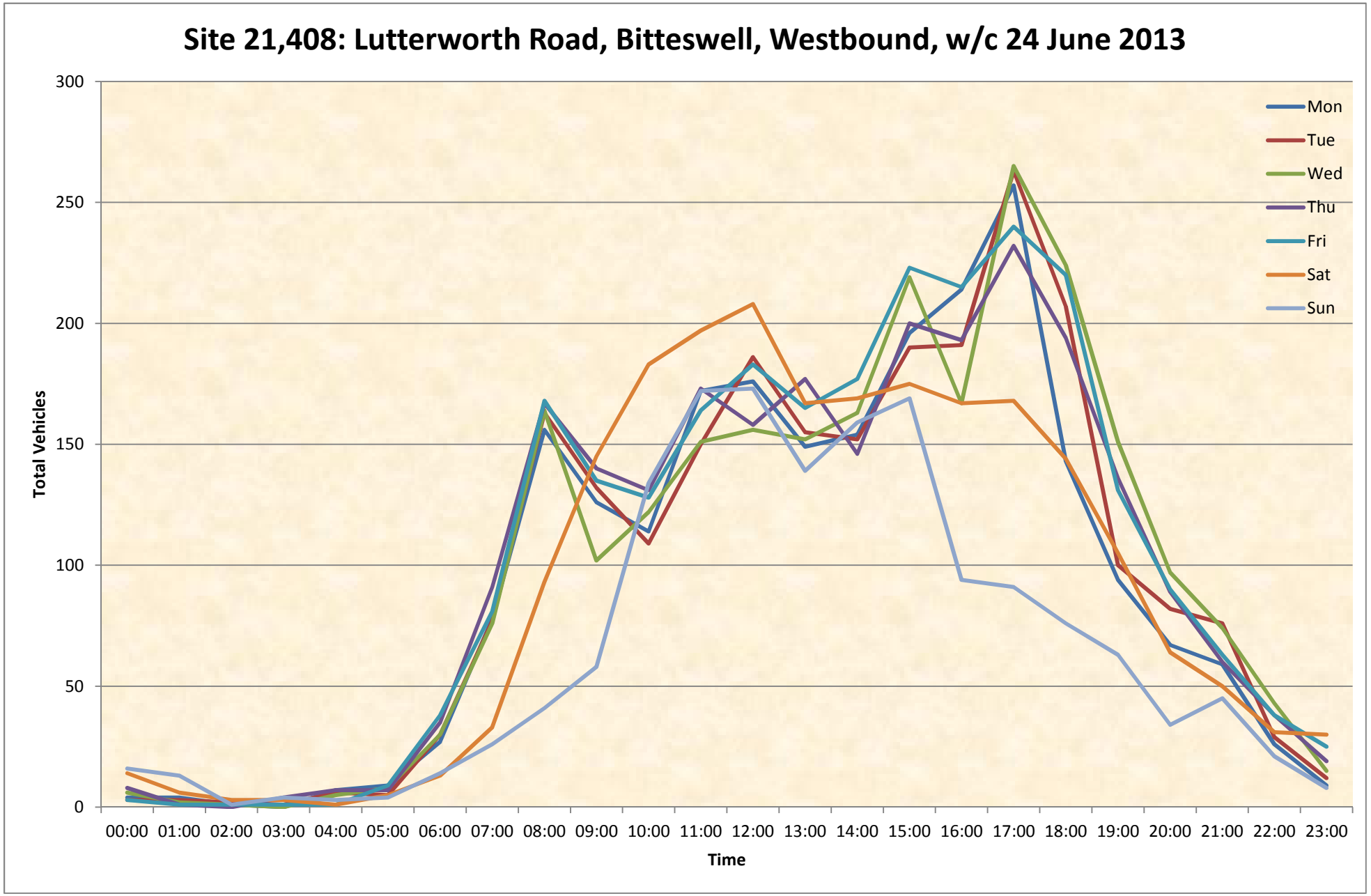
Site 21,408: Lutterworth Road, Bitteswell, Westbound, w/c 24 June 2013
Total Vehicles
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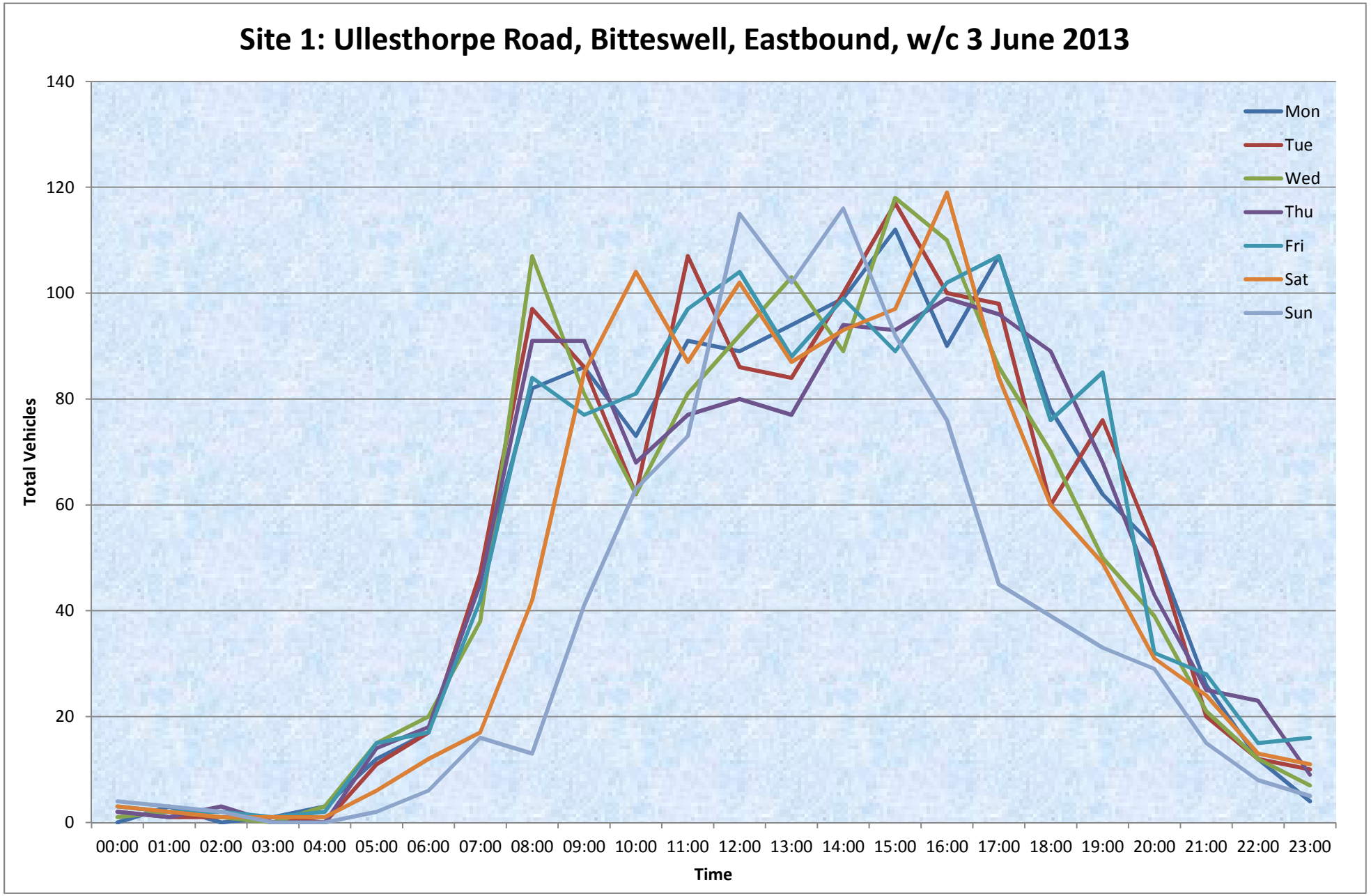
Temporary Site 1: Ullesthorpe Road, Bitteswell


Site 1: Ullesthorpe Road, Bitteswell, Eastbound, w/c 3 June 2013
Total Vehicles
140
120
100
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00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00
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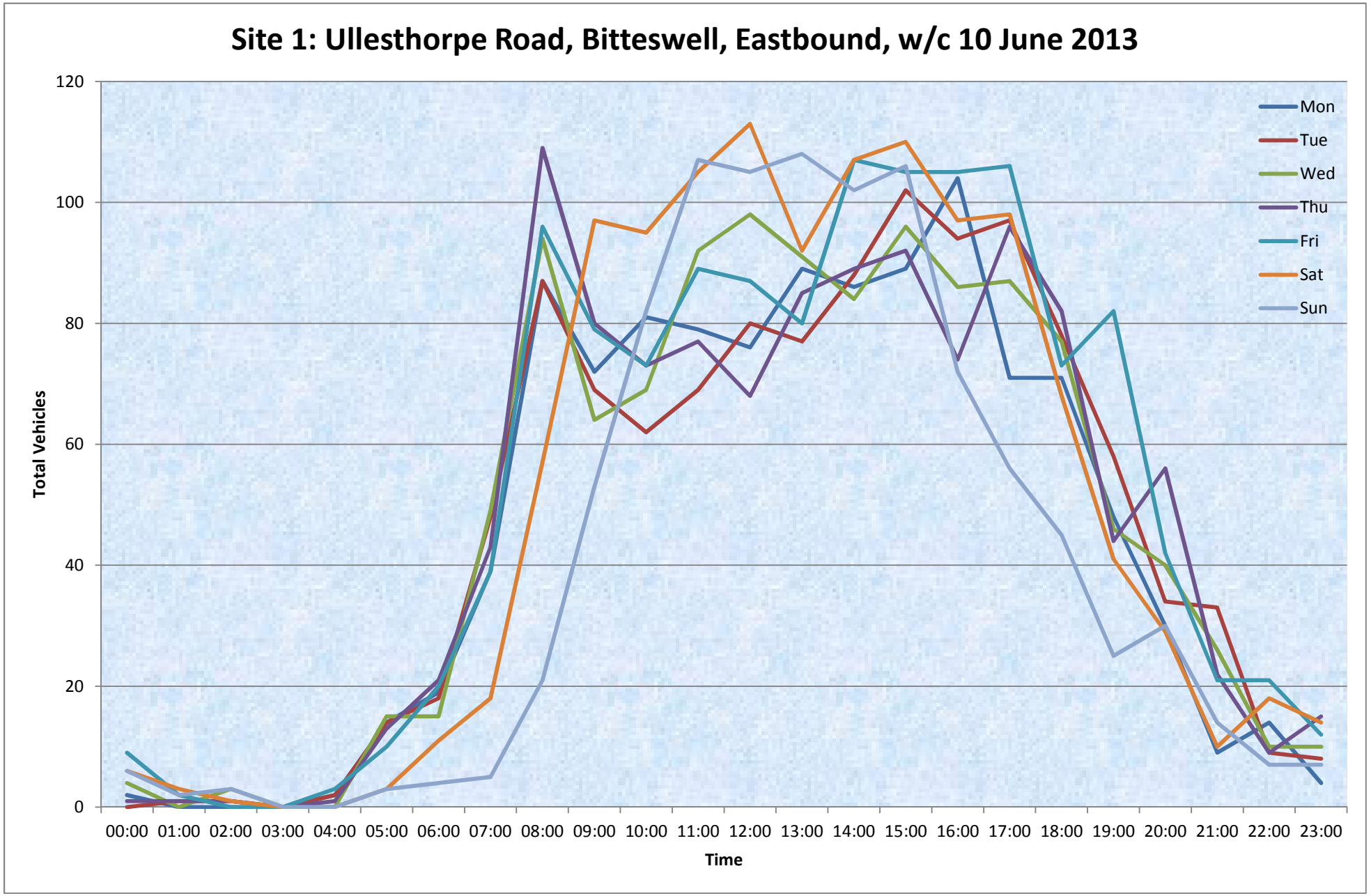
Site 1: Ullesthorpe Road, Bitteswell, Eastbound, w/c 10 June 2013
120
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Total Vehicles
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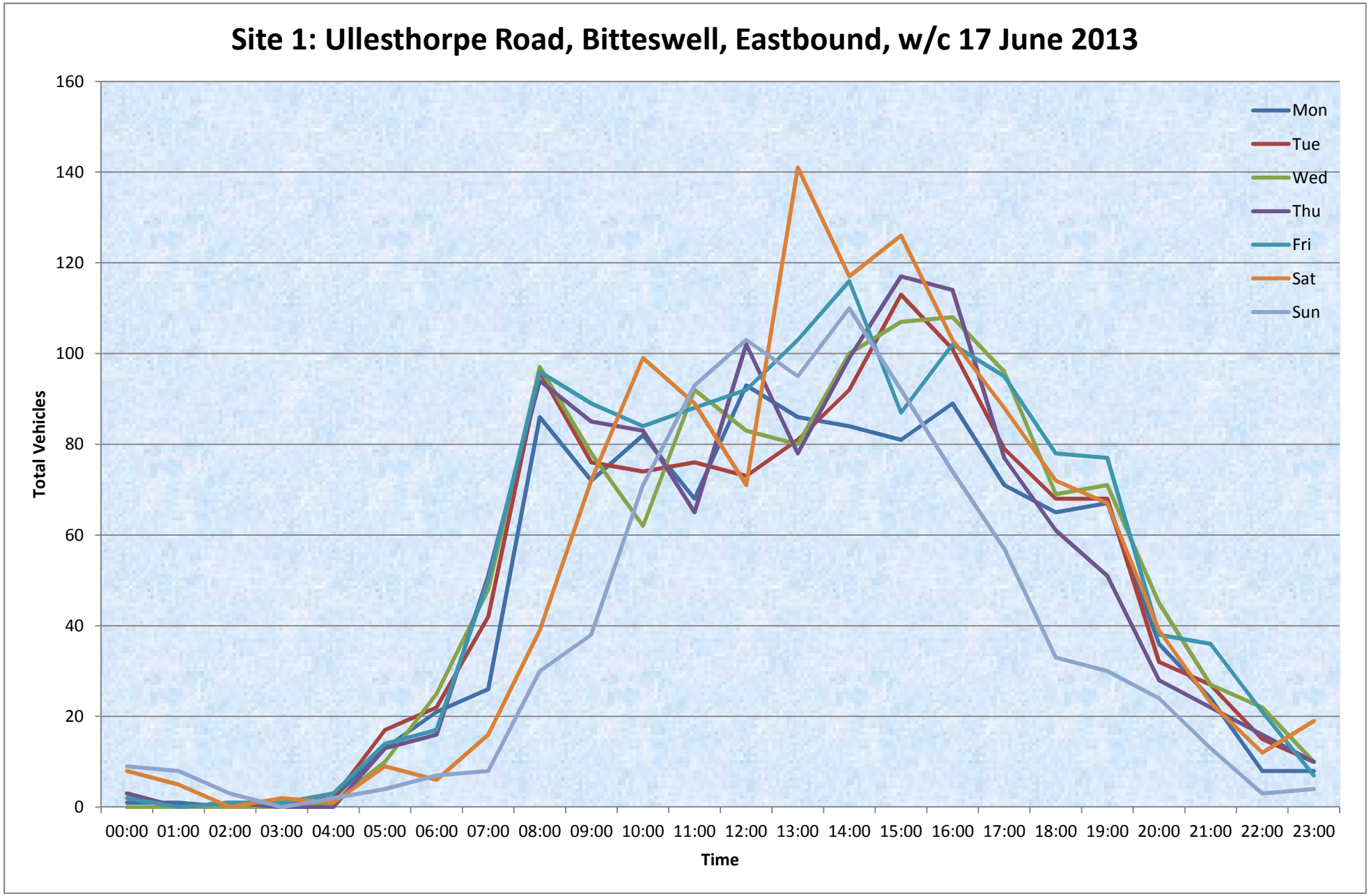
Site 1: Ullesthorpe Road, Bitteswell, Eastbound, w/c 17 June 2013
Total Vehicles
160
140
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00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00
Time
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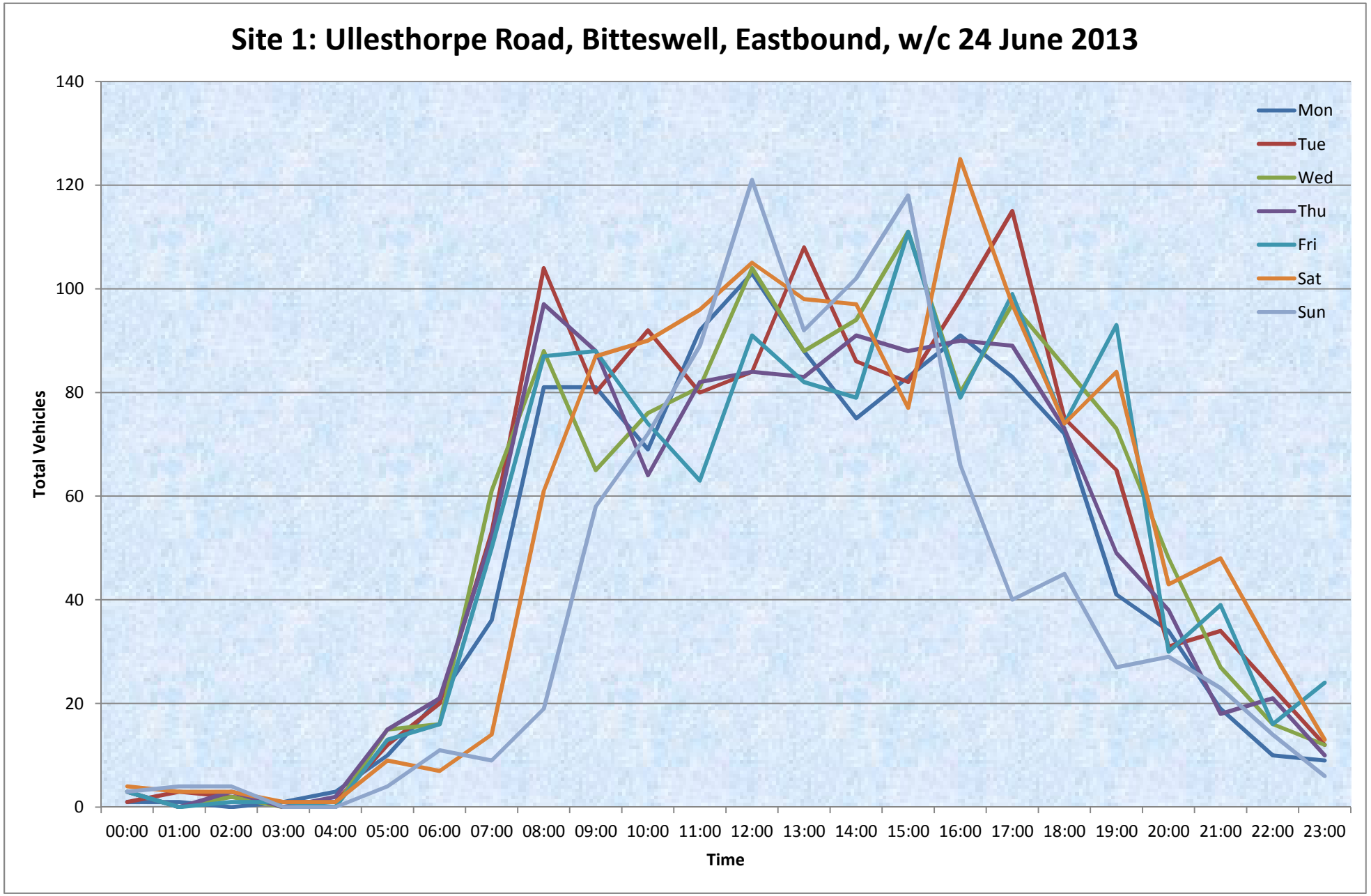
Site 1: Ullesthorpe Road, Bitteswell, Eastbound, w/c 24 June 2013
Total Vehicles
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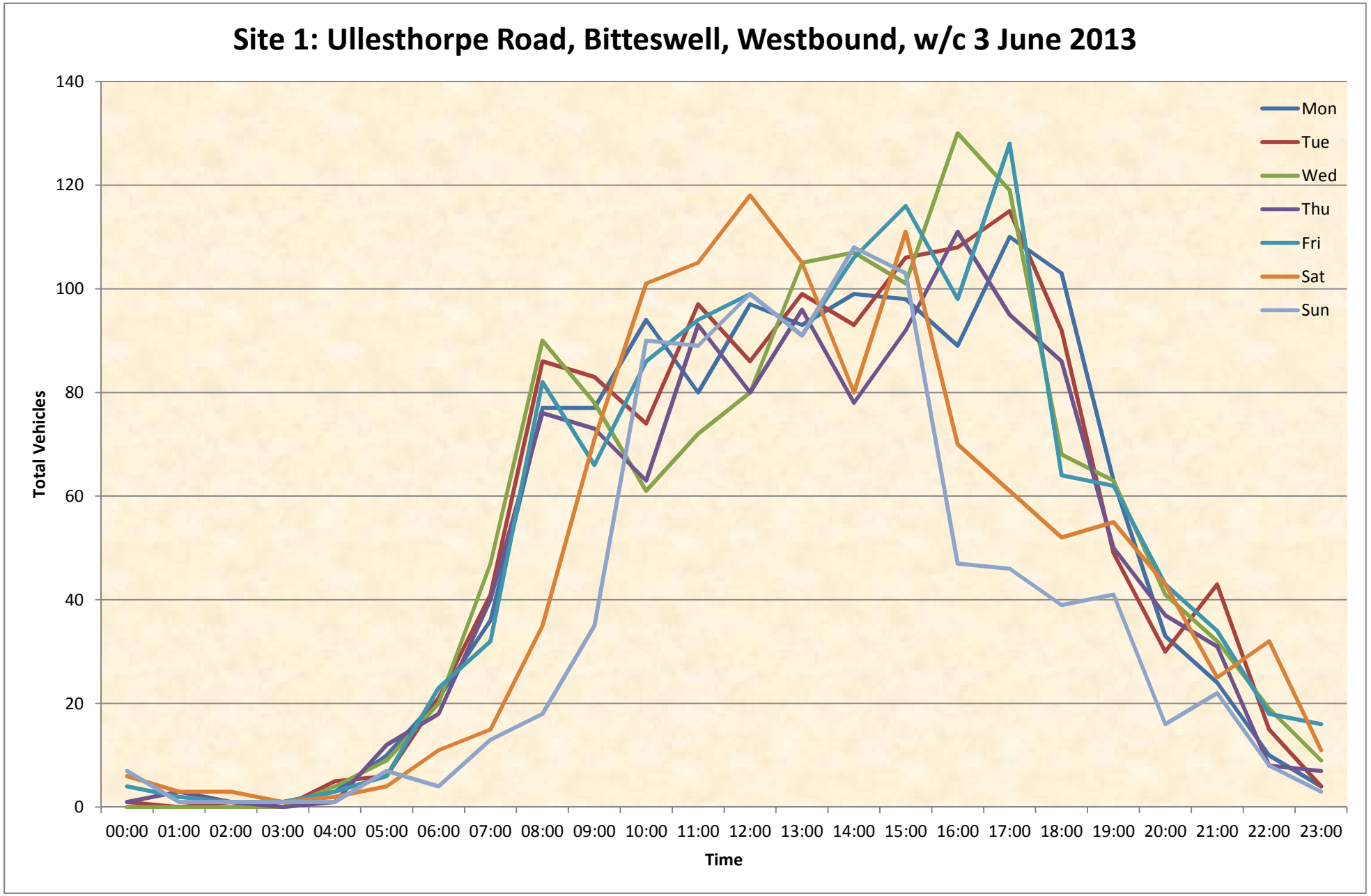
Site 1: Ullesthorpe Road, Bitteswell, Westbound, w/c 3 June 2013
Total Vehicles
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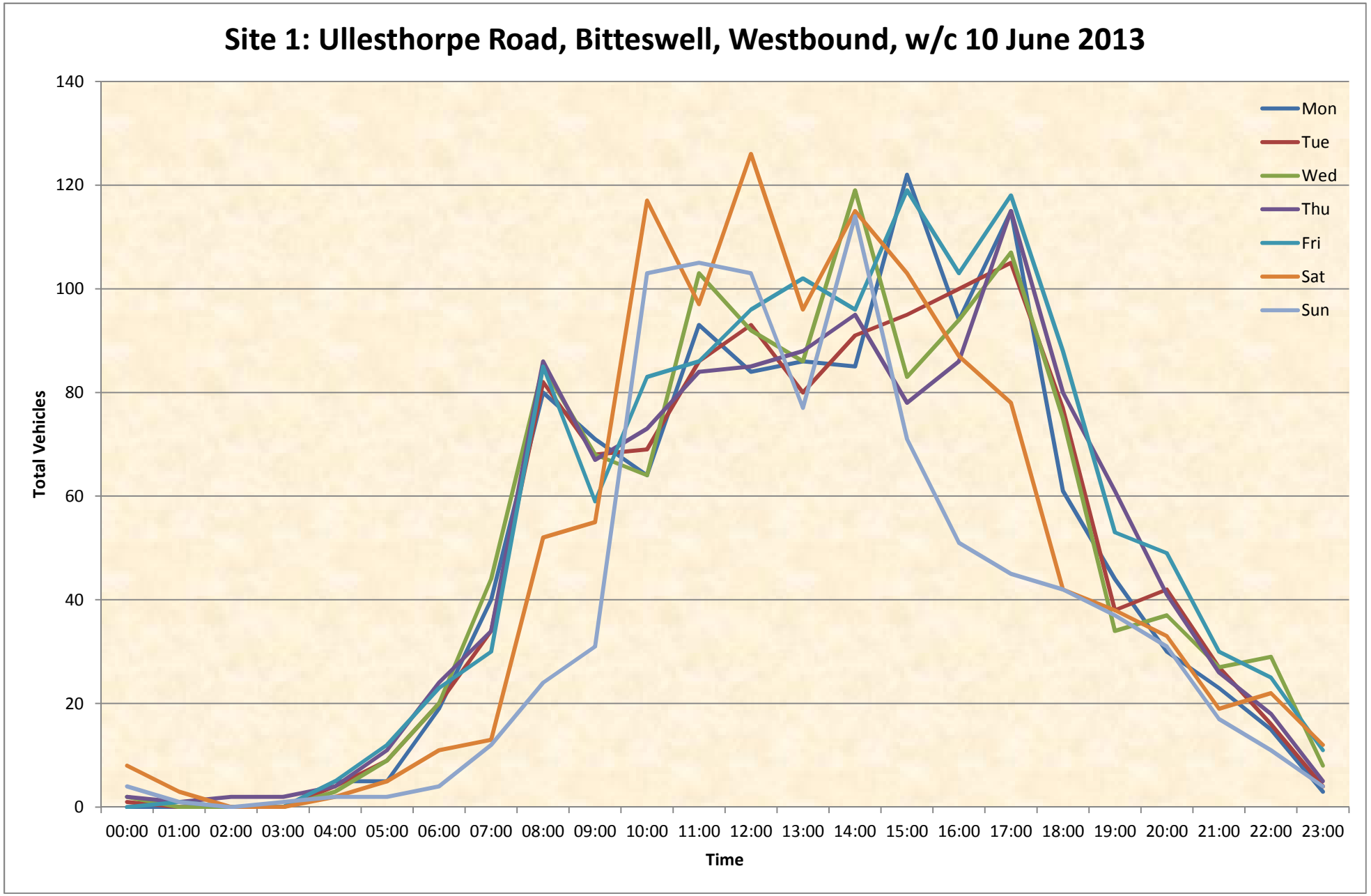
Site 1: Ullesthorpe Road, Bitteswell, Westbound, w/c 10 June 2013
Total Vehicles
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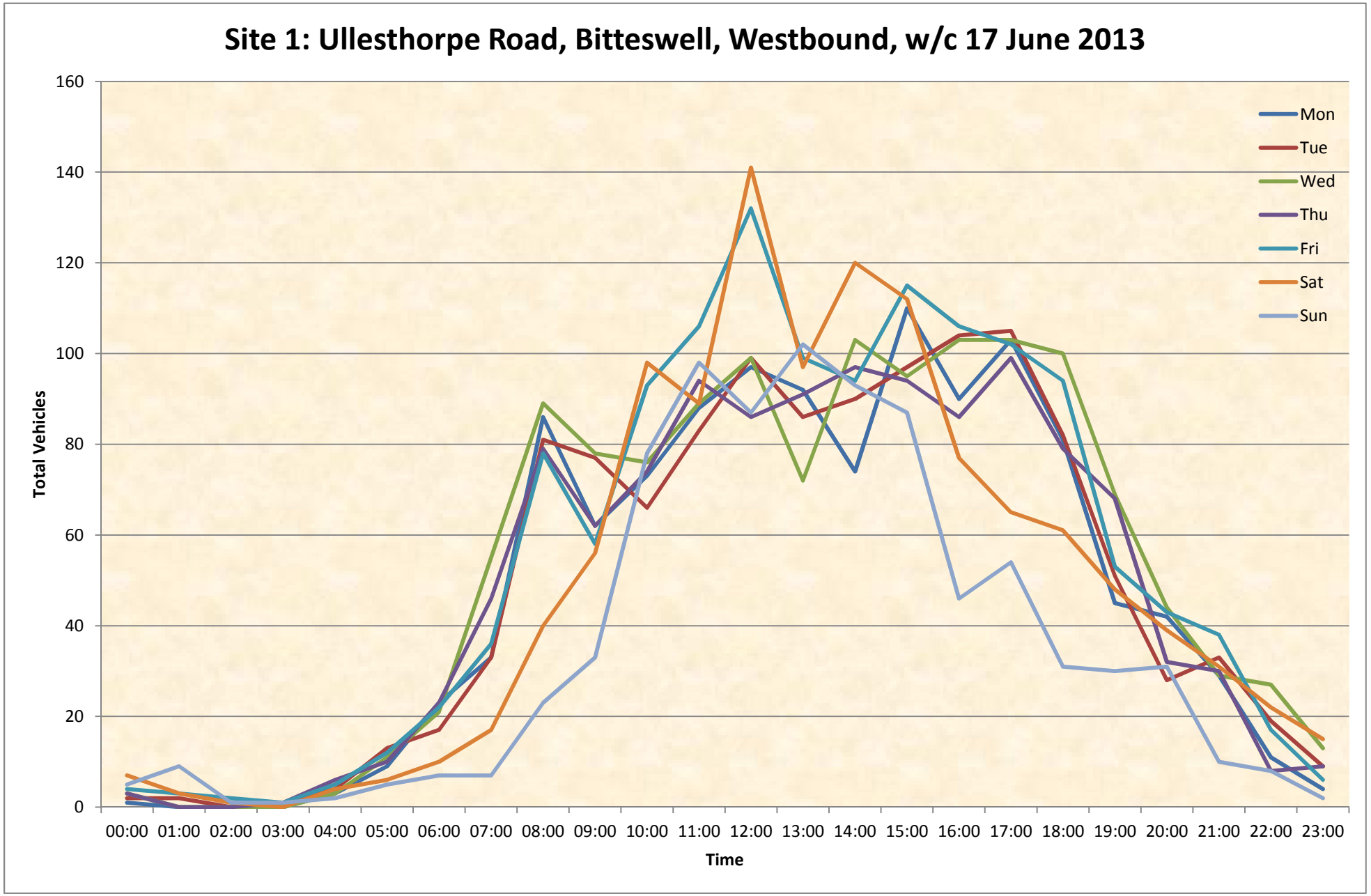
Site 1: Ullesthorpe Road, Bitteswell, Westbound, w/c 17 June 2013
Total Vehicles
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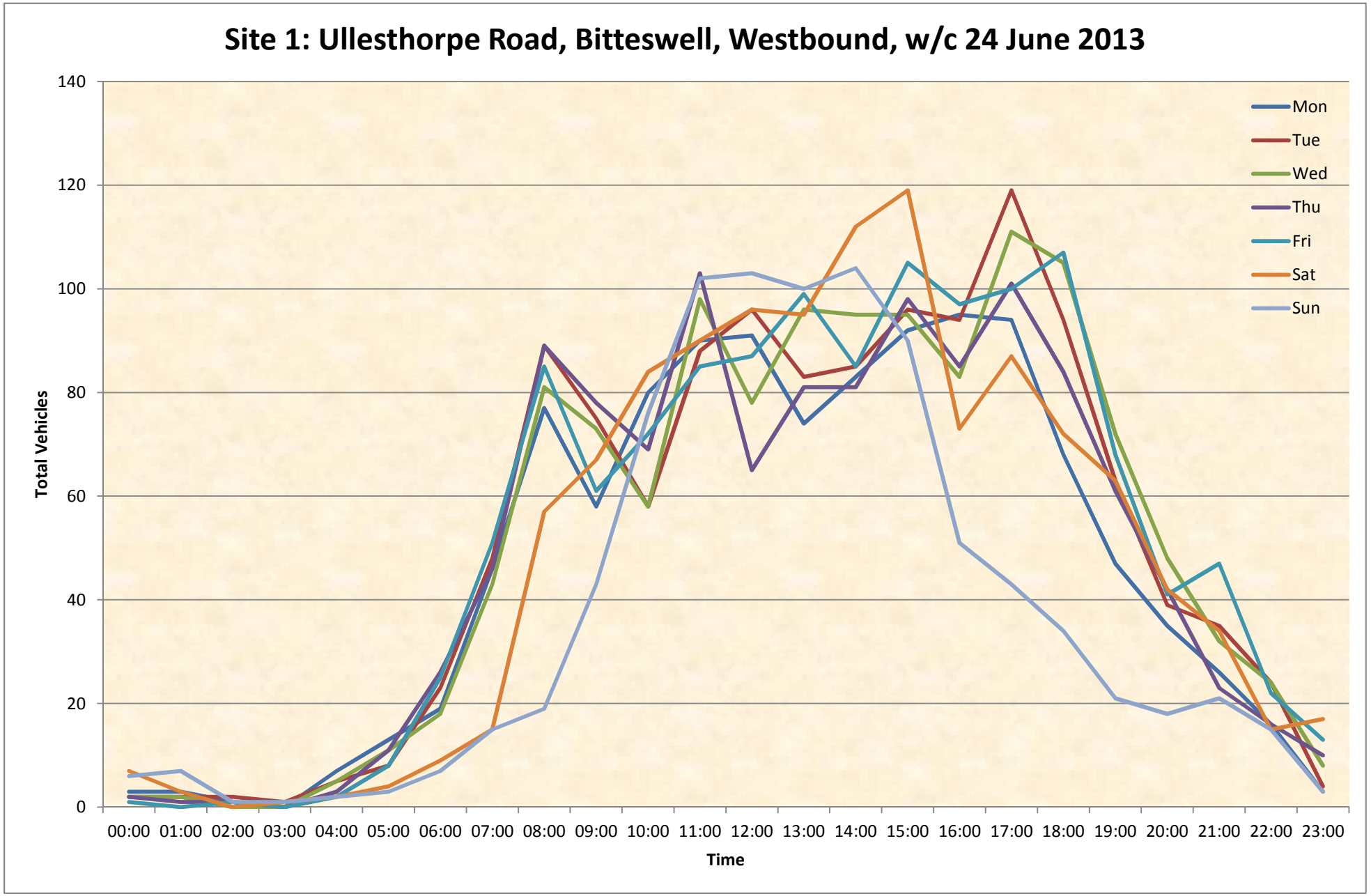
Site 1: Ullesthorpe Road, Bitteswell, Westbound, w/c 24 June 2013
Total Vehicles
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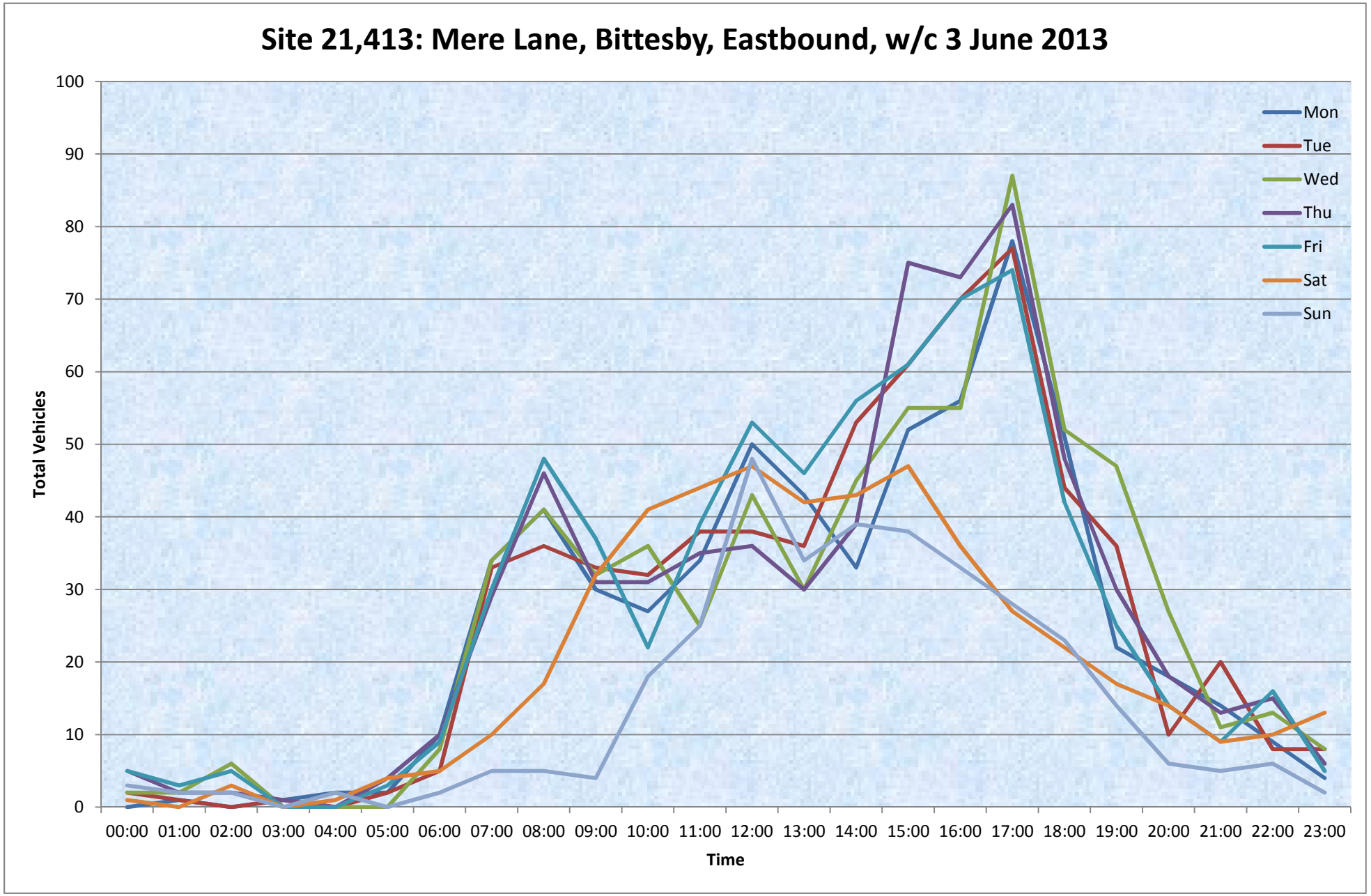
LCC Site 21,413: Mere Lane, Bittesby


Site 21,413: Mere Lane, Bittesby, Eastbound, w/c 3 June 2013
Total Vehicles
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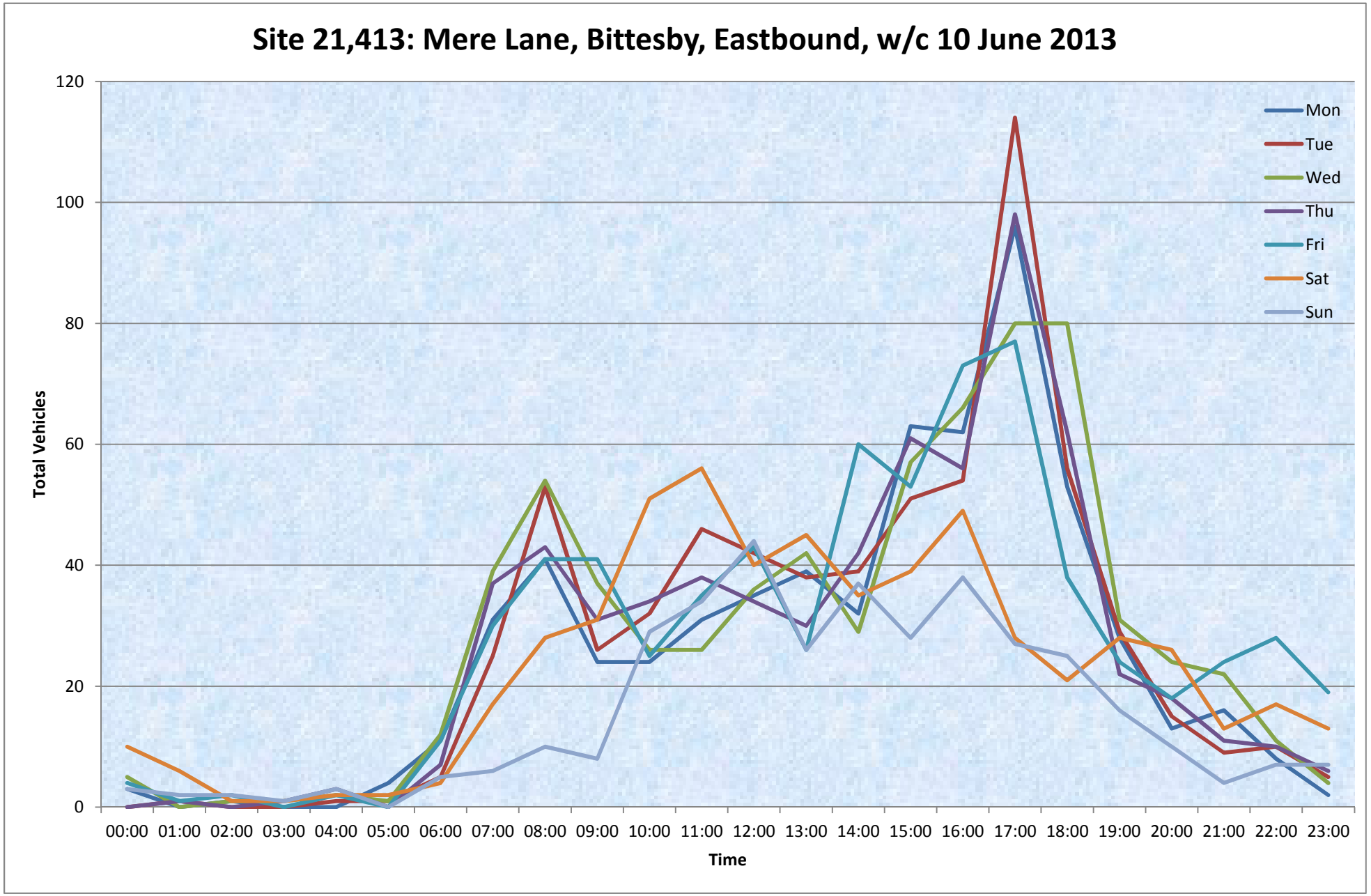
Site 21,413: Mere Lane, Bittesby, Eastbound, w/c 10 June 2013
Total Vehicles
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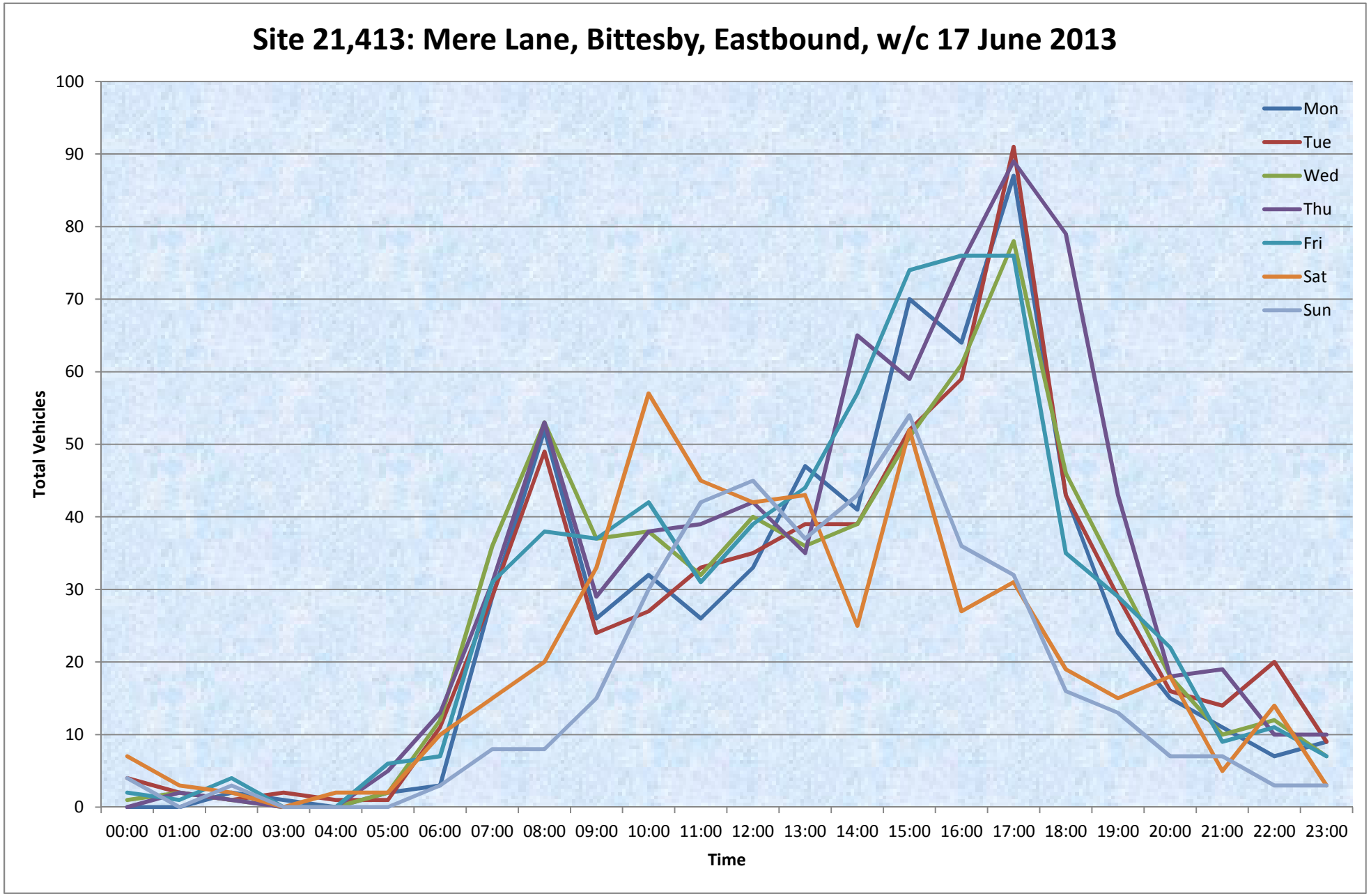
Site 21,413: Mere Lane, Bittesby, Eastbound, w/c 17 June 2013
Total Vehicles
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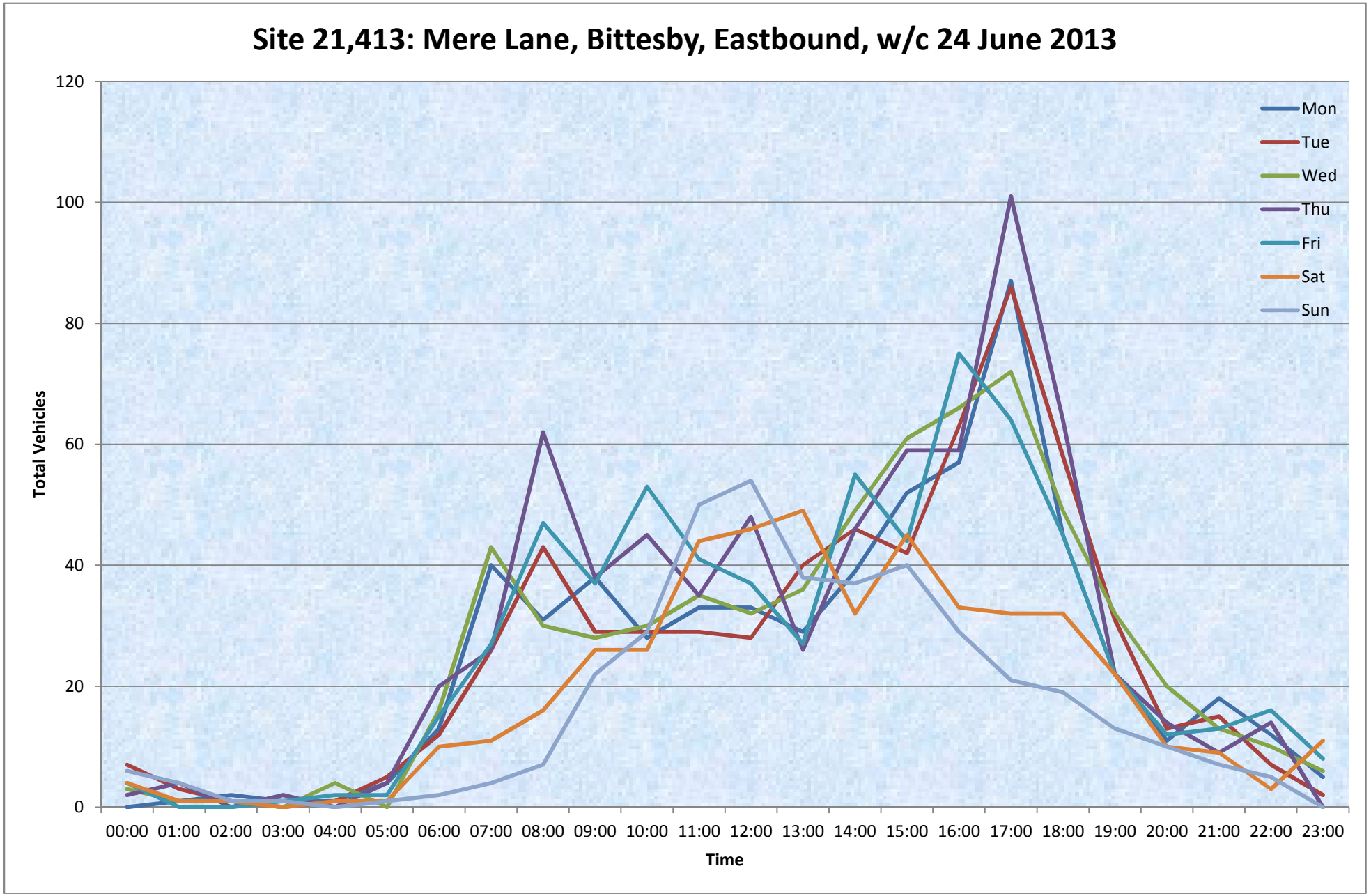
Site 21,413: Mere Lane, Bittesby, Eastbound, w/c 24 June 2013
Total Vehicles
120
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40
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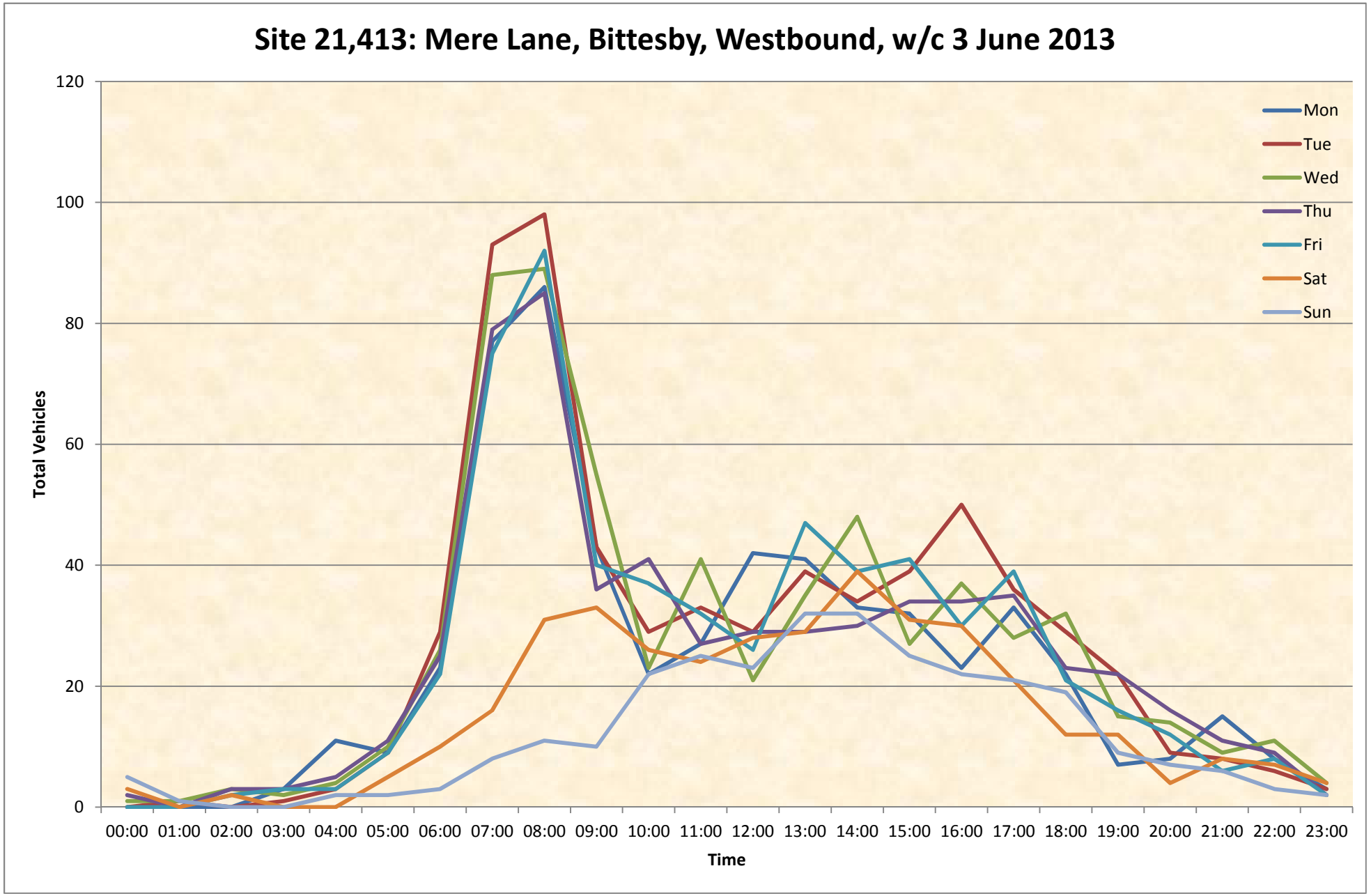
Site 21,413: Mere Lane, Bittesby, Westbound, w/c 3 June 2013
Total Vehicles
120
100
80
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40
20
0
00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00
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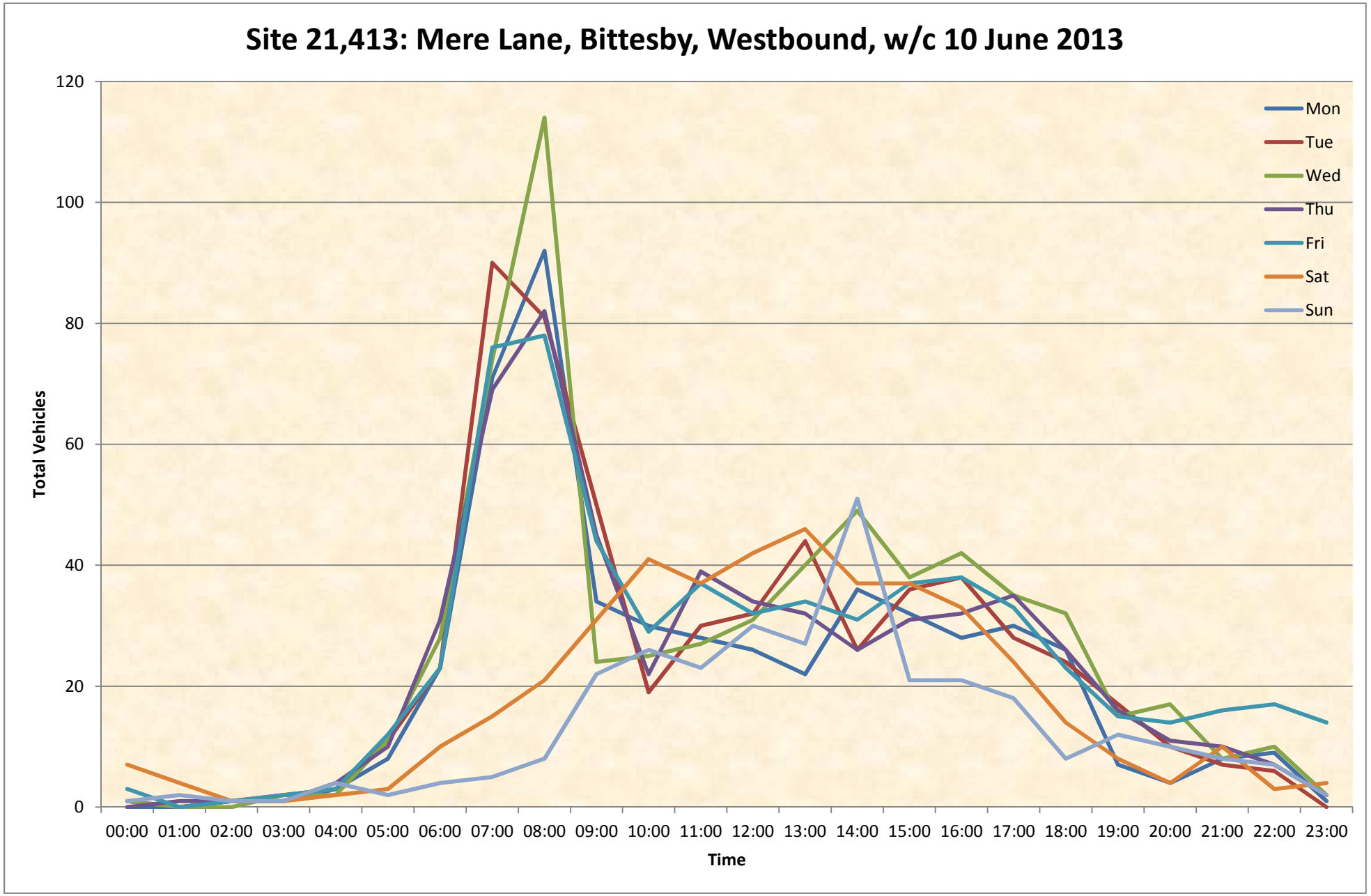
Site 21,413: Mere Lane, Bittesby, Westbound, w/c 10 June 2013
Total Vehicles
120
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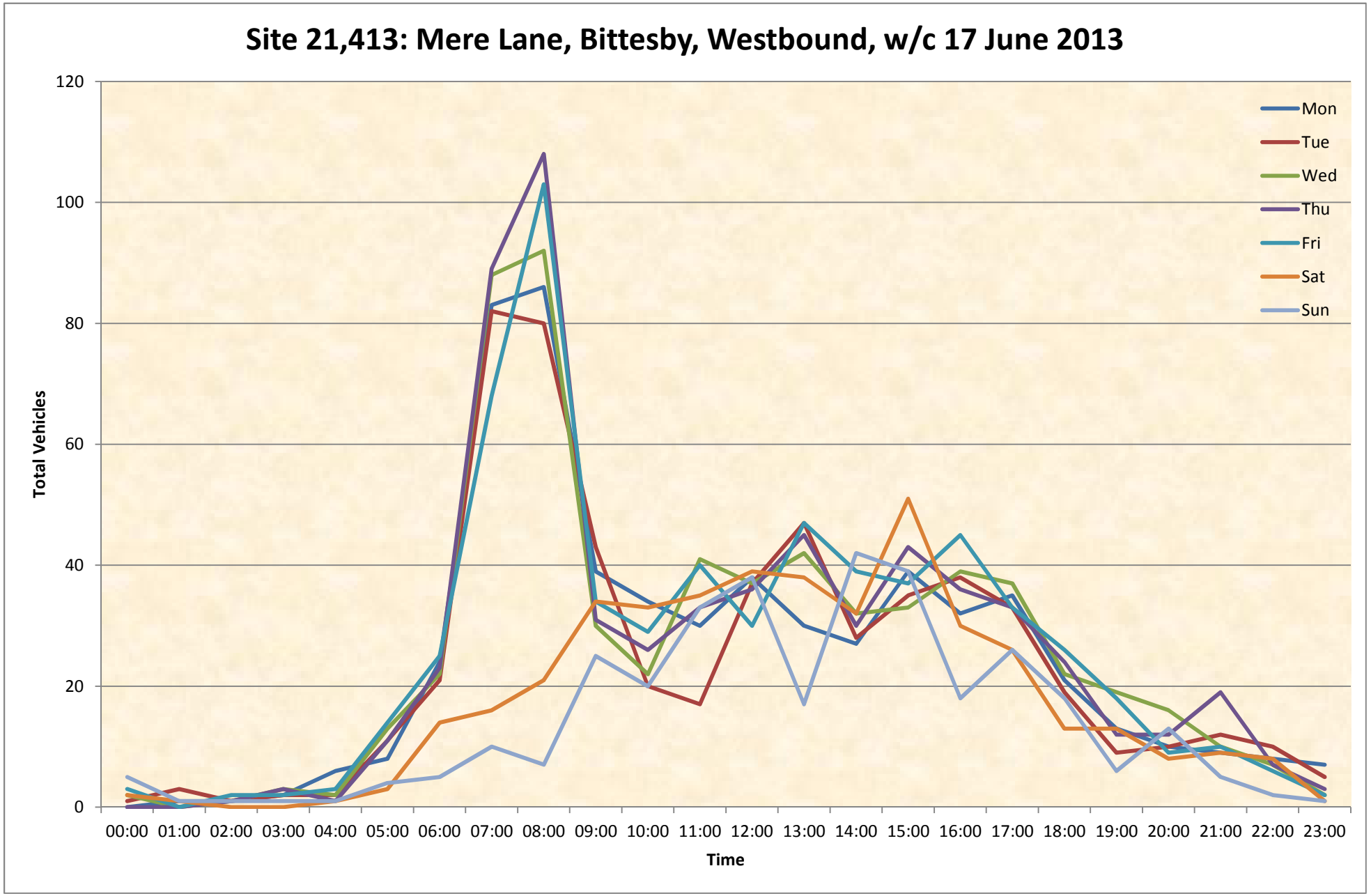
Site 21,413: Mere Lane, Bittesby, Westbound, w/c 17 June 2013
Total Vehicles
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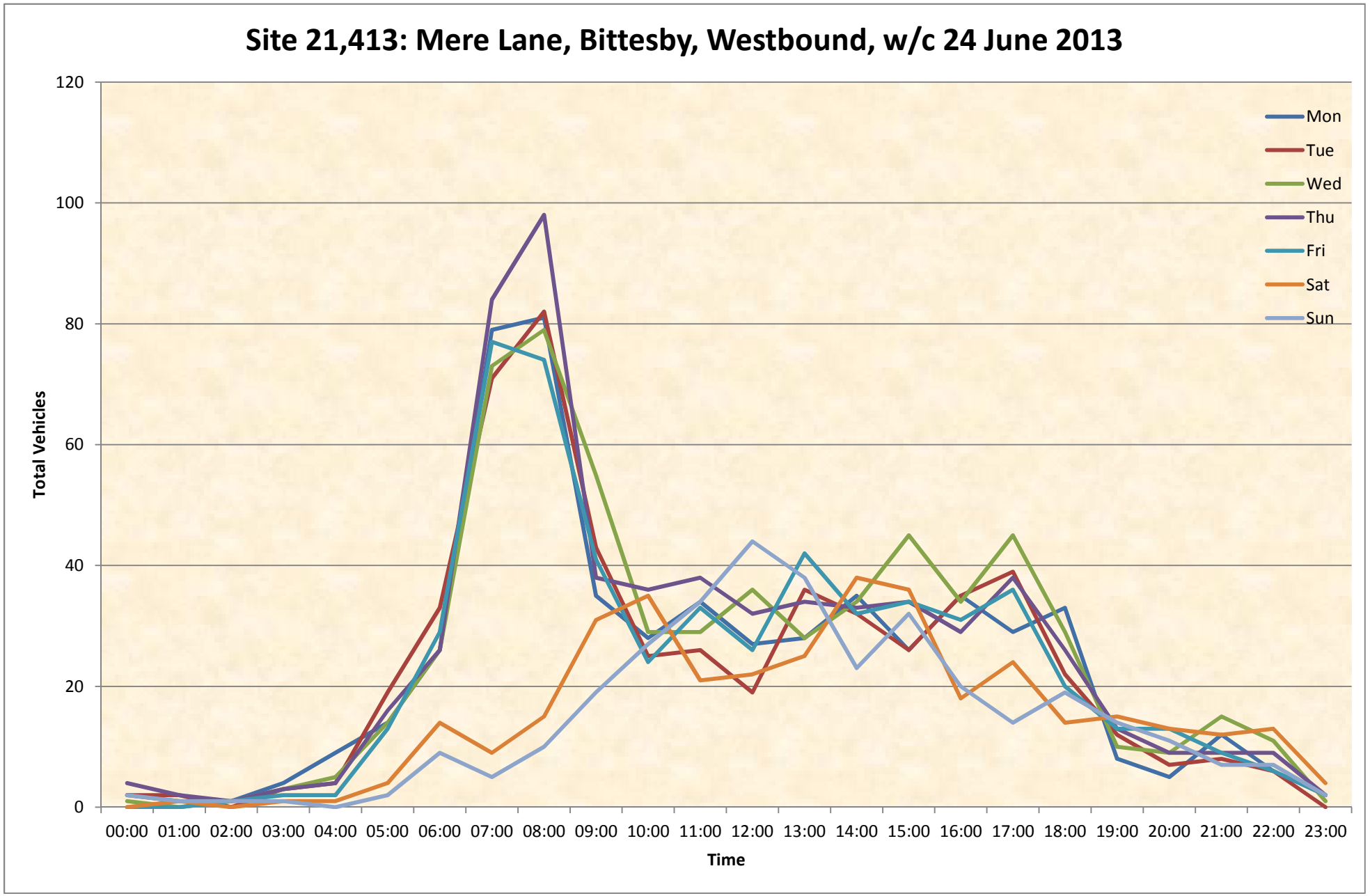
Site 21,413: Mere Lane, Bittesby, Westbound, w/c 24 June 2013
Total Vehicles
120
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00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00
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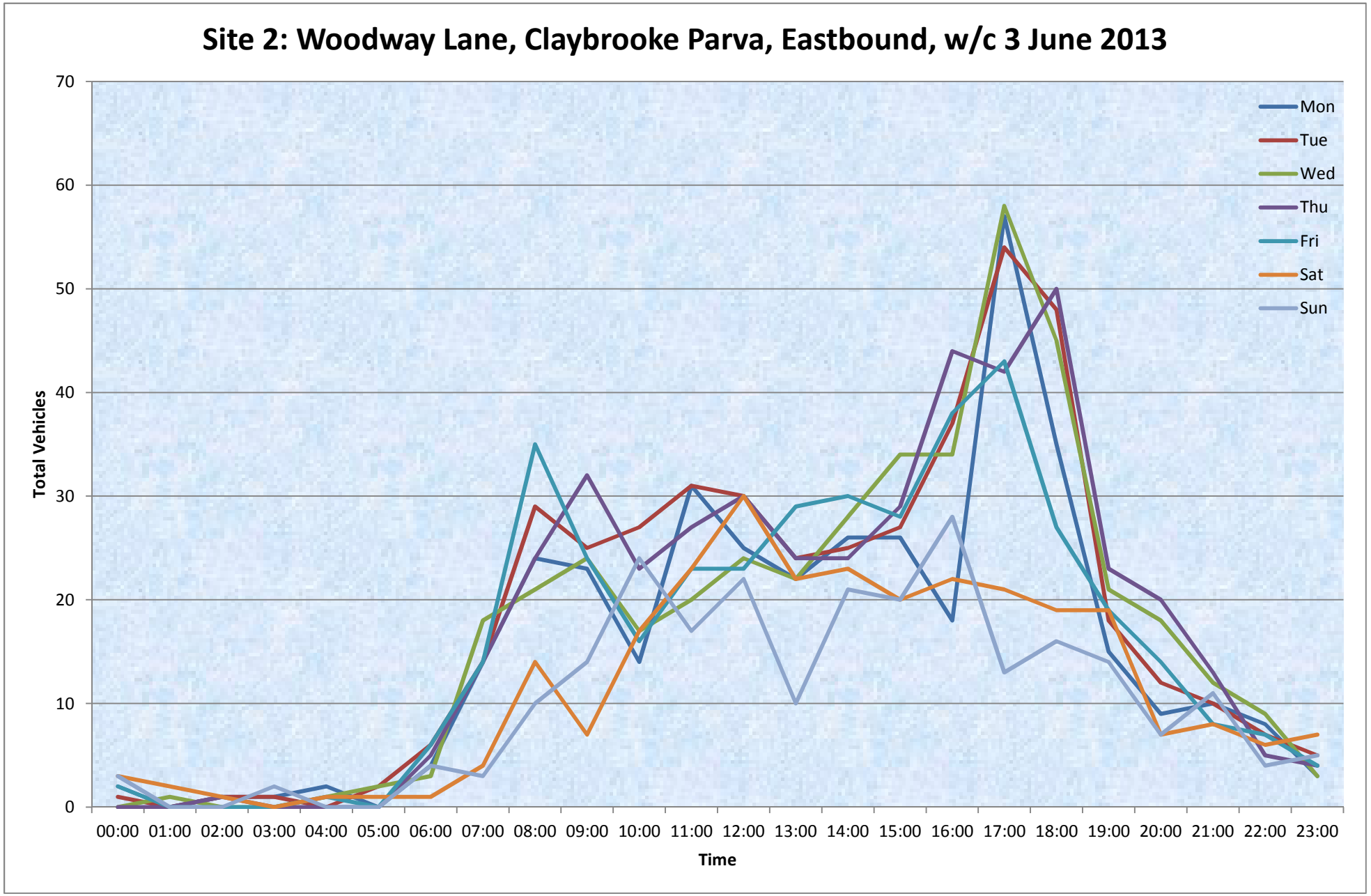
Temporary Site 2: Woodway Lane, Claybrooke Parva


Site 2: Woodway Lane, Claybrooke Parva, Eastbound, w/c 3 June 2013
Total Vehicles
70
60
50
40
30
20
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00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00
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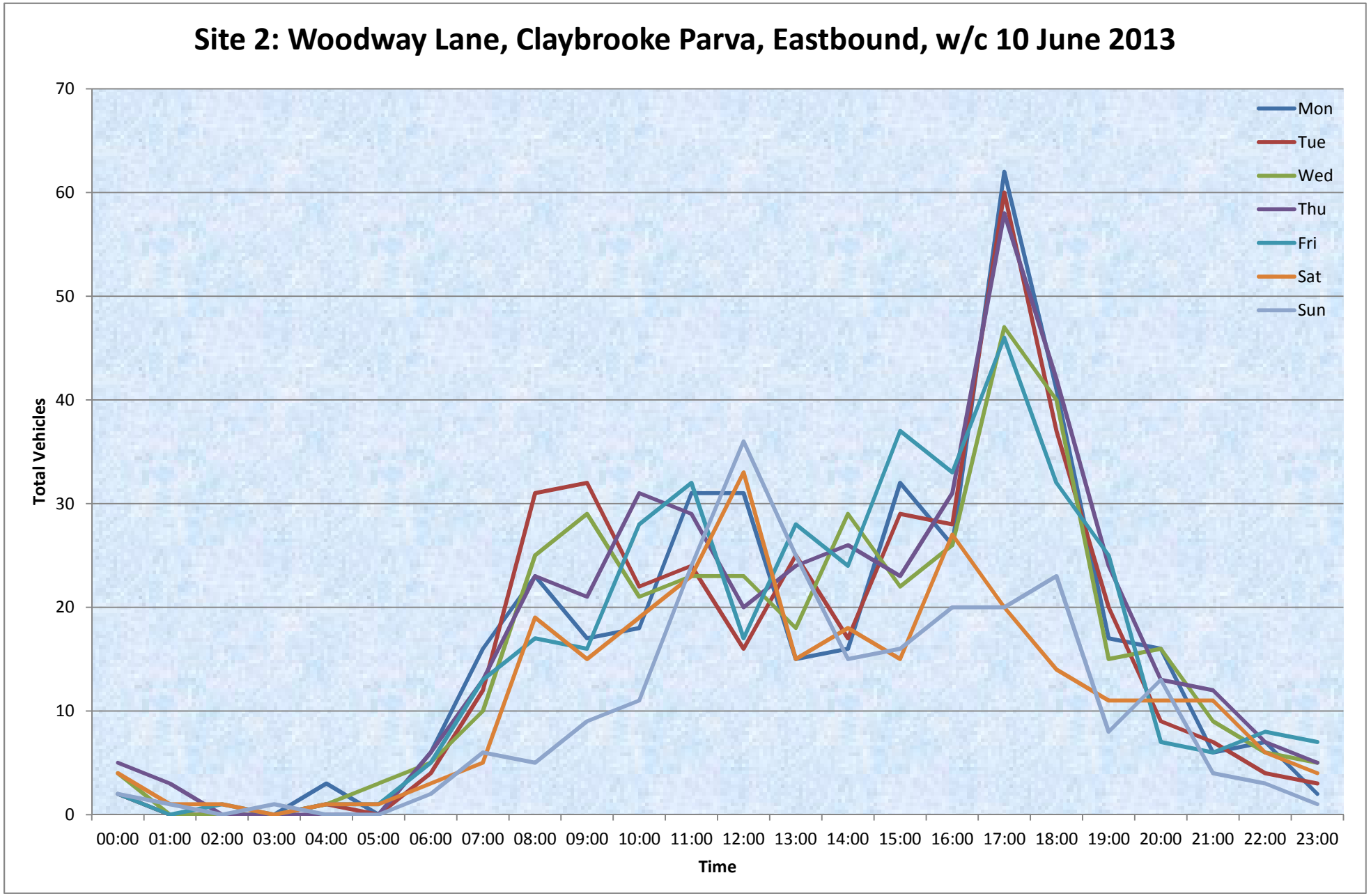
Site 2: Woodway Lane, Claybrooke Parva, Eastbound, w/c 10 June 2013
Total Vehicles
70
60
50
40
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20
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00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00
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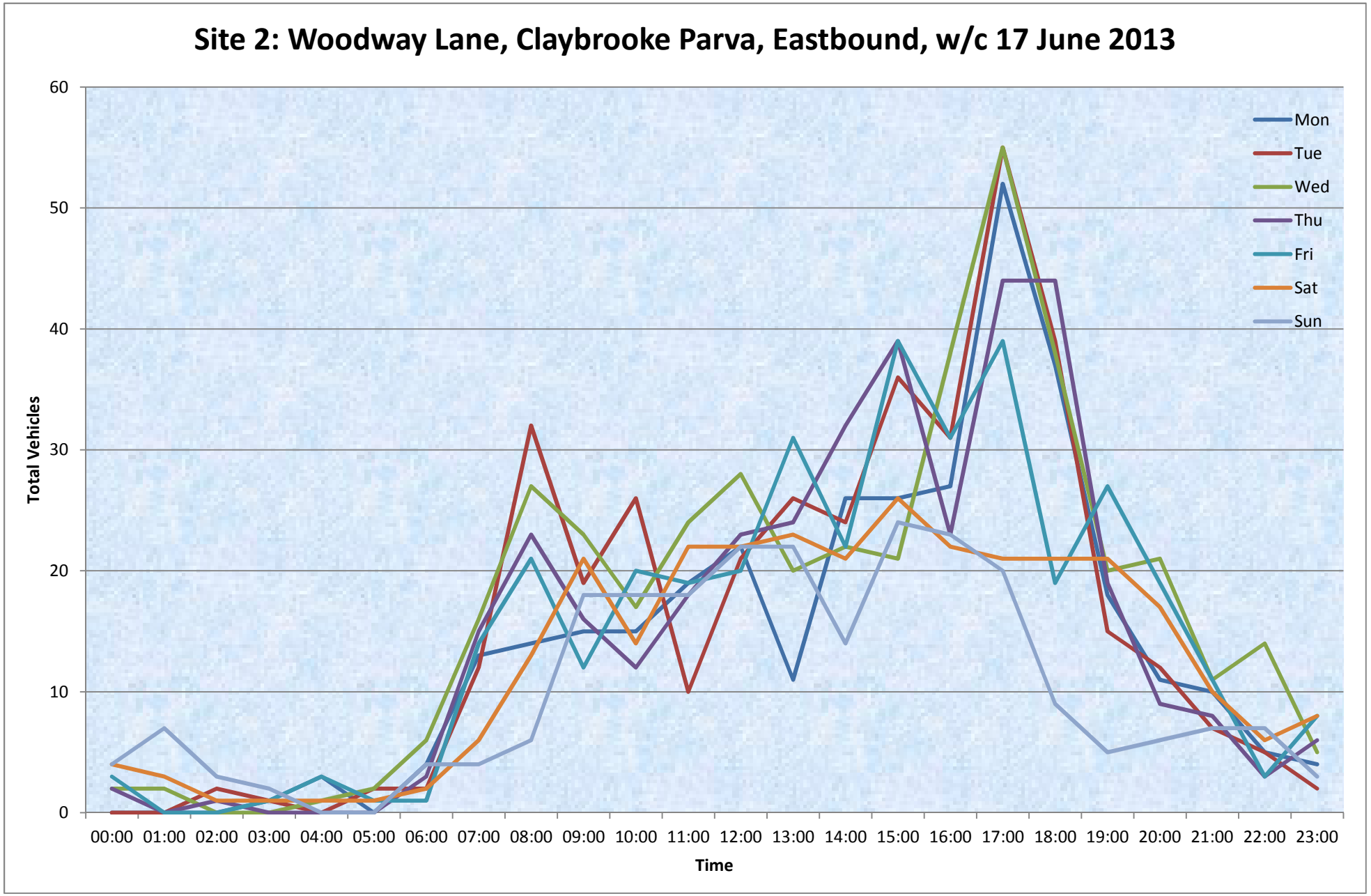
Site 2: Woodway Lane, Claybrooke Parva, Eastbound, w/c 17 June 2013
Total Vehicles
60
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00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00
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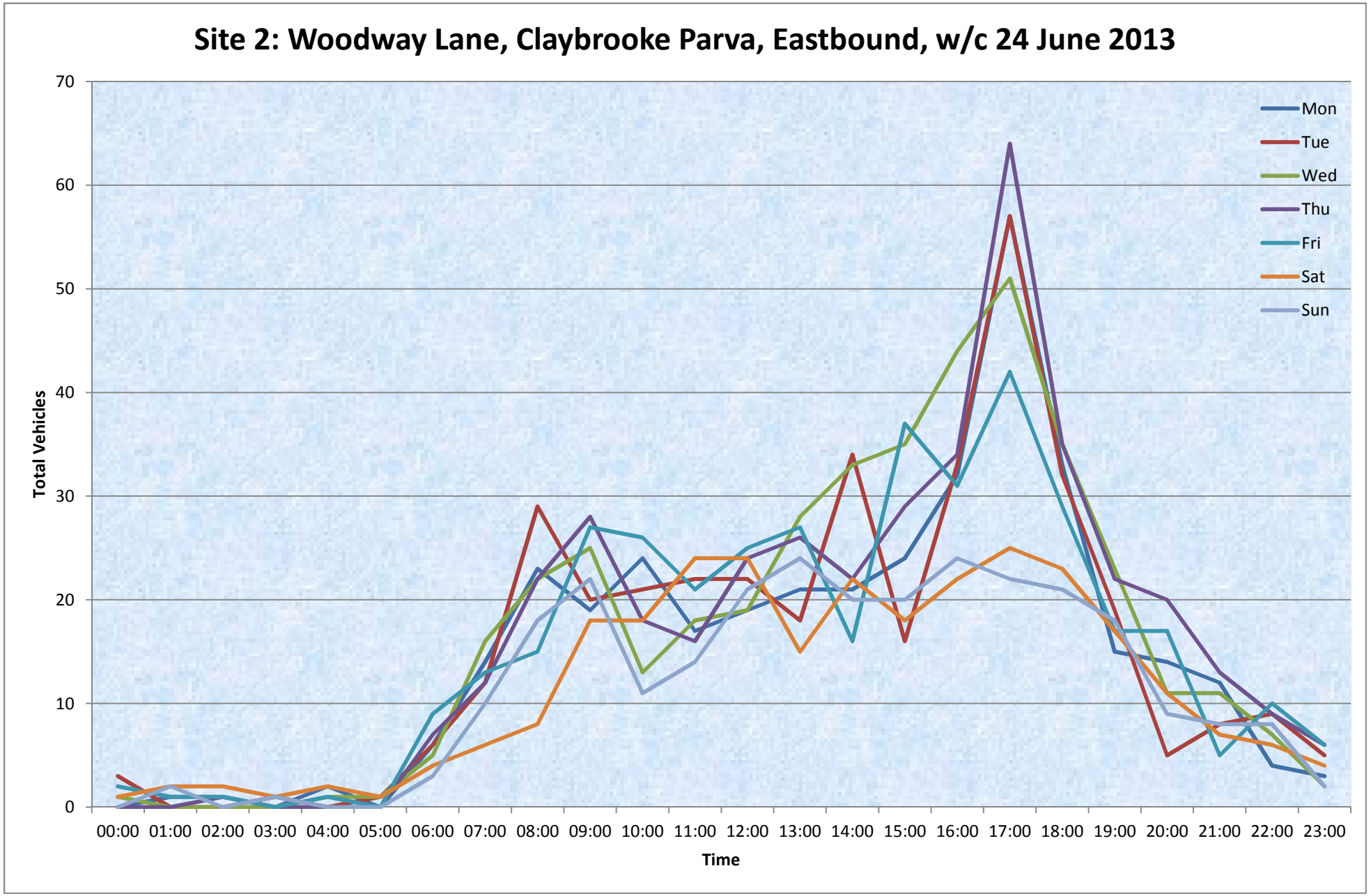
Site 2: Woodway Lane, Claybrooke Parva, Eastbound, w/c 24 June 2013
Total Vehicles
70
60
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00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00
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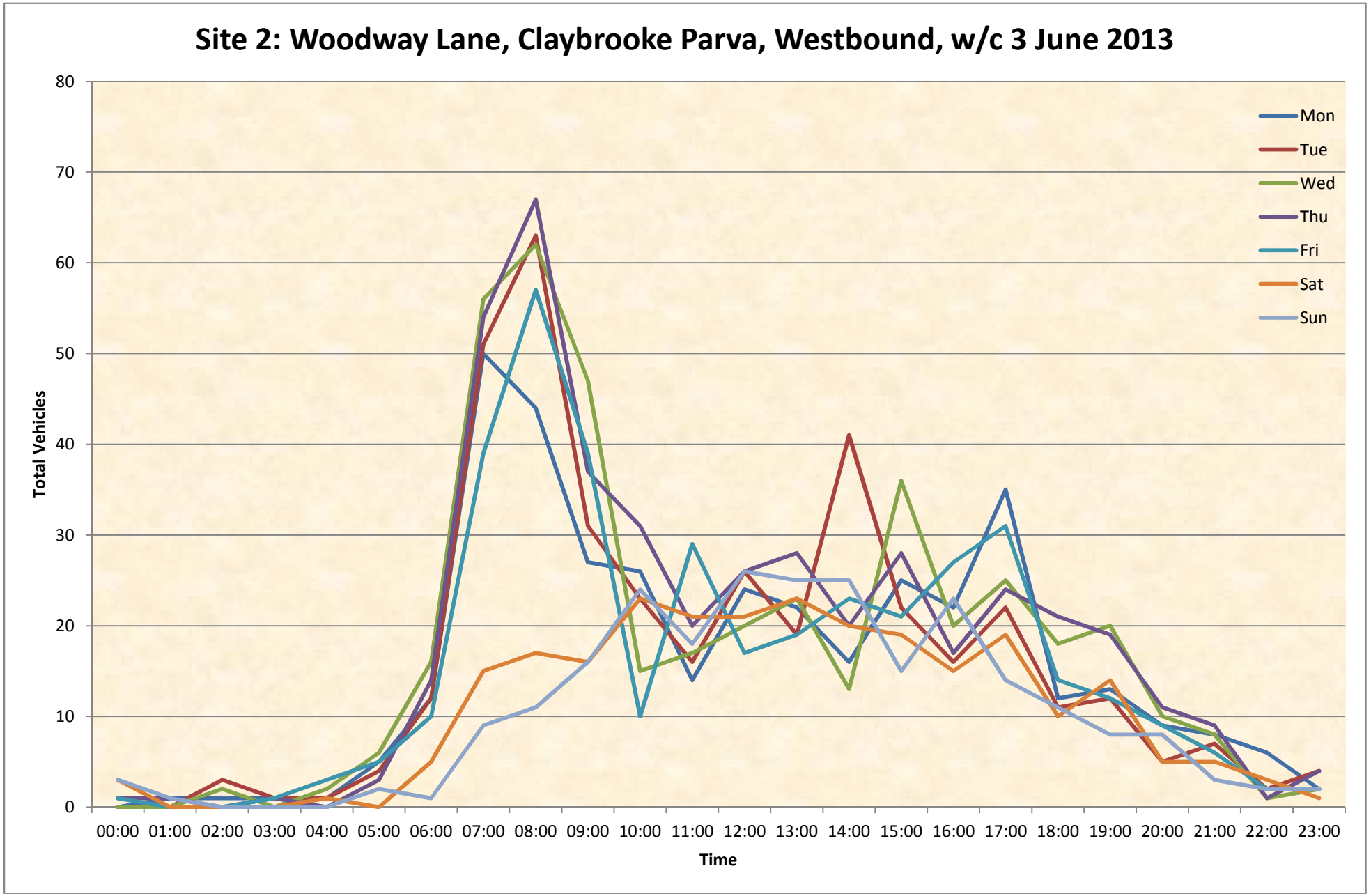
Site 2: Woodway Lane, Claybrooke Parva, Westbound, w/c 3 June 2013
Total Vehicles
80
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00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00
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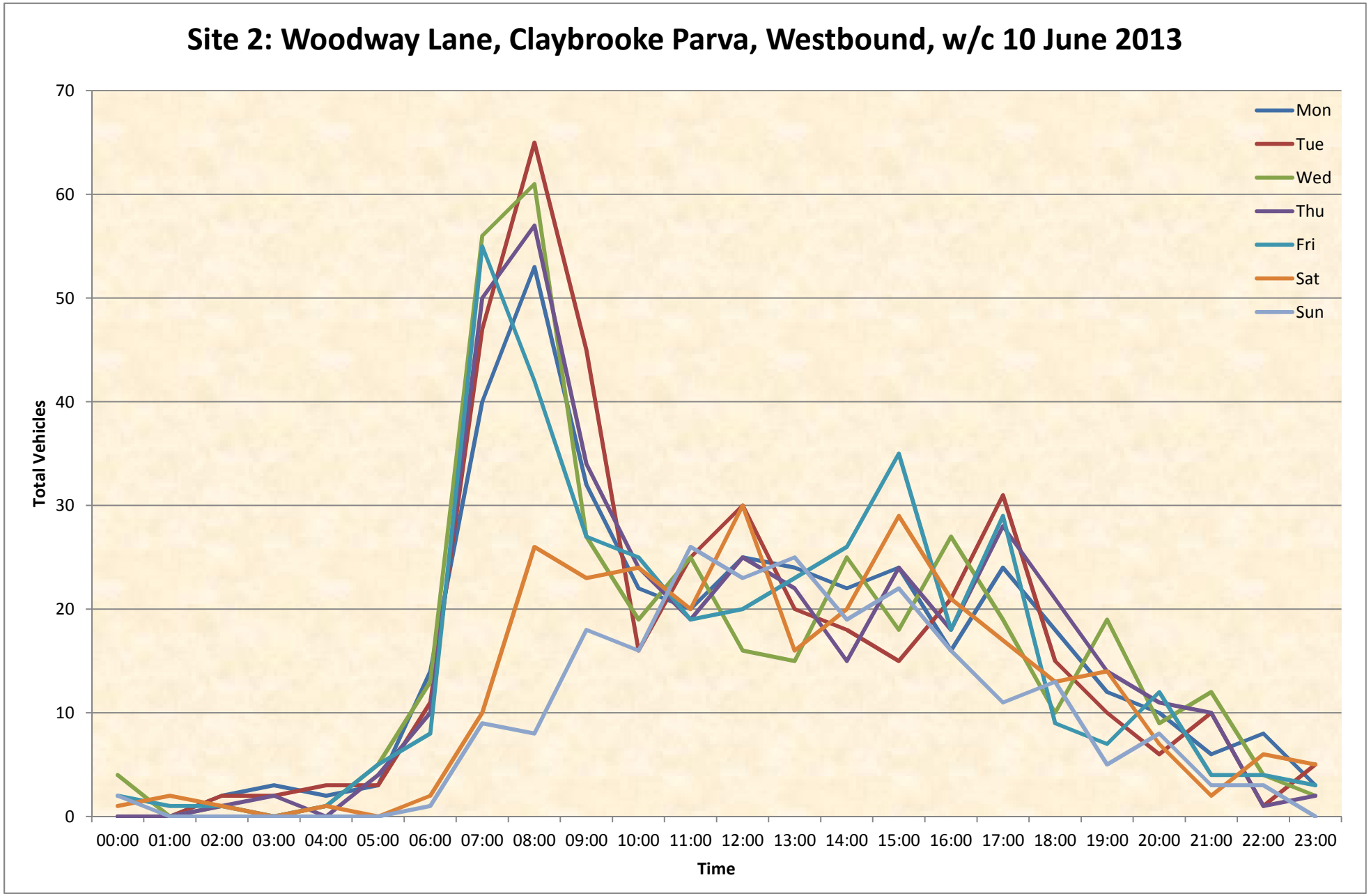
Site 2: Woodway Lane, Claybrooke Parva, Westbound, w/c 10 June 2013
Total Vehicles
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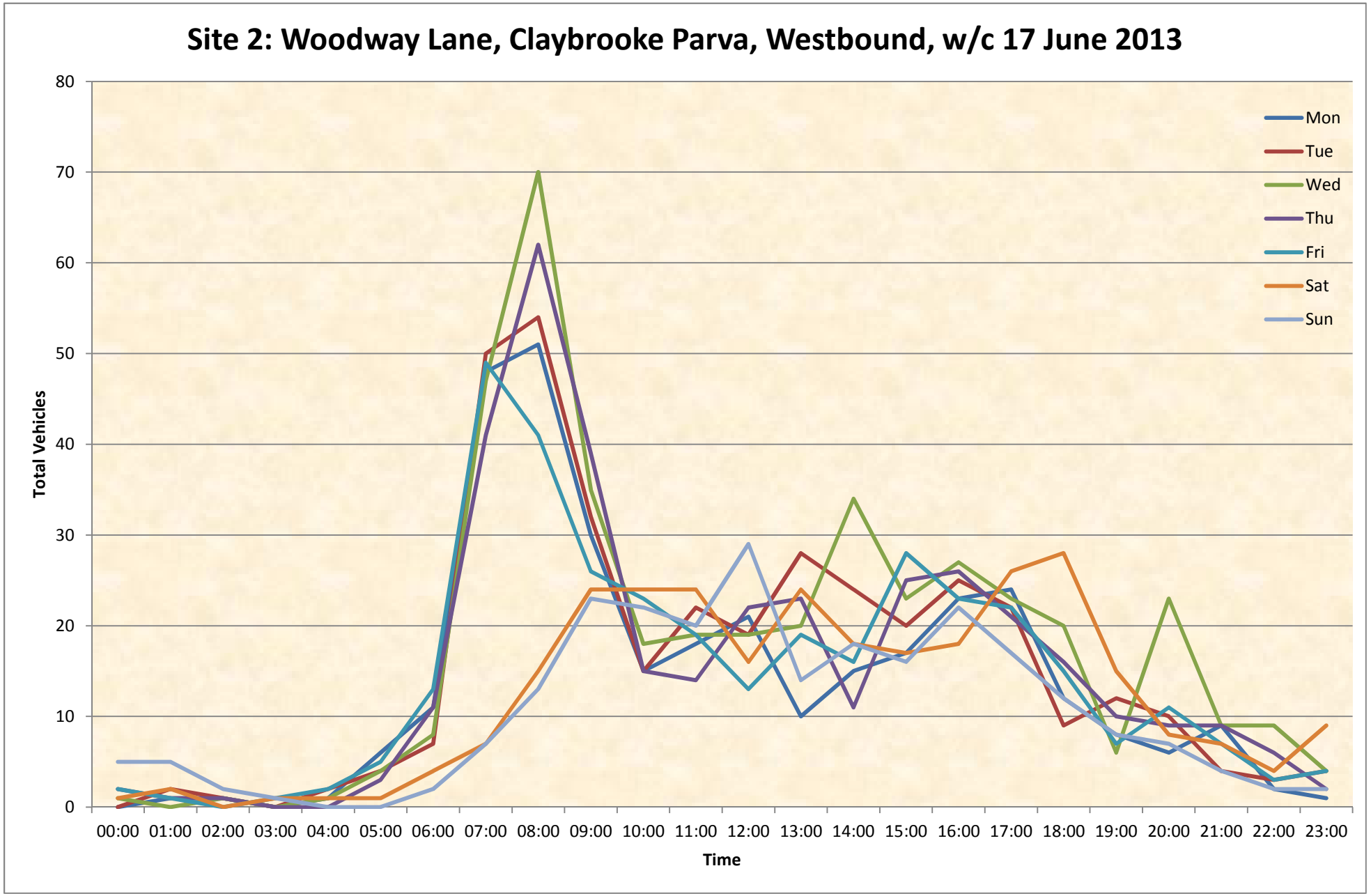
Site 2: Woodway Lane, Claybrooke Parva, Westbound, w/c 17 June 2013
Total Vehicles
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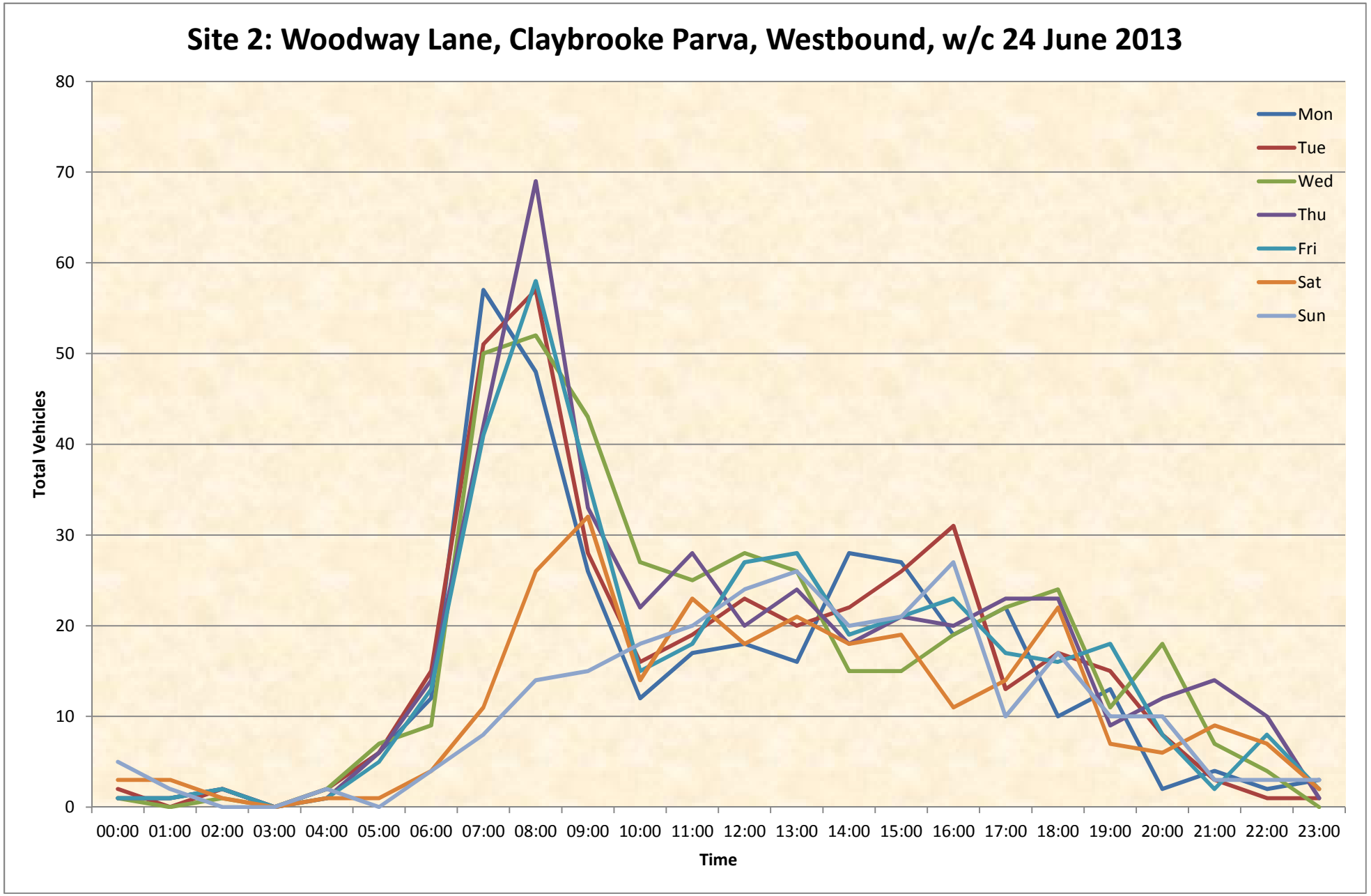
Site 2: Woodway Lane, Claybrooke Parva, Westbound, w/c 24 June 2013
Total Vehicles
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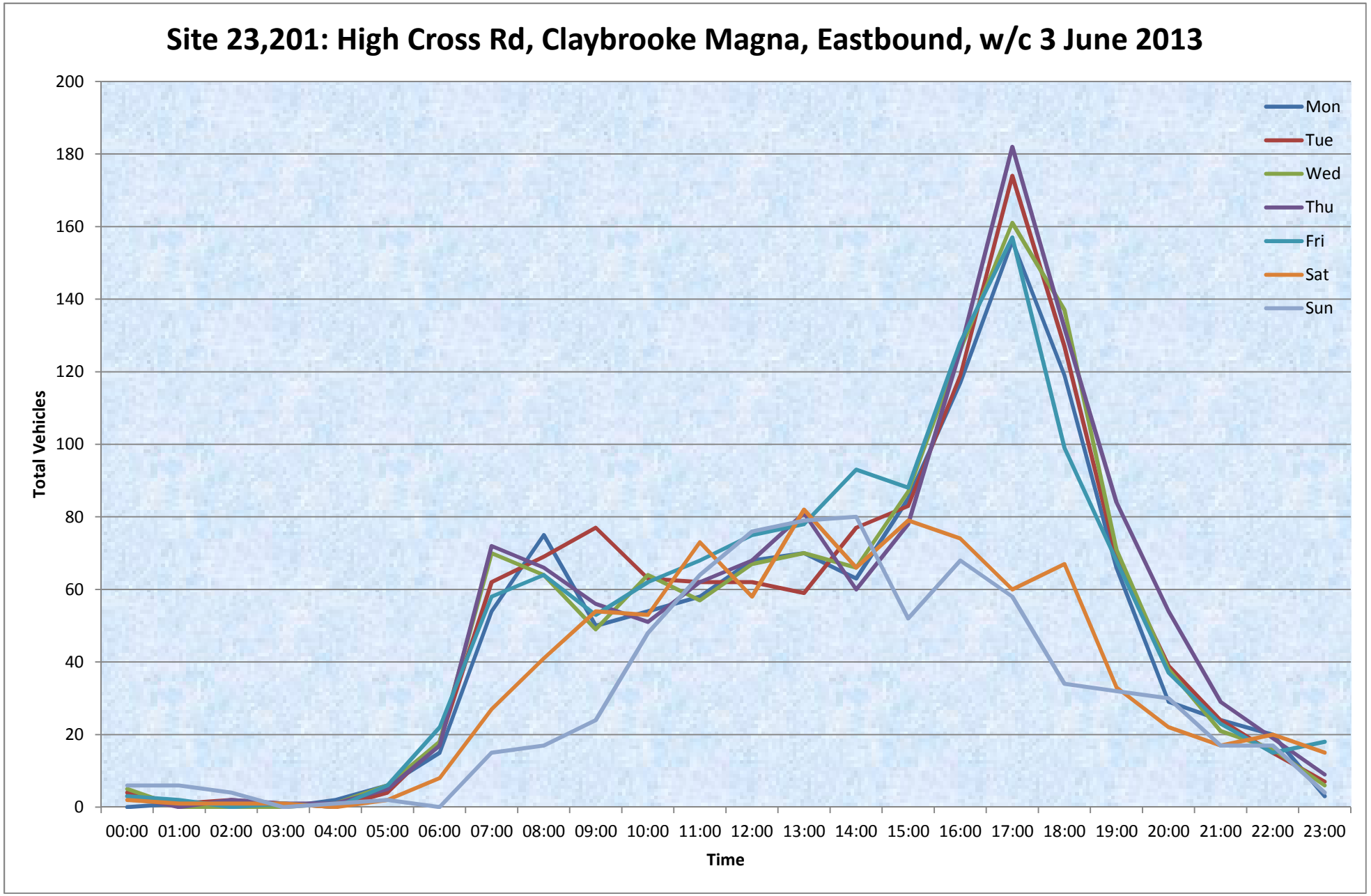
LCC Site 23,201: High Cross Road, Claybrooke Magna


Site 23,201: High Cross Rd, Claybrooke Magna, Eastbound, w/c 3 June 2013
Total Vehicles
200
180
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00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00
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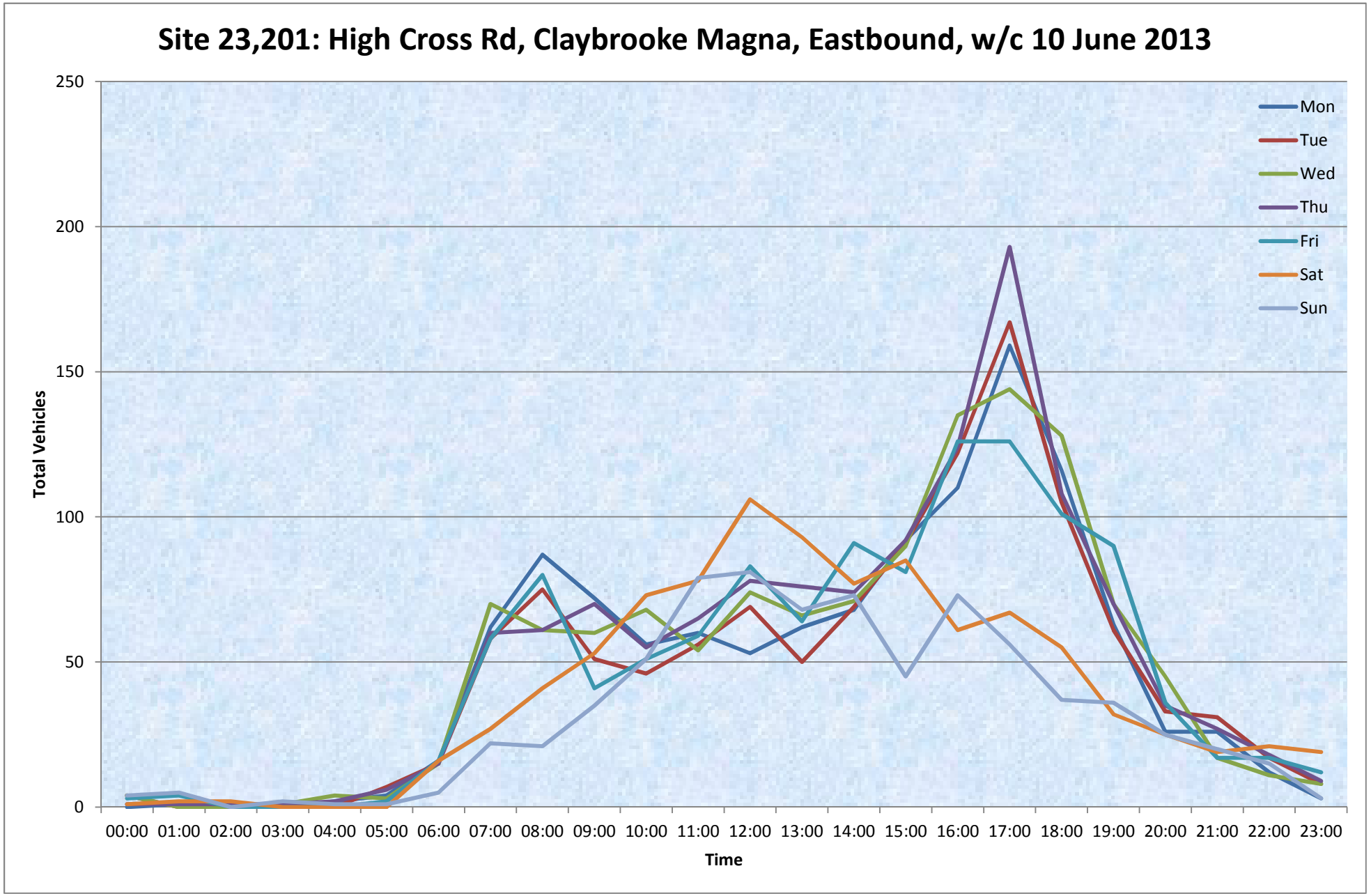
Site 23,201: High Cross Rd, Claybrooke Magna, Eastbound, w/c 10 June 2013
Total Vehicles
250
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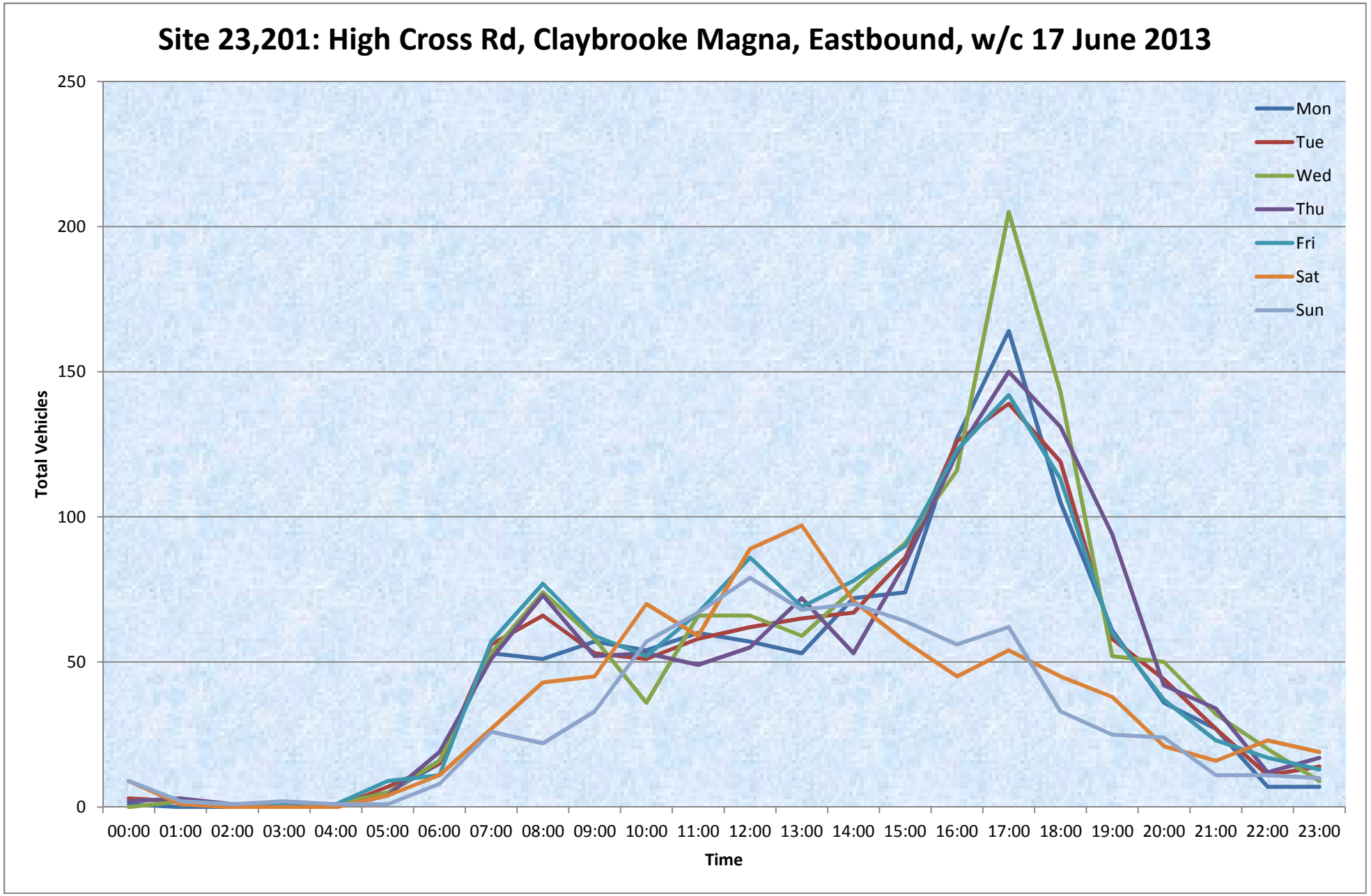
Site 23,201: High Cross Rd, Claybrooke Magna, Eastbound, w/c 17 June 2013
Total Vehicles
250
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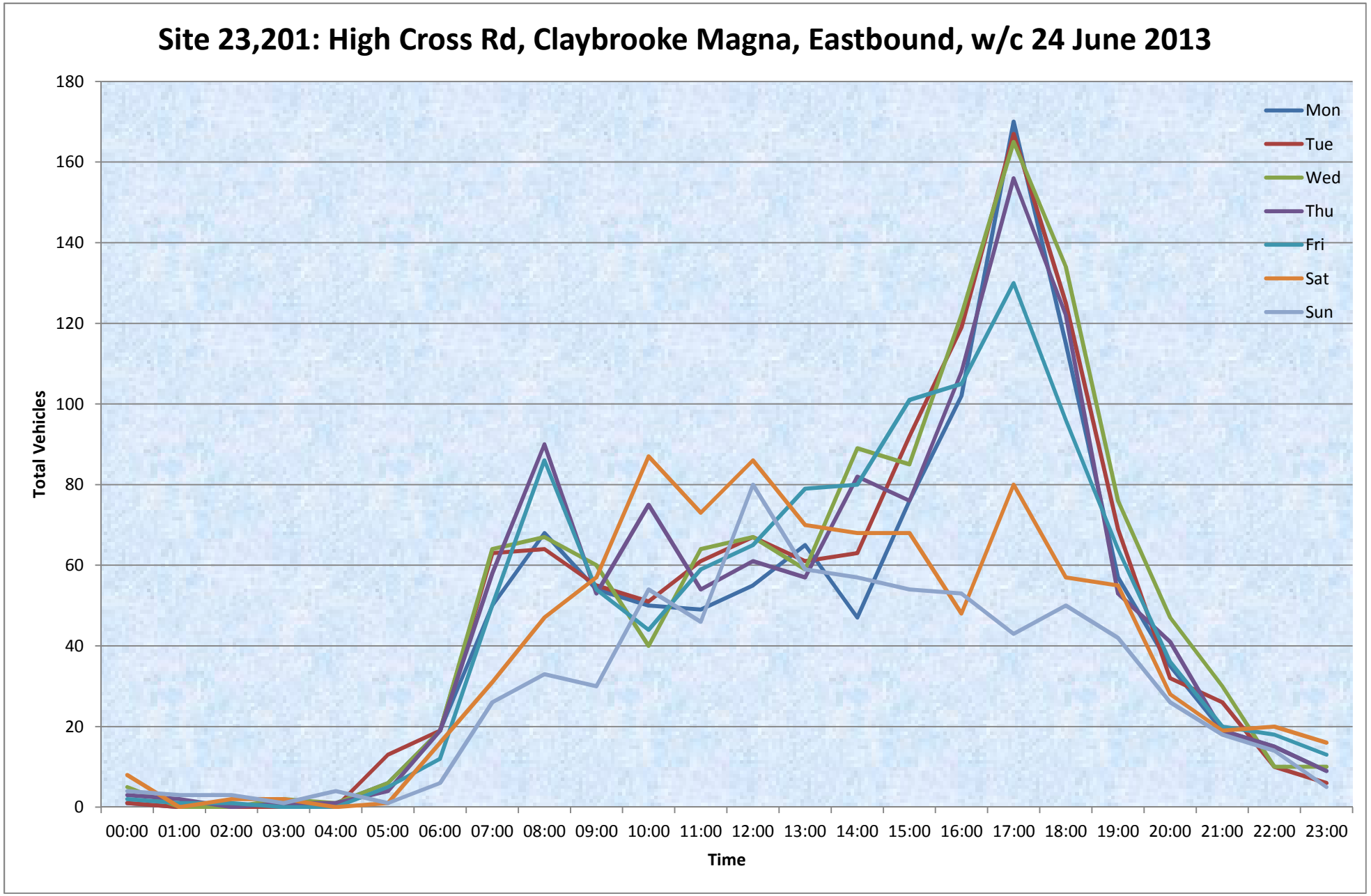
Site 23,201: High Cross Rd, Claybrooke Magna, Eastbound, w/c 24 June 2013
Total Vehicles
180
160
140
120
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00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00
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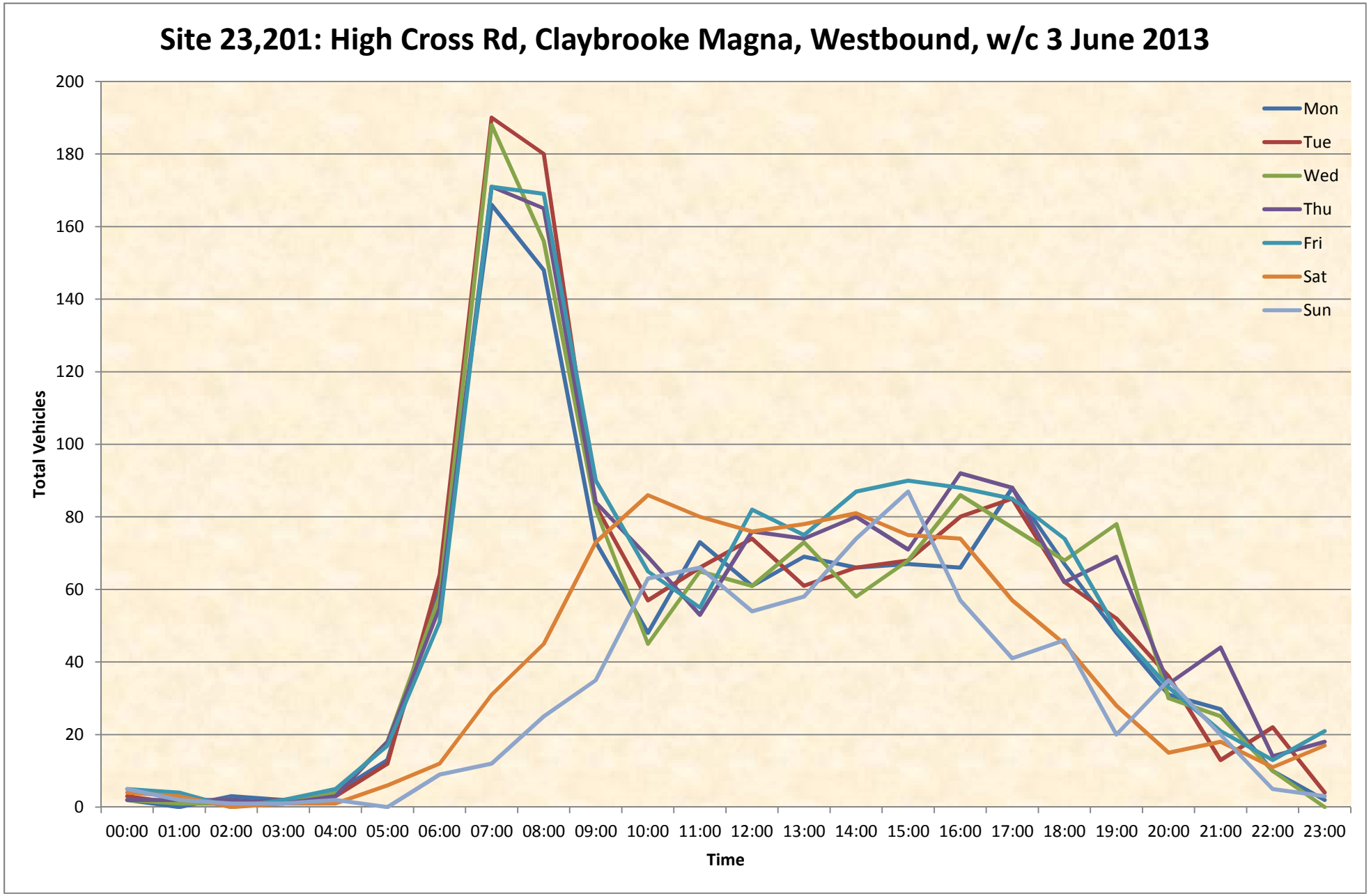
Site 23,201: High Cross Rd, Claybrooke Magna, Westbound, w/c 3 June 2013
Total Vehicles
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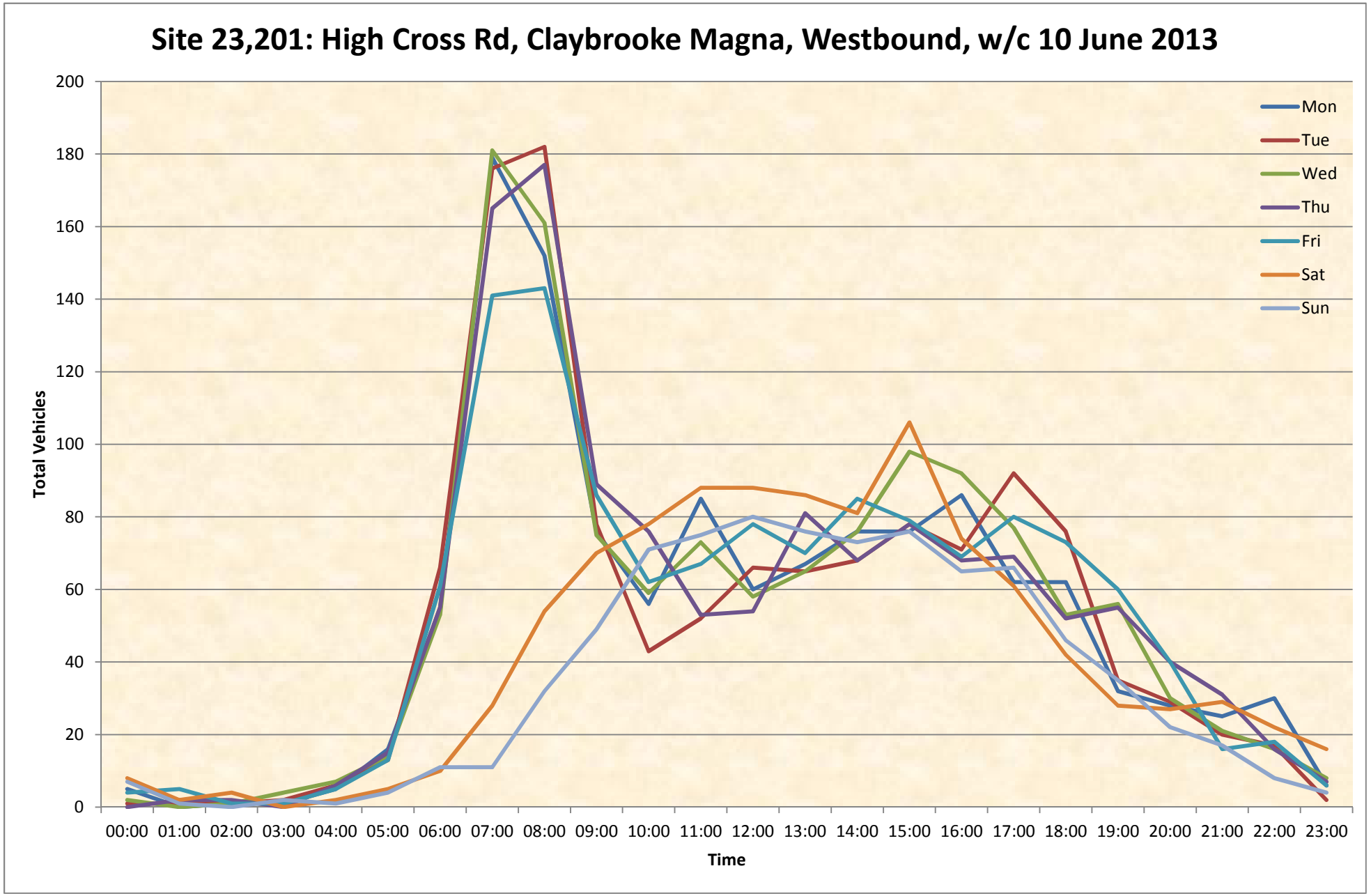
Site 23,201: High Cross Rd, Claybrooke Magna, Westbound, w/c 10 June 2013
Total Vehicles
200
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00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00
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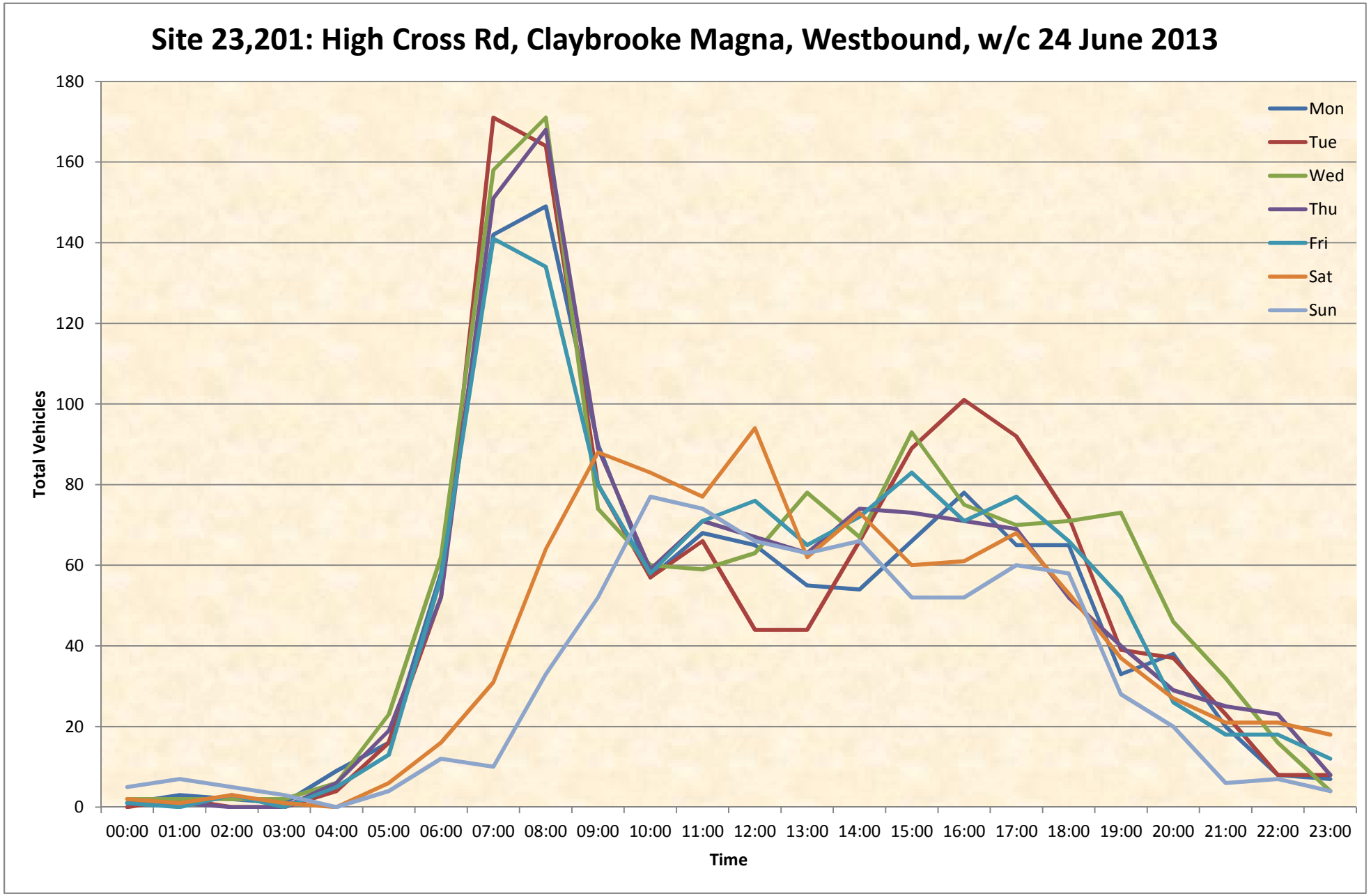
Site 23,201: High Cross Rd, Claybrooke Magna, Westbound, w/c 24 June 2013
Total Vehicles
180
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00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00
Time
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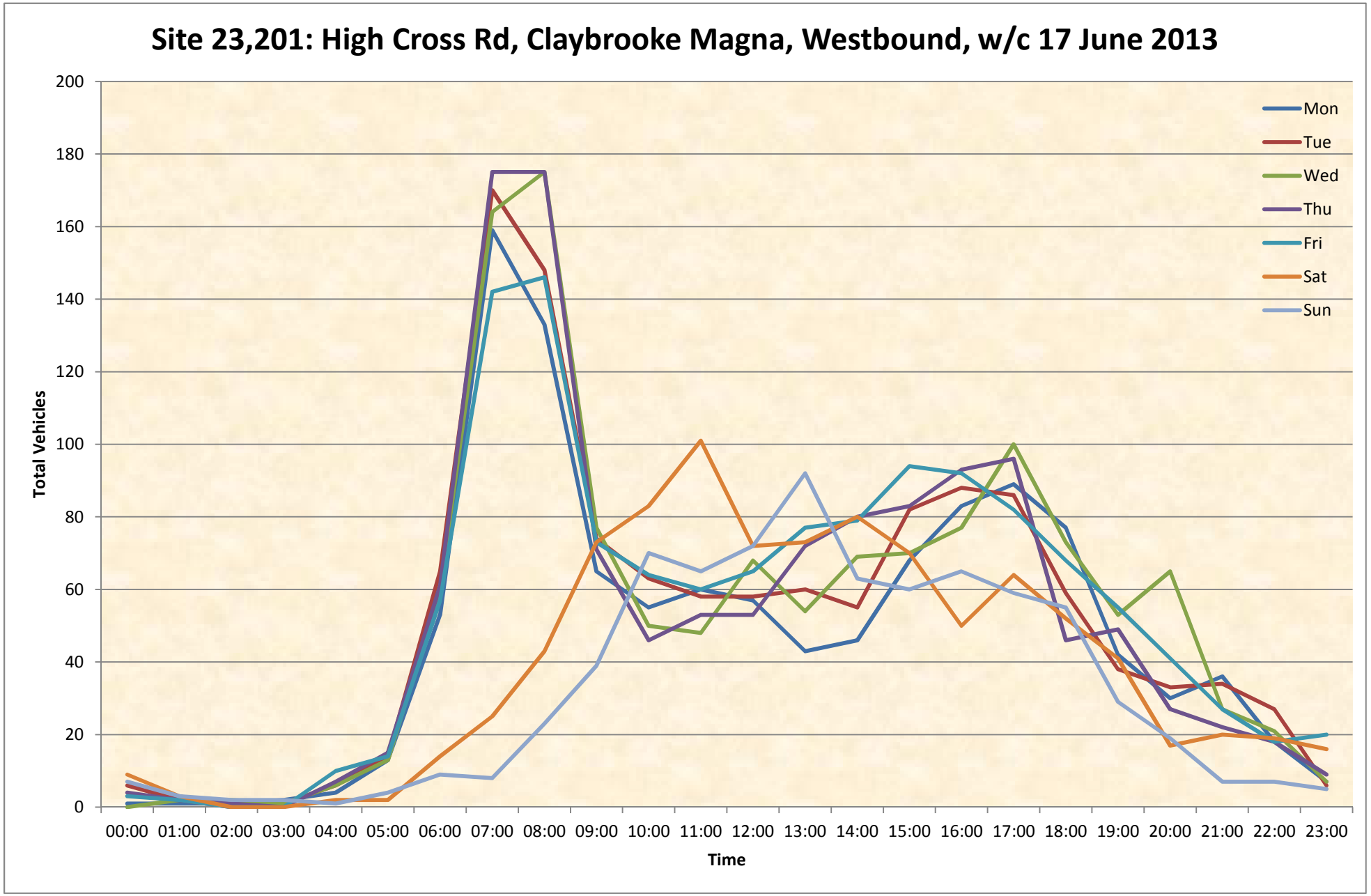
Site 23,201: High Cross Rd, Claybrooke Magna, Westbound, w/c 17 June 2013
Total Vehicles
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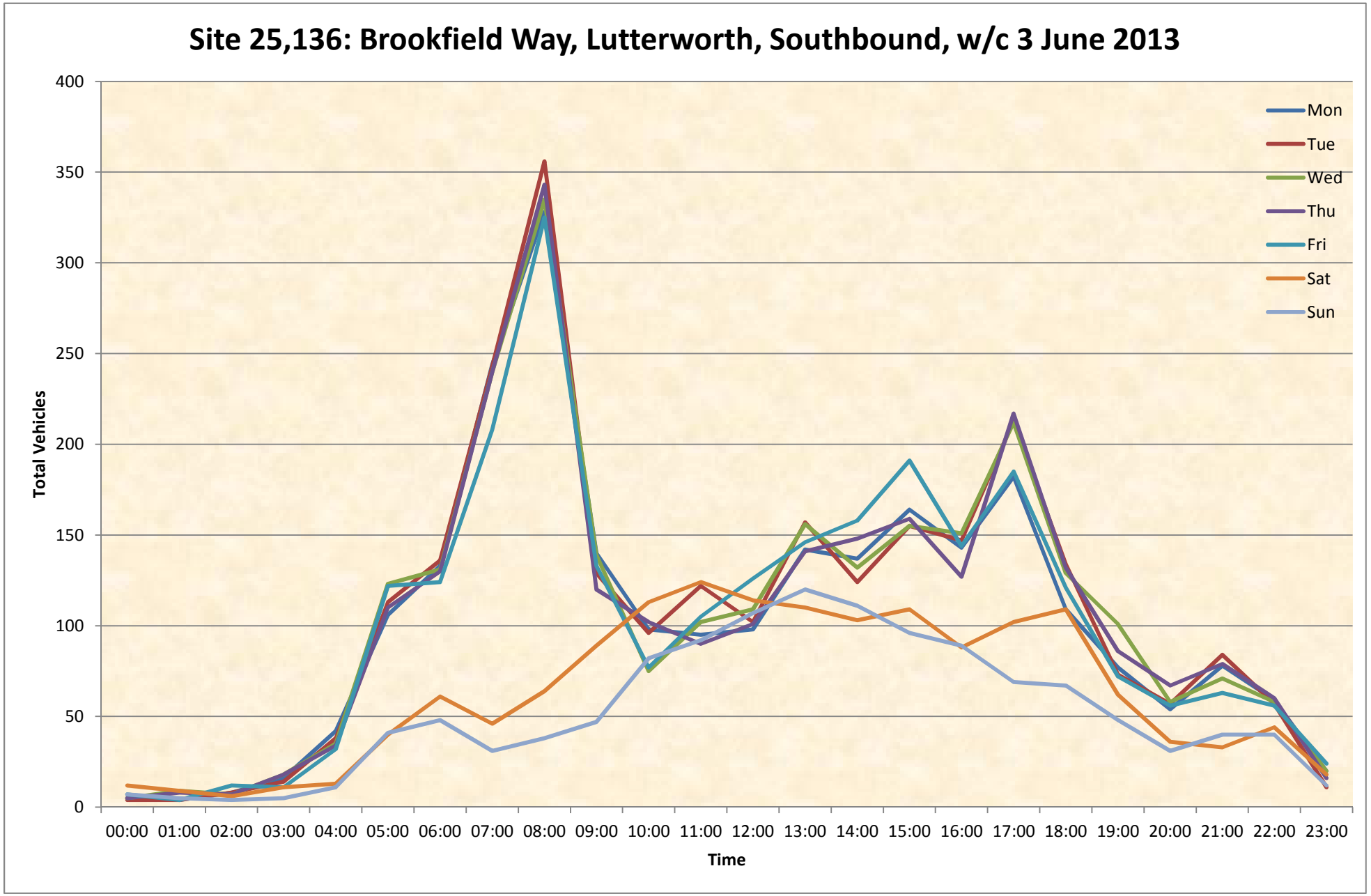
LCC Site 25,136: Brookfield Way, Lutterworth


Site 25,136: Brookfield Way, Lutterworth, Southbound, w/c 3 June 2013
Total Vehicles
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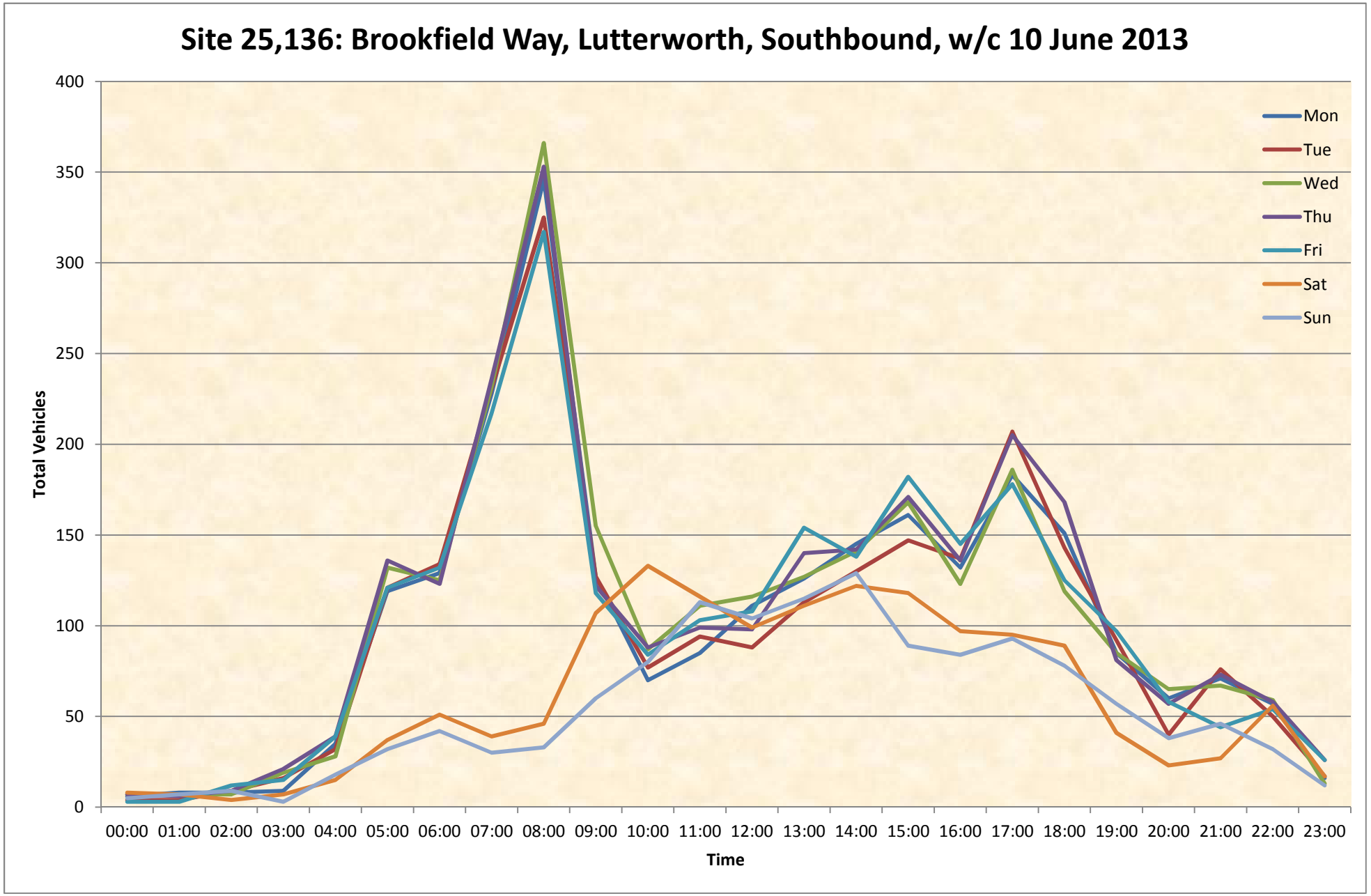
Site 25,136: Brookfield Way, Lutterworth, Southbound, w/c 10 June 2013
Total Vehicles
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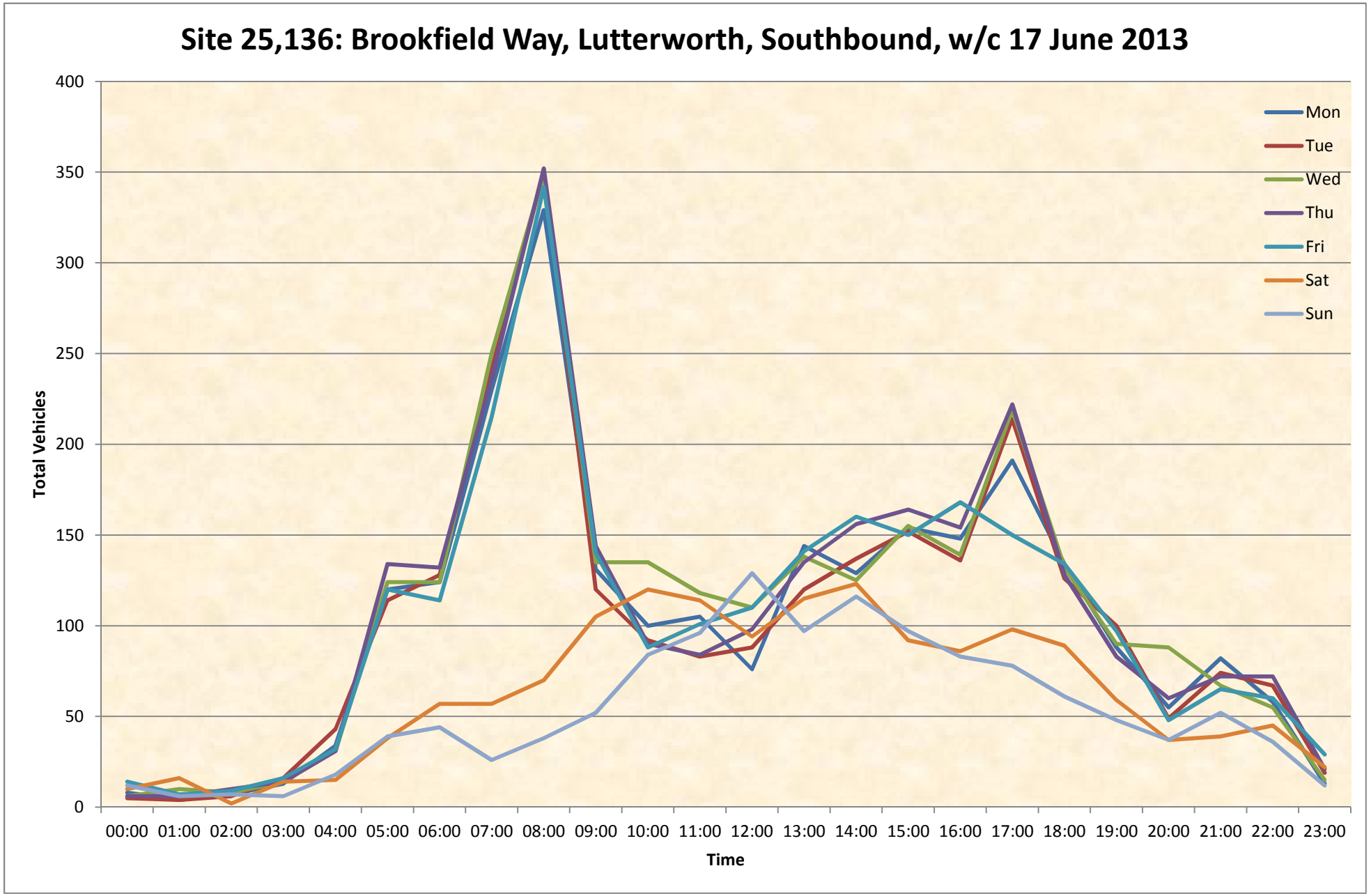
Site 25,136: Brookfield Way, Lutterworth, Southbound, w/c 17 June 2013
Total Vehicles
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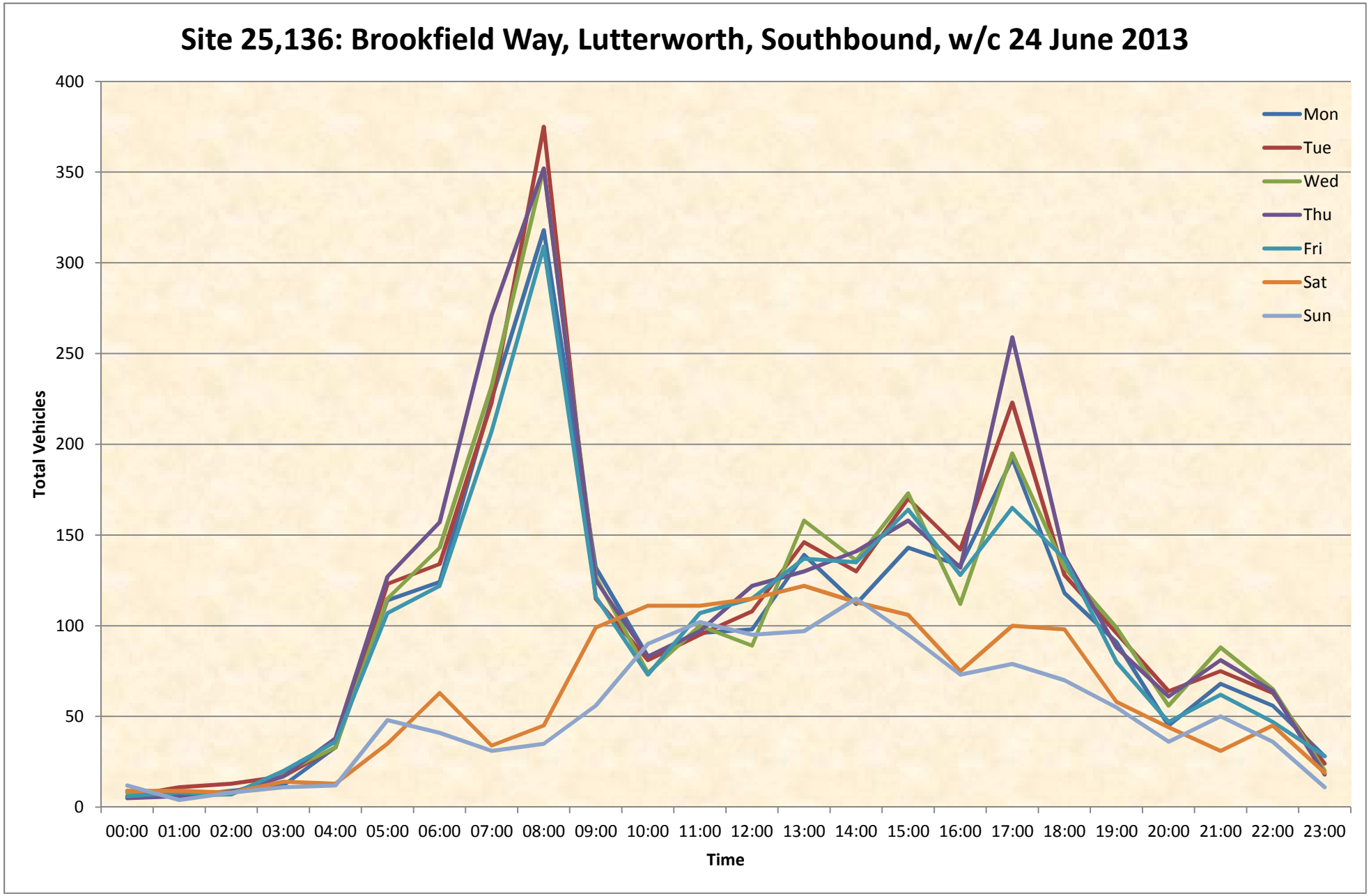
Site 25,136: Brookfield Way, Lutterworth, Southbound, w/c 24 June 2013
Total Vehicles
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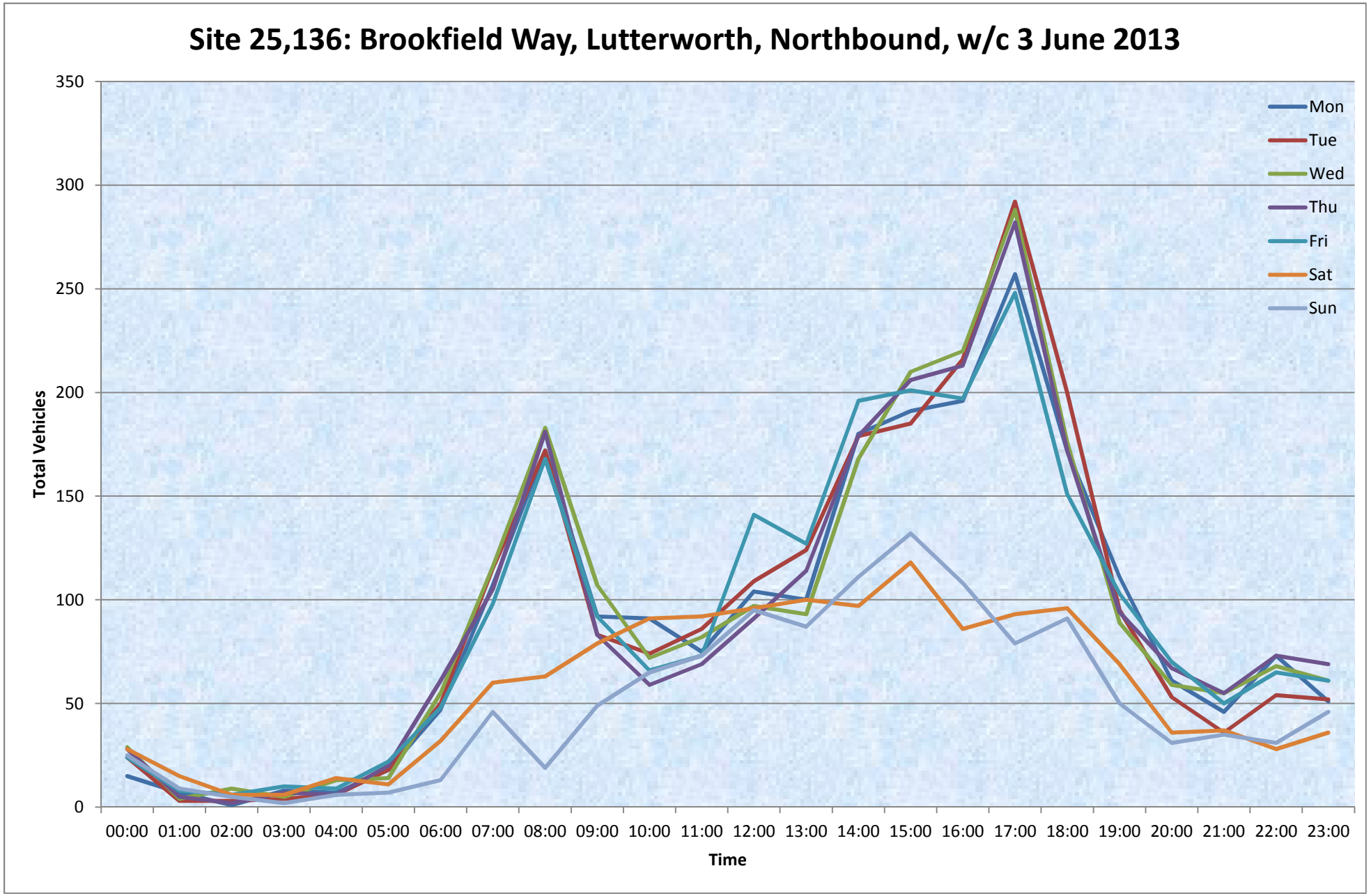
Site 25,136: Brookfield Way, Lutterworth, Northbound, w/c 3 June 2013
Total Vehicles
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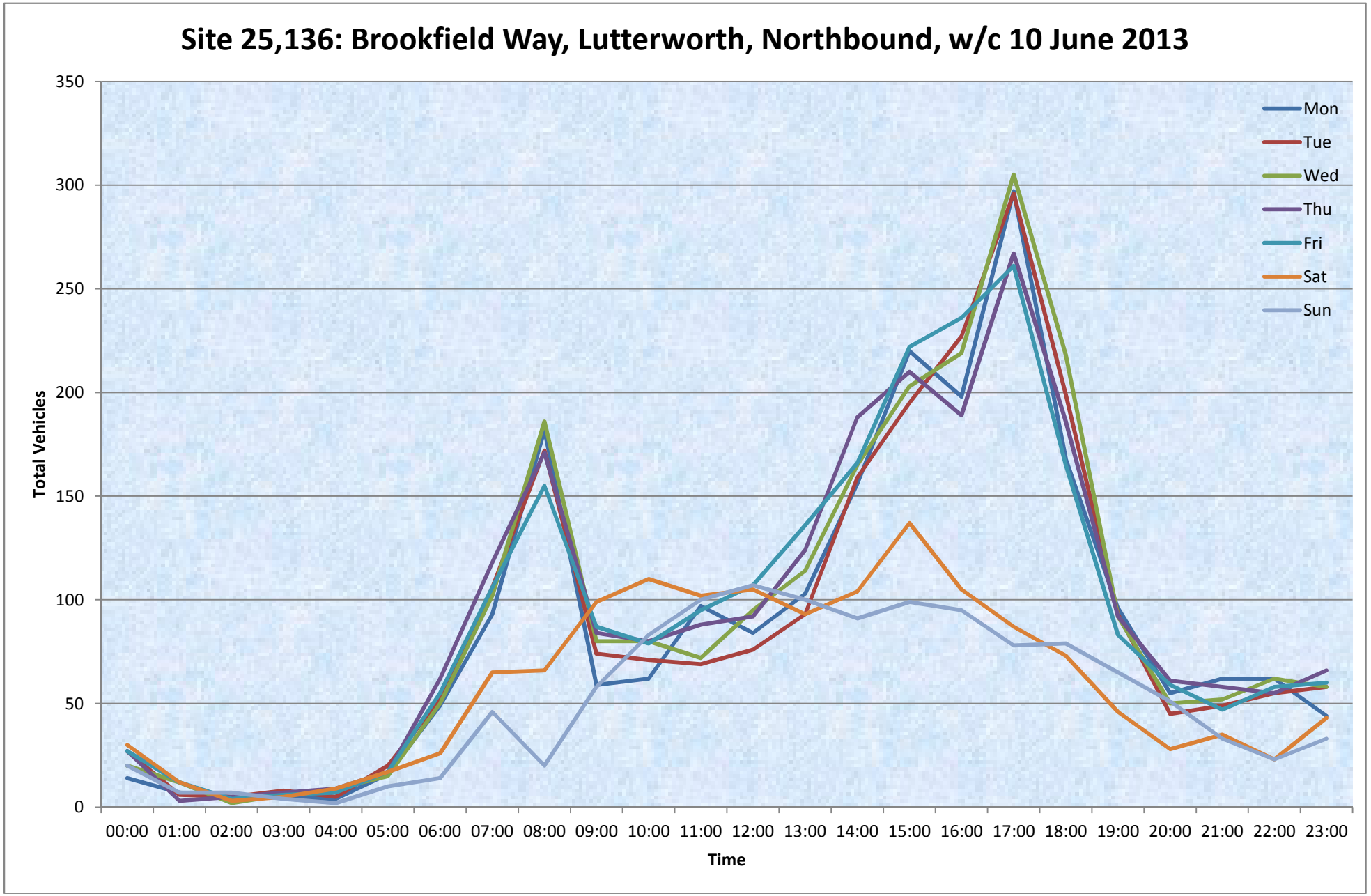
Site 25,136: Brookfield Way, Lutterworth, Northbound, w/c 10 June 2013
Total Vehicles
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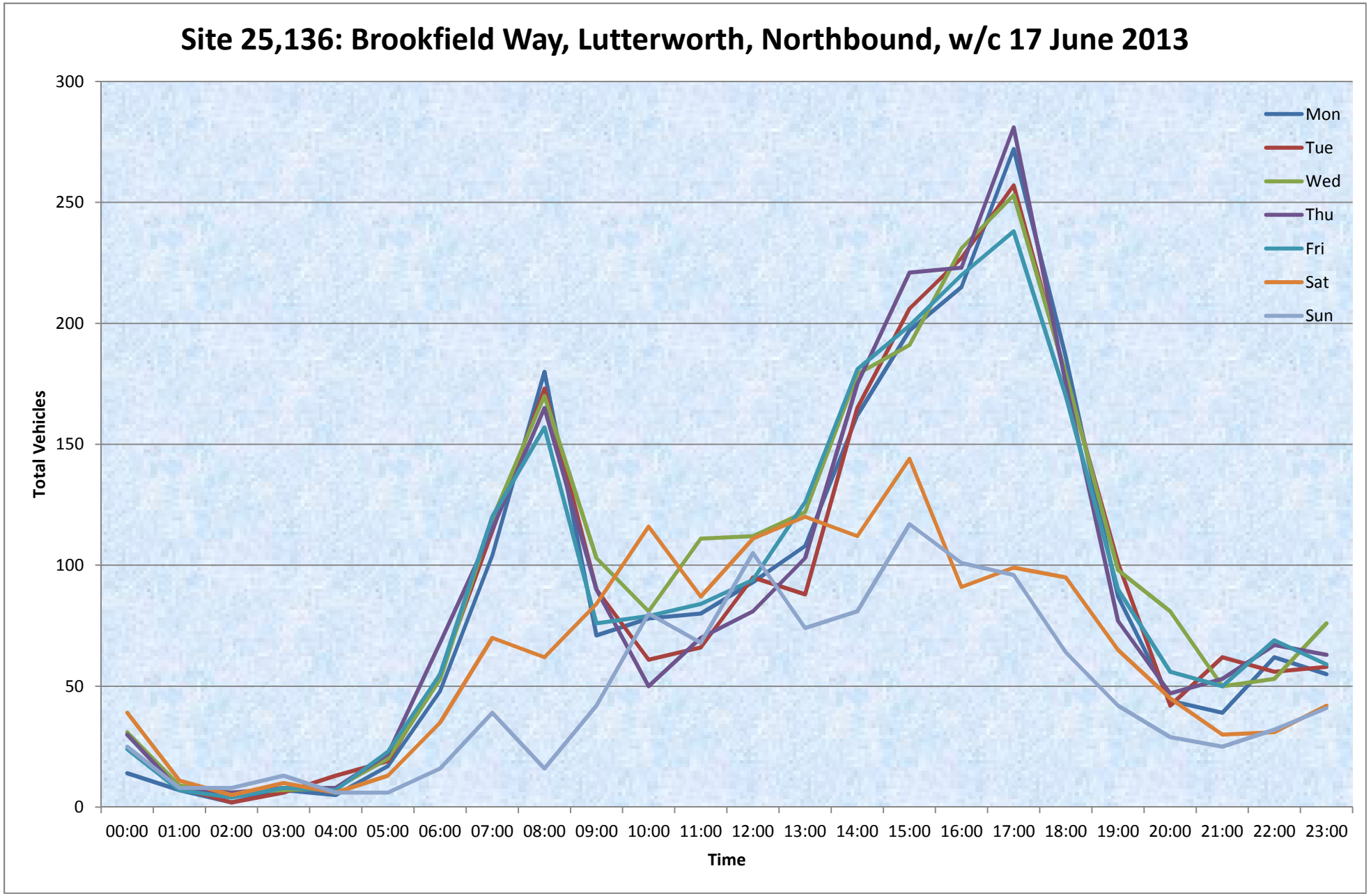
Site 25,136: Brookfield Way, Lutterworth, Northbound, w/c 17 June 2013
Total Vehicles
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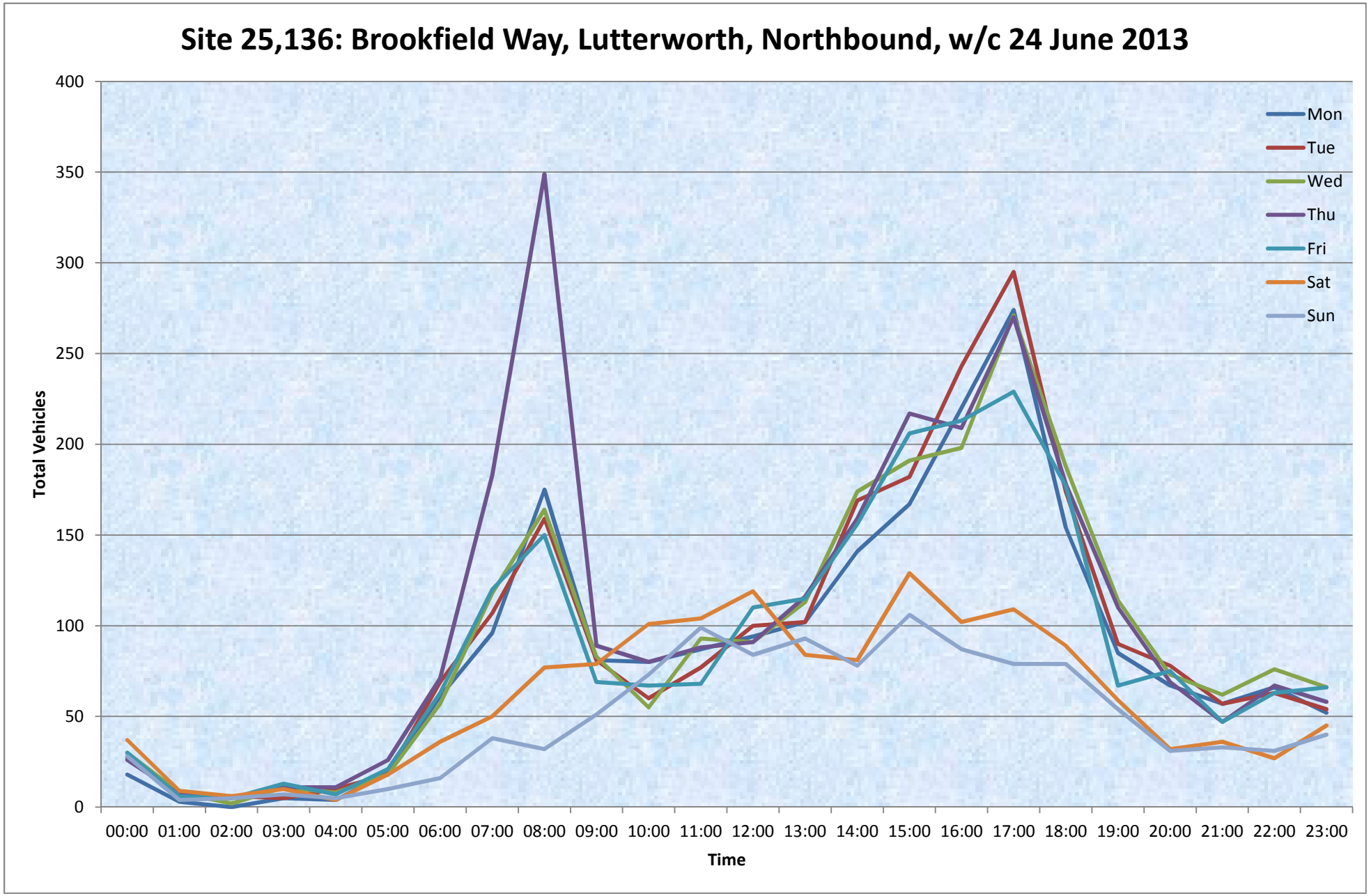
Site 25,136: Brookfield Way, Lutterworth, Northbound, w/c 24 June 2013
Total Vehicles
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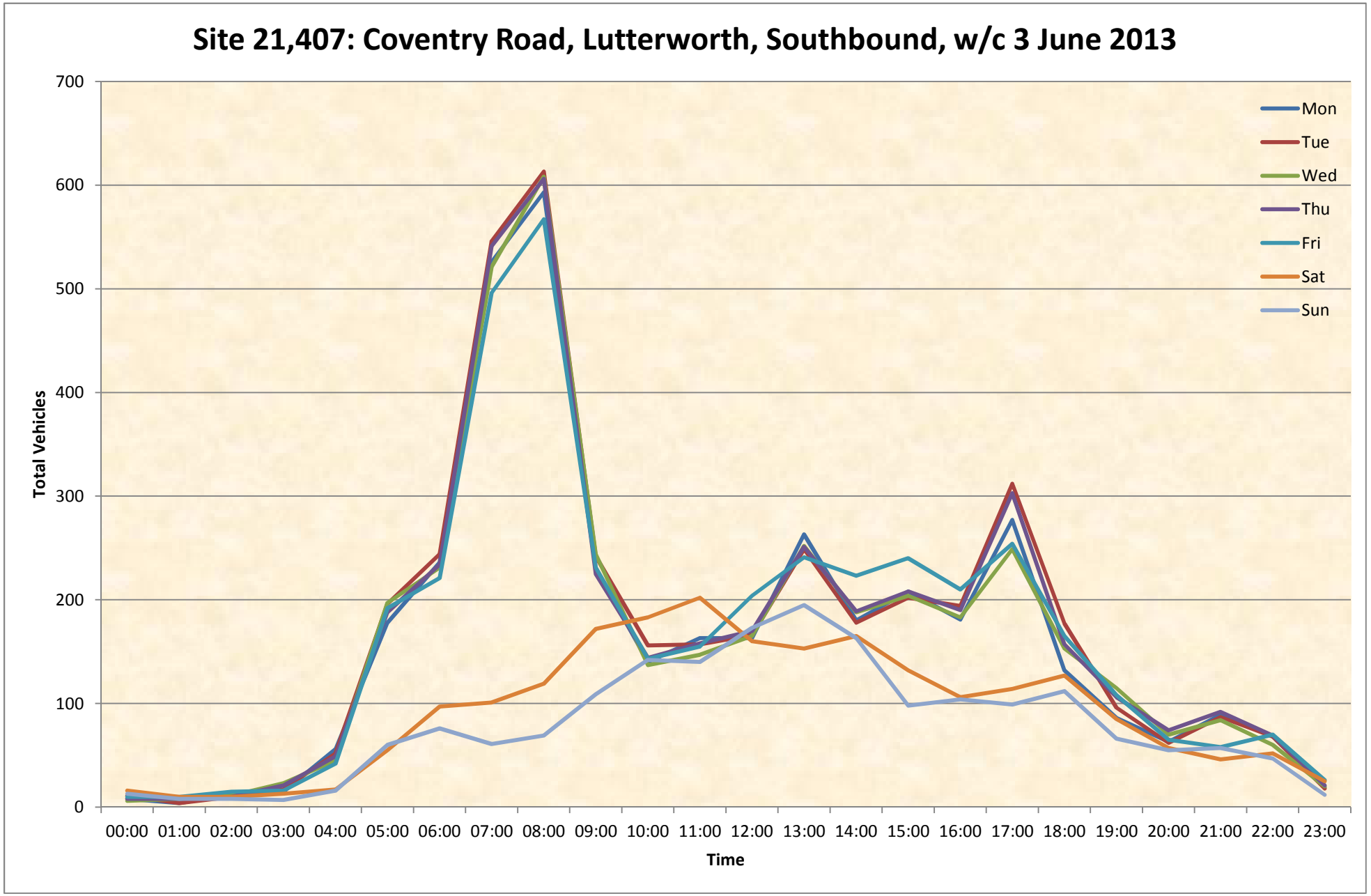
LCC Site 21,407: Coventry Road, Lutterworth


Site 21,407: Coventry Road, Lutterworth, Southbound, w/c 3 June 2013
Total Vehicles
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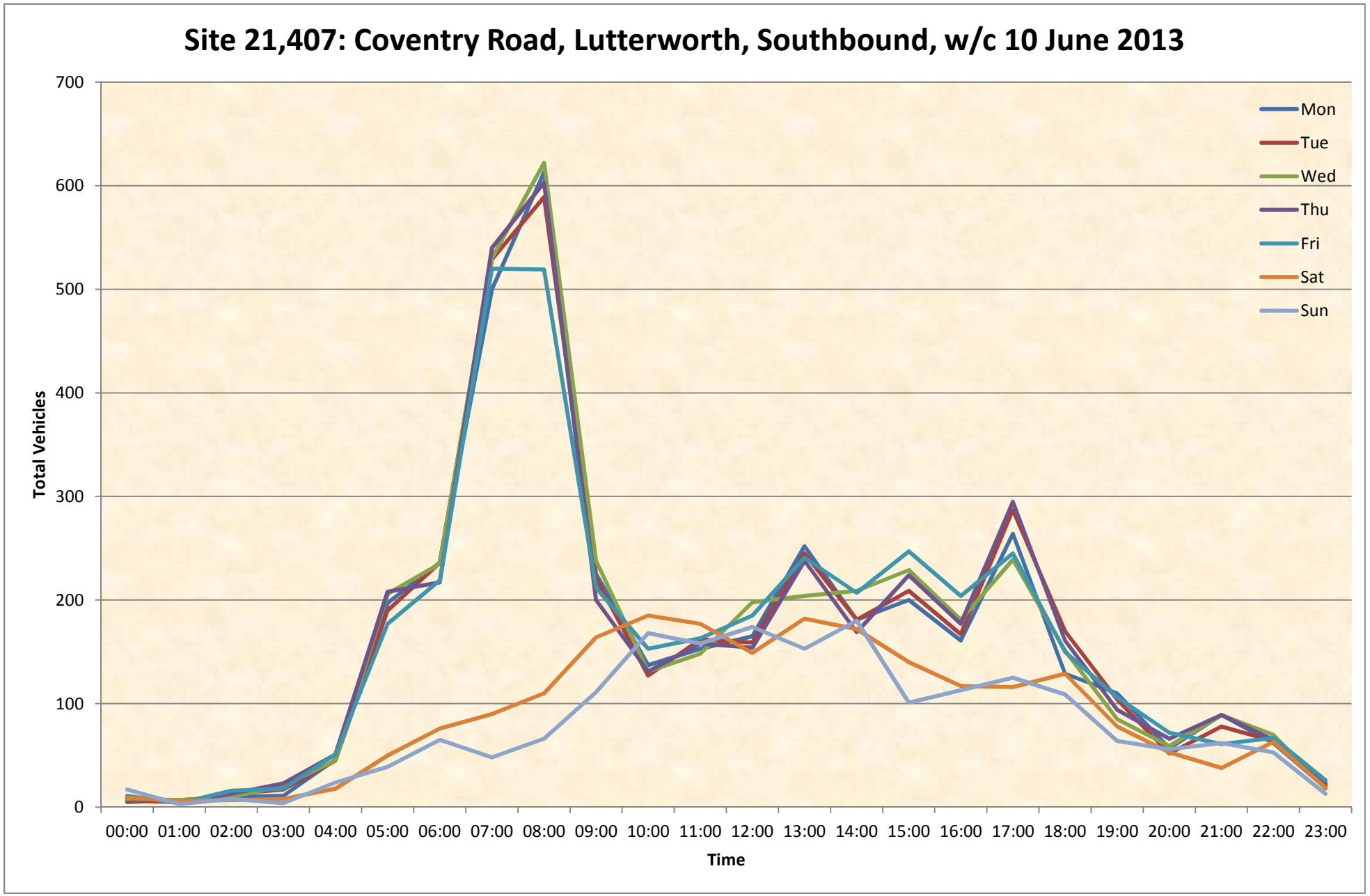
Site 21,407: Coventry Road, Lutterworth, Southbound, w/c 10 June 2013
Total Vehicles
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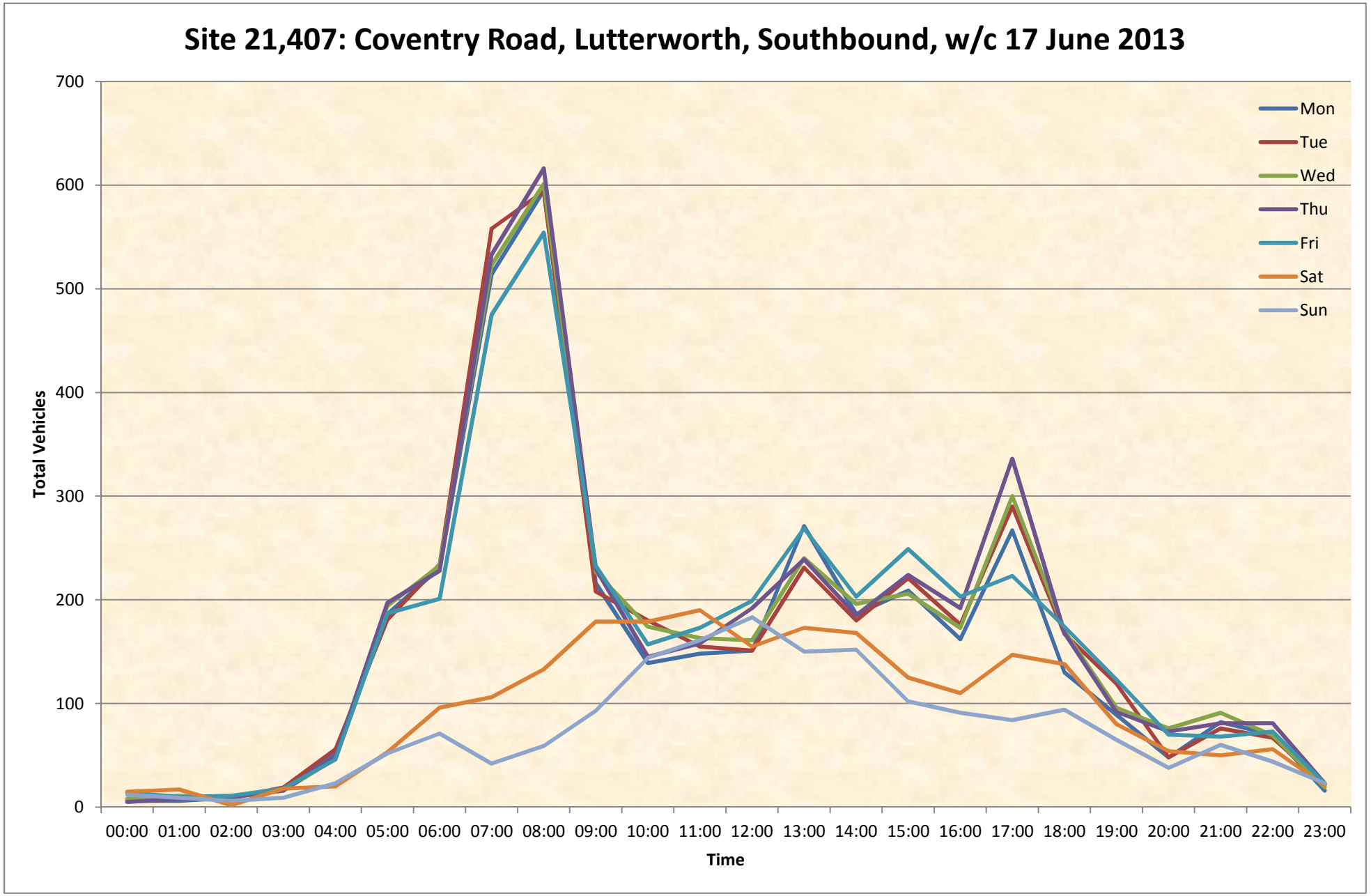
Site 21,407: Coventry Road, Lutterworth, Southbound, w/c 17 June 2013
Total Vehicles
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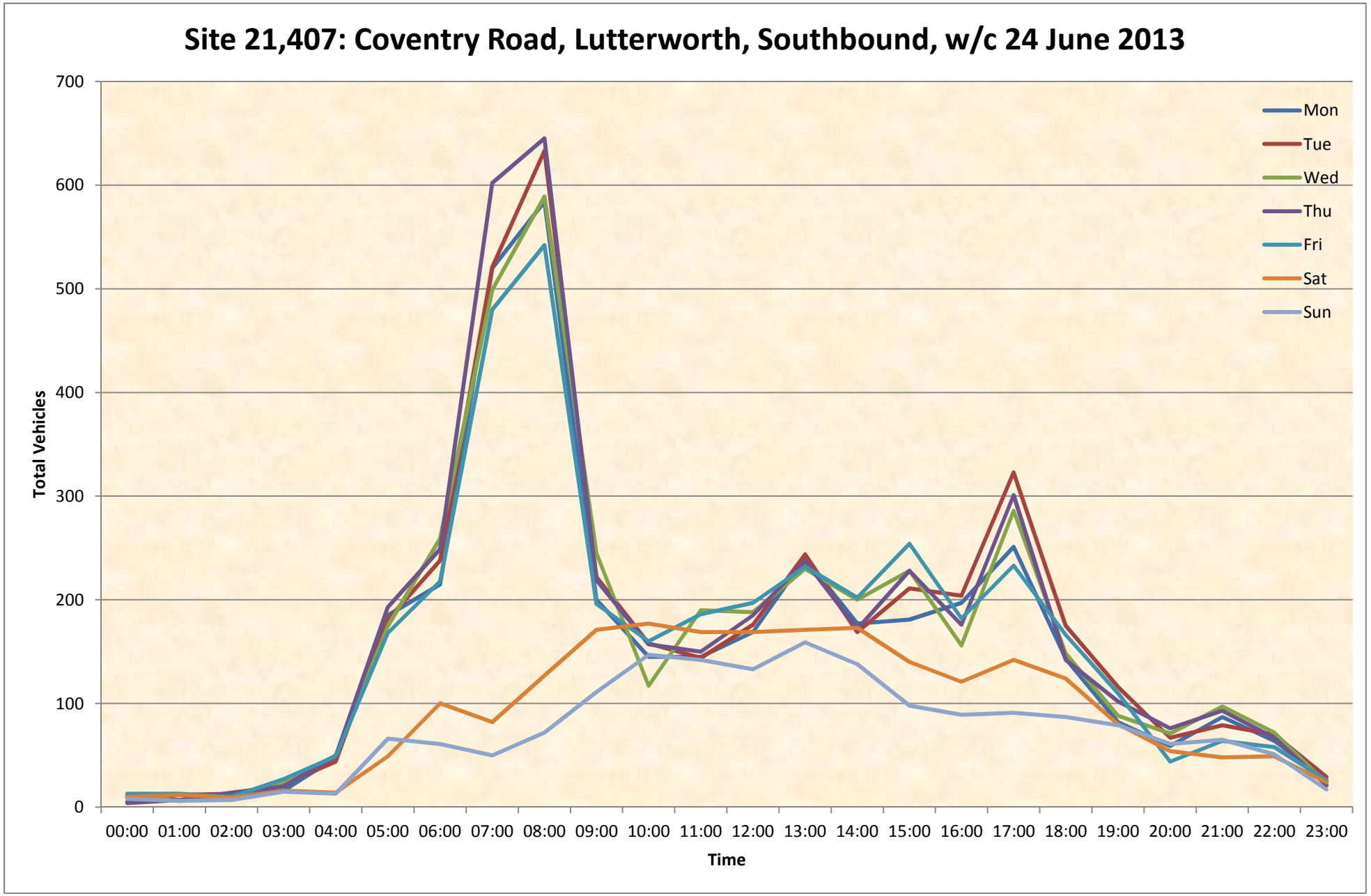
Site 21,407: Coventry Road, Lutterworth, Southbound, w/c 24 June 2013
Total Vehicles
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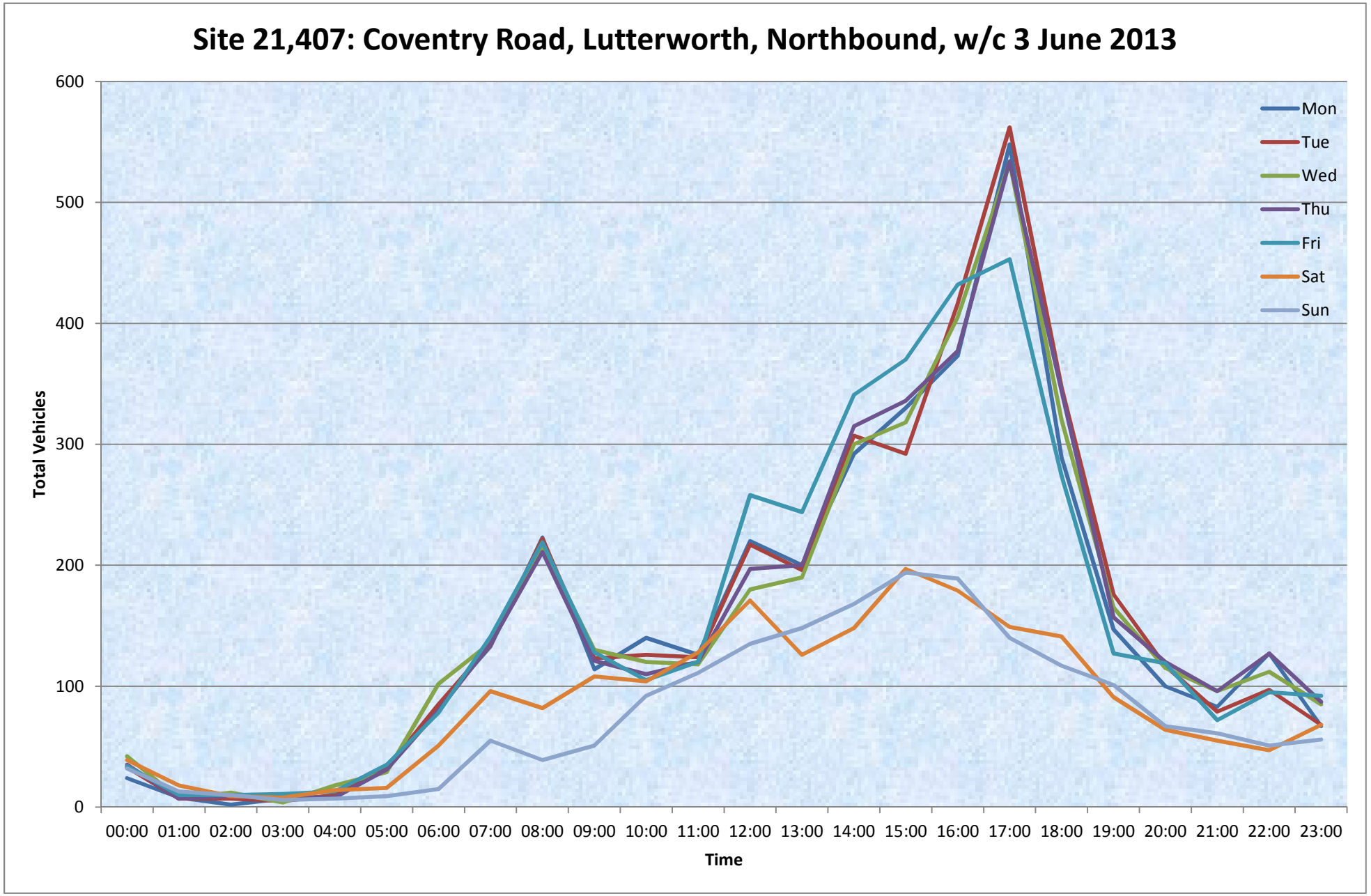
Site 21,407: Coventry Road, Lutterworth, Northbound, w/c 3 June 2013
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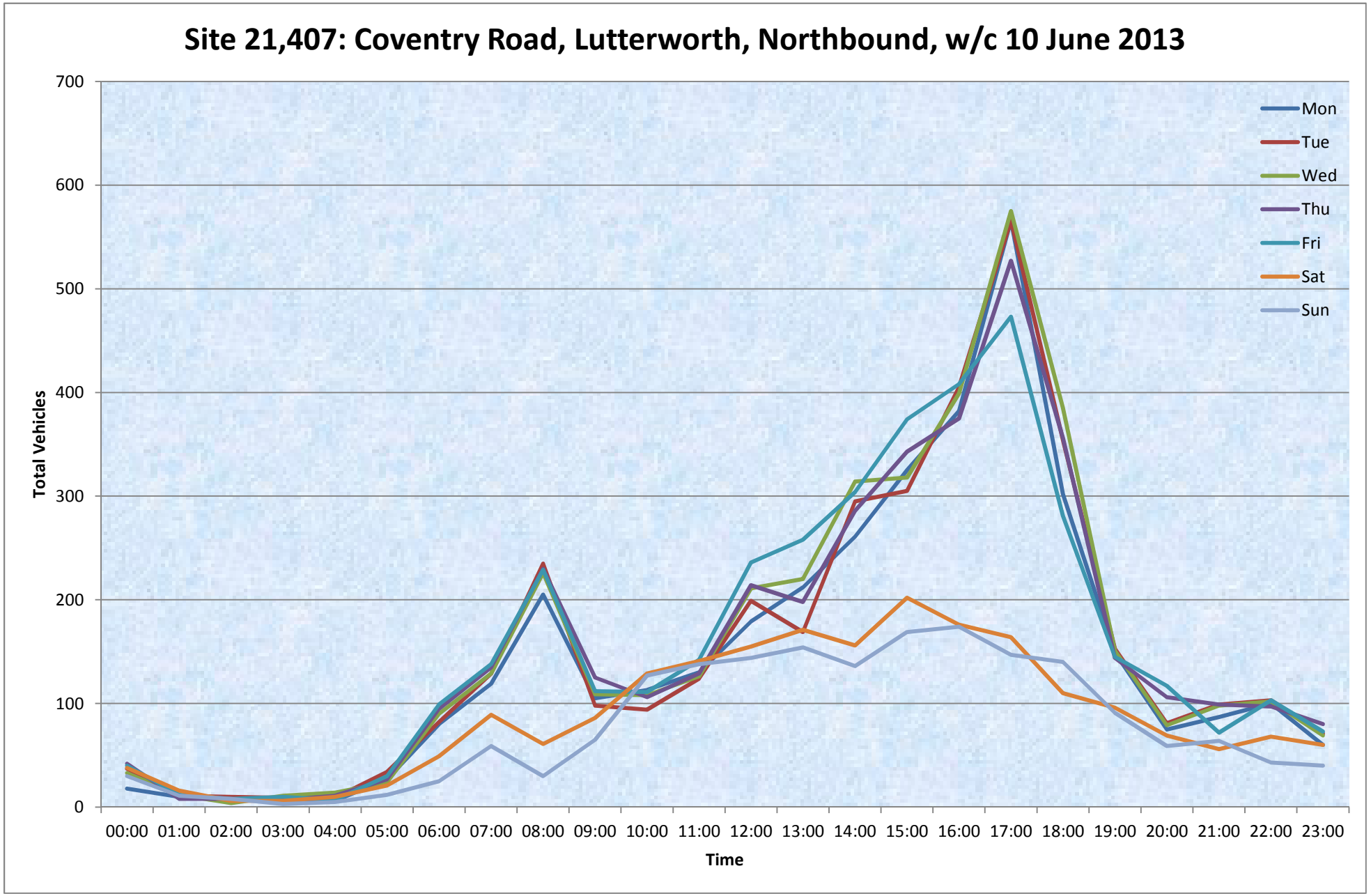
Site 21,407: Coventry Road, Lutterworth, Northbound, w/c 10 June 2013
Total Vehicles
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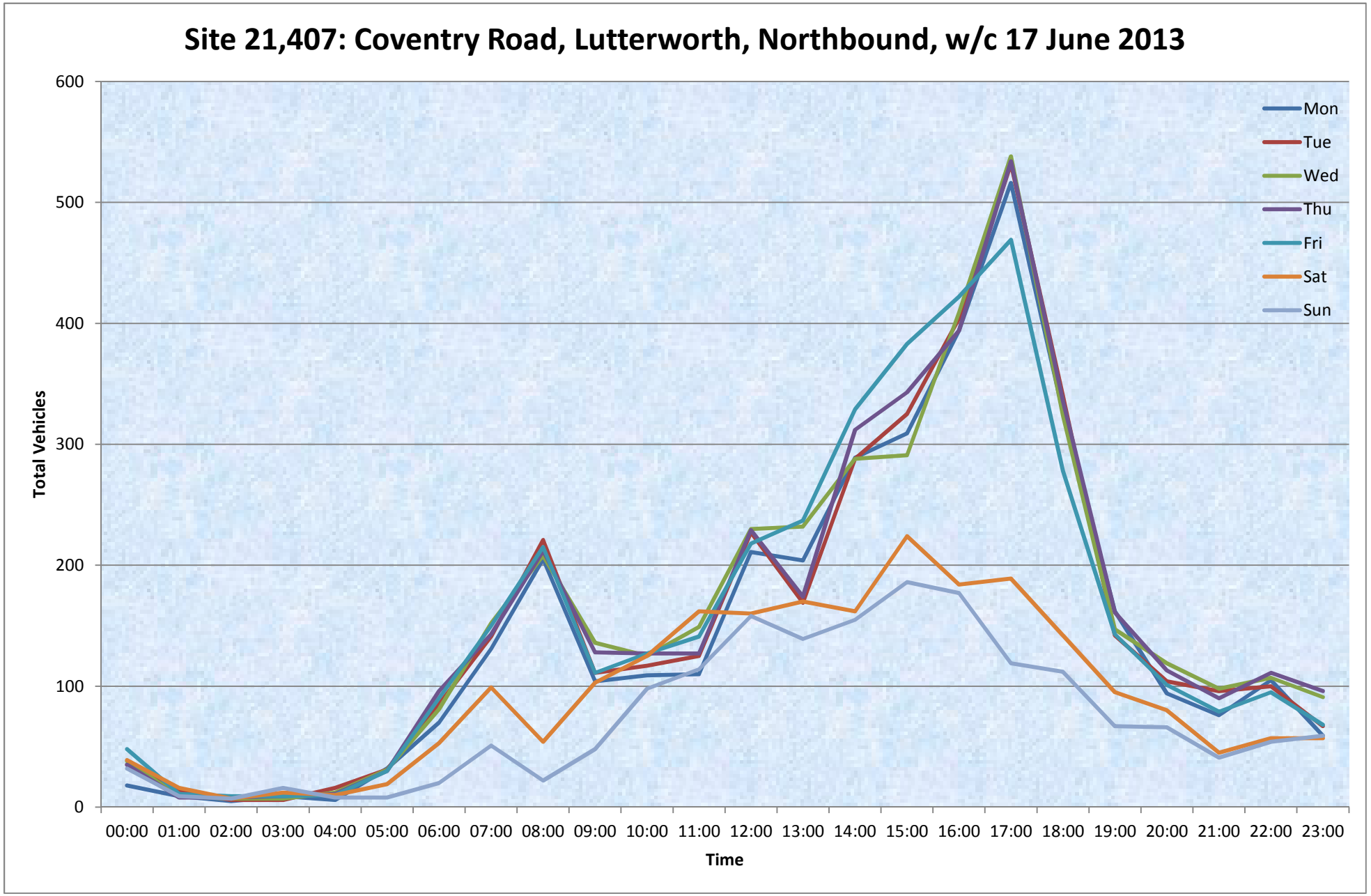
Site 21,407: Coventry Road, Lutterworth, Northbound, w/c 17 June 2013
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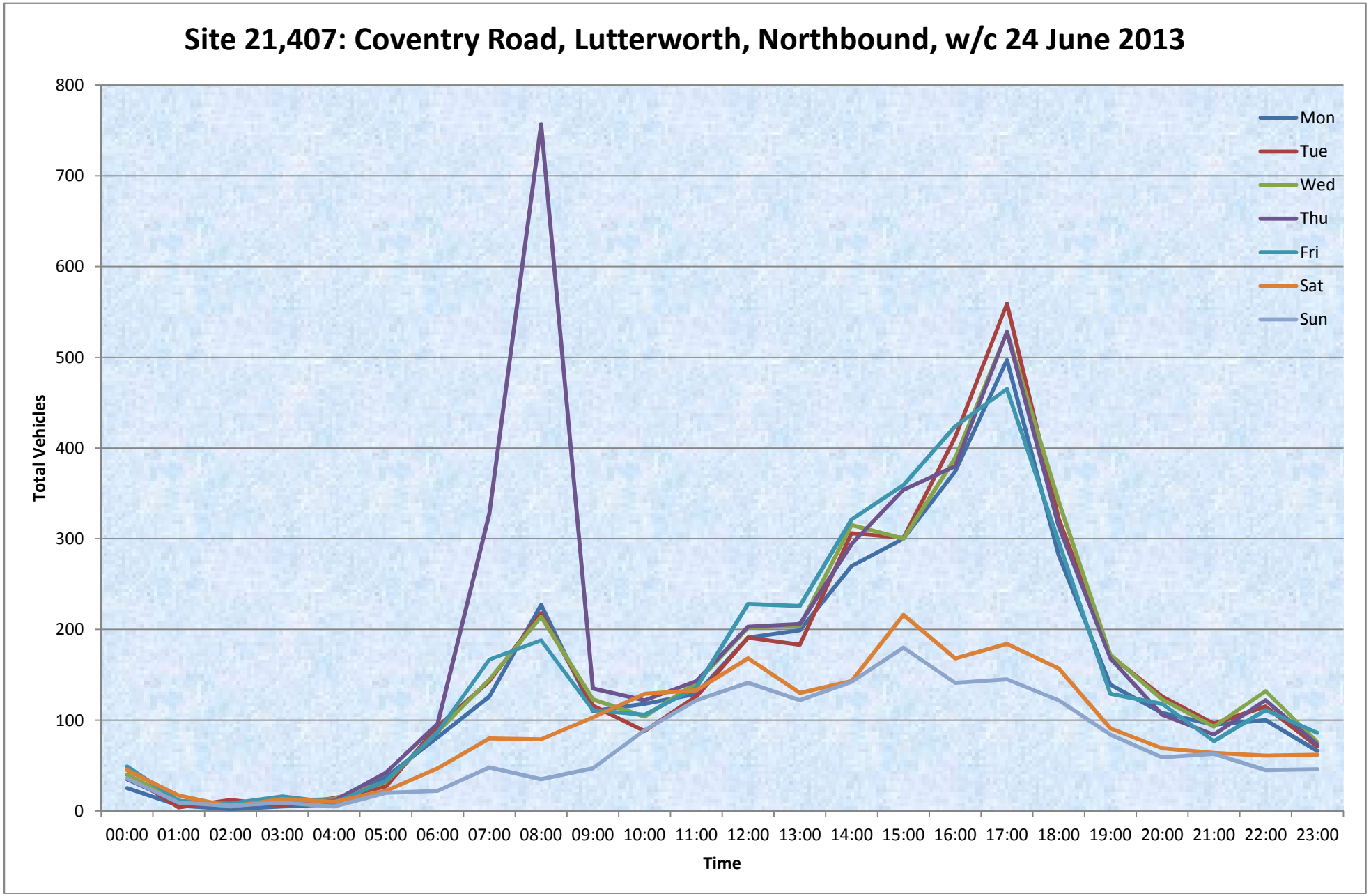
Site 21,407: Coventry Road, Lutterworth, Northbound, w/c 24 June 2013
Total Vehicles
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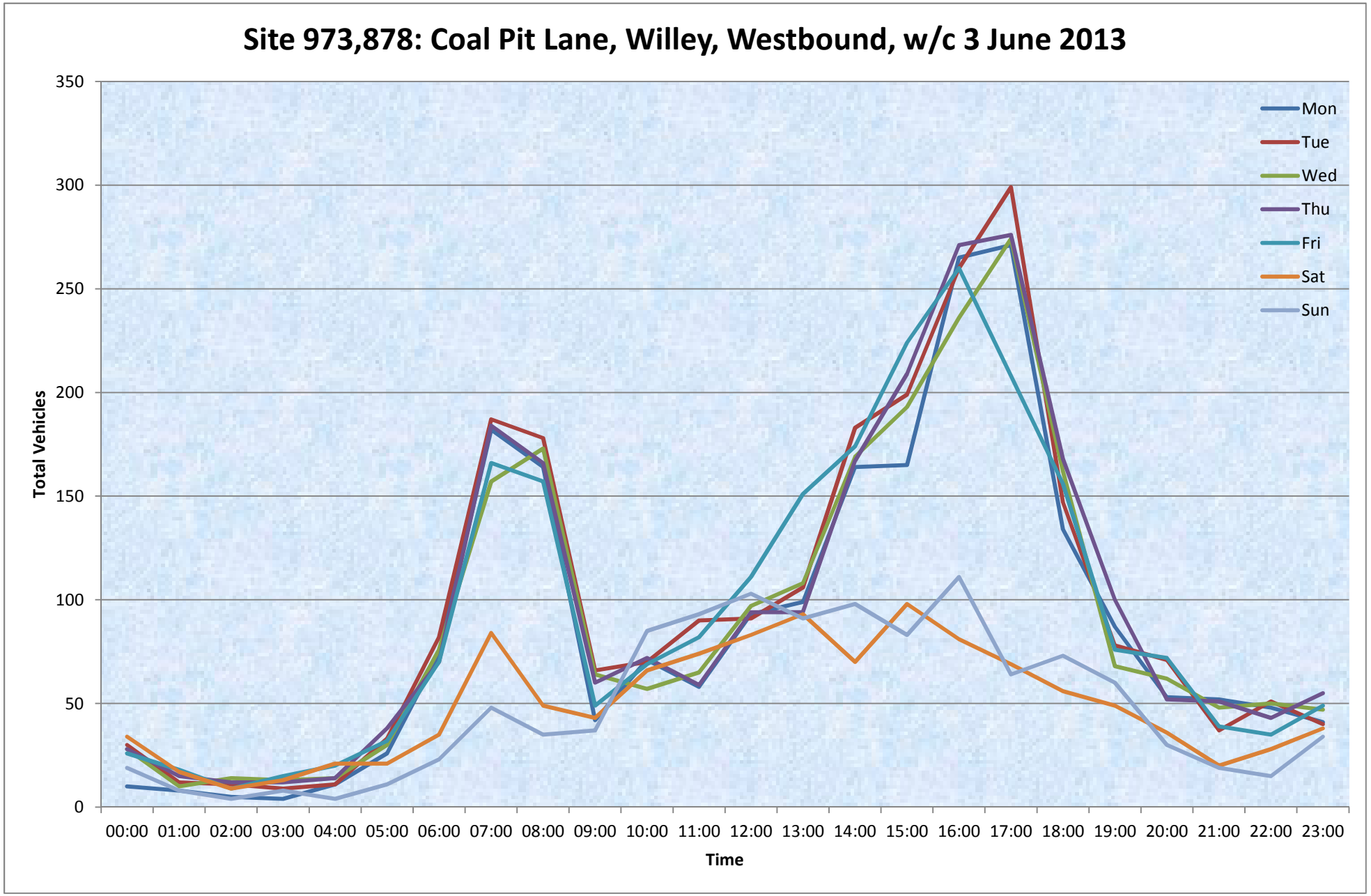
WCC Site 973,878: Coal Pit Lane, Willey


Site 973,878: Coal Pit Lane, Willey, Westbound, w/c 3 June 2013
Total Vehicles
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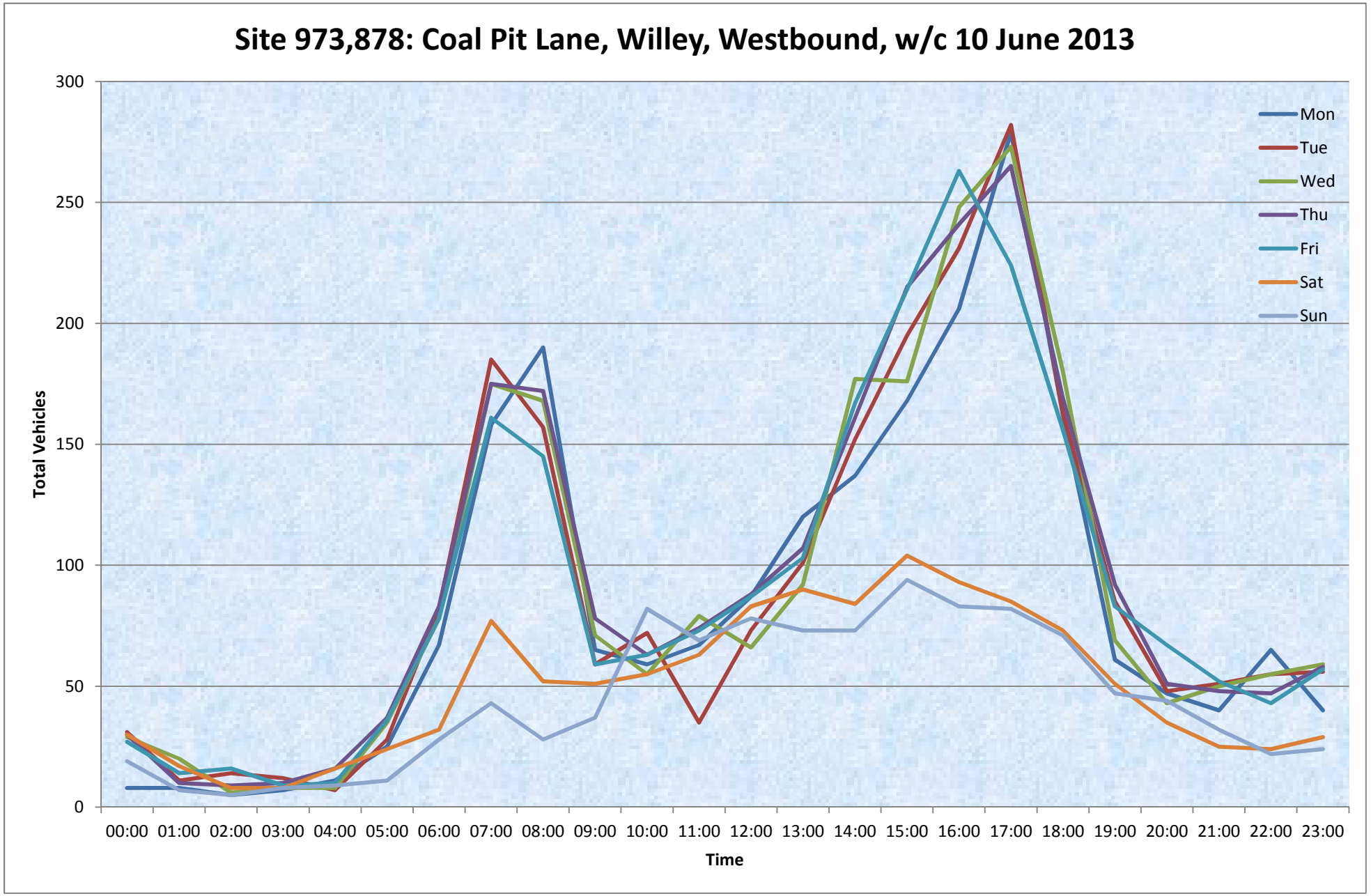
Site 973,878: Coal Pit Lane, Willey, Westbound, w/c 10 June 2013
Total Vehicles
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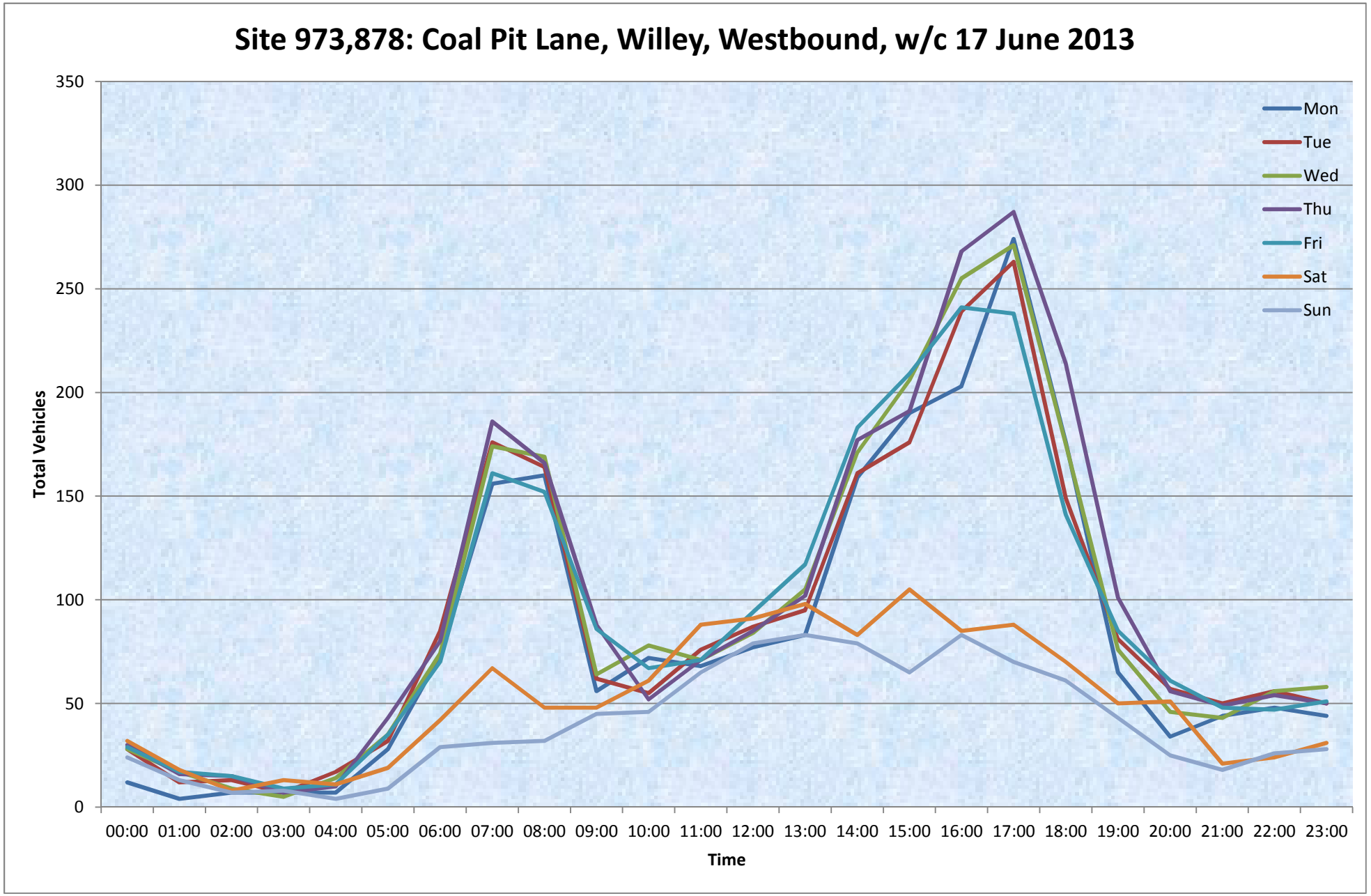
Site 973,878: Coal Pit Lane, Willey, Westbound, w/c 17 June 2013
Total Vehicles
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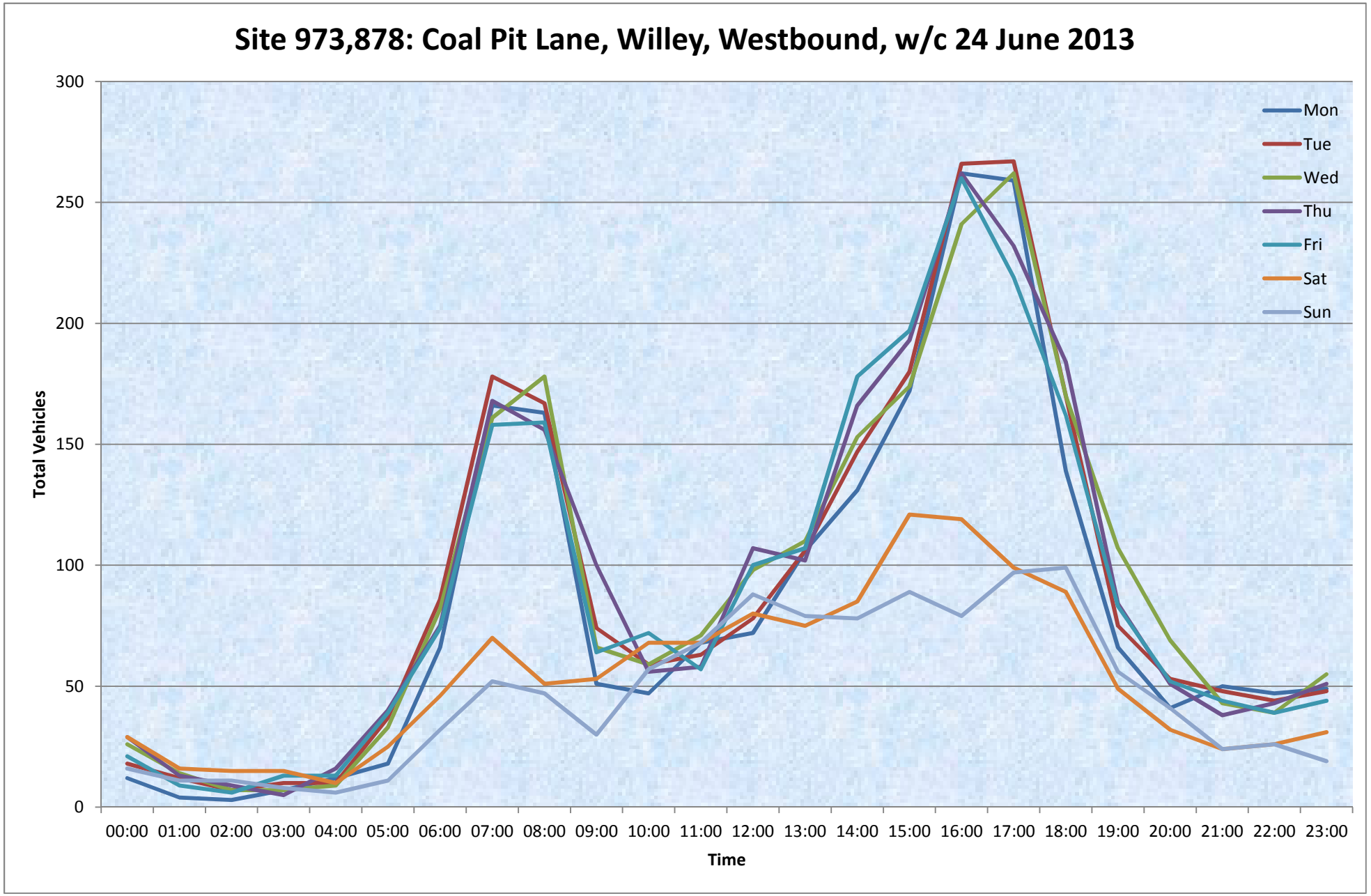
Site 973,878: Coal Pit Lane, Willey, Westbound, w/c 24 June 2013
Total Vehicles
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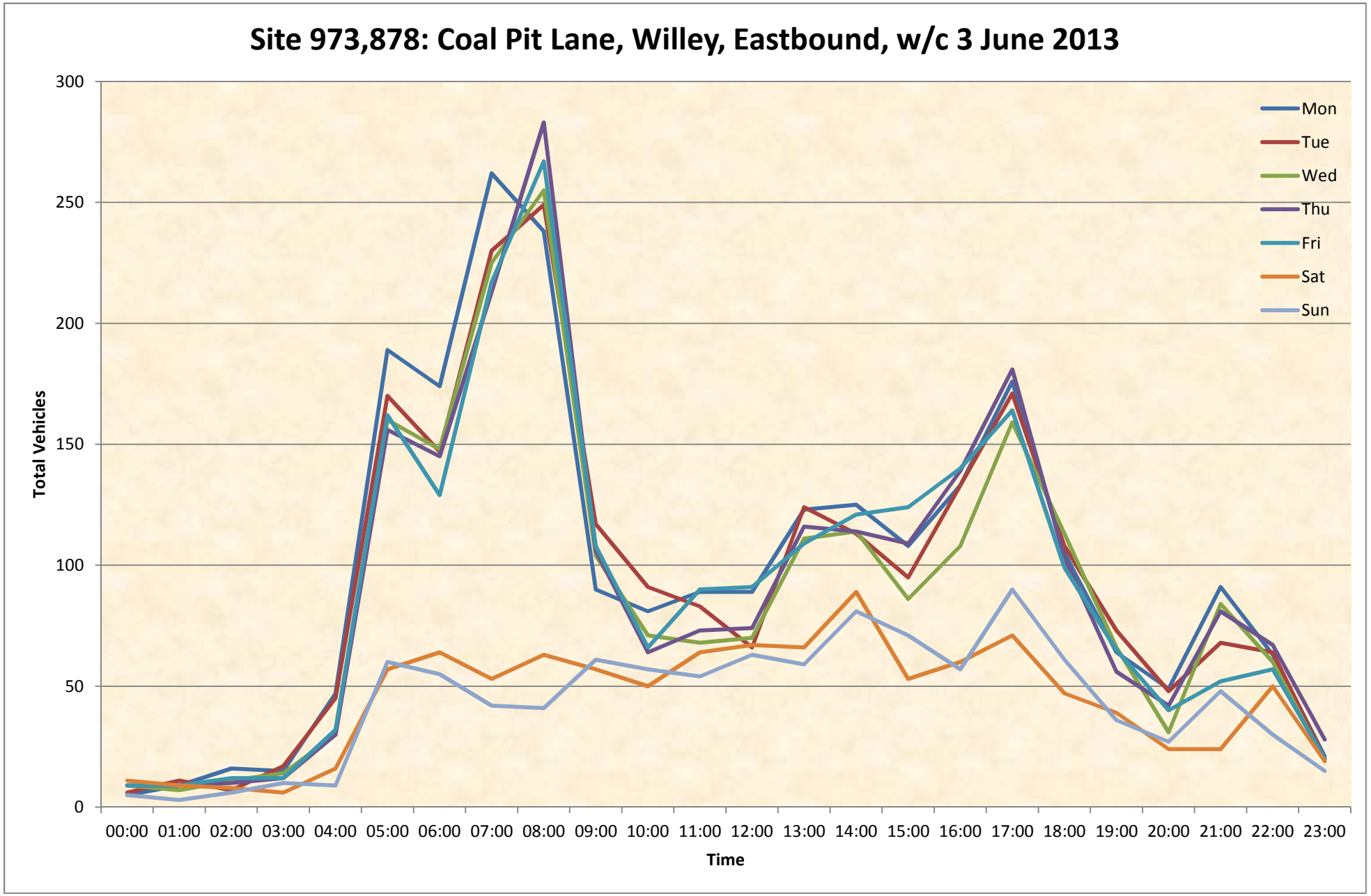
Site 973,878: Coal Pit Lane, Willey, Eastbound, w/c 3 June 2013
Total Vehicles
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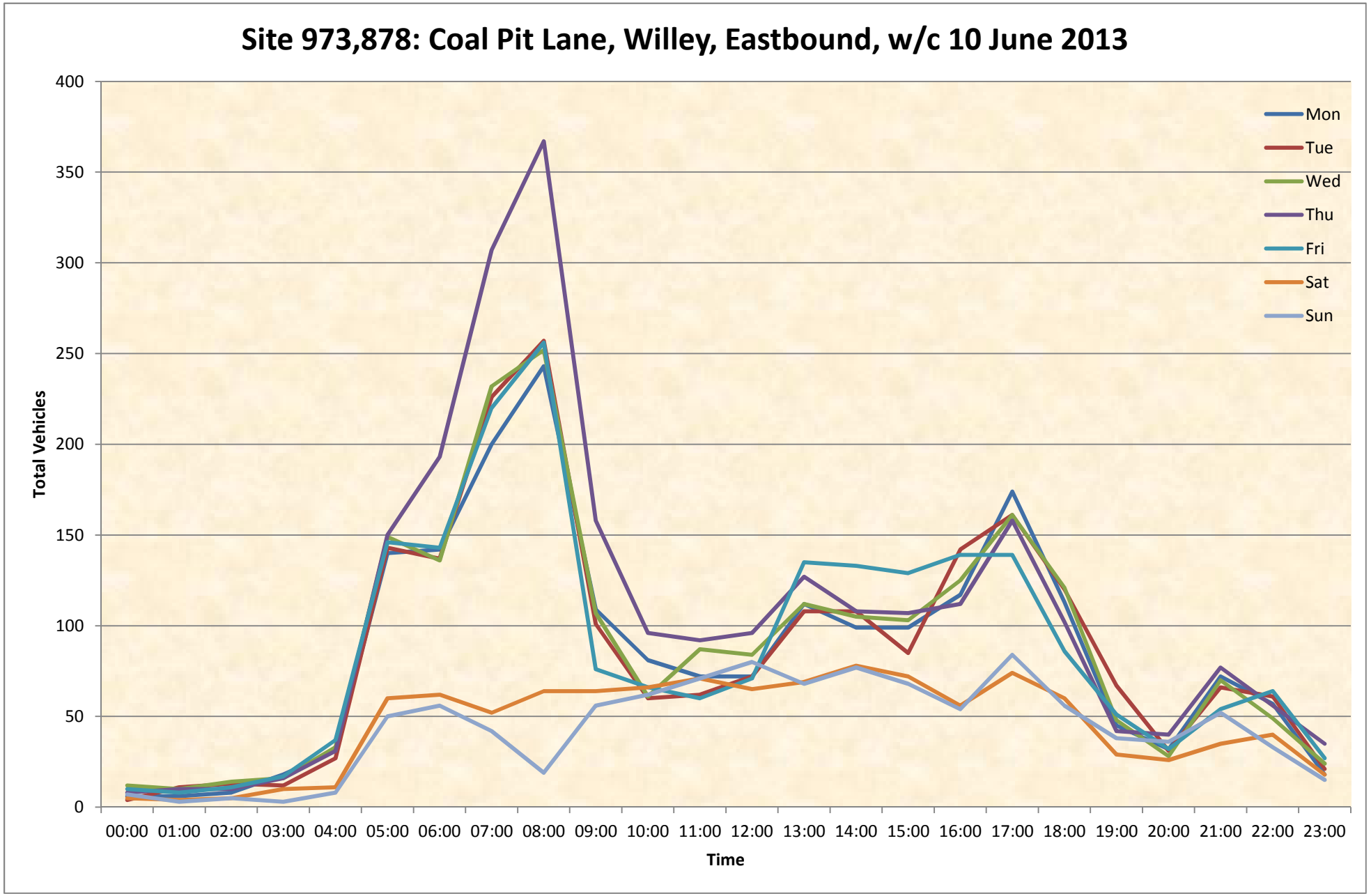
Site 973,878: Coal Pit Lane, Willey, Eastbound, w/c 10 June 2013
Total Vehicles
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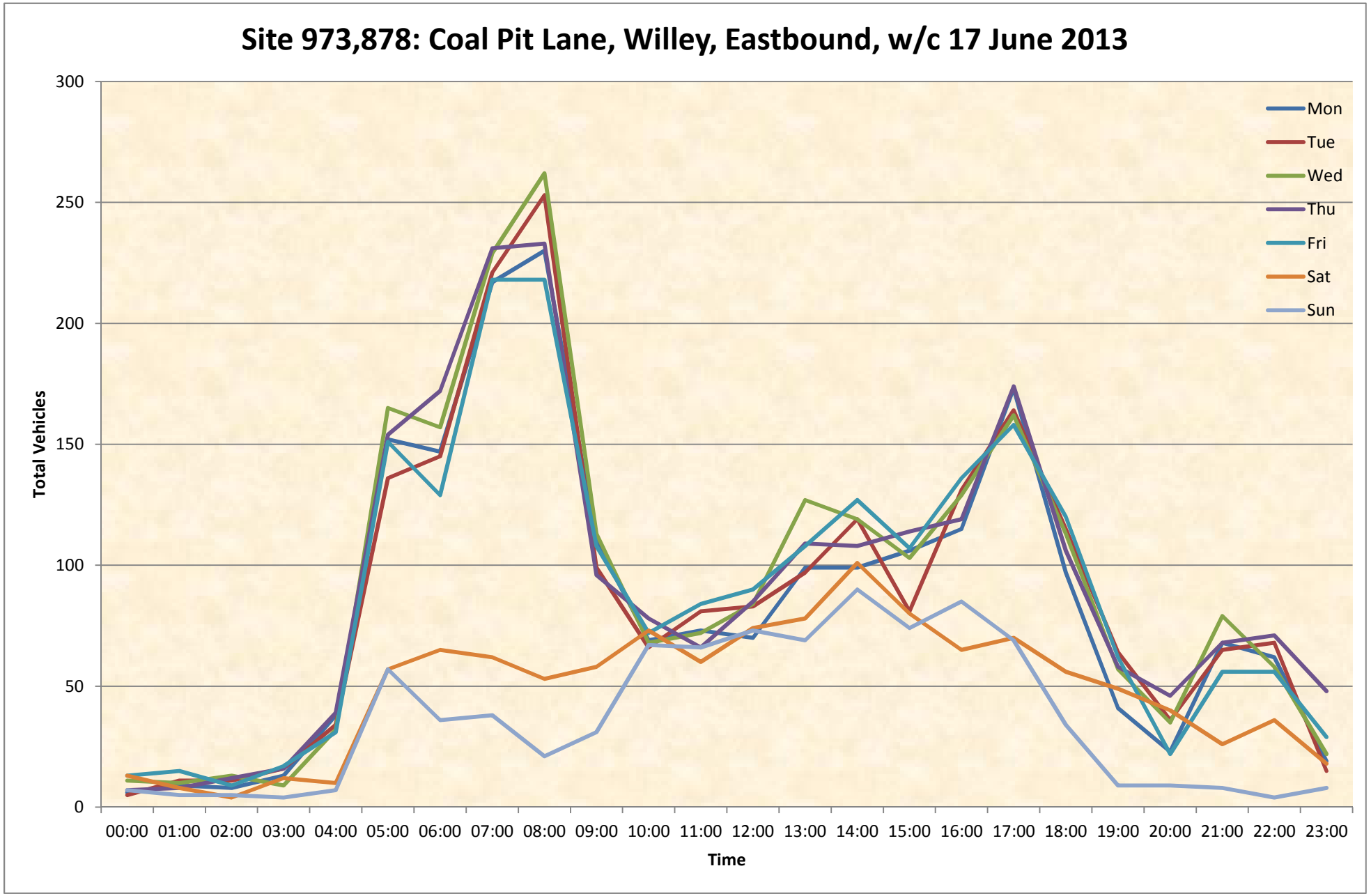
Site 973,878: Coal Pit Lane, Willey, Eastbound, w/c 17 June 2013
Total Vehicles
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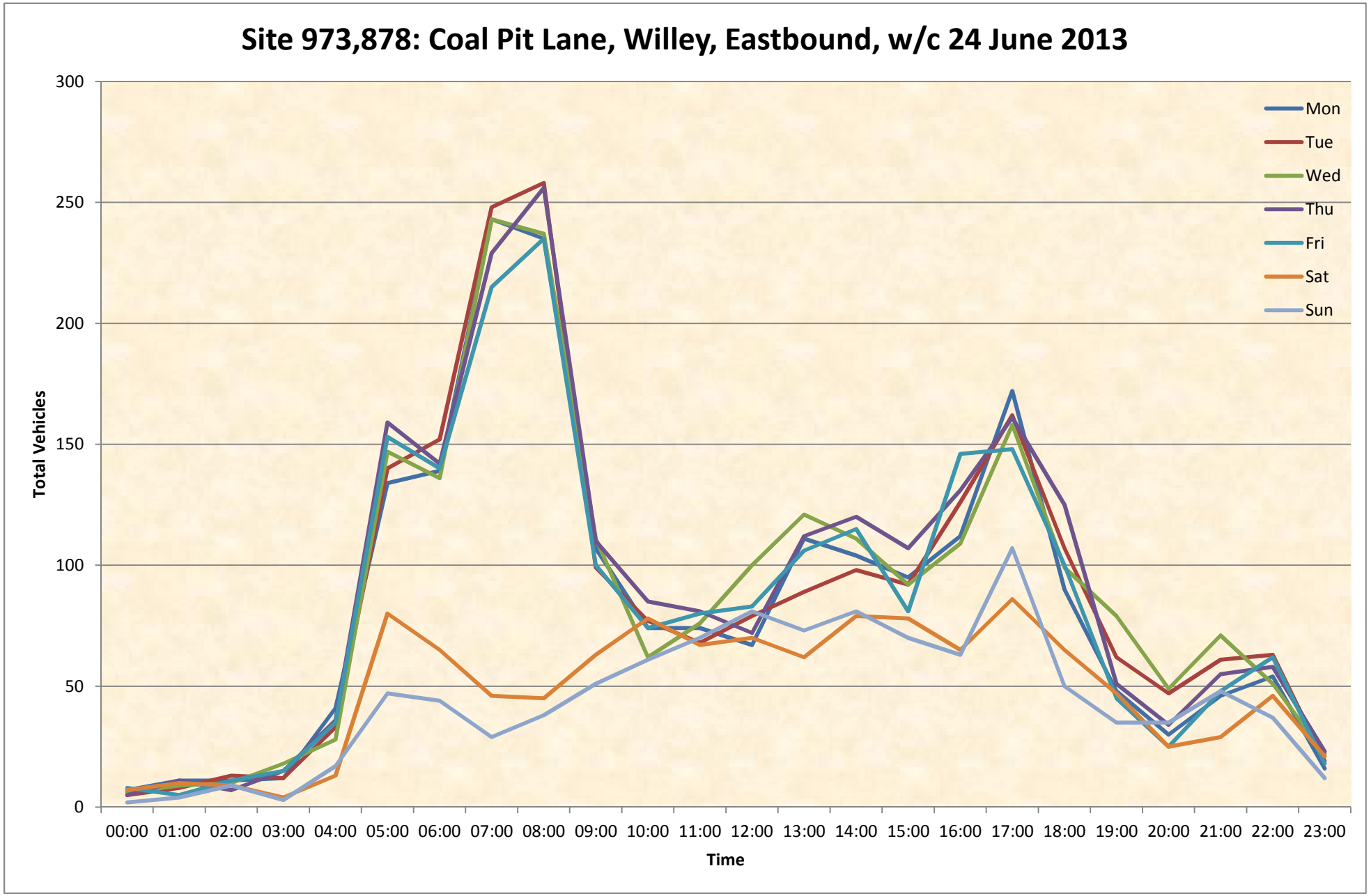
Site 973,878: Coal Pit Lane, Willey, Eastbound, w/c 24 June 2013
Total Vehicles
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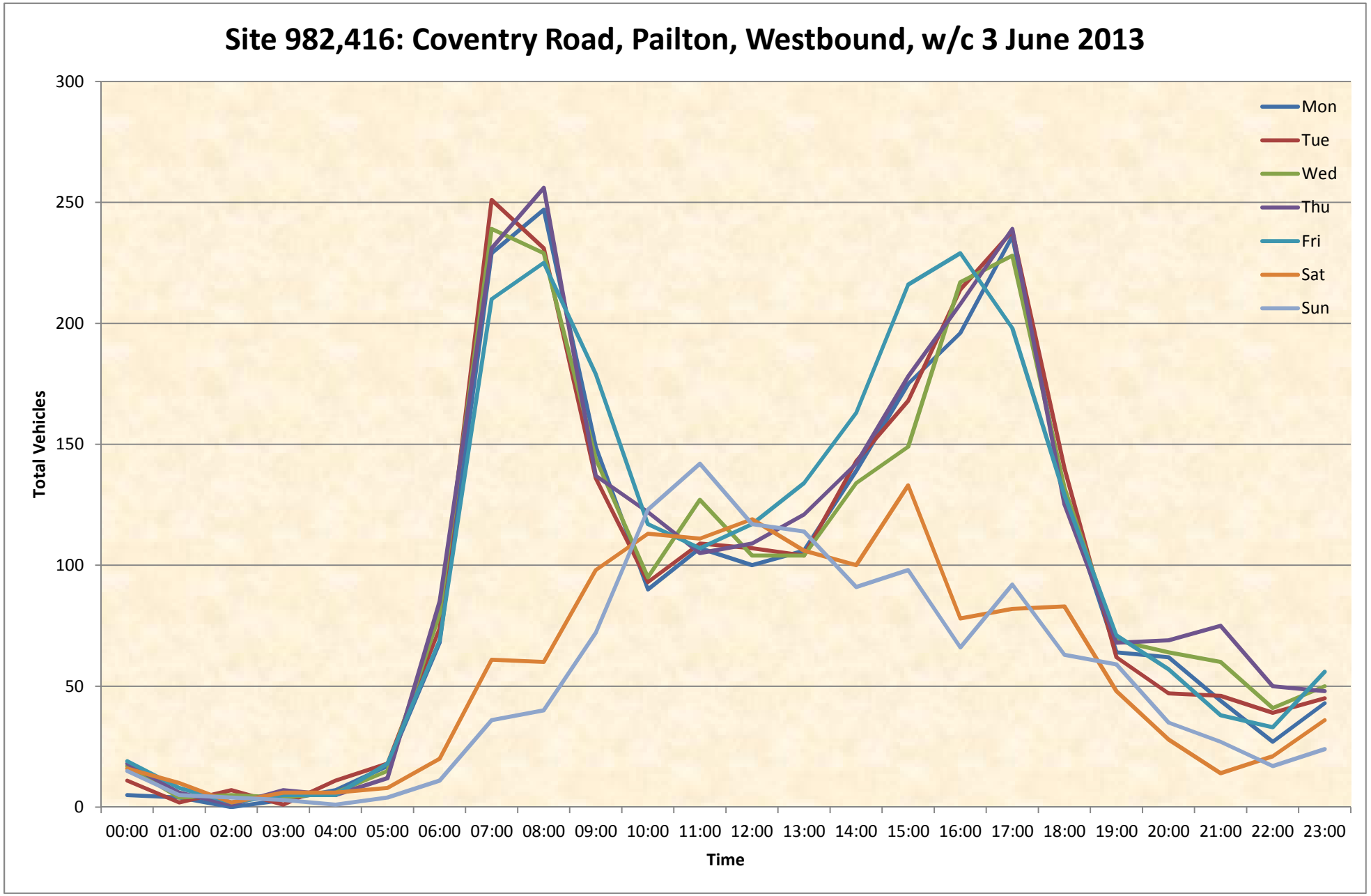
WCC Site 982,416: Coventry Road, Pailton


Site 982,416: Coventry Road, Pailton, Westbound, w/c 3 June 2013
Total Vehicles
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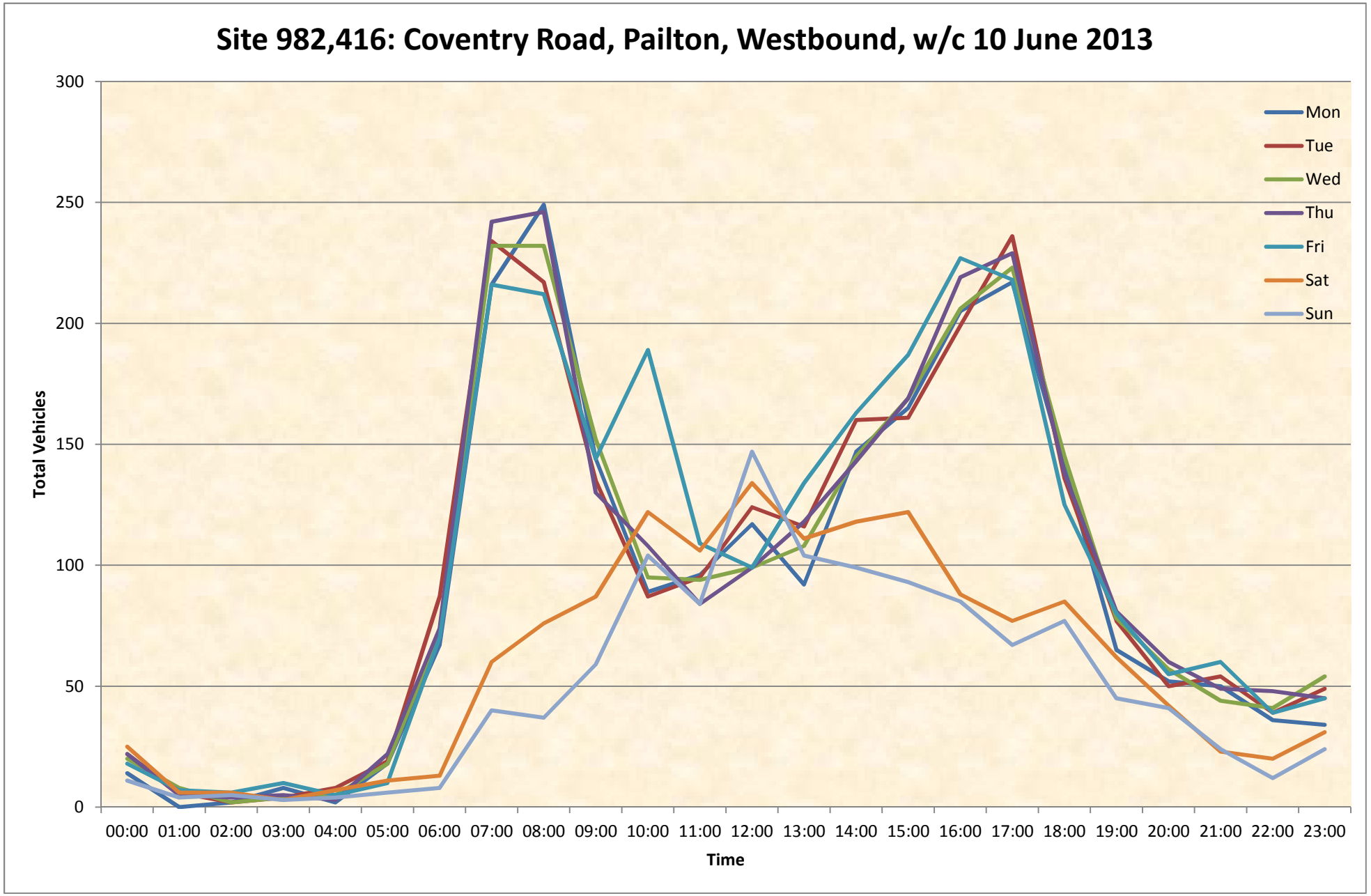
Site 982,416: Coventry Road, Pailton, Westbound, w/c 10 June 2013
Total Vehicles
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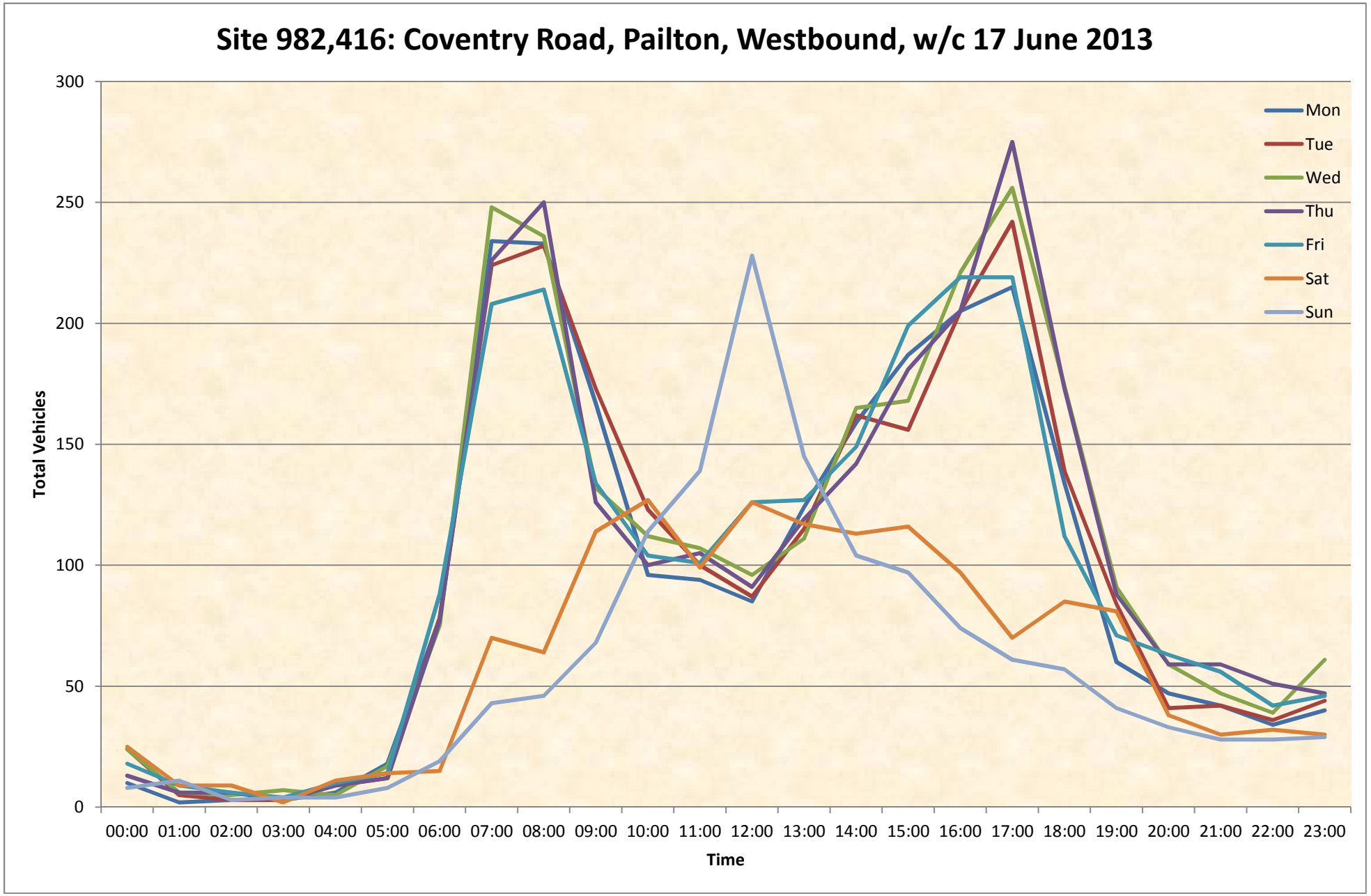
Site 982,416: Coventry Road, Pailton, Westbound, w/c 17 June 2013
Total Vehicles
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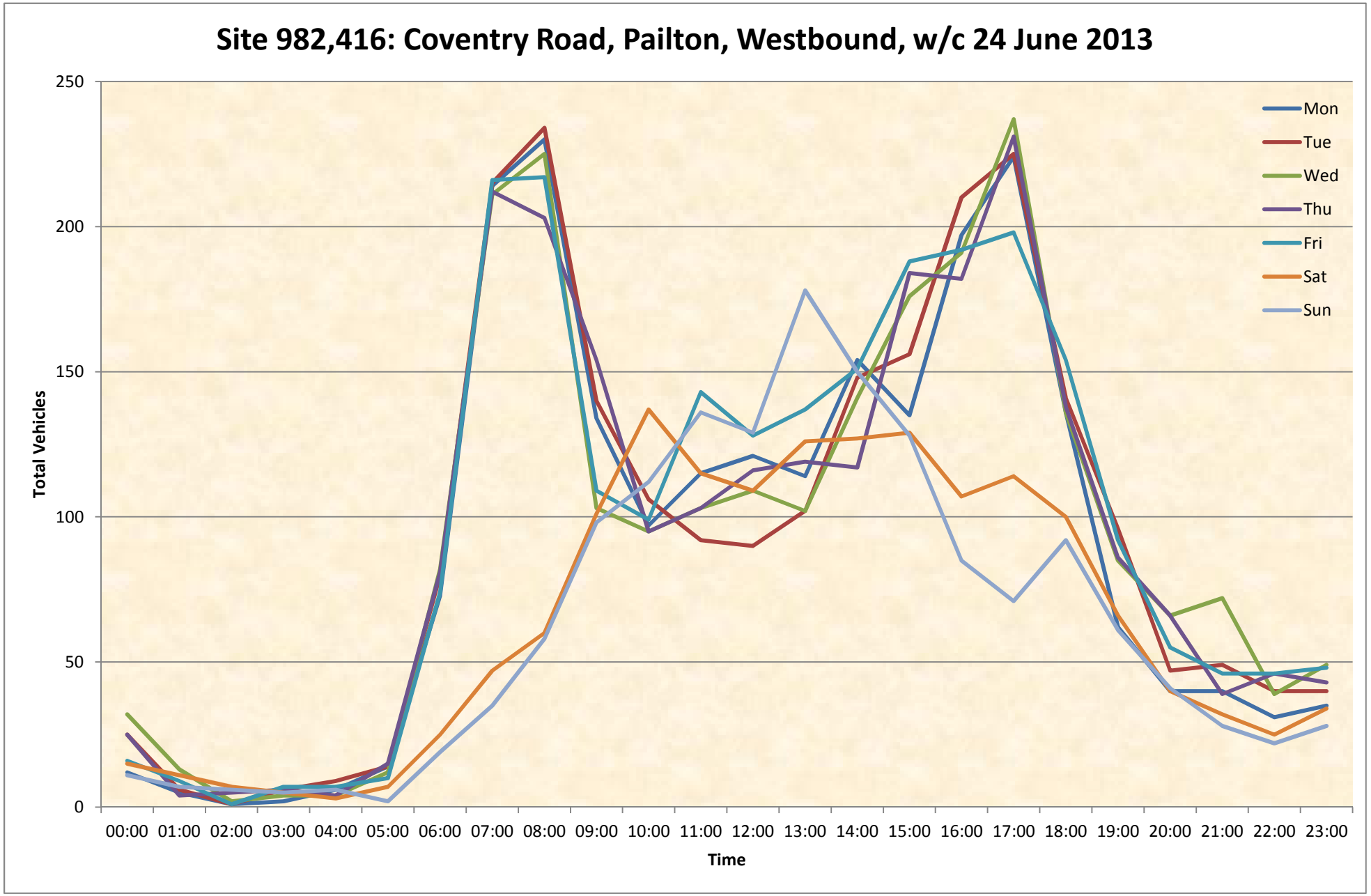
Site 982,416: Coventry Road, Pailton, Westbound, w/c 24 June 2013
Total Vehicles
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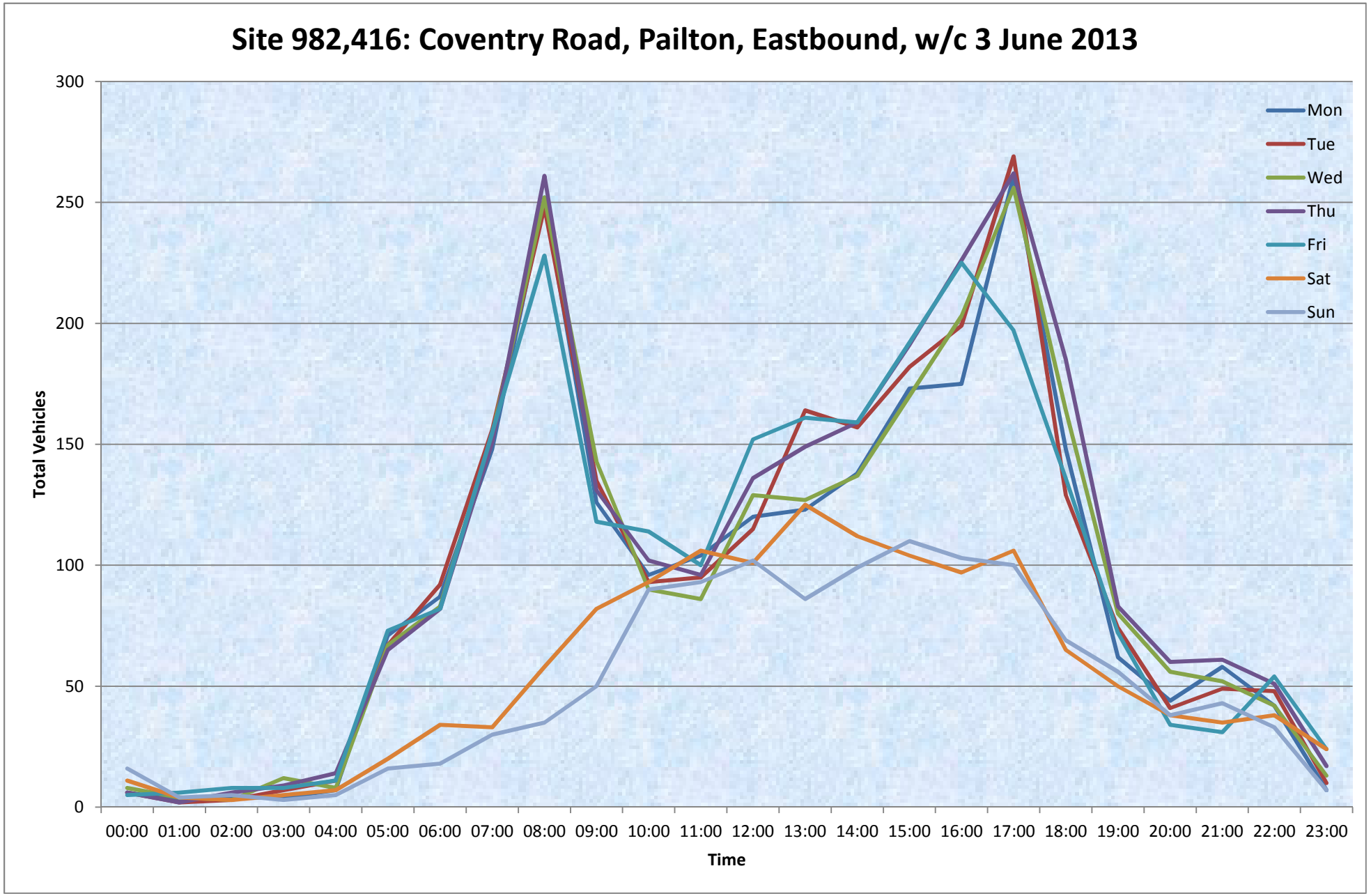
Site 982,416: Coventry Road, Pailton, Eastbound, w/c 3 June 2013
Total Vehicles
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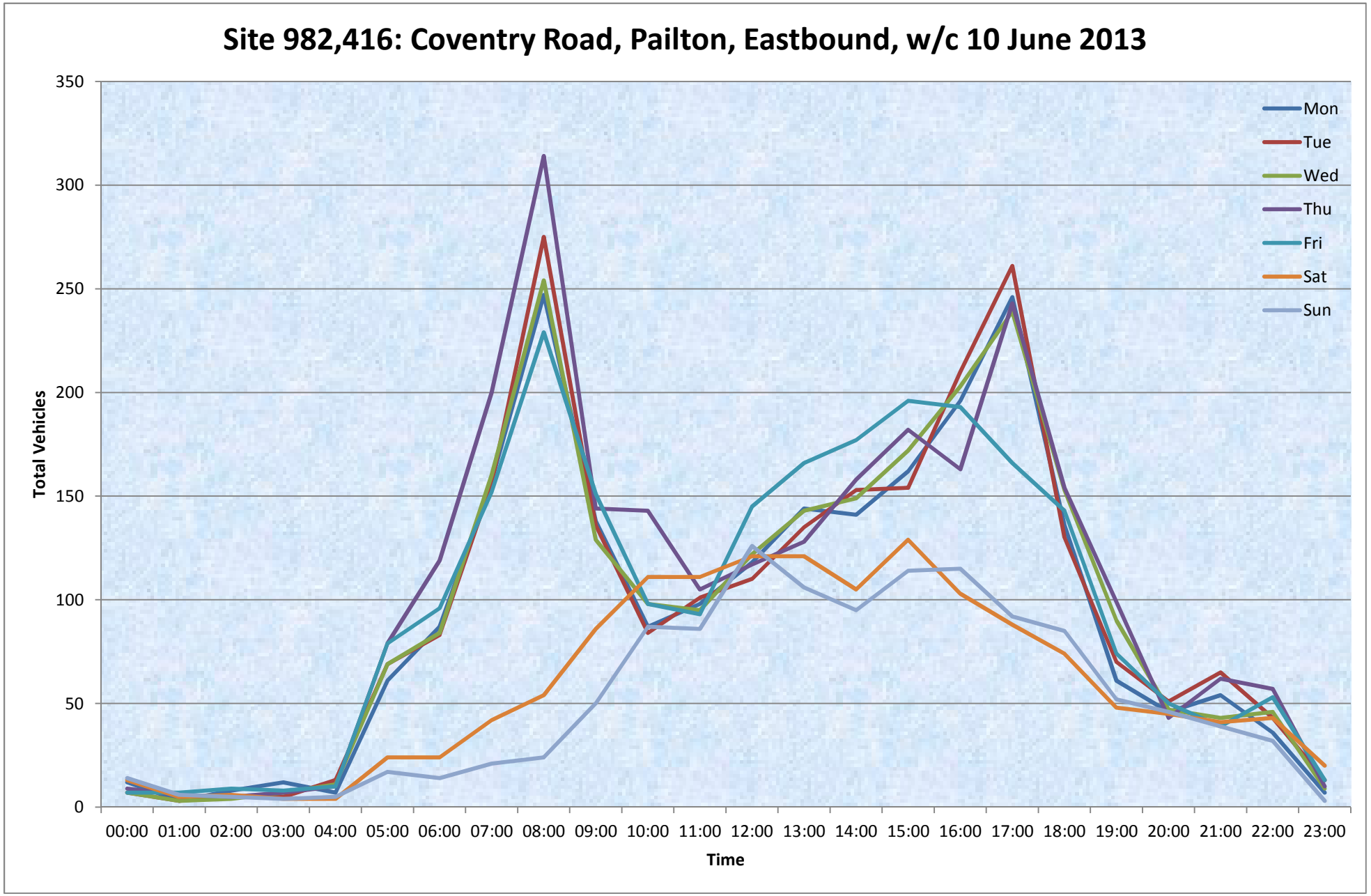
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Total Vehicles
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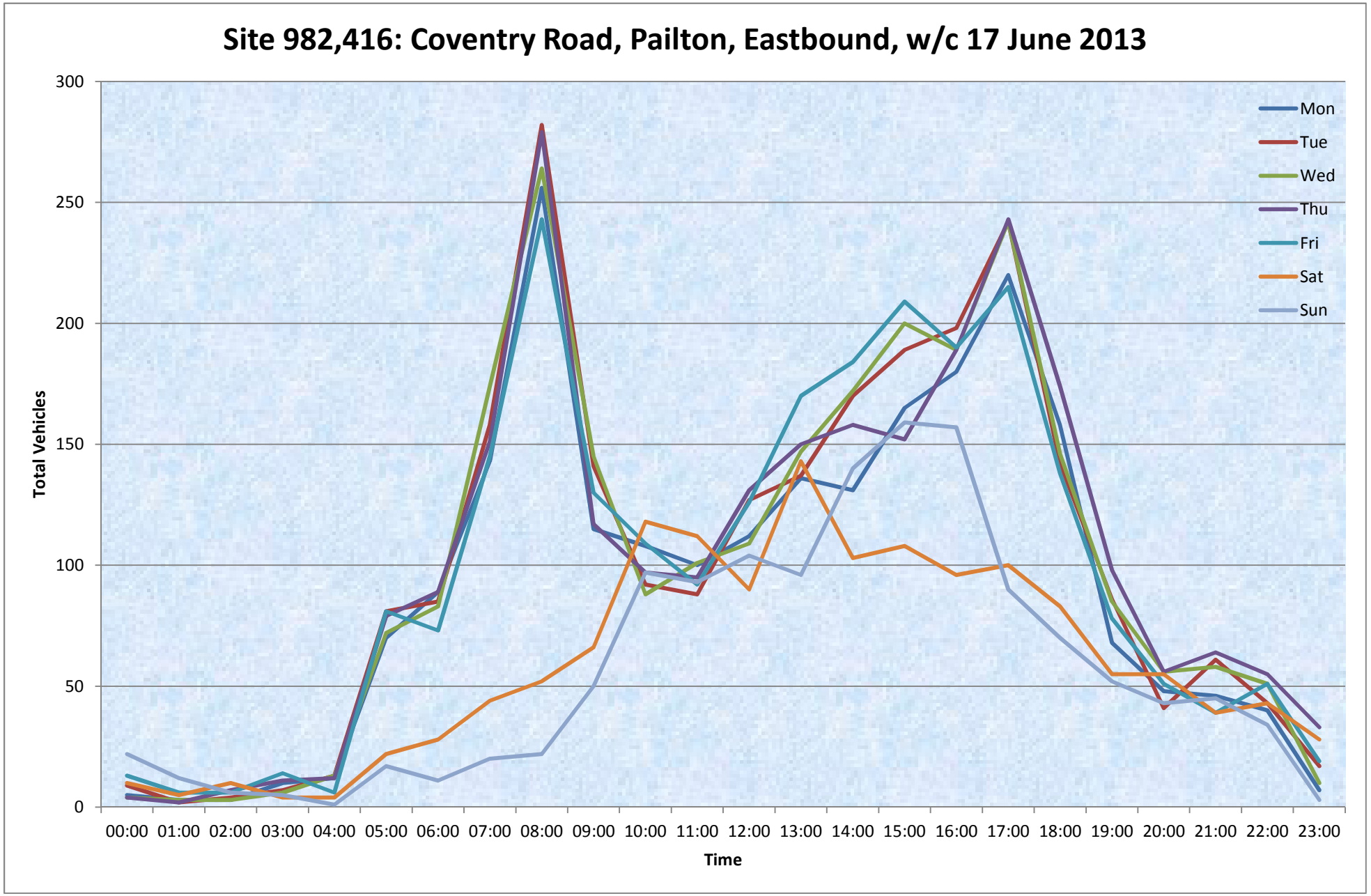
Site 982,416: Coventry Road, Pailton, Eastbound, w/c 17 June 2013
Total Vehicles
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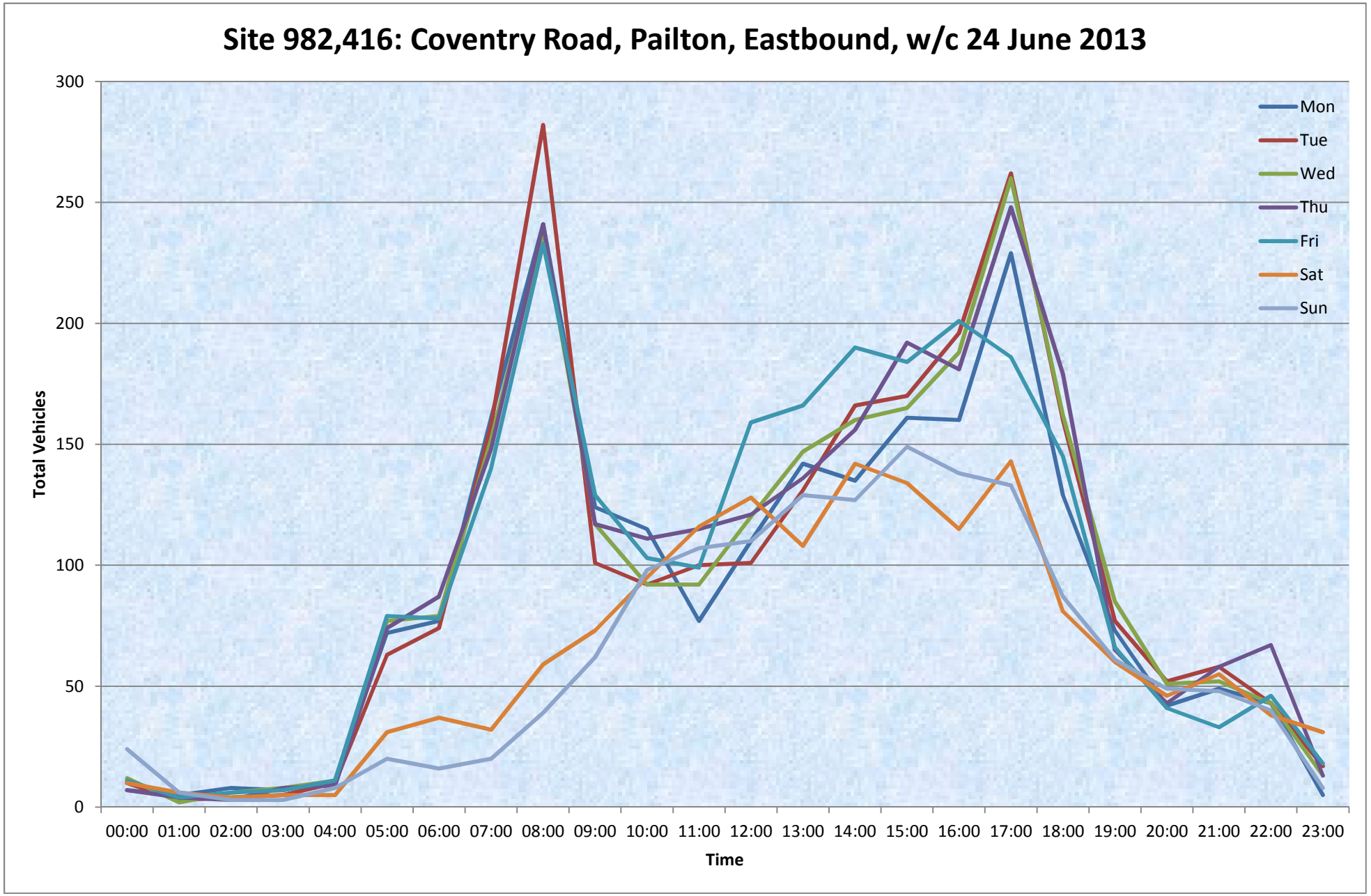
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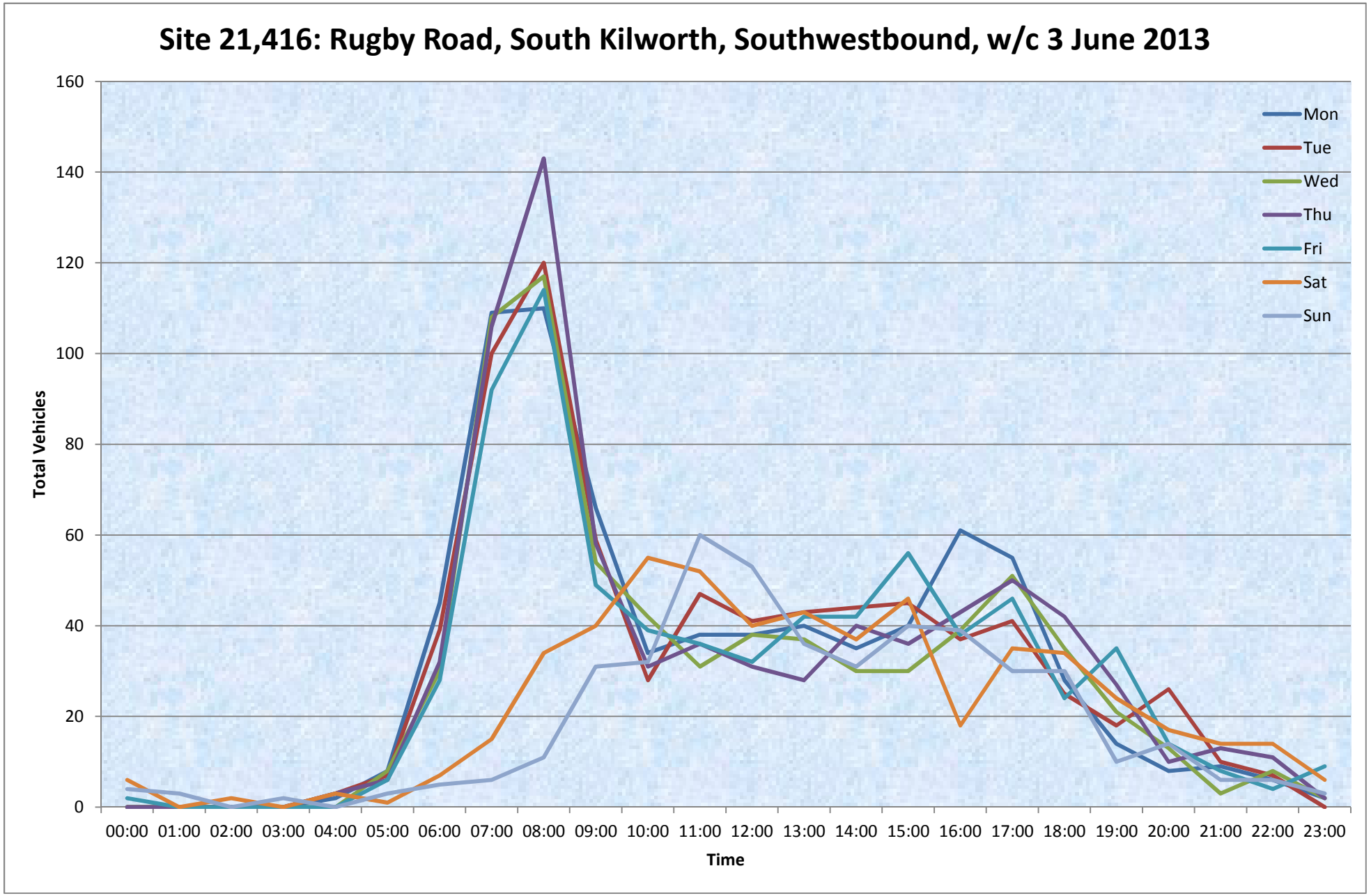
LCC Site 21,416: Rugby Road, South Kilworth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Total Vehicles
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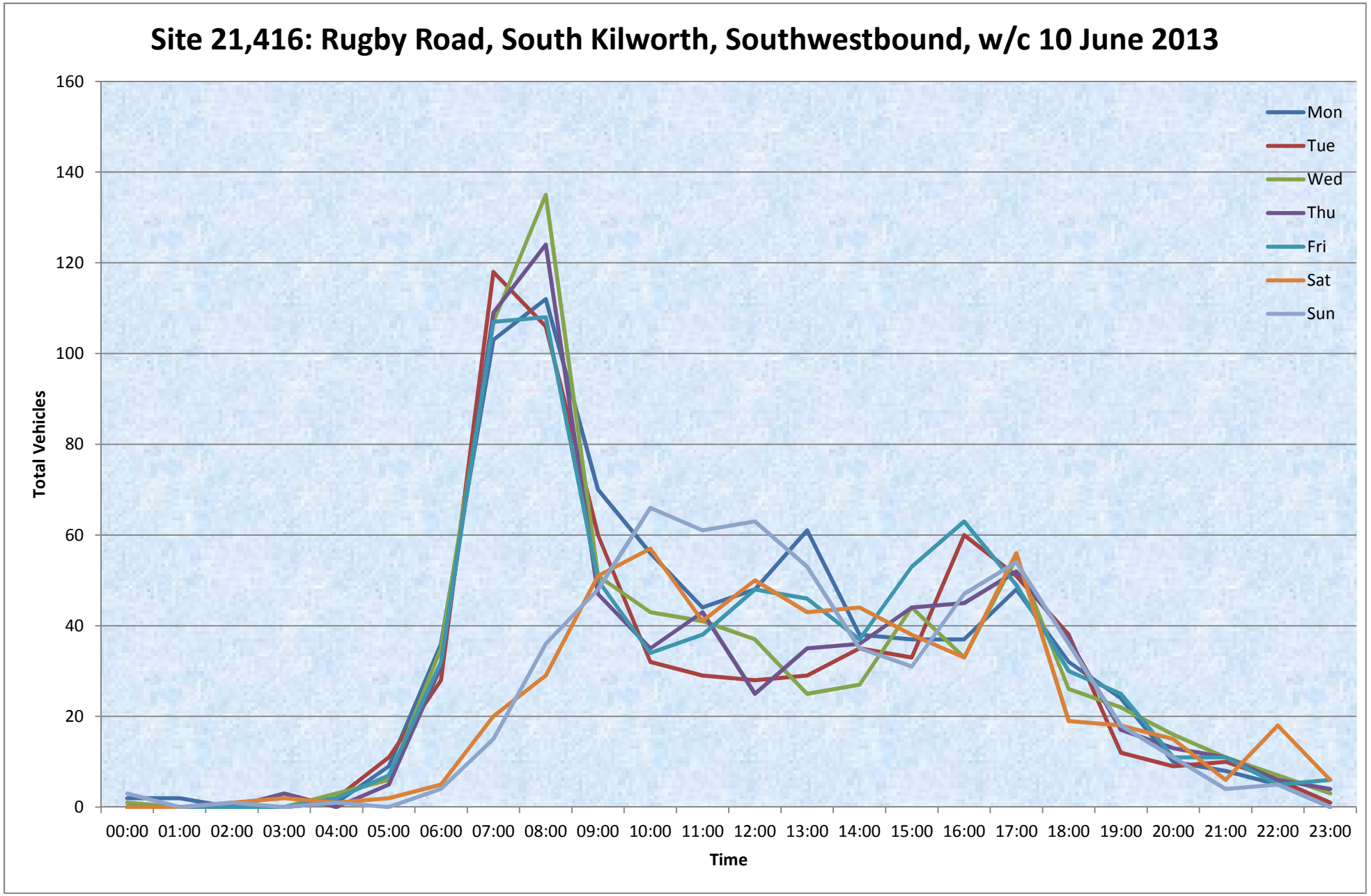
Site 21,416: Rugby Road, South Kilworth, Southwestbound, w/c 10 June 2013
Total Vehicles
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00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00
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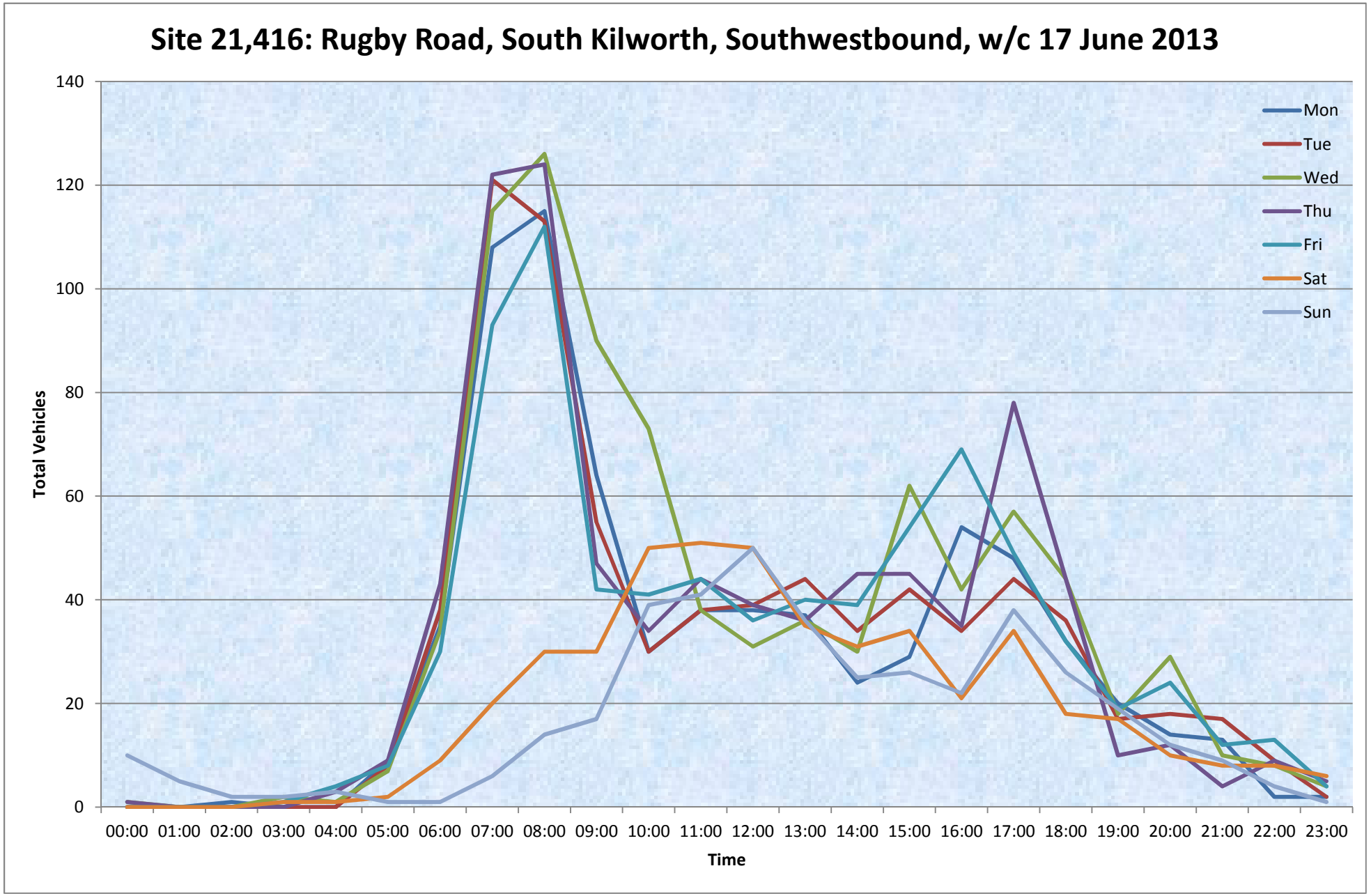
Site 21,416: Rugby Road, South Kilworth, Southwestbound, w/c 17 June 2013
Total Vehicles
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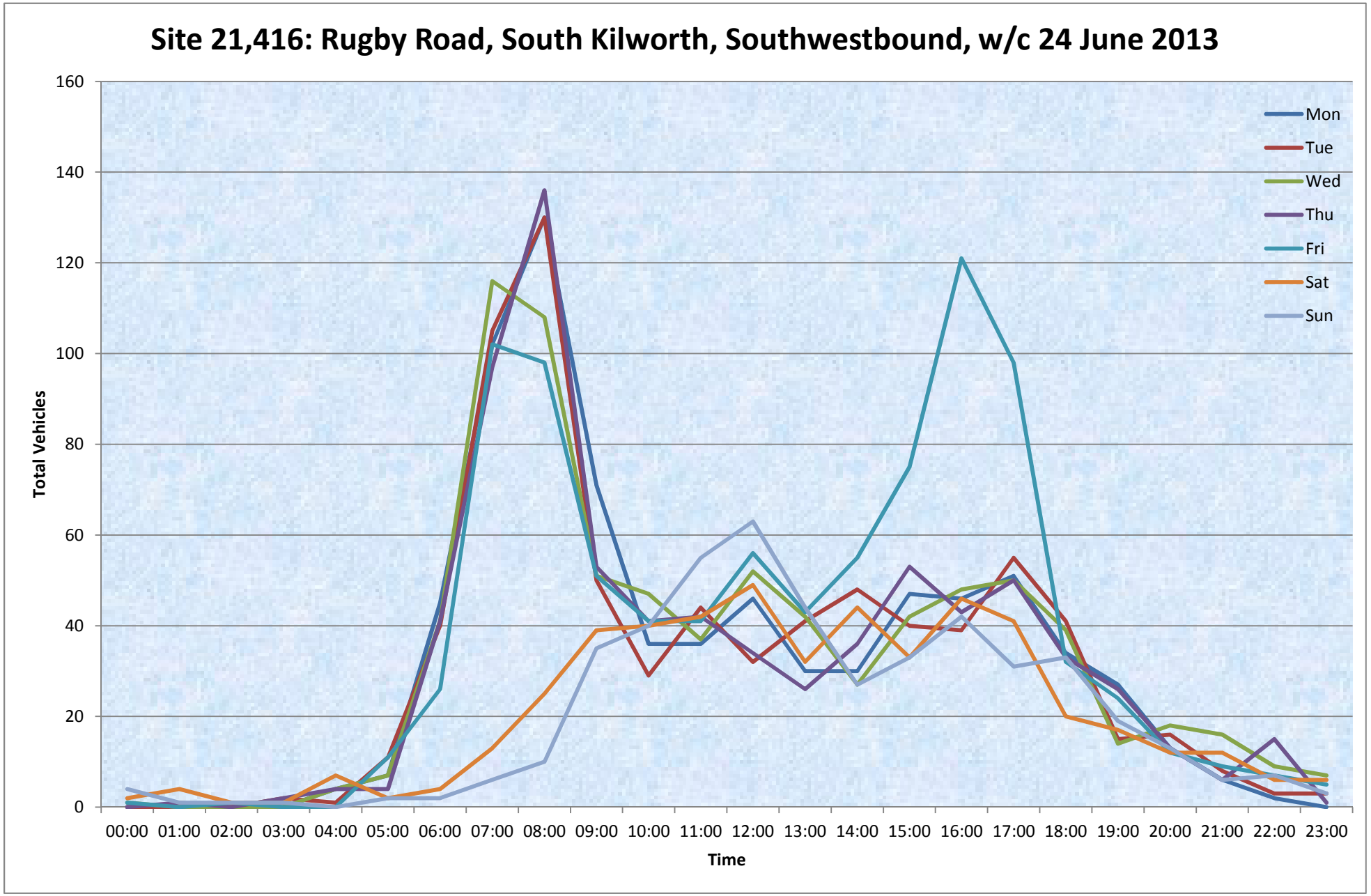
Site 21,416: Rugby Road, South Kilworth, Southwestbound, w/c 24 June 2013
Total Vehicles
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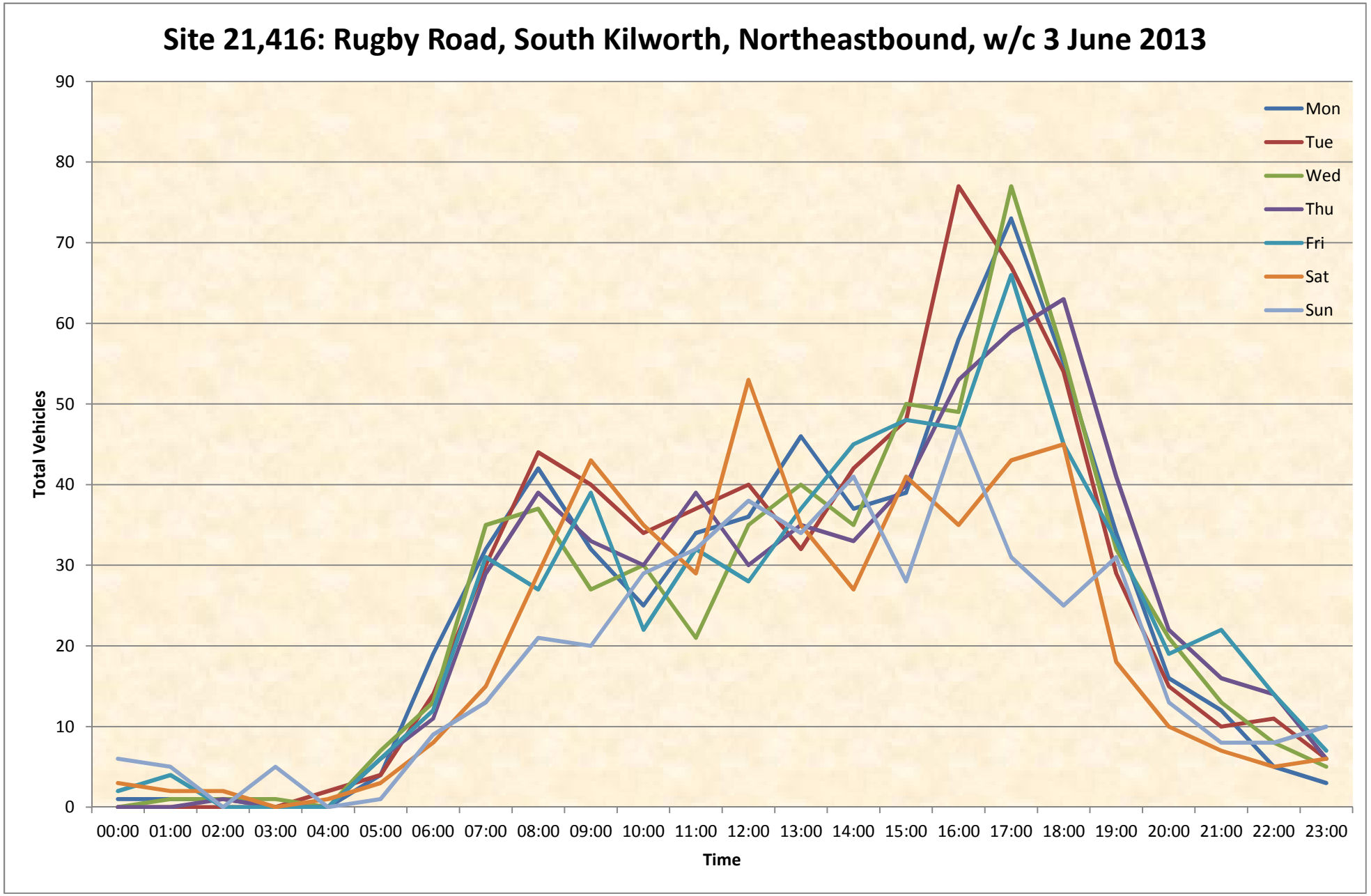
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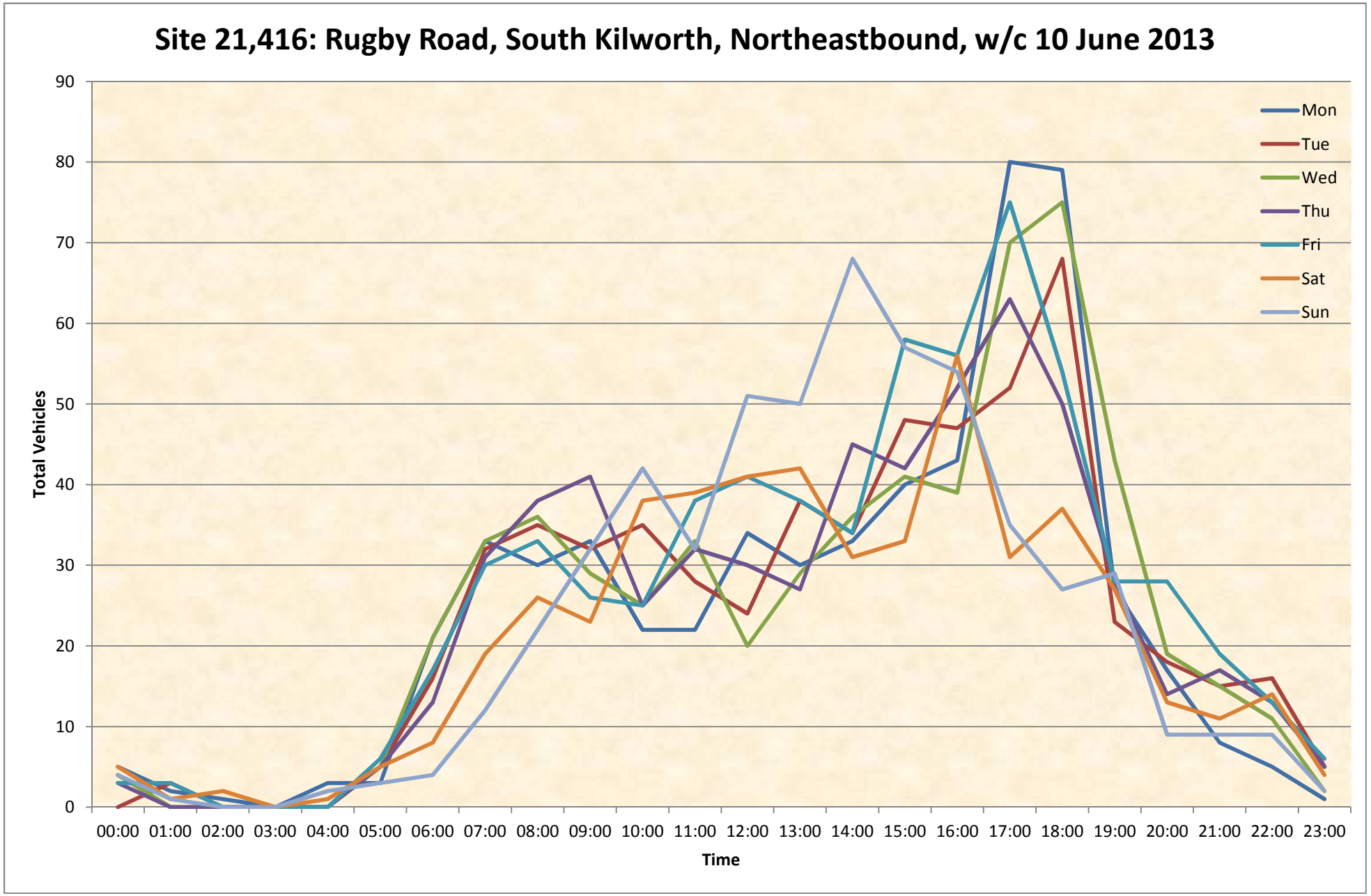
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Total Vehicles
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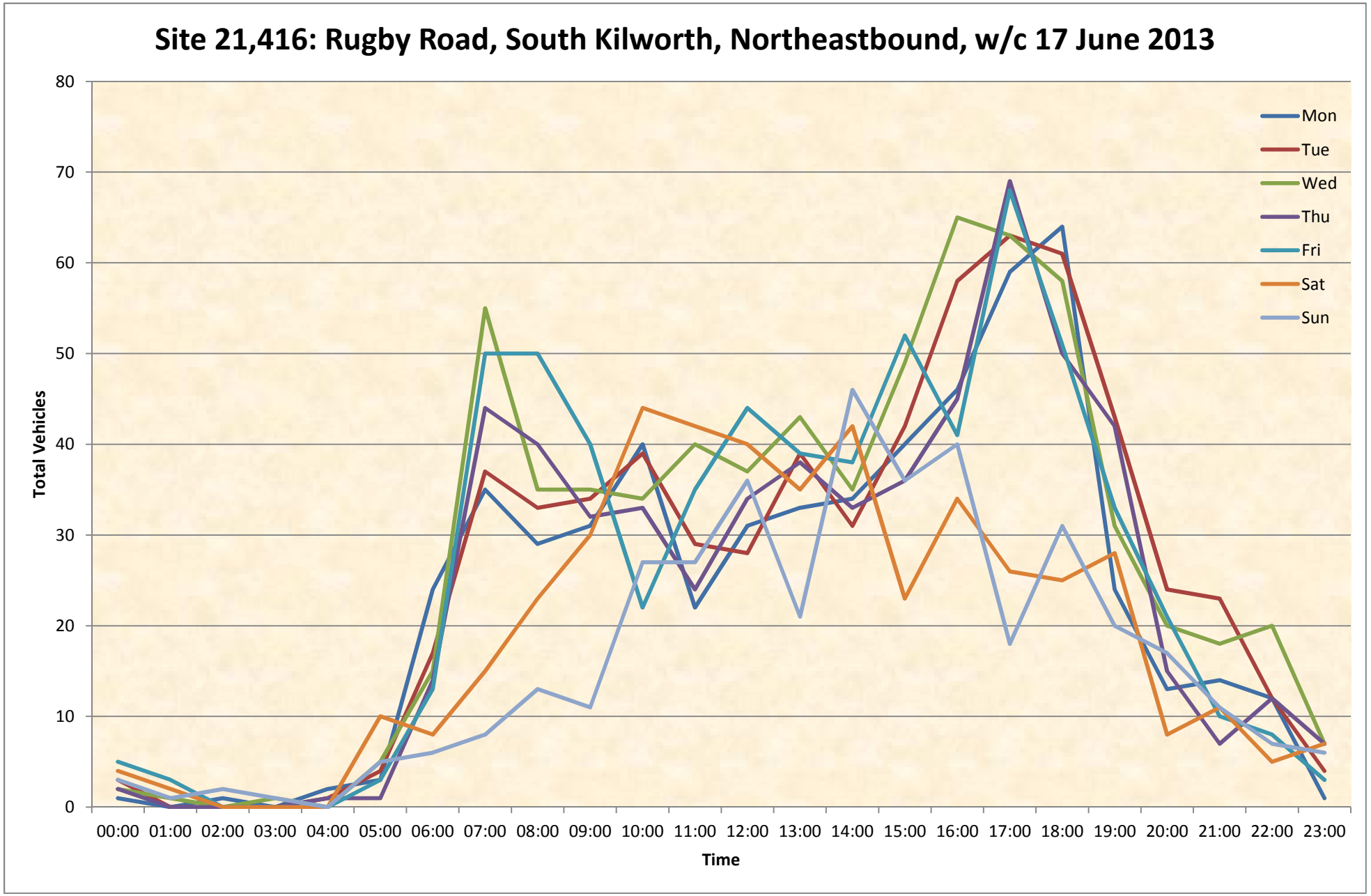
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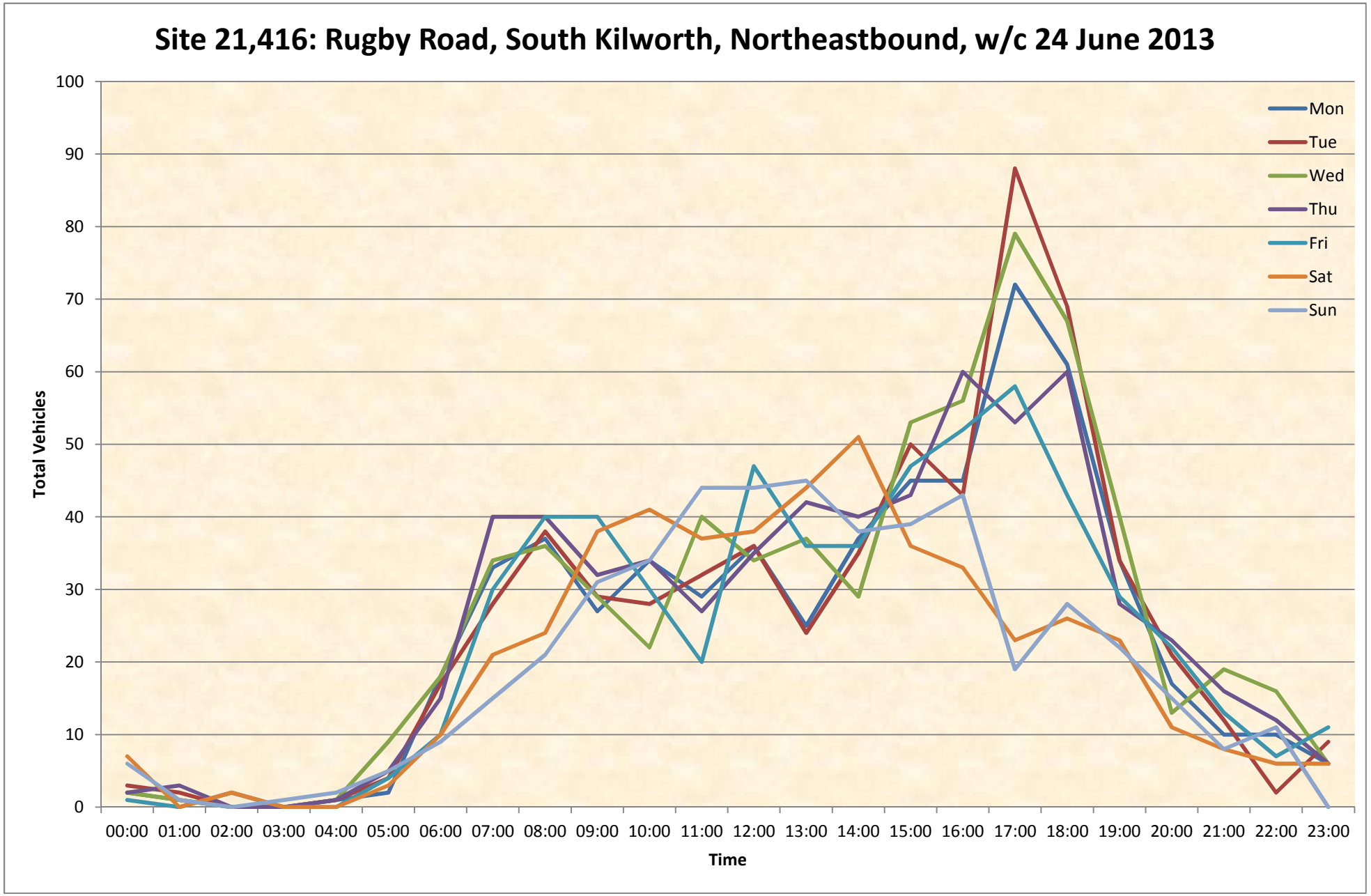
Site 21,416: Rugby Road, South Kilworth, Northeastbound, w/c 24 June 2013
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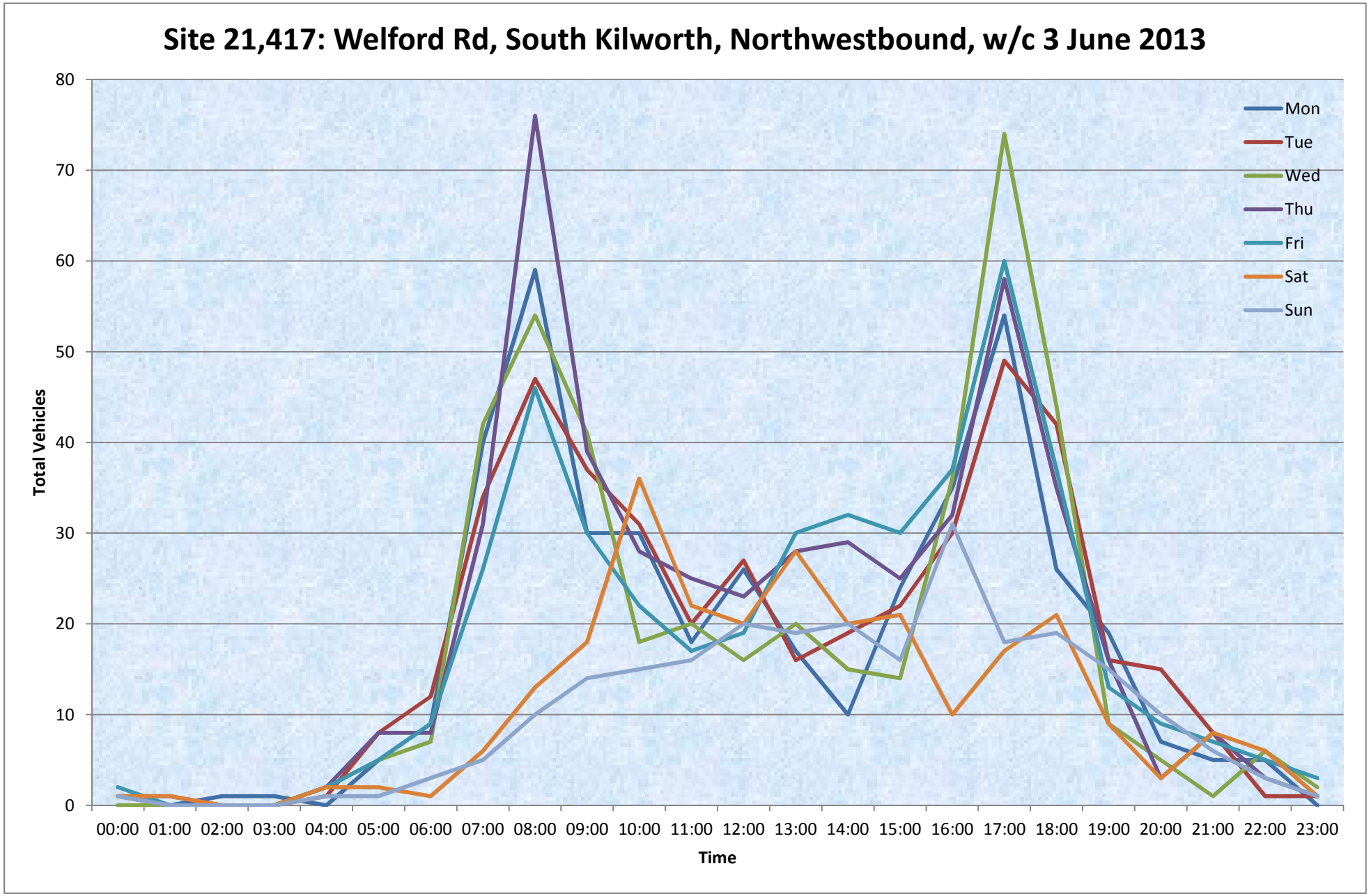
LCC Site 21,417: Welford Road, South Kilworth


Site 21,417: Welford Rd, South Kilworth, Northwestbound, w/c 3 June 2013
Total Vehicles
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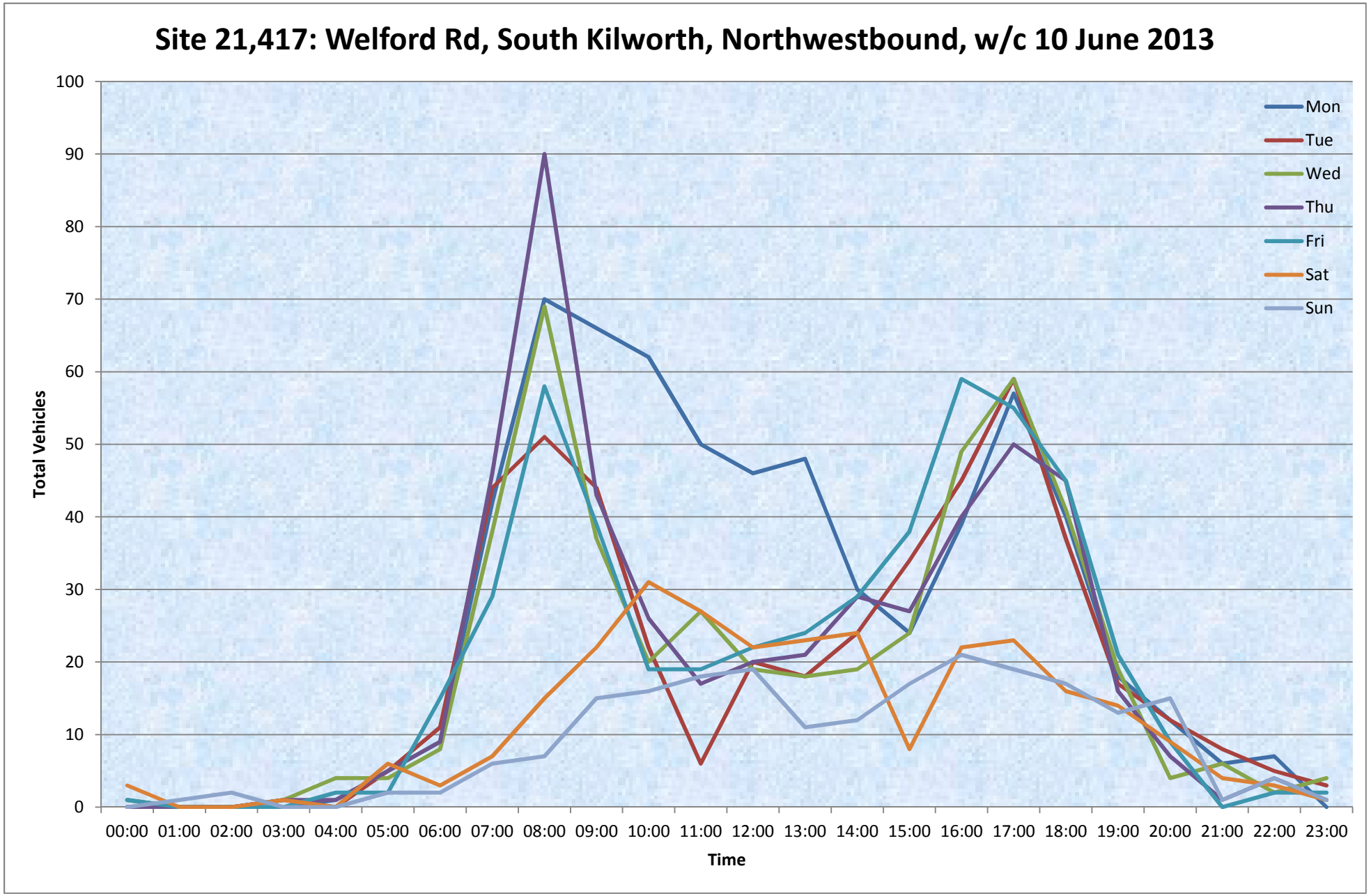
Site 21,417: Welford Rd, South Kilworth, Northwestbound, w/c 10 June 2013
Total Vehicles
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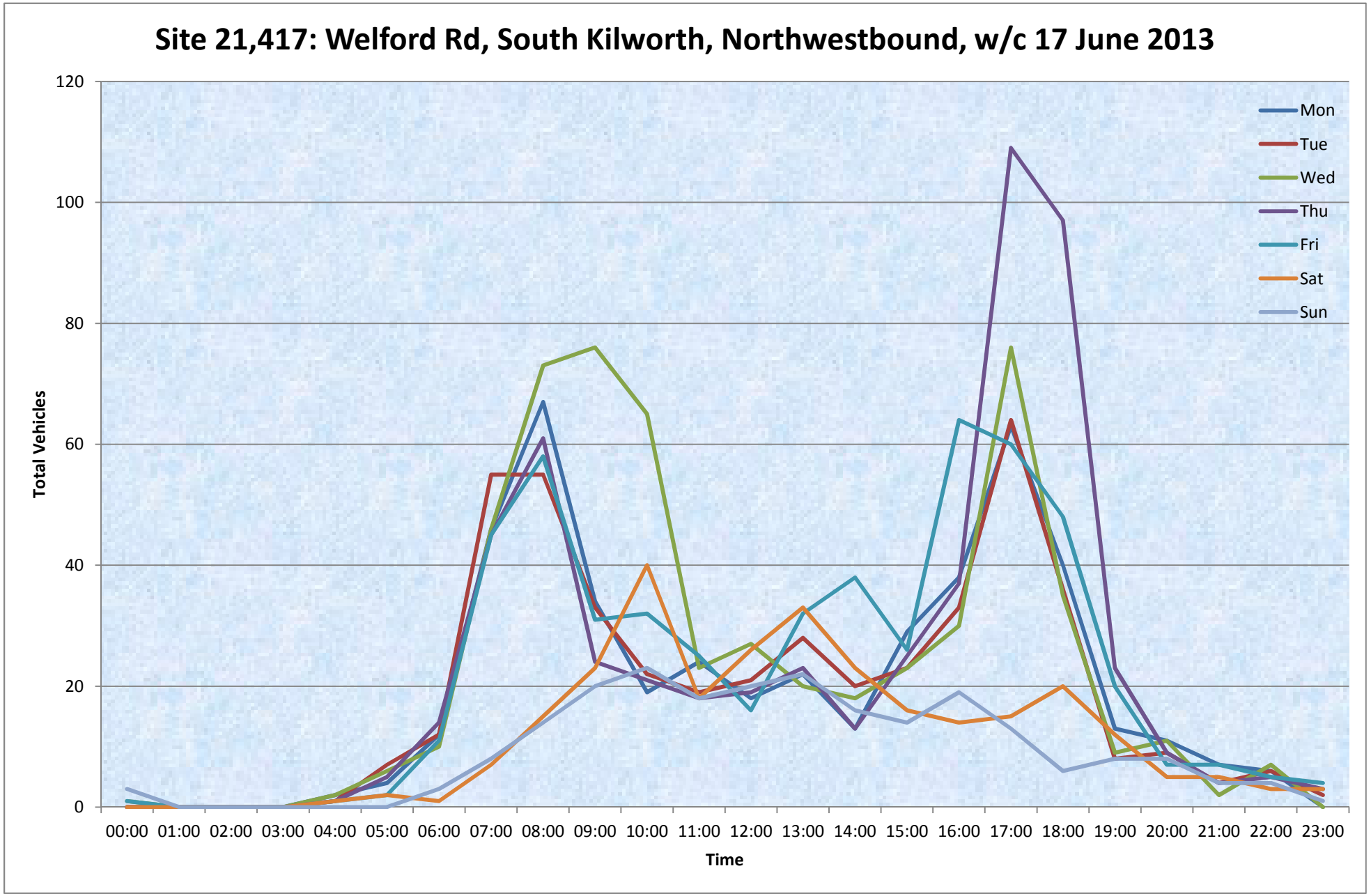
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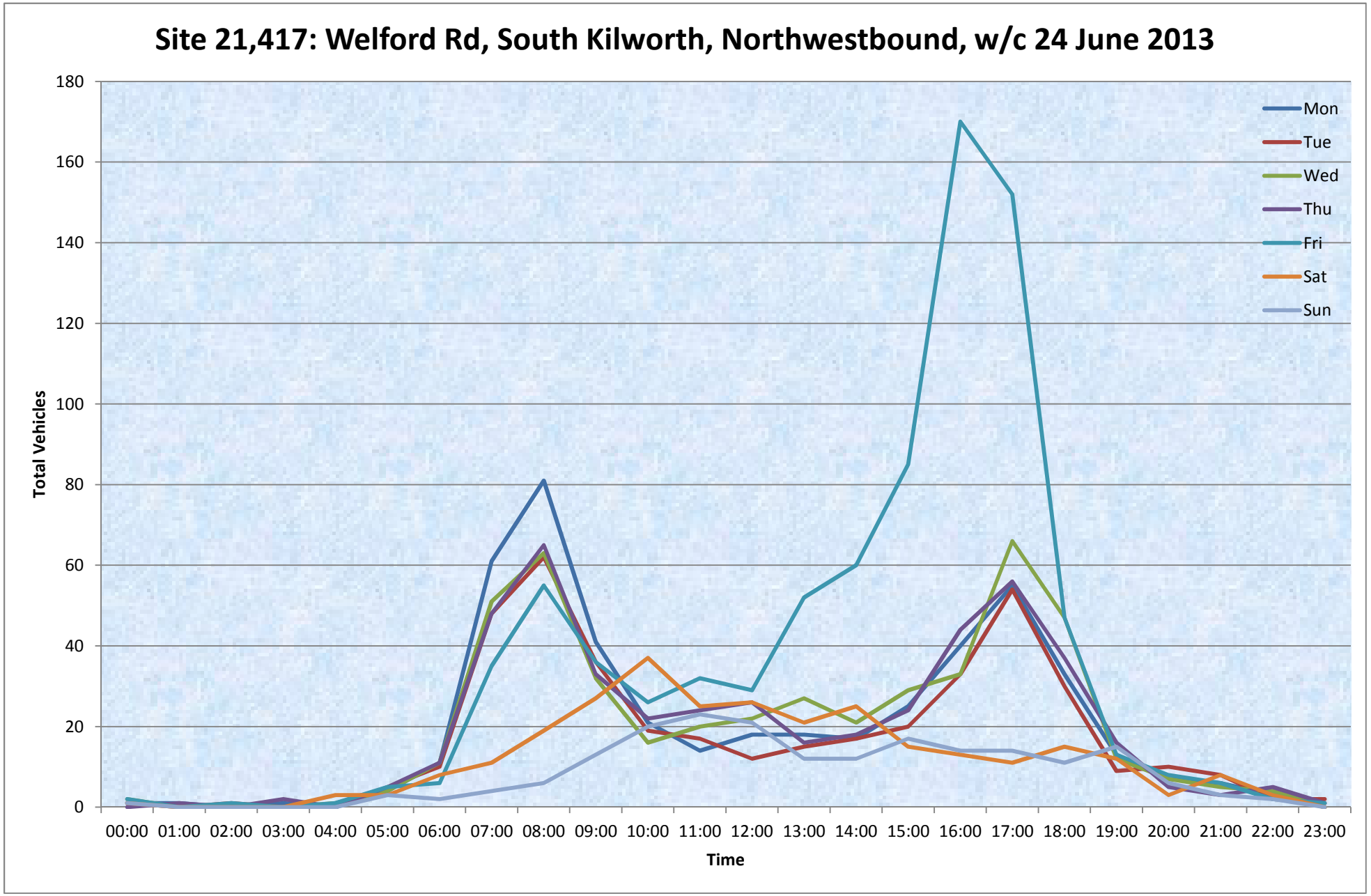
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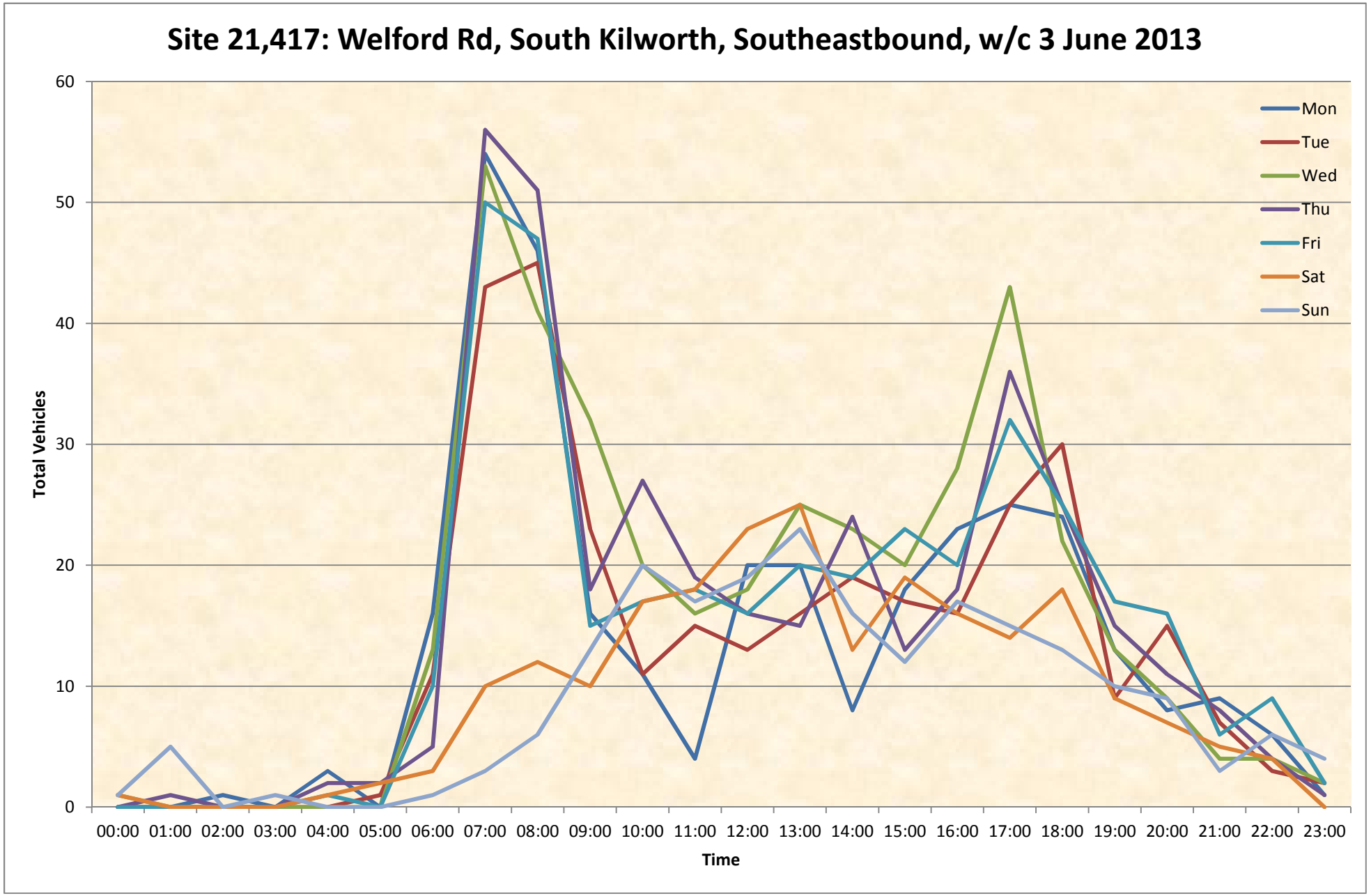
Site 21,417: Welford Rd, South Kilworth, Southeastbound, w/c 3 June 2013
Total Vehicles
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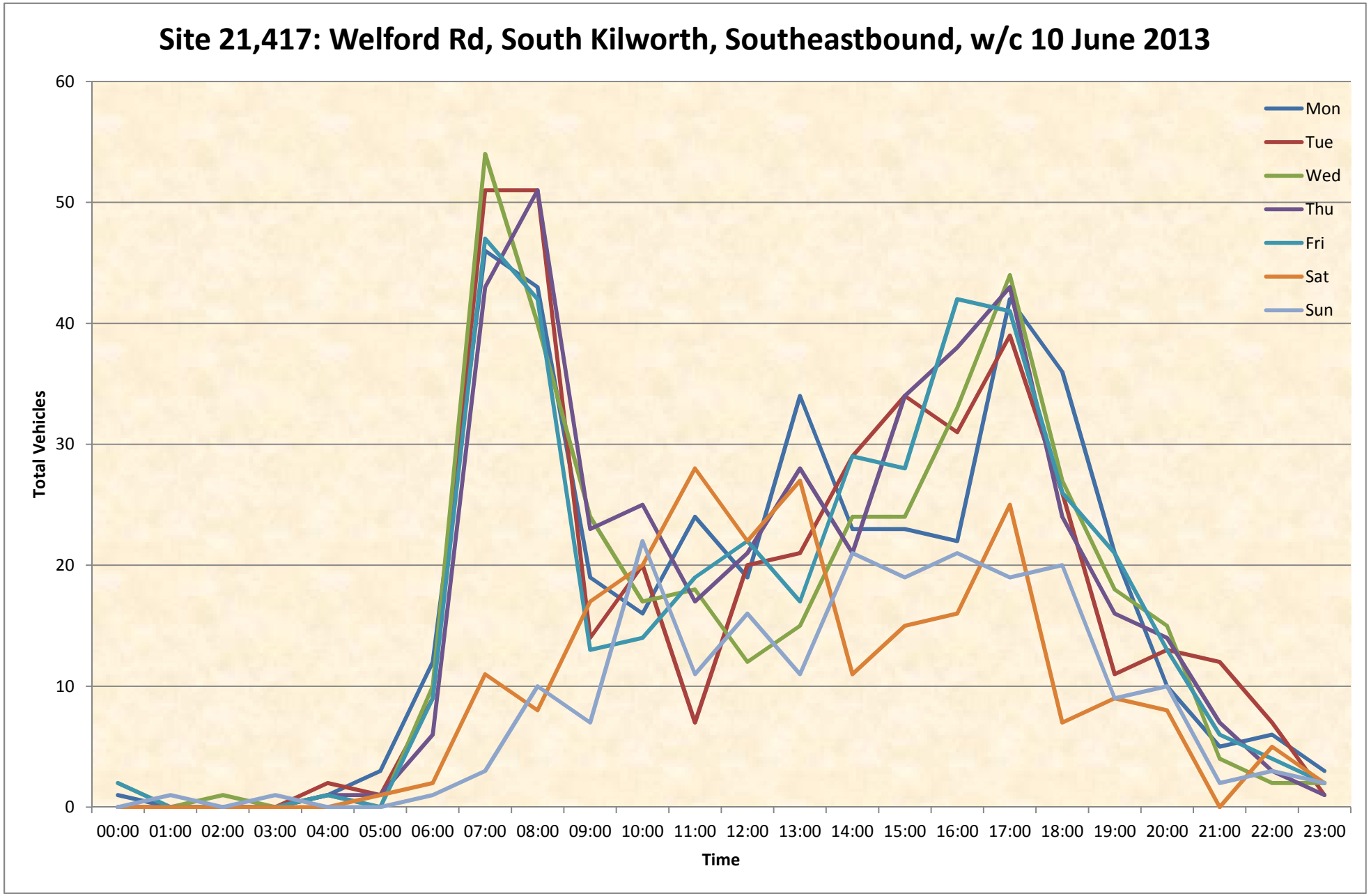
Site 21,417: Welford Rd, South Kilworth, Southeastbound, w/c 10 June 2013
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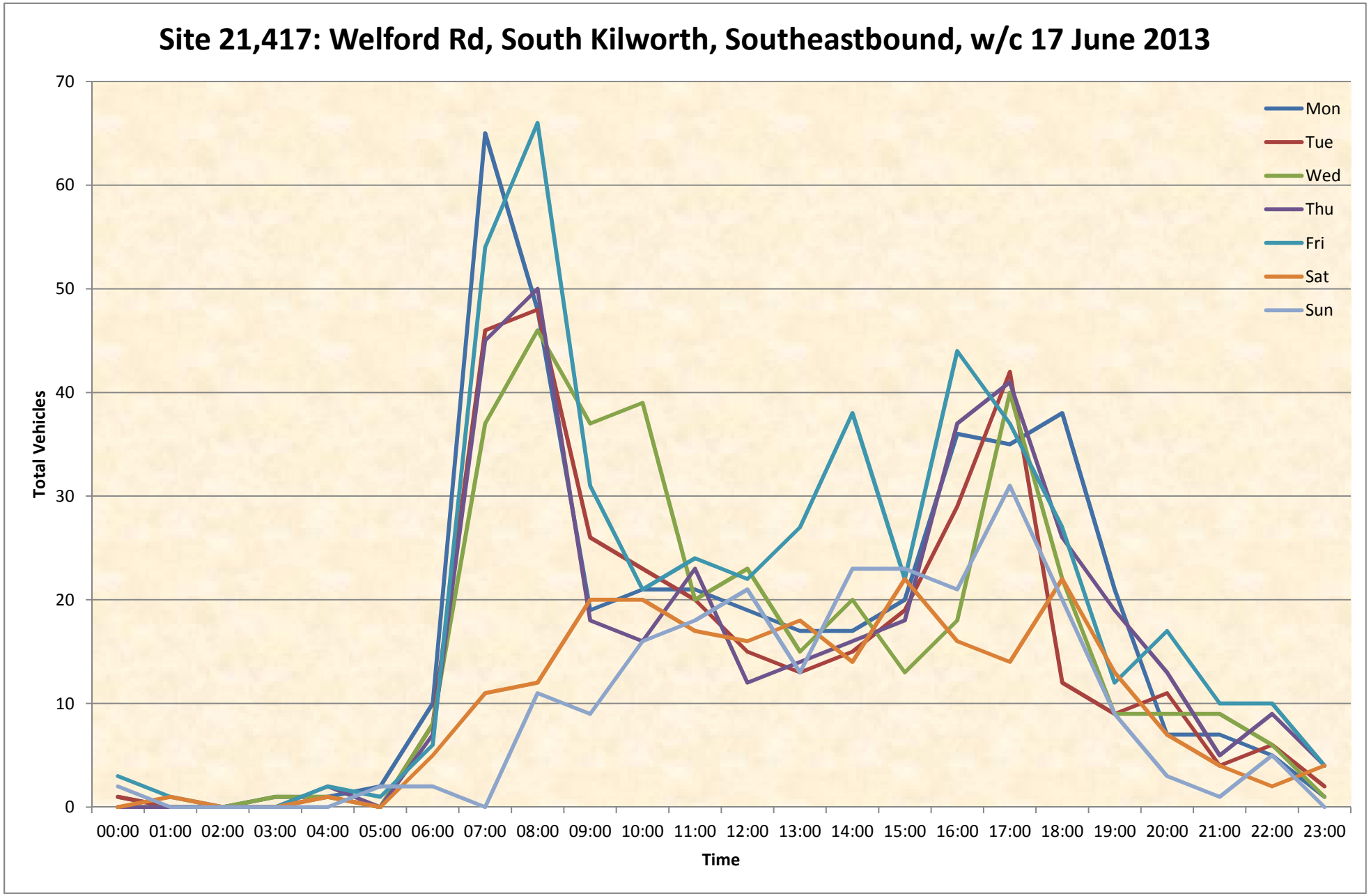
Site 21,417: Welford Rd, South Kilworth, Southeastbound, w/c 17 June 2013
Total Vehicles
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00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00
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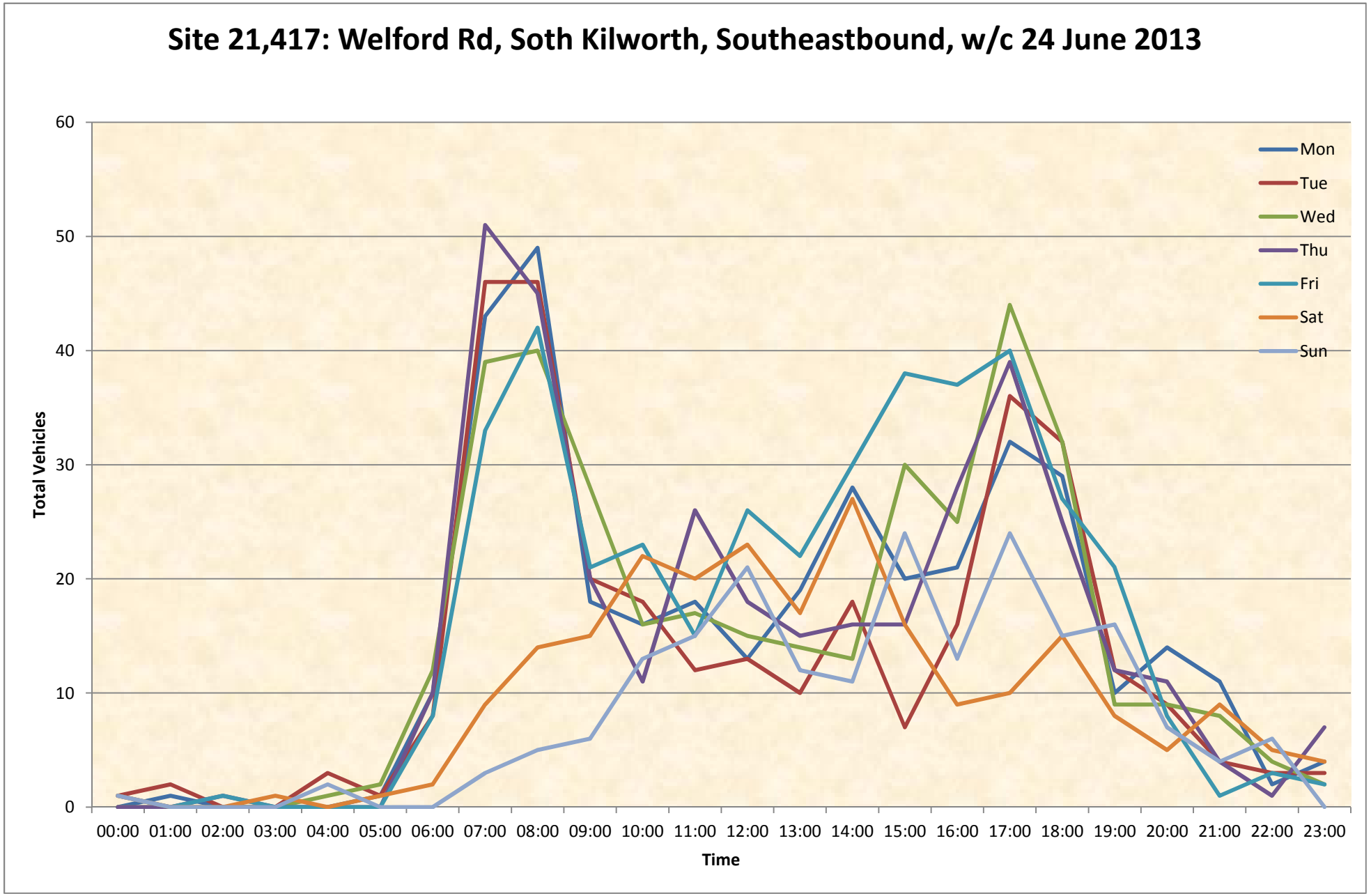
Site 21,417: Welford Rd, Soth Kilworth, Southeastbound, w/c 24 June 2013
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Magna Park Extension: Hybrid Application
Transport Assessment

Appendix Q – M6 J1/M69 J1 Traffic Signal Information

File ref - h:\traffic\signals\sites\county\c51 south (217) m6 junction 1, rugby\drawings\cad\m6j1 proposed layout.dwg

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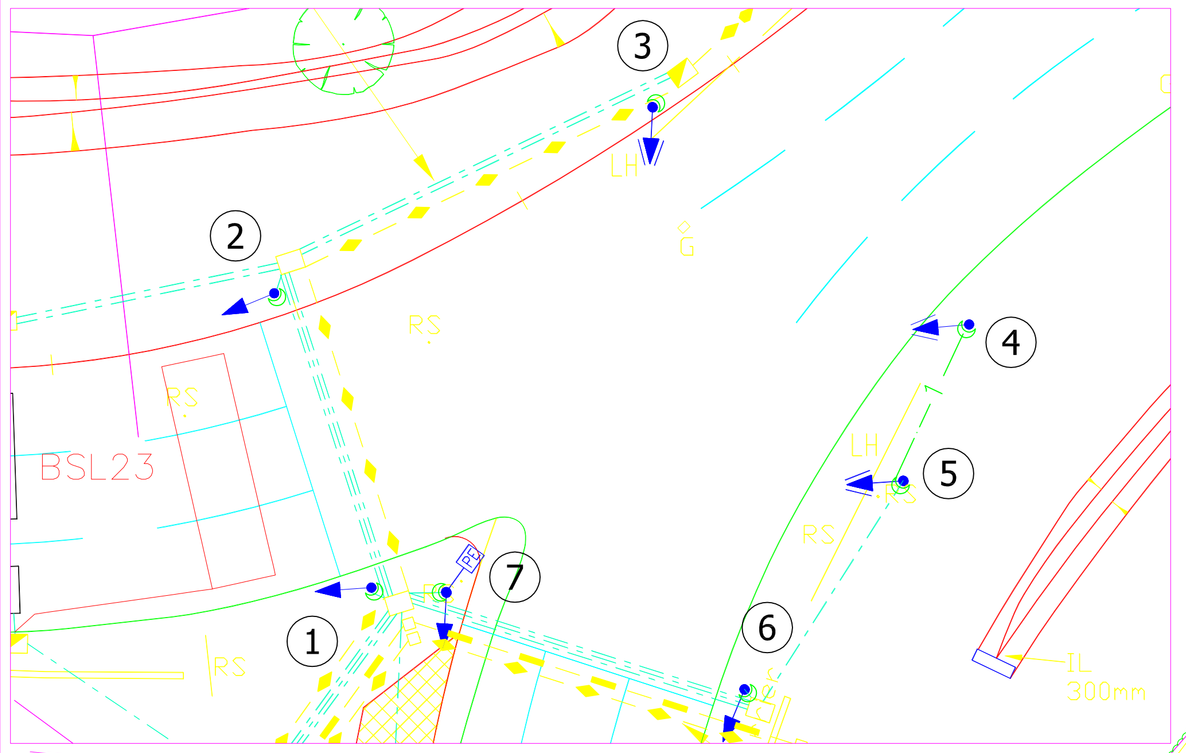
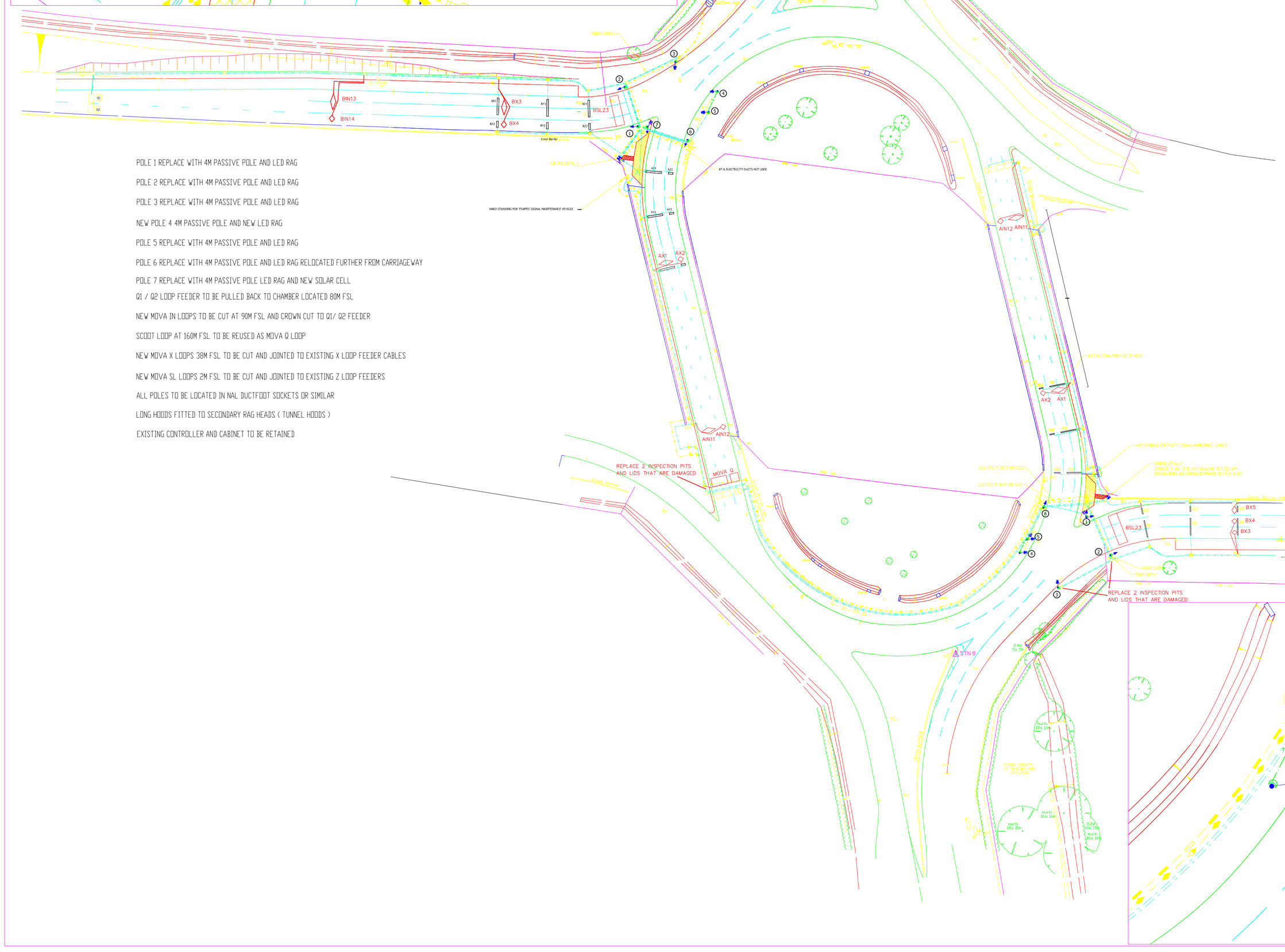




POLE 1 REPLACE WITH 4M PASSIVE POLE AND LED RAG

POLE 2 REPLACE WITH 4M PASSIVE POLE AND LED RAG

POLE 3 REPLACE WITH 4M PASSIVE POLE AND LED RAG

NEW POLE 4 4M PASSIVE POLE AND NEW LED RAG

POLE 5 REPLACE WITH 4M PASSIVE POLE AND LED RAG

POLE 6 REPLACE WITH 4M PASSIVE POLE AND LED RAG RELOCATED FURTHER FROM CARRIAGEWAY

POLE 7 REPLACE WITH 4M PASSIVE POLE LED RAG AND NEW SOLAR CELL

Q1 / Q2 LOOP FEEDER TO BE PULLED BACK TO CHAMBER LOCATED 80M FSL

NEW MOVA IN LOOPS TO BE CUT AT 90M FSL AND CROWN CUT TO Q1/ Q2 FEEDER

SCOOT LOOP AT 160M FSL TO BE REUSED AS MOVA Q LOOP

NEW MOVA X LOOPS 38M FSL TO BE CUT AND JOINTED TO EXISTING X LOOP FEEDER CABLES

NEW MOVA SL LOOPS 2M FSL TO BE CUT AND JOINTED TO EXISTING Z LOOP FEEDERS

ALL POLES TO BE LOCATED IN NAL DUCTFOOT SOCKETS OR SIMILAR

LONG HOODS FITTED TO SECONDARY RAG HEADS (TUNNEL HOODS)

EXISTING CONTROLLER AND CABINET TO BE RETAINED

POLE 1 RELOCATE TO COMBINE OLD POLES WITH 4M PASSIVE POLE AND 2 LED RAGs AND NEW SOLAR CELL

POLE 2 REPLACE WITH 4M PASSIVE POLE AND LED RAG

POLE 3 REPLACE WITH 4M PASSIVE POLE AND LED RAG

NEW POLE 4 4M PASSIVE POLE AND NEW LED RAG

POLE 5 REPLACE WITH 4M PASSIVE POLE AND LED RAG

POLE 6 REPLACE WITH 4M PASSIVE POLE AND LED RAG RELOCATED FURTHER FROM CARRIAGEWAY

Q1 / Q2 LOOP FEEDER TO BE PULLED BACK TO CHAMBER LOCATED 80M FSL

NEW MOVA IN LOOPS TO BE CUT AT 90M FSL ON OFFSLIP AND CROWN CUT TO Q1/ Q2 FEEDER

SCOOT LOOP AT 160M FSL ON OFFSLIP TO BE REUSED AS MOVA Q LOOP

NEW MOVA X LOOPS 38M FSL ON OFFSLIP TO BE CUT AND JOINTED TO EXISTING X LOOP FEEDER CABLES

NEW MOVA SL LOOPS 2M FSL ON OFFSLIP TO BE CUT AND JOINTED TO EXISTING Z LOOP FEEDERS

NEW MOVA X LOOPS 37M FSL TO BE CUT ON GYRATORY AND JOINTED TO EXISTING X LOOP FEEDER CABLE

NEW MOVA IN LOOPS 89M FSL TO BE CUT ON GYRATORY AND JOINTED TO EXISTING SCOOT LOOP FEEDER CABLES

EXISTING CONTROLLER CABINET TO BE RETAINED WITH NEW CONTROLLER RETRO-FITTED

ALL POLES TO BE LOCATED IN NAL DUCTFOOT SOCKETS OR SIMILAR

LONG HOODS FITTED TO SECONDARY RAG HEADS (TUNNEL HOODS)

NOTES

1. All detector loops shown in red are new and are to be cut as part of the works.
2. Existing cabling is to be reused. New cabling to two new poles both numbered 4 on the east and west side.
3. Poles to be numbered in accordance with this drawing. Controllers to be numbered, contact Amey for numbering.
4. Siemens RMS outstations to be installed in each controller. Exsiting PSTN lines are provided in both controllers. These are to be relocated into two new feeder pillars to be installed alongside the controller cabinets.
5. Damaged chamber frames and lids are to be replaced with 450x450mm Grade B minimum composite lids and frames.
6. All new pole positions to be agreed on site with Amey.
7. Two new 290x275 inspection chambers and lids to be installed by both the poles numbered 5. New 1 x 100mm orange ducting to be installed from these chambers to the NAL sockets by both the poles numbered 4.
8. NAL SIS to be installed in existing controller cabinets.
9. All poles to be passively safe aluminium in accordance with BS EN12767. All poles to be 4m long and 114mm diameter.
10. Existing poles and heads to be removed from site.

LEGEND

- SINGLE 100mm TRAFFIC SIGNAL DUCT
- DOUBLE 100mm TRAFFIC SIGNAL DUCT
- TRIPLE 100mm TRAFFIC SIGNAL DUCT
- DUCTS THROUGH BRIDGE DECK OR MOUNTED EXTERNALLY
- SINGLE 100mm DUCT FOR BT CABLE (GREY COLOURED)
- SINGLE 100mm DUCT FOR POWER SUPPLY (BLACK COLOURED)
- HALBO PILLAR FOR POWER SUPPLY/BT
- CHAMBER (450 x 450mm)
- CHAMBER (300 x 300mm)
- LOOP FEEDER CHAMBER (300mm x 300mm) WITH 50mm DUCT
- TRAFFIC SIGNAL PRIMARY HEAD ON 5m POLE
- 7m HIGH, WIDE BASED SIGNAL POLE WITH TWO TRAFFIC SIGNAL PRIMARIES
- SECONDARY SIGNAL HEAD ON 4m POLE
- LONG HOODS FITTED TO RAG HEAD (TUNNEL HOODS)
- LOUVRED SIGNALS
- PHOTO ELECTRIC CELL
- TRAFFIC SIGNAL CONTROLLER
- QUEUE LOOP
- SCOOT LOOP
- 1 x 100mm NEW ORANGE DUCTING
- NEW NAL RS115 DUCKFOOT OR EQUIVALENT

Rev	Revision details	Chkd	Appd	Date

Drawn:	JS	Preliminary	✓
Design:	JS	For comment	
Chkd:	CP	For tender	✓
Appd:	JB	For construction	
Date:	30/11/2010	As constructed	
		Other	

amey

Client

HIGHWAYS AGENCY

Project Name

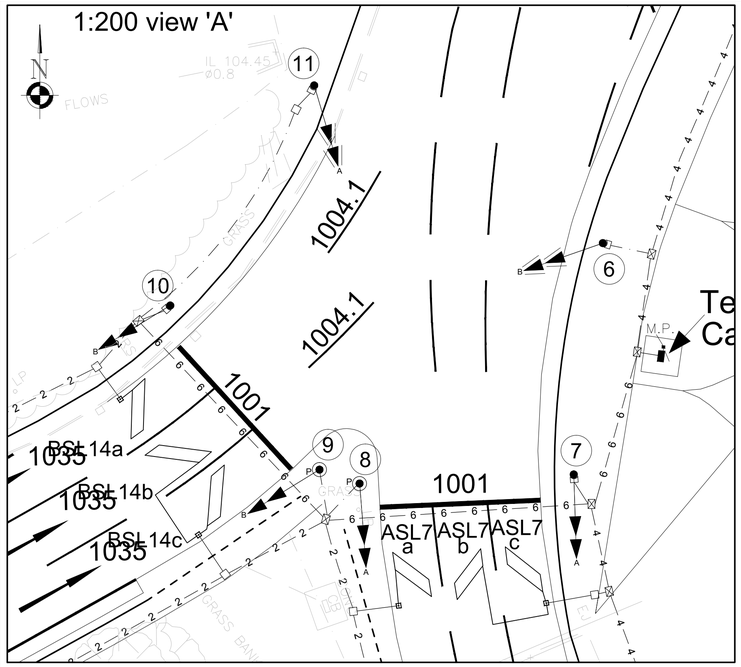
M6 JUNCTION 1

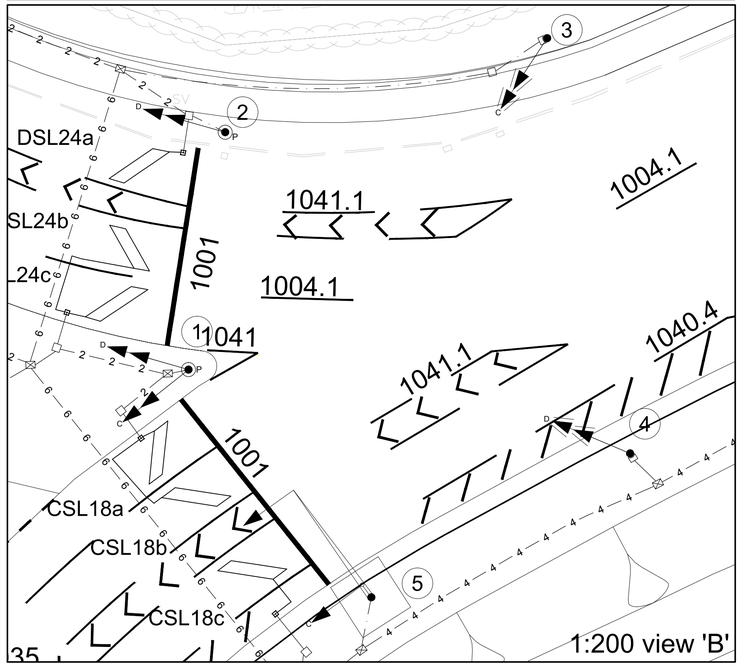
Drawing Title

Installation of MOVA Control

Original Drawing Size :	A1
Scale : NTS	Dimensions : -

Drawing No	Rev
9/1118136/01210	P0



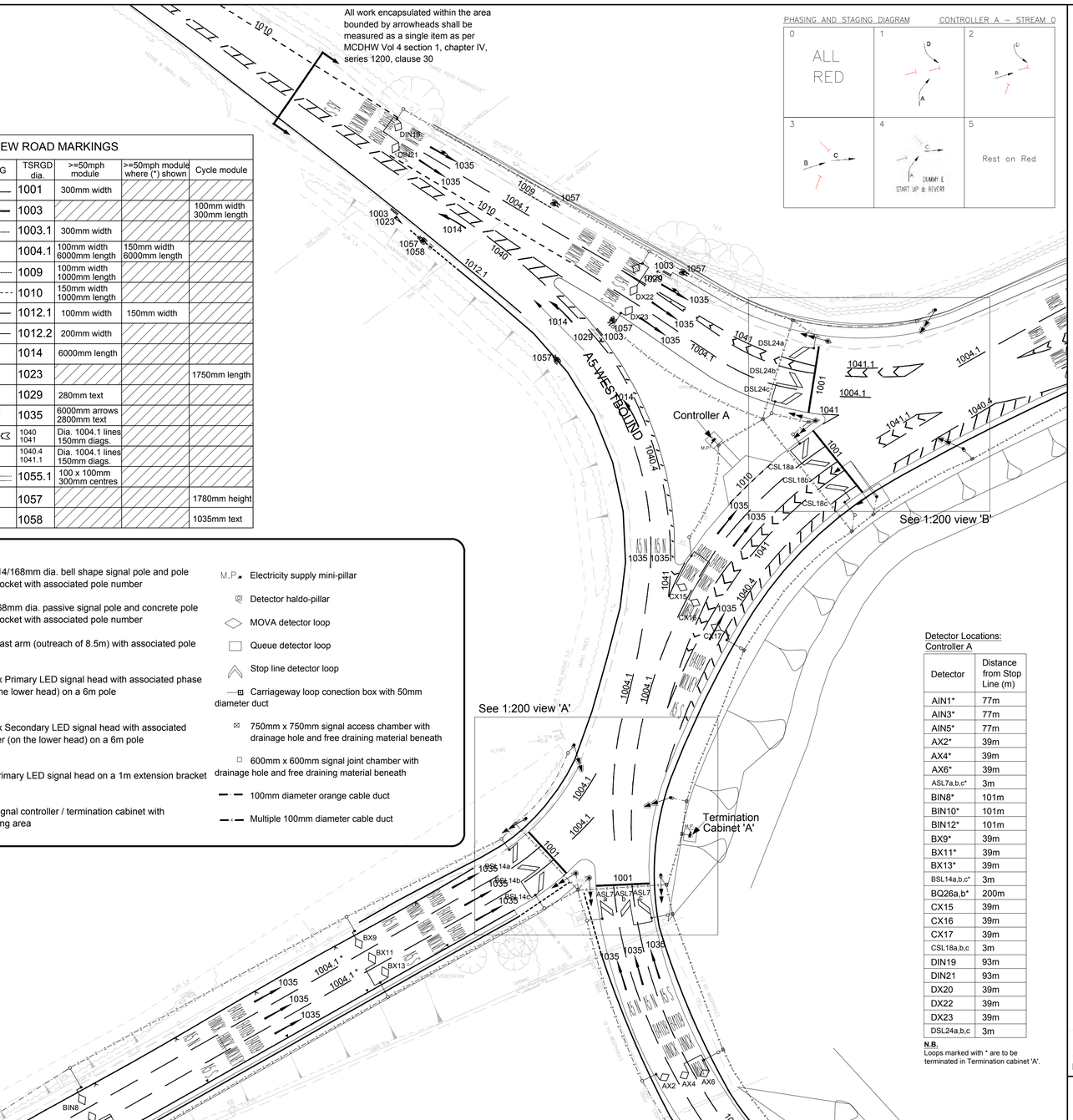


KEY: NEW ROAD MARKINGS				
MARKING	TSRGD dia.	>=50mph module	>=50mph module where (*) shown	Cycle module
	1001	300mm width		
	1003			100mm width 300mm length
	1003.1	300mm width		
— —	1004.1	100mm width 6000mm length	150mm width 6000mm length	
	1009	100mm width 1000mm length		
	1010	150mm width 1000mm length		
	1012.1	100mm width	150mm width	
	1012.2	200mm width		
	1014	6000mm length		
	1023			1750mm length
LOOK LEFT LOOK RIGHT	1029	280mm text		
ARM	1035	6000mm arrows 2800mm text		
	1040 1041	Dia. 1004.1 lines 150mm diags.		
	1040.4 1041.1	Dia. 1004.1 lines 150mm diags.		
	1055.1	100 x 100mm 300mm centres		
	1057			1780mm height
END	1058			1035mm text

KEY

- 114/168mm dia. bell shape signal pole and pole retention socket with associated pole number
- 168mm dia. passive signal pole and concrete pole retention socket with associated pole number
- Mast arm (outreach of 8.5m) with associated pole number
- 2x Primary LED signal head with associated phase letter on the lower head) on a 6m pole
- 2x Secondary LED signal head with associated phase letter (on the lower head) on a 6m pole
- Primary LED signal head on a 1m extension bracket
- Signal controller / termination cabinet with hardstanding area
- M.P. Electricity supply mini-pillar
- Detector haldo-pillar
- MOVA detector loop
- Queue detector loop
- Stop line detector loop
- Carriageway loop conection box with 50mm diameter duct
- 750mm x 750mm signal access chamber with drainage hole and free draining material beneath
- 600mm x 600mm signal joint chamber with drainage hole and free draining material beneath
- 100mm diameter orange cable duct
- Multiple 100mm diameter cable duct

All work encapsulated within the area bounded by arrowheads shall be measured as a single item as per MCDHW Vol 4 section 1, chapter IV, series 1200, clause 30



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All work encapsulated within the area bounded by arrowheads shall be measured as a single item as per MCDHW Vol 4 section 1, chapter IV, series 1200, clause 30

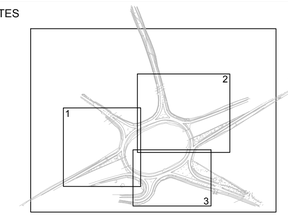
PHASING AND STAGING DIAGRAM — CONTROLLER A — STREAM 0

Detector Locations:
Controller A

Detector	Distance from Stop Line (m)
AIN1*	77m
AIN3*	77m
AIN5*	77m
AX2*	39m
AX4*	39m
AX6*	39m
ASL7a,b,c*	3m
BIN8*	101m
BIN10*	101m
BIN12*	101m
BX9*	39m
BX11*	39m
BX13*	39m
BSL14a,b,c*	3m
BQ26a,b*	200m
CX15	39m
CX16	39m
CX17	39m
CSL18a,b,c	3m
DIN19	93m
DIN21	93m
DX20	39m
DX22	39m
DX23	39m
DSL24a,b,c	3m

N.B.
Loops marked with * are to be terminated in Termination cabinet 'A'.

NOTES



1. All dimensions in millimetres unless stated otherwise.
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3. Diagram above shows sheet layouts. Refer to drawing numbers 11/06012/H/12/01.1 & 01.2 for sheets 2 & 3.
4. References shall be made to the following contract drawing numbers:

11/06012/H/04/01.0-01.2 for safety barrier layout.
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11/06012/H/07/02.0-02.2 for high friction surfacing.
11/06012/H/12/03.0-03.2 for road marking layout.
11/06012/H/12/01.3 for mast arm foundation detail.
11/06012/H/12/02.0-02.2 for signing layout.
11/06012/H/11/01.0-01.2 & 02.0 for maintenance bay detail.

5. Stop lines to be located 1.0m from the centre line of the primary signal pole.
6. MOVA loop and signal pole positions are to be agreed on site with signal design engineer.
7. All ducting to be 100ø except between joint chambers and carriageway loop connection boxes which shall be 50ø.
8. All loops are to be fed into a carriageway loop connection box. Each loop shall be cut into a seperate slot.
9. All signal heads are to be LED.
10. References should be made to the following Highway Construction Detail Drawings:

Dwg G25 for carriageway loop connection boxes.
Dwg G27 for the installation of stop line loops.
Dwg G28 for the installation of queue loops.
Dwg G32 for the installation of MOVA loops.

11. Refer to appendix 12/5 for traffic signal installation requirements and to appendix 5/2 for traffic signal ducting/chamber installation requirements.
12. Kerb drain cable loop units (Type ACO KD480CL) are to be installed so as to coincide with proposed loop positions. Refer to dwg 11/06012/H/11/01.0-01.2.
13. Refer to Appendix 7/2 for c/w trench reinstatement details.

Rev	Description	By	Chk'd	App	Date

(Paragraph 130) (Regulation 13(2)(b)) Construction (Design & Management) Regulations 1994

In accordance with paragraph 131 of HSG224, the Approved Code of Practice to the Construction (Design and Management) Regulations 1994 - 2000, we believe there are no residual hazards which, in our opinion, would not be "Obvious" to a Competent Contractor (those which are classed as "Unusual" or "Likely to be Difficult to Manage").

Risks where information is available at this stage of the design have been taken into account in preparation of the indicative design. Possible revisions to the design are subject to further information and associated Risk Assessment.

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HIGHWAYS AGENCY

OPTIMA
INFRASTRUCTURE MANAGEMENT
Galena Close, Amington, Tamworth, Staffordshire, B77 4AS
Tel: 01827 313 313 Fax: 01827 313 113 e-mail: enquires@optima-im.com

Project: AREA 11 MAC CONTRACT

Title: A5 / M69 SIGNALISATION
Traffic Signal Installation - Sheet 1 of 3

Scale	Drawn	Date	Checked	Date	Approved	Date
1:500	EA	01-06-06	TH	16-06-06	AD	14-09-06

Office	Project No.		Drawing No.		Revision
11	/ 06012	/	H/12/01.0	/ -	

Status: PRELIMINARY ☐ DETAILED ☐ CONTRACT ☒ AS BUILT ☐

1

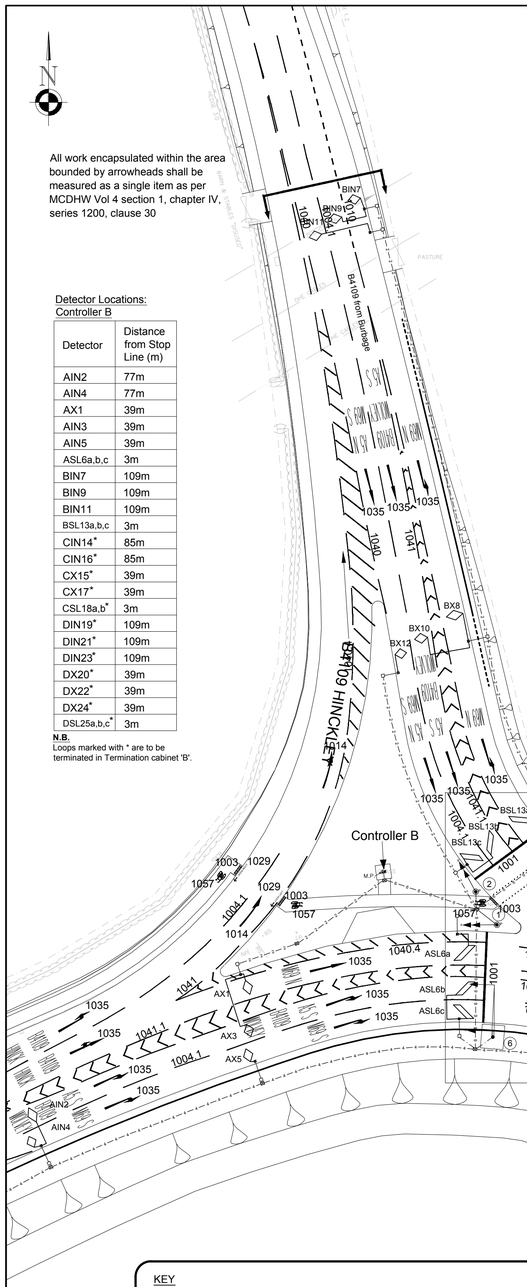
0 10 Millimetres 100

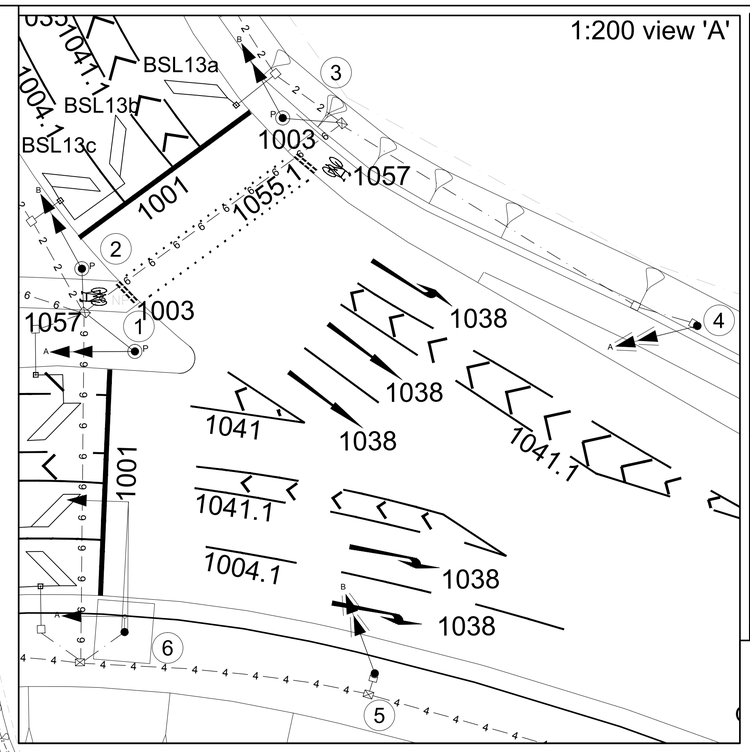
All work encapsulated within the area bounded by arrowheads shall be measured as a single item as per MCDHW Vol 4 section 1, chapter IV, series 1200, clause 30

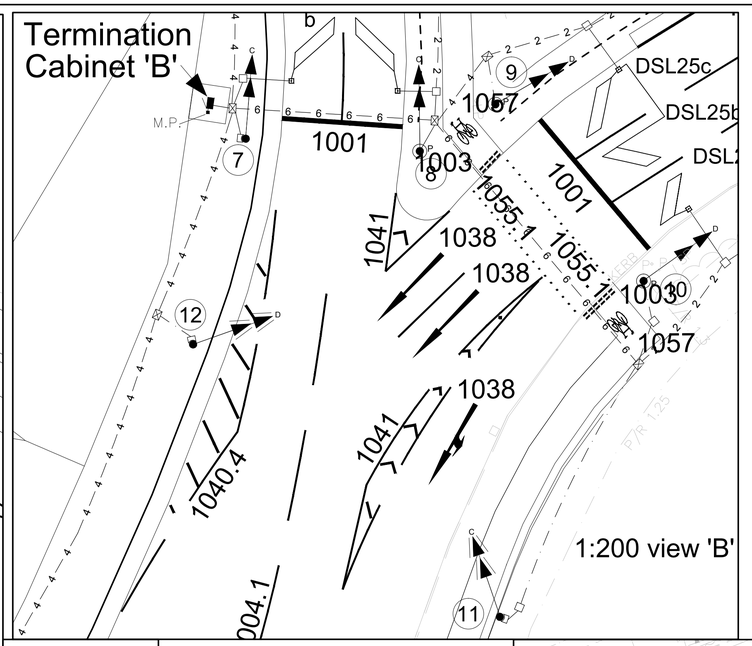
Detector Locations:
Controller B

Detector	Distance from Stop Line (m)
AIN2	77m
AIN4	77m
AX1	39m
AIN3	39m
AIN5	39m
ASL6a,b,c	3m
BIN7	109m
BIN9	109m
BIN11	109m
BSL13a,b,c	3m
CIN14*	85m
CIN16*	85m
CX15*	39m
CX17*	39m
CSL18a,b*	3m
DIN19*	109m
DIN21*	109m
DIN23*	109m
DX20*	39m
DX22*	39m
DX24*	39m
DSL25a,b,c*	3m

N.B.
Loops marked with * are to be terminated in Termination cabinet 'B'.







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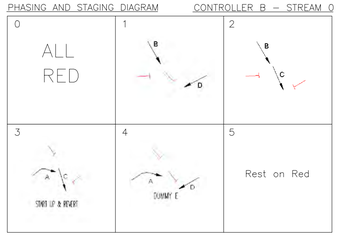
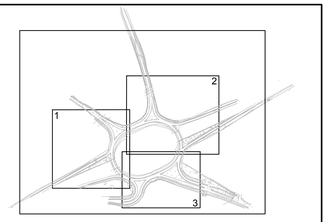
———	1003			100mm width 300mm length
— —	1004.1	100mm width 6000mm length	150mm width 6000mm length	
- - - - -	1010	150mm width 1000mm length		
———	1012.2	200mm width		
	1014	6000mm length		
ONLY	1029	280mm text		
AHEAD	1035	6000mm arrows 2800mm text		
	1038	6000mm arrows		
	1040 1041	Dia. 1004.1 lines 150mm diags.		
	1040.4 1041.1	Dia. 1004.1 lines 150mm diags.		
·····	1055.1	100 x 100mm 300mm centres		
	1057			1780mm height

PHASING AND STAGING DIAGRAM — CONTROLLER B – STREAM 0



NOTES



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Rev	Description	By	Chk'd	App	Date

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Project
AREA 11 MAC CONTRACT

Title
A5 / M69 SIGNALISATION
Traffic Signal Installation - Sheet 2 of 3

Scale	Drawn	Date	Checked	Date	Approved	Date
1:500	EA	01-06-06	TH	16-06-06	AD	14-09-06

Office	Project No.	Drawing No.	Revision
11	06012	H/12/01.1	-

Status
PRELIMINARY ☐ DETAILED ☐ CONTRACT ☒ AS BUILT ☐

2

0 10 Millimetres 100

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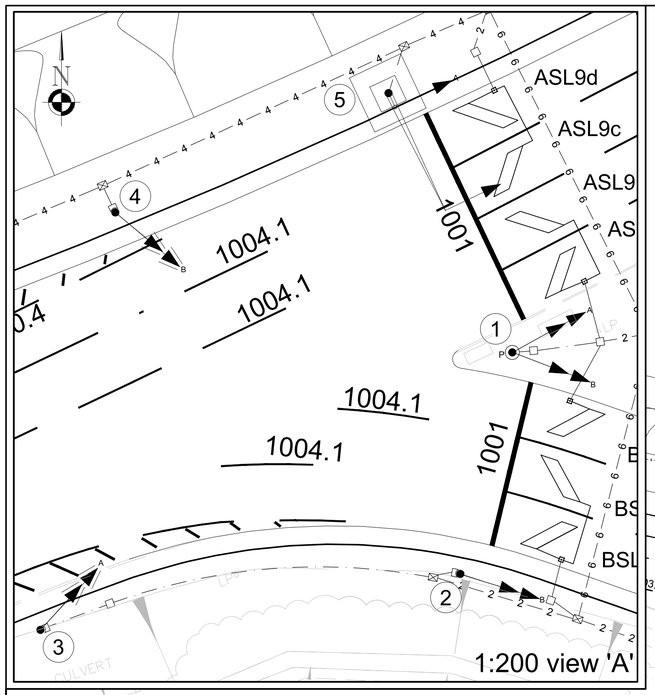
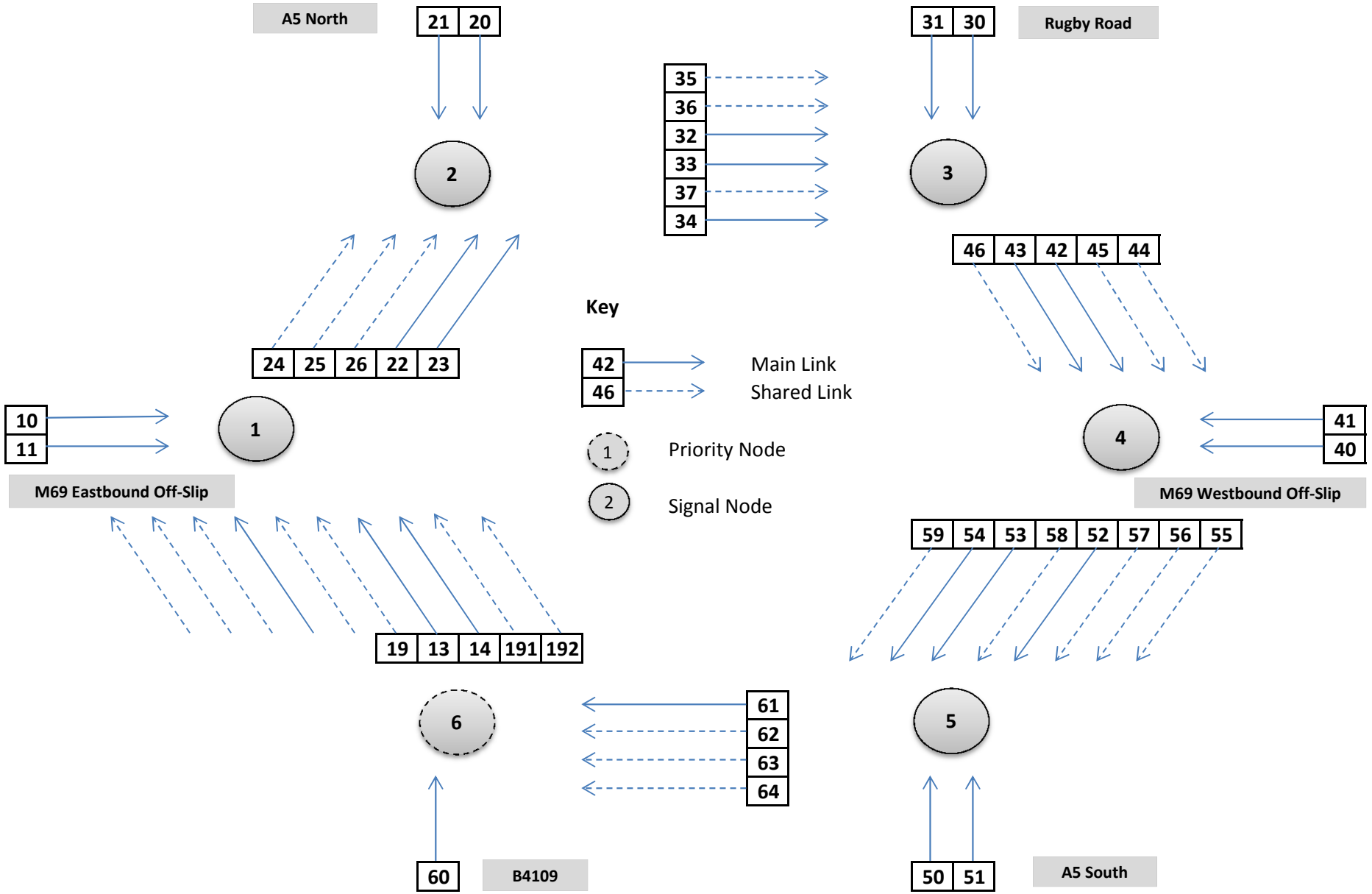
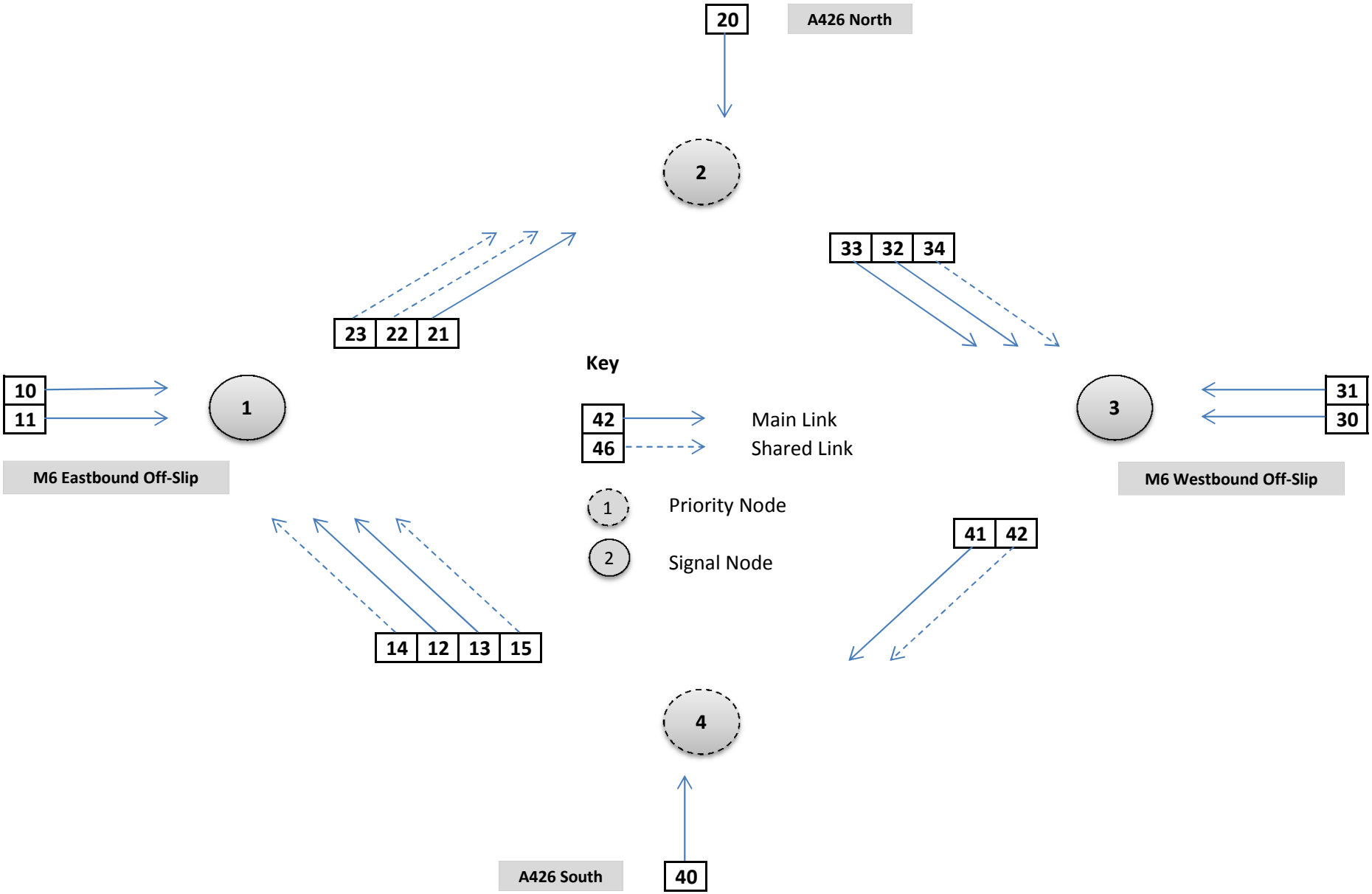

N
ASL9d
ASL9c
ASL9
AS
BS
BSL
1001
1004.1
1004.1
1004.1

Magna Park Extension: Hybrid Application
Transport Assessment

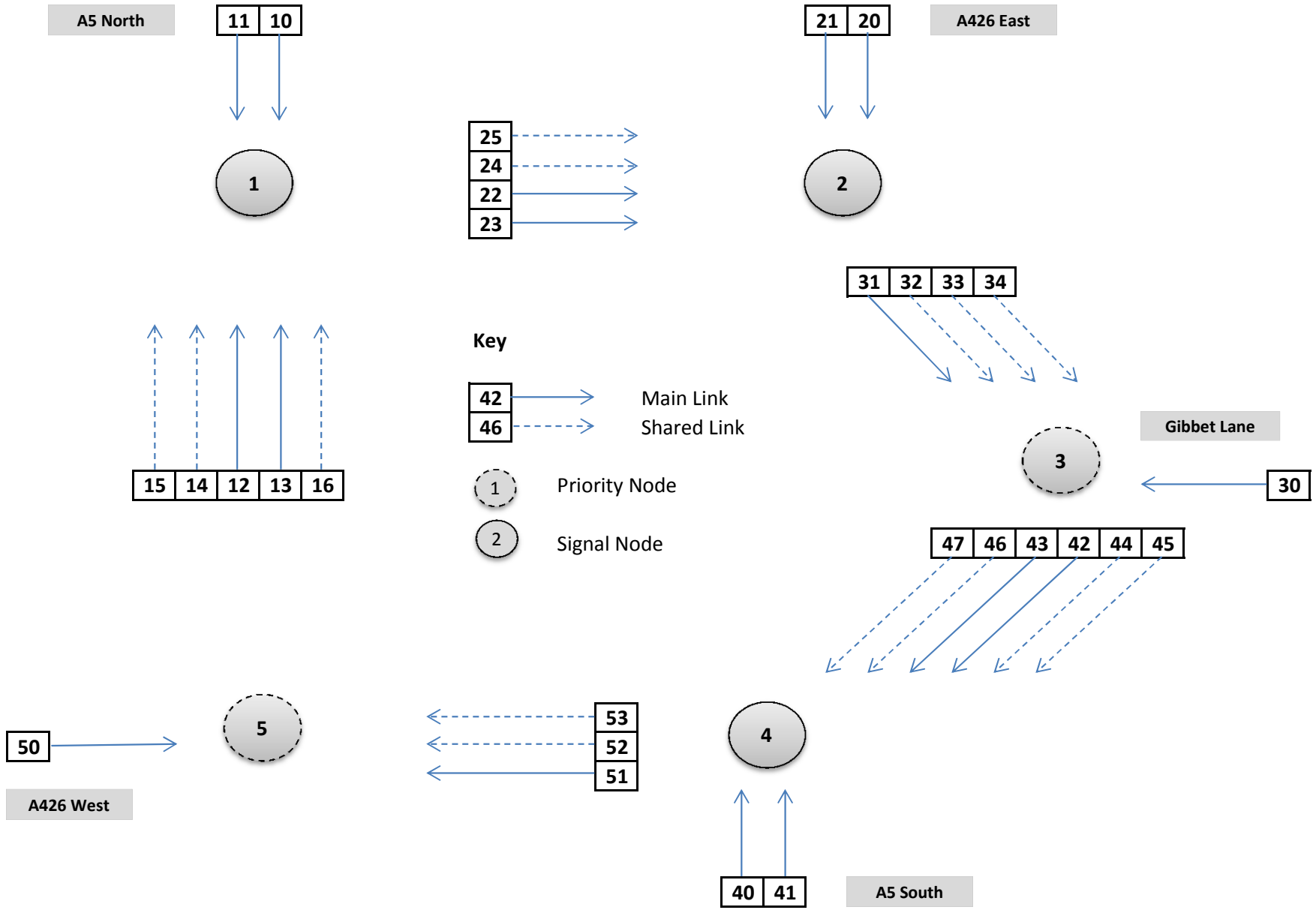
Appendix R – TRANSYT Link/Node Diagrams



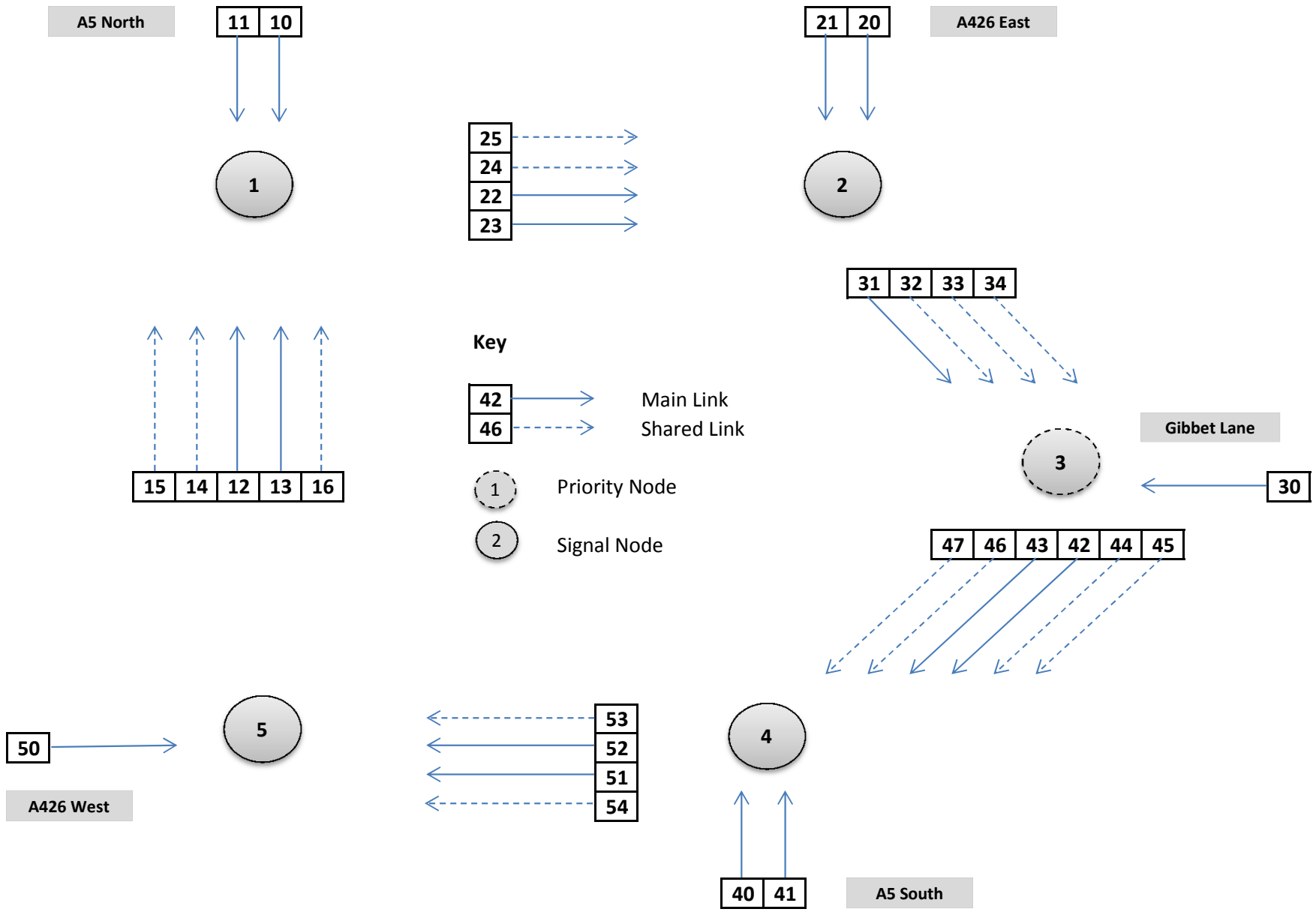
M69 Junction 1 - TRANSYT Link/Node Diagram



M6 Junction 1 - TRANSYT Link/Node Diagram



Gibbet Hill Roundabout DIRFT III Improvements - TRANSYT Link/Node Diagram



Gibbet Hill Roundabout Symmetry Park Improvements - TRANSYT Link/Node Diagram

Magna Park Extension: Hybrid Application
Transport Assessment

Appendix S – Output from Capacity Assessments

2014 Base-
Existing Network Performance

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 3.0 (JUNE 2005)

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Nine Mile Ride
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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:-
"j:\Bedford-Jobs\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\
M1 Junction 20\am2014base.vai"
(drive-on-the-left) at 12:35:40 on Thursday, 31 July 2014

FILE PROPERTIES

RUN TITLE: M1 Junction 20 AM Peak 2014 Base Flows
LOCATION: M1 Junction 20
DATE: 31/07/2014
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - M1 North
ARM B - A4304
ARM C - M1 South
ARM D - A4303

GEOMETRIC DATA

GRADE SEPARATED / MOTORWAY FACTORS APPLY TO ALL ARMS

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.30	12.70	35.00	45.00	103.00	43.0	1.201	61.131
ARM B	3.50	7.70	51.00	45.00	176.00	40.0	0.862	44.745
ARM C	7.30	12.00	49.00	50.00	103.00	41.0	1.089	59.684
ARM D	7.30	8.90	7.00	50.00	176.00	35.0	1.151	55.620

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A: Effective flare length is outside normal range.
Treat capacities with increasing caution.
WARNING ARM B: Effective flare length is outside normal range.
Treat capacities with increasing caution.
WARNING ARM C: Effective flare length is outside normal range.
Treat capacities with increasing caution.

DATA FOR VERY LARGE ROUNDABOUTS

ARM	CIRFLO	SEP
A	14.0	120.0
B	17.0	0.0
C	22.0	120.0
D	4.0	0.0

TRAFFIC DEMAND DATA

(Only sets included in the current run are shown)

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS 07.15 AND ENDS 08.45

LENGTH OF TIME PERIOD - 90 MINUTES.
LENGTH OF TIME SEGMENT - 15 MINUTES.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK FLOW STOPS IS REACHED	FALLING BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	10.85	10.85
ARM B	15.00	45.00	75.00	10.07	10.07
ARM C	15.00	45.00	75.00	5.91	5.91
ARM D	15.00	45.00	75.00	15.61	15.61

DEMAND SET TITLE: AM Peak 2006 Base Flows

TURNING PROPORTIONS
TURNING COUNTS (VEH/HR)
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
07.15 - 08.45	ARM A	0.000	0.134	0.000	0.866
		0.0	116.0	0.0	752.0
		(11.1)	(11.1)	(11.1)	(11.1)
	ARM B	0.300	0.000	0.135	0.565
		242.0	0.0	109.0	455.0
		(4.6)	(4.6)	(4.6)	(4.6)
	ARM C	0.000	0.076	0.051	0.873
		0.0	36.0	24.0	413.0
		(24.5)	(24.5)	(24.5)	(24.5)
	ARM D	0.452	0.217	0.331	0.000
		565.0	271.0	413.0	0.0
		(14.4)	(14.4)	(14.4)	(14.4)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	10.85	43.46	0.250		0.0	0.3	4.9		0.03
ARM B	10.07	29.02	0.347		0.0	0.5	7.8		0.05
ARM C	5.91	30.89	0.191		0.0	0.2	3.5		0.04
ARM D	15.61	44.51	0.351		0.0	0.5	7.9		0.03

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
ARM A	12.96	41.20	0.314		0.3	0.5	6.8		0.04
ARM B	12.03	26.33	0.457		0.5	0.8	12.2		0.07
ARM C	7.06	27.54	0.256		0.2	0.3	5.1		0.05
ARM D	18.64	43.70	0.427		0.5	0.7	10.9		0.04

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
ARM A	15.87	38.10	0.416		0.5	0.7	10.5		0.04
ARM B	14.73	22.64	0.651		0.8	1.8	25.9		0.12
ARM C	8.65	23.00	0.376		0.3	0.6	8.8		0.07
ARM D	22.83	42.61	0.536		0.7	1.1	16.8		0.05

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	15.87	38.08	0.417		0.7	0.7	10.7		0.05
ARM B	14.73	22.62	0.651		1.8	1.8	27.5		0.13
ARM C	8.65	22.93	0.377		0.6	0.6	9.0		0.07
ARM D	22.83	42.59	0.536		1.1	1.2	17.2		0.05

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
ARM A	12.96	41.17	0.315		0.7	0.5	7.0		0.04
ARM B	12.03	26.30	0.457		1.8	0.9	13.2		0.07
ARM C	7.06	27.45	0.257		0.6	0.3	5.3		0.05
ARM D	18.64	43.67	0.427		1.2	0.7	11.4		0.04

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
ARM A	10.85	43.43	0.250		0.5	0.3	5.1		0.03
ARM B	10.07	28.98	0.348		0.9	0.5	8.2		0.05
ARM C	5.91	30.82	0.192		0.3	0.2	3.6		0.04
ARM D	15.61	44.49	0.351		0.7	0.5	8.2		0.03

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.3	
07.45	0.5	
08.00	0.7	*
08.15	0.7	*
08.30	0.5	
08.45	0.3	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.5	*
07.45	0.8	*
08.00	1.8	**
08.15	1.8	**
08.30	0.9	*
08.45	0.5	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.2	
07.45	0.3	
08.00	0.6	*
08.15	0.6	*
08.30	0.3	
08.45	0.2	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.5	*
07.45	0.7	*
08.00	1.1	*
08.15	1.2	*
08.30	0.7	*
08.45	0.5	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1190.2	793.5	44.9	0.04	44.9	0.04
B	1105.2	736.8	94.7	0.09	94.7	0.09
C	648.6	432.4	35.3	0.05	35.3	0.05
D	1712.6	1141.8	72.6	0.04	72.6	0.04
ALL	4656.6	3104.4	247.5	0.05	247.5	0.05

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

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Printed at 10:07:43 on 29/04/2015]

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 3.0 (JUNE 2005)

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For sales and distribution information,
program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770018
Fax: +44 (0) 1344 770864
Email: softwarebureau@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Bedford-Jobs\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\
M1 Junction 20\pm2014base.vai"
(drive-on-the-left) at 12:39:52 on Thursday, 31 July 2014

FILE PROPERTIES

RUN TITLE: M1 Junction 20 PM Peak 2014 Base Flows
LOCATION: M1 Junction 20
DATE: 31/07/2014
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - M1 North
ARM B - A4304
ARM C - M1 South
ARM D - A4303

GEOMETRIC DATA

GRADE SEPARATED / MOTORWAY FACTORS APPLY TO ALL ARMS

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
A	7.30	12.70	35.00	45.00	103.00	43.0	1.217	61.363
B	3.50	7.70	51.00	45.00	176.00	40.0	0.817	43.817
C	7.30	12.00	49.00	50.00	103.00	41.0	1.027	58.756
D	7.30	8.90	7.00	50.00	176.00	35.0	1.138	55.388

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A: Effective flare length is outside normal range.
Treat capacities with increasing caution.
WARNING ARM B: Effective flare length is outside normal range.
Treat capacities with increasing caution.
WARNING ARM C: Effective flare length is outside normal range.
Treat capacities with increasing caution.

DATA FOR VERY LARGE ROUNDABOUTS

ARM	CIRFLO	SEP
A	13.0	120.0
B	21.0	0.0
C	26.0	120.0
D	5.0	0.0

TRAFFIC DEMAND DATA

(Only sets included in the current run are shown)

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MINUTES.
LENGTH OF TIME SEGMENT - 15 MINUTES.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK	FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
	TO RISE	IS REACHED	IFALLING			
ARM A	15.00	45.00	75.00	9.61	14.42	9.61
ARM B	15.00	45.00	75.00	7.35	11.02	7.35
ARM C	15.00	45.00	75.00	6.06	9.09	6.06
ARM D	15.00	45.00	75.00	18.39	27.58	18.39

DEMAND SET TITLE: AM Peak 2006 Base Flows

TURNING PROPORTIONS
TURNING COUNTS (VEH/HR)
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15					
	ARM A	0.000	0.298	0.000	0.702
		0.0	229.0	0.0	540.0
		(9.4)	(9.4)	(9.4)	(9.4)
	ARM B	0.240	0.000	0.087	0.673
		141.0	0.0	51.0	396.0
		(6.6)	(6.6)	(6.6)	(6.6)
	ARM C	0.000	0.179	0.031	0.790
		0.0	87.0	15.0	383.0
		(18.1)	(18.1)	(18.1)	(18.1)
	ARM D	0.440	0.323	0.237	0.000
		647.0	475.0	349.0	0.0
		(8.4)	(8.4)	(8.4)	(8.4)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	9.61	42.03	0.229		0.0	0.3	4.4		0.03
ARM B	7.35	31.67	0.232		0.0	0.3	4.4		0.04
ARM C	6.06	37.13	0.163		0.0	0.2	2.9		0.03
ARM D	18.39	47.55	0.387		0.0	0.6	9.3		0.03
17.00-17.15									
ARM A	11.48	39.28	0.292		0.3	0.4	6.1		0.04
ARM B	8.78	29.83	0.294		0.3	0.4	6.1		0.05
ARM C	7.24	34.66	0.209		0.2	0.3	3.9		0.04
ARM D	21.96	46.86	0.469		0.6	0.9	13.0		0.04
17.15-17.30									
ARM A	14.06	35.51	0.396		0.4	0.7	9.6		0.05
ARM B	10.75	27.30	0.394		0.4	0.6	9.5		0.06
ARM C	8.87	31.28	0.283		0.3	0.4	5.8		0.04
ARM D	26.89	45.90	0.586		0.9	1.4	20.5		0.05
17.30-17.45									
ARM A	14.06	35.48	0.396		0.7	0.7	9.8		0.05
ARM B	10.75	27.28	0.394		0.6	0.6	9.7		0.06
ARM C	8.87	31.26	0.284		0.4	0.4	5.9		0.04
ARM D	26.89	45.90	0.586		1.4	1.4	21.1		0.05
17.45-18.00									
ARM A	11.48	39.24	0.293		0.7	0.4	6.3		0.04
ARM B	8.78	29.80	0.294		0.6	0.4	6.4		0.05
ARM C	7.24	34.63	0.209		0.4	0.3	4.0		0.04
ARM D	21.96	46.85	0.469		1.4	0.9	13.5		0.04
18.00-18.15									
ARM A	9.61	41.99	0.229		0.4	0.3	4.5		0.03
ARM B	7.35	31.65	0.232		0.4	0.3	4.6		0.04
ARM C	6.06	37.09	0.163		0.3	0.2	3.0		0.03
ARM D	18.39	47.54	0.387		0.9	0.6	9.6		0.03

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.7	*
17.45	0.7	*
18.00	0.4	
18.15	0.3	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.6	*
17.45	0.6	*
18.00	0.4	
18.15	0.3	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.2	
17.15	0.3	
17.30	0.4	
17.45	0.4	
18.00	0.3	
18.15	0.2	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.6	*
17.15	0.9	*
17.30	1.4	*
17.45	1.4	*
18.00	0.9	*
18.15	0.6	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1054.5	703.0	40.7	0.04	40.7	0.04
B	806.3	537.5	40.8	0.05	40.8	0.05
C	665.0	443.4	25.5	0.04	25.5	0.04
D	2017.1	1344.7	87.0	0.04	87.0	0.04
ALL	4542.8	3028.5	194.1	0.04	194.1	0.04

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 10:08:42 on 29/04/2015]

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 3.0 (JUNE 2005)

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For sales and distribution information,
program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770018
Fax: +44 (0) 1344 770864
Email: softwarebureau@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Bedford-Jobs\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\
A4303_A426\am2014base.vai"
(drive-on-the-left) at 11:11:40 on Thursday, 31 July 2014

FILE PROPERTIES

RUN TITLE: A4303/ A426 Roundabout AM Peak 2014 Base Flows
LOCATION: A4303_Rugby Road
DATE: 31/07/2014
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - Rugby Road
ARM B - A4303 East
ARM C - A426 South
ARM D - A4303 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.30	7.40	30.00	23.00	70.00	53.0	0.492	28.789
ARM B	7.30	11.10	25.00	28.00	70.00	50.0	0.669	47.016
ARM C	3.20	7.80	20.00	27.00	70.00	44.0	0.498	28.481
ARM D	7.30	8.40	19.00	28.00	70.00	52.0	0.591	38.960

V = approach half-width E = entry width L = effective flare length R = entry radius D = inscribed circle diameter PHI = entry angle

TRAFFIC DEMAND DATA

(Only sets included in the current run are shown)

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS 07.15 AND ENDS 08.45

LENGTH OF TIME PERIOD - 90 MINUTES.
LENGTH OF TIME SEGMENT - 15 MINUTES.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS IFALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	11.26	16.89	11.26
ARM B	15.00	45.00	75.00	20.34	30.51	20.34
ARM C	15.00	45.00	75.00	7.82	11.74	7.82
ARM D	15.00	45.00	75.00	7.30	10.95	7.30

DEMAND SET TITLE: AM Peak 2006 Base Flows

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
07.15 - 08.45					
	ARM A	0.000	0.523	0.371	0.107
		0.0	471.0	334.0	96.0
		(7.1)	(7.1)	(7.1)	(7.1)
	ARM B	0.283	0.000	0.389	0.328
		460.0	0.0	633.0	534.0
		(12.7)	(12.7)	(12.7)	(12.7)
	ARM C	0.465	0.486	0.000	0.050
		291.0	304.0	0.0	31.0
		(9.0)	(9.0)	(9.0)	(9.0)
	ARM D	0.106	0.834	0.060	0.000
		62.0	487.0	35.0	0.0
		(19.0)	(19.0)	(19.0)	(19.0)

TURNING PROPORTIONS
TURNING COUNTS (VEH/HR)
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	11.26	21.43	0.526		0.0	1.1	15.7		0.10
ARM B	20.34	38.02	0.535		0.0	1.1	16.6		0.06
ARM C	7.82	19.17	0.408		0.0	0.7	9.9		0.09
ARM D	7.30	25.53	0.286		0.0	0.4	5.8		0.05

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
ARM A	13.45	20.36	0.661		1.1	1.9	26.9		0.14
ARM B	24.28	37.29	0.651		1.1	1.8	26.7		0.08
ARM C	9.34	17.80	0.525		0.7	1.1	15.7		0.12
ARM D	8.72	24.11	0.362		0.4	0.6	8.3		0.06

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
ARM A	16.47	18.91	0.871		1.9	5.7	72.5		0.34
ARM B	29.74	36.35	0.818		1.8	4.3	58.8		0.14
ARM C	11.44	15.97	0.716		1.1	2.4	33.2		0.21
ARM D	10.68	22.22	0.480		0.6	0.9	13.3		0.09

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	16.47	18.88	0.873		5.7	6.2	90.3		0.40
ARM B	29.74	36.28	0.820		4.3	4.4	65.4		0.15
ARM C	11.44	15.91	0.719		2.4	2.5	36.9		0.22
ARM D	10.68	22.15	0.482		0.9	0.9	13.8		0.09

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
ARM A	13.45	20.31	0.662		6.2	2.0	33.9		0.16
ARM B	24.28	37.19	0.653		4.4	1.9	30.1		0.08
ARM C	9.34	17.71	0.527		2.5	1.1	17.9		0.12
ARM D	8.72	24.02	0.363		0.9	0.6	8.8		0.07

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
ARM A	11.26	21.39	0.526		2.0	1.1	17.6		0.10
ARM B	20.34	37.98	0.536		1.9	1.2	17.9		0.06
ARM C	7.82	19.12	0.409		1.1	0.7	10.8		0.09
ARM D	7.30	25.47	0.287		0.6	0.4	6.2		0.06

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.1	*
07.45	1.9	**
08.00	5.7	******
08.15	6.2	******
08.30	2.0	**
08.45	1.1	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.1	*
07.45	1.8	**
08.00	4.3	****
08.15	4.4	****
08.30	1.9	**
08.45	1.2	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.7	*
07.45	1.1	*
08.00	2.4	**
08.15	2.5	**
08.30	1.1	*
08.45	0.7	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.4	
07.45	0.6	*
08.00	0.9	*
08.15	0.9	*
08.30	0.6	*
08.45	0.4	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1235.5	823.6	256.8	0.21	256.9	0.21
B	2231.0	1487.3	215.5	0.10	215.5	0.10
C	858.4	572.3	124.4	0.14	124.5	0.14
D	800.8	533.9	56.2	0.07	56.2	0.07
ALL	5125.6	3417.1	653.0	0.13	653.1	0.13

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 10:16:29 on 29/04/2015]

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 3.0 (JUNE 2005)

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Nine Mile Ride Email: softwarebureau@trl.co.uk
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RG40 3GA,UK

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:-
"j:\Bedford-Jobs\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\
A4303_A426\pm2014base.vai"
(drive-on-the-left) at 11:16:42 on Thursday, 31 July 2014

FILE PROPERTIES

RUN TITLE: A4303/ A426 Roundabout PM Peak 2014 Base Flows
LOCATION: A4303_Rugby Road
DATE: 31/07/2014
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - Rugby Road
ARM B - A4303 East
ARM C - A426 South
ARM D - A4303 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.30	7.40	30.00	23.00	70.00	53.0	0.492	28.789
ARM B	7.30	11.10	25.00	28.00	70.00	50.0	0.669	47.016
ARM C	3.20	7.80	20.00	27.00	70.00	44.0	0.498	28.481
ARM D	7.30	8.40	19.00	28.00	70.00	52.0	0.591	38.960

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

(Only sets included in the current run are shown)

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MINUTES.
LENGTH OF TIME SEGMENT - 15 MINUTES.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS IFALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	10.55	15.83	10.55
ARM B	15.00	45.00	75.00	16.04	24.06	16.04
ARM C	15.00	45.00	75.00	8.81	13.22	8.81
ARM D	15.00	45.00	75.00	10.64	15.96	10.64

DEMAND SET TITLE: AM Peak 2006 Base Flows

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15					
	ARM A	0.000	0.496	0.366	0.137
		0.0	419.0	309.0	116.0
		(2.1)%	(2.1)%	(2.1)%	(2.1)%
	ARM B	0.369	0.000	0.338	0.292
		474.0	0.0	434.0	375.0
		(12.2)%	(12.2)%	(12.2)%	(12.2)%
	ARM C	0.499	0.460	0.000	0.041
		352.0	324.0	0.0	29.0
		(4.3)%	(4.3)%	(4.3)%	(4.3)%
	ARM D	0.105	0.853	0.042	0.000
		89.0	726.0	36.0	0.0
		(11.5)%	(11.5)%	(11.5)%	(11.5)%

TURNING PROPORTIONS
TURNING COUNTS (VEH/HR)
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	10.55	21.07	0.501		0.0	1.0	14.3		0.09
ARM B	16.04	38.39	0.418		0.0	0.7	10.5		0.04
ARM C	8.81	20.93	0.421		0.0	0.7	10.4		0.08
ARM D	10.64	26.78	0.397		0.0	0.7	9.6		0.06

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	12.60	19.67	0.641		1.0	1.7	24.7		0.14
ARM B	19.15	37.70	0.508		0.7	1.0	15.1		0.05
ARM C	10.52	19.68	0.535		0.7	1.1	16.4		0.11
ARM D	12.70	25.18	0.505		0.7	1.0	14.7		0.08

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
ARM A	15.43	17.78	0.868		1.7	5.6	70.0		0.35
ARM B	23.45	36.82	0.637		1.0	1.7	25.1		0.07
ARM C	12.89	17.99	0.717		1.1	2.4	33.6		0.19
ARM D	15.56	23.01	0.676		1.0	2.0	28.8		0.13

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
ARM A	15.43	17.73	0.870		5.6	6.1	87.8		0.42
ARM B	23.45	36.75	0.638		1.7	1.7	26.1		0.08
ARM C	12.89	17.95	0.718		2.4	2.5	36.9		0.20
ARM D	15.56	22.96	0.678		2.0	2.1	30.8		0.14

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
ARM A	12.60	19.60	0.643		6.1	1.8	31.2		0.15
ARM B	19.15	37.60	0.509		1.7	1.0	16.1		0.05
ARM C	10.52	19.63	0.536		2.5	1.2	18.5		0.11
ARM D	12.70	25.10	0.506		2.1	1.0	16.1		0.08

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
ARM A	10.55	21.02	0.502		1.8	1.0	15.9		0.10
ARM B	16.04	38.36	0.418		1.0	0.7	11.0		0.04
ARM C	8.81	20.90	0.422		1.2	0.7	11.4		0.08
ARM D	10.64	26.73	0.398		1.0	0.7	10.2		0.06

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.0	*
17.15	1.7	**
17.30	5.6	******
17.45	6.1	******
18.00	1.8	**
18.15	1.0	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.7	*
17.15	1.0	*
17.30	1.7	**
17.45	1.7	**
18.00	1.0	*
18.15	0.7	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.7	*
17.15	1.1	*
17.30	2.4	**
17.45	2.5	**
18.00	1.2	*
18.15	0.7	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.7	*
17.15	1.0	*
17.30	2.0	**
17.45	2.1	**
18.00	1.0	*
18.15	0.7	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1157.3	771.5	243.9	0.21	243.9	0.21
B	1759.3	1172.8	103.9	0.06	103.9	0.06
C	966.7	644.5	127.2	0.13	127.2	0.13
D	1166.9	777.9	110.2	0.09	110.2	0.09
ALL	5050.2	3366.8	585.1	0.12	585.2	0.12

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
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* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 10:21:07 on 29/04/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 3.0 (JUNE 2005)

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Wokingham, Berks. Web: www.trlsoftware.co.uk
RG40 3GA,UK

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IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:-
"j:\Bedford-Jobs\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\
A4303_Coventry Road\am2014base.vai"
(drive-on-the-left) at 11:23:43 on Thursday, 31 July 2014

FILE PROPERTIES

RUN TITLE: A4303/ Coventry Road Roundabout AM Peak 2014 Base Flows
LOCATION: A4303_Coventry Road
DATE: 31/07/2014
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 7071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - Coventry Road
ARM B - A4303 East
ARM C - Mobile Home Park
ARM D - A4303 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.20	7.20	31.00	14.00	56.00	62.0	0.523	26.437
ARM B	7.20	8.40	13.00	35.00	56.00	58.0	0.662	37.911
ARM C	3.65	5.50	8.00	28.00	56.00	50.0	0.501	22.482
ARM D	7.20	8.80	29.00	35.00	56.00	45.0	0.717	41.883

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A: Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

(Only sets included in the current run are shown)

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS 07.15 AND ENDS 08.45

LENGTH OF TIME PERIOD - 90 MINUTES.
LENGTH OF TIME SEGMENT - 15 MINUTES.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS IFALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	8.79	13.18	8.79
ARM B	15.00	45.00	75.00	10.39	15.58	10.39
ARM C	15.00	45.00	75.00	0.22	0.34	0.22
ARM D	15.00	45.00	75.00	7.29	10.93	7.29

DEMAND SET TITLE: AM Peak 2006 Base Flows

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
07.15 - 08.45		TURNING PROPORTIONS			
		TURNING COUNTS (VEH/HR)			
		(PERCENTAGE OF H.V.S)			
	ARM A	0.000	0.213	0.000	0.787
		0.0	150.0	0.0	553.0
		(1.1)	(1.1)	(1.1)	(1.1)
	ARM B	0.032	0.000	0.000	0.968
		27.0	0.0	0.0	804.0
		(14.7)	(14.7)	(14.7)	(14.7)
	ARM C	0.389	0.444	0.000	0.167
		7.0	8.0	0.0	3.0
		(5.6)	(5.6)	(5.6)	(5.6)
	ARM D	0.281	0.705	0.005	0.009
		164.0	411.0	3.0	5.0
		(20.2)	(20.2)	(20.2)	(20.2)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	8.79	22.85	0.385		0.0	0.6	9.0		0.07
ARM B	10.39	28.97	0.359		0.0	0.6	8.1		0.05
ARM C	0.22	12.33	0.018		0.0	0.0	0.3		0.08
ARM D	7.29	34.50	0.211		0.0	0.3	3.9		0.04

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
ARM A	10.49	22.20	0.473		0.6	0.9	13.0		0.09
ARM B	12.40	28.16	0.440		0.6	0.8	11.5		0.06
ARM C	0.27	10.56	0.025		0.0	0.0	0.4		0.10
ARM D	8.70	34.43	0.253		0.3	0.3	5.0		0.04

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
ARM A	12.85	21.31	0.603		0.9	1.5	21.4		0.12
ARM B	15.19	27.07	0.561		0.8	1.3	18.3		0.08
ARM C	0.33	8.16	0.040		0.0	0.0	0.6		0.13
ARM D	10.66	34.34	0.310		0.3	0.4	6.6		0.04

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	12.85	21.31	0.603		1.5	1.5	22.5		0.12
ARM B	15.19	27.05	0.562		1.3	1.3	19.0		0.08
ARM C	0.33	8.13	0.040		0.0	0.0	0.6		0.13
ARM D	10.66	34.33	0.310		0.4	0.4	6.7		0.04

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
ARM A	10.49	22.19	0.473		1.5	0.9	14.0		0.09
ARM B	12.40	28.14	0.441		1.3	0.8	12.2		0.06
ARM C	0.27	10.51	0.026		0.0	0.0	0.4		0.10
ARM D	8.70	34.43	0.253		0.4	0.3	5.2		0.04

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
ARM A	8.79	22.84	0.385		0.9	0.6	9.7		0.07
ARM B	10.39	28.94	0.359		0.8	0.6	8.6		0.05
ARM C	0.22	12.28	0.018		0.0	0.0	0.3		0.08
ARM D	7.29	34.50	0.211		0.3	0.3	4.1		0.04

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.6	*
07.45	0.9	*
08.00	1.5	*
08.15	1.5	**
08.30	0.9	*
08.45	0.6	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.6	*
07.45	0.8	*
08.00	1.3	*
08.15	1.3	*
08.30	0.8	*
08.45	0.6	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.0
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.3
07.45	0.3
08.00	0.4
08.15	0.4
08.30	0.3
08.45	0.3

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	964.0	642.6	89.6	0.09	89.6	0.09
B	1139.5	759.7	77.8	0.07	77.8	0.07
C	24.7	16.5	2.6	0.10	2.6	0.10
D	799.4	532.9	31.5	0.04	31.5	0.04
ALL	2927.5	1951.7	201.5	0.07	201.5	0.07

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 10:33:24 on 29/04/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 3.0 (JUNE 2005)

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Crowthorne House Fax: +44 (0) 1344 770864
Nine Mile Ride Email: softwarebureau@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk
RG40 3GA,UK

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IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:-
"j:\Bedford-Jobs\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\
A4303_Coventry Road\pm2014base.vai"
(drive-on-the-left) at 11:28:33 on Thursday, 31 July 2014

FILE PROPERTIES

RUN TITLE: A4303/ Coventry Road Roundabout PM Peak 2014 Base Flows
LOCATION: A4303_Coventry Road
DATE: 31/07/2014
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 7071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - Coventry Road
ARM B - A4303 East
ARM C - Mobile Home Park
ARM D - A4303 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.20	7.20	31.00	14.00	56.00	62.0	0.523	26.437
ARM B	7.20	8.40	13.00	35.00	56.00	58.0	0.662	37.911
ARM C	3.65	5.50	8.00	28.00	56.00	50.0	0.501	22.482
ARM D	7.20	8.80	29.00	35.00	56.00	45.0	0.717	41.883

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A: Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

(Only sets included in the current run are shown)

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MINUTES.
LENGTH OF TIME SEGMENT - 15 MINUTES.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK	FLOW STOPS BEFORE TO RISE	IS REACHED IFALLING	RATE OF FLOW (VEH/MIN) PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	4.35	6.52	4.35	
ARM B	15.00	45.00	75.00	6.90	10.35	6.90	
ARM C	15.00	45.00	75.00	0.15	0.23	0.15	
ARM D	15.00	45.00	75.00	15.81	23.72	15.81	

DEMAND SET TITLE: AM Peak 2006 Base Flows

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15					
	ARM A	0.000	0.330	0.011	0.658
		0.0	115.0	4.0	229.0
		(2.0)	(2.0)	(2.0)	(2.0)
	ARM B	0.121	0.000	0.000	0.879
		67.0	0.0	0.0	485.0
		(19.5)	(19.5)	(19.5)	(19.5)
	ARM C	0.583	0.083	0.000	0.333
		7.0	1.0	0.0	4.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.404	0.591	0.004	0.002
		511.0	747.0	5.0	2.0
		(7.9)	(7.9)	(7.9)	(7.9)

TURNING PROPORTIONS
TURNING COUNTS (VEH/HR)
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	4.35	20.72	0.210		0.0	0.3	3.9		0.06
ARM B	6.90	30.03	0.230		0.0	0.3	4.4		0.04
ARM C	0.15	16.90	0.009		0.0	0.0	0.1		0.06
ARM D	15.81	38.09	0.415		0.0	0.7	10.4		0.04

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	5.19	19.70	0.264		0.3	0.4	5.2		0.07
ARM B	8.24	29.70	0.277		0.3	0.4	5.7		0.05
ARM C	0.18	15.80	0.011		0.0	0.0	0.2		0.06
ARM D	18.88	37.94	0.498		0.7	1.0	14.5		0.05

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
ARM A	6.36	18.30	0.348		0.4	0.5	7.7		0.08
ARM B	10.09	29.25	0.345		0.4	0.5	7.7		0.05
ARM C	0.22	14.30	0.015		0.0	0.0	0.2		0.07
ARM D	23.13	37.75	0.613		1.0	1.6	22.8		0.07

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
ARM A	6.36	18.29	0.348		0.5	0.5	7.9		0.08
ARM B	10.09	29.24	0.345		0.5	0.5	7.9		0.05
ARM C	0.22	14.29	0.015		0.0	0.0	0.2		0.07
ARM D	23.13	37.75	0.613		1.6	1.6	23.5		0.07

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
ARM A	5.19	19.68	0.264		0.5	0.4	5.5		0.07
ARM B	8.24	29.69	0.277		0.5	0.4	5.9		0.05
ARM C	0.18	15.78	0.011		0.0	0.0	0.2		0.06
ARM D	18.88	37.94	0.498		1.6	1.0	15.3		0.05

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
ARM A	4.35	20.70	0.210		0.4	0.3	4.1		0.06
ARM B	6.90	30.02	0.230		0.4	0.3	4.5		0.04
ARM C	0.15	16.87	0.009		0.0	0.0	0.1		0.06
ARM D	15.81	38.08	0.415		1.0	0.7	10.9		0.04

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.5	*
17.45	0.5	*
18.00	0.4	
18.15	0.3	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.5	*
17.45	0.5	*
18.00	0.4	
18.15	0.3	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.7	*
17.15	1.0	*
17.30	1.6	**
17.45	1.6	**
18.00	1.0	*
18.15	0.7	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	477.2	318.1	34.4	0.07	34.4	0.07
B	756.9	504.6	36.1	0.05	36.1	0.05
C	16.5	11.0	1.1	0.07	1.1	0.07
D	1734.6	1156.4	97.3	0.06	97.3	0.06
ALL	2985.1	1990.1	168.9	0.06	168.9	0.06

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

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RELEASE 5.0 (JUNE 2010)

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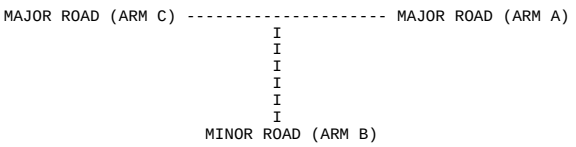
Run with file:- "C:\Users\jon_ashcroft\Gazeley Magna Park\am2014.vpi" (drive-on-the-left) at 09:57:30 on Tuesday, 17 February 2015

RUN INFORMATION

RUN TITLE : A4303/ Shackelton Way 2014 AM Peak Base Flows
LOCATION :
DATE : 12/02/15
CLIENT :
ENUMERATOR : jon_ashcroft [UK1005963L]
JOB NUMBER :
STATUS :
DESCRIPTION :

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A4303 West
ARM B IS Shackelton Way
ARM C IS A4303 East

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.30 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)200.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 100.0 M.
- VISIBILITY TO RIGHT	(VB-A) 150.0 M.
- LANE 1 WIDTH	(WB-C) 4.00 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
790.29	0.29	0.11

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
645.16	0.28	0.11	0.18	0.40

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
689.79	0.25	0.25

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: A4303/ Shackelton Way 2014 AM Peak Base Flows

TIME PERIOD BEGINS 07.15 AND ENDS 08.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	7.63	11.44	7.63
ARM B	15.00	45.00	75.00	0.80	1.20	0.80
ARM C	15.00	45.00	75.00	0.00	0.00	0.00

Demand set: A4303/ Shackelton Way 2014 AM Peak Base Flows

TIME	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) FROM/TO	ARM A	ARM B	ARM C
07.15 - 08.45	ARM A	0.000	0.100	0.900
		0.0	61.0	549.0
		(0.0)%	(17.2)%	(17.2)%
	ARM B	0.000	0.000	1.000
		0.0	0.0	64.0
		(51.6)%	(0.0)%	(51.6)%
	ARM C	0.000	0.000	0.000
		0.0	0.0	0.0
		(0.0)%	(0.0)%	(0.0)%

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
B-AC	0.80	7.08	0.113		0.00	0.13	1.8		0.16
C-A	0.00								
C-B	0.00	8.40	0.000		0.00	0.00	0.0		0.00
A-B	0.77								
A-C	6.89								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-AC	0.96	6.77	0.142		0.13	0.16	2.4		0.17
C-A	0.00								
C-B	0.00	8.00	0.000		0.00	0.00	0.0		0.00
A-B	0.91								
A-C	8.23								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-AC	1.17	6.34	0.185		0.16	0.22	3.3		0.19
C-A	0.00								
C-B	0.00	7.44	0.000		0.00	0.00	0.0		0.00
A-B	1.12								
A-C	10.07								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-AC	1.17	6.34	0.185		0.22	0.23	3.4		0.19
C-A	0.00								
C-B	0.00	7.44	0.000		0.00	0.00	0.0		0.00
A-B	1.12								
A-C	10.07								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-AC	0.96	6.77	0.142		0.23	0.17	2.6		0.17
C-A	0.00								
C-B	0.00	8.00	0.000		0.00	0.00	0.0		0.00
A-B	0.91								
A-C	8.23								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-AC	0.80	7.08	0.113		0.17	0.13	2.0		0.16
C-A	0.00								
C-B	0.00	8.40	0.000		0.00	0.00	0.0		0.00
A-B	0.77								
A-C	6.89								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.1
07.45	0.2
08.00	0.2
08.15	0.2
08.30	0.2
08.45	0.1

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.0
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-AC	88.1	58.7	15.4	0.17	15.4	0.17
C-A	0.0	0.0				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	84.0	56.0				
A-C	755.7	503.8				
ALL	927.7	618.5	15.4	0.02	15.4	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

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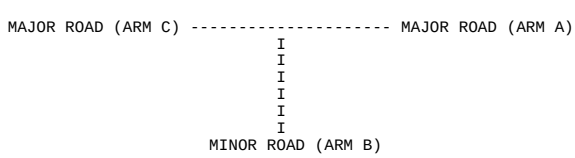
Run with file:- "C:\Users\jon_ashcroft\Gazeley Magna Park\pm2014.vpi" (drive-on-the-left) at 09:57:52 on Tuesday, 17 February 2015

RUN INFORMATION

RUN TITLE : A4303/ Shackelton Way 2014 PM Peak Base Flows
LOCATION :
DATE : 12/02/15
CLIENT :
ENUMERATOR : jon_ashcroft [UK1005963L]
JOB NUMBER :
STATUS :
DESCRIPTION :

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A4303 West
ARM B IS Shackelton Way
ARM C IS A4303 East

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.30 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)200.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 100.0 M.
- VISIBILITY TO RIGHT	(VB-A) 150.0 M.
- LANE 1 WIDTH	(WB-C) 4.00 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
790.29	0.29	0.11

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
645.16	0.28	0.11	0.18	0.40

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
689.79	0.25	0.25

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: A4303/ Shackelton Way 2014 AM Peak Base Flows

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	12.88	19.31	12.88
ARM B	15.00	45.00	75.00	2.30	3.45	2.30
ARM C	15.00	45.00	75.00	0.00	0.00	0.00

Demand set: A4303/ Shackelton Way 2014 AM Peak Base Flows

TIME	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.017	0.983
		0.0	17.0	1013.0
		(0.0)%	(6.6)%	(6.6)%
	ARM B	0.000	0.000	1.000
		0.0	0.0	184.0
		(8.7)%	(0.0)%	(8.7)%
	ARM C	0.000	0.000	0.000
		0.0	0.0	0.0
		(0.0)%	(0.0)%	(0.0)%

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME (VEH/MIN)	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	2.31	8.49	0.272		0.00	0.37	5.3		0.16
C-A	0.00								
C-B	0.00	7.29	0.000		0.00	0.00	0.0		0.00
A-B	0.21								
A-C	12.71								

TIME (VEH/MIN)	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	2.76	7.79	0.354		0.37	0.54	7.7		0.20
C-A	0.00								
C-B	0.00	6.68	0.000		0.00	0.00	0.0		0.00
A-B	0.25								
A-C	15.18								

TIME (VEH/MIN)	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	3.38	6.82	0.495		0.54	0.95	13.3		0.29
C-A	0.00								
C-B	0.00	5.83	0.000		0.00	0.00	0.0		0.00
A-B	0.31								
A-C	18.59								

TIME (VEH/MIN)	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	3.38	6.82	0.495		0.95	0.96	14.4		0.29
C-A	0.00								
C-B	0.00	5.83	0.000		0.00	0.00	0.0		0.00
A-B	0.31								
A-C	18.59								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-AC	2.76	7.79	0.354		0.96	0.56	8.8		0.20
C-A	0.00								
C-B	0.00	6.68	0.000		0.00	0.00	0.0		0.00
A-B	0.25								
A-C	15.18								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-AC	2.31	8.49	0.272		0.56	0.38	5.9		0.16
C-A	0.00								
C-B	0.00	7.29	0.000		0.00	0.00	0.0		0.00
A-B	0.21								
A-C	12.71								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	*
17.30	0.9	*
17.45	1.0	*
18.00	0.6	*
18.15	0.4	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-AC	253.3	168.8	55.4	0.22	55.4	0.22
C-A	0.0	0.0				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	23.4	15.6				
A-C	1394.3	929.5				
ALL	1671.0	1114.0	55.4	0.03	55.4	0.03

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 10:43:52 on 29/04/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 3.0 (JUNE 2005)

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For sales and distribution information,
program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770018
Fax: +44 (0) 1344 770864
Email: softwarebureau@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Bedford-Jobs\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\
A4303_Hunter Bld\am2014base.vai"
(drive-on-the-left) at 11:34:28 on Thursday, 31 July 2014

FILE PROPERTIES

RUN TITLE: Magna Park Access Roundabout AM Peak 2014 Base Flows
LOCATION: Magna Park Site Access
DATE: 31/07/2014
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - Hunter Bld
ARM B - A4303 East
ARM C - Site Access
ARM D - A4303 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.20	10.70	31.00	19.00	67.00	57.0	0.654	44.594
ARM B	7.30	10.20	32.00	100.00	67.00	54.0	0.681	46.088
ARM C	7.30	8.50	10.00	25.00	67.00	62.0	0.579	37.067
ARM D	7.60	10.00	11.00	42.00	67.00	60.0	0.632	41.945

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A: Effective flare length is outside normal range.
Treat capacities with increasing caution.
WARNING ARM B: Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

(Only sets included in the current run are shown)

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS 07.15 AND ENDS 08.45

LENGTH OF TIME PERIOD - 90 MINUTES.
LENGTH OF TIME SEGMENT - 15 MINUTES.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS IFALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	3.56	5.34	3.56
ARM B	15.00	45.00	75.00	15.65	23.47	15.65
ARM C	15.00	45.00	75.00	0.20	0.30	0.20
ARM D	15.00	45.00	75.00	13.84	20.76	13.84

DEMAND SET TITLE: AM Peak 2006 Base Flows

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
07.15 - 08.45					
	ARM A	0.000	0.340	0.000	0.660
		0.0	97.0	0.0	188.0
		(48.4)	(48.4)	(48.4)	(48.4)
	ARM B	0.357	0.036	0.062	0.545
		447.0	45.0	78.0	682.0
		(9.2)	(9.2)	(9.2)	(9.2)
	ARM C	0.313	0.250	0.000	0.438
		5.0	4.0	0.0	7.0
		(43.8)	(43.8)	(43.8)	(43.8)
	ARM D	0.519	0.423	0.059	0.000
		574.0	468.0	65.0	0.0
		(9.5)	(9.5)	(9.5)	(9.5)

TURNING PROPORTIONS
TURNING COUNTS (VEH/HR)
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	3.56	26.55	0.134		0.0	0.2	2.3		0.04
ARM B	15.65	39.48	0.396		0.0	0.7	9.6		0.04
ARM C	0.20	17.94	0.011		0.0	0.0	0.2		0.06
ARM D	13.84	34.35	0.403		0.0	0.7	9.8		0.05

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
ARM A	4.25	25.86	0.165		0.2	0.2	2.9		0.05
ARM B	18.69	38.95	0.480		0.7	0.9	13.5		0.05
ARM C	0.24	16.40	0.015		0.0	0.0	0.2		0.06
ARM D	16.52	33.57	0.492		0.7	1.0	14.1		0.06

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
ARM A	5.21	24.92	0.209		0.2	0.3	3.9		0.05
ARM B	22.89	38.22	0.599		0.9	1.5	21.5		0.06
ARM C	0.29	14.29	0.020		0.0	0.0	0.3		0.07
ARM D	20.24	32.51	0.623		1.0	1.6	23.5		0.08

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	5.21	24.91	0.209		0.3	0.3	4.0		0.05
ARM B	22.89	38.21	0.599		1.5	1.5	22.2		0.07
ARM C	0.29	14.28	0.020		0.0	0.0	0.3		0.07
ARM D	20.24	32.50	0.623		1.6	1.6	24.5		0.08

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
ARM A	4.25	25.84	0.165		0.3	0.2	3.0		0.05
ARM B	18.69	38.94	0.480		1.5	0.9	14.2		0.05
ARM C	0.24	16.37	0.015		0.0	0.0	0.2		0.06
ARM D	16.52	33.55	0.492		1.6	1.0	15.0		0.06

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
ARM A	3.56	26.53	0.134		0.2	0.2	2.4		0.04
ARM B	15.65	39.47	0.396		0.9	0.7	10.1		0.04
ARM C	0.20	17.91	0.011		0.0	0.0	0.2		0.06
ARM D	13.84	34.33	0.403		1.0	0.7	10.4		0.05

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.2
07.45	0.2
08.00	0.3
08.15	0.3
08.30	0.2
08.45	0.2

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.7	*
07.45	0.9	*
08.00	1.5	*
08.15	1.5	*
08.30	0.9	*
08.45	0.7	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.0
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.7	*
07.45	1.0	*
08.00	1.6	**
08.15	1.6	**
08.30	1.0	*
08.45	0.7	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	390.8	260.5	18.4	0.05	18.4	0.05
B	1716.8	1144.5	91.2	0.05	91.2	0.05
C	21.9	14.6	1.4	0.06	1.4	0.06
D	1517.9	1012.0	97.4	0.06	97.5	0.06
ALL	3647.4	2431.6	208.4	0.06	208.4	0.06

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 10:36:42 on 29/04/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770018
Fax: +44 (0) 1344 770864
Email: softwarebureau@trl.co.uk
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Run with file:-
"j:\Bedford-Jobs\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\
A4303_Hunter Bld\pm2014base.vai"
(drive-on-the-left) at 11:40:20 on Thursday, 31 July 2014

FILE PROPERTIES

RUN TITLE: Magna Park Access Roundabout PM Peak 2014 Base Flows
LOCATION: Magna Park Site Access
DATE: 31/07/2014
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - Hunter Bld
ARM B - A4303 East
ARM C - Site Access
ARM D - A4303 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.20	10.70	31.00	19.00	67.00	57.0	0.654	44.594
ARM B	7.30	10.20	32.00	100.00	67.00	54.0	0.681	46.088
ARM C	7.30	8.50	10.00	25.00	67.00	62.0	0.579	37.067
ARM D	7.60	10.00	11.00	42.00	67.00	60.0	0.632	41.945

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A: Effective flare length is outside normal range.
Treat capacities with increasing caution.
WARNING ARM B: Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

(Only sets included in the current run are shown)

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MINUTES.
LENGTH OF TIME SEGMENT - 15 MINUTES.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	FLOW STARTS	NUMBER OF MINUTES FROM START WHEN TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS IFALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00		8.66	12.99	8.66
ARM B	15.00	45.00	75.00		7.89	11.83	7.89
ARM C	15.00	45.00	75.00		3.25	4.88	3.25
ARM D	15.00	45.00	75.00		9.46	14.19	9.46

DEMAND SET TITLE: AM Peak 2006 Base Flows

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15					
	ARM A	0.000	0.333	0.004	0.662
		0.0	231.0	3.0	459.0
		(15.3)	(15.3)	(15.3)	(15.3)
	ARM B	0.236	0.043	0.022	0.699
		149.0	27.0	14.0	441.0
		(11.9)	(11.9)	(11.9)	(11.9)
	ARM C	0.042	0.615	0.000	0.342
		11.0	160.0	0.0	89.0
		(3.1)	(3.1)	(3.1)	(3.1)
	ARM D	0.168	0.820	0.012	0.000
		127.0	621.0	9.0	0.0
		(9.5)	(9.5)	(9.5)	(9.5)

TURNING PROPORTIONS
TURNING COUNTS (VEH/HR)
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	8.66	32.42	0.267		0.0	0.4	5.4		0.04
ARM B	7.89	37.07	0.213		0.0	0.3	4.0		0.03
ARM C	3.25	27.41	0.119		0.0	0.1	2.0		0.04
ARM D	9.46	35.62	0.266		0.0	0.4	5.3		0.04

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	10.34	31.19	0.332		0.4	0.5	7.3		0.05
ARM B	9.42	36.26	0.260		0.3	0.3	5.2		0.04
ARM C	3.88	25.73	0.151		0.1	0.2	2.6		0.05
ARM D	11.30	35.09	0.322		0.4	0.5	7.0		0.04

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
ARM A	12.67	29.51	0.429		0.5	0.7	11.0		0.06
ARM B	11.54	35.16	0.328		0.3	0.5	7.2		0.04
ARM C	4.75	23.43	0.203		0.2	0.3	3.7		0.05
ARM D	13.84	34.37	0.403		0.5	0.7	9.9		0.05

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
ARM A	12.67	29.50	0.429		0.7	0.7	11.2		0.06
ARM B	11.54	35.15	0.328		0.5	0.5	7.3		0.04
ARM C	4.75	23.42	0.203		0.3	0.3	3.8		0.05
ARM D	13.84	34.37	0.403		0.7	0.7	10.1		0.05

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
ARM A	10.34	31.18	0.332		0.7	0.5	7.6		0.05
ARM B	9.42	36.25	0.260		0.5	0.4	5.3		0.04
ARM C	3.88	25.71	0.151		0.3	0.2	2.7		0.05
ARM D	11.30	35.08	0.322		0.7	0.5	7.3		0.04

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
ARM A	8.66	32.40	0.267		0.5	0.4	5.6		0.04
ARM B	7.89	37.06	0.213		0.4	0.3	4.1		0.03
ARM C	3.25	27.38	0.119		0.2	0.1	2.0		0.04
ARM D	9.46	35.61	0.266		0.5	0.4	5.5		0.04

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	
17.30	0.7	*
17.45	0.7	*
18.00	0.5	
18.15	0.4	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.3
17.15	0.3
17.30	0.5
17.45	0.5
18.00	0.4
18.15	0.3

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.2
17.30	0.3
17.45	0.3
18.00	0.2
18.15	0.1

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	
17.30	0.7	*
17.45	0.7	*
18.00	0.5	
18.15	0.4	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	950.2	633.5	48.0	0.05	48.0	0.05
B	865.2	576.8	33.1	0.04	33.1	0.04
C	356.5	237.7	16.9	0.05	16.9	0.05
D	1038.0	692.0	45.1	0.04	45.1	0.04
ALL	3210.0	2140.0	143.2	0.04	143.2	0.04

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 10:38:24 on 29/04/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 3.0 (JUNE 2005)

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TRL Limited Tel: +44 (0) 1344 770018
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Run with file:-
"j:\Bedford-Jobs\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\
Cross in Hand\am2014base.vai"
(drive-on-the-left) at 11:47:58 on Thursday, 31 July 2014

FILE PROPERTIES

RUN TITLE: Cross in Hand Roundabout AM Peak 2014 Base Flows
LOCATION: Cross In Hand Roundabout
DATE: 31/07/2014
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A5 North
ARM B - A4303
ARM C - A5 South
ARM D - B4027
ARM E - Coal Pit Lane

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.70	7.50	47.00	45.00	98.00	48.0	0.494	34.354
ARM B	7.10	8.80	25.00	35.00	79.00	54.0	0.566	40.232
ARM C	5.10	7.50	50.00	37.00	98.00	54.0	0.486	34.056
ARM D	3.20	6.20	24.00	40.00	88.00	64.0	0.405	24.458
ARM E	3.50	7.20	9.00	19.00	88.00	64.0	0.384	22.641

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A: Effective flare length is outside normal range.
Treat capacities with increasing caution.
WARNING ARM C: Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

(Only sets included in the current run are shown)

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100
E	100

TIME PERIOD BEGINS 07.15 AND ENDS 08.45

LENGTH OF TIME PERIOD - 90 MINUTES.
LENGTH OF TIME SEGMENT - 15 MINUTES.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	FLOW TOP OF PEAK IS REACHED	FLOW STOPS IFALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	13.84	20.76	13.84
ARM B	15.00	45.00	75.00	10.93	16.39	10.93
ARM C	15.00	45.00	75.00	8.06	12.09	8.06
ARM D	15.00	45.00	75.00	1.98	2.96	1.98
ARM E	15.00	45.00	75.00	3.81	5.72	3.81

DEMAND SET TITLE: AM Peak 2006 Base Flows

TURNING PROPORTIONS
TURNING COUNTS (VEH/HR)
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D	ARM E
07.15 - 08.45	ARM A	0.000	0.469	0.486	0.042	0.004
		0.0	519.0	538.0	46.0	4.0
		(6.9)	(6.9)	(6.9)	(6.9)	(6.9)
	ARM B	0.388	0.000	0.275	0.206	0.132
		339.0	0.0	240.0	180.0	115.0
		(12.5)	(12.5)	(12.5)	(12.5)	(12.5)
	ARM C	0.459	0.414	0.000	0.026	0.101
		296.0	267.0	0.0	17.0	65.0
		(14.3)	(14.3)	(14.3)	(14.3)	(14.3)
	ARM D	0.133	0.810	0.051	0.000	0.006
		21.0	128.0	8.0	0.0	1.0
		(3.2)	(3.2)	(3.2)	(3.2)	(3.2)
	ARM E	0.020	0.643	0.321	0.016	0.000
		6.0	196.0	98.0	5.0	0.0
		(1.6)	(1.6)	(1.6)	(1.6)	(1.6)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	13.84	27.83	0.497		0.0	1.0	14.2		0.07
ARM B	10.93	31.12	0.351		0.0	0.5	7.9		0.05
ARM C	8.06	25.71	0.314		0.0	0.5	6.7		0.06
ARM D	1.98	17.67	0.112		0.0	0.1	1.8		0.06
ARM E	3.81	16.70	0.228		0.0	0.3	4.3		0.08

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
ARM A	16.52	26.98	0.612		1.0	1.6	22.5		0.09
ARM B	13.05	30.20	0.432		0.5	0.8	11.1		0.06
ARM C	9.63	24.91	0.387		0.5	0.6	9.2		0.07
ARM D	2.36	16.49	0.143		0.1	0.2	2.5		0.07
ARM E	4.55	15.60	0.292		0.3	0.4	6.0		0.09

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
ARM A	20.24	25.83	0.784		1.6	3.4	47.4		0.17
ARM B	15.98	28.98	0.551		0.8	1.2	17.7		0.08
ARM C	11.79	23.81	0.495		0.6	1.0	14.1		0.08
ARM D	2.89	14.87	0.194		0.2	0.2	3.5		0.08
ARM E	5.58	14.11	0.395		0.4	0.6	9.4		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	20.24	25.81	0.784		3.4	3.5	52.5		0.18
ARM B	15.98	28.94	0.552		1.2	1.2	18.3		0.08
ARM C	11.79	23.80	0.495		1.0	1.0	14.6		0.08
ARM D	2.89	14.85	0.194		0.2	0.2	3.6		0.08
ARM E	5.58	14.09	0.396		0.6	0.7	9.7		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
ARM A	16.52	26.96	0.613		3.5	1.6	25.4		0.10
ARM B	13.05	30.15	0.433		1.2	0.8	11.8		0.06
ARM C	9.63	24.89	0.387		1.0	0.6	9.8		0.07
ARM D	2.36	16.46	0.143		0.2	0.2	2.6		0.07
ARM E	4.55	15.58	0.292		0.7	0.4	6.4		0.09

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
ARM A	13.84	27.80	0.498		1.6	1.0	15.4		0.07
ARM B	10.93	31.08	0.351		0.8	0.5	8.3		0.05
ARM C	8.06	25.69	0.314		0.6	0.5	7.0		0.06
ARM D	1.98	17.64	0.112		0.2	0.1	1.9		0.06
ARM E	3.81	16.67	0.229		0.4	0.3	4.6		0.08

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.0	*
07.45	1.6	**
08.00	3.4	***
08.15	3.5	****
08.30	1.6	**
08.45	1.0	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.5	*
07.45	0.8	*
08.00	1.2	*
08.15	1.2	*
08.30	0.8	*
08.45	0.5	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.5	
07.45	0.6	*
08.00	1.0	*
08.15	1.0	*
08.30	0.6	*
08.45	0.5	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.1
07.45	0.2
08.00	0.2
08.15	0.2
08.30	0.2
08.45	0.1

QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.3	
07.45	0.4	
08.00	0.6	*
08.15	0.7	*
08.30	0.4	
08.45	0.3	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1517.9	1012.0	177.4	0.12	177.4	0.12
B	1198.4	799.0	75.1	0.06	75.1	0.06
C	884.4	589.6	61.4	0.07	61.4	0.07
D	216.7	144.4	15.9	0.07	15.9	0.07
E	418.2	278.8	40.4	0.10	40.4	0.10
ALL	4235.7	2823.8	370.2	0.09	370.2	0.09

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 10:44:47 on 29/04/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 3.0 (JUNE 2005)

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Run with file:-
"j:\Bedford-Jobs\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\
Cross in Hand\pm2014base.vai"
(drive-on-the-left) at 11:55:10 on Thursday, 31 July 2014

FILE PROPERTIES

RUN TITLE: Cross in Hand Roundabout PM Peak 2014 Base Flows
LOCATION: Cross In Hand Roundabout
DATE: 31/07/2014
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A5 North
ARM B - A4303
ARM C - A5 South
ARM D - B4027
ARM E - Coal Pit Lane

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.70	7.50	47.00	45.00	98.00	48.0	0.494	34.354
ARM B	7.10	8.80	25.00	35.00	79.00	54.0	0.566	40.232
ARM C	5.10	7.50	50.00	37.00	98.00	54.0	0.486	34.056
ARM D	3.20	6.20	24.00	40.00	88.00	64.0	0.405	24.458
ARM E	3.50	7.20	9.00	19.00	88.00	64.0	0.384	22.641

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A: Effective flare length is outside normal range.
Treat capacities with increasing caution.
WARNING ARM C: Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

(Only sets included in the current run are shown)

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100
E	100

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MINUTES.
LENGTH OF TIME SEGMENT - 15 MINUTES.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS IFALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	7.60	11.40	7.60
ARM B	15.00	45.00	75.00	12.84	19.26	12.84
ARM C	15.00	45.00	75.00	9.20	13.80	9.20
ARM D	15.00	45.00	75.00	3.39	5.08	3.39
ARM E	15.00	45.00	75.00	2.09	3.13	2.09

DEMAND SET TITLE: AM Peak 2006 Base Flows

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D	ARM E
16.45 - 18.15		TURNING PROPORTIONS TURNING COUNTS (VEH/HR) (PERCENTAGE OF H.V.S)				
	ARM A	0.000 0.0 (6.7)%	0.495 301.0 (6.7)%	0.480 292.0 (6.7)%	0.021 13.0 (6.7)%	0.003 2.0 (6.7)%
	ARM B	0.463 475.0 (8.0)%	0.000 0.0 (8.0)%	0.229 235.0 (8.0)%	0.140 144.0 (8.0)%	0.168 173.0 (8.0)%
	ARM C	0.670 493.0 (8.8)%	0.197 145.0 (8.8)%	0.000 0.0 (8.8)%	0.012 9.0 (8.8)%	0.121 89.0 (8.8)%
	ARM D	0.244 66.0 (0.7)%	0.705 191.0 (0.7)%	0.030 8.0 (0.7)%	0.000 0.0 (0.7)%	0.022 6.0 (0.7)%
	ARM E	0.030 5.0 (3.0)%	0.671 112.0 (3.0)%	0.275 46.0 (3.0)%	0.024 4.0 (3.0)%	0.000 0.0 (3.0)%

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	7.60	29.17	0.260		0.0	0.4	5.2		0.05
ARM B	12.84	34.72	0.370		0.0	0.6	8.6		0.05
ARM C	9.20	26.43	0.348		0.0	0.5	7.8		0.06
ARM D	3.39	16.81	0.202		0.0	0.3	3.7		0.07
ARM E	2.09	15.14	0.138		0.0	0.2	2.3		0.08

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	9.08	28.58	0.318		0.4	0.5	6.8		0.05
ARM B	15.33	34.23	0.448		0.6	0.8	11.9		0.05
ARM C	10.99	25.47	0.431		0.5	0.8	11.0		0.07
ARM D	4.05	15.33	0.264		0.3	0.4	5.2		0.09
ARM E	2.49	13.80	0.181		0.2	0.2	3.2		0.09

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
ARM A	11.11	27.77	0.400		0.5	0.7	9.8		0.06
ARM B	18.77	33.55	0.560		0.8	1.3	18.4		0.07
ARM C	13.45	24.17	0.557		0.8	1.2	18.0		0.09
ARM D	4.95	13.33	0.372		0.4	0.6	8.5		0.12
ARM E	3.05	11.97	0.255		0.2	0.3	5.0		0.11

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
ARM A	11.11	27.76	0.400		0.7	0.7	10.0		0.06
ARM B	18.77	33.54	0.560		1.3	1.3	18.9		0.07
ARM C	13.45	24.16	0.557		1.2	1.2	18.7		0.09
ARM D	4.95	13.31	0.372		0.6	0.6	8.8		0.12
ARM E	3.05	11.94	0.256		0.3	0.3	5.1		0.11

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
ARM A	9.08	28.56	0.318		0.7	0.5	7.1		0.05
ARM B	15.33	34.22	0.448		1.3	0.8	12.5		0.05
ARM C	10.99	25.46	0.432		1.2	0.8	11.8		0.07
ARM D	4.05	15.30	0.264		0.6	0.4	5.6		0.09
ARM E	2.49	13.76	0.181		0.3	0.2	3.4		0.09

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
ARM A	7.60	29.15	0.261		0.5	0.4	5.4		0.05
ARM B	12.84	34.71	0.370		0.8	0.6	9.0		0.05
ARM C	9.20	26.41	0.348		0.8	0.5	8.2		0.06
ARM D	3.39	16.77	0.202		0.4	0.3	3.9		0.07
ARM E	2.09	15.11	0.138		0.2	0.2	2.5		0.08

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	
17.30	0.7	*
17.45	0.7	*
18.00	0.5	
18.15	0.4	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.6	*
17.15	0.8	*
17.30	1.3	*
17.45	1.3	*
18.00	0.8	*
18.15	0.6	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.5	*
17.15	0.8	*
17.30	1.2	*
17.45	1.2	*
18.00	0.8	*
18.15	0.5	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.6	*
17.45	0.6	*
18.00	0.4	
18.15	0.3	

QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.2
17.15	0.2
17.30	0.3
17.45	0.3
18.00	0.2
18.15	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND	* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH) (VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	833.7 555.8	44.3	0.05	44.3	0.05
B	1408.2 938.8	79.3	0.06	79.3	0.06
C	1009.2 672.8	75.4	0.07	75.4	0.07
D	371.6 247.7	35.6	0.10	35.7	0.10
E	229.0 152.7	21.5	0.09	21.5	0.09
ALL	3851.7 2567.8	256.1	0.07	256.1	0.07

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 10:45:49 on 29/04/2015]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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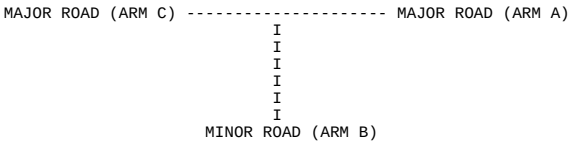
Run with file:-
"C:\Users\jon_ashcroft\Documents\LINSIG Report Templates\2014am.vpi"
(drive-on-the-left) at 11:42:44 on Monday, 26 January 2015

RUN INFORMATION

RUN TITLE	: A5/ Mere Lane 2014 AM Peak Base
LOCATION	:
DATE	: 07/08/14
CLIENT	:
ENUMERATOR	: jon_ashcroft [UK1005963L]
JOB NUMBER	:
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A5 North
ARM B IS Mere Lane
ARM C IS A5 South

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.10 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.80 M.
- VISIBILITY	(VC-B)200.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 250.0 M.
- VISIBILITY TO RIGHT	(VB-A) 100.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	8.40 M.
WIDTH AT 10 M FROM JUNCTION	4.50 M.
WIDTH AT 15 M FROM JUNCTION	2.80 M.
WIDTH AT 20 M FROM JUNCTION	2.80 M.
- LENGTH OF FLARED SECTION	1 VEHS

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
734.83	0.27	0.27

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: A5/ Mere Lane 2014 AM Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	12.73	19.09	12.73
ARM B	15.00	45.00	75.00	1.25	1.88	1.25
ARM C	15.00	45.00	75.00	8.13	12.19	8.13

Demand set: A5/ Mere Lane 2014 AM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00	ARM A	0.000	0.008	0.992
		0.0	8.0	1010.0
		(0.0)	(9.6)	(9.6)
	ARM B	0.080	0.000	0.920
		8.0	0.0	92.0
		(4.0)	(0.0)	(4.0)
	ARM C	0.954	0.046	0.000
		620.0	30.0	0.0
		(10.5)	(10.5)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	1.15	8.29	0.139		0.00	0.16	2.3		0.14
B-A	0.10	4.62	0.022		0.00	0.02	0.3		0.22
C-A	7.78								
C-B	0.38	7.65	0.049		0.00	0.05	0.7		0.14
A-B	0.10								
A-C	12.67								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	1.38	7.55	0.183		0.16	0.22	3.2		0.16
B-A	0.12	3.62	0.033		0.02	0.03	0.5		0.29
C-A	9.29								
C-B	0.45	6.98	0.064		0.05	0.07	1.0		0.15
A-B	0.12								
A-C	15.13								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	1.69	6.50	0.260		0.22	0.34	5.0		0.21
B-A	0.15	2.23	0.066		0.03	0.07	1.0		0.48
C-A	11.38								
C-B	0.55	6.06	0.091		0.07	0.10	1.4		0.18
A-B	0.15								
A-C	18.53								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	1.69	6.50	0.260		0.34	0.35	5.2		0.21
B-A	0.15	2.23	0.066		0.07	0.07	1.0		0.48
C-A	11.38								
C-B	0.55	6.06	0.091		0.10	0.10	1.5		0.18
A-B	0.15								
A-C	18.53								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	1.38	7.55	0.183		0.35	0.23	3.5		0.16
B-A	0.12	3.62	0.033		0.07	0.03	0.6		0.29
C-A	9.29								
C-B	0.45	6.98	0.064		0.10	0.07	1.1		0.15
A-B	0.12								
A-C	15.13								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	1.15	8.29	0.139		0.23	0.16	2.5		0.14
B-A	0.10	4.62	0.022		0.03	0.02	0.4		0.22
C-A	7.78								
C-B	0.38	7.65	0.049		0.07	0.05	0.8		0.14
A-B	0.10								
A-C	12.67								

WARNING THE JUNCTION MODELLED CAN CARRY HIGH-SPEED MAJOR ROAD TRAFFIC. (AG23 REF. 8.4.2(v)).

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.2
08.00	0.2
08.15	0.3
08.30	0.3
08.45	0.2
09.00	0.2

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.1
08.30	0.1
08.45	0.0
09.00	0.0

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.1
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	126.6	84.4	21.7	0.17	21.7	0.17
B-A	11.0	7.3	3.7	0.33	3.7	0.33
C-A	853.4	568.9				
C-B	41.3	27.5	6.5	0.16	6.5	0.16
A-B	11.0	7.3				
A-C	1390.2	926.8				
ALL	2433.5	1622.3	31.9	0.01	31.9	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

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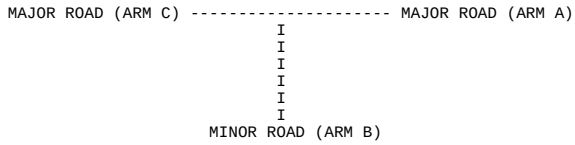
Run with file:-
"C:\Users\jon_ashcroft\Documents\LINSIG Report Templates\2014pm.vpi"
(drive-on-the-left) at 11:45:48 on Monday, 26 January 2015

RUN INFORMATION

RUN TITLE	: A5/ Mere Lane 2014 PM Peak Base
LOCATION	:
DATE	: 07/08/14
CLIENT	:
ENUMERATOR	: jon_ashcroft [UK1005963L]
JOB NUMBER	:
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A5 North
ARM B IS Mere Lane
ARM C IS A5 South

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.10 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.80 M.
- VISIBILITY	(VC-B)200.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 250.0 M.
- VISIBILITY TO RIGHT	(VB-A) 100.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	8.40 M.
WIDTH AT 10 M FROM JUNCTION	4.50 M.
WIDTH AT 15 M FROM JUNCTION	2.80 M.
WIDTH AT 20 M FROM JUNCTION	2.80 M.
- LENGTH OF FLARED SECTION	1 VEHS

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
734.83	0.27	0.27

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: A5/ Mere Lane 2014 AM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	7.20	10.80	7.20
ARM B	15.00	45.00	75.00	0.60	0.90	0.60
ARM C	15.00	45.00	75.00	12.93	19.39	12.93

Demand set: A5/ Mere Lane 2014 AM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.012	0.988
		0.0	7.0	569.0
		(0.0)	(13.9)	(13.9)
	ARM B	0.188	0.000	0.813
		9.0	0.0	39.0
		(2.1)	(0.0)	(2.1)
	ARM C	0.940	0.060	0.000
		972.0	62.0	0.0
		(6.1)	(6.1)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.49	9.92	0.049		0.00	0.05	0.8		0.11
B-A	0.11	5.44	0.021		0.00	0.02	0.3		0.19
C-A	12.20								
C-B	0.78	9.44	0.082		0.00	0.09	1.3		0.12
A-B	0.09								
A-C	7.14								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.58	9.47	0.062		0.05	0.07	1.0		0.11
B-A	0.13	4.54	0.030		0.02	0.03	0.4		0.23
C-A	14.56								
C-B	0.93	9.03	0.103		0.09	0.11	1.7		0.12
A-B	0.10								
A-C	8.53								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.72	8.83	0.081		0.07	0.09	1.3		0.12
B-A	0.17	3.30	0.050		0.03	0.05	0.7		0.32
C-A	17.84								
C-B	1.14	8.47	0.134		0.11	0.15	2.2		0.14
A-B	0.13								
A-C	10.44								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.72	8.83	0.081		0.09	0.09	1.3		0.12
B-A	0.17	3.29	0.050		0.05	0.05	0.8		0.32
C-A	17.84								
C-B	1.14	8.47	0.134		0.15	0.15	2.3		0.14
A-B	0.13								
A-C	10.44								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.58	9.47	0.062		0.09	0.07	1.0		0.11
B-A	0.13	4.54	0.030		0.05	0.03	0.5		0.23
C-A	14.56								
C-B	0.93	9.03	0.103		0.15	0.12	1.8		0.12
A-B	0.10								
A-C	8.53								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.49	9.91	0.049		0.07	0.05	0.8		0.11
B-A	0.11	5.44	0.021		0.03	0.02	0.3		0.19
C-A	12.20								
C-B	0.78	9.44	0.082		0.12	0.09	1.4		0.12
A-B	0.09								
A-C	7.14								

WARNING THE JUNCTION MODELLED CAN CARRY HIGH-SPEED MAJOR ROAD TRAFFIC. (AG23 REF. 8.4.2(v)).

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1
18.15	0.1

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.1
17.45	0.1
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.2
17.45	0.2
18.00	0.1
18.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	53.7	35.8	6.1	0.11	6.1	0.11
B-A	12.4	8.3	3.1	0.25	3.1	0.25
C-A	1337.9	891.9				
C-B	85.3	56.9	10.7	0.13	10.7	0.13
A-B	9.6	6.4				
A-C	783.2	522.1				
ALL	2282.1	1521.4	19.9	0.01	19.9	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 10:30:25 on 29/04/2015]

T R A N S Y T 12

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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For sales and distribution information,
program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770864
Email: softwarebureau@trl.co.uk
Web: www.trlsoftware.co.uk

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "2014 AM BASE.DAT" at 15:15 on 20141014

TRANSYT 12.0

M69 Junction 1 2014 AM Peak Base

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	= 5
NUMBER OF LINKS	= 49
NUMBER OF OPTIMISED NODES	= 5
MAXIMUM NUMBER OF GRAPHIC PLOTS	= 0
NUMBER OF STEPS IN CYCLE	= 60
MAXIMUM NUMBER OF SHARED STOPLINES	= 4
MAXIMUM NUMBER OF TIMING POINTS	= 2
MAXIMUM LINKS AT ANY NODE	= 12

CORE REQUESTED = 11409 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

(1)= TITLE:- M69 Junction 1 2014 AM Peak Base

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME PERIOD 1-1200 MINS.	EFFECTIVE-GREEN START (SEC)	EFFECTIVE-GREEN END (SEC)	EQUISAT 0=UNEQUAL SETTINGS 1=YES	FLOW CYCLE	SCALE 1=EQUAL	CRUISE-SPEEDS 10-200 %	50-200 %	0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL-CLIMB 1=FULL OUTPUT	DELAY VALUE P PER PCU-H	STOP VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260	

CARD NO.	CARD TYPE	LIST OF NODES TO BE OPTIMISED															
3)=	2	1	2	3	4	5	0	0	0	0	0	0	0	0	0	0	

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET.....					SECOND SET.....					THIRD SET.....				
4)=	7	12	15	16	17	0	13	19	18	0	0	14	191	192	0	0
5)=	7	22	24	25	26	0	32	35	36	0	0	33	37	0	0	0
6)=	7	42	44	45	0	0	43	46	0	0	0	52	55	56	57	0
7)=	7	53	58	0	0	0	54	59	0	0	0	61	62	63	64	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
8)=	10	1	7	7								
9)=	10	2	7	7								
10)=	10	3	7	7								
11)=	10	4	7	7								
12)=	10	5	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
13)=	11	1	6	6								
14)=	11	2	6	6								
15)=	11	3	6	6								
16)=	11	4	6	6								
17)=	11	5	6	6								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
18)=	12	1	1	0	0								
19)=	12	2	1	0	0								
20)=	12	3	1	0	0								
21)=	12	4	1	0	0								
22)=	12	5	1	0	0								

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY LINKS LINK1 NO.	LINK2 NO.	LINK1 GIVEWAY COEFFS. ONLY % FLOW	A1 X100	A2 X100				LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
23)=	30	60	61	0	0	47	100	0	0	0	0	125	0	2108	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN START STAGE	FIRST GREEN START LAG	FIRST GREEN END STAGE	FIRST GREEN END LAG	SECOND GREEN START STAGE	SECOND GREEN START LAG	SECOND GREEN END STAGE	SECOND GREEN END LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
24)=	31	10	1	1	6	2	0	0	0	0	0	200	-9999	4100	60	0
25)=	31	11	1	1	6	2	0	0	0	0	0	200	-9999	2120	60	0
26)=	31	12	1	2	6	1	0	0	0	0	0	110	0	1892	500	0
27)=	31	13	1	2	6	1	0	0	0	0	0	110	0	2029	500	0
28)=	31	14	1	2	6	1	0	0	0	0	0	110	0	2029	500	0
29)=	31	15	1	1	0	1	0	0	0	0	0	110	0	0	0	0
30)=	31	16	1	1	0	1	0	0	0	0	0	110	0	0	0	0
31)=	31	17	1	1	0	1	0	0	0	0	0	110	0	0	0	0
32)=	31	18	1	1	0	1	0	0	0	0	0	110	0	0	0	0
33)=	31	19	1	1	0	1	0	0	0	0	0	110	0	0	0	0
34)=	31	20	2	1	6	2	0	0	0	0	0	200	-9999	2015	20	0
35)=	31	21	2	1	6	2	0	0	0	0	0	200	-9999	2130	20	0
36)=	31	22	2	2	6	1	0	0	0	0	0	100	0	3989	500	0
37)=	31	23	2	2	6	1	0	0	0	0	0	100	0	2063	500	0
38)=	31	24	2	1	0	1	0	0	0	0	0	100	0	0	0	0
39)=	31	25	2	1	0	1	0	0	0	0	0	100	0	0	0	0
40)=	31	26	2	1	0	1	0	0	0	0	0	100	0	0	0	0
41)=	31	30	3	1	6	2	0	0	0	0	0	200	-9999	2015	60	0
42)=	31	31	3	1	6	2	0	0	0	0	0	200	-9999	4270	60	0
43)=	31	32	3	2	6	1	0	0	0	0	0	130	0	1926	500	0
44)=	31	33	3	2	6	1	0	0	0	0	0	130	0	2063	500	0
45)=	31	34	3	2	6	1	0	0	0	0	0	130	0	2063	500	0
46)=	31	35	3	1	0	1	0	0	0	0	0	130	0	0	0	0
47)=	31	36	3	1	0	1	0	0	0	0	0	130	0	0	0	0
48)=	31	37	3	1	0	1	0	0	0	0	0	130	0	0	0	0
49)=	31	40	4	1	6	2	0	0	0	0	0	200	-9999	1995	60	0
50)=	31	41	4	1	6	2	0	0	0	0	0	200	-9999	4230	60	0
51)=	31	42	4	2	6	1	0	0	0	0	0	140	0	1941	500	0
52)=	31	43	4	2	6	1	0	0	0	0	0	140	0	2077	500	0
53)=	31	44	4	1	0	1	0	0	0	0	0	140	0	0	0	0
54)=	31	45	4	1	0	1	0	0	0	0	0	140	0	0	0	0
55)=	31	46	4	1	0	1	0	0	0	0	0	140	0	0	0	0
56)=	31	50	5	1	6	2	0	0	0	0	0	200	-9999	1975	20	0
57)=	31	51	5	1	6	2	0	0	0	0	0	200	-9999	4250	20	0
58)=	31	52	5	2	6	1	0	0	0	0	0	125	0	1936	500	0
59)=	31	53	5	2	6	1	0	0	0	0	0	125	0	2072	500	0
60)=	31	54	5	2	6	1	0	0	0	0	0	125	0	4144	500	0
61)=	31	55	5	1	0	1	0	0	0	0	0	125	0	0	0	0
62)=	31	56	5	1	0	1	0	0	0	0	0	125	0	0	0	0
63)=	31	57	5	1	0	1	0	0	0	0	0	125	0	0	0	0
64)=	31	58	5	1	0	1	0	0	0	0	0	125	0	0	0	0
65)=	31	59	5	1	0	1	0	0	0	0	0	125	0	0	0	0
66)=	31	61	0	0	0	0	0	0	0	0	0	125	0	6000	0	0
67)=	31	62	0	0	0	0	0	0	0	0	0	125	0	0	0	0
68)=	31	63	0	0	0	0	0	0	0	0	0	125	0	0	0	0
69)=	31	64	0	0	0	0	0	0	0	0	0	125	0	0	0	0
70)=	31	191	1	1	0	1	0	0	0	0	0	110	0	0	0	0
71)=	31	192	1	1	0	1	0	0	0	0	0	110	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 ..... LINK NO.	ENTRY 1 ..... CRUISE FLOW	ENTRY 1 ..... CRUISE SPEED	ENTRY 2 ..... LINK NO.	ENTRY 2 ..... CRUISE FLOW	ENTRY 2 ..... CRUISE SPEED	ENTRY 3 ..... LINK NO.	ENTRY 3 ..... CRUISE FLOW	ENTRY 3 ..... CRUISE SPEED	ENTRY 4 ..... LINK NO.	ENTRY 4 ..... CRUISE FLOW	ENTRY 4 ..... CRUISE SPEED
72)=	32	10	585	0	0	0	43	0	0	0	0	0	0	0	0	0
73)=	32	11	203	0	0	0	43	0	0	0	0	0	0	0	0	0
74)=	32	12	79	0	60	79	43	0	0	0	0	0	0	0	0	0
75)=	32	13	80	0	60	80	43	0	0	0	0	0	0	0	0	0
76)=	32	14	193	0	60	193	43	0	0	0	0	0	0	0	0	0
77)=	32	15	253	0	61	253	43	0	0	0	0	0	0	0	0	0
78)=	32	16	183	0	64	183	43	0	0	0	0	0	0	0	0	0
79)=	32	17	88	0	63	88	43	0	0	0	0	0	0	0	0	0
80)=	32	18	253	0	61	253	43	0	0	0	0	0	0	0	0	0
81)=	32	19	183	0	64	183	43	0	0	0	0	0	0	0	0	0
82)=	32	20	343	0	0	0	43	0	0	0	0	0	0	0	0	0

```
 83)=  32      21     793       0       0       0      43       0       0       0       0       0       0       0       0       0
 84)=  32      22     245       0      10     245      43       0       0       0       0       0       0       0       0       0
 85)=  32      23     203       0      11     203      43       0       0       0       0       0       0       0       0       0
 86)=  32      24     273       0      14     193      43      13      80      43       0       0       0       0       0       0
 87)=  32      25     166       0     192     166      43       0       0       0       0       0       0       0       0       0
 88)=  32      26      41       0     191      41      43       0       0       0       0       0       0       0       0       0
 89)=  32      30     153       0       0       0      43       0       0       0       0       0       0       0       0       0
 90)=  32      31    1313       0       0       0      43       0       0       0       0       0       0       0       0       0
 91)=  32      32     334       0      20     334      43       0       0       0       0       0       0       0       0       0
 92)=  32      33     525       0      21     525      43       0       0       0       0       0       0       0       0       0
 93)=  32      34     268       0      21     268      43       0       0       0       0       0       0       0       0       0
 94)=  32      35     193       0      24     193      43       0       0       0       0       0       0       0       0       0
 95)=  32      36      32       0      25      32      43       0       0       0       0       0       0       0       0       0
 96)=  32      37     203       0      23     203      43       0       0       0       0       0       0       0       0       0
 97)=  32      40     204       0       0       0      43       0       0       0       0       0       0       0       0       0
 98)=  32      41     407       0       0       0      43       0       0       0       0       0       0       0       0       0
 99)=  32      42     563       0      31     563      43       0       0       0       0       0       0       0       0       0
100)=  32      43     750       0      31     750      43       0       0       0       0       0       0       0       0       0
101)=  32      44     525       0      33     525      43       0       0       0       0       0       0       0       0       0
102)=  32      45     203       0      37     203      43       0       0       0       0       0       0       0       0       0
103)=  32      46     268       0      34     268      43       0       0       0       0       0       0       0       0       0
104)=  32      50     261       0       0       0      43       0       0       0       0       0       0       0       0       0
105)=  32      51     672       0       0       0      43       0       0       0       0       0       0       0       0       0
106)=  32      52     153       0      40     153      43       0       0       0       0       0       0       0       0       0
107)=  32      53     268       0      46     268      43       0       0       0       0       0       0       0       0       0
108)=  32      54     407       0      41     407      43       0       0       0       0       0       0       0       0       0
109)=  32      55     240       0      42     240      43       0       0       0       0       0       0       0       0       0
110)=  32      56      80       0      44      80      43       0       0       0       0       0       0       0       0       0
111)=  32      57      10       0      45      10      43       0       0       0       0       0       0       0       0       0
112)=  32      58     662       0      43     662      43       0       0       0       0       0       0       0       0       0
113)=  32      59      88       0      43      88      43       0       0       0       0       0       0       0       0       0
114)=  32      60     365       0       0       0      43       0       0       0       0       0       0       0       0       0
115)=  32      61     929       0      51     672      43      50     257      43       0       0       0       0       0       0
116)=  32      62     268       0      53     268      43       0       0       0       0       0       0       0       0       0
117)=  32      63     750       0      58     662      43      59      88      43       0       0       0       0       0       0
118)=  32      64     407       0      54     407      43       0       0       0       0       0       0       0       0       0
119)=  32     191      41       0      64      41      43       0       0       0       0       0       0       0       0       0
120)=  32     192     166       0      61     166      43       0       0       0       0       0       0       0       0       0

                      LINK CARDS : FLARE SATURATION FLOW DATA
                       ..LANE  1..     ..LANE  2..     ..LANE  3..
       CARD   LINK   SAT.     CAPAC  SAT.     CAPAC  SAT.     CAPAC
       TYPE    NO.   FLOW      VEH.  FLOW      VEH.  FLOW      VEH.
121)=  33      21    2130       5       0       0       0       0

                                                 LINK DATA:  QUEUE CONSTRAINTS
CARD   CARD   LINK    LIMIT   QUEUE   LINK    LIMIT   QUEUE   LINK    LIMIT   QUEUE   LINK    LIMIT   QUEUE   LINK    LIMIT   QUEUE
 NO.   TYPE    NO.    QUEUE  WEIGHT    NO.   QUEUE  WEIGHT    NO.   QUEUE  WEIGHT    NO.   QUEUE  WEIGHT    NO.   QUEUE  WEIGHT
122)=  38      12      10    4500      13      10    4500      14      10    4500      22       9    4500      23       7    4500
123)=  38      32       6    4500      33      10    4500      34      10    4500      42      11    4500      43      11    4500
124)=  38      52       9    4500      53       9    4500      54      18    4500       0       0       0       0       0       0

*****END OF SUBROUTINE TINPUT****


     60 SECOND CYCLE  60 STEPS

INITIAL SETTINGS
 - (SECONDS)

  NODE   NUMBER   STAGE   STAGE   STAGE   STAGE   STAGE  STAGE   STAGE   STAGE   STAGE   STAGE
   NO   OF STAGES   1       2       3       4       5      6       7       8       9      10

    1       2       0      21
    2       2       0      36
    3       2       0      28
    4       2       0      13
    5       2       0      18

 LINK    FLOW   SAT   DEGREE  MEAN TIMES  -------DELAY--------    ----STOPS----   ----QUEUE----  PERFORMANCE   EXIT   GREEN TIMES
NUMBER   INTO   FLOW    OF      PER PCU    UNIFORM RANDOM+ COST    MEAN    COST    MEAN            INDEX.       NODE   START  START
         LINK          SAT     CRUISE              OVERSAT  OF    STOPS    OF    MAX.  AVERAGE  WEIGHTED SUM          END    END
                              DELAY  (U+R+O=MEAN Q) DELAY    /PCU   STOPS          EXCESS  OF ( ) VALUES          1ST    2ND
       (PCU/H) (PCU/H)  (%)  (SEC) (SEC)   (PCU-H/H)   ($/H)    (%)   ($/H)   (PCU) (PCU)     ($/H)                (SECONDS)

   10     585   4100     54  16.7  22.4    3.1 +  0.6  ( 51.6)*    87  ( 13.1)       9                31.0      1      6  21
   11     203   2120     36  16.7  22.8    1.0 +  0.3  ( 18.3)*    85  (  4.4)       3                11.0      1      6  21
   12      79   1892S    56   9.2  10.4    0.1 +  0.1  (  3.2)*    55  (  1.1)       6  ( 0.0)*       17.3      1     27   0
   13      80   2029S    45   9.2   8.8    0.1 +  0.1  (  2.8)*    46  (  1.0)       4  ( 0.0)*       14.9      1     27   0
   14     193   2029S    35   9.2   8.6    0.3 +  0.1  (  6.5)*    45  (  2.3)       3  ( 0.0)*       34.8      1     27   0
   15     253     12L    56   9.2   6.9    0.2 +  0.3  (  6.9)     70  (  4.6)       6                11.5      1     27   0
   16     183     12L    56   9.2   4.2    0.0 +  0.2  (  3.0)      8  (  0.4)       6                 3.4      1     27   0
   17      89     12L    56   9.2  13.8    0.2 +  0.1  (  4.8)     57  (  1.3)       6                 6.1      1     27   0
   18     253     13L    45   9.2   4.6    0.1 +  0.2  (  4.5)     49  (  3.2)       4                 7.8      1     27   0
   19     183     13L    45   9.2   3.2    0.0 +  0.1  (  2.3)      6  (  0.3)       4                 2.6      1     27   0
   20     343   2015     33  16.7  11.0    0.8 +  0.2  ( 14.9)*    58  (  5.1)       3                 3.0      2      6  36
   21     793   2710f    57  16.7  11.6    1.9 +  0.7  ( 36.2)*    60  ( 12.2)       8                 7.2      2      6  36
   22     245   3989S    57   8.4  28.9    1.7 +  0.2  ( 27.9)*   105  (  6.6)      11  ( 0.3)*      158.3      2     42   0
   23     203   2063     31   8.4  31.0    1.5 +  0.2  ( 24.8)*   107  (  5.6)       4  ( 0.0)*      129.6      2     42   0
   24     273     22L    57   8.4  15.1    0.9 +  0.3  ( 16.2)     84  (  5.9)      11     +          22.1      2     42   0
   25     165     22L    57   8.4  11.9    0.4 +  0.2  (  7.7)     96  (  4.1)      11     +          11.9      2     42   0
   26      41     22L    57   8.4   8.8    0.1 +  0.0  (  1.4)     33  (  0.3)      11     +           1.8      2     42   0
   30     153   2015     20  16.7  15.3    0.5 +  0.1  (  9.2)*    67  (  2.7)       2                 5.5      3      6  28
   31    1313   4270     80  16.7  22.0    6.0 +  2.0  (113.8)*    93  ( 31.4)      21                68.3      3      6  28
   32     334   1926S    64  10.9  20.7    1.4 +  0.5  ( 27.3)*   102  (  8.8)       8  ( 0.3)*      160.8      3     34   0
   33     525   2063S    78  10.9  23.6    2.2 +  1.3  ( 48.9)*   109  ( 14.8)      11  ( 0.1)*      261.8      3     34   0
   34     268   2063     29  10.9  13.5    0.8 +  0.2  ( 14.3)*    86  (  5.9)       4  ( 0.0)*       77.4      3     34   0
   35     193     32L    64  10.9  19.0    0.7 +  0.3  ( 14.5)     54  (  2.7)       8     +          17.2      3     34   0
   36      32     32L    64  10.9  19.5    0.1 +  0.1  (  2.5)     54  (  0.4)       8     +           2.9      3     34   0
   37     203     33L    78  10.9  13.0    0.2 +  0.5  ( 10.4)     28  (  1.5)      11     +          11.9      3     34   0
   40     204   1995     77  16.7  52.7    1.4 +  1.6  ( 42.4)*   133  (  7.0)       5                25.5      4      6  13
   41     407   4230     72  16.7  36.2    2.8 +  1.3  ( 58.2)*   110  ( 11.5)       8                34.9      4      6  13
   42     562   1941S    95  11.7  28.5    1.1 +  3.3  ( 63.3)*   123  ( 17.8)      21  ( 3.0)*      471.0      4     19   0
   43     751   2077S    70  11.7   5.8    0.3 +  0.9  ( 17.1)*    61  ( 11.8)      13  ( 0.1)*      102.1      4     19   0
   44     525     42L    95  11.7  24.5    0.4 +  3.1  ( 50.7)     52  (  7.1)      21     +          57.8      4     19   0
   45     203     42L    95  11.7  34.2    0.7 +  1.2  ( 27.4)    119  (  6.2)      21     +          33.6      4     19   0
   46     268     43L    70  11.7   5.1    0.1 +  0.3  (  5.4)     14  (  0.9)      13     +           6.3      4     19   0
   50     261   1975     61  16.7  31.9    1.5 +  0.8  ( 32.8)*   103  (  6.9)       5                 6.6      5      6  18
   51     672   4250     73  16.7  29.0    4.1 +  1.3  ( 76.9)*   100  ( 17.3)      12                15.4      5      6  18
   52     153   1936S    40  10.5  10.7    0.3 +  0.1  (  6.4)*    97  (  3.8)       4  ( 0.0)*       36.0      5     24   0
   53     268   2072S    73  10.5  14.7    0.7 +  0.4  ( 15.6)*    56  (  3.9)       4  ( 0.0)*       81.7      5     24   0
   54     407   4144S    19  10.5   8.2    0.8 +  0.1  ( 13.1)*    92  (  9.7)       7  ( 0.0)*       75.1      5     24   0
   55     239     52L    40  10.5   2.9    0.0 +  0.2  (  2.7)      6  (  0.4)       4                 3.1      5     24   0
   56      80     52L    40  10.5  13.5    0.2 +  0.1  (  4.3)     68  (  1.4)       4                 5.7      5     24   0
   57      10     52L    40  10.5   3.4    0.0 +  0.0  (  0.1)     11  (  0.0)       4                 0.2      5     24   0
   58     662     53L    73  10.5   5.3    0.0 +  0.9  ( 14.0)      9  (  1.6)       4                15.6      5     24   0
   59      89     54L    19  10.5   1.1    0.0 +  0.0  (  0.4)      4  (  0.1)       7                 0.5      5     24   0
   60     365   2108     35  10.5   3.6    0.1 +  0.3  (  5.2)     29  (  2.7)       1                 8.0
```

60 SECOND CYCLE 60 STEPS

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	DELAY COST ($/H)	STOPS MEAN /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	END 1ST	END 2ND
61	929	6000S	39	10.5	0.5	0.0 + 0.1 (1.8)	1	(0.2)	0			2.0					
62	268	61L	39	10.5	0.5	0.0 + 0.0 (0.5)	1	(0.1)	0			0.6					
63	751	61L	39	10.5	0.5	0.0 + 0.1 (1.5)	1	(0.2)	0			1.6					
64	407	61L	39	10.5	0.5	0.0 + 0.1 (0.8)	1	(0.1)	0			0.9					
191	41	14L	35	9.2	2.7	0.0 + 0.0 (0.4)	5	(0.1)	3			0.5	1	27	0		
192	165	14L	35	9.2	4.4	0.1 + 0.1 (2.9)	49	(2.1)	3			4.9	1	27	0		

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2350.5	119.3	19.7	39.5	25.1	(1756.0) + (140.8)	+ (172.4)	= 2069.2	TOTALS	

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	126.1	+	74.3	+	115.0	=	315.4

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 49

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

1	2	36	57
2	2	18	54
3	2	0	28
4	2	0	13
5	2	51	9

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2350.5	119.1	19.7	39.3	25.1	(1480.4) + (133.0)	+ (188.4)	= 1801.8	TOTALS	

NO. OF ENTRIES TO SUBPT = 16
NO. OF LINKS RECALCULATED= 479

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

1	2	36	57
2	2	18	54
3	2	0	28
4	2	0	13
5	2	51	9

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2350.5	119.1	19.7	39.3	25.1	(1480.4) + (133.0)	+ (188.4)	= 1801.8	TOTALS	

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 372

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

1	2	42	59
2	2	25	51
3	2	3	28
4	2	0	13
5	2	53	9

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2350.5	123.5	19.0	38.0	30.9	(1159.6) + (101.5)	+ (157.7)	= 1418.8	TOTALS	

NO. OF ENTRIES TO SUBPT = 41
NO. OF LINKS RECALCULATED= 1081

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1	2	51	8
2	2	25	51
3	2	3	28
4	2	0	13
5	2	53	9

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2350.5	122.7	19.2	37.2	30.9	(1131.3) + (	95.1)	+ (157.8)	= 1384.1	TOTALS

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 416

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1	2	51	8
2	2	25	51
3	2	3	28
4	2	0	13
5	2	53	9

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2350.5	122.7	19.2	37.2	30.9	(1131.3) + (	95.1)	+ (157.8)	= 1384.1	TOTALS

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 395

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1	2	50	7
2	2	24	50
3	2	3	28
4	2	2	15
5	2	54	10

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2350.5	122.4	19.2	36.8	30.9	(1134.7) + (	93.4)	+ (112.1)	= 1340.3	TOTALS

NO. OF ENTRIES TO SUBPT = 14
NO. OF LINKS RECALCULATED= 519

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1	2	50	7
2	2	24	45
3	2	4	28
4	2	2	15
5	2	54	10

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2350.5	131.4	17.9	37.2	39.5	(1140.5) + (	87.5)	+ (104.8)	= 1332.7	TOTALS

NO. OF ENTRIES TO SUBPT = 24
NO. OF LINKS RECALCULATED= 893

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	51	8								
2	2	23	44								
3	2	4	28								
4	2	2	15								
5	2	54	10								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	RANDOM+ OVERSAT (U+R+O=MEAN Q) (PCU-H/H)	COST OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN MAX. QUEUE (PCU)	AVERAGE EXCESS QUEUE (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	START END 2ND (SECONDS)
10	585	4100	71	16.7	30.0	3.6 +	1.2 (69.2)*	101	(15.2)	10			41.5	1	57	8
11	203	2120	48	16.7	29.4	1.2 +	0.5 (23.5)*	97	(5.1)	3			14.1	1	57	8
12	79	1892S	50	9.2	7.8	0.1 +	0.1 (2.4)*	44	(0.9)	3	(0.0)*		13.1	1	14	51
13	80	2029S	40	9.2	6.7	0.1 +	0.1 (2.1)*	39	(0.8)	1	(0.0)*		11.4	1	14	51
14	193	2029S	31	9.2	6.5	0.2 +	0.1 (5.0)*	40	(2.0)	2	(0.0)*		26.8	1	14	51
15	253	12L	50	9.2	3.1	0.0 +	0.2 (3.1)	8	(0.5)	3			3.6	1	14	51
16	183	12L	50	9.2	4.1	0.1 +	0.2 (3.0)	11	(0.5)	3			3.5	1	14	51
17	89	12L	50	9.2	12.9	0.2 +	0.1 (4.5)	85	(1.9)	3			6.5	1	14	51
18	253	13L	40	9.2	2.3	0.0 +	0.2 (2.3)	4	(0.3)	1			2.6	1	14	51
19	183	13L	40	9.2	3.4	0.1 +	0.1 (2.5)	10	(0.5)	1			2.9	1	14	51
20	343	2015	64	16.7	28.6	1.9 +	0.9 (38.7)*	98	(8.7)	6			7.7	2	29	44
21	793	3255f	91	16.7	41.3	4.4 +	4.7 (129.2)*	121	(24.7)	17			25.8	2	29	44
22	245	3989S	32	8.4	1.2	0.0 +	0.1 (1.2)*	2	(0.1)	6	(0.0)*		6.1	2	50	23
23	203	2063	17	8.4	1.9	0.0 +	0.1 (1.5)*	3	(0.2)	0	(0.0)*		7.8	2	50	23
24	273	22L	32	8.4	9.9	0.7 +	0.1 (10.7)	59	(4.2)	6			14.8	2	50	23
25	165	22L	32	8.4	19.5	0.8 +	0.1 (12.7)	98	(4.2)	6			16.9	2	50	23
26	41	22L	32	8.4	7.0	0.1 +	0.0 (1.1)	73	(0.8)	6			1.9	2	50	23
30	153	2015	24	16.7	18.9	0.6 +	0.2 (11.4)*	76	(3.0)	2			6.8	3	10	28
31	1313	4270	97	16.7	49.9	7.4 +	10.8 (258.2)*	137	(46.3)	32			154.9	3	10	28
32	334	1926S	56	10.9	4.2	0.0 +	0.4 (5.6)*	7	(0.6)	3	(0.0)*		28.5	3	34	4
33	525	2063S	68	10.9	6.2	0.1 +	0.8 (12.9)*	44	(6.0)	12	(0.1)*		75.0	3	34	4
34	268	2063	25	10.9	2.4	0.0 +	0.2 (2.5)*	4	(0.3)	0	(0.0)*		12.9	3	34	4
35	193	32L	56	10.9	14.2	0.5 +	0.2 (10.8)	61	(3.0)	3			13.8	3	34	4
36	32	32L	56	10.9	12.1	0.1 +	0.0 (1.5)	38	(0.3)	3			1.8	3	34	4
37	203	33L	68	10.9	21.8	0.9 +	0.3 (17.5)	108	(5.6)	12	+		23.1	3	34	4
40	204	1995	77	16.7	52.7	1.4 +	1.6 (42.4)*	133	(7.0)	5			25.5	4	8	15
41	407	4230	72	16.7	36.2	2.8 +	1.3 (58.2)*	110	(11.5)	8			34.9	4	8	15
42	562	1941S	95	11.7	24.9	0.5 +	3.3 (55.1)*	105	(15.2)	20	(1.8)*		370.0	4	21	2
43	751	2077S	70	11.7	5.8	0.4 +	0.9 (17.3)*	63	(12.2)	15	(0.3)*		113.2	4	21	2
44	525	42L	95	11.7	27.8	0.9 +	3.1 (57.6)	74	(10.0)	20	+		67.6	4	21	2
45	203	42L	95	11.7	21.8	0.0 +	1.2 (17.4)	35	(1.8)	20	+		19.3	4	21	2
46	268	43L	70	11.7	8.6	0.3 +	0.3 (9.1)	38	(2.6)	15	+		11.7	4	21	2
50	261	1975	72	16.7	40.4	1.7 +	1.3 (41.6)*	117	(7.9)	5			8.3	5	0	10
51	672	4250	86	16.7	39.7	4.4 +	3.0 (105.2)*	118	(20.4)	14			21.0	5	0	10
52	153	1936S	38	10.5	2.6	0.0 +	0.1 (1.6)*	16	(0.6)	3	(0.0)*		8.5	5	16	54
53	268	2072S	69	10.5	12.8	0.6 +	0.3 (13.5)*	74	(5.1)	5	(0.0)*		72.8	5	16	54
54	407	4144S	18	10.5	0.8	0.0 +	0.1 (1.3)*	1	(0.1)	0	(0.0)*		6.7	5	16	54
55	239	52L	38	10.5	4.0	0.1 +	0.2 (3.8)	14	(0.8)	3			4.7	5	16	54
56	80	52L	38	10.5	8.2	0.1 +	0.1 (2.6)	61	(1.3)	3			3.8	5	16	54
57	10	52L	38	10.5	16.4	0.0 +	0.0 (0.6)	95	(0.2)	3			0.9	5	16	54
58	662	53L	69	10.5	5.9	0.3 +	0.8 (15.5)	16	(2.7)	5			18.2	5	16	54
59	89	54L	18	10.5	2.4	0.0 +	0.0 (0.8)	10	(0.2)	0			1.1	5	16	54
60	365	2108	35	10.5	3.5	0.1 +	0.3 (5.0)	26	(2.4)	1			7.5			

60 SECOND CYCLE 60 STEPS

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	RANDOM+ OVERSAT (U+R+O=MEAN Q) (PCU-H/H)	COST OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN MAX. QUEUE (PCU)	AVERAGE EXCESS QUEUE (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	START END 2ND (SECONDS)
61	929	6000S	39	10.5	0.5	0.0 +	0.1 (1.8)	1	(0.2)	0			2.0			
62	268	61L	39	10.5	0.5	0.0 +	0.0 (0.5)	1	(0.1)	0			0.6			
63	751	61L	39	10.5	0.5	0.0 +	0.1 (1.5)	1	(0.2)	0			1.6			
64	407	61L	39	10.5	0.5	0.0 +	0.1 (0.8)	1	(0.1)	0			0.9			
191	41	14L	31	9.2	3.1	0.0 +	0.0 (0.5)	9	(0.1)	2			0.6	1	14	51
192	165	14L	31	9.2	2.0	0.0 +	0.1 (1.3)	4	(0.2)	2			1.5	1	14	51

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2350.5	131.3	17.9	37.1	39.5	(1139.2) + (88.9)	+ (98.5)	= 1326.6	TOTALS	
								ROUTE	

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	126.1	+	88.1	+	108.8	=	323.0

NO. OF ENTRIES TO SUBPT = 12
NO. OF LINKS RECALCULATED= 461

PROGRAM TRANSYT FINISHED
========== end of file ==========

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T R A N S Y T 12

Traffic Network Study Tool

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For sales and distribution information,
program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770864
Email: softwarebureau@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:- "2014 PM BASE.DAT" at 15:20 on 20141014

TRANSYT 12.0

M69 Junction 1 2014 PM Peak Base

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	= 5
NUMBER OF LINKS	= 49
NUMBER OF OPTIMISED NODES	= 5
MAXIMUM NUMBER OF GRAPHIC PLOTS	= 0
NUMBER OF STEPS IN CYCLE	= 60
MAXIMUM NUMBER OF SHARED STOPLINES	= 4
MAXIMUM NUMBER OF TIMING POINTS	= 2
MAXIMUM LINKS AT ANY NODE	= 12

CORE REQUESTED = 11409 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

CARD NO. 1 TYPE: TITLE:- M69 Junction 1 2014 PM Peak Base

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME PERIOD 1-1200 MINS.	EFFECTIVE-GREEN DISPLACEMENTS START (SEC)	END (SEC)	EQUISAT SETTINGS 0=UNEQUAL 1=YES 0=NO	FLOW CYCLE	FLOW SCALE %	CRUISE-SPEEDS SCALE 10-200 %	SCALE 50-200 %	CARD32 0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL-CLIMB OUTPUT 1=FULL	DELAY VALUE P PER PCU-H	STOP VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260	

CARD NO. 3 TYPE: LIST OF NODES TO BE OPTIMISED

3)=	2	1	2	3	4	5	0	0	0	0	0	0	0	0	0	0	

CARD NO. 4 TYPE: LINKS HAVING SHARED STOPLINES

		FIRST SET.....					SECOND SET.....						THIRD SET.....				
4)=	7	12	15	16	17	0	13	19	18	0	0	14	191	192	0	0	
5)=	7	22	24	25	26	0	32	35	36	0	0	33	37	0	0	0	
6)=	7	42	44	45	0	0	43	46	0	0	0	52	55	56	57	0	
7)=	7	53	58	0	0	0	54	59	0	0	0	61	62	63	64	0	

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
8)=	10	1	7	7								
9)=	10	2	7	7								
10)=	10	3	7	7								
11)=	10	4	7	7								
12)=	10	5	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
13)=	11	1	6	6								
14)=	11	2	6	6								
15)=	11	3	6	6								
16)=	11	4	6	6								
17)=	11	5	6	6								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
18)=	12	1	1	0	0								
19)=	12	2	1	0	0								
20)=	12	3	1	0	0								
21)=	12	4	1	0	0								
22)=	12	5	1	0	0								

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY LINKS LINK1 NO.	LINK2 NO.	LINK1 GIVEWAY COEFFS. ONLY % FLOW	A1 X100	A2 X100				LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
23)=	30	60	61	0	0	47	100	0	0	0	0	125	0	2108	0	0	

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN START STAGE	LAG	END STAGE	LAG	SECOND GREEN START STAGE	LAG	END STAGE	LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
24)=	31	10	1	1	6	2	0	0	0	0	0	200	-9999	4100	60	0
25)=	31	11	1	1	6	2	0	0	0	0	0	200	-9999	2120	60	0
26)=	31	12	1	2	6	1	0	0	0	0	0	110	0	1892	500	0
27)=	31	13	1	2	6	1	0	0	0	0	0	110	0	2029	500	0
28)=	31	14	1	2	6	1	0	0	0	0	0	110	0	2029	500	0
29)=	31	15	1	1	0	1	0	0	0	0	0	110	0	0	0	0
30)=	31	16	1	1	0	1	0	0	0	0	0	110	0	0	0	0
31)=	31	17	1	1	0	1	0	0	0	0	0	110	0	0	0	0
32)=	31	18	1	1	0	1	0	0	0	0	0	110	0	0	0	0
33)=	31	19	1	1	0	1	0	0	0	0	0	110	0	0	0	0
34)=	31	20	2	1	6	2	0	0	0	0	0	200	-9999	2015	20	0
35)=	31	21	2	1	6	2	0	0	0	0	0	200	-9999	2130	20	0
36)=	31	22	2	2	6	1	0	0	0	0	0	100	0	3989	500	0
37)=	31	23	2	2	6	1	0	0	0	0	0	100	0	2063	500	0
38)=	31	24	2	1	0	1	0	0	0	0	0	100	0	0	0	0
39)=	31	25	2	1	0	1	0	0	0	0	0	100	0	0	0	0
40)=	31	26	2	1	0	1	0	0	0	0	0	100	0	0	0	0
41)=	31	30	3	1	6	2	0	0	0	0	0	200	-9999	2015	60	0
42)=	31	31	3	1	6	2	0	0	0	0	0	200	-9999	4270	60	0
43)=	31	32	3	2	6	1	0	0	0	0	0	130	0	1926	500	0
44)=	31	33	3	2	6	1	0	0	0	0	0	130	0	2063	500	0
45)=	31	34	3	2	6	1	0	0	0	0	0	130	0	2063	500	0
46)=	31	35	3	1	0	1	0	0	0	0	0	130	0	0	0	0
47)=	31	36	3	1	0	1	0	0	0	0	0	130	0	0	0	0
48)=	31	37	3	1	0	1	0	0	0	0	0	130	0	0	0	0
49)=	31	40	4	1	6	2	0	0	0	0	0	200	-9999	1995	60	0
50)=	31	41	4	1	6	2	0	0	0	0	0	200	-9999	4230	60	0
51)=	31	42	4	2	6	1	0	0	0	0	0	140	0	1941	500	0
52)=	31	43	4	2	6	1	0	0	0	0	0	140	0	2077	500	0
53)=	31	44	4	1	0	1	0	0	0	0	0	140	0	0	0	0
54)=	31	45	4	1	0	1	0	0	0	0	0	140	0	0	0	0
55)=	31	46	4	1	0	1	0	0	0	0	0	140	0	0	0	0
56)=	31	50	5	1	6	2	0	0	0	0	0	200	-9999	1975	20	0
57)=	31	51	5	1	6	2	0	0	0	0	0	200	-9999	4250	20	0
58)=	31	52	5	2	6	1	0	0	0	0	0	125	0	1936	500	0
59)=	31	53	5	2	6	1	0	0	0	0	0	125	0	2072	500	0
60)=	31	54	5	2	6	1	0	0	0	0	0	125	0	4144	500	0
61)=	31	55	5	1	0	1	0	0	0	0	0	125	0	0	0	0
62)=	31	56	5	1	0	1	0	0	0	0	0	125	0	0	0	0
63)=	31	57	5	1	0	1	0	0	0	0	0	125	0	0	0	0
64)=	31	58	5	1	0	1	0	0	0	0	0	125	0	0	0	0
65)=	31	59	5	1	0	1	0	0	0	0	0	125	0	0	0	0
66)=	31	61	0	0	0	0	0	0	0	0	0	125	0	6000	0	0
67)=	31	62	0	0	0	0	0	0	0	0	0	125	0	0	0	0
68)=	31	63	0	0	0	0	0	0	0	0	0	125	0	0	0	0
69)=	31	64	0	0	0	0	0	0	0	0	0	125	0	0	0	0
70)=	31	191	1	1	0	1	0	0	0	0	0	110	0	0	0	0
71)=	31	192	1	1	0	1	0	0	0	0	0	110	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 2 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 3 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 4 ..... LINK NO.	FLOW	CRUISE SPEED
72)=	32	10	853	0	0	0	43	0	0	0	0	0	0	0	0	0
73)=	32	11	333	0	0	0	43	0	0	0	0	0	0	0	0	0
74)=	32	12	96	0	60	96	43	0	0	0	0	0	0	0	0	0
75)=	32	13	170	0	60	170	43	0	0	0	0	0	0	0	0	0
76)=	32	14	143	0	60	143	43	0	0	0	0	0	0	0	0	0
77)=	32	15	222	0	61	222	43	0	0	0	0	0	0	0	0	0
78)=	32	16	125	0	64	125	43	0	0	0	0	0	0	0	0	0
79)=	32	17	31	0	63	31	43	0	0	0	0	0	0	0	0	0
80)=	32	18	222	0	61	222	43	0	0	0	0	0	0	0	0	0
81)=	32	19	125	0	64	125	43	0	0	0	0	0	0	0	0	0
82)=	32	20	306	0	0	0	43	0	0	0	0	0	0	0	0	0

83)=	32	21	787	0	0	0	43	0	0	0	0	0	0	0	0	0
84)=	32	22	563	0	10	563	43	0	0	0	0	0	0	0	0	0
85)=	32	23	333	0	11	333	43	0	0	0	0	0	0	0	0	0
86)=	32	24	313	0	14	143	43	13	170	43	0	0	0	0	0	0
87)=	32	25	240	0	192	240	43	0	0	0	0	0	0	0	0	0
88)=	32	26	72	0	191	72	43	0	0	0	0	0	0	0	0	0
89)=	32	30	60	0	0	0	43	0	0	0	0	0	0	0	0	0
90)=	32	31	501	0	0	0	43	0	0	0	0	0	0	0	0	0
91)=	32	32	276	0	20	276	43	0	0	0	0	0	0	0	0	0
92)=	32	33	520	0	21	520	43	0	0	0	0	0	0	0	0	0
93)=	32	34	267	0	21	267	43	0	0	0	0	0	0	0	0	0
94)=	32	35	143	0	24	143	43	0	0	0	0	0	0	0	0	0
95)=	32	36	37	0	25	37	43	0	0	0	0	0	0	0	0	0
96)=	32	37	333	0	23	333	43	0	0	0	0	0	0	0	0	0
97)=	32	40	281	0	0	0	43	0	0	0	0	0	0	0	0	0
98)=	32	41	322	0	0	0	43	0	0	0	0	0	0	0	0	0
99)=	32	42	249	0	31	249	43	0	0	0	0	0	0	0	0	0
100)=	32	43	252	0	31	252	43	0	0	0	0	0	0	0	0	0
101)=	32	44	520	0	33	520	43	0	0	0	0	0	0	0	0	0
102)=	32	45	333	0	37	333	43	0	0	0	0	0	0	0	0	0
103)=	32	46	267	0	34	267	43	0	0	0	0	0	0	0	0	0
104)=	32	50	161	0	0	0	43	0	0	0	0	0	0	0	0	0
105)=	32	51	684	0	0	0	43	0	0	0	0	0	0	0	0	0
106)=	32	52	243	0	40	243	43	0	0	0	0	0	0	0	0	0
107)=	32	53	267	0	46	267	43	0	0	0	0	0	0	0	0	0
108)=	32	54	322	0	41	322	43	0	0	0	0	0	0	0	0	0
109)=	32	55	152	0	42	152	43	0	0	0	0	0	0	0	0	0
110)=	32	56	56	0	44	56	43	0	0	0	0	0	0	0	0	0
111)=	32	57	18	0	45	18	43	0	0	0	0	0	0	0	0	0
112)=	32	58	221	0	43	221	43	0	0	0	0	0	0	0	0	0
113)=	32	59	31	0	43	31	43	0	0	0	0	0	0	0	0	0
114)=	32	60	431	0	0	0	43	0	0	0	0	0	0	0	0	0
115)=	32	61	823	0	51	684	43	50	139	43	0	0	0	0	0	0
116)=	32	62	267	0	53	267	43	0	0	0	0	0	0	0	0	0
117)=	32	63	252	0	58	221	43	59	31	43	0	0	0	0	0	0
118)=	32	64	322	0	54	322	43	0	0	0	0	0	0	0	0	0
119)=	32	191	72	0	64	72	43	0	0	0	0	0	0	0	0	0
120)=	32	192	240	0	61	240	43	0	0	0	0	0	0	0	0	0

LINK CARDS : FLARE SATURATION FLOW DATA

	CARD TYPE	LINK NO.	..LANE 1.. SAT. FLOW	CAPAC VEH.	..LANE 2.. SAT. FLOW	CAPAC VEH.	..LANE 3.. SAT. FLOW	CAPAC VEH.
121)=	33	21	2130	5	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
122)=	38	12	10	4500	13	10	4500	14	10	4500	22	9	4500	23	7	4500
123)=	38	32	6	4500	33	10	4500	34	10	4500	42	11	4500	43	11	4500
124)=	38	52	9	4500	53	9	4500	54	18	4500	0	0	0	0	0	0

*****END OF SUBROUTINE TINPUT****

60 SECOND CYCLE 60 STEPS

INITIAL SETTINGS
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	0	28								
2	2	0	29								
3	2	0	16								
4	2	0	15								
5	2	0	25								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY UNIFORM (U+R+O=MEAN Q) (PCU-H/H)	DELAY RANDOM+ OVERSAT (U+R+O=MEAN Q) (PCU-H/H)	COST OF DELAY ($/H)	STOPS MEAN /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)
10	853	4100	54	16.7	16.9	3.4 + 0.6	(56.9)*	77	(17.0)	11		34.1	1	6	28
11	333	2120	41	16.7	17.3	1.3 + 0.3	(22.7)*	75	(6.4)	4		13.6	1	6	28
12	96	1892S	56	9.2	15.4	0.3 + 0.1	(5.8)*	73	(1.8)	5	(0.0)*	31.1	1	34	0
13	170	2029S	57	9.2	15.5	0.5 + 0.2	(10.4)*	74	(3.2)	6	(0.0)*	55.2	1	34	0
14	143	2029S	50	9.2	14.8	0.4 + 0.2	(8.3)*	73	(2.7)	6	(0.0)*	44.3	1	34	0
15	222	12L	56	9.2	12.6	0.5 + 0.3	(11.1)	94	(5.4)	5		16.4	1	34	0
16	125	12L	56	9.2	6.9	0.1 + 0.2	(3.4)	15	(0.5)	5		3.9	1	34	0
17	31	12L	56	9.2	10.9	0.1 + 0.0	(1.3)	29	(0.2)	5		1.6	1	34	0
18	222	13L	57	9.2	12.9	0.5 + 0.3	(11.3)	95	(5.5)	6		16.8	1	34	0
19	125	13L	57	9.2	6.7	0.1 + 0.2	(3.3)	15	(0.5)	6		3.8	1	34	0
20	306	2015	38	16.7	16.3	1.1 + 0.3	(19.7)*	72	(5.7)	4		3.9	2	6	29
21	787	2880f	68	16.7	18.2	2.9 + 1.1	(56.4)*	77	(15.6)	11		11.3	2	6	29
22	563	3989S	69	8.4	22.2	3.0 + 0.5	(49.4)*	105	(15.2)	18	(1.5)*	330.0	2	35	0
23	333	2063	37	8.4	22.4	1.8 + 0.3	(29.4)*	105	(9.0)	6	(0.0)*	156.2	2	35	0
24	313	22L	69	8.4	9.3	0.5 + 0.3	(11.5)	56	(4.6)	18	+	16.0	2	35	0
25	240	22L	69	8.4	4.8	0.1 + 0.2	(4.6)	45	(2.8)	18	+	7.4	2	35	0
26	72	22L	69	8.4	16.4	0.3 + 0.1	(4.7)	52	(1.0)	18	+	5.6	2	35	0
30	60	2015	16	16.7	26.5	0.3 + 0.1	(6.3)*	90	(1.4)	1		3.8	3	6	16
31	501	4270	64	16.7	29.0	3.2 + 0.9	(57.4)*	99	(12.7)	9		34.4	3	6	16
32	276	1926S	36	10.9	6.8	0.4 + 0.2	(7.4)*	72	(5.1)	5	(0.0)*	42.3	3	22	0
33	519	2063S	64	10.9	8.6	0.7 + 0.5	(17.6)*	82	(11.0)	9	(0.0)*	98.8	3	22	0
34	268	2063	20	10.9	4.0	0.2 + 0.1	(4.2)*	52	(3.6)	3	(0.0)*	24.5	3	22	0
35	143	32L	36	10.9	8.7	0.3 + 0.1	(4.9)	41	(1.5)	5		6.4	3	22	0
36	37	32L	36	10.9	10.0	0.1 + 0.0	(1.5)	47	(0.4)	5		1.9	3	22	0
37	333	33L	64	10.9	4.4	0.1 + 0.3	(5.8)	10	(0.9)	9		6.7	3	22	0
40	281	1995	85	16.7	56.1	1.9 + 2.5	(62.2)*	139	(10.1)	7		37.3	4	6	15
41	322	4230	46	16.7	27.3	2.0 + 0.4	(34.6)*	94	(7.8)	5		20.8	4	6	15
42	249	1941S	85	11.7	18.5	0.7 + 0.6	(18.2)*	111	(7.1)	19	(1.1)*	149.4	4	21	0
43	252	2077S	37	11.7	4.2	0.1 + 0.1	(4.1)*	58	(3.8)	4	(0.0)*	24.5	4	21	0
44	519	42L	85	11.7	10.9	0.3 + 1.3	(22.2)	65	(8.7)	19	+	31.0	4	21	0
45	333	42L	85	11.7	22.3	1.2 + 0.8	(29.2)	90	(7.7)	19	+	37.0	4	21	0
46	268	43L	37	11.7	2.3	0.0 + 0.2	(2.4)	5	(0.3)	4		2.7	4	21	0
50	161	1975	24	16.7	18.2	0.7 + 0.2	(11.5)*	75	(3.1)	2		2.3	5	6	25
51	684	4250	48	16.7	18.4	3.0 + 0.5	(49.5)*	79	(13.9)	9		9.9	5	6	25
52	243	1936S	48	10.5	17.8	1.0 + 0.2	(17.0)*	105	(6.6)	5	(0.0)*	91.7	5	31	0
53	268	2072S	47	10.5	6.2	0.2 + 0.2	(6.6)*	17	(1.2)	3	(0.0)*	34.1	5	31	0
54	322	4144S	17	10.5	15.1	1.3 + 0.1	(19.1)*	101	(8.4)	6	(0.0)*	103.9	5	31	0
55	152	52L	48	10.5	4.0	0.0 + 0.2	(2.4)	17	(0.7)	5		3.0	5	31	0
56	56	52L	48	10.5	8.6	0.1 + 0.1	(1.9)	26	(0.4)	5		2.3	5	31	0
57	18	52L	48	10.5	11.7	0.0 + 0.0	(0.8)	79	(0.4)	5		1.2	5	31	0
58	220	53L	47	10.5	3.8	0.0 + 0.2	(3.3)	23	(1.3)	3		4.6	5	31	0
59	31	54L	17	10.5	2.5	0.0 + 0.0	(0.3)	36	(0.3)	6		0.6	5	31	0
60	431	2108	32	10.5	2.4	0.0 + 0.2	(4.0)	18	(2.0)	1		6.1			

60 SECOND CYCLE 60 STEPS

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	COST OF DELAY ($/H)	STOPS MEAN /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	END 1ST (SECONDS)	END 2ND (SECONDS)
61	823	6000S	28	10.5	0.4	0.0 + 0.1 (1.3)	1	(0.1)	0			1.5					
62	268	61L	28	10.5	0.4	0.0 + 0.0 (0.4)	1	(0.0)	0			0.5					
63	251	61L	28	10.5	0.4	0.0 + 0.0 (0.4)	1	(0.0)	0			0.5					
64	322	61L	28	10.5	0.4	0.0 + 0.0 (0.5)	1	(0.1)	0			0.6					
191	72	14L	50	9.2	6.1	0.0 + 0.1 (1.7)	14	(0.3)	6			2.0	1	34	0		
192	240	14L	50	9.2	12.1	0.5 + 0.3 (11.4)	94	(5.8)	6			17.2	1	34	0		

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2026.2	97.9	20.7	34.9	15.8	(1305.6) + (129.9)	+ (119.0)	= 1554.5	TOTALS	

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	108.7	+	58.4	+	101.9	=	269.0

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 49

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

1	2	9	37
2	2	0	29
3	2	0	16
4	2	9	24
5	2	0	25

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2026.2	97.4	20.8	34.5	15.8	(1168.0) + (133.3)	+ (72.4)	= 1373.7	TOTALS	

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 368

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

1	2	9	37
2	2	0	29
3	2	24	40
4	2	9	24
5	2	0	25

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2026.2	98.8	20.5	35.8	15.8	(1174.3) + (126.0)	+ (53.4)	= 1353.8	TOTALS	

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 390

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

1	2	18	37
2	2	59	21
3	2	27	40
4	2	10	24
5	2	9	25

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2026.2	108.7	18.6	33.5	28.0	(771.0) + (81.9)	+ (0.1)	= 852.9	TOTALS	

NO. OF ENTRIES TO SUBPT = 48
NO. OF LINKS RECALCULATED= 1227

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1	2	18	37
2	2	59	21
3	2	27	40
4	2	10	24
5	2	9	25

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2026.2	108.7	18.6	33.5	28.0	(771.0) + (	81.9) + (	0.1) =	852.9	TOTALS

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 420

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1	2	18	37
2	2	59	21
3	2	27	40
4	2	10	24
5	2	45	1

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2026.2	109.0	18.6	33.8	28.0	(771.3) + (	73.7) + (	0.1) =	845.1	TOTALS

NO. OF ENTRIES TO SUBPT = 12
NO. OF LINKS RECALCULATED= 452

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1	2	21	40
2	2	56	18
3	2	30	43
4	2	9	23
5	2	45	1

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2026.2	108.8	18.6	33.6	28.0	(721.9) + (	75.1) + (	7.1) =	804.1	TOTALS

NO. OF ENTRIES TO SUBPT = 19
NO. OF LINKS RECALCULATED= 652

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1	2	20	40
2	2	57	18
3	2	30	43
4	2	9	23
5	2	45	1

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2026.2	108.5	18.7	33.6	27.7	(718.8) + (	75.1) + (	4.9) =	798.8	TOTALS

NO. OF ENTRIES TO SUBPT = 20
NO. OF LINKS RECALCULATED= 711

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	20	40								
2	2	57	18								
3	2	29	42								
4	2	9	23								
5	2	44	0								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN MAX. QUEUE (PCU)	AVERAGE EXCESS QUEUE (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	START END 2ND (SECONDS)
10	853	4100	83	16.7	31.5	5.0 + 2.4	(106.0)*	106	(23.3)	16		63.6	1	26	40
11	333	2120	63	16.7	29.1	1.9 + 0.8	(38.2)*	99	(8.5)	6		22.9	1	26	40
12	96	1892S	43	9.2	9.7	0.2 + 0.1	(3.7)*	54	(1.3)	4	(0.0)*	19.6	1	46	20
13	170	2029S	44	9.2	9.4	0.3 + 0.1	(6.3)*	54	(2.3)	4	(0.0)*	34.0	1	46	20
14	143	2029S	38	9.2	9.0	0.3 + 0.1	(5.1)*	51	(1.9)	3	(0.0)*	27.3	1	46	20
15	222	12L	43	9.2	5.4	0.2 + 0.2	(4.7)	16	(0.9)	4		5.7	1	46	20
16	125	12L	43	9.2	6.4	0.1 + 0.1	(3.2)	66	(2.1)	4		5.3	1	46	20
17	31	12L	43	9.2	18.7	0.1 + 0.0	(2.3)	104	(0.8)	4		3.1	1	46	20
18	222	13L	44	9.2	5.2	0.2 + 0.2	(4.6)	16	(0.9)	4		5.5	1	46	20
19	125	13L	44	9.2	6.1	0.1 + 0.1	(3.0)	65	(2.1)	4		5.1	1	46	20
20	306	2015	57	16.7	26.8	1.6 + 0.7	(32.3)*	94	(7.4)	5		6.5	2	3	18
21	787	3255f	91	16.7	40.0	4.4 + 4.4	(124.1)*	119	(24.1)	17		24.8	2	3	18
22	563	3989S	53	8.4	1.7	0.0 + 0.3	(3.8)*	3	(0.4)	8	(0.0)*	19.3	2	24	57
23	333	2063	28	8.4	2.2	0.0 + 0.2	(2.8)*	4	(0.3)	0	(0.0)*	14.6	2	24	57
24	313	22L	53	8.4	10.5	0.8 + 0.1	(13.0)	57	(4.6)	8		17.6	2	24	57
25	240	22L	53	8.4	8.0	0.4 + 0.1	(7.6)	81	(5.0)	8		12.6	2	24	57
26	72	22L	53	8.4	12.8	0.2 + 0.0	(3.6)	52	(1.0)	8		4.6	2	24	57
30	60	2015	22	16.7	31.9	0.4 + 0.1	(7.6)*	99	(1.5)	1		4.5	3	35	42
31	501	4270	88	16.7	49.5	3.6 + 3.3	(97.9)*	130	(16.8)	11		58.7	3	35	42
32	276	1926S	34	10.9	2.7	0.1 + 0.2	(3.0)*	8	(0.6)	2	(0.0)*	15.4	3	48	29
33	519	2063S	59	10.9	4.2	0.2 + 0.4	(8.5)*	23	(3.1)	6	(0.0)*	45.7	3	48	29
34	268	2063	19	10.9	2.4	0.1 + 0.1	(2.5)*	8	(0.6)	0	(0.0)*	13.2	3	48	29
35	143	32L	34	10.9	8.7	0.3 + 0.1	(4.9)	61	(2.2)	2		7.1	3	48	29
36	37	32L	34	10.9	11.1	0.1 + 0.0	(1.6)	89	(0.8)	2		2.5	3	48	29
37	333	33L	59	10.9	5.9	0.3 + 0.3	(7.8)	67	(5.8)	6		13.6	3	48	29
40	281	1995	94	16.7	89.0	2.0 + 5.0	(98.7)*	177	(12.8)	10		59.2	4	15	23
41	322	4230	51	16.7	29.2	2.1 + 0.5	(37.1)*	98	(8.1)	5		22.3	4	15	23
42	249	1941S	83	11.7	8.0	0.0 + 0.5	(7.9)*	16	(1.0)	12	(0.1)*	43.9	4	29	9
43	252	2077S	37	11.7	2.1	0.0 + 0.1	(2.1)*	4	(0.2)	2	(0.0)*	10.5	4	29	9
44	519	42L	83	11.7	13.0	0.7 + 1.1	(26.7)	93	(12.4)	12	+	39.1	4	29	9
45	333	42L	83	11.7	12.1	0.4 + 0.7	(15.9)	40	(3.4)	12	+	19.3	4	29	9
46	268	43L	37	11.7	2.8	0.1 + 0.1	(3.0)	25	(1.7)	2		4.7	4	29	9
50	161	1975	44	16.7	30.7	1.0 + 0.4	(19.5)*	99	(4.1)	3		3.9	5	50	0
51	684	4250	88	16.7	41.5	4.5 + 3.4	(112.0)*	120	(21.2)	14		22.4	5	50	0
52	243	1936S	37	10.5	2.4	0.0 + 0.2	(2.3)*	4	(0.3)	3	(0.0)*	11.6	5	6	44
53	268	2072S	36	10.5	9.8	0.6 + 0.2	(10.4)*	50	(3.4)	6	(0.0)*	55.3	5	6	44
54	322	4144S	13	10.5	0.8	0.0 + 0.1	(1.0)*	2	(0.1)	0	(0.0)*	5.3	5	6	44
55	152	52L	37	10.5	9.4	0.3 + 0.1	(5.6)	88	(3.5)	3		9.1	5	6	44
56	56	52L	37	10.5	13.7	0.2 + 0.0	(3.0)	81	(1.2)	3		4.2	5	6	44
57	18	52L	37	10.5	3.1	0.0 + 0.0	(0.2)	13	(0.1)	3		0.3	5	6	44
58	220	53L	36	10.5	11.8	0.6 + 0.1	(10.2)	96	(5.5)	6		15.7	5	6	44
59	31	54L	13	10.5	5.5	0.0 + 0.0	(0.7)	67	(0.5)	0		1.2	5	6	44
60	431	2108	33	10.5	2.6	0.1 + 0.2	(4.4)	16	(1.7)	1		6.2			

60 SECOND CYCLE 60 STEPS

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN MAX. QUEUE (PCU)	AVERAGE EXCESS QUEUE (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	START END 2ND (SECONDS)
61	823	6000S	28	10.5	0.4	0.0 + 0.1	(1.3)	1	(0.1)	0		1.5			
62	267	61L	28	10.5	0.4	0.0 + 0.0	(0.4)	1	(0.0)	0		0.5			
63	251	61L	28	10.5	0.4	0.0 + 0.0	(0.4)	1	(0.0)	0		0.5			
64	322	61L	28	10.5	0.4	0.0 + 0.0	(0.5)	1	(0.1)	0		0.6			
191	72	14L	38	9.2	5.2	0.1 + 0.0	(1.5)	55	(1.0)	3		2.5	1	46	20
192	240	14L	38	9.2	5.0	0.2 + 0.2	(4.7)	16	(1.0)	3		5.7	1	46	20

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2026.2	108.2	18.7	33.4	27.7	(720.5) + (	74.2) + (	3.6) =	798.2	TOTALS

ROUTE

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	108.7	+	70.3	+	92.1	=	271.0

NO. OF ENTRIES TO SUBPT = 13
NO. OF LINKS RECALCULATED= 472

PROGRAM TRANSYT FINISHED
========== end of file ==========

Printed at 11:00:31 on 29/04/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 3.0 (JUNE 2005)

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TRL Limited Tel: +44 (0) 1344 770018
Crowthorne House Fax: +44 (0) 1344 770864
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Run with file:-
"j:\Bedford-Jobs\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\
Gibbet Hill\am2014base.vai"
(drive-on-the-left) at 12:21:20 on Thursday, 31 July 2014

FILE PROPERTIES

RUN TITLE: Gibbet Hill Roundabout AM Peak 2014 Base Flows
LOCATION: Gibbet Hill Roundabout
DATE: 31/07/2014
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - Gibbet Lane
ARM B - A5 South
ARM C - A426 South
ARM D - A5 North
ARM E - Rugby Road

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	2.90	8.00	10.00	19.00	66.00	68.0	0.421	21.146
ARM B	4.70	7.30	25.00	24.00	70.00	40.0	0.540	32.695
ARM C	3.65	6.90	20.00	44.00	70.00	56.0	0.481	27.373
ARM D	4.00	8.80	36.00	15.00	70.00	54.0	0.530	33.487
ARM E	3.65	7.20	27.00	100.00	70.00	52.0	0.511	29.895

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM D: Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

(Only sets included in the current run are shown)

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100
E	100

TIME PERIOD BEGINS 07.15 AND ENDS 08.45

LENGTH OF TIME PERIOD - 90 MINUTES.
LENGTH OF TIME SEGMENT - 15 MINUTES.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	1.13	1.69	1.13
ARM B	15.00	45.00	75.00	6.15	9.23	6.15
ARM C	15.00	45.00	75.00	11.02	16.54	11.02
ARM D	15.00	45.00	75.00	11.35	17.03	11.35
ARM E	15.00	45.00	75.00	7.79	11.68	7.79

DEMAND SET TITLE: AM Peak 2006 Base Flows

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D	ARM E
07.15 - 08.45						
	ARM A	0.000	0.144	0.456	0.167	0.233
		0.0	13.0	41.0	15.0	21.0
		(28.9)	(28.9)	(28.9)	(28.9)	(28.9)
	ARM B	0.041	0.000	0.152	0.593	0.213
		20.0	0.0	75.0	292.0	105.0
		(22.4)	(22.4)	(22.4)	(22.4)	(22.4)
	ARM C	0.029	0.112	0.000	0.373	0.485
		26.0	99.0	0.0	329.0	428.0
		(10.7)	(10.7)	(10.7)	(10.7)	(10.7)
	ARM D	0.015	0.474	0.502	0.000	0.009
		14.0	430.0	456.0	0.0	8.0
		(11.7)	(11.7)	(11.7)	(11.7)	(11.7)
	ARM E	0.042	0.220	0.735	0.003	0.000
		26.0	137.0	458.0	2.0	0.0
		(10.3)	(10.3)	(10.3)	(10.3)	(10.3)

TURNING PROPORTIONS
TURNING COUNTS (VEH/HR)
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	1.13	9.26	0.121		0.0	0.1	2.0		0.12
ARM B	6.15	20.59	0.299		0.0	0.4	6.2		0.07
ARM C	11.02	21.70	0.508		0.0	1.0	14.7		0.09
ARM D	11.35	25.30	0.449		0.0	0.8	11.7		0.07
ARM E	7.79	20.37	0.382		0.0	0.6	8.9		0.08

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
ARM A	1.34	7.86	0.171		0.1	0.2	3.0		0.15
ARM B	7.34	19.37	0.379		0.4	0.6	8.9		0.08
ARM C	13.16	21.11	0.624		1.0	1.6	23.3		0.12
ARM D	13.55	24.38	0.556		0.8	1.2	17.9		0.09
ARM E	9.30	19.04	0.488		0.6	0.9	13.7		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
ARM A	1.65	5.97	0.276		0.2	0.4	5.3		0.23
ARM B	8.99	17.75	0.507		0.6	1.0	14.6		0.11
ARM C	16.12	20.30	0.794		1.6	3.6	48.8		0.23
ARM D	16.60	23.15	0.717		1.2	2.4	34.4		0.15
ARM E	11.39	17.25	0.660		0.9	1.9	26.5		0.17

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	1.65	5.91	0.278		0.4	0.4	5.7		0.23
ARM B	8.99	17.71	0.508		1.0	1.0	15.3		0.11
ARM C	16.12	20.28	0.795		3.6	3.7	55.2		0.24
ARM D	16.60	23.11	0.718		2.4	2.5	37.2		0.15
ARM E	11.39	17.21	0.662		1.9	1.9	28.6		0.17

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
ARM A	1.34	7.78	0.173		0.4	0.2	3.3		0.16
ARM B	7.34	19.31	0.380		1.0	0.6	9.6		0.08
ARM C	13.16	21.08	0.624		3.7	1.7	27.1		0.13
ARM D	13.55	24.31	0.557		2.5	1.3	20.0		0.09
ARM E	9.30	18.97	0.490		1.9	1.0	15.2		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
ARM A	1.13	9.21	0.122		0.2	0.1	2.2		0.12
ARM B	6.15	20.53	0.299		0.6	0.4	6.6		0.07
ARM C	11.02	21.68	0.508		1.7	1.0	16.3		0.09
ARM D	11.35	25.26	0.449		1.3	0.8	12.7		0.07
ARM E	7.79	20.31	0.383		1.0	0.6	9.7		0.08

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.1	
07.45	0.2	
08.00	0.4	
08.15	0.4	
08.30	0.2	
08.45	0.1	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.4	
07.45	0.6	*
08.00	1.0	*
08.15	1.0	*
08.30	0.6	*
08.45	0.4	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.0	*
07.45	1.6	**
08.00	3.6	****
08.15	3.7	****
08.30	1.7	**
08.45	1.0	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.8	*
07.45	1.2	*
08.00	2.4	**
08.15	2.5	***
08.30	1.3	*
08.45	0.8	*

QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.6	*
07.45	0.9	*
08.00	1.9	**
08.15	1.9	**
08.30	1.0	*
08.45	0.6	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	123.4	82.3	21.4	0.17	21.4	0.17
B	674.6	449.8	61.1	0.09	61.1	0.09
C	1209.4	806.3	185.4	0.15	185.4	0.15
D	1245.1	830.0	133.9	0.11	133.9	0.11
E	854.3	569.5	102.6	0.12	102.6	0.12
ALL	4106.8	2737.9	504.4	0.12	504.4	0.12

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 10:48:25 on 29/04/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 3.0 (JUNE 2005)

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program advice and maintenance, contact:

TRL Limited Tel: +44 (0) 1344 770018
Crowthorne House Fax: +44 (0) 1344 770864
Nine Mile Ride Email: softwarebureau@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk
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Run with file:-
"j:\Bedford-Jobs\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\
Gibbet Hill\pm2014base.vai"
(drive-on-the-left) at 12:29:35 on Thursday, 31 July 2014

FILE PROPERTIES

RUN TITLE: Gibbet Hill Roundabout PM Peak 2014 Base Flows
LOCATION: Gibbet Hill Roundabout
DATE: 31/07/2014
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - Gibbet Lane
ARM B - A5 South
ARM C - A426 South
ARM D - A5 North
ARM E - Rugby Road

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	2.90	8.00	10.00	19.00	66.00	68.0	0.421	21.146
ARM B	4.70	7.30	25.00	24.00	70.00	40.0	0.540	32.695
ARM C	3.65	6.90	20.00	44.00	70.00	56.0	0.481	27.373
ARM D	4.00	8.80	36.00	15.00	70.00	54.0	0.530	33.487
ARM E	3.65	7.20	27.00	100.00	70.00	52.0	0.511	29.895

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM D: Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

(Only sets included in the current run are shown)

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100
E	100

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MINUTES.
LENGTH OF TIME SEGMENT - 15 MINUTES.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	1.13	1.69	1.13
ARM B	15.00	45.00	75.00	8.40	12.60	8.40
ARM C	15.00	45.00	75.00	11.71	17.57	11.71
ARM D	15.00	45.00	75.00	8.04	12.06	8.04
ARM E	15.00	45.00	75.00	7.95	11.92	7.95

DEMAND SET TITLE: AM Peak 2006 Base Flows

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D	ARM E
16.45 - 18.15						
	ARM A	0.000	0.167	0.400	0.233	0.200
		0.0	15.0	36.0	21.0	18.0
		(1.1)	(1.1)	(1.1)	(1.1)	(1.1)
	ARM B	0.027	0.013	0.097	0.629	0.234
		18.0	9.0	65.0	423.0	157.0
		(9.2)	(9.2)	(9.2)	(9.2)	(9.2)
	ARM C	0.051	0.079	0.000	0.350	0.520
		48.0	74.0	0.0	328.0	487.0
		(9.7)	(9.7)	(9.7)	(9.7)	(9.7)
	ARM D	0.020	0.446	0.526	0.000	0.008
		13.0	287.0	338.0	0.0	5.0
		(9.5)	(9.5)	(9.5)	(9.5)	(9.5)
	ARM E	0.039	0.231	0.711	0.019	0.000
		25.0	147.0	452.0	12.0	0.0
		(7.6)	(7.6)	(7.6)	(7.6)	(7.6)

TURNING PROPORTIONS
TURNING COUNTS (VEH/HR)
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	1.13	13.49	0.083		0.0	0.1	1.3		0.08
ARM B	8.40	24.12	0.348		0.0	0.5	7.8		0.06
ARM C	11.71	21.05	0.557		0.0	1.2	17.6		0.11
ARM D	8.04	25.24	0.318		0.0	0.5	6.8		0.06
ARM E	7.95	22.68	0.350		0.0	0.5	7.8		0.07

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	1.34	12.03	0.112		0.1	0.1	1.8		0.09
ARM B	10.03	22.97	0.437		0.5	0.8	11.3		0.08
ARM C	13.99	20.28	0.690		1.2	2.2	30.4		0.16
ARM D	9.60	24.19	0.397		0.5	0.7	9.6		0.07
ARM E	9.49	21.68	0.438		0.5	0.8	11.3		0.08

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
ARM A	1.65	10.05	0.164		0.1	0.2	2.8		0.12
ARM B	12.28	21.41	0.574		0.8	1.3	19.1		0.11
ARM C	17.13	19.23	0.891		2.2	6.6	82.0		0.38
ARM D	11.75	22.84	0.515		0.7	1.0	15.2		0.09
ARM E	11.63	20.33	0.572		0.8	1.3	18.9		0.11

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
ARM A	1.65	10.01	0.164		0.2	0.2	2.9		0.12
ARM B	12.28	21.39	0.574		1.3	1.3	20.0		0.11
ARM C	17.13	19.22	0.891		6.6	7.3	104.8		0.45
ARM D	11.75	22.74	0.517		1.0	1.1	15.9		0.09
ARM E	11.63	20.30	0.573		1.3	1.3	19.8		0.12

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
ARM A	1.34	11.97	0.112		0.2	0.1	2.0		0.09
ARM B	10.03	22.94	0.437		1.3	0.8	12.1		0.08
ARM C	13.99	20.25	0.691		7.3	2.3	39.6		0.18
ARM D	9.60	24.05	0.399		1.1	0.7	10.3		0.07
ARM E	9.49	21.63	0.439		1.3	0.8	12.2		0.08

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
ARM A	1.13	13.44	0.084		0.1	0.1	1.4		0.08
ARM B	8.40	24.08	0.349		0.8	0.5	8.3		0.06
ARM C	11.71	21.02	0.557		2.3	1.3	20.0		0.11
ARM D	8.04	25.18	0.319		0.7	0.5	7.2		0.06
ARM E	7.95	22.65	0.351		0.8	0.5	8.3		0.07

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.2
17.45	0.2
18.00	0.1
18.15	0.1

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.5	*
17.15	0.8	*
17.30	1.3	*
17.45	1.3	*
18.00	0.8	*
18.15	0.5	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.2	*
17.15	2.2	**
17.30	6.6	*******
17.45	7.3	*******
18.00	2.3	**
18.15	1.3	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.5	
17.15	0.7	*
17.30	1.0	*
17.45	1.1	*
18.00	0.7	*
18.15	0.5	

QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.5	*
17.15	0.8	*
17.30	1.3	*
17.45	1.3	*
18.00	0.8	*
18.15	0.5	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	123.4	82.3	12.3	0.10	12.3	0.10
B	921.5	614.3	78.4	0.09	78.4	0.09
C	1284.8	856.5	294.5	0.23	294.5	0.23
D	881.7	587.8	65.0	0.07	65.0	0.07
E	872.1	581.4	78.4	0.09	78.4	0.09
ALL	4083.5	2722.3	528.6	0.13	528.6	0.13

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 10:49:46 on 29/04/2015]

T R A N S Y T 12

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770864
Email: softwarebureau@trl.co.uk
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Run with file:- "2014 AM BASE.DAT" at 15:22 on 20141014

TRANSYT 12.0

M6 Junction 1 2014 AM Peak Base Flows

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	= 2
NUMBER OF LINKS	= 18
NUMBER OF OPTIMISED NODES	= 2
MAXIMUM NUMBER OF GRAPHIC PLOTS	= 0
NUMBER OF STEPS IN CYCLE	= 60
MAXIMUM NUMBER OF SHARED STOPLINES	= 3
MAXIMUM NUMBER OF TIMING POINTS	= 2
MAXIMUM LINKS AT ANY NODE	= 6

CORE REQUESTED = 6891 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

(1)= TITLE:- M6 Junction 1 2014 AM Peak Base Flows

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME PERIOD 1-1200 MINS.	EFFECTIVE-GREEN DISPLACEMENTS START (SEC)	EFFECTIVE-GREEN DISPLACEMENTS END (SEC)	EQUISAT 0=UNEQUAL SETTINGS 0=NO 1=YES	FLOW CYCLE 1=EQUAL CYCLE	SCALE %	CRUISE-SPEEDS SCALE %	CARD32 0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL-CLIMB 1=FULL OUTPUT	DELAY VALUE P PER PCU-H	STOP VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260

CARD NO.	CARD TYPE	LIST OF NODES TO BE OPTIMISED													
3)=	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET.....				SECOND SET.....				THIRD SET.....				
4)=	7	12	14	0	0	0	13	15	0	0	0	21	22	23	0	0
5)=	7	32	34	0	0	0	41	42	0	0	0	0	0	0	0	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
6)=	10	1	7	7								
7)=	10	3	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
8)=	11	1	7	7								
9)=	11	3	7	7								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
10)=	12	1	1	0	0								
11)=	12	3	1	0	0								

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY LINKS LINK1 NO.	PRIORITY LINKS LINK2 NO.	LINK1 GIVEWAY COEFFS. ONLY % FLOW	A1 X100	A2 X100				LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
12)=	30	20	21	0	0	51	100	0	0	0	0	200	0	2207	0	0
13)=	30	40	41	0	0	51	100	0	0	0	0	200	0	2197	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN START STAGE	FIRST GREEN START LAG	FIRST GREEN END STAGE	FIRST GREEN END LAG	SECOND GREEN START STAGE	SECOND GREEN START LAG	SECOND GREEN END STAGE	SECOND GREEN END LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
14)=	31	10	1	1	7	2	0	0	0	0	0	200	-9999	1945	60	0
15)=	31	11	1	1	7	2	0	0	0	0	0	200	-9999	4170	60	0
16)=	31	12	1	2	7	1	0	0	0	0	0	158	0	3885	500	0
17)=	31	13	1	2	7	1	0	0	0	0	0	158	0	2010	500	0
18)=	31	14	1	1	0	1	0	0	0	0	0	158	0	0	0	0
19)=	31	15	1	1	0	1	0	0	0	0	0	158	0	0	0	0
20)=	31	21	0	0	0	0	0	0	0	0	0	84	0	4000	0	0
21)=	31	22	0	0	0	0	0	0	0	0	0	84	0	0	0	0
22)=	31	23	0	0	0	0	0	0	0	0	0	84	0	0	0	0
23)=	31	30	3	1	7	2	0	0	0	0	0	200	-9999	1945	60	0
24)=	31	31	3	1	7	2	0	0	0	0	0	200	-9999	4170	60	0
25)=	31	32	3	2	7	1	0	0	0	0	0	147	0	3896	500	0
26)=	31	33	3	2	7	1	0	0	0	0	0	147	0	2016	500	0
27)=	31	34	3	1	0	1	0	0	0	0	0	147	0	0	0	0
28)=	31	41	0	0	0	0	0	0	0	0	0	84	0	4000	0	0
29)=	31	42	0	0	0	0	0	0	0	0	0	84	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 ..... LINK NO.	ENTRY 1 ..... CRUISE FLOW	ENTRY 1 ..... CRUISE SPEED	ENTRY 2 ..... LINK NO.	ENTRY 2 ..... CRUISE FLOW	ENTRY 2 ..... CRUISE SPEED	ENTRY 3 ..... LINK NO.	ENTRY 3 ..... CRUISE FLOW	ENTRY 3 ..... CRUISE SPEED	ENTRY 4 ..... LINK NO.	ENTRY 4 ..... CRUISE FLOW	ENTRY 4 ..... CRUISE SPEED
30)=	32	10	313	0	0	0	43	0	0	0	0	0	0	0	0	0
31)=	32	11	756	0	0	0	43	0	0	0	0	0	0	0	0	0
32)=	32	12	646	0	40	646	43	0	0	0	0	0	0	0	0	0
33)=	32	13	179	0	40	179	43	0	0	0	0	0	0	0	0	0
34)=	32	14	31	0	41	31	43	0	0	0	0	0	0	0	0	0
35)=	32	15	77	0	41	77	43	0	0	0	0	0	0	0	0	0
36)=	32	20	1221	0	0	0	43	0	0	0	0	0	0	0	0	0
37)=	32	21	756	0	11	756	43	0	0	0	0	0	0	0	0	0
38)=	32	22	77	0	15	77	43	0	0	0	0	0	0	0	0	0
39)=	32	23	179	0	13	179	43	0	0	0	0	0	0	0	0	0
40)=	32	30	262	0	0	0	43	0	0	0	0	0	0	0	0	0
41)=	32	31	283	0	0	0	43	0	0	0	0	0	0	0	0	0
42)=	32	32	878	0	20	878	43	0	0	0	0	0	0	0	0	0
43)=	32	33	301	0	20	301	43	0	0	0	0	0	0	0	0	0
44)=	32	34	756	0	21	756	43	0	0	0	0	0	0	0	0	0
45)=	32	40	1499	0	0	0	43	0	0	0	0	0	0	0	0	0
46)=	32	41	108	0	31	108	43	0	0	0	0	0	0	0	0	0
47)=	32	42	301	0	33	301	43	0	0	0	0	0	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
48)=	38	12	28	4500	13	14	4500	32	24	4500	33	12	4500	0	0	0

*****END OF SUBROUTINE TINPUT*****

60 SECOND CYCLE 60 STEPS

INITIAL SETTINGS
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	0	30								
3	2	0	18								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) UNIFORM (PCU-H/H)	RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	STOPS MEAN /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)
10	313	1945	40	16.7	16.7	1.1 +	0.3	(20.7)*	73	(5.9)	4		12.4	1	7	30
11	756	4170	45	16.7	15.2	2.8 +	0.4	(45.2)*	72	(14.0)	9		27.1	1	7	30
12	645	3885S	43	13.2	15.1	2.3 +	0.4	(38.4)*	71	(11.9)	9	(0.0)*	204.0	1	37	0
13	180	2010S	32	13.2	15.5	0.6 +	0.2	(11.0)*	71	(3.3)	4	(0.0)*	58.5	1	37	0
14	31	12L	43	13.2	13.2	0.1 +	0.0	(1.6)	98	(0.8)	9		2.4	1	37	0
15	77	13L	32	13.2	13.0	0.2 +	0.1	(4.0)	97	(1.9)	4		5.9	1	37	0
20	1221	2207	72	16.7	4.7	0.3 +	1.3	(22.7)	28	(8.7)	8		31.4			
21	756	4000S	25	7.0	0.6	0.0 +	0.1	(1.8)	1	(0.2)	0		2.0			
22	77	21L	25	7.0	0.6	0.0 +	0.0	(0.2)	1	(0.0)	0		0.2			
23	180	21L	25	7.0	0.6	0.0 +	0.0	(0.4)	1	(0.0)	0		0.5			
30	262	1945	67	16.7	36.2	1.6 +	1.0	(37.4)*	110	(7.4)	5		22.4	3	7	18
31	283	4170	34	16.7	23.9	1.6 +	0.3	(26.7)*	87	(6.4)	4		16.0	3	7	18
32	879	3896S	70	12.3	9.2	1.6 +	0.6	(32.0)*	62	(14.0)	22	(0.0)*	174.1	3	25	0
33	300	2016	25	12.3	7.6	0.5 +	0.2	(9.0)*	45	(3.5)	2	(0.0)*	48.5	3	25	0
34	756	32L	70	12.3	5.6	0.6 +	0.5	(16.6)	66	(12.9)	22		29.6	3	25	0
40	1499	2197	75	16.7	3.7	0.0 +	1.5	(21.6)	6	(2.3)	2		24.0			
41	108	4000S	10	7.0	0.5	0.0 +	0.0	(0.2)	1	(0.0)	0		0.2			
42	300	41L	10	7.0	0.5	0.0 +	0.0	(0.6)	1	(0.1)	0		0.7			

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1418.0	53.4	26.5	13.4	7.0	(600.1) +	(59.6) +	(0.0) =	659.8	TOTALS

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	76.1	+	23.5	+	42.5	=	142.1

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 24

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	9	39								
3	2	0	18								

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1418.0	53.2	26.7	13.2	7.0	(596.9) +	(46.6) +	(0.0) =	643.5	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 86

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	9	39								
3	2	0	18								

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1418.0	53.2	26.7	13.2	7.0	(596.9) +	(46.6) +	(0.0) =	643.5	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 92

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	14	35								
3	2	3	18								

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1418.0	57.7	24.6	14.0	10.6	(508.9) +	(42.7) +	(0.0) =	551.6	TOTALS

NO. OF ENTRIES TO SUBPT = 20
NO. OF LINKS RECALCULATED= 318

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1 2 5 26
3 2 3 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1418.0	57.2	24.8	13.6	10.6	(490.0) + (	38.9) + (	0.0) =	529.0	TOTALS

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 120

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1 2 5 26
3 2 3 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1418.0	57.2	24.8	13.6	10.6	(490.0) + (	38.9) + (	0.0) =	529.0	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 109

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1 2 5 26
3 2 3 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1418.0	57.2	24.8	13.6	10.6	(490.0) + (	38.9) + (	0.0) =	529.0	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 104

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1 2 6 26
3 2 3 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1418.0	58.0	24.5	13.7	11.2	(489.1) + (	38.5) + (	0.0) =	527.6	TOTALS

NO. OF ENTRIES TO SUBPT = 10
NO. OF LINKS RECALCULATED= 200

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	5	25								
3	2	3	18								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY UNIFORM (U+R+O=MEAN Q) (PCU-H/H)	DELAY RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	STOPS MEAN STOPS /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES END 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END 2ND (SECONDS)
10	313	1945	69	16.7	33.6	1.8 +	1.1	(41.5)*	107	(8.6)	6		24.9	1	12	25		
11	756	4170	78	16.7	29.7	4.5 +	1.7	(88.6)*	102	(19.9)	13		53.2	1	12	25		
12	645	3885S	31	13.2	8.0	1.2 +	0.2	(20.3)*	50	(8.3)	6	(0.0)*	109.7	1	32	5		
13	180	2010S	23	13.2	8.3	0.3 +	0.1	(5.9)*	49	(2.3)	3	(0.0)*	31.9	1	32	5		
14	31	12L	31	13.2	4.9	0.0 +	0.0	(0.6)	65	(0.5)	6		1.1	1	32	5		
15	77	13L	23	13.2	4.7	0.1 +	0.0	(1.4)	58	(1.1)	3		2.6	1	32	5		
20	1221	2207	72	16.7	5.3	0.5 +	1.3	(25.7)	37	(11.5)	10		37.2					
21	756	4000S	25	7.0	0.6	0.0 +	0.1	(1.8)	1	(0.2)	1		2.0					
22	77	21L	25	7.0	0.6	0.0 +	0.0	(0.2)	1	(0.0)	1		0.2					
23	180	21L	25	7.0	0.6	0.0 +	0.0	(0.4)	1	(0.0)	1		0.5					
30	262	1945	90	16.7	73.9	1.8 +	3.6	(76.4)*	160	(10.8)	8		45.8	3	10	18		
31	283	4170	45	16.7	28.5	1.8 +	0.4	(31.8)*	96	(7.0)	5		19.1	3	10	18		
32	879	3896S	65	12.3	6.9	1.2 +	0.5	(23.8)*	45	(10.1)	9	(0.0)*	129.0	3	25	3		
33	300	2016	23	12.3	6.2	0.4 +	0.1	(7.3)*	40	(3.1)	2	(0.0)*	39.7	3	25	3		
34	756	32L	65	12.3	2.1	0.0 +	0.4	(6.3)	7	(1.3)	9		7.6	3	25	3		
40	1499	2197	75	16.7	3.7	0.0 +	1.5	(21.6)	0	(0.0)	2		21.6					
41	108	4000S	10	7.0	0.5	0.0 +	0.0	(0.2)	1	(0.0)	0		0.2					
42	300	41L	10	7.0	0.5	0.0 +	0.0	(0.6)	1	(0.1)	0		0.7					

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1418.0	57.9	24.5	13.7	11.2	(488.4) +	(38.7) +	(0.0) =	527.1	TOTALS

ROUTE

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	76.1	+	28.7	+	38.8	=	143.5

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 128

PROGRAM TRANSYT FINISHED
========== end of file ==========

Printed at 10:52:22 on 29/04/2015]

T R A N S Y T 12

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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For sales and distribution information,
program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770864
Email: softwarebureau@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:- "2014 PM BASE.DAT" at 15:24 on 20141014

TRANSYT 12.0

M6 Junction 1 2014 PM Peak Base Flows

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	= 2
NUMBER OF LINKS	= 18
NUMBER OF OPTIMISED NODES	= 2
MAXIMUM NUMBER OF GRAPHIC PLOTS	= 0
NUMBER OF STEPS IN CYCLE	= 60
MAXIMUM NUMBER OF SHARED STOPLINES	= 3
MAXIMUM NUMBER OF TIMING POINTS	= 2
MAXIMUM LINKS AT ANY NODE	= 6

CORE REQUESTED = 6891 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

(1)= TITLE:- M6 Junction 1 2014 PM Peak Base Flows

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME PERIOD 1-1200 MINS.	EFFECTIVE-GREEN DISPLACEMENTS START (SEC)	EFFECTIVE-GREEN DISPLACEMENTS END (SEC)	EQUISAT 0=UNEQUAL SETTINGS 1=EQUAL 0=NO 1=YES	FLOW CYCLE	SCALE %	CRUISE-SPEEDS SCALE 10-200 %	CRUISE-SPEEDS CARD32 50-200 0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL-CLIMB OUTPUT 1=FULL	DELAY VALUE P PER PCU-H	STOP VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260

CARD NO.	CARD TYPE	LIST OF NODES TO BE OPTIMISED														
3)=	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET.....				SECOND SET.....				THIRD SET.....				
4)=	7	12	14	0	0	0	13	15	0	0	0	21	22	23	0	0
5)=	7	32	34	0	0	0	41	42	0	0	0	0	0	0	0	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
6)=	10	1	7	7								
7)=	10	3	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
8)=	11	1	7	7								
9)=	11	3	7	7								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
10)=	12	1	1	0	0								
11)=	12	3	1	0	0								

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY LINKS LINK1 NO.	PRIORITY LINKS LINK2 NO.	LINK1 GIVEWAY COEFFS. ONLY % FLOW	LINK1 GIVEWAY COEFFS. A1 X100	LINK1 GIVEWAY COEFFS. A2 X100	LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
12)=	30	20	21	0	0	51	100	0	0	0	0	200	0	2207	0	0
13)=	30	40	41	0	0	51	100	0	0	0	0	200	0	2197	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN START STAGE	FIRST GREEN START LAG	FIRST GREEN END STAGE	FIRST GREEN END LAG	SECOND GREEN START STAGE	SECOND GREEN START LAG	SECOND GREEN END STAGE	SECOND GREEN END LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
14)=	31	10	1	1	7	2	0	0	0	0	0	200	-9999	1945	60	0
15)=	31	11	1	1	7	2	0	0	0	0	0	200	-9999	4170	60	0
16)=	31	12	1	2	7	1	0	0	0	0	0	158	0	3885	500	0
17)=	31	13	1	2	7	1	0	0	0	0	0	158	0	2010	500	0
18)=	31	14	1	1	0	1	0	0	0	0	0	158	0	0	0	0
19)=	31	15	1	1	0	1	0	0	0	0	0	158	0	0	0	0
20)=	31	21	0	0	0	0	0	0	0	0	0	84	0	4000	0	0
21)=	31	22	0	0	0	0	0	0	0	0	0	84	0	0	0	0
22)=	31	23	0	0	0	0	0	0	0	0	0	84	0	0	0	0
23)=	31	30	3	1	7	2	0	0	0	0	0	200	-9999	1945	60	0
24)=	31	31	3	1	7	2	0	0	0	0	0	200	-9999	4170	60	0
25)=	31	32	3	2	7	1	0	0	0	0	0	147	0	3896	500	0
26)=	31	33	3	2	7	1	0	0	0	0	0	147	0	2016	500	0
27)=	31	34	3	1	0	1	0	0	0	0	0	147	0	0	0	0
28)=	31	41	0	0	0	0	0	0	0	0	0	84	0	4000	0	0
29)=	31	42	0	0	0	0	0	0	0	0	0	84	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 ..... LINK NO.	ENTRY 1 ..... CRUISE FLOW	ENTRY 1 ..... CRUISE SPEED	ENTRY 2 ..... LINK NO.	ENTRY 2 ..... CRUISE FLOW	ENTRY 2 ..... CRUISE SPEED	ENTRY 3 ..... LINK NO.	ENTRY 3 ..... CRUISE FLOW	ENTRY 3 ..... CRUISE SPEED	ENTRY 4 ..... LINK NO.	ENTRY 4 ..... CRUISE FLOW	ENTRY 4 ..... CRUISE SPEED
30)=	32	10	283	0	0	0	43	0	0	0	0	0	0	0	0	0
31)=	32	11	643	0	0	0	43	0	0	0	0	0	0	0	0	0
32)=	32	12	725	0	40	725	43	0	0	0	0	0	0	0	0	0
33)=	32	13	219	0	40	219	43	0	0	0	0	0	0	0	0	0
34)=	32	14	58	0	41	58	43	0	0	0	0	0	0	0	0	0
35)=	32	15	24	0	41	24	43	0	0	0	0	0	0	0	0	0
36)=	32	20	985	0	0	0	43	0	0	0	0	0	0	0	0	0
37)=	32	21	643	0	11	643	43	0	0	0	0	0	0	0	0	0
38)=	32	22	24	0	15	24	43	0	0	0	0	0	0	0	0	0
39)=	32	23	219	0	13	219	43	0	0	0	0	0	0	0	0	0
40)=	32	30	136	0	0	0	43	0	0	0	0	0	0	0	0	0
41)=	32	31	172	0	0	0	43	0	0	0	0	0	0	0	0	0
42)=	32	32	656	0	20	656	43	0	0	0	0	0	0	0	0	0
43)=	32	33	301	0	20	301	43	0	0	0	0	0	0	0	0	0
44)=	32	34	643	0	21	643	43	0	0	0	0	0	0	0	0	0
45)=	32	40	1524	0	0	0	43	0	0	0	0	0	0	0	0	0
46)=	32	41	82	0	31	82	43	0	0	0	0	0	0	0	0	0
47)=	32	42	301	0	33	301	43	0	0	0	0	0	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
48)=	38	12	28	4500	13	14	4500	32	24	4500	33	12	4500	0	0	0

*****END OF SUBROUTINE TINPUT*****

60 SECOND CYCLE 60 STEPS

INITIAL SETTINGS
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	0	27								
3	2	0	15								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) UNIFORM (PCU-H/H)	DELAY RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	STOPS MEAN STOPS /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END 1ST (SECONDS)	GREEN TIMES END 2ND (SECONDS)
10	283	1945	42	16.7	19.4	1.2	+ 0.4	(21.6)*	79	(5.8)	4		13.0	1	7	27		
11	643	4170	44	16.7	17.2	2.7	+ 0.4	(43.6)*	76	(12.6)	9		26.2	1	7	27		
12	725	3885S	45	13.2	13.2	2.3	+ 0.4	(37.8)*	68	(12.7)	10	(0.0)*	201.7	1	34	0		
13	219	2010S	27	13.2	13.1	0.6	+ 0.2	(11.3)*	63	(3.6)	3	(0.0)*	59.9	1	34	0		
14	58	12L	45	13.2	11.6	0.2	+ 0.0	(2.7)	96	(1.4)	10		4.1	1	34	0		
15	24	13L	27	13.2	10.2	0.0	+ 0.0	(1.0)	89	(0.6)	3		1.5	1	34	0		
20	985	2207	56	16.7	2.7	0.1	+ 0.6	(10.4)	14	(3.5)	4		13.9					
21	643	4000S	22	7.0	0.6	0.0	+ 0.1	(1.5)	1	(0.2)	0		1.6					
22	24	21L	22	7.0	0.6	0.0	+ 0.0	(0.1)	1	(0.0)	0		0.1					
23	219	21L	22	7.0	0.6	0.0	+ 0.0	(0.5)	1	(0.1)	0		0.6					
30	136	1945	47	16.7	34.8	0.9	+ 0.4	(18.7)*	105	(3.7)	2		11.2	3	7	15		
31	172	4170	27	16.7	26.6	1.1	+ 0.2	(18.0)*	92	(4.1)	3		10.8	3	7	15		
32	656	3896S	51	12.3	5.9	0.8	+ 0.3	(15.3)*	41	(6.9)	7	(0.0)*	83.4	3	22	0		
33	301	2016	23	12.3	6.1	0.4	+ 0.1	(7.3)*	40	(3.1)	2	(0.0)*	39.4	3	22	0		
34	643	32L	51	12.3	1.6	0.0	+ 0.3	(4.1)	7	(1.2)	7		5.3	3	22	0		
40	1524	2197	76	16.7	3.7	0.0	+ 1.6	(22.5)	0	(0.0)	2		22.5					
41	82	4000S	10	7.0	0.5	0.0	+ 0.0	(0.2)	1	(0.0)	0		0.2					
42	301	41L	10	7.0	0.5	0.0	+ 0.0	(0.6)	1	(0.1)	0		0.7					

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1252.5	44.4	28.2	10.2	5.1	(462.7) + (33.3)	+ (0.0)	= 496.0		TOTALS

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	67.2	+	17.6	+	27.1	=	111.8

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 24

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	0	27								
3	2	0	15								

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1252.5	44.4	28.2	10.2	5.1	(462.7) + (33.3)	+ (0.0)	= 496.0		TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 86

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	0	27								
3	2	0	15								

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1252.5	44.4	28.2	10.2	5.1	(462.7) + (33.3)	+ (0.0)	= 496.0		TOTALS

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 104

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	9	27								
3	2	1	15								

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1252.5	47.1	26.6	10.8	7.2	(380.9) + (28.1)	+ (0.0)	= 409.0		TOTALS

NO. OF ENTRIES TO SUBPT = 17
NO. OF LINKS RECALCULATED= 272

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1	2	0	18
3	2	1	15

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1252.5	47.0	26.7	10.7	7.2	(376.8) + (	27.3) + (	0.0) =	404.1	TOTALS

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 110

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1	2	0	18
3	2	1	15

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1252.5	47.0	26.7	10.7	7.2	(376.8) + (	27.3) + (	0.0) =	404.1	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 94

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1	2	1	19
3	2	1	15

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1252.5	47.0	26.7	10.7	7.2	(376.8) + (	27.1) + (	0.0) =	403.9	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 94

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1	2	1	19
3	2	1	15

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1252.5	47.0	26.7	10.7	7.2	(376.8) + (	27.1) + (	0.0) =	403.9	TOTALS

NO. OF ENTRIES TO SUBPT = 7
NO. OF LINKS RECALCULATED= 126

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	1	19								
3	2	1	15								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY UNIFORM (U+R+O=MEAN Q) (PCU-H/H)	DELAY RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	STOPS MEAN STOPS /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES END 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END 2ND (SECONDS)
10	283	1945	73	16.7	39.1	1.8 +	1.3	(43.6)*	115	(8.4)	6		26.2	1	8	19		
11	643	4170	77	16.7	32.0	4.1 +	1.7	(81.1)*	105	(17.4)	12		48.7	1	8	19		
12	725	3885S	34	13.2	7.1	1.2 +	0.2	(20.3)*	47	(8.9)	7	(0.0)*	110.5	1	26	1		
13	219	2010S	20	13.2	7.3	0.3 +	0.1	(6.3)*	44	(2.5)	2	(0.0)*	34.0	1	26	1		
14	58	12L	34	13.2	3.1	0.0 +	0.0	(0.7)	46	(0.7)	7		1.4	1	26	1		
15	24	13L	20	13.2	2.6	0.0 +	0.0	(0.2)	27	(0.2)	2		0.4	1	26	1		
20	985	2207	56	16.7	2.9	0.2 +	0.6	(11.4)	18	(4.6)	4		16.0					
21	643	4000S	22	7.0	0.6	0.0 +	0.1	(1.5)	1	(0.2)	0		1.6					
22	24	21L	22	7.0	0.6	0.0 +	0.0	(0.1)	1	(0.0)	0		0.1					
23	219	21L	22	7.0	0.6	0.0 +	0.0	(0.5)	1	(0.1)	0		0.6					
30	136	1945	52	16.7	38.7	0.9 +	0.5	(20.8)*	111	(3.9)	3		12.5	3	8	15		
31	172	4170	31	16.7	28.2	1.1 +	0.2	(19.1)*	95	(4.2)	3		11.5	3	8	15		
32	656	3896S	50	12.3	5.4	0.7 +	0.3	(14.0)*	38	(6.4)	5	(0.0)*	76.5	3	22	1		
33	301	2016	22	12.3	5.7	0.3 +	0.1	(6.7)*	38	(2.9)	2	(0.0)*	36.6	3	22	1		
34	643	32L	50	12.3	1.4	0.0 +	0.2	(3.6)	4	(0.6)	5		4.2	3	22	1		
40	1524	2197	76	16.7	3.7	0.0 +	1.6	(22.5)	0	(0.0)	2		22.5					
41	82	4000S	10	7.0	0.5	0.0 +	0.0	(0.2)	1	(0.0)	0		0.2					
42	301	41L	10	7.0	0.5	0.0 +	0.0	(0.6)	1	(0.1)	0		0.7					

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1252.5	47.0	26.7	10.7	7.2	(376.8) +	(27.1) +	(0.0) =	403.9	TOTALS

ROUTE

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	67.2	+	20.5	+	27.8	=	115.5

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 94

PROGRAM TRANSYT FINISHED
========== end of file ==========

Printed at 10:52:52 on 29/04/2015]

2017-

Opening Year Network Performance (With and Without Development)

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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For sales and distribution information,
program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\New Rbt on Mere Lane\
2017 assessments\am2017wd.vai"
(drive-on-the-left) at 16:24:59 on Thursday, 9 July 2015

FILE PROPERTIES

RUN TITLE: New Access Roundabout on Mere Lane AM Peak 2017 With Development
LOCATION: Magna Park Site Access
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - Site Access
ARM B - Mere Lane East
ARM C - Hunter Bld
ARM D - Mere Lane West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	5.50	8.00	8.00	30.00	52.00	55.0	0.617	31.686
ARM B	3.00	6.00	22.00	60.00	52.00	40.0	0.569	25.644
ARM C	5.50	6.00	5.00	20.00	52.00	52.0	0.568	27.422
ARM D	3.65	7.50	23.00	65.00	52.00	36.0	0.638	31.499

V = approach half-width E = entry width L = effective flare length R = entry radius D = inscribed circle diameter PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK FLOW IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.77	1.16	0.77
ARM B	15.00	45.00	75.00	1.34	2.01	1.34
ARM C	15.00	45.00	75.00	1.21	1.82	1.21
ARM D	15.00	45.00	75.00	3.03	4.54	3.03

DEMAND SET TITLE: AM Peak 2006 Base Flows

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.15 - 08.45					
	ARM A	0.000	0.016	0.419	0.565
		0.0	1.0	26.0	35.0
		(33.9)%	(33.9)%	(33.9)%	(33.9)%
	ARM B	0.028	0.000	0.121	0.850
		3.0	0.0	13.0	91.0
		(3.7)%	(3.7)%	(3.7)%	(3.7)%
	ARM C	0.701	0.031	0.000	0.268
		68.0	3.0	0.0	26.0
		(19.6)%	(19.6)%	(19.6)%	(19.6)%
	ARM D	0.347	0.153	0.500	0.000
		84.0	37.0	121.0	0.0
		(9.1)%	(9.1)%	(9.1)%	(9.1)%

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	0.78	22.65	0.034	- -	0.0	0.0	0.5	-	0.046
ARM B	1.34	23.26	0.058	- -	0.0	0.1	0.9	-	0.046
ARM C	1.22	22.07	0.055	- -	0.0	0.1	0.9	-	0.048
ARM D	3.04	28.22	0.108	- -	0.0	0.1	1.8	-	0.040
07.30-07.45									
ARM A	0.93	22.45	0.041	- -	0.0	0.0	0.6	-	0.046
ARM B	1.60	22.97	0.070	- -	0.1	0.1	1.1	-	0.047
ARM C	1.45	21.90	0.066	- -	0.1	0.1	1.1	-	0.049
ARM D	3.63	28.10	0.129	- -	0.1	0.1	2.2	-	0.041
07.45-08.00									
ARM A	1.14	22.17	0.051	- -	0.0	0.1	0.8	-	0.048
ARM B	1.96	22.57	0.087	- -	0.1	0.1	1.4	-	0.049
ARM C	1.78	21.67	0.082	- -	0.1	0.1	1.3	-	0.050
ARM D	4.44	27.92	0.159	- -	0.1	0.2	2.8	-	0.043
08.00-08.15									
ARM A	1.14	22.17	0.051	- -	0.1	0.1	0.8	-	0.048
ARM B	1.96	22.57	0.087	- -	0.1	0.1	1.4	-	0.049
ARM C	1.78	21.67	0.082	- -	0.1	0.1	1.3	-	0.050
ARM D	4.44	27.92	0.159	- -	0.2	0.2	2.8	-	0.043
08.15-08.30									
ARM A	0.93	22.44	0.041	- -	0.1	0.0	0.7	-	0.046
ARM B	1.60	22.97	0.070	- -	0.1	0.1	1.1	-	0.047
ARM C	1.45	21.90	0.066	- -	0.1	0.1	1.1	-	0.049
ARM D	3.63	28.10	0.129	- -	0.2	0.1	2.3	-	0.041
08.30-08.45									
ARM A	0.78	22.64	0.034	- -	0.0	0.0	0.5	-	0.046
ARM B	1.34	23.25	0.058	- -	0.1	0.1	0.9	-	0.046
ARM C	1.22	22.06	0.055	- -	0.1	0.1	0.9	-	0.048
ARM D	3.04	28.22	0.108	- -	0.1	0.1	1.8	-	0.040

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.0
07.45	0.0
08.00	0.1
08.15	0.1
08.30	0.0
08.45	0.0

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.1
07.45	0.1
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.1
07.45	0.1
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.1
07.45	0.1
08.00	0.2
08.15	0.2
08.30	0.1
08.45	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	85.3	56.9	4.0	0.05	4.0	0.05
B	147.3	98.2	6.9	0.05	6.9	0.05
C	133.5	89.0	6.5	0.05	6.5	0.05
D	333.1	222.1	13.7	0.04	13.7	0.04
ALL	699.2	466.1	31.1	0.04	31.1	0.04

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

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A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\New Rbt on Mere Lane\
2017 assessments\pm2017wd.vai"
(drive-on-the-left) at 16:29:23 on Thursday, 9 July 2015

FILE PROPERTIES

RUN TITLE: New Access Roundabout on Mere Lane PM Peak 2017 With Development
LOCATION: Magna Park Site Access
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - Site Access
ARM B - Mere Lane East
ARM C - Hunter Bld
ARM D - Mere Lane West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	5.50	8.00	8.00	30.00	52.00	55.0	0.617	31.686
ARM B	3.00	6.00	22.00	60.00	52.00	40.0	0.569	25.644
ARM C	5.50	6.00	5.00	20.00	52.00	52.0	0.568	27.422
ARM D	3.65	7.50	23.00	65.00	52.00	36.0	0.638	31.499

V = approach half-width E = entry width L = effective flare length R = entry radius D = inscribed circle diameter PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK	FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE	AT TOP	AFTER
	TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK
ARM A	15.00	45.00	75.00	1.48	2.21	1.48
ARM B	15.00	45.00	75.00	0.66	0.99	0.66
ARM C	15.00	45.00	75.00	1.36	2.04	1.36
ARM D	15.00	45.00	75.00	1.42	2.14	1.42

DEMAND SET TITLE: AM Peak 2006 Base Flows

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.025	0.432	0.542
		0.0	3.0	51.0	64.0
		(11.0)	(11.0)	(11.0)	(11.0)
	ARM B	0.057	0.000	0.094	0.849
		3.0	0.0	5.0	45.0
		(1.9)	(1.9)	(1.9)	(1.9)
	ARM C	0.165	0.110	0.000	0.725
		18.0	12.0	0.0	79.0
		(9.2)	(9.2)	(9.2)	(9.2)
	ARM D	0.281	0.526	0.193	0.000
		32.0	60.0	22.0	0.0
		(12.3)	(12.3)	(12.3)	(12.3)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	1.48	27.81	0.053	- -	0.0	0.1	0.8	-	0.038
ARM B	0.67	24.10	0.028	- -	0.0	0.0	0.4	-	0.043
ARM C	1.37	24.33	0.056	- -	0.0	0.1	0.9	-	0.044
ARM D	1.43	27.79	0.051	- -	0.0	0.1	0.8	-	0.038
17.00-17.15									
ARM A	1.77	27.67	0.064	- -	0.1	0.1	1.0	-	0.039
ARM B	0.79	23.89	0.033	- -	0.0	0.0	0.5	-	0.043
ARM C	1.63	24.17	0.068	- -	0.1	0.1	1.1	-	0.044
ARM D	1.71	27.74	0.062	- -	0.1	0.1	1.0	-	0.038
17.15-17.30									
ARM A	2.17	27.47	0.079	- -	0.1	0.1	1.3	-	0.040
ARM B	0.97	23.60	0.041	- -	0.0	0.0	0.6	-	0.044
ARM C	2.00	23.96	0.083	- -	0.1	0.1	1.3	-	0.046
ARM D	2.09	27.67	0.076	- -	0.1	0.1	1.2	-	0.039
17.30-17.45									
ARM A	2.17	27.47	0.079	- -	0.1	0.1	1.3	-	0.040
ARM B	0.97	23.60	0.041	- -	0.0	0.0	0.6	-	0.044
ARM C	2.00	23.96	0.083	- -	0.1	0.1	1.4	-	0.046
ARM D	2.09	27.67	0.076	- -	0.1	0.1	1.2	-	0.039
17.45-18.00									
ARM A	1.77	27.67	0.064	- -	0.1	0.1	1.0	-	0.039
ARM B	0.79	23.89	0.033	- -	0.0	0.0	0.5	-	0.043
ARM C	1.63	24.17	0.068	- -	0.1	0.1	1.1	-	0.044
ARM D	1.71	27.74	0.062	- -	0.1	0.1	1.0	-	0.038
18.00-18.15									
ARM A	1.48	27.81	0.053	- -	0.1	0.1	0.9	-	0.038
ARM B	0.67	24.10	0.028	- -	0.0	0.0	0.4	-	0.043
ARM C	1.37	24.33	0.056	- -	0.1	0.1	0.9	-	0.044
ARM D	1.43	27.79	0.051	- -	0.1	0.1	0.8	-	0.038

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1
18.15	0.1

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1
18.15	0.1

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1
18.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *		T75
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)	
A	162.4	108.3	6.3	0.04	6.3	0.04	
B	73.0	48.6	3.2	0.04	3.2	0.04	
C	150.0	100.0	6.7	0.04	6.7	0.04	
D	156.9	104.6	6.0	0.04	6.0	0.04	
ALL	542.3	361.5	22.1	0.04	22.1	0.04	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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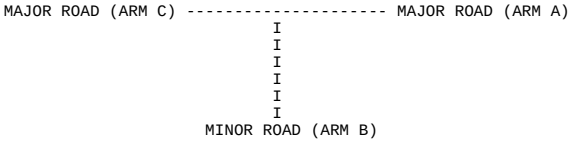
Run with file:-
"J:\Bedford-Jobs\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\
A5_Mere Lane\2017 assessments\2017 am nd.vpi"
(drive-on-the-left) at 16:38:42 on Thursday, 9 July 2015

RUN INFORMATION

RUN TITLE	: A5/ Mere Lane 2017 AM Peak Without Development
LOCATION	:
DATE	: 07/08/14
CLIENT	:
ENUMERATOR	: jon_ashcroft [UK1005963L]
JOB NUMBER	:
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A5 North
ARM B IS Mere Lane
ARM C IS A5 South

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.10 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.80 M.
- VISIBILITY	(VC-B)200.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 250.0 M.
- VISIBILITY TO RIGHT	(VB-A) 150.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	8.40 M.
WIDTH AT 10 M FROM JUNCTION	4.50 M.
WIDTH AT 15 M FROM JUNCTION	2.80 M.
WIDTH AT 20 M FROM JUNCTION	2.80 M.
- LENGTH OF FLARED SECTION	2 VEHS

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
734.83	0.27	0.27

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: A5/ Mere Lane 2014 AM Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	13.15	19.72	13.15
ARM B	15.00	45.00	75.00	1.30	1.95	1.30
ARM C	15.00	45.00	75.00	7.95	11.92	7.95

Demand set: A5/ Mere Lane 2014 AM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
07.30 - 09.00	ARM A	0.000	0.008	0.992
		0.0	8.0	1044.0
		(0.0)	(8.7)	(8.7)
	ARM B	0.077	0.000	0.923
		8.0	0.0	96.0
		(3.9)	(0.0)	(3.9)
	ARM C	0.951	0.049	0.000
		605.0	31.0	0.0
		(12.0)	(12.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	1.20	8.59	0.140		0.00	0.16	2.3		0.13
B-A	0.10	4.76	0.021		0.00	0.02	0.3		0.21
C-A	7.59								
C-B	0.39	7.46	0.052		0.00	0.05	0.8		0.14
A-B	0.10								
A-C	13.10								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	1.44	7.79	0.185		0.16	0.22	3.3		0.16
B-A	0.12	3.70	0.032		0.02	0.03	0.5		0.28
C-A	9.06								
C-B	0.46	6.79	0.068		0.05	0.07	1.1		0.16
A-B	0.12								
A-C	15.64								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	1.76	6.67	0.264		0.22	0.35	5.1		0.20
B-A	0.15	2.24	0.065		0.03	0.07	1.0		0.48
C-A	11.10								
C-B	0.57	5.86	0.097		0.07	0.11	1.5		0.19
A-B	0.15								
A-C	19.16								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	1.76	6.67	0.264		0.35	0.36	5.3		0.20
B-A	0.15	2.24	0.066		0.07	0.07	1.0		0.48
C-A	11.10								
C-B	0.57	5.86	0.097		0.11	0.11	1.6		0.19
A-B	0.15								
A-C	19.16								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	1.44	7.79	0.185		0.36	0.23	3.6		0.16
B-A	0.12	3.70	0.032		0.07	0.03	0.5		0.28
C-A	9.06								
C-B	0.46	6.79	0.068		0.11	0.07	1.1		0.16
A-B	0.12								
A-C	15.64								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	1.20	8.58	0.140		0.23	0.16	2.5		0.14
B-A	0.10	4.76	0.021		0.03	0.02	0.3		0.21
C-A	7.59								
C-B	0.39	7.46	0.052		0.07	0.06	0.9		0.14
A-B	0.10								
A-C	13.10								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.2
08.00	0.2
08.15	0.4
08.30	0.4
08.45	0.2
09.00	0.2

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.1
08.30	0.1
08.45	0.0
09.00	0.0

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.1
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	132.1	88.1	22.1	0.17	22.1	0.17
B-A	11.0	7.3	3.6	0.33	3.6	0.33
C-A	832.7	555.2				
C-B	42.7	28.4	7.0	0.16	7.0	0.16
A-B	11.0	7.3				
A-C	1437.0	958.0				
ALL	2466.6	1644.4	32.7	0.01	32.7	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 16:00:43 on 10/09/2015]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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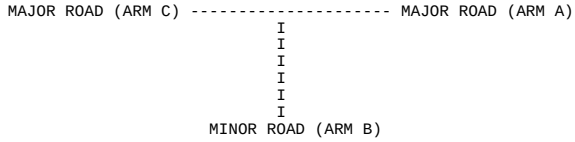
Run with file:- "C:\Users\jon_ashcroft\Documents\BMS Photographs\2017 pm nd.vpi" (drive-on-the-left) at 16:52:08 on Thursday, 9 July 2015

RUN INFORMATION

RUN TITLE	: A5/ Mere Lane 2017 PM Peak Without Development
LOCATION	:
DATE	: 07/08/14
CLIENT	:
ENUMERATOR	: jon_ashcroft [UK1005963L]
JOB NUMBER	:
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A5 North
ARM B IS Mere Lane
ARM C IS A5 South

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.10 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.80 M.
- VISIBILITY	(VC-B)200.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 250.0 M.
- VISIBILITY TO RIGHT	(VB-A) 150.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	8.40 M.
WIDTH AT 10 M FROM JUNCTION	4.50 M.
WIDTH AT 15 M FROM JUNCTION	2.80 M.
WIDTH AT 20 M FROM JUNCTION	2.80 M.
- LENGTH OF FLARED SECTION	2 VEHS

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
734.83	0.27	0.27

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: A5/ Mere Lane 2014 AM Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	6.81	10.22	6.81
ARM B	15.00	45.00	75.00	0.63	0.94	0.63
ARM C	15.00	45.00	75.00	12.31	18.47	12.31

Demand set: A5/ Mere Lane 2014 AM Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.013	0.987
		0.0	7.0	538.0
		(0.0)	(9.5)	(9.5)
	ARM B	0.180	0.000	0.820
		9.0	0.0	41.0
		(2.0)	(0.0)	(2.0)
	ARM C	0.934	0.066	0.000
		920.0	65.0	0.0
		(6.6)	(6.6)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.51	10.60	0.049		0.00	0.05	0.7		0.10
B-A	0.11	5.99	0.019		0.00	0.02	0.3		0.17
C-A	11.54								
C-B	0.82	9.58	0.085		0.00	0.09	1.3		0.11
A-B	0.09								
A-C	6.75								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.61	10.17	0.060		0.05	0.06	0.9		0.10
B-A	0.13	5.11	0.026		0.02	0.03	0.4		0.20
C-A	13.78								
C-B	0.97	9.22	0.106		0.09	0.12	1.7		0.12
A-B	0.10								
A-C	8.06								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.75	9.58	0.079		0.06	0.08	1.2		0.11
B-A	0.17	3.88	0.043		0.03	0.04	0.6		0.27
C-A	16.88								
C-B	1.19	8.70	0.137		0.12	0.16	2.3		0.13
A-B	0.13								
A-C	9.87								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.75	9.58	0.079		0.08	0.08	1.3		0.11
B-A	0.17	3.88	0.043		0.04	0.04	0.7		0.27
C-A	16.88								
C-B	1.19	8.70	0.137		0.16	0.16	2.4		0.13
A-B	0.13								
A-C	9.87								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.61	10.17	0.060		0.08	0.06	1.0		0.10
B-A	0.13	5.10	0.026		0.04	0.03	0.4		0.20
C-A	13.78								
C-B	0.97	9.22	0.106		0.16	0.12	1.8		0.12
A-B	0.10								
A-C	8.06								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.51	10.60	0.049		0.06	0.05	0.8		0.10
B-A	0.11	5.99	0.019		0.03	0.02	0.3		0.17
C-A	11.54								
C-B	0.82	9.58	0.085		0.12	0.09	1.4		0.11
A-B	0.09								
A-C	6.75								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1
18.15	0.1

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.2
17.45	0.2
18.00	0.1
18.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	56.4	37.6	6.0	0.11	6.0	0.11
B-A	12.4	8.3	2.7	0.22	2.7	0.22
C-A	1266.3	844.2				
C-B	89.5	59.6	11.0	0.12	11.0	0.12
A-B	9.6	6.4				
A-C	740.5	493.7				
ALL	2174.8	1449.8	19.6	0.01	19.6	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 16:01:02 on 10/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\A5_Mere Lane\
2017 assessments\am2017wd.vai"
(drive-on-the-left) at 12:09:56 on Thursday, 9 July 2015

FILE PROPERTIES

RUN TITLE: New A5/ Mere Lane Roundabout AM Peak 2017 With Development
LOCATION: Magna Park Site Access
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A5 North
ARM B - Mere Lane
ARM C - A5 South

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.30	7.50	5.00	30.00	56.00	47.0	0.652	36.148
ARM B	3.65	8.00	29.00	25.00	56.00	49.0	0.597	31.407
ARM C	4.50	7.50	28.00	30.00	56.00	45.0	0.617	32.791

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TO TOP OF PEAK TO RISE	TO STOPS IS REACHED	RATE OF FLOW (VEH/MIN) BEFORE FALLING	AT TOP PEAK	AFTER OF PEAK PEAK
ARM A	15.00	45.00	75.00	13.60	20.40	13.60
ARM B	15.00	45.00	75.00	1.90	2.85	1.90
ARM C	15.00	45.00	75.00	8.18	12.26	8.18

DEMAND SET TITLE: AM Peak 2006 Base Flows

TIME	FROM/T	ARM A	ARM B	ARM C
07.15 - 08.45				
	ARM A	0.000	0.152	0.848
		0.0	165.0	923.0
		(8.7)	(8.7)	(8.7)
	ARM B	0.289	0.000	0.711
		44.0	0.0	108.0
		(15.8)	(15.8)	(15.8)
	ARM C	0.885	0.115	0.000
		579.0	75.0	0.0
		(10.4)	(10.4)	(10.4)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	13.65	32.63	0.418	- -	-	0.0	0.7	10.5	-	0.052
ARM B	1.91	20.65	0.092	- -	-	0.0	0.1	1.5	-	0.053
ARM C	8.21	29.35	0.280	- -	-	0.0	0.4	5.7	-	0.047
07.30-07.45									
ARM A	16.30	32.51	0.501	- -	-	0.7	1.0	14.6	-	0.061
ARM B	2.28	19.38	0.118	- -	-	0.1	0.1	2.0	-	0.058
ARM C	9.80	29.28	0.335	- -	-	0.4	0.5	7.4	-	0.051
07.45-08.00									
ARM A	19.97	32.35	0.617	- -	-	1.0	1.6	23.1	-	0.080
ARM B	2.79	17.65	0.158	- -	-	0.1	0.2	2.8	-	0.067
ARM C	12.00	29.18	0.411	- -	-	0.5	0.7	10.2	-	0.058
08.00-08.15									
ARM A	19.97	32.34	0.617	- -	-	1.6	1.6	24.0	-	0.081
ARM B	2.79	17.63	0.158	- -	-	0.2	0.2	2.8	-	0.067
ARM C	12.00	29.18	0.411	- -	-	0.7	0.7	10.4	-	0.058
08.15-08.30									
ARM A	16.30	32.51	0.501	- -	-	1.6	1.0	15.6	-	0.062
ARM B	2.28	19.35	0.118	- -	-	0.2	0.1	2.0	-	0.059
ARM C	9.80	29.27	0.335	- -	-	0.7	0.5	7.7	-	0.051
08.30-08.45									
ARM A	13.65	32.63	0.418	- -	-	1.0	0.7	11.1	-	0.053
ARM B	1.91	20.62	0.092	- -	-	0.1	0.1	1.6	-	0.053
ARM C	8.21	29.34	0.280	- -	-	0.5	0.4	5.9	-	0.047

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.7	*
07.45	1.0	*
08.00	1.6	**
08.15	1.6	**
08.30	1.0	*
08.45	0.7	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.1	
07.45	0.1	
08.00	0.2	
08.15	0.2	
08.30	0.1	
08.45	0.1	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.4	
07.45	0.5	*
08.00	0.7	*
08.15	0.7	*
08.30	0.5	*
08.45	0.4	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1497.6	998.4	98.8	0.07	98.8	0.07
B	209.2	139.5	12.6	0.06	12.6	0.06
C	900.2	600.1	47.4	0.05	47.4	0.05
ALL	2607.0	1738.0	158.8	0.06	158.8	0.06

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 16:03:46 on 10/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770356
Nine Mile Ride Email: software@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk
RG40 3GA,UK

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\A5_Mere Lane\
2017 assessments\pm2017wd.vai"
(drive-on-the-left) at 12:10:16 on Thursday, 9 July 2015

FILE PROPERTIES

RUN TITLE: New A5/ Mere Lane Roundabout PM Peak 2017 With Development
LOCATION: Magna Park Site Access
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A5 North
ARM B - Mere Lane
ARM C - A5 South

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.30	7.50	5.00	30.00	56.00	47.0	0.652	36.148
ARM B	3.65	8.00	29.00	25.00	56.00	49.0	0.597	31.407
ARM C	4.50	7.50	28.00	30.00	56.00	45.0	0.617	32.791

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	6.94	10.41	6.94
ARM B	15.00	45.00	75.00	2.35	3.52	2.35
ARM C	15.00	45.00	75.00	11.45	17.17	11.45

DEMAND SET TITLE: AM Peak 2006 Base Flows

T33

TIME	FROM/T	ARM A	ARM B	ARM C
16.45 - 18.15				
	ARM A	0.000	0.070	0.930
		0.0	39.0	516.0
		(9.7)	(9.7)	(9.7)
	ARM B	0.601	0.000	0.399
		113.0	0.0	75.0
		(4.3)	(4.3)	(4.3)
	ARM C	0.918	0.082	0.000
		841.0	75.0	0.0
		(6.9)	(6.9)	(6.9)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	6.96	32.36	0.215	- -	0.0	0.3	4.0	-	0.039
ARM B	2.36	26.06	0.091	- -	0.0	0.1	1.5	-	0.042
ARM C	11.49	29.82	0.385	- -	0.0	0.6	9.1	-	0.054
17.00-17.15									
ARM A	8.32	32.24	0.258	- -	0.3	0.3	5.1	-	0.042
ARM B	2.82	25.26	0.112	- -	0.1	0.1	1.9	-	0.045
ARM C	13.72	29.66	0.463	- -	0.6	0.9	12.6	-	0.063
17.15-17.30									
ARM A	10.18	32.08	0.317	- -	0.3	0.5	6.9	-	0.046
ARM B	3.45	24.17	0.143	- -	0.1	0.2	2.5	-	0.048
ARM C	16.81	29.43	0.571	- -	0.9	1.3	19.2	-	0.079
17.30-17.45									
ARM A	10.18	32.08	0.317	- -	0.5	0.5	7.0	-	0.046
ARM B	3.45	24.17	0.143	- -	0.2	0.2	2.5	-	0.048
ARM C	16.81	29.43	0.571	- -	1.3	1.3	19.8	-	0.079
17.45-18.00									
ARM A	8.32	32.24	0.258	- -	0.5	0.3	5.3	-	0.042
ARM B	2.82	25.25	0.112	- -	0.2	0.1	1.9	-	0.045
ARM C	13.72	29.65	0.463	- -	1.3	0.9	13.3	-	0.063
18.00-18.15									
ARM A	6.96	32.35	0.215	- -	0.3	0.3	4.2	-	0.039
ARM B	2.36	26.04	0.091	- -	0.1	0.1	1.5	-	0.042
ARM C	11.49	29.82	0.385	- -	0.9	0.6	9.6	-	0.055

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.3
17.15	0.3
17.30	0.5
17.45	0.5
18.00	0.3
18.15	0.3

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.1	
17.15	0.1	
17.30	0.2	
17.45	0.2	
18.00	0.1	
18.15	0.1	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.6	*
17.15	0.9	*
17.30	1.3	*
17.45	1.3	*
18.00	0.9	*
18.15	0.6	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *		T75
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)	
A	763.9	509.3	32.5	0.04	32.5	0.04	
B	258.8	172.5	11.7	0.05	11.7	0.05	
C	1260.8	840.5	83.6	0.07	83.7	0.07	
ALL	2283.5	1522.3	127.8	0.06	127.8	0.06	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 16:04:05 on 10/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\A4303_Hunter Bld\
2017 assessments\am2017nd.vai"
(drive-on-the-left) at 11:42:19 on Thursday, 9 July 2015

FILE PROPERTIES

RUN TITLE: Magna Park Access Roundabout AM Peak 2017 No Development
LOCATION: Magna Park Site Access
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - Hunter Bld
ARM B - A4303 East
ARM C - Site Access
ARM D - A4303 West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.20	10.70	31.00	19.00	67.00	57.0	0.654	44.594
ARM B	7.30	10.20	32.00	100.00	67.00	54.0	0.681	46.088
ARM C	7.30	8.50	10.00	25.00	67.00	62.0	0.579	37.067
ARM D	7.60	10.00	11.00	42.00	67.00	60.0	0.632	41.945

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK	NUMBER OF MINUTES FROM START WHEN FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
	TO RISE	IS REACHED	FALLING			
ARM A	15.00	45.00	75.00	3.71	5.57	3.71
ARM B	15.00	45.00	75.00	16.34	24.51	16.34
ARM C	15.00	45.00	75.00	0.20	0.30	0.20
ARM D	15.00	45.00	75.00	14.45	21.67	14.45

DEMAND SET TITLE: AM Peak 2006 Base Flows

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.15 - 08.45					
	ARM A	0.000	0.340	0.000	0.660
		0.0	101.0	0.0	196.0
		(48.8)	(48.8)	(48.8)	(48.8)
	ARM B	0.357	0.036	0.062	0.545
		467.0	47.0	81.0	712.0
		(9.2)	(9.2)	(9.2)	(9.2)
	ARM C	0.313	0.250	0.000	0.438
		5.0	4.0	0.0	7.0
		(43.8)	(43.8)	(43.8)	(43.8)
	ARM D	0.518	0.423	0.059	0.000
		599.0	489.0	68.0	0.0
		(9.4)	(9.4)	(9.4)	(9.4)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	3.73	26.31	0.142	- -	0.0	0.2	2.4	-	0.044
ARM B	16.40	39.35	0.417	- -	0.0	0.7	10.4	-	0.043
ARM C	0.20	17.56	0.011	- -	0.0	0.0	0.2	-	0.058
ARM D	14.50	34.19	0.424	- -	0.0	0.7	10.7	-	0.051
07.30-07.45									
ARM A	4.45	25.59	0.174	- -	0.2	0.2	3.1	-	0.047
ARM B	19.58	38.79	0.505	- -	0.7	1.0	14.9	-	0.052
ARM C	0.24	15.94	0.015	- -	0.0	0.0	0.2	-	0.064
ARM D	17.32	33.37	0.519	- -	0.7	1.1	15.7	-	0.062
07.45-08.00									
ARM A	5.45	24.61	0.221	- -	0.2	0.3	4.2	-	0.052
ARM B	23.98	38.02	0.631	- -	1.0	1.7	24.5	-	0.071
ARM C	0.29	13.74	0.021	- -	0.0	0.0	0.3	-	0.074
ARM D	21.21	32.26	0.658	- -	1.1	1.9	27.2	-	0.090
08.00-08.15									
ARM A	5.45	24.60	0.222	- -	0.3	0.3	4.3	-	0.052
ARM B	23.98	38.02	0.631	- -	1.7	1.7	25.4	-	0.071
ARM C	0.29	13.72	0.021	- -	0.0	0.0	0.3	-	0.074
ARM D	21.21	32.25	0.658	- -	1.9	1.9	28.5	-	0.091
08.15-08.30									
ARM A	4.45	25.57	0.174	- -	0.3	0.2	3.2	-	0.047
ARM B	19.58	38.78	0.505	- -	1.7	1.0	15.8	-	0.052
ARM C	0.24	15.91	0.015	- -	0.0	0.0	0.2	-	0.064
ARM D	17.32	33.36	0.519	- -	1.9	1.1	16.8	-	0.063
08.30-08.45									
ARM A	3.73	26.29	0.142	- -	0.2	0.2	2.5	-	0.044
ARM B	16.40	39.34	0.417	- -	1.0	0.7	11.0	-	0.044
ARM C	0.20	17.52	0.011	- -	0.0	0.0	0.2	-	0.058
ARM D	14.50	34.17	0.424	- -	1.1	0.7	11.3	-	0.051

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.2	
07.45	0.2	
08.00	0.3	
08.15	0.3	
08.30	0.2	
08.45	0.2	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.7	*
07.45	1.0	*
08.00	1.7	**
08.15	1.7	**
08.30	1.0	*
08.45	0.7	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.0
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.7	*
07.45	1.1	*
08.00	1.9	**
08.15	1.9	**
08.30	1.1	*
08.45	0.7	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	408.8	272.5	19.7	0.05	19.7	0.05
B	1799.0	1199.3	102.0	0.06	102.0	0.06
C	22.0	14.7	1.5	0.07	1.5	0.07
D	1591.1	1060.8	110.2	0.07	110.2	0.07
ALL	3821.0	2547.3	233.4	0.06	233.4	0.06

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
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* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 16:05:15 on 10/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\A4303_Hunter Bld\2017 assessments\pm2017nd.vai"
(drive-on-the-left) at 11:46:19 on Thursday, 9 July 2015

FILE PROPERTIES

RUN TITLE: Magna Park Access Roundabout PM Peak 2017 No Development
LOCATION: Magna Park Site Access
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - Hunter Bld
ARM B - A4303 East
ARM C - Site Access
ARM D - A4303 West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.20	10.70	31.00	19.00	67.00	57.0	0.654	44.594
ARM B	7.30	10.20	32.00	100.00	67.00	54.0	0.681	46.088
ARM C	7.30	8.50	10.00	25.00	67.00	62.0	0.579	37.067
ARM D	7.60	10.00	11.00	42.00	67.00	60.0	0.632	41.945

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TO TOP OF PEAK	FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE TO RISE	AT TOP IS REACHED	AFTER FALLING
ARM A	15.00	45.00	75.00	9.05	13.58	9.05
ARM B	15.00	45.00	75.00	8.25	12.38	8.25
ARM C	15.00	45.00	75.00	3.39	5.08	3.39
ARM D	15.00	45.00	75.00	9.89	14.83	9.89

DEMAND SET TITLE: AM Peak 2006 Base Flows

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15					
	ARM A	0.000	0.333	0.004	0.663
		0.0	241.0	3.0	480.0
		(15.3)%	(15.3)%	(15.3)%	(15.3)%
	ARM B	0.236	0.042	0.023	0.698
		156.0	28.0	15.0	461.0
		(11.8)%	(11.8)%	(11.8)%	(11.8)%
	ARM C	0.041	0.616	0.000	0.343
		11.0	167.0	0.0	93.0
		(3.0)%	(3.0)%	(3.0)%	(3.0)%
	ARM D	0.168	0.820	0.011	0.000
		133.0	649.0	9.0	0.0
		(9.5)%	(9.5)%	(9.5)%	(9.5)%

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	9.08	32.12	0.283	- -	0.0	0.4	5.8	-	0.043
ARM B	8.28	36.91	0.224	- -	0.0	0.3	4.3	-	0.035
ARM C	3.40	27.01	0.126	- -	0.0	0.1	2.1	-	0.042
ARM D	9.93	35.49	0.280	- -	0.0	0.4	5.7	-	0.039
17.00-17.15									
ARM A	10.85	30.83	0.352	- -	0.4	0.5	8.0	-	0.050
ARM B	9.89	36.06	0.274	- -	0.3	0.4	5.6	-	0.038
ARM C	4.06	25.25	0.161	- -	0.1	0.2	2.8	-	0.047
ARM D	11.85	34.94	0.339	- -	0.4	0.5	7.6	-	0.043
17.15-17.30									
ARM A	13.29	29.08	0.457	- -	0.5	0.8	12.2	-	0.063
ARM B	12.11	34.90	0.347	- -	0.4	0.5	7.8	-	0.044
ARM C	4.97	22.84	0.218	- -	0.2	0.3	4.1	-	0.056
ARM D	14.52	34.19	0.425	- -	0.5	0.7	10.8	-	0.051
17.30-17.45									
ARM A	13.29	29.07	0.457	- -	0.8	0.8	12.6	-	0.063
ARM B	12.11	34.89	0.347	- -	0.5	0.5	7.9	-	0.044
ARM C	4.97	22.83	0.218	- -	0.3	0.3	4.2	-	0.056
ARM D	14.52	34.18	0.425	- -	0.7	0.7	11.0	-	0.051
17.45-18.00									
ARM A	10.85	30.82	0.352	- -	0.8	0.5	8.3	-	0.050
ARM B	9.89	36.04	0.274	- -	0.5	0.4	5.8	-	0.038
ARM C	4.06	25.23	0.161	- -	0.3	0.2	2.9	-	0.047
ARM D	11.85	34.94	0.339	- -	0.7	0.5	7.9	-	0.043
18.00-18.15									
ARM A	9.08	32.10	0.283	- -	0.5	0.4	6.0	-	0.043
ARM B	8.28	36.89	0.225	- -	0.4	0.3	4.4	-	0.035
ARM C	3.40	26.98	0.126	- -	0.2	0.1	2.2	-	0.042
ARM D	9.93	35.48	0.280	- -	0.5	0.4	5.9	-	0.039

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	*
17.30	0.8	*
17.45	0.8	*
18.00	0.5	*
18.15	0.4	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.5	*
17.45	0.5	*
18.00	0.4	
18.15	0.3	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.2
17.30	0.3
17.45	0.3
18.00	0.2
18.15	0.1

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	*
17.30	0.7	*
17.45	0.7	*
18.00	0.5	*
18.15	0.4	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *		T75
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)	
A	996.5	664.4	52.9	0.05	52.9	0.05	
B	908.4	605.6	35.8	0.04	35.8	0.04	
C	373.0	248.7	18.3	0.05	18.3	0.05	
D	1088.8	725.8	48.9	0.04	48.9	0.04	
ALL	3366.7	2244.5	155.9	0.05	155.9	0.05	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 16:05:33 on 10/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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Wokingham, Berks. Web: www.trlsoftware.co.uk
RG40 3GA,UK

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IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\A4303_Hunter Bld\
2017 assessments\am2017wd.vai"
(drive-on-the-left) at 11:55:16 on Thursday, 9 July 2015

FILE PROPERTIES

RUN TITLE: Magna Park Access Roundabout AM Peak 2017 With Development
LOCATION: Magna Park Site Access
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - Hunter Bld
ARM B - A4303 East
ARM C - Site Access
ARM D - A4303 West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.20	10.70	31.00	19.00	67.00	57.0	0.654	44.594
ARM B	7.30	10.20	32.00	100.00	67.00	54.0	0.681	46.088
ARM C	7.30	8.50	10.00	25.00	67.00	62.0	0.579	37.067
ARM D	7.60	10.00	11.00	42.00	67.00	60.0	0.632	41.945

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK	NUMBER OF MINUTES FROM START WHEN FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
	TO RISE	IS REACHED	FALLING			
ARM A	15.00	45.00	75.00	3.69	5.53	3.69
ARM B	15.00	45.00	75.00	17.19	25.78	17.19
ARM C	15.00	45.00	75.00	0.20	0.30	0.20
ARM D	15.00	45.00	75.00	12.76	19.14	12.76

DEMAND SET TITLE: AM Peak 2006 Base Flows

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.15 - 08.45					
	ARM A	0.000	0.431	0.000	0.569
		0.0	127.0	0.0	168.0
		(49.5)%	(49.5)%	(49.5)%	(49.5)%
	ARM B	0.389	0.034	0.059	0.518
		535.0	47.0	81.0	712.0
		(9.4)%	(9.4)%	(9.4)%	(9.4)%
	ARM C	0.313	0.250	0.000	0.438
		5.0	4.0	0.0	7.0
		(43.8)%	(43.8)%	(43.8)%	(43.8)%
	ARM D	0.454	0.479	0.067	0.000
		464.0	489.0	68.0	0.0
		(9.2)%	(9.2)%	(9.2)%	(9.2)%

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	3.70	26.19	0.141	- -	0.0	0.2	2.4	-	0.044
ARM B	17.25	39.59	0.436	- -	0.0	0.8	11.3	-	0.045
ARM C	0.20	17.37	0.012	- -	0.0	0.0	0.2	-	0.058
ARM D	12.81	33.70	0.380	- -	0.0	0.6	9.0	-	0.048
07.30-07.45									
ARM A	4.42	25.47	0.174	- -	0.2	0.2	3.1	-	0.048
ARM B	20.60	39.10	0.527	- -	0.8	1.1	16.2	-	0.054
ARM C	0.24	15.72	0.015	- -	0.0	0.0	0.2	-	0.065
ARM D	15.30	32.78	0.467	- -	0.6	0.9	12.8	-	0.057
07.45-08.00									
ARM A	5.41	24.50	0.221	- -	0.2	0.3	4.2	-	0.052
ARM B	25.23	38.42	0.657	- -	1.1	1.9	27.3	-	0.075
ARM C	0.29	13.47	0.022	- -	0.0	0.0	0.3	-	0.076
ARM D	18.74	31.52	0.594	- -	0.9	1.4	21.0	-	0.078
08.00-08.15									
ARM A	5.41	24.49	0.221	- -	0.3	0.3	4.2	-	0.052
ARM B	25.23	38.41	0.657	- -	1.9	1.9	28.4	-	0.076
ARM C	0.29	13.45	0.022	- -	0.0	0.0	0.3	-	0.076
ARM D	18.74	31.51	0.595	- -	1.4	1.5	21.8	-	0.078
08.15-08.30									
ARM A	4.42	25.46	0.174	- -	0.3	0.2	3.2	-	0.048
ARM B	20.60	39.09	0.527	- -	1.9	1.1	17.3	-	0.054
ARM C	0.24	15.69	0.015	- -	0.0	0.0	0.2	-	0.065
ARM D	15.30	32.76	0.467	- -	1.5	0.9	13.6	-	0.058
08.30-08.45									
ARM A	3.70	26.17	0.141	- -	0.2	0.2	2.5	-	0.044
ARM B	17.25	39.58	0.436	- -	1.1	0.8	11.9	-	0.045
ARM C	0.20	17.34	0.012	- -	0.0	0.0	0.2	-	0.058
ARM D	12.81	33.68	0.380	- -	0.9	0.6	9.4	-	0.048

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.2
07.45	0.2
08.00	0.3
08.15	0.3
08.30	0.2
08.45	0.2

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.8	*
07.45	1.1	*
08.00	1.9	**
08.15	1.9	**
08.30	1.1	*
08.45	0.8	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.0
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.6	*
07.45	0.9	*
08.00	1.4	*
08.15	1.5	*
08.30	0.9	*
08.45	0.6	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *		T75
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)	
A	406.0	270.7	19.7	0.05	19.7	0.05	
B	1892.6	1261.7	112.4	0.06	112.4	0.06	
C	22.0	14.7	1.5	0.07	1.5	0.07	
D	1405.3	936.9	87.5	0.06	87.5	0.06	
ALL	3726.0	2484.0	221.0	0.06	221.0	0.06	

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END OF JOB

========== end of file ==========

Printed at 16:05:58 on 10/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\A4303_Hunter Bld\2017 assessments\pm2017wd.vai"
(drive-on-the-left) at 11:55:41 on Thursday, 9 July 2015

FILE PROPERTIES

RUN TITLE: Magna Park Access Roundabout PM Peak 2017 With Development
LOCATION: Magna Park Site Access
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - Hunter Bld
ARM B - A4303 East
ARM C - Site Access
ARM D - A4303 West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.20	10.70	31.00	19.00	67.00	57.0	0.654	44.594
ARM B	7.30	10.20	32.00	100.00	67.00	54.0	0.681	46.088
ARM C	7.30	8.50	10.00	25.00	67.00	62.0	0.579	37.067
ARM D	7.60	10.00	11.00	42.00	67.00	60.0	0.632	41.945

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TO TOP OF PEAK	FLOW STOPS TO RISE	RATE OF FLOW (VEH/MIN) BEFORE IS REACHED	AT TOP FALLING	AFTER PEAK	OF PEAK	PEAK
ARM A	15.00	45.00	75.00	8.55	12.83	8.55		
ARM B	15.00	45.00	75.00	8.48	12.71	8.48		
ARM C	15.00	45.00	75.00	3.39	5.08	3.39		
ARM D	15.00	45.00	75.00	9.56	14.34	9.56		

DEMAND SET TITLE: AM Peak 2006 Base Flows

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15					
	ARM A	0.000	0.427	0.004	0.569
		0.0	292.0	3.0	389.0
		(17.1)%	(17.1)%	(17.1)%	(17.1)%
	ARM B	0.257	0.041	0.022	0.680
		174.0	28.0	15.0	461.0
		(12.4)%	(12.4)%	(12.4)%	(12.4)%
	ARM C	0.041	0.616	0.000	0.343
		11.0	167.0	0.0	93.0
		(3.0)%	(3.0)%	(3.0)%	(3.0)%
	ARM D	0.140	0.848	0.012	0.000
		107.0	649.0	9.0	0.0
		(8.8)%	(8.8)%	(8.8)%	(8.8)%

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	8.58	31.66	0.271	- -	0.0	0.4	5.5	-	0.043
ARM B	8.51	37.45	0.227	- -	0.0	0.3	4.3	-	0.034
ARM C	3.40	27.53	0.124	- -	0.0	0.1	2.1	-	0.041
ARM D	9.60	35.57	0.270	- -	0.0	0.4	5.4	-	0.038
17.00-17.15									
ARM A	10.25	30.40	0.337	- -	0.4	0.5	7.5	-	0.050
ARM B	10.16	36.75	0.276	- -	0.3	0.4	5.6	-	0.038
ARM C	4.06	25.87	0.157	- -	0.1	0.2	2.7	-	0.046
ARM D	11.46	34.98	0.328	- -	0.4	0.5	7.2	-	0.043
17.15-17.30									
ARM A	12.55	28.67	0.438	- -	0.5	0.8	11.3	-	0.062
ARM B	12.44	35.80	0.348	- -	0.4	0.5	7.8	-	0.043
ARM C	4.97	23.60	0.211	- -	0.2	0.3	3.9	-	0.054
ARM D	14.04	34.18	0.411	- -	0.5	0.7	10.2	-	0.050
17.30-17.45									
ARM A	12.55	28.66	0.438	- -	0.8	0.8	11.6	-	0.062
ARM B	12.44	35.79	0.348	- -	0.5	0.5	8.0	-	0.043
ARM C	4.97	23.59	0.211	- -	0.3	0.3	4.0	-	0.054
ARM D	14.04	34.18	0.411	- -	0.7	0.7	10.4	-	0.050
17.45-18.00									
ARM A	10.25	30.38	0.337	- -	0.8	0.5	7.8	-	0.050
ARM B	10.16	36.74	0.276	- -	0.5	0.4	5.8	-	0.038
ARM C	4.06	25.85	0.157	- -	0.3	0.2	2.8	-	0.046
ARM D	11.46	34.97	0.328	- -	0.7	0.5	7.5	-	0.043
18.00-18.15									
ARM A	8.58	31.64	0.271	- -	0.5	0.4	5.7	-	0.043
ARM B	8.51	37.44	0.227	- -	0.4	0.3	4.5	-	0.035
ARM C	3.40	27.50	0.124	- -	0.2	0.1	2.1	-	0.042
ARM D	9.60	35.56	0.270	- -	0.5	0.4	5.6	-	0.039

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	*
17.30	0.8	*
17.45	0.8	*
18.00	0.5	*
18.15	0.4	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.5	*
17.45	0.5	*
18.00	0.4	
18.15	0.3	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.2
17.30	0.3
17.45	0.3
18.00	0.2
18.15	0.1

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	
17.30	0.7	*
17.45	0.7	*
18.00	0.5	
18.15	0.4	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *		T75
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)	
A	941.5	627.7	49.4	0.05	49.4	0.05	
B	933.2	622.1	36.1	0.04	36.1	0.04	
C	373.0	248.7	17.7	0.05	17.7	0.05	
D	1053.0	702.0	46.3	0.04	46.3	0.04	
ALL	3300.7	2200.4	149.6	0.05	149.6	0.05	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 16:06:18 on 10/09/2015]

_____ A R C A D Y 6 _____

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

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Nine Mile Ride Email: software@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk
RG40 3GA,UK

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\Cross in Hand\
2017 assessments\am2017nd.vai"
(drive-on-the-left) at 14:32:27 on Thursday, 9 July 2015

FILE PROPERTIES
****

RUN TITLE: Cross in Hand Roundabout AM Peak 2017 No Development
LOCATION: Cross In Hand Roundabout
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA
****
ARM A - A5 North
ARM B - A4303
ARM C - A5 South
ARM D - B4027
ARM E - Coal Pit Lane

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.70	7.50	47.00	45.00	98.00	48.0	0.494	34.354
ARM B	7.10	8.80	25.00	35.00	79.00	54.0	0.566	40.232
ARM C	5.10	7.50	50.00	37.00	98.00	54.0	0.486	34.056
ARM D	3.20	6.20	24.00	40.00	88.00	64.0	0.405	24.458
ARM E	3.50	7.20	9.00	19.00	88.00	64.0	0.384	22.641

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

WARNING ARM C Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100
E	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TO TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	14.45	21.67	14.45
ARM B	15.00	45.00	75.00	11.41	17.12	11.41
ARM C	15.00	45.00	75.00	8.43	12.64	8.43
ARM D	15.00	45.00	75.00	2.06	3.09	2.06
ARM E	15.00	45.00	75.00	3.97	5.96	3.97

DEMAND SET TITLE: AM Peak 2006 Base Flows

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D	ARM E
07.15 - 08.45	ARM A	0.000	0.469	0.486	0.042	0.003
		0.0	542.0	562.0	48.0	4.0
		(6.9)%	(6.9)%	(6.9)%	(6.9)%	(6.9)%
	ARM B	0.388	0.000	0.275	0.206	0.131
		354.0	0.0	251.0	188.0	120.0
		(12.5)%	(12.5)%	(12.5)%	(12.5)%	(12.5)%
	ARM C	0.458	0.414	0.000	0.027	0.101
		309.0	279.0	0.0	18.0	68.0
		(14.2)%	(14.2)%	(14.2)%	(14.2)%	(14.2)%
	ARM D	0.133	0.812	0.048	0.000	0.006
		22.0	134.0	8.0	0.0	1.0
		(3.0)%	(3.0)%	(3.0)%	(3.0)%	(3.0)%
	ARM E	0.019	0.645	0.321	0.016	0.000
		6.0	205.0	102.0	5.0	0.0
		(1.6)%	(1.6)%	(1.6)%	(1.6)%	(1.6)%

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	14.50	27.63	0.525	- - -	0.0	1.1	15.8	-	0.075
ARM B	11.46	30.90	0.371	- - -	0.0	0.6	8.6	-	0.051
ARM C	8.46	25.54	0.331	- - -	0.0	0.5	7.2	-	0.058
ARM D	2.07	17.42	0.119	- - -	0.0	0.1	2.0	-	0.065
ARM E	3.99	16.44	0.243	- - -	0.0	0.3	4.6	-	0.080
07.30-07.45									
ARM A	17.32	26.74	0.648	- - -	1.1	1.8	25.9	-	0.105
ARM B	13.68	29.95	0.457	- - -	0.6	0.8	12.3	-	0.061
ARM C	10.10	24.70	0.409	- - -	0.5	0.7	10.1	-	0.068
ARM D	2.47	16.17	0.153	- - -	0.1	0.2	2.6	-	0.073
ARM E	4.76	15.28	0.312	- - -	0.3	0.4	6.6	-	0.095
07.45-08.00									
ARM A	21.21	25.53	0.831	- - -	1.8	4.5	60.6	-	0.214
ARM B	16.75	28.68	0.584	- - -	0.8	1.4	20.1	-	0.083
ARM C	12.37	23.55	0.525	- - -	0.7	1.1	15.9	-	0.089
ARM D	3.03	14.48	0.209	- - -	0.2	0.3	3.9	-	0.087
ARM E	5.84	13.72	0.425	- - -	0.4	0.7	10.6	-	0.126
08.00-08.15									
ARM A	21.21	25.51	0.831	- - -	4.5	4.7	69.7	-	0.229
ARM B	16.75	28.63	0.585	- - -	1.4	1.4	20.9	-	0.084
ARM C	12.37	23.54	0.525	- - -	1.1	1.1	16.5	-	0.089
ARM D	3.03	14.46	0.209	- - -	0.3	0.3	3.9	-	0.087
ARM E	5.84	13.70	0.426	- - -	0.7	0.7	11.0	-	0.127
08.15-08.30									
ARM A	17.32	26.71	0.648	- - -	4.7	1.9	30.2	-	0.111
ARM B	13.68	29.87	0.458	- - -	1.4	0.9	13.1	-	0.062
ARM C	10.10	24.67	0.409	- - -	1.1	0.7	10.7	-	0.069
ARM D	2.47	16.14	0.153	- - -	0.3	0.2	2.8	-	0.073
ARM E	4.76	15.26	0.312	- - -	0.7	0.5	7.1	-	0.096

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
ARM A	14.50	27.60	0.526	- - -	1.9	1.1	17.3	-	0.077
ARM B	11.46	30.86	0.371	- - -	0.9	0.6	9.1	-	0.052
ARM C	8.46	25.52	0.331	- - -	0.7	0.5	7.6	-	0.059
ARM D	2.07	17.39	0.119	- - -	0.2	0.1	2.1	-	0.065
ARM E	3.99	16.41	0.243	- - -	0.5	0.3	5.0	-	0.081

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.1	*
07.45	1.8	**
08.00	4.5	*****
08.15	4.7	*****
08.30	1.9	**
08.45	1.1	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.6	*
07.45	0.8	*
08.00	1.4	*
08.15	1.4	*
08.30	0.9	*
08.45	0.6	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.5	
07.45	0.7	*
08.00	1.1	*
08.15	1.1	*
08.30	0.7	*
08.45	0.5	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.1
07.45	0.2
08.00	0.3
08.15	0.3
08.30	0.2
08.45	0.1

QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.3	
07.45	0.4	
08.00	0.7	*
08.15	0.7	*
08.30	0.5	
08.45	0.3	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1591.1	1060.8	219.7	0.14	219.7	0.14
B	1256.7	837.8	84.1	0.07	84.1	0.07
C	927.7	618.5	68.0	0.07	68.0	0.07
D	227.1	151.4	17.3	0.08	17.3	0.08
E	437.7	291.8	44.8	0.10	44.8	0.10
ALL	4440.4	2960.2	433.8	0.10	433.9	0.10

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 16:07:40 on 10/09/2015]

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770356
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RG40 3GA,UK

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\Cross in Hand\
2017 assessments\pm2017nd.vai"
(drive-on-the-left) at 14:36:58 on Thursday, 9 July 2015

FILE PROPERTIES

RUN TITLE: Cross in Hand Roundabout PM Peak 2017 No Development
LOCATION: Cross In Hand Roundabout
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A5 North
ARM B - A4303
ARM C - A5 South
ARM D - B4027
ARM E - Coal Pit Lane

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.70	7.50	47.00	45.00	98.00	48.0	0.494	34.354
ARM B	7.10	8.80	25.00	35.00	79.00	54.0	0.566	40.232
ARM C	5.10	7.50	50.00	37.00	98.00	54.0	0.486	34.056
ARM D	3.20	6.20	24.00	40.00	88.00	64.0	0.405	24.458
ARM E	3.50	7.20	9.00	19.00	88.00	64.0	0.384	22.641

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

WARNING ARM C Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100
E	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
	TO RISE					
ARM A	15.00	45.00	75.00	7.95	11.92	7.95
ARM B	15.00	45.00	75.00	13.41	20.12	13.41
ARM C	15.00	45.00	75.00	9.61	14.42	9.61
ARM D	15.00	45.00	75.00	3.54	5.31	3.54
ARM E	15.00	45.00	75.00	2.17	3.26	2.17

DEMAND SET TITLE: AM Peak 2006 Base Flows

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D	ARM E
16.45 - 18.15	ARM A	0.000	0.495	0.480	0.022	0.003
		0.0	315.0	305.0	14.0	2.0
		(6.8)	(6.8)	(6.8)	(6.8)	(6.8)
	ARM B	0.462	0.000	0.229	0.140	0.169
		496.0	0.0	246.0	150.0	181.0
		(7.6)	(7.6)	(7.6)	(7.6)	(7.6)
	ARM C	0.670	0.198	0.000	0.012	0.121
		515.0	152.0	0.0	9.0	93.0
		(8.8)	(8.8)	(8.8)	(8.8)	(8.8)
	ARM D	0.244	0.707	0.028	0.000	0.021
		69.0	200.0	8.0	0.0	6.0
		(0.7)	(0.7)	(0.7)	(0.7)	(0.7)
	ARM E	0.029	0.672	0.276	0.023	0.000
		5.0	117.0	48.0	4.0	0.0
		(2.9)	(2.9)	(2.9)	(2.9)	(2.9)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	7.98	29.00	0.275	- -	0.0	0.4	5.6	-	0.047
ARM B	13.46	34.73	0.388	- -	0.0	0.6	9.2	-	0.047
ARM C	9.65	26.21	0.368	- -	0.0	0.6	8.5	-	0.060
ARM D	3.55	16.46	0.216	- -	0.0	0.3	4.0	-	0.077
ARM E	2.18	14.83	0.147	- -	0.0	0.2	2.5	-	0.079
17.00-17.15									
ARM A	9.53	28.37	0.336	- -	0.4	0.5	7.4	-	0.053
ARM B	16.08	34.21	0.470	- -	0.6	0.9	13.0	-	0.055
ARM C	11.52	25.21	0.457	- -	0.6	0.8	12.2	-	0.073
ARM D	4.24	14.91	0.284	- -	0.3	0.4	5.8	-	0.094
ARM E	2.61	13.42	0.194	- -	0.2	0.2	3.5	-	0.092
17.15-17.30									
ARM A	11.67	27.53	0.424	- -	0.5	0.7	10.7	-	0.063
ARM B	19.69	33.49	0.588	- -	0.9	1.4	20.5	-	0.072
ARM C	14.11	23.85	0.592	- -	0.8	1.4	20.6	-	0.102
ARM D	5.19	12.82	0.405	- -	0.4	0.7	9.7	-	0.130
ARM E	3.19	11.50	0.278	- -	0.2	0.4	5.5	-	0.120
17.30-17.45									
ARM A	11.67	27.51	0.424	- -	0.7	0.7	11.0	-	0.063
ARM B	19.69	33.49	0.588	- -	1.4	1.4	21.2	-	0.072
ARM C	14.11	23.84	0.592	- -	1.4	1.4	21.5	-	0.103
ARM D	5.19	12.79	0.406	- -	0.7	0.7	10.1	-	0.132
ARM E	3.19	11.48	0.278	- -	0.4	0.4	5.7	-	0.121
17.45-18.00									
ARM A	9.53	28.35	0.336	- -	0.7	0.5	7.8	-	0.053
ARM B	16.08	34.20	0.470	- -	1.4	0.9	13.7	-	0.055
ARM C	11.52	25.19	0.457	- -	1.4	0.9	13.1	-	0.074
ARM D	4.24	14.87	0.285	- -	0.7	0.4	6.2	-	0.094
ARM E	2.61	13.38	0.195	- -	0.4	0.2	3.7	-	0.093

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
ARM A	7.98	28.98	0.275	- -	0.5	0.4	5.8	-	0.048
ARM B	13.46	34.72	0.388	- -	0.9	0.6	9.7	-	0.047
ARM C	9.65	26.19	0.368	- -	0.9	0.6	9.0	-	0.061
ARM D	3.55	16.41	0.216	- -	0.4	0.3	4.3	-	0.078
ARM E	2.18	14.79	0.148	- -	0.2	0.2	2.7	-	0.079

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	*
17.30	0.7	*
17.45	0.7	*
18.00	0.5	*
18.15	0.4	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.6	*
17.15	0.9	*
17.30	1.4	*
17.45	1.4	*
18.00	0.9	*
18.15	0.6	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.6	*
17.15	0.8	*
17.30	1.4	*
17.45	1.4	*
18.00	0.9	*
18.15	0.6	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.7	*
17.45	0.7	*
18.00	0.4	
18.15	0.3	

QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.2
17.15	0.2
17.30	0.4
17.45	0.4
18.00	0.2
18.15	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	875.4	583.6	48.3	0.06	48.3	0.06
B	1476.9	984.6	87.4	0.06	87.4	0.06
C	1058.5	705.6	84.9	0.08	84.9	0.08
D	389.5	259.7	40.1	0.10	40.1	0.10
E	239.5	159.7	23.7	0.10	23.7	0.10
ALL	4039.8	2693.2	284.3	0.07	284.3	0.07

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 16:13:22 on 10/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\Cross in Hand\
2017 assessments\am2017wd.vai"
(drive-on-the-left) at 14:46:50 on Thursday, 9 July 2015

FILE PROPERTIES

RUN TITLE: Cross in Hand Roundabout AM Peak 2017 With Development
LOCATION: Cross In Hand Roundabout
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A5 North
ARM B - A4303
ARM C - A5 South
ARM D - B4027
ARM E - Coal Pit Lane

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.70	7.50	47.00	45.00	98.00	48.0	0.494	34.354
ARM B	7.10	8.80	25.00	35.00	79.00	54.0	0.566	40.232
ARM C	5.10	7.50	50.00	37.00	98.00	54.0	0.486	34.056
ARM D	3.20	6.20	24.00	40.00	88.00	64.0	0.405	24.458
ARM E	3.50	7.20	9.00	19.00	88.00	64.0	0.384	22.641

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

WARNING ARM C Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100
E	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	13.09	19.63	13.09
ARM B	15.00	45.00	75.00	11.06	16.59	11.06
ARM C	15.00	45.00	75.00	8.60	12.90	8.60
ARM D	15.00	45.00	75.00	2.25	3.38	2.25
ARM E	15.00	45.00	75.00	4.21	6.32	4.21

DEMAND SET TITLE: AM Peak 2006 Base Flows

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D	ARM E
07.15 - 08.45	ARM A	0.000	0.389	0.547	0.055	0.009
		0.0	407.0	573.0	58.0	9.0
		(6.9)	(6.9)	(6.9)	(6.9)	(6.9)
	ARM B	0.368	0.000	0.284	0.212	0.136
		326.0	0.0	251.0	188.0	120.0
		(11.8)	(11.8)	(11.8)	(11.8)	(11.8)
	ARM C	0.469	0.406	0.000	0.026	0.099
		323.0	279.0	0.0	18.0	68.0
		(14.2)	(14.2)	(14.2)	(14.2)	(14.2)
	ARM D	0.206	0.744	0.044	0.000	0.006
		37.0	134.0	8.0	0.0	1.0
		(2.8)	(2.8)	(2.8)	(2.8)	(2.8)
	ARM E	0.074	0.608	0.303	0.015	0.000
		25.0	205.0	102.0	5.0	0.0
		(1.5)	(1.5)	(1.5)	(1.5)	(1.5)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	13.14	27.63	0.475	- -	0.0	0.9	13.1	-	0.068
ARM B	11.10	30.92	0.359	- -	0.0	0.6	8.2	-	0.050
ARM C	8.63	25.64	0.337	- -	0.0	0.5	7.4	-	0.059
ARM D	2.26	17.52	0.129	- -	0.0	0.1	2.2	-	0.065
ARM E	4.23	16.47	0.257	- -	0.0	0.3	5.0	-	0.081
07.30-07.45									
ARM A	15.69	26.74	0.587	- -	0.9	1.4	20.3	-	0.090
ARM B	13.26	29.92	0.443	- -	0.6	0.8	11.6	-	0.060
ARM C	10.31	24.82	0.415	- -	0.5	0.7	10.4	-	0.069
ARM D	2.70	16.28	0.166	- -	0.1	0.2	2.9	-	0.074
ARM E	5.05	15.31	0.330	- -	0.3	0.5	7.1	-	0.097
07.45-08.00									
ARM A	19.21	25.53	0.752	- -	1.4	2.9	40.7	-	0.153
ARM B	16.24	28.58	0.568	- -	0.8	1.3	18.9	-	0.081
ARM C	12.63	23.71	0.533	- -	0.7	1.1	16.3	-	0.090
ARM D	3.30	14.60	0.226	- -	0.2	0.3	4.3	-	0.088
ARM E	6.18	13.75	0.450	- -	0.5	0.8	11.6	-	0.132
08.00-08.15									
ARM A	19.21	25.52	0.753	- -	2.9	3.0	44.4	-	0.158
ARM B	16.24	28.54	0.569	- -	1.3	1.3	19.6	-	0.081
ARM C	12.63	23.69	0.533	- -	1.1	1.1	17.0	-	0.090
ARM D	3.30	14.59	0.226	- -	0.3	0.3	4.4	-	0.089
ARM E	6.18	13.73	0.450	- -	0.8	0.8	12.1	-	0.132
08.15-08.30									
ARM A	15.69	26.71	0.587	- -	3.0	1.4	22.6	-	0.092
ARM B	13.26	29.87	0.444	- -	1.3	0.8	12.4	-	0.060
ARM C	10.31	24.80	0.416	- -	1.1	0.7	11.0	-	0.069
ARM D	2.70	16.25	0.166	- -	0.3	0.2	3.1	-	0.074
ARM E	5.05	15.29	0.330	- -	0.8	0.5	7.7	-	0.098

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
ARM A	13.14	27.60	0.476	- -	1.4	0.9	14.1	-	0.069
ARM B	11.10	30.88	0.360	- -	0.8	0.6	8.6	-	0.051
ARM C	8.63	25.62	0.337	- -	0.7	0.5	7.8	-	0.059
ARM D	2.26	17.49	0.129	- -	0.2	0.1	2.3	-	0.066
ARM E	4.23	16.44	0.257	- -	0.5	0.3	5.4	-	0.082

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.9	*
07.45	1.4	*
08.00	2.9	***
08.15	3.0	***
08.30	1.4	*
08.45	0.9	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.6	*
07.45	0.8	*
08.00	1.3	*
08.15	1.3	*
08.30	0.8	*
08.45	0.6	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.5	*
07.45	0.7	*
08.00	1.1	*
08.15	1.1	*
08.30	0.7	*
08.45	0.5	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.1
07.45	0.2
08.00	0.3
08.15	0.3
08.30	0.2
08.45	0.1

QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.3	
07.45	0.5	
08.00	0.8	*
08.15	0.8	*
08.30	0.5	
08.45	0.3	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1441.1	960.7	155.2	0.11	155.2	0.11
B	1218.1	812.1	79.3	0.07	79.3	0.07
C	947.0	631.3	69.9	0.07	69.9	0.07
D	247.8	165.2	19.0	0.08	19.0	0.08
E	463.9	309.2	48.9	0.11	48.9	0.11
ALL	4317.8	2878.6	372.3	0.09	372.3	0.09

T75

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 16:13:37 on 10/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770356
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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\Cross in Hand\
2017 assessments\pm2017wd.vai"
(drive-on-the-left) at 14:47:21 on Thursday, 9 July 2015

FILE PROPERTIES

RUN TITLE: Cross in Hand Roundabout PM Peak 2017 With Development
LOCATION: Cross In Hand Roundabout
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A5 North
ARM B - A4303
ARM C - A5 South
ARM D - B4027
ARM E - Coal Pit Lane

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.70	7.50	47.00	45.00	98.00	48.0	0.494	34.354
ARM B	7.10	8.80	25.00	35.00	79.00	54.0	0.566	40.232
ARM C	5.10	7.50	50.00	37.00	98.00	54.0	0.486	34.056
ARM D	3.20	6.20	24.00	40.00	88.00	64.0	0.405	24.458
ARM E	3.50	7.20	9.00	19.00	88.00	64.0	0.384	22.641

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

WARNING ARM C Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100
E	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TO TOP OF PEAK	FLOW STOPS IS REACHED	RATE OF FLOW (VEH/MIN) BEFORE FALLING	AT TOP OF PEAK	AFTER PEAK
	TO RISE					
ARM A	15.00	45.00	75.00	8.13	12.19	8.13
ARM B	15.00	45.00	75.00	12.27	18.41	12.27
ARM C	15.00	45.00	75.00	9.70	14.55	9.70
ARM D	15.00	45.00	75.00	3.65	5.48	3.65
ARM E	15.00	45.00	75.00	2.26	3.39	2.26

DEMAND SET TITLE: AM Peak 2006 Base Flows

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D	ARM E
16.45 - 18.15	ARM A	0.000	0.445	0.488	0.051	0.017
		0.0	289.0	317.0	33.0	11.0
		(5.7)	(5.7)	(5.7)	(5.7)	(5.7)
	ARM B	0.412	0.000	0.251	0.153	0.184
		405.0	0.0	246.0	150.0	181.0
		(8.4)	(8.4)	(8.4)	(8.4)	(8.4)
	ARM C	0.673	0.196	0.000	0.012	0.120
		522.0	152.0	0.0	9.0	93.0
		(9.0)	(9.0)	(9.0)	(9.0)	(9.0)
	ARM D	0.267	0.685	0.027	0.000	0.021
		78.0	200.0	8.0	0.0	6.0
		(0.7)	(0.7)	(0.7)	(0.7)	(0.7)
	ARM E	0.066	0.646	0.265	0.022	0.000
		12.0	117.0	48.0	4.0	0.0
		(2.8)	(2.8)	(2.8)	(2.8)	(2.8)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	8.16	29.30	0.278	- -	0.0	0.4	5.7	-	0.047
ARM B	12.32	34.22	0.360	- -	0.0	0.6	8.2	-	0.046
ARM C	9.74	26.51	0.367	- -	0.0	0.6	8.4	-	0.059
ARM D	3.66	16.83	0.218	- -	0.0	0.3	4.0	-	0.076
ARM E	2.27	15.21	0.149	- -	0.0	0.2	2.6	-	0.077
17.00-17.15									
ARM A	9.74	28.67	0.340	- -	0.4	0.5	7.6	-	0.053
ARM B	14.71	33.65	0.437	- -	0.6	0.8	11.4	-	0.053
ARM C	11.63	25.58	0.454	- -	0.6	0.8	12.1	-	0.071
ARM D	4.38	15.36	0.285	- -	0.3	0.4	5.8	-	0.091
ARM E	2.71	13.86	0.196	- -	0.2	0.2	3.5	-	0.090
17.15-17.30									
ARM A	11.93	27.81	0.429	- -	0.5	0.7	11.0	-	0.063
ARM B	18.02	32.87	0.548	- -	0.8	1.2	17.5	-	0.067
ARM C	14.24	24.32	0.586	- -	0.8	1.4	20.1	-	0.099
ARM D	5.36	13.37	0.401	- -	0.4	0.7	9.6	-	0.124
ARM E	3.32	12.04	0.276	- -	0.2	0.4	5.5	-	0.114
17.30-17.45									
ARM A	11.93	27.80	0.429	- -	0.7	0.7	11.2	-	0.063
ARM B	18.02	32.87	0.548	- -	1.2	1.2	18.1	-	0.067
ARM C	14.24	24.31	0.586	- -	1.4	1.4	21.0	-	0.099
ARM D	5.36	13.34	0.402	- -	0.7	0.7	10.0	-	0.125
ARM E	3.32	12.01	0.276	- -	0.4	0.4	5.7	-	0.115
17.45-18.00									
ARM A	9.74	28.65	0.340	- -	0.7	0.5	7.9	-	0.053
ARM B	14.71	33.64	0.437	- -	1.2	0.8	12.0	-	0.053
ARM C	11.63	25.57	0.455	- -	1.4	0.8	13.0	-	0.072
ARM D	4.38	15.33	0.285	- -	0.7	0.4	6.2	-	0.092
ARM E	2.71	13.83	0.196	- -	0.4	0.2	3.8	-	0.090

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
ARM A	8.16	29.28	0.279	- -	0.5	0.4	5.9	-	0.047
ARM B	12.32	34.21	0.360	- -	0.8	0.6	8.6	-	0.046
ARM C	9.74	26.49	0.368	- -	0.8	0.6	8.9	-	0.060
ARM D	3.66	16.79	0.218	- -	0.4	0.3	4.3	-	0.076
ARM E	2.27	15.17	0.150	- -	0.2	0.2	2.7	-	0.078

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	*
17.30	0.7	*
17.45	0.7	*
18.00	0.5	*
18.15	0.4	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.6	*
17.15	0.8	*
17.30	1.2	*
17.45	1.2	*
18.00	0.8	*
18.15	0.6	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.6	*
17.15	0.8	*
17.30	1.4	*
17.45	1.4	*
18.00	0.8	*
18.15	0.6	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.7	*
17.45	0.7	*
18.00	0.4	
18.15	0.3	

QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.2
17.15	0.2
17.30	0.4
17.45	0.4
18.00	0.2
18.15	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	894.7	596.5	49.2	0.05	49.2	0.05
B	1351.7	901.1	75.8	0.06	75.8	0.06
C	1068.1	712.1	83.5	0.08	83.5	0.08
D	401.9	267.9	39.9	0.10	39.9	0.10
E	249.1	166.1	23.8	0.10	23.8	0.10
ALL	3965.5	2643.7	272.2	0.07	272.2	0.07

T75

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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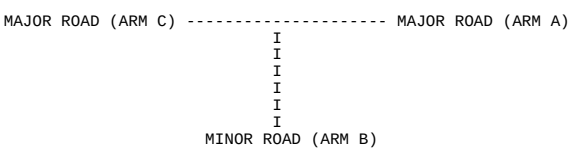
Run with file:- "C:\Users\jon_ashcroft\Documents\BMS Photographs\am2017nd.vpi" (drive-on-the-left) at 17:08:07 on Thursday, 9 July 2015

RUN INFORMATION

RUN TITLE : A4303/ Shackelton Way 2017 AM Peak Without Development
LOCATION :
DATE : 12/02/15
CLIENT :
ENUMERATOR : jon_ashcroft [UK1005963L]
JOB NUMBER :
STATUS :
DESCRIPTION :

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A4303 West
ARM B IS Shackelton Way
ARM C IS A4303 East

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.30 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)200.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 100.0 M.
- VISIBILITY TO RIGHT	(VB-A) 150.0 M.
- LANE 1 WIDTH	(WB-C) 4.00 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
790.29	0.29	0.11

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
645.16	0.28	0.11	0.18	0.40

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
689.79	0.25	0.25

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: A4303/ Shackelton Way 2014 AM Peak Base Flows

TIME PERIOD BEGINS 07.15 AND ENDS 08.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	7.96	11.94	7.96
ARM B	15.00	45.00	75.00	0.84	1.26	0.84
ARM C	15.00	45.00	75.00	0.00	0.00	0.00

Demand set: A4303/ Shackelton Way 2014 AM Peak Base Flows

TIME	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) FROM/TO	ARM A	ARM B	ARM C
07.15 - 08.45	ARM A	0.000	0.100	0.900
		0.0	64.0	573.0
		(0.0)	(17.1)	(17.1)
	ARM B	0.000	0.000	1.000
		0.0	0.0	67.0
		(50.8)	(0.0)	(50.8)
	ARM C	0.000	0.000	0.000
		0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
B-AC	0.84	7.05	0.119		0.00	0.13	1.9		0.16
C-A	0.00								
C-B	0.00	8.31	0.000		0.00	0.00	0.0		0.00
A-B	0.80								
A-C	7.19								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-AC	1.00	6.72	0.149		0.13	0.17	2.5		0.17
C-A	0.00								
C-B	0.00	7.89	0.000		0.00	0.00	0.0		0.00
A-B	0.96								
A-C	8.59								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-AC	1.23	6.27	0.196		0.17	0.24	3.5		0.20
C-A	0.00								
C-B	0.00	7.31	0.000		0.00	0.00	0.0		0.00
A-B	1.17								
A-C	10.51								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-AC	1.23	6.27	0.196		0.24	0.24	3.6		0.20
C-A	0.00								
C-B	0.00	7.31	0.000		0.00	0.00	0.0		0.00
A-B	1.17								
A-C	10.51								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-AC	1.00	6.72	0.149		0.24	0.18	2.8		0.18
C-A	0.00								
C-B	0.00	7.89	0.000		0.00	0.00	0.0		0.00
A-B	0.96								
A-C	8.59								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-AC	0.84	7.05	0.119		0.18	0.14	2.1		0.16
C-A	0.00								
C-B	0.00	8.31	0.000		0.00	0.00	0.0		0.00
A-B	0.80								
A-C	7.19								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.1
07.45	0.2
08.00	0.2
08.15	0.2
08.30	0.2
08.45	0.1

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.0
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	92.2	61.5	16.4	0.18	16.4	0.18
C-A	0.0	0.0				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	88.1	58.7				
A-C	788.7	525.8				
ALL	969.0	646.0	16.4	0.02	16.4	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

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Run with file:- "C:\Users\jon_ashcroft\Documents\BMS Photographs\pm2017nd.vpi" (drive-on-the-left) at 17:08:25 on Thursday, 9 July 2015

RUN INFORMATION

RUN TITLE : A4303/ Shackelton Way 2017 PM Peak Without Development
LOCATION :
DATE : 12/02/15
CLIENT :
ENUMERATOR : jon_ashcroft [UK1005963L]
JOB NUMBER :
STATUS :
DESCRIPTION :

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

MAJOR ROAD (ARM C) ---------- MAJOR ROAD (ARM A)
I
I
I
I
I
I
MINOR ROAD (ARM B)

ARM A IS A4303 West
ARM B IS Shackelton Way
ARM C IS A4303 East

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.30 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)200.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 100.0 M.
- VISIBILITY TO RIGHT	(VB-A) 150.0 M.
- LANE 1 WIDTH	(WB-C) 4.00 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
790.29	0.29	0.11

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
645.16	0.28	0.11	0.18	0.40

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
689.79	0.25	0.25

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: A4303/ Shackelton Way 2014 AM Peak Base Flows

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	13.46	20.19	13.46
ARM B	15.00	45.00	75.00	2.40	3.60	2.40
ARM C	15.00	45.00	75.00	0.00	0.00	0.00

Demand set: A4303/ Shackelton Way 2014 AM Peak Base Flows

TIME	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.017	0.983
		0.0	18.0	1059.0
		(0.0)%	(6.6)%	(6.6)%
	ARM B	0.000	0.000	1.000
		0.0	0.0	192.0
		(8.9)%	(0.0)%	(8.9)%
	ARM C	0.000	0.000	0.000
		0.0	0.0	0.0
		(0.0)%	(0.0)%	(0.0)%

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	2.41	8.31	0.290		0.00	0.40	5.7		0.17
C-A	0.00								
C-B	0.00	7.15	0.000		0.00	0.00	0.0		0.00
A-B	0.23								
A-C	13.29								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	2.88	7.58	0.380		0.40	0.60	8.6		0.21
C-A	0.00								
C-B	0.00	6.51	0.000		0.00	0.00	0.0		0.00
A-B	0.27								
A-C	15.87								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	3.52	6.56	0.537		0.60	1.11	15.4		0.32
C-A	0.00								
C-B	0.00	5.62	0.000		0.00	0.00	0.0		0.00
A-B	0.33								
A-C	19.43								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	3.52	6.56	0.537		1.11	1.13	16.9		0.33
C-A	0.00								
C-B	0.00	5.62	0.000		0.00	0.00	0.0		0.00
A-B	0.33								
A-C	19.43								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-AC	2.88	7.58	0.380		1.13	0.63	9.9		0.22
C-A	0.00								
C-B	0.00	6.51	0.000		0.00	0.00	0.0		0.00
A-B	0.27								
A-C	15.87								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-AC	2.41	8.31	0.290		0.63	0.41	6.5		0.17
C-A	0.00								
C-B	0.00	7.15	0.000		0.00	0.00	0.0		0.00
A-B	0.23								
A-C	13.29								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.6	*
17.30	1.1	*
17.45	1.1	*
18.00	0.6	*
18.15	0.4	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-AC	264.3	176.2	63.0	0.24	63.0	0.24
C-A	0.0	0.0				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	24.8	16.5				
A-C	1457.6	971.8				
ALL	1746.7	1164.5	63.0	0.04	63.0	0.04

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

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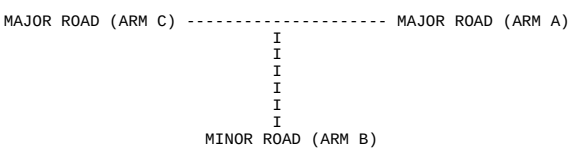
Run with file:- "C:\Users\jon_ashcroft\Documents\BMS Photographs\am2017wd.vpi" (drive-on-the-left) at 17:08:18 on Thursday, 9 July 2015

RUN INFORMATION

RUN TITLE : A4303/ Shackelton Way 2017 AM Peak With Development
LOCATION :
DATE : 12/02/15
CLIENT :
ENUMERATOR : jon_ashcroft [UK1005963L]
JOB NUMBER :
STATUS :
DESCRIPTION :

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A4303 West
ARM B IS Shackelton Way
ARM C IS A4303 East

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.30 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)200.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 100.0 M.
- VISIBILITY TO RIGHT	(VB-A) 150.0 M.
- LANE 1 WIDTH	(WB-C) 4.00 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
790.29	0.29	0.11

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
645.16	0.28	0.11	0.18	0.40

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
689.79	0.25	0.25

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: A4303/ Shackelton Way 2014 AM Peak Base Flows

TIME PERIOD BEGINS 07.15 AND ENDS 08.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	8.29	12.43	8.29
ARM B	15.00	45.00	75.00	0.84	1.26	0.84
ARM C	15.00	45.00	75.00	0.00	0.00	0.00

Demand set: A4303/ Shackelton Way 2014 AM Peak Base Flows

TIME	TURNING PROPORTIONS (PERCENTAGE OF H.V.S) FROM/TO	ARM A	ARM B	ARM C
07.15 - 08.45				
	ARM A	0.000	0.097	0.903
		0.0	64.0	599.0
		(0.0)	(18.1)	(18.1)
	ARM B	0.000	0.000	1.000
		0.0	0.0	67.0
		(50.8)	(0.0)	(50.8)
	ARM C	0.000	0.000	0.000
		0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
B-AC	0.84	6.96	0.121		0.00	0.14	1.9		0.16
C-A	0.00								
C-B	0.00	8.20	0.000		0.00	0.00	0.0		0.00
A-B	0.80								
A-C	7.52								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-AC	1.00	6.62	0.152		0.14	0.18	2.6		0.18
C-A	0.00								
C-B	0.00	7.76	0.000		0.00	0.00	0.0		0.00
A-B	0.96								
A-C	8.97								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-AC	1.23	6.14	0.200		0.18	0.25	3.6		0.20
C-A	0.00								
C-B	0.00	7.16	0.000		0.00	0.00	0.0		0.00
A-B	1.17								
A-C	10.99								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-AC	1.23	6.14	0.200		0.25	0.25	3.7		0.20
C-A	0.00								
C-B	0.00	7.16	0.000		0.00	0.00	0.0		0.00
A-B	1.17								
A-C	10.99								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-AC	1.00	6.62	0.152		0.25	0.18	2.8		0.18
C-A	0.00								
C-B	0.00	7.76	0.000		0.00	0.00	0.0		0.00
A-B	0.96								
A-C	8.97								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-AC	0.84	6.96	0.121		0.18	0.14	2.1		0.16
C-A	0.00								
C-B	0.00	8.20	0.000		0.00	0.00	0.0		0.00
A-B	0.80								
A-C	7.52								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.1
07.45	0.2
08.00	0.2
08.15	0.2
08.30	0.2
08.45	0.1

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.0
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-AC	92.2	61.5	16.8	0.18	16.8	0.18
C-A	0.0	0.0				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	88.1	58.7				
A-C	824.5	549.7				
ALL	1004.8	669.9	16.8	0.02	16.8	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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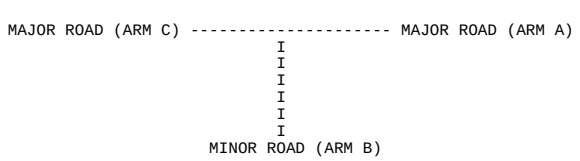
Run with file:- "C:\Users\jon_ashcroft\Documents\BMS Photographs\pm2017wd.vpi" (drive-on-the-left) at 17:08:33 on Thursday, 9 July 2015

RUN INFORMATION

RUN TITLE : A4303/ Shackelton Way 2017 PM Peak With Development
LOCATION :
DATE : 12/02/15
CLIENT :
ENUMERATOR : jon_ashcroft [UK1005963L]
JOB NUMBER :
STATUS :
DESCRIPTION :

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A4303 West
ARM B IS Shackelton Way
ARM C IS A4303 East

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.30 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)200.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 100.0 M.
- VISIBILITY TO RIGHT	(VB-A) 150.0 M.
- LANE 1 WIDTH	(WB-C) 4.00 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
790.29	0.29	0.11

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
645.16	0.28	0.11	0.18	0.40

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
689.79	0.25	0.25

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: A4303/ Shackelton Way 2014 AM Peak Base Flows

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	14.10	21.15	14.10
ARM B	15.00	45.00	75.00	2.40	3.60	2.40
ARM C	15.00	45.00	75.00	0.00	0.00	0.00

Demand set: A4303/ Shackelton Way 2014 AM Peak Base Flows

TIME	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.016	0.984
		0.0	18.0	1110.0
		(0.0)%	(7.2)%	(7.2)%
	ARM B	0.000	0.000	1.000
		0.0	0.0	192.0
		(8.9)%	(0.0)%	(8.9)%
	ARM C	0.000	0.000	0.000
		0.0	0.0	0.0
		(0.0)%	(0.0)%	(0.0)%

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	2.41	8.11	0.297		0.00	0.42	5.9		0.17
C-A	0.00								
C-B	0.00	6.97	0.000		0.00	0.00	0.0		0.00
A-B	0.23								
A-C	13.93								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	2.88	7.34	0.392		0.42	0.63	9.0		0.22
C-A	0.00								
C-B	0.00	6.30	0.000		0.00	0.00	0.0		0.00
A-B	0.27								
A-C	16.63								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	3.52	6.27	0.562		0.63	1.22	16.9		0.35
C-A	0.00								
C-B	0.00	5.36	0.000		0.00	0.00	0.0		0.00
A-B	0.33								
A-C	20.37								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	3.52	6.27	0.562		1.22	1.25	18.6		0.36
C-A	0.00								
C-B	0.00	5.36	0.000		0.00	0.00	0.0		0.00
A-B	0.33								
A-C	20.37								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-AC	2.88	7.34	0.392		1.25	0.66	10.5		0.23
C-A	0.00								
C-B	0.00	6.30	0.000		0.00	0.00	0.0		0.00
A-B	0.27								
A-C	16.63								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-AC	2.41	8.11	0.297		0.66	0.43	6.7		0.18
C-A	0.00								
C-B	0.00	6.97	0.000		0.00	0.00	0.0		0.00
A-B	0.23								
A-C	13.93								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.6	*
17.30	1.2	*
17.45	1.3	*
18.00	0.7	*
18.15	0.4	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	264.3	176.2	67.6	0.26	67.6	0.26
C-A	0.0	0.0				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	24.8	16.5				
A-C	1527.8	1018.6				
ALL	1816.9	1211.3	67.6	0.04	67.6	0.04

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

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A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770356
Nine Mile Ride Email: software@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk
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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\A4303_Coventry Road\
2017 assessments\am2017nd.vai"
(drive-on-the-left) at 11:21:09 on Thursday, 9 July 2015

FILE PROPERTIES

RUN TITLE: A4303/ Coventry Road Roundabout AM Peak 2017 No Development
LOCATION: A4303_Coventry Road
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - Coventry Road
ARM B - A4303 East
ARM C - Mobile Home Park
ARM D - A4303 West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.20	7.20	31.00	14.00	56.00	62.0	0.523	26.437
ARM B	7.20	8.40	13.00	35.00	56.00	58.0	0.662	37.911
ARM C	3.65	5.50	8.00	28.00	56.00	50.0	0.501	22.482
ARM D	7.20	8.80	29.00	35.00	56.00	45.0	0.717	41.883

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TO TOP OF PEAK	FLOW STOPS IS REACHED	RATE OF FLOW (VEH/MIN) BEFORE FALLING	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	9.18	13.76	9.18
ARM B	15.00	45.00	75.00	10.84	16.26	10.84
ARM C	15.00	45.00	75.00	0.22	0.34	0.22
ARM D	15.00	45.00	75.00	7.60	11.40	7.60

DEMAND SET TITLE: AM Peak 2006 Base Flows

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.15 - 08.45					
	ARM A	0.000	0.214	0.000	0.786
		0.0	157.0	0.0	577.0
		(1.1)	(1.1)	(1.1)	(1.1)
	ARM B	0.032	0.000	0.000	0.968
		28.0	0.0	0.0	839.0
		(14.7)	(14.7)	(14.7)	(14.7)
	ARM C	0.389	0.444	0.000	0.167
		7.0	8.0	0.0	3.0
		(5.6)	(5.6)	(5.6)	(5.6)
	ARM D	0.281	0.706	0.005	0.008
		171.0	429.0	3.0	5.0
		(20.2)	(20.2)	(20.2)	(20.2)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	9.21	22.70	0.406	- -	0.0	0.7	9.9	-	0.074
ARM B	10.88	28.78	0.378	- -	0.0	0.6	8.8	-	0.056
ARM C	0.23	11.91	0.019	- -	0.0	0.0	0.3	-	0.086
ARM D	7.63	34.49	0.221	- -	0.0	0.3	4.2	-	0.037
07.30-07.45									
ARM A	11.00	22.02	0.499	- -	0.7	1.0	14.4	-	0.090
ARM B	12.99	27.94	0.465	- -	0.6	0.9	12.6	-	0.067
ARM C	0.27	10.06	0.027	- -	0.0	0.0	0.4	-	0.102
ARM D	9.11	34.42	0.265	- -	0.3	0.4	5.3	-	0.040
07.45-08.00									
ARM A	13.47	21.09	0.639	- -	1.0	1.7	24.6	-	0.130
ARM B	15.91	26.80	0.594	- -	0.9	1.4	20.8	-	0.091
ARM C	0.33	7.55	0.044	- -	0.0	0.0	0.7	-	0.138
ARM D	11.16	34.32	0.325	- -	0.4	0.5	7.1	-	0.043
08.00-08.15									
ARM A	13.47	21.09	0.639	- -	1.7	1.7	26.1	-	0.131
ARM B	15.91	26.78	0.594	- -	1.4	1.5	21.7	-	0.092
ARM C	0.33	7.51	0.044	- -	0.0	0.0	0.7	-	0.139
ARM D	11.16	34.32	0.325	- -	0.5	0.5	7.2	-	0.043
08.15-08.30									
ARM A	11.00	22.01	0.500	- -	1.7	1.0	15.7	-	0.092
ARM B	12.99	27.90	0.466	- -	1.5	0.9	13.5	-	0.067
ARM C	0.27	10.00	0.027	- -	0.0	0.0	0.4	-	0.103
ARM D	9.11	34.41	0.265	- -	0.5	0.4	5.5	-	0.040
08.30-08.45									
ARM A	9.21	22.69	0.406	- -	1.0	0.7	10.6	-	0.074
ARM B	10.88	28.75	0.378	- -	0.9	0.6	9.4	-	0.056
ARM C	0.23	11.85	0.019	- -	0.0	0.0	0.3	-	0.086
ARM D	7.63	34.49	0.221	- -	0.4	0.3	4.3	-	0.037

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.7	*
07.45	1.0	*
08.00	1.7	**
08.15	1.7	**
08.30	1.0	*
08.45	0.7	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.6	*
07.45	0.9	*
08.00	1.4	*
08.15	1.5	*
08.30	0.9	*
08.45	0.6	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.0
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.3
07.45	0.4
08.00	0.5
08.15	0.5
08.30	0.4
08.45	0.3

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1010.3	673.5	101.3	0.10	101.3	0.10
B	1193.4	795.6	86.9	0.07	86.9	0.07
C	24.8	16.5	2.8	0.11	2.8	0.11
D	836.9	557.9	33.6	0.04	33.6	0.04
ALL	3065.3	2043.5	224.6	0.07	224.6	0.07

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

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A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770356
Nine Mile Ride Email: software@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk
RG40 3GA,UK

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\A4303_Coventry Road\
2017 assessments\pm2017nd.vai"
(drive-on-the-left) at 11:25:44 on Thursday, 9 July 2015

FILE PROPERTIES

RUN TITLE: A4303/ Coventry Road Roundabout PM Peak 2017 No Development
LOCATION: A4303_Coventry Road
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - Coventry Road
ARM B - A4303 East
ARM C - Mobile Home Park
ARM D - A4303 West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.20	7.20	31.00	14.00	56.00	62.0	0.523	26.437
ARM B	7.20	8.40	13.00	35.00	56.00	58.0	0.662	37.911
ARM C	3.65	5.50	8.00	28.00	56.00	50.0	0.501	22.482
ARM D	7.20	8.80	29.00	35.00	56.00	45.0	0.717	41.883

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK	FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE	AT TOP	AFTER
	TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK
ARM A	15.00	45.00	75.00	4.54	6.81	4.54
ARM B	15.00	45.00	75.00	7.29	10.93	7.29
ARM C	15.00	45.00	75.00	0.15	0.23	0.15
ARM D	15.00	45.00	75.00	16.52	24.79	16.52

DEMAND SET TITLE: AM Peak 2006 Base Flows

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15					
	ARM A	0.000	0.331	0.011	0.658
		0.0	120.0	4.0	239.0
		(1.9)	(1.9)	(1.9)	(1.9)
	ARM B	0.120	0.000	0.010	0.870
		70.0	0.0	6.0	507.0
		(19.6)	(19.6)	(19.6)	(19.6)
	ARM C	0.583	0.083	0.000	0.333
		7.0	1.0	0.0	4.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.404	0.591	0.004	0.002
		534.0	781.0	5.0	2.0
		(7.9)	(7.9)	(7.9)	(7.9)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	4.55	20.48	0.222	- -	0.0	0.3	4.2	-	0.063
ARM B	7.32	29.93	0.244	- -	0.0	0.3	4.7	-	0.044
ARM C	0.15	16.62	0.009	- -	0.0	0.0	0.1	-	0.061
ARM D	16.59	38.05	0.436	- -	0.0	0.8	11.3	-	0.046
17.00-17.15									
ARM A	5.44	19.41	0.280	- -	0.3	0.4	5.7	-	0.071
ARM B	8.74	29.59	0.295	- -	0.3	0.4	6.2	-	0.048
ARM C	0.18	15.47	0.012	- -	0.0	0.0	0.2	-	0.065
ARM D	19.81	37.90	0.523	- -	0.8	1.1	16.0	-	0.055
17.15-17.30									
ARM A	6.66	17.95	0.371	- -	0.4	0.6	8.6	-	0.088
ARM B	10.70	29.11	0.367	- -	0.4	0.6	8.5	-	0.054
ARM C	0.22	13.90	0.016	- -	0.0	0.0	0.2	-	0.073
ARM D	24.26	37.70	0.643	- -	1.1	1.8	25.8	-	0.074
17.30-17.45									
ARM A	6.66	17.93	0.371	- -	0.6	0.6	8.8	-	0.089
ARM B	10.70	29.11	0.368	- -	0.6	0.6	8.7	-	0.054
ARM C	0.22	13.88	0.016	- -	0.0	0.0	0.2	-	0.073
ARM D	24.26	37.70	0.644	- -	1.8	1.8	26.8	-	0.075
17.45-18.00									
ARM A	5.44	19.39	0.281	- -	0.6	0.4	6.0	-	0.072
ARM B	8.74	29.58	0.295	- -	0.6	0.4	6.4	-	0.048
ARM C	0.18	15.45	0.012	- -	0.0	0.0	0.2	-	0.066
ARM D	19.81	37.90	0.523	- -	1.8	1.1	17.0	-	0.056
18.00-18.15									
ARM A	4.55	20.46	0.223	- -	0.4	0.3	4.4	-	0.063
ARM B	7.32	29.92	0.244	- -	0.4	0.3	4.9	-	0.044
ARM C	0.15	16.60	0.009	- -	0.0	0.0	0.1	-	0.061
ARM D	16.59	38.05	0.436	- -	1.1	0.8	11.9	-	0.047

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.6	*
17.45	0.6	*
18.00	0.4	
18.15	0.3	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.6	*
17.45	0.6	*
18.00	0.4	
18.15	0.3	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.8	*
17.15	1.1	*
17.30	1.8	**
17.45	1.8	**
18.00	1.1	*
18.15	0.8	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *		T75
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)	
A	499.6	333.1	37.6	0.08	37.6	0.08	
B	802.5	535.0	39.5	0.05	39.5	0.05	
C	16.5	11.0	1.1	0.07	1.1	0.07	
D	1819.6	1213.1	108.7	0.06	108.7	0.06	
ALL	3138.3	2092.2	186.9	0.06	186.9	0.06	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 16:16:42 on 10/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770356
Nine Mile Ride Email: software@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk
RG40 3GA,UK

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IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\A4303_Coventry Road\
2017 assessments\am2017wd.vai"
(drive-on-the-left) at 11:34:34 on Thursday, 9 July 2015

FILE PROPERTIES

RUN TITLE: A4303/ Coventry Road Roundabout AM Peak 2017 With Development
LOCATION: A4303_Coventry Road
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - Coventry Road
ARM B - A4303 East
ARM C - Mobile Home Park
ARM D - A4303 West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.20	7.20	31.00	14.00	56.00	62.0	0.523	26.437
ARM B	7.20	8.40	13.00	35.00	56.00	58.0	0.662	37.911
ARM C	3.65	5.50	8.00	28.00	56.00	50.0	0.501	22.482
ARM D	7.20	8.80	29.00	35.00	56.00	45.0	0.717	41.883

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00		9.46	14.19	9.46
ARM B	15.00	45.00	75.00		11.40	17.10	11.40
ARM C	15.00	45.00	75.00		0.22	0.34	0.22
ARM D	15.00	45.00	75.00		7.93	11.89	7.93

DEMAND SET TITLE: AM Peak 2006 Base Flows

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.15 - 08.45					
	ARM A	0.000	0.207	0.000	0.793
		0.0	157.0	0.0	600.0
		(1.1)	(1.1)	(1.1)	(1.1)
	ARM B	0.031	0.000	0.000	0.969
		28.0	0.0	0.0	884.0
		(14.9)	(14.9)	(14.9)	(14.9)
	ARM C	0.389	0.444	0.000	0.167
		7.0	8.0	0.0	3.0
		(5.6)	(5.6)	(5.6)	(5.6)
	ARM D	0.282	0.705	0.005	0.008
		179.0	447.0	3.0	5.0
		(21.1)	(21.1)	(21.1)	(21.1)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	9.50	22.53	0.422	- -	0.0	0.7	10.5	-	0.076
ARM B	11.44	28.56	0.401	- -	0.0	0.7	9.7	-	0.058
ARM C	0.23	11.45	0.020	- -	0.0	0.0	0.3	-	0.089
ARM D	7.96	34.23	0.232	- -	0.0	0.3	4.5	-	0.038
07.30-07.45									
ARM A	11.34	21.82	0.520	- -	0.7	1.1	15.5	-	0.095
ARM B	13.66	27.69	0.494	- -	0.7	1.0	14.1	-	0.071
ARM C	0.27	9.51	0.028	- -	0.0	0.0	0.4	-	0.108
ARM D	9.50	34.16	0.278	- -	0.3	0.4	5.7	-	0.041
07.45-08.00									
ARM A	13.89	20.85	0.666	- -	1.1	1.9	27.6	-	0.141
ARM B	16.74	26.51	0.631	- -	1.0	1.7	24.2	-	0.101
ARM C	0.33	6.89	0.048	- -	0.0	0.0	0.7	-	0.152
ARM D	11.63	34.07	0.342	- -	0.4	0.5	7.6	-	0.045
08.00-08.15									
ARM A	13.89	20.84	0.666	- -	1.9	2.0	29.4	-	0.143
ARM B	16.74	26.48	0.632	- -	1.7	1.7	25.4	-	0.103
ARM C	0.33	6.84	0.048	- -	0.0	0.1	0.8	-	0.153
ARM D	11.63	34.06	0.342	- -	0.5	0.5	7.8	-	0.045
08.15-08.30									
ARM A	11.34	21.81	0.520	- -	2.0	1.1	17.1	-	0.097
ARM B	13.66	27.65	0.494	- -	1.7	1.0	15.2	-	0.072
ARM C	0.27	9.45	0.029	- -	0.1	0.0	0.5	-	0.109
ARM D	9.50	34.16	0.278	- -	0.5	0.4	5.9	-	0.041
08.30-08.45									
ARM A	9.50	22.52	0.422	- -	1.1	0.7	11.3	-	0.077
ARM B	11.44	28.53	0.401	- -	1.0	0.7	10.3	-	0.059
ARM C	0.23	11.39	0.020	- -	0.0	0.0	0.3	-	0.090
ARM D	7.96	34.23	0.232	- -	0.0	0.3	4.6	-	0.038

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.7	*
07.45	1.1	*
08.00	1.9	**
08.15	2.0	**
08.30	1.1	*
08.45	0.7	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.7	*
07.45	1.0	*
08.00	1.7	**
08.15	1.7	**
08.30	1.0	*
08.45	0.7	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.0	
07.45	0.0	
08.00	0.0	
08.15	0.1	
08.30	0.0	
08.45	0.0	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.3	
07.45	0.4	
08.00	0.5	*
08.15	0.5	*
08.30	0.4	
08.45	0.3	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1042.0	694.6	111.4	0.11	111.4	0.11
B	1255.3	836.9	99.0	0.08	99.0	0.08
C	24.8	16.5	3.0	0.12	3.0	0.12
D	872.7	581.8	36.0	0.04	36.0	0.04
ALL	3194.7	2129.8	249.4	0.08	249.4	0.08

T75

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 16:16:56 on 10/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\A4303_Coventry Road\2017 assessments\pm2017wd.vai"
(drive-on-the-left) at 11:34:54 on Thursday, 9 July 2015

FILE PROPERTIES

RUN TITLE: A4303/ Coventry Road Roundabout PM Peak 2017 With Development
LOCATION: A4303_Coventry Road
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - Coventry Road
ARM B - A4303 East
ARM C - Mobile Home Park
ARM D - A4303 West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.20	7.20	31.00	14.00	56.00	62.0	0.523	26.437
ARM B	7.20	8.40	13.00	35.00	56.00	58.0	0.662	37.911
ARM C	3.65	5.50	8.00	28.00	56.00	50.0	0.501	22.482
ARM D	7.20	8.80	29.00	35.00	56.00	45.0	0.717	41.883

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK	FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE	AT TOP	AFTER
	TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK
ARM A	15.00	45.00	75.00	4.63	6.94	4.63
ARM B	15.00	45.00	75.00	7.43	11.14	7.43
ARM C	15.00	45.00	75.00	0.15	0.23	0.15
ARM D	15.00	45.00	75.00	17.16	25.74	17.16

DEMAND SET TITLE: AM Peak 2006 Base Flows

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.324	0.011	0.665
		0.0	120.0	4.0	246.0
		(1.9)	(1.9)	(1.9)	(1.9)
	ARM B	0.118	0.000	0.010	0.872
		70.0	0.0	6.0	518.0
		(20.2)	(20.2)	(20.2)	(20.2)
	ARM C	0.583	0.083	0.000	0.333
		7.0	1.0	0.0	4.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.402	0.593	0.004	0.001
		552.0	814.0	5.0	2.0
		(8.3)	(8.3)	(8.3)	(8.3)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	4.64	20.23	0.229	- -	0.0	0.3	4.3	-	0.064
ARM B	7.45	29.74	0.251	- -	0.0	0.3	4.9	-	0.045
ARM C	0.15	16.47	0.009	- -	0.0	0.0	0.1	-	0.061
ARM D	17.23	37.91	0.454	- -	0.0	0.8	12.1	-	0.048
17.00-17.15									
ARM A	5.54	19.11	0.290	- -	0.3	0.4	6.0	-	0.074
ARM B	8.90	29.38	0.303	- -	0.3	0.4	6.4	-	0.049
ARM C	0.18	15.29	0.012	- -	0.0	0.0	0.2	-	0.066
ARM D	20.57	37.76	0.545	- -	0.8	1.2	17.4	-	0.058
17.15-17.30									
ARM A	6.79	17.59	0.386	- -	0.4	0.6	9.1	-	0.092
ARM B	10.90	28.90	0.377	- -	0.4	0.6	8.9	-	0.055
ARM C	0.22	13.68	0.016	- -	0.0	0.0	0.2	-	0.074
ARM D	25.20	37.56	0.671	- -	1.2	2.0	29.0	-	0.080
17.30-17.45									
ARM A	6.79	17.57	0.386	- -	0.6	0.6	9.4	-	0.093
ARM B	10.90	28.89	0.377	- -	0.6	0.6	9.1	-	0.056
ARM C	0.22	13.67	0.016	- -	0.0	0.0	0.2	-	0.074
ARM D	25.20	37.55	0.671	- -	2.0	2.0	30.2	-	0.081
17.45-18.00									
ARM A	5.54	19.09	0.290	- -	0.6	0.4	6.3	-	0.074
ARM B	8.90	29.37	0.303	- -	0.6	0.4	6.7	-	0.049
ARM C	0.18	15.27	0.012	- -	0.0	0.0	0.2	-	0.066
ARM D	20.57	37.76	0.545	- -	2.0	1.2	18.6	-	0.059
18.00-18.15									
ARM A	4.64	20.21	0.230	- -	0.4	0.3	4.6	-	0.064
ARM B	7.45	29.72	0.251	- -	0.4	0.3	5.1	-	0.045
ARM C	0.15	16.45	0.009	- -	0.0	0.0	0.1	-	0.061
ARM D	17.23	37.91	0.454	- -	1.2	0.8	12.8	-	0.048

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.6	*
17.45	0.6	*
18.00	0.4	
18.15	0.3	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.6	*
17.45	0.6	*
18.00	0.4	
18.15	0.3	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.8	*
17.15	1.2	*
17.30	2.0	**
17.45	2.0	**
18.00	1.2	*
18.15	0.8	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *		T75
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)	
A	509.3	339.5	39.7	0.08	39.7	0.08	
B	817.6	545.1	41.0	0.05	41.0	0.05	
C	16.5	11.0	1.1	0.07	1.1	0.07	
D	1889.8	1259.9	120.2	0.06	120.2	0.06	
ALL	3233.2	2155.5	202.0	0.06	202.0	0.06	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 16:17:11 on 10/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\A4303_A426\2017 assessments\am2017nd.vai"
(drive-on-the-left) at 10:51:07 on Thursday, 9 July 2015

FILE PROPERTIES

RUN TITLE: A4303/ A426 Roundabout AM Peak 2017 Without Development
LOCATION: A4303_Rugby Road
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - Rugby Road
ARM B - A4303 East
ARM C - A426 South
ARM D - A4303 West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.30	7.40	30.00	23.00	70.00	53.0	0.492	28.789
ARM B	7.30	11.10	25.00	28.00	70.00	50.0	0.669	47.016
ARM C	3.20	7.80	20.00	27.00	70.00	44.0	0.498	28.481
ARM D	7.30	8.40	19.00	28.00	70.00	52.0	0.591	38.960

V = approach half-width
E = entry width
L = effective flare length
R = entry radius
D = inscribed circle diameter
PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK	FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE	AT TOP	AFTER
	TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK
ARM A	15.00	45.00	75.00	11.76	17.64	11.76
ARM B	15.00	45.00	75.00	21.24	31.86	21.24
ARM C	15.00	45.00	75.00	8.16	12.24	8.16
ARM D	15.00	45.00	75.00	7.63	11.44	7.63

DEMAND SET TITLE: AM Peak 2006 Base Flows

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.15 - 08.45					
	ARM A	0.000	0.523	0.371	0.106
		0.0	492.0	349.0	100.0
		(7.1)%	(7.1)%	(7.1)%	(7.1)%
	ARM B	0.283	0.000	0.328	0.389
		480.0	0.0	558.0	661.0
		(12.7)%	(12.7)%	(12.7)%	(12.7)%
	ARM C	0.466	0.485	0.000	0.049
		304.0	317.0	0.0	32.0
		(9.0)%	(9.0)%	(9.0)%	(9.0)%
	ARM D	0.107	0.833	0.061	0.000
		65.0	508.0	37.0	0.0
		(18.9)%	(18.9)%	(18.9)%	(18.9)%

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	11.81	21.18	0.558	- -	0.0	1.2	17.7	-	0.105
ARM B	21.32	37.84	0.563	- -	0.0	1.3	18.6	-	0.060
ARM C	8.19	18.17	0.451	- -	0.0	0.8	11.7	-	0.099
ARM D	7.65	25.21	0.304	- -	0.0	0.4	6.4	-	0.057
07.30-07.45									
ARM A	14.10	20.05	0.703	- -	1.2	2.3	32.1	-	0.164
ARM B	25.46	37.07	0.687	- -	1.3	2.2	31.0	-	0.085
ARM C	9.78	16.61	0.589	- -	0.8	1.4	20.0	-	0.145
ARM D	9.14	23.73	0.385	- -	0.4	0.6	9.1	-	0.068
07.45-08.00									
ARM A	17.27	18.56	0.931	- -	2.3	8.9	104.2	-	0.488
ARM B	31.18	36.14	0.863	- -	2.2	5.8	76.7	-	0.185
ARM C	11.98	14.55	0.824	- -	1.4	4.1	53.5	-	0.344
ARM D	11.19	21.79	0.514	- -	0.6	1.0	15.1	-	0.094
08.00-08.15									
ARM A	17.27	18.50	0.933	- -	8.9	10.6	148.3	-	0.653
ARM B	31.18	36.04	0.865	- -	5.8	6.1	89.5	-	0.203
ARM C	11.98	14.45	0.829	- -	4.1	4.5	65.2	-	0.393
ARM D	11.19	21.67	0.516	- -	1.0	1.1	15.8	-	0.095
08.15-08.30									
ARM A	14.10	19.97	0.706	- -	10.6	2.5	47.4	-	0.205
ARM B	25.46	36.89	0.690	- -	6.1	2.3	36.5	-	0.091
ARM C	9.78	16.47	0.594	- -	4.5	1.5	24.7	-	0.159
ARM D	9.14	23.56	0.388	- -	1.1	0.6	9.8	-	0.070
08.30-08.45									
ARM A	11.81	21.13	0.559	- -	2.5	1.3	20.2	-	0.109
ARM B	21.32	37.79	0.564	- -	2.3	1.3	20.2	-	0.061
ARM C	8.19	18.11	0.452	- -	1.5	0.8	13.0	-	0.102
ARM D	7.65	25.14	0.304	- -	0.6	0.4	6.7	-	0.057

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.2	*
07.45	2.3	**
08.00	8.9	*********
08.15	10.6	***********
08.30	2.5	**
08.45	1.3	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.3	*
07.45	2.2	**
08.00	5.8	******
08.15	6.1	******
08.30	2.3	**
08.45	1.3	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.8	*
07.45	1.4	*
08.00	4.1	****
08.15	4.5	****
08.30	1.5	*
08.45	0.8	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.4	
07.45	0.6	*
08.00	1.0	*
08.15	1.1	*
08.30	0.6	*
08.45	0.4	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *		T75
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)	
A	1295.2	863.5	369.8	0.29	369.9	0.29	
B	2338.5	1559.0	272.5	0.12	272.5	0.12	
C	898.8	599.2	188.1	0.21	188.1	0.21	
D	839.6	559.7	63.0	0.08	63.0	0.08	
ALL	5372.2	3581.5	893.4	0.17	893.5	0.17	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 16:17:41 on 10/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\A4303_A426\
2017 assessments\pm2017nd.vai"
(drive-on-the-left) at 10:56:26 on Thursday, 9 July 2015

FILE PROPERTIES

RUN TITLE: A4303/ A426 Roundabout PM Peak 2017 Without Development
LOCATION: A4303_Rugby Road
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - Rugby Road
ARM B - A4303 East
ARM C - A426 South
ARM D - A4303 West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.30	7.40	30.00	23.00	70.00	53.0	0.492	28.789
ARM B	7.30	11.10	25.00	28.00	70.00	50.0	0.669	47.016
ARM C	3.20	7.80	20.00	27.00	70.00	44.0	0.498	28.481
ARM D	7.30	8.40	19.00	28.00	70.00	52.0	0.591	38.960

V = approach half-width
E = entry width
L = effective flare length
R = entry radius
D = inscribed circle diameter
PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK	FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE	AT TOP	AFTER
	TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK
ARM A	15.00	45.00	75.00	11.02	16.54	11.02
ARM B	15.00	45.00	75.00	16.76	25.14	16.76
ARM C	15.00	45.00	75.00	9.21	13.82	9.21
ARM D	15.00	45.00	75.00	11.13	16.69	11.13

DEMAND SET TITLE: AM Peak 2006 Base Flows

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15					
	ARM A	0.000	0.497	0.366	0.137
		0.0	438.0	323.0	121.0
		(2.0)	(2.0)	(2.0)	(2.0)
	ARM B	0.369	0.000	0.292	0.339
		495.0	0.0	392.0	454.0
		(12.2)	(12.2)	(12.2)	(12.2)
	ARM C	0.499	0.460	0.000	0.041
		368.0	339.0	0.0	30.0
		(4.2)	(4.2)	(4.2)	(4.2)
	ARM D	0.104	0.853	0.043	0.000
		93.0	759.0	38.0	0.0
		(11.5)	(11.5)	(11.5)	(11.5)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	11.07	20.74	0.534	- -	0.0	1.1	16.2	-	0.102
ARM B	16.83	38.23	0.440	- -	0.0	0.8	11.5	-	0.046
ARM C	9.25	20.23	0.457	- -	0.0	0.8	12.0	-	0.090
ARM D	11.17	26.39	0.423	- -	0.0	0.7	10.6	-	0.065
17.00-17.15									
ARM A	13.21	19.26	0.686	- -	1.1	2.1	29.7	-	0.162
ARM B	20.09	37.50	0.536	- -	0.8	1.1	16.8	-	0.057
ARM C	11.04	18.83	0.586	- -	0.8	1.4	19.9	-	0.127
ARM D	13.33	24.71	0.540	- -	0.7	1.2	16.8	-	0.088
17.15-17.30									
ARM A	16.18	17.30	0.935	- -	2.1	9.1	104.7	-	0.522
ARM B	24.61	36.63	0.672	- -	1.1	2.0	29.0	-	0.082
ARM C	13.52	16.96	0.798	- -	1.4	3.6	48.2	-	0.269
ARM D	16.33	22.47	0.727	- -	1.2	2.6	35.8	-	0.158
17.30-17.45									
ARM A	16.18	17.23	0.939	- -	9.1	11.1	153.5	-	0.727
ARM B	24.61	36.53	0.674	- -	2.0	2.0	30.5	-	0.084
ARM C	13.52	16.91	0.800	- -	3.6	3.8	56.0	-	0.292
ARM D	16.33	22.38	0.730	- -	2.6	2.6	39.2	-	0.165
17.45-18.00									
ARM A	13.21	19.16	0.690	- -	11.1	2.3	45.3	-	0.206
ARM B	20.09	37.30	0.539	- -	2.0	1.2	18.2	-	0.059
ARM C	11.04	18.76	0.589	- -	3.8	1.5	23.6	-	0.135
ARM D	13.33	24.59	0.542	- -	2.6	1.2	18.8	-	0.090
18.00-18.15									
ARM A	11.07	20.68	0.535	- -	2.3	1.2	18.3	-	0.106
ARM B	16.83	38.18	0.441	- -	1.2	0.8	12.1	-	0.047
ARM C	9.25	20.19	0.458	- -	1.5	0.9	13.3	-	0.092
ARM D	11.17	26.32	0.424	- -	1.2	0.7	11.4	-	0.066

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.1	*
17.15	2.1	**
17.30	9.1	*********
17.45	11.1	***********
18.00	2.3	**
18.15	1.2	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.8	*
17.15	1.1	*
17.30	2.0	**
17.45	2.0	**
18.00	1.2	*
18.15	0.8	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.8	*
17.15	1.4	*
17.30	3.6	****
17.45	3.8	****
18.00	1.5	*
18.15	0.9	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.7	*
17.15	1.2	*
17.30	2.6	***
17.45	2.6	***
18.00	1.2	*
18.15	0.7	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1214.0	809.3	367.7	0.30	367.8	0.30
B	1845.8	1230.5	118.0	0.06	118.0	0.06
C	1014.4	676.3	173.0	0.17	173.0	0.17
D	1225.0	816.7	132.6	0.11	132.6	0.11
ALL	5299.2	3532.8	791.4	0.15	791.4	0.15

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* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
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END OF JOB

========== end of file ==========

Printed at 16:18:00 on 10/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\A4303_A426\2017 assessments\am2017wd.vai"
(drive-on-the-left) at 11:04:33 on Thursday, 9 July 2015

FILE PROPERTIES

RUN TITLE: A4303/ A426 Roundabout AM Peak 2017 With Development
LOCATION: A4303_Rugby Road
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - Rugby Road
ARM B - A4303 East
ARM C - A426 South
ARM D - A4303 West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.30	7.40	30.00	23.00	70.00	53.0	0.492	28.789
ARM B	7.30	11.10	25.00	28.00	70.00	50.0	0.669	47.016
ARM C	3.20	7.80	20.00	27.00	70.00	44.0	0.498	28.481
ARM D	7.30	8.40	19.00	28.00	70.00	52.0	0.591	38.960

V = approach half-width
E = entry width
L = effective flare length
R = entry radius
D = inscribed circle diameter
PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK	FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE	AT TOP	AFTER
	TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK
ARM A	15.00	45.00	75.00	11.89	17.83	11.89
ARM B	15.00	45.00	75.00	21.67	32.51	21.67
ARM C	15.00	45.00	75.00	8.16	12.24	8.16
ARM D	15.00	45.00	75.00	7.85	11.77	7.85

DEMAND SET TITLE: AM Peak 2006 Base Flows

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.15 - 08.45	ARM A	0.000	0.517	0.367	0.116
		0.0	492.0	349.0	110.0
		(7.4)%	(7.4)%	(7.4)%	(7.4)%
	ARM B	0.277	0.000	0.322	0.401
		480.0	0.0	558.0	696.0
		(12.8)%	(12.8)%	(12.8)%	(12.8)%
	ARM C	0.466	0.485	0.000	0.049
		304.0	317.0	0.0	32.0
		(9.0)%	(9.0)%	(9.0)%	(9.0)%
	ARM D	0.110	0.831	0.059	0.000
		69.0	522.0	37.0	0.0
		(20.1)%	(20.1)%	(20.1)%	(20.1)%

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME		DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30										
	ARM A	11.93	20.98	0.569	- -	0.0	1.3	18.5	-	0.109
	ARM B	21.76	37.71	0.577	- -	0.0	1.4	19.6	-	0.062
	ARM C	8.19	17.88	0.458	- -	0.0	0.8	12.0	-	0.102
	ARM D	7.88	24.96	0.316	- -	0.0	0.5	6.7	-	0.058
07.30-07.45										
	ARM A	14.25	19.84	0.718	- -	1.3	2.5	34.3	-	0.174
	ARM B	25.98	36.93	0.703	- -	1.4	2.3	33.4	-	0.090
	ARM C	9.78	16.26	0.602	- -	0.8	1.5	21.0	-	0.152
	ARM D	9.41	23.49	0.401	- -	0.5	0.7	9.7	-	0.071
07.45-08.00										
	ARM A	17.45	18.32	0.953	- -	2.5	10.8	120.3	-	0.564
	ARM B	31.82	36.01	0.884	- -	2.3	6.8	88.2	-	0.211
	ARM C	11.98	14.14	0.847	- -	1.5	4.7	59.9	-	0.390
	ARM D	11.52	21.59	0.534	- -	0.7	1.1	16.3	-	0.099
08.00-08.15										
	ARM A	17.45	18.26	0.956	- -	10.8	13.4	183.8	-	0.818
	ARM B	31.82	35.89	0.887	- -	6.8	7.3	106.2	-	0.240
	ARM C	11.98	14.03	0.854	- -	4.7	5.3	75.8	-	0.464
	ARM D	11.52	21.46	0.537	- -	1.1	1.1	17.1	-	0.101
08.15-08.30										
	ARM A	14.25	19.75	0.722	- -	13.4	2.7	56.9	-	0.238
	ARM B	25.98	36.69	0.708	- -	7.3	2.5	40.5	-	0.099
	ARM C	9.78	16.08	0.608	- -	5.3	1.6	26.9	-	0.171
	ARM D	9.41	23.28	0.404	- -	1.1	0.7	10.5	-	0.072
08.30-08.45										
	ARM A	11.93	20.94	0.570	- -	2.7	1.3	21.2	-	0.113
	ARM B	21.76	37.66	0.578	- -	2.5	1.4	21.4	-	0.064
	ARM C	8.19	17.81	0.460	- -	1.6	0.9	13.4	-	0.105
	ARM D	7.88	24.88	0.317	- -	0.7	0.5	7.1	-	0.059

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.3	*
07.45	2.5	**
08.00	10.8	**********
08.15	13.4	*************
08.30	2.7	***
08.45	1.3	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.4	*
07.45	2.3	**
08.00	6.8	*******
08.15	7.3	*******
08.30	2.5	**
08.45	1.4	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.8	*
07.45	1.5	*
08.00	4.7	*****
08.15	5.3	*****
08.30	1.6	**
08.45	0.9	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.5	
07.45	0.7	*
08.00	1.1	*
08.15	1.1	*
08.30	0.7	*
08.45	0.5	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1309.0	872.7	435.0	0.33	435.0	0.33
B	2386.7	1591.1	309.3	0.13	309.3	0.13
C	898.8	599.2	209.0	0.23	209.0	0.23
D	864.4	576.3	67.6	0.08	67.6	0.08
ALL	5458.9	3639.3	1020.8	0.19	1020.9	0.19

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 16:18:48 on 10/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770356
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Wokingham, Berks. Web: www.trlsoftware.co.uk
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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\A4303_A426\2017 assessments\pm2017wd.vai"
(drive-on-the-left) at 11:12:45 on Thursday, 9 July 2015

FILE PROPERTIES

RUN TITLE: A4303/ A426 Roundabout PM Peak 2017 With Development
LOCATION: A4303_Rugby Road
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - Rugby Road
ARM B - A4303 East
ARM C - A426 South
ARM D - A4303 West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.30	7.40	30.00	23.00	70.00	53.0	0.492	28.789
ARM B	7.30	11.10	25.00	28.00	70.00	50.0	0.669	47.016
ARM C	3.20	7.80	20.00	27.00	70.00	44.0	0.498	28.481
ARM D	7.30	8.40	19.00	28.00	70.00	52.0	0.591	38.960

V = approach half-width E = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK	FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE	AT TOP	AFTER
	TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK
ARM A	15.00	45.00	75.00	11.06	16.59	11.06
ARM B	15.00	45.00	75.00	16.88	25.31	16.88
ARM C	15.00	45.00	75.00	9.21	13.82	9.21
ARM D	15.00	45.00	75.00	11.54	17.31	11.54

DEMAND SET TITLE: AM Peak 2006 Base Flows

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.495	0.365	0.140
		0.0	438.0	323.0	124.0
		(2.3)	(2.3)	(2.3)	(2.3)
	ARM B	0.367	0.000	0.290	0.343
		495.0	0.0	392.0	463.0
		(12.4)	(12.4)	(12.4)	(12.4)
	ARM C	0.499	0.460	0.000	0.041
		368.0	339.0	0.0	30.0
		(4.2)	(4.2)	(4.2)	(4.2)
	ARM D	0.107	0.852	0.041	0.000
		99.0	786.0	38.0	0.0
		(12.1)	(12.1)	(12.1)	(12.1)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	11.10	20.47	0.543	- -	0.0	1.2	16.7	-	0.105
ARM B	16.94	38.12	0.444	- -	0.0	0.8	11.7	-	0.047
ARM C	9.25	20.13	0.459	- -	0.0	0.8	12.1	-	0.091
ARM D	11.58	26.24	0.441	- -	0.0	0.8	11.4	-	0.068
17.00-17.15									
ARM A	13.26	18.96	0.699	- -	1.2	2.2	31.4	-	0.171
ARM B	20.23	37.40	0.541	- -	0.8	1.2	17.1	-	0.058
ARM C	11.04	18.72	0.590	- -	0.8	1.4	20.2	-	0.129
ARM D	13.83	24.57	0.563	- -	0.8	1.3	18.4	-	0.093
17.15-17.30									
ARM A	16.24	16.95	0.958	- -	2.2	10.9	120.4	-	0.605
ARM B	24.77	36.55	0.678	- -	1.2	2.1	29.8	-	0.084
ARM C	13.52	16.83	0.804	- -	1.4	3.7	49.6	-	0.278
ARM D	16.94	22.34	0.758	- -	1.3	3.0	41.2	-	0.178
17.30-17.45									
ARM A	16.24	16.87	0.963	- -	10.9	14.1	190.4	-	0.911
ARM B	24.77	36.44	0.680	- -	2.1	2.1	31.3	-	0.086
ARM C	13.52	16.78	0.806	- -	3.7	3.9	57.9	-	0.303
ARM D	16.94	22.25	0.761	- -	3.0	3.1	45.8	-	0.187
17.45-18.00									
ARM A	13.26	18.84	0.704	- -	14.1	2.5	54.9	-	0.240
ARM B	20.23	37.13	0.545	- -	2.1	1.2	18.6	-	0.060
ARM C	11.04	18.63	0.593	- -	3.9	1.5	24.0	-	0.138
ARM D	13.83	24.44	0.566	- -	3.1	1.3	20.8	-	0.096
18.00-18.15									
ARM A	11.10	20.40	0.544	- -	2.5	1.2	19.0	-	0.109
ARM B	16.94	38.07	0.445	- -	1.2	0.8	12.3	-	0.047
ARM C	9.25	20.09	0.460	- -	1.5	0.9	13.4	-	0.093
ARM D	11.58	26.17	0.442	- -	1.3	0.8	12.3	-	0.069

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.2	*
17.15	2.2	**
17.30	10.9	**********
17.45	14.1	**************
18.00	2.5	**
18.15	1.2	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.8	*
17.15	1.2	*
17.30	2.1	**
17.45	2.1	**
18.00	1.2	*
18.15	0.8	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.8	*
17.15	1.4	*
17.30	3.7	****
17.45	3.9	****
18.00	1.5	*
18.15	0.9	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.8	*
17.15	1.3	*
17.30	3.0	***
17.45	3.1	***
18.00	1.3	*
18.15	0.8	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1218.1	812.1	432.8	0.36	432.9	0.36
B	1858.2	1238.8	120.8	0.07	120.8	0.07
C	1014.4	676.3	177.3	0.17	177.3	0.17
D	1270.4	847.0	150.0	0.12	150.0	0.12
ALL	5361.2	3574.1	881.0	0.16	881.0	0.16

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

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ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\M1 Junction 20\
2017 assessments\am2017nd.vai"
(drive-on-the-left) at 16:03:38 on Thursday, 9 July 2015

FILE PROPERTIES

RUN TITLE: M1 Junction 20 AM Peak 2017 No Development
LOCATION: M1 Junction 20
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - M1 North
ARM B - A4304
ARM C - M1 South
ARM D - A4303

GEOMETRIC DATA

GRADE SEPARATED / MOTORWAY FACTORS APPLY TO ALL ARMS

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
A	7.30	12.70	35.00	45.00	103.00	43.0	1.171	60.667
B	3.50	7.70	51.00	45.00	176.00	40.0	0.749	42.425
C	7.30	12.00	49.00	50.00	103.00	41.0	0.920	57.132
D	7.30	8.90	7.00	50.00	176.00	35.0	1.125	55.156

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range.
Treat capacities with increasing caution.

WARNING ARM C Effective flare length is outside normal range.
Treat capacities with increasing caution.

DATA FOR VERY LARGE ROUNDABOUTS

ARM	CIRFLO	SEP
A	16.0	120.0
B	27.0	0.0
C	33.0	120.0
D	6.0	0.0

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
	TO RISE					
ARM A	15.00	45.00	75.00	11.32	16.99	11.32
ARM B	15.00	45.00	75.00	10.52	15.79	10.52
ARM C	15.00	45.00	75.00	6.18	9.26	6.18
ARM D	15.00	45.00	75.00	16.30	24.45	16.30

DEMAND SET TITLE: AM Peak 2006 Base Flows

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C	ARM D
07.15 - 08.45	ARM A	0.000	0.134	0.000	0.866
		0.0	121.0	0.0	785.0
		(11.0)	(11.0)	(11.0)	(11.0)
	ARM B	0.300	0.000	0.135	0.564
		253.0	0.0	114.0	475.0
		(4.5)	(4.5)	(4.5)	(4.5)
	ARM C	0.000	0.077	0.051	0.872
		0.0	38.0	25.0	431.0
		(24.3)	(24.3)	(24.3)	(24.3)
	ARM D	0.452	0.217	0.331	0.000
		590.0	283.0	431.0	0.0
		(14.4)	(14.4)	(14.4)	(14.4)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	11.37	42.83	0.265	- -	0.0	0.4	5.3	-	0.032
ARM B	10.57	28.08	0.376	- -	0.0	0.6	8.8	-	0.057
ARM C	6.20	30.85	0.201	- -	0.0	0.3	3.7	-	0.041
ARM D	16.36	44.00	0.372	- -	0.0	0.6	8.7	-	0.036
07.30-07.45									
ARM A	13.57	40.52	0.335	- -	0.4	0.5	7.4	-	0.037
ARM B	12.62	25.63	0.492	- -	0.6	1.0	14.0	-	0.077
ARM C	7.40	27.89	0.265	- -	0.3	0.4	5.3	-	0.049
ARM D	19.54	43.17	0.453	- -	0.6	0.8	12.1	-	0.042
07.45-08.00									
ARM A	16.63	37.35	0.445	- -	0.5	0.8	11.7	-	0.048
ARM B	15.45	22.27	0.694	- -	1.0	2.2	30.9	-	0.143
ARM C	9.07	23.87	0.380	- -	0.4	0.6	8.9	-	0.067
ARM D	23.93	42.06	0.569	- -	0.8	1.3	19.2	-	0.055
08.00-08.15									
ARM A	16.63	37.33	0.445	- -	0.8	0.8	12.0	-	0.048
ARM B	15.45	22.25	0.694	- -	2.2	2.2	33.3	-	0.147
ARM C	9.07	23.80	0.381	- -	0.6	0.6	9.2	-	0.068
ARM D	23.93	42.03	0.569	- -	1.3	1.3	19.7	-	0.055
08.15-08.30									
ARM A	13.57	40.48	0.335	- -	0.8	0.5	7.7	-	0.037
ARM B	12.62	25.60	0.493	- -	2.2	1.0	15.3	-	0.078
ARM C	7.40	27.79	0.266	- -	0.6	0.4	5.6	-	0.049
ARM D	19.54	43.13	0.453	- -	1.3	0.8	12.7	-	0.042

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
ARM A	11.37	42.79	0.266	- - -	0.5	0.4	5.5	-	0.032
ARM B	10.57	28.04	0.377	- - -	1.0	0.6	9.3	-	0.057
ARM C	6.20	30.78	0.201	- - -	0.4	0.3	3.8	-	0.041
ARM D	16.36	43.97	0.372	- - -	0.8	0.6	9.0	-	0.036

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.4	
07.45	0.5	*
08.00	0.8	*
08.15	0.8	*
08.30	0.5	*
08.45	0.4	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.6	*
07.45	1.0	*
08.00	2.2	**
08.15	2.2	**
08.30	1.0	*
08.45	0.6	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.3	
07.45	0.4	
08.00	0.6	*
08.15	0.6	*
08.30	0.4	
08.45	0.3	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.6	*
07.45	0.8	*
08.00	1.3	*
08.15	1.3	*
08.30	0.8	*
08.45	0.6	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1247.0	831.4	49.7	0.04	49.7	0.04
B	1159.0	772.6	111.6	0.10	111.6	0.10
C	680.0	453.3	36.5	0.05	36.5	0.05
D	1794.9	1196.6	81.5	0.05	81.5	0.05
ALL	4880.8	3253.9	279.3	0.06	279.3	0.06

T75

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

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A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770356
Nine Mile Ride Email: software@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk
RG40 3GA,UK

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\M1 Junction 20\
2017 assessments\pm2017nd.vai"
(drive-on-the-left) at 16:05:30 on Thursday, 9 July 2015

FILE PROPERTIES

RUN TITLE: M1 Junction 20 PM Peak 2017 No Development
LOCATION: M1 Junction 20
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - M1 North
ARM B - A4304
ARM C - M1 South
ARM D - A4303

GEOMETRIC DATA

GRADE SEPARATED / MOTORWAY FACTORS APPLY TO ALL ARMS

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.30	12.70	35.00	45.00	103.00	43.0	1.171	60.667
ARM B	3.50	7.70	51.00	45.00	176.00	40.0	0.749	42.425
ARM C	7.30	12.00	49.00	50.00	103.00	41.0	0.920	57.132
ARM D	7.30	8.90	7.00	50.00	176.00	35.0	1.125	55.156

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range.
Treat capacities with increasing caution.

WARNING ARM C Effective flare length is outside normal range.
Treat capacities with increasing caution.

DATA FOR VERY LARGE ROUNDABOUTS

ARM	CIRFLO	SEP
A	16.0	120.0
B	27.0	0.0
C	33.0	120.0
D	6.0	0.0

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
	TO RISE					
ARM A	15.00	45.00	75.00	10.04	15.06	10.04
ARM B	15.00	45.00	75.00	7.68	11.51	7.68
ARM C	15.00	45.00	75.00	6.34	9.51	6.34
ARM D	15.00	45.00	75.00	19.21	28.82	19.21

DEMAND SET TITLE: AM Peak 2006 Base Flows

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.298	0.000	0.702
		0.0	239.0	0.0	564.0
		(9.3)	(9.3)	(9.3)	(9.3)
	ARM B	0.239	0.000	0.086	0.674
		147.0	0.0	53.0	414.0
		(6.5)	(6.5)	(6.5)	(6.5)
	ARM C	0.000	0.179	0.032	0.789
		0.0	91.0	16.0	400.0
		(18.0)	(18.0)	(18.0)	(18.0)
	ARM D	0.440	0.323	0.237	0.000
		676.0	496.0	365.0	0.0
		(8.4)	(8.4)	(8.4)	(8.4)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	10.08	41.29	0.244	- -	0.0	0.3	4.8	-	0.032
ARM B	7.70	30.76	0.250	- -	0.0	0.3	4.9	-	0.043
ARM C	6.36	36.57	0.174	- -	0.0	0.2	3.1	-	0.033
ARM D	19.29	47.21	0.409	- -	0.0	0.7	10.1	-	0.036
17.00-17.15									
ARM A	12.03	38.51	0.312	- -	0.3	0.5	6.7	-	0.038
ARM B	9.20	28.98	0.317	- -	0.3	0.5	6.8	-	0.050
ARM C	7.60	34.25	0.222	- -	0.2	0.3	4.2	-	0.038
ARM D	23.03	46.49	0.495	- -	0.7	1.0	14.4	-	0.043
17.15-17.30									
ARM A	14.74	34.70	0.425	- -	0.5	0.7	10.8	-	0.050
ARM B	11.27	26.55	0.424	- -	0.5	0.7	10.7	-	0.065
ARM C	9.30	31.07	0.299	- -	0.3	0.4	6.3	-	0.046
ARM D	28.20	45.50	0.620	- -	1.0	1.6	23.6	-	0.058
17.30-17.45									
ARM A	14.74	34.67	0.425	- -	0.7	0.7	11.0	-	0.050
ARM B	11.27	26.54	0.425	- -	0.7	0.7	11.0	-	0.066
ARM C	9.30	31.05	0.300	- -	0.4	0.4	6.4	-	0.046
ARM D	28.20	45.49	0.620	- -	1.6	1.6	24.3	-	0.058
17.45-18.00									
ARM A	12.03	38.47	0.313	- -	0.7	0.5	7.0	-	0.038
ARM B	9.20	28.96	0.318	- -	0.7	0.5	7.1	-	0.051
ARM C	7.60	34.21	0.222	- -	0.4	0.3	4.4	-	0.038
ARM D	23.03	46.48	0.496	- -	1.6	1.0	15.1	-	0.043

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
ARM A	10.08	41.25	0.244	- - -	0.5	0.3	4.9	-	0.032
ARM B	7.70	30.73	0.251	- - -	0.5	0.3	5.1	-	0.043
ARM C	6.36	36.53	0.174	- - -	0.3	0.2	3.2	-	0.033
ARM D	19.29	47.19	0.409	- - -	1.0	0.7	10.6	-	0.036

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.5	
17.30	0.7	*
17.45	0.7	*
18.00	0.5	
18.15	0.3	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.5	
17.30	0.7	*
17.45	0.7	*
18.00	0.5	
18.15	0.3	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.2
17.15	0.3
17.30	0.4
17.45	0.4
18.00	0.3
18.15	0.2

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.7	*
17.15	1.0	*
17.30	1.6	**
17.45	1.6	**
18.00	1.0	*
18.15	0.7	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1105.3	736.8	45.2	0.04	45.2	0.04
B	845.1	563.4	45.7	0.05	45.7	0.05
C	697.8	465.2	27.6	0.04	27.6	0.04
D	2115.6	1410.4	98.1	0.05	98.1	0.05
ALL	4763.8	3175.9	216.5	0.05	216.5	0.05

T75

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* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 16:19:56 on 10/09/2015]

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770356
Nine Mile Ride Email: software@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk
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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\M1 Junction 20\
2017 assessments\am2017wd.vai"
(drive-on-the-left) at 16:04:05 on Thursday, 9 July 2015

FILE PROPERTIES

RUN TITLE: M1 Junction 20 AM Peak 2017 With Development
LOCATION: M1 Junction 20
DATE: 14/07/31
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - M1 North
ARM B - A4304
ARM C - M1 South
ARM D - A4303

GEOMETRIC DATA

GRADE SEPARATED / MOTORWAY FACTORS APPLY TO ALL ARMS

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.30	12.70	35.00	45.00	103.00	43.0	1.171	60.667
ARM B	3.50	7.70	51.00	45.00	176.00	40.0	0.749	42.425
ARM C	7.30	12.00	49.00	50.00	103.00	41.0	0.920	57.132
ARM D	7.30	8.90	7.00	50.00	176.00	35.0	1.125	55.156

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range.
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WARNING ARM C Effective flare length is outside normal range.
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DATA FOR VERY LARGE ROUNDABOUTS

ARM	CIRFLO	SEP
A	16.0	120.0
B	27.0	0.0
C	33.0	120.0
D	6.0	0.0

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
	TO RISE					
ARM A	15.00	45.00	75.00	11.60	17.40	11.60
ARM B	15.00	45.00	75.00	10.57	15.86	10.57
ARM C	15.00	45.00	75.00	6.29	9.43	6.29
ARM D	15.00	45.00	75.00	16.48	24.71	16.48

DEMAND SET TITLE: AM Peak 2006 Base Flows

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C	ARM D
07.15 - 08.45					
	ARM A	0.000	0.130	0.000	0.870
		0.0	121.0	0.0	807.0
		(11.4)	(11.4)	(11.4)	(11.4)
	ARM B	0.299	0.000	0.135	0.566
		253.0	0.0	114.0	479.0
		(4.5)	(4.5)	(4.5)	(4.5)
	ARM C	0.000	0.076	0.050	0.875
		0.0	38.0	25.0	440.0
		(23.9)	(23.9)	(23.9)	(23.9)
	ARM D	0.456	0.215	0.329	0.000
		601.0	284.0	433.0	0.0
		(14.9)	(14.9)	(14.9)	(14.9)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	11.64	42.59	0.273	- -	0.0	0.4	5.5	-	0.032
ARM B	10.62	27.79	0.382	- -	0.0	0.6	9.0	-	0.058
ARM C	6.31	30.65	0.206	- -	0.0	0.3	3.8	-	0.041
ARM D	16.54	43.81	0.377	- -	0.0	0.6	8.9	-	0.037
07.30-07.45									
ARM A	13.90	40.27	0.345	- -	0.4	0.5	7.8	-	0.038
ARM B	12.68	25.29	0.501	- -	0.6	1.0	14.5	-	0.079
ARM C	7.54	27.62	0.273	- -	0.3	0.4	5.5	-	0.050
ARM D	19.75	42.99	0.459	- -	0.6	0.8	12.5	-	0.043
07.45-08.00									
ARM A	17.03	37.09	0.459	- -	0.5	0.8	12.4	-	0.050
ARM B	15.52	21.86	0.710	- -	1.0	2.4	33.1	-	0.153
ARM C	9.23	23.52	0.392	- -	0.4	0.6	9.4	-	0.070
ARM D	24.19	41.88	0.577	- -	0.8	1.4	19.8	-	0.056
08.00-08.15									
ARM A	17.03	37.06	0.459	- -	0.8	0.8	12.7	-	0.050
ARM B	15.52	21.83	0.711	- -	2.4	2.4	36.0	-	0.158
ARM C	9.23	23.44	0.394	- -	0.6	0.6	9.7	-	0.070
ARM D	24.19	41.85	0.578	- -	1.4	1.4	20.4	-	0.057
08.15-08.30									
ARM A	13.90	40.23	0.346	- -	0.8	0.5	8.1	-	0.038
ARM B	12.68	25.25	0.502	- -	2.4	1.0	15.9	-	0.081
ARM C	7.54	27.52	0.274	- -	0.6	0.4	5.8	-	0.050
ARM D	19.75	42.95	0.460	- -	1.4	0.9	13.1	-	0.043

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
ARM A	11.64	42.55	0.274	- - -	0.5	0.4	5.7	-	0.032
ARM B	10.62	27.75	0.382	- - -	1.0	0.6	9.6	-	0.058
ARM C	6.31	30.58	0.206	- - -	0.4	0.3	4.0	-	0.041
ARM D	16.54	43.79	0.378	- - -	0.9	0.6	9.3	-	0.037

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.4	
07.45	0.5	*
08.00	0.8	*
08.15	0.8	*
08.30	0.5	*
08.45	0.4	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.6	*
07.45	1.0	*
08.00	2.4	**
08.15	2.4	**
08.30	1.0	*
08.45	0.6	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.3	
07.45	0.4	
08.00	0.6	*
08.15	0.6	*
08.30	0.4	
08.45	0.3	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.6	*
07.45	0.8	*
08.00	1.4	*
08.15	1.4	*
08.30	0.9	*
08.45	0.6	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1277.3	851.5	52.2	0.04	52.2	0.04
B	1164.5	776.3	118.0	0.10	118.0	0.10
C	692.3	461.6	38.1	0.06	38.1	0.06
D	1814.1	1209.4	83.9	0.05	84.0	0.05
ALL	4948.3	3298.8	292.4	0.06	292.4	0.06

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END OF JOB

========== end of file ==========

Printed at 16:20:15 on 10/09/2015]

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ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

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TRL Limited Tel: +44 (0) 1344 770758
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ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
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DESCRIPTION:

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ARM B - A4304
ARM C - M1 South
ARM D - A4303

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GRADE SEPARATED / MOTORWAY FACTORS APPLY TO ALL ARMS

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
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ARM C	7.30	12.00	49.00	50.00	103.00	41.0	0.920	57.132
ARM D	7.30	8.90	7.00	50.00	176.00	35.0	1.125	55.156

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T13

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B	100
C	100
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TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

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	TO RISE					
ARM A	15.00	45.00	75.00	10.13	15.19	10.13
ARM B	15.00	45.00	75.00	7.69	11.53	7.69
ARM C	15.00	45.00	75.00	6.35	9.52	6.35
ARM D	15.00	45.00	75.00	19.55	29.32	19.55

DEMAND SET TITLE: AM Peak 2006 Base Flows

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.295	0.000	0.705
		0.0	239.0	0.0	571.0
		(9.9)	(9.9)	(9.9)	(9.9)
	ARM B	0.239	0.000	0.086	0.675
		147.0	0.0	53.0	415.0
		(6.5)	(6.5)	(6.5)	(6.5)
	ARM C	0.000	0.179	0.031	0.789
		0.0	91.0	16.0	401.0
		(17.9)	(17.9)	(17.9)	(17.9)
	ARM D	0.445	0.319	0.236	0.000
		696.0	499.0	369.0	0.0
		(8.8)	(8.8)	(8.8)	(8.8)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	10.16	40.92	0.248	- -	0.0	0.3	4.9	-	0.032
ARM B	7.72	30.61	0.252	- -	0.0	0.3	4.9	-	0.044
ARM C	6.37	36.48	0.175	- -	0.0	0.2	3.1	-	0.033
ARM D	19.62	47.04	0.417	- -	0.0	0.7	10.5	-	0.036

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	12.14	38.13	0.318	- -	0.3	0.5	6.9	-	0.038
ARM B	9.21	28.81	0.320	- -	0.3	0.5	6.9	-	0.051
ARM C	7.61	34.14	0.223	- -	0.2	0.3	4.2	-	0.038
ARM D	23.43	46.32	0.506	- -	0.7	1.0	15.0	-	0.044

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
ARM A	14.86	34.30	0.433	- -	0.5	0.8	11.2	-	0.051
ARM B	11.29	26.34	0.428	- -	0.5	0.7	10.9	-	0.066
ARM C	9.32	30.93	0.301	- -	0.3	0.4	6.3	-	0.046
ARM D	28.70	45.34	0.633	- -	1.0	1.7	24.9	-	0.060

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
ARM A	14.86	34.27	0.434	- -	0.8	0.8	11.4	-	0.052
ARM B	11.29	26.32	0.429	- -	0.7	0.7	11.2	-	0.067
ARM C	9.32	30.90	0.302	- -	0.4	0.4	6.5	-	0.046
ARM D	28.70	45.33	0.633	- -	1.7	1.7	25.7	-	0.060

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
ARM A	12.14	38.08	0.319	- -	0.8	0.5	7.2	-	0.039
ARM B	9.21	28.78	0.320	- -	0.7	0.5	7.2	-	0.051
ARM C	7.61	34.10	0.223	- -	0.4	0.3	4.4	-	0.038
ARM D	23.43	46.31	0.506	- -	1.7	1.0	15.8	-	0.044

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
ARM A	10.16	40.87	0.249	- -	0.5	0.3	5.0	-	0.033
ARM B	7.72	30.58	0.252	- -	0.5	0.3	5.2	-	0.044
ARM C	6.37	36.44	0.175	- -	0.3	0.2	3.2	-	0.033
ARM D	19.62	47.02	0.417	- -	1.0	0.7	11.0	-	0.037

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.5	
17.30	0.8	*
17.45	0.8	*
18.00	0.5	
18.15	0.3	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.5	
17.30	0.7	*
17.45	0.7	*
18.00	0.5	
18.15	0.3	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.2
17.15	0.3
17.30	0.4
17.45	0.4
18.00	0.3
18.15	0.2

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.7	*
17.15	1.0	*
17.30	1.7	**
17.45	1.7	**
18.00	1.0	*
18.15	0.7	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *		T75
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)	
A	1114.9	743.3	46.6	0.04	46.6	0.04	
B	846.5	564.3	46.3	0.05	46.4	0.05	
C	699.2	466.1	27.8	0.04	27.8	0.04	
D	2152.7	1435.2	102.8	0.05	102.8	0.05	
ALL	4813.4	3208.9	223.5	0.05	223.5	0.05	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 16:20:28 on 10/09/2015]

T R A N S Y T 12

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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For sales and distribution information,
program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770864
Email: softwarebureau@trl.co.uk
Web: www.trlsoftware.co.uk

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "2017 AM NO DEV.DAT" at 09:05 on 20150720

TRANSYT 12.0

M69 Junction 1 AM Peak 2017 Without Development

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	= 5
NUMBER OF LINKS	= 49
NUMBER OF OPTIMISED NODES	= 5
MAXIMUM NUMBER OF GRAPHIC PLOTS	= 0
NUMBER OF STEPS IN CYCLE	= 60
MAXIMUM NUMBER OF SHARED STOPLINES	= 4
MAXIMUM NUMBER OF TIMING POINTS	= 2
MAXIMUM LINKS AT ANY NODE	= 12

CORE REQUESTED = 11409 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

CARD NO. 1 TYPE

TITLE:- M69 Junction 1 AM Peak 2017 Without Development

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME PERIOD 1-1200 MINS.	EFFECTIVE-GREEN DISPLACEMENTS START (SEC)	EFFECTIVE-GREEN DISPLACEMENTS END (SEC)	EQUISAT 0=UNEQUAL SETTINGS 0=NO 1=YES	FLOW CYCLE	FLOW SCALE %	CRUISE-SPEEDS SCALE 10-200 %	CRUISE-SPEEDS CARD32 50-200 0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL-CLIMB OUTPUT 1=FULL	DELAY VALUE P PER PCU-H	STOP VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260

CARD NO. 3 TYPE 2 — LIST OF NODES TO BE OPTIMISED

3)=	2	1	2	3	4	5	0	0	0	0	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET					SECOND SET					THIRD SET				
4)=	7	12	15	16	17	0	13	19	18	0	0	14	191	192	0	0
5)=	7	22	24	25	26	0	32	35	36	0	0	33	37	0	0	0
6)=	7	42	44	45	0	0	43	46	0	0	0	52	55	56	57	0
7)=	7	53	58	0	0	0	54	59	0	0	0	61	62	63	64	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
8)=	10	1	7	7								
9)=	10	2	7	7								
10)=	10	3	7	7								
11)=	10	4	7	7								
12)=	10	5	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
13)=	11	1	6	6								
14)=	11	2	6	6								
15)=	11	3	6	6								
16)=	11	4	6	6								
17)=	11	5	6	6								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
18)=	12	1	1	0	0								
19)=	12	2	1	0	0								
20)=	12	3	1	0	0								
21)=	12	4	1	0	0								
22)=	12	5	1	0	0								

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY LINKS LINK1 NO.	PRIORITY LINKS LINK2 NO.	LINK1 GIVEWAY COEFFS. ONLY % FLOW	A1 X100	A2 X100				LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
23)=	30	60	61	0	0	47	100	0	0	0	0	125	0	2108	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN START STAGE	FIRST GREEN START LAG	FIRST GREEN END STAGE	FIRST GREEN END LAG	SECOND GREEN START STAGE	SECOND GREEN START LAG	SECOND GREEN END STAGE	SECOND GREEN END LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
24)=	31	10	1	1	6	2	0	0	0	0	0	200	-9999	4100	60	0
25)=	31	11	1	1	6	2	0	0	0	0	0	200	-9999	2120	60	0
26)=	31	12	1	2	6	1	0	0	0	0	0	110	0	1892	500	0
27)=	31	13	1	2	6	1	0	0	0	0	0	110	0	2029	500	0
28)=	31	14	1	2	6	1	0	0	0	0	0	110	0	2029	500	0
29)=	31	15	1	1	0	1	0	0	0	0	0	110	0	0	0	0
30)=	31	16	1	1	0	1	0	0	0	0	0	110	0	0	0	0
31)=	31	17	1	1	0	1	0	0	0	0	0	110	0	0	0	0
32)=	31	18	1	1	0	1	0	0	0	0	0	110	0	0	0	0
33)=	31	19	1	1	0	1	0	0	0	0	0	110	0	0	0	0
34)=	31	20	2	1	6	2	0	0	0	0	0	200	-9999	2015	60	0
35)=	31	21	2	1	6	2	0	0	0	0	0	200	-9999	2130	60	0
36)=	31	22	2	2	6	1	0	0	0	0	0	100	0	3989	500	0
37)=	31	23	2	2	6	1	0	0	0	0	0	100	0	2063	500	0
38)=	31	24	2	1	0	1	0	0	0	0	0	100	0	0	0	0
39)=	31	25	2	1	0	1	0	0	0	0	0	100	0	0	0	0
40)=	31	26	2	1	0	1	0	0	0	0	0	100	0	0	0	0
41)=	31	30	3	1	6	2	0	0	0	0	0	200	-9999	2015	60	0
42)=	31	31	3	1	6	2	0	0	0	0	0	200	-9999	4270	60	0
43)=	31	32	3	2	6	1	0	0	0	0	0	130	0	1926	500	0
44)=	31	33	3	2	6	1	0	0	0	0	0	130	0	2063	500	0
45)=	31	34	3	2	6	1	0	0	0	0	0	130	0	2063	500	0
46)=	31	35	3	1	0	1	0	0	0	0	0	130	0	0	0	0
47)=	31	36	3	1	0	1	0	0	0	0	0	130	0	0	0	0
48)=	31	37	3	1	0	1	0	0	0	0	0	130	0	0	0	0
49)=	31	40	4	1	6	2	0	0	0	0	0	200	-9999	1995	60	0
50)=	31	41	4	1	6	2	0	0	0	0	0	200	-9999	4230	60	0
51)=	31	42	4	2	6	1	0	0	0	0	0	140	0	1941	500	0
52)=	31	43	4	2	6	1	0	0	0	0	0	140	0	2077	500	0
53)=	31	44	4	1	0	1	0	0	0	0	0	140	0	0	0	0
54)=	31	45	4	1	0	1	0	0	0	0	0	140	0	0	0	0
55)=	31	46	4	1	0	1	0	0	0	0	0	140	0	0	0	0
56)=	31	50	5	1	6	2	0	0	0	0	0	200	-9999	1975	20	0
57)=	31	51	5	1	6	2	0	0	0	0	0	200	-9999	4250	20	0
58)=	31	52	5	2	6	1	0	0	0	0	0	125	0	1936	500	0
59)=	31	53	5	2	6	1	0	0	0	0	0	125	0	2072	500	0
60)=	31	54	5	2	6	1	0	0	0	0	0	125	0	4144	500	0
61)=	31	55	5	1	0	1	0	0	0	0	0	125	0	0	0	0
62)=	31	56	5	1	0	1	0	0	0	0	0	125	0	0	0	0
63)=	31	57	5	1	0	1	0	0	0	0	0	125	0	0	0	0
64)=	31	58	5	1	0	1	0	0	0	0	0	125	0	0	0	0
65)=	31	59	5	1	0	1	0	0	0	0	0	125	0	0	0	0
66)=	31	61	0	0	0	0	0	0	0	0	0	125	0	6000	0	0
67)=	31	62	0	0	0	0	0	0	0	0	0	125	0	0	0	0
68)=	31	63	0	0	0	0	0	0	0	0	0	125	0	0	0	0
69)=	31	64	0	0	0	0	0	0	0	0	0	125	0	0	0	0
70)=	31	191	1	1	0	1	0	0	0	0	0	110	0	0	0	0
71)=	31	192	1	1	0	1	0	0	0	0	0	110	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 LINK NO.	ENTRY 1 CRUISE FLOW	ENTRY 1 CRUISE SPEED	ENTRY 2 LINK NO.	ENTRY 2 CRUISE FLOW	ENTRY 2 CRUISE SPEED	ENTRY 3 LINK NO.	ENTRY 3 CRUISE FLOW	ENTRY 3 CRUISE SPEED	ENTRY 4 LINK NO.	ENTRY 4 CRUISE FLOW	ENTRY 4 CRUISE SPEED
72)=	32	10	611	0	0	0	43	0	0	0	0	0	0	0	0	0
73)=	32	11	211	0	0	0	43	0	0	0	0	0	0	0	0	0
74)=	32	12	82	0	60	82	43	0	0	0	0	0	0	0	0	0
75)=	32	13	83	0	60	83	43	0	0	0	0	0	0	0	0	0
76)=	32	14	201	0	60	201	43	0	0	0	0	0	0	0	0	0
77)=	32	15	264	0	61	264	43	0	0	0	0	0	0	0	0	0
78)=	32	16	191	0	64	191	43	0	0	0	0	0	0	0	0	0
79)=	32	17	92	0	63	92	43	0	0	0	0	0	0	0	0	0
80)=	32	18	264	0	61	264	43	0	0	0	0	0	0	0	0	0
81)=	32	19	191	0	64	191	43	0	0	0	0	0	0	0	0	0
82)=	32	20	358	0	0	0	43	0	0	0	0	0	0	0	0	0

```
 83)=  32      21     828       0       0       0      43       0       0       0       0       0       0       0       0       0
 84)=  32      22     256       0      10     256      43       0       0       0       0       0       0       0       0       0
 85)=  32      23     211       0      11     211      43       0       0       0       0       0       0       0       0       0
 86)=  32      24     284       0      14     201      43      13      83      43       0       0       0       0       0       0
 87)=  32      25     173       0     192     173      43       0       0       0       0       0       0       0       0       0
 88)=  32      26      43       0     191      43      43       0       0       0       0       0       0       0       0       0
 89)=  32      30     160       0       0       0      43       0       0       0       0       0       0       0       0       0
 90)=  32      31    1370       0       0       0      43       0       0       0       0       0       0       0       0       0
 91)=  32      32     349       0      20     349      43       0       0       0       0       0       0       0       0       0
 92)=  32      33     548       0      21     548      43       0       0       0       0       0       0       0       0       0
 93)=  32      34     280       0      21     280      43       0       0       0       0       0       0       0       0       0
 94)=  32      35     201       0      24     201      43       0       0       0       0       0       0       0       0       0
 95)=  32      36      33       0      25      33      43       0       0       0       0       0       0       0       0       0
 96)=  32      37     211       0      23     211      43       0       0       0       0       0       0       0       0       0
 97)=  32      40     213       0       0       0      43       0       0       0       0       0       0       0       0       0
 98)=  32      41     425       0       0       0      43       0       0       0       0       0       0       0       0       0
 99)=  32      42     587       0      31     587      43       0       0       0       0       0       0       0       0       0
100)=  32      43     783       0      31     783      43       0       0       0       0       0       0       0       0       0
101)=  32      44     548       0      33     548      43       0       0       0       0       0       0       0       0       0
102)=  32      45     211       0      37     211      43       0       0       0       0       0       0       0       0       0
103)=  32      46     280       0      34     280      43       0       0       0       0       0       0       0       0       0
104)=  32      50     273       0       0       0      43       0       0       0       0       0       0       0       0       0
105)=  32      51     701       0       0       0      43       0       0       0       0       0       0       0       0       0
106)=  32      52     160       0      40     160      43       0       0       0       0       0       0       0       0       0
107)=  32      53     280       0      46     280      43       0       0       0       0       0       0       0       0       0
108)=  32      54     425       0      41     425      43       0       0       0       0       0       0       0       0       0
109)=  32      55     250       0      42     250      43       0       0       0       0       0       0       0       0       0
110)=  32      56      83       0      44      83      43       0       0       0       0       0       0       0       0       0
111)=  32      57      10       0      45      10      43       0       0       0       0       0       0       0       0       0
112)=  32      58     691       0      43     691      43       0       0       0       0       0       0       0       0       0
113)=  32      59      92       0      43      92      43       0       0       0       0       0       0       0       0       0
114)=  32      60     380       0       0       0      43       0       0       0       0       0       0       0       0       0
115)=  32      61     970       0      51     701      43      50     269      43       0       0       0       0       0       0
116)=  32      62     280       0      53     280      43       0       0       0       0       0       0       0       0       0
117)=  32      63     783       0      58     691      43      59      92      43       0       0       0       0       0       0
118)=  32      64     425       0      54     425      43       0       0       0       0       0       0       0       0       0
119)=  32     191      43       0      64      43      43       0       0       0       0       0       0       0       0       0
120)=  32     192     173       0      61     173      43       0       0       0       0       0       0       0       0       0

                    LINK CARDS : FLARE SATURATION FLOW DATA
                     ..LANE  1..     ..LANE  2..     ..LANE  3..
      CARD   LINK   SAT.     CAPAC  SAT.     CAPAC  SAT.     CAPAC
      TYPE    NO.   FLOW      VEH.  FLOW      VEH.  FLOW      VEH.
121)=  33      21    2130       5       0       0       0       0

                                                 LINK DATA:  QUEUE CONSTRAINTS
CARD   CARD   LINK    LIMIT   QUEUE   LINK    LIMIT   QUEUE   LINK    LIMIT   QUEUE   LINK    LIMIT   QUEUE   LINK    LIMIT   QUEUE
 NO.   TYPE    NO.    QUEUE  WEIGHT    NO.    QUEUE  WEIGHT    NO.    QUEUE  WEIGHT    NO.    QUEUE  WEIGHT    NO.    QUEUE  WEIGHT
122)=  38      12      10    4500      13      10    4500      14      10    4500      22       9    4500      23       7    4500
123)=  38      32       6    4500      33      10    4500      34      10    4500      42      11    4500      43      11    4500
124)=  38      52       9    4500      53       9    4500      54      18    4500       0       0       0       0       0       0

*****END OF SUBROUTINE TINPUT****


     60 SECOND CYCLE  60 STEPS

INITIAL SETTINGS
 - (SECONDS)

  NODE   NUMBER   STAGE   STAGE   STAGE   STAGE   STAGE  STAGE   STAGE   STAGE   STAGE   STAGE
   NO   OF STAGES   1       2       3       4       5      6       7       8       9      10

    1       2       0      21
    2       2       0      36
    3       2       0      28
    4       2       0      13
    5       2       0      18

 LINK    FLOW   SAT   DEGREE  MEAN TIMES  -------DELAY--------    ----STOPS----   ----QUEUE----  PERFORMANCE   EXIT   GREEN TIMES
NUMBER   INTO   FLOW    OF     PER PCU    UNIFORM RANDOM+ COST    MEAN    COST    MEAN            INDEX.       NODE   START  START
         LINK          SAT    CRUISE                  OVERSAT  OF   STOPS    OF   STOPS   MAX.  AVERAGE  WEIGHTED SUM              END    END
                              DELAY  (U+R+O=MEAN Q) DELAY    /PCU   STOPS        EXCESS  OF ( ) VALUES             1ST    2ND
       (PCU/H) (PCU/H)  (%)  (SEC) (SEC)   (PCU-H/H)   ($/H)   (%)   ($/H)   (PCU) (PCU)     ($/H)                  (SECONDS)

   10     611   4100     56  16.7  22.7    3.2 +  0.6  ( 54.7)*    88  ( 13.8)      9                32.8      1      6  21
   11     211   2120     37  16.7  23.0    1.1 +  0.3  ( 19.1)*    85  (  4.6)      3                11.5      1      6  21
   12      82   1892S    59   9.2  10.7    0.2 +  0.1  (  3.5)*    56  (  1.2)      6  ( 0.0)*       18.5      1     27   0
   13      83   2029S    47   9.2   8.9    0.1 +  0.1  (  2.9)*    46  (  1.0)      4  ( 0.0)*       15.5      1     27   0
   14     201   2029S    36   9.2   8.6    0.3 +  0.1  (  6.8)*    45  (  2.3)      4  ( 0.0)*       36.6      1     27   0
   15     264     12L    59   9.2   7.3    0.2 +  0.3  (  7.6)     73  (  4.9)      6                12.5      1     27   0
   16     191     12L    59   9.2   4.4    0.0 +  0.2  (  3.3)      8  (  0.4)      6                 3.7      1     27   0
   17      92     12L    59   9.2  14.5    0.3 +  0.1  (  5.3)     59  (  1.4)      6                 6.7      1     27   0
   18     264     13L    47   9.2   4.7    0.1 +  0.2  (  4.8)     50  (  3.4)      4                 8.2      1     27   0
   19     191     13L    47   9.2   3.3    0.0 +  0.2  (  2.5)      6  (  0.3)      4                 2.8      1     27   0
   20     358   2015     34  16.7  11.2    0.8 +  0.3  ( 15.8)*    59  (  5.4)      4                 9.5      2      6  36
   21     828   2710f    59  16.7  11.8    2.0 +  0.7  ( 38.7)*    60  ( 12.8)      9                23.2      2      6  36
   22     255   3989S    60   8.4  29.2    1.8 +  0.3  ( 29.3)*   106  (  7.0)     12  ( 0.4)*      171.9      2     42   0
   23     211   2063     32   8.4  31.1    1.6 +  0.2  ( 25.9)*   107  (  5.8)      4  ( 0.0)*      135.3      2     42   0
   24     283     22L    60   8.4  15.5    0.9 +  0.3  ( 17.3)     85  (  6.2)     12     +          23.6      2     42   0
   25     173     22L    60   8.4  12.2    0.4 +  0.2  (  8.3)     98  (  4.4)     12     +          12.7      2     42   0
   26      43     22L    60   8.4   9.4    0.1 +  0.0  (  1.6)     38  (  0.4)     12     +           2.0      2     42   0
   30     160   2015     21  16.7  15.3    0.6 +  0.1  (  9.7)*    68  (  2.8)      2                 5.8      3      6  28
   31    1370   4270     84  16.7  23.4    6.4 +  2.5  (126.6)*    96  ( 33.9)     23                75.9      3      6  28
   32     349   1926S    67  10.9  21.6    1.5 +  0.6  ( 29.7)*   103  (  9.3)      8  ( 0.5)*      181.0      3     34   0
   33     548   2063S    82  10.9  25.5    2.3 +  1.6  ( 55.1)*   113  ( 15.9)     12  ( 0.2)*      301.0      3     34   0
   34     280   2063     30  10.9  13.6    0.8 +  0.2  ( 15.0)*    86  (  6.2)      4  ( 0.0)*       81.3      3     34   0
   35     201     32L    67  10.9  20.3    0.8 +  0.4  ( 16.1)     58  (  3.0)      8     +          19.1      3     34   0
   36      33     32L    67  10.9  21.3    0.1 +  0.1  (  2.8)     59  (  0.5)      8     +           3.3      3     34   0
   37     211     33L    82  10.9  14.7    0.3 +  0.6  ( 12.3)     31  (  1.7)     12     +          14.0      3     34   0
   40     213   1995     80  16.7  57.0    1.5 +  1.9  ( 47.9)*   139  (  7.7)      5                28.7      4      6  13
   41     425   4230     75  16.7  37.7    3.0 +  1.5  ( 63.3)*   112  ( 12.3)      8                38.0      4      6  13
   42     586   1941S    99  11.7  49.1    1.3 +  6.7  (113.5)*   151  ( 22.9)     31  (11.0)*     1085.1      4     19   0
   43     784   2077S    73  11.7   6.4    0.4 +  1.0  ( 19.6)*    64  ( 13.0)     14  ( 0.2)*      120.6      4     19   0
   44     548     42L    99  11.7  44.8    0.6 +  6.2  ( 96.9)     83  ( 11.7)     31     +         108.6      4     19   0
   45     211     42L    99  11.7  54.4    0.8 +  2.4  ( 45.2)    147  (  8.0)     31     +          53.3      4     19   0
   46     280     43L    73  11.7   5.6    0.1 +  0.4  (  6.2)     14  (  1.0)     14     +           7.2      4     19   0
   50     273   1975     64  16.7  32.9    1.6 +  0.9  ( 35.4)*   105  (  7.4)      5                 7.1      5      6  18
   51     701   4250     76  16.7  30.1    4.3 +  1.6  ( 83.3)*   102  ( 18.5)     12                16.7      5      6  18
   52     160   1936S    42  10.5  10.8    0.4 +  0.1  (  6.8)*    97  (  4.0)      4  ( 0.0)*       38.1      5     24   0
   53     280   2072S    76  10.5  15.6    0.8 +  0.5  ( 17.3)*    59  (  4.2)      4  ( 0.0)*       90.5      5     24   0
   54     425   4144S    20  10.5   8.2    0.9 +  0.1  ( 13.7)*    92  ( 10.1)      7  ( 0.0)*       78.7      5     24   0
   55     250     52L    42  10.5   3.1    0.0 +  0.2  (  3.1)      7  (  0.4)      4                 3.5      5     24   0
   56      83     52L    42  10.5  13.3    0.2 +  0.1  (  4.3)     67  (  1.4)      4                 5.8      5     24   0
   57      10     52L    42  10.5   3.5    0.0 +  0.0  (  0.1)     11  (  0.0)      4                 0.2      5     24   0
   58     691     53L    76  10.5   6.0    0.0 +  1.1  ( 16.5)     11  (  1.9)      4                18.4      5     24   0
   59      92     54L    20  10.5   1.2    0.0 +  0.0  (  0.4)      5  (  0.1)      7                 0.5      5     24   0
   60     380   2108     38  10.5   4.1    0.1 +  0.3  (  6.1)     33  (  3.2)      1                 9.3
```

60 SECOND CYCLE 60 STEPS

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	COST OF DELAY ($/H)	STOPS MEAN /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START END 1ST (SECONDS)	GREEN TIMES START END 2ND (SECONDS)
61	970	6000S	41	10.5	0.5	0.0 + 0.1 (1.9)	1	(0.2)	0			2.2			
62	280	61L	41	10.5	0.5	0.0 + 0.0 (0.6)	1	(0.1)	0			0.6			
63	784	61L	41	10.5	0.5	0.0 + 0.1 (1.6)	1	(0.2)	0			1.7			
64	425	61L	41	10.5	0.5	0.0 + 0.1 (0.9)	1	(0.1)	0			0.9			
191	43	14L	36	9.2	2.8	0.0 + 0.0 (0.5)	6	(0.1)	4			0.5	1	27	0
192	173	14L	36	9.2	4.5	0.1 + 0.1 (3.0)	49	(2.2)	4			5.2	1	27	0

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2452.7	134.7	18.2	42.0	35.6	(2213.9) + (160.2)	+ (555.6)	= 2929.7	TOTALS	

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	131.5	+	89.3	+	127.3	=	348.2

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 49

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

1	2	36	57
2	2	18	54
3	2	0	28
4	2	0	13
5	2	51	9

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2452.7	134.7	18.2	42.1	35.6	(1933.3) + (153.2)	+ (578.5)	= 2665.0	TOTALS	

NO. OF ENTRIES TO SUBPT = 16
NO. OF LINKS RECALCULATED= 475

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

1	2	36	57
2	2	18	54
3	2	0	28
4	2	0	13
5	2	51	9

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2452.7	134.7	18.2	42.1	35.6	(1933.3) + (153.2)	+ (578.5)	= 2665.0	TOTALS	

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 378

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

1	2	41	58
2	2	25	51
3	2	5	28
4	2	0	13
5	2	53	9

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2452.7	179.0	13.7	41.2	80.8	(1656.3) + (101.2)	+ (209.9)	= 1967.4	TOTALS	

NO. OF ENTRIES TO SUBPT = 41
NO. OF LINKS RECALCULATED= 1101

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1	2	50	7
2	2	25	51
3	2	5	28
4	2	0	13
5	2	53	9

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2452.7	177.9	13.8	40.1	80.8	(1616.4) + (	92.4)	+ (209.8)	= 1918.7	TOTALS

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 416

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1	2	50	7
2	2	25	51
3	2	5	28
4	2	0	13
5	2	53	9

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2452.7	177.9	13.8	40.1	80.8	(1616.4) + (	92.4)	+ (209.8)	= 1918.7	TOTALS

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 409

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1	2	50	7
2	2	24	50
3	2	5	28
4	2	0	13
5	2	52	8

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2452.7	177.7	13.8	39.9	80.8	(1604.9) + (	89.5)	+ (165.3)	= 1859.6	TOTALS

NO. OF ENTRIES TO SUBPT = 13
NO. OF LINKS RECALCULATED= 489

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1	2	50	7
2	2	24	52
3	2	5	28
4	2	0	13
5	2	52	8

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2452.7	176.9	13.9	39.6	80.3	(1604.5) + (	90.2)	+ (164.1)	= 1858.9	TOTALS

NO. OF ENTRIES TO SUBPT = 21
NO. OF LINKS RECALCULATED= 767

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	50	7								
2	2	24	52								
3	2	5	28								
4	2	0	13								
5	2	52	8								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	RANDOM+ OVERSAT (U+R+O=MEAN Q) (PCU-H/H)	COST OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN MAX. QUEUE (PCU)	AVERAGE EXCESS QUEUE (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	START 2ND (SECONDS)	END
10	611	4100	75	16.7	31.1	3.8 + 1.4	(74.9)*	103	(16.3)	11		44.9	1	56	7	
11	211	2120	50	16.7	29.7	1.3 + 0.5	(24.8)*	98	(5.4)	4		14.9	1	56	7	
12	82	1892S	52	9.2	7.9	0.1 + 0.1	(2.6)*	44	(0.9)	3	(0.0)*	13.8	1	13	50	
13	83	2029S	42	9.2	6.7	0.1 + 0.1	(2.2)*	39	(0.8)	1	(0.0)*	11.8	1	13	50	
14	201	2029S	32	9.2	6.6	0.3 + 0.1	(5.2)*	40	(2.1)	2	(0.0)*	28.2	1	13	50	
15	264	12L	52	9.2	3.3	0.0 + 0.2	(3.4)	11	(0.7)	3		4.2	1	13	50	
16	191	12L	52	9.2	4.0	0.0 + 0.2	(3.0)	10	(0.5)	3		3.5	1	13	50	
17	86	12L	52	9.2	12.8	0.2 + 0.1	(4.3)	78	(1.8)	3		6.2	1	13	50	
18	264	13L	42	9.2	2.4	0.0 + 0.2	(2.5)	4	(0.3)	1		2.8	1	13	50	
19	191	13L	42	9.2	3.3	0.0 + 0.1	(2.5)	9	(0.4)	1		2.9	1	13	50	
20	358	2015	46	16.7	18.2	1.4 + 0.4	(25.7)*	77	(7.1)	5		15.4	2	30	52	
21	828	2912f	74	16.7	20.4	3.3 + 1.4	(66.5)*	82	(17.6)	12		39.9	2	30	52	
22	255	3989S	42	8.4	1.8	0.0 + 0.1	(1.8)*	5	(0.3)	7	(0.0)*	9.4	2	58	24	
23	211	2063	23	8.4	2.5	0.0 + 0.1	(2.1)*	4	(0.2)	0	(0.0)*	10.8	2	58	24	
24	283	22L	42	8.4	13.8	0.9 + 0.1	(15.4)	64	(4.7)	7		20.1	2	58	24	
25	173	22L	42	8.4	25.5	1.1 + 0.1	(17.4)	90	(4.0)	7		21.4	2	58	24	
26	43	22L	42	8.4	16.1	0.2 + 0.0	(2.7)	98	(1.1)	7		3.8	2	58	24	
30	160	2015	26	16.7	20.0	0.7 + 0.2	(12.6)*	79	(3.2)	2		7.6	3	11	28	
31	1370	4270	107	16.7	158.0	8.9 + 51.2	(853.9)*	227	(80.1)	74		512.3	3	11	28	
32	349	1926S	57	10.9	4.7	0.1 + 0.4	(6.5)*	16	(1.5)	6	(0.0)*	33.7	3	34	5	
33	548	2063S	69	10.9	6.0	0.1 + 0.8	(12.9)*	22	(3.2)	6	(0.0)*	67.7	3	34	5	
34	280	2063	25	10.9	2.7	0.0 + 0.2	(2.9)*	6	(0.4)	0	(0.0)*	15.1	3	34	5	
35	201	32L	57	10.9	21.0	0.9 + 0.2	(16.6)	101	(5.3)	6		21.9	3	34	5	
36	33	32L	57	10.9	25.6	0.2 + 0.0	(3.3)	104	(0.9)	6		4.2	3	34	5	
37	211	33L	69	10.9	23.0	1.0 + 0.3	(19.2)	108	(5.9)	6		25.0	3	34	5	
40	213	1995	80	16.7	57.0	1.5 + 1.9	(47.9)*	139	(7.7)	5		28.7	4	6	13	
41	425	4230	75	16.7	37.7	3.0 + 1.5	(63.3)*	112	(12.3)	8		38.0	4	6	13	
42	548<	1941S	96	11.7	29.2	0.5 + 3.9	(63.1)*	104	(15.7)	23	(3.6)*	495.4	4	19	0	
43	733<	2077S	70	11.7	4.5	0.1 + 0.8	(13.2)*	27	(5.4)	9	(0.0)*	71.1	4	19	0	
44	548	42L	96	11.7	34.3	1.3 + 3.9	(74.1)	93	(13.2)	23	+	87.3	4	19	0	
45	211	42L	96	11.7	26.3	0.0 + 1.5	(21.9)	42	(2.3)	23	+	24.2	4	19	0	
46	280	43L	70	11.7	10.5	0.5 + 0.3	(11.6)	54	(3.9)	9		15.5	4	19	0	
50	273	1975	75	16.7	42.8	1.8 + 1.5	(46.1)*	120	(8.5)	6		9.2	5	58	8	
51	701	4250	90	16.7	44.8	4.7 + 4.1	(124.0)*	125	(22.6)	15		24.8	5	58	8	
52	160	1936S	39	10.5	2.7	0.0 + 0.1	(1.7)*	19	(0.8)	3	(0.0)*	9.4	5	14	52	
53	280	2072S	69	10.5	9.9	0.4 + 0.3	(10.9)*	56	(4.0)	5	(0.0)*	58.7	5	14	52	
54	425	4144S	19	10.5	0.8	0.0 + 0.1	(1.4)*	1	(0.2)	0	(0.0)*	7.1	5	14	52	
55	234<	52L	39	10.5	5.7	0.2 + 0.2	(5.2)	21	(1.4)	3		6.6	5	14	52	
56	83	52L	39	10.5	6.6	0.1 + 0.1	(2.2)	47	(1.0)	3		3.2	5	14	52	
57	10	52L	39	10.5	16.2	0.0 + 0.0	(0.6)	99	(0.3)	3		0.9	5	14	52	
58	646<	53L	69	10.5	6.6	0.4 + 0.8	(16.8)	19	(3.3)	5		20.1	5	14	52	
59	86	54L	19	10.5	3.1	0.1 + 0.0	(1.0)	13	(0.3)	0		1.3	5	14	52	
60	380	2108	38	10.5	3.8	0.1 + 0.3	(5.6)	28	(2.7)	1		8.3				

60 SECOND CYCLE 60 STEPS

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	RANDOM+ OVERSAT (U+R+O=MEAN Q) (PCU-H/H)	COST OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN MAX. QUEUE (PCU)	AVERAGE EXCESS QUEUE (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	START 2ND (SECONDS)	END
61	970	6000S	40	10.5	0.5	0.0 + 0.1	(1.9)	1	(0.2)	0		2.1				
62	280	61L	40	10.5	0.5	0.0 + 0.0	(0.6)	1	(0.1)	0		0.6				
63	733<	61L	40	10.5	0.5	0.0 + 0.1	(1.4)	1	(0.2)	0		1.6				
64	425	61L	40	10.5	0.5	0.0 + 0.1	(0.8)	1	(0.1)	0		0.9				
191	43	14L	32	9.2	3.0	0.0 + 0.0	(0.5)	8	(0.1)	2		0.6	1	13	50	
192	173	14L	32	9.2	2.1	0.0 + 0.1	(1.4)	5	(0.2)	2		1.7	1	13	50	

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2452.7	176.9	13.9	39.6	80.3	(1604.5) + (90.2)	+ (164.1)	= 1858.9	TOTALS	
								ROUTE	

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	131.5	+	137.9	+	123.4	=	392.9

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 420

PROGRAM TRANSYT FINISHED
========== end of file ==========

Printed at 16:21:34 on 10/09/2015]

T R A N S Y T 12

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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For sales and distribution information,
program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770864
Email: softwarebureau@trl.co.uk
Web: www.trlsoftware.co.uk

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "2017 PM NO DEV.DAT" at 16:14 on 20150710

TRANSYT 12.0

M69 Junction 1 PM Peak 2017 Without Development

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	= 5
NUMBER OF LINKS	= 49
NUMBER OF OPTIMISED NODES	= 5
MAXIMUM NUMBER OF GRAPHIC PLOTS	= 0
NUMBER OF STEPS IN CYCLE	= 60
MAXIMUM NUMBER OF SHARED STOPLINES	= 4
MAXIMUM NUMBER OF TIMING POINTS	= 2
MAXIMUM LINKS AT ANY NODE	= 12

CORE REQUESTED = 11409 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

(1)= TITLE:- M69 Junction 1 PM Peak 2017 Without Development

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME PERIOD 1-1200 MINS.	EFFECTIVE-GREEN DISPLACEMENTS START (SEC)	EFFECTIVE-GREEN DISPLACEMENTS END (SEC)	EQUISAT 0=UNEQUAL SETTINGS 0=NO 1=YES	FLOW CYCLE 1=EQUAL CYCLE	SCALE 10-200 %	CRUISE-SPEEDS SCALE 50-200 %	CARD32 0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL-CLIMB 0=NO 1=FULL OUTPUT	DELAY VALUE P PER PCU-H	STOP VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260

LIST OF NODES TO BE OPTIMISED

CARD NO.	CARD TYPE															
3)=	2	1	2	3	4	5	0	0	0	0	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET.....					SECOND SET.....					THIRD SET.....				
4)=	7	12	15	16	17	0	13	19	18	0	0	14	191	192	0	0
5)=	7	22	24	25	26	0	32	35	36	0	0	33	37	0	0	0
6)=	7	42	44	45	0	0	43	46	0	0	0	52	55	56	57	0
7)=	7	53	58	0	0	0	54	59	0	0	0	61	62	63	64	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
8)=	10	1	7	7								
9)=	10	2	7	7								
10)=	10	3	7	7								
11)=	10	4	7	7								
12)=	10	5	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
13)=	11	1	6	6								
14)=	11	2	6	6								
15)=	11	3	6	6								
16)=	11	4	6	6								
17)=	11	5	6	6								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
18)=	12	1	1	0	0								
19)=	12	2	1	0	0								
20)=	12	3	1	0	0								
21)=	12	4	1	0	0								
22)=	12	5	1	0	0								

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY LINKS LINK1 NO.	PRIORITY LINKS LINK2 NO.	LINK1 GIVEWAY COEFFS. ONLY % FLOW	A1 X100	A2 X100				LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
23)=	30	60	61	0	0	47	100	0	0	0	0	125	0	2108	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN START STAGE	FIRST GREEN START LAG	FIRST GREEN END STAGE	FIRST GREEN END LAG	SECOND GREEN START STAGE	SECOND GREEN START LAG	SECOND GREEN END STAGE	SECOND GREEN END LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
24)=	31	10	1	1	6	2	0	0	0	0	0	200	-9999	4100	60	0
25)=	31	11	1	1	6	2	0	0	0	0	0	200	-9999	2120	60	0
26)=	31	12	1	2	6	1	0	0	0	0	0	110	0	1892	500	0
27)=	31	13	1	2	6	1	0	0	0	0	0	110	0	2029	500	0
28)=	31	14	1	2	6	1	0	0	0	0	0	110	0	2029	500	0
29)=	31	15	1	1	0	1	0	0	0	0	0	110	0	0	0	0
30)=	31	16	1	1	0	1	0	0	0	0	0	110	0	0	0	0
31)=	31	17	1	1	0	1	0	0	0	0	0	110	0	0	0	0
32)=	31	18	1	1	0	1	0	0	0	0	0	110	0	0	0	0
33)=	31	19	1	1	0	1	0	0	0	0	0	110	0	0	0	0
34)=	31	20	2	1	6	2	0	0	0	0	0	200	-9999	2015	60	0
35)=	31	21	2	1	6	2	0	0	0	0	0	200	-9999	2130	60	0
36)=	31	22	2	2	6	1	0	0	0	0	0	100	0	3989	500	0
37)=	31	23	2	2	6	1	0	0	0	0	0	100	0	2063	500	0
38)=	31	24	2	1	0	1	0	0	0	0	0	100	0	0	0	0
39)=	31	25	2	1	0	1	0	0	0	0	0	100	0	0	0	0
40)=	31	26	2	1	0	1	0	0	0	0	0	100	0	0	0	0
41)=	31	30	3	1	6	2	0	0	0	0	0	200	-9999	2015	60	0
42)=	31	31	3	1	6	2	0	0	0	0	0	200	-9999	4270	60	0
43)=	31	32	3	2	6	1	0	0	0	0	0	130	0	1926	500	0
44)=	31	33	3	2	6	1	0	0	0	0	0	130	0	2063	500	0
45)=	31	34	3	2	6	1	0	0	0	0	0	130	0	2063	500	0
46)=	31	35	3	1	0	1	0	0	0	0	0	130	0	0	0	0
47)=	31	36	3	1	0	1	0	0	0	0	0	130	0	0	0	0
48)=	31	37	3	1	0	1	0	0	0	0	0	130	0	0	0	0
49)=	31	40	4	1	6	2	0	0	0	0	0	200	-9999	1995	60	0
50)=	31	41	4	1	6	2	0	0	0	0	0	200	-9999	4230	60	0
51)=	31	42	4	2	6	1	0	0	0	0	0	140	0	1941	500	0
52)=	31	43	4	2	6	1	0	0	0	0	0	140	0	2077	500	0
53)=	31	44	4	1	0	1	0	0	0	0	0	140	0	0	0	0
54)=	31	45	4	1	0	1	0	0	0	0	0	140	0	0	0	0
55)=	31	46	4	1	0	1	0	0	0	0	0	140	0	0	0	0
56)=	31	50	5	1	6	2	0	0	0	0	0	200	-9999	1975	20	0
57)=	31	51	5	1	6	2	0	0	0	0	0	200	-9999	4250	20	0
58)=	31	52	5	2	6	1	0	0	0	0	0	125	0	1936	500	0
59)=	31	53	5	2	6	1	0	0	0	0	0	125	0	2072	500	0
60)=	31	54	5	2	6	1	0	0	0	0	0	125	0	4144	500	0
61)=	31	55	5	1	0	1	0	0	0	0	0	125	0	0	0	0
62)=	31	56	5	1	0	1	0	0	0	0	0	125	0	0	0	0
63)=	31	57	5	1	0	1	0	0	0	0	0	125	0	0	0	0
64)=	31	58	5	1	0	1	0	0	0	0	0	125	0	0	0	0
65)=	31	59	5	1	0	1	0	0	0	0	0	125	0	0	0	0
66)=	31	61	0	0	0	0	0	0	0	0	0	125	0	6000	0	0
67)=	31	62	0	0	0	0	0	0	0	0	0	125	0	0	0	0
68)=	31	63	0	0	0	0	0	0	0	0	0	125	0	0	0	0
69)=	31	64	0	0	0	0	0	0	0	0	0	125	0	0	0	0
70)=	31	191	1	1	0	1	0	0	0	0	0	110	0	0	0	0
71)=	31	192	1	1	0	1	0	0	0	0	0	110	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 ..... LINK NO.	ENTRY 1 ..... CRUISE FLOW	ENTRY 1 ..... CRUISE SPEED	ENTRY 2 ..... LINK NO.	ENTRY 2 ..... CRUISE FLOW	ENTRY 2 ..... CRUISE SPEED	ENTRY 3 ..... LINK NO.	ENTRY 3 ..... CRUISE FLOW	ENTRY 3 ..... CRUISE SPEED	ENTRY 4 ..... LINK NO.	ENTRY 4 ..... CRUISE FLOW	ENTRY 4 ..... CRUISE SPEED
72)=	32	10	891	0	0	0	43	0	0	0	0	0	0	0	0	0
73)=	32	11	348	0	0	0	43	0	0	0	0	0	0	0	0	0
74)=	32	12	100	0	60	100	43	0	0	0	0	0	0	0	0	0
75)=	32	13	178	0	60	178	43	0	0	0	0	0	0	0	0	0
76)=	32	14	152	0	60	152	43	0	0	0	0	0	0	0	0	0
77)=	32	15	232	0	61	232	43	0	0	0	0	0	0	0	0	0
78)=	32	16	130	0	64	130	43	0	0	0	0	0	0	0	0	0
79)=	32	17	32	0	63	32	43	0	0	0	0	0	0	0	0	0
80)=	32	18	232	0	61	232	43	0	0	0	0	0	0	0	0	0
81)=	32	19	131	0	64	131	43	0	0	0	0	0	0	0	0	0
82)=	32	20	320	0	0	0	43	0	0	0	0	0	0	0	0	0

```
 83)=  32      21     822       0       0       0      43       0       0       0       0       0       0       0       0       0
 84)=  32      22     588       0      10     588      43       0       0       0       0       0       0       0       0       0
 85)=  32      23     348       0      11     348      43       0       0       0       0       0       0       0       0       0
 86)=  32      24     330       0      14     152      43      13     178      43       0       0       0       0       0       0
 87)=  32      25     251       0     192     251      43       0       0       0       0       0       0       0       0       0
 88)=  32      26      75       0     191      75      43       0       0       0       0       0       0       0       0       0
 89)=  32      30      63       0       0       0      43       0       0       0       0       0       0       0       0       0
 90)=  32      31     523       0       0       0      43       0       0       0       0       0       0       0       0       0
 91)=  32      32     289       0      20     289      43       0       0       0       0       0       0       0       0       0
 92)=  32      33     543       0      21     543      43       0       0       0       0       0       0       0       0       0
 93)=  32      34     279       0      21     279      43       0       0       0       0       0       0       0       0       0
 94)=  32      35     152       0      24     152      43       0       0       0       0       0       0       0       0       0
 95)=  32      36      39       0      25      39      43       0       0       0       0       0       0       0       0       0
 96)=  32      37     348       0      23     348      43       0       0       0       0       0       0       0       0       0
 97)=  32      40     294       0       0       0      43       0       0       0       0       0       0       0       0       0
 98)=  32      41     336       0       0       0      43       0       0       0       0       0       0       0       0       0
 99)=  32      42     260       0      31     260      43       0       0       0       0       0       0       0       0       0
100)=  32      43     263       0      31     263      43       0       0       0       0       0       0       0       0       0
101)=  32      44     543       0      33     543      43       0       0       0       0       0       0       0       0       0
102)=  32      45     348       0      37     348      43       0       0       0       0       0       0       0       0       0
103)=  32      46     279       0      34     279      43       0       0       0       0       0       0       0       0       0
104)=  32      50     168       0       0       0      43       0       0       0       0       0       0       0       0       0
105)=  32      51     715       0       0       0      43       0       0       0       0       0       0       0       0       0
106)=  32      52     254       0      40     254      43       0       0       0       0       0       0       0       0       0
107)=  32      53     279       0      46     279      43       0       0       0       0       0       0       0       0       0
108)=  32      54     336       0      41     336      43       0       0       0       0       0       0       0       0       0
109)=  32      55     159       0      42     159      43       0       0       0       0       0       0       0       0       0
110)=  32      56      58       0      44      58      43       0       0       0       0       0       0       0       0       0
111)=  32      57      19       0      45      19      43       0       0       0       0       0       0       0       0       0
112)=  32      58     231       0      43     231      43       0       0       0       0       0       0       0       0       0
113)=  32      59      32       0      43      32      43       0       0       0       0       0       0       0       0       0
114)=  32      60     450       0       0       0      43       0       0       0       0       0       0       0       0       0
115)=  32      61     860       0      51     715      43      50     145      43       0       0       0       0       0       0
116)=  32      62     279       0      53     279      43       0       0       0       0       0       0       0       0       0
117)=  32      63     263       0      58     231      43      59      32      43       0       0       0       0       0       0
118)=  32      64     336       0      54     336      43       0       0       0       0       0       0       0       0       0
119)=  32     191      75       0      64      75      43       0       0       0       0       0       0       0       0       0
120)=  32     192     251       0      61     251      43       0       0       0       0       0       0       0       0       0

                    LINK CARDS : FLARE SATURATION FLOW DATA
                     ..LANE  1..     ..LANE  2..     ..LANE  3..
      CARD   LINK   SAT.     CAPAC  SAT.     CAPAC  SAT.     CAPAC
      TYPE    NO.   FLOW      VEH.  FLOW      VEH.  FLOW      VEH.
121)=  33      21    2130       5       0       0       0       0

                                                 LINK DATA:  QUEUE CONSTRAINTS
CARD   CARD   LINK    LIMIT   QUEUE   LINK    LIMIT   QUEUE   LINK    LIMIT   QUEUE   LINK    LIMIT   QUEUE   LINK    LIMIT   QUEUE
 NO.   TYPE    NO.    QUEUE  WEIGHT    NO.   QUEUE  WEIGHT    NO.   QUEUE  WEIGHT    NO.   QUEUE  WEIGHT    NO.   QUEUE  WEIGHT
122)=  38      12      10    4500      13      10    4500      14      10    4500      22       9    4500      23       7    4500
123)=  38      32       6    4500      33      10    4500      34      10    4500      42      11    4500      43      11    4500
124)=  38      52       9    4500      53       9    4500      54      18    4500       0       0       0       0       0       0

*****END OF SUBROUTINE TINPUT****


     60 SECOND CYCLE  60 STEPS

INITIAL SETTINGS
 - (SECONDS)

  NODE   NUMBER   STAGE   STAGE   STAGE   STAGE   STAGE  STAGE   STAGE   STAGE   STAGE   STAGE
   NO   OF STAGES   1       2       3       4       5      6       7       8       9      10

    1       2       0      27
    2       2       0      29
    3       2       0      16
    4       2       0      15
    5       2       0      25

 LINK    FLOW   SAT   DEGREE   MEAN TIMES  -------DELAY--------    ----STOPS----   ----QUEUE----  PERFORMANCE   EXIT   GREEN TIMES
NUMBER   INTO   FLOW     OF      PER PCU    UNIFORM RANDOM+ COST    MEAN    COST    MEAN            INDEX.       NODE   START  START
         LINK          SAT     CRUISE              OVERSAT  OF     STOPS    OF     MAX.  AVERAGE  WEIGHTED SUM          END    END
                                      DELAY  (U+R+O=MEAN Q) DELAY   /PCU   STOPS                EXCESS  OF ( ) VALUES         1ST    2ND
       (PCU/H) (PCU/H)  (%)  (SEC)  (SEC)    (PCU-H/H)    ($/H)    (%)   ($/H)   (PCU)  (PCU)     ($/H)                (SECONDS)

   10     891   4100     59  16.7   18.3    3.8 +  0.7  ( 64.4)*    81  ( 18.6)      13                38.6      1      6  27
   11     348   2120     45  16.7   18.6    1.4 +  0.4  ( 25.5)*    78  (  7.0)       5                15.3      1      6  27
   12     100   1892S    56   9.2   14.7    0.3 +  0.1  (  5.8)*    71  (  1.8)       6  ( 0.0)*       30.8      1     33   0
   13     178   2029S    57   9.2   14.8    0.5 +  0.2  ( 10.4)*    73  (  3.3)       7  ( 0.0)*       55.3      1     33   0
   14     152   2029S    51   9.2   14.1    0.4 +  0.2  (  8.4)*    72  (  2.8)       6  ( 0.0)*       45.0      1     33   0
   15     232     12L    56   9.2   11.7    0.5 +  0.3  ( 10.7)     91  (  5.4)       6                16.1      1     33   0
   16     130     12L    56   9.2    6.7    0.1 +  0.2  (  3.4)     15  (  0.5)       6                 3.9      1     33   0
   17      32     12L    56   9.2   10.7    0.1 +  0.0  (  1.4)     30  (  0.2)       6                 1.6      1     33   0
   18     232     13L    57   9.2   12.0    0.5 +  0.3  ( 11.0)     93  (  5.6)       7                16.5      1     33   0
   19     131     13L    57   9.2    6.6    0.1 +  0.2  (  3.4)     15  (  0.5)       7                 3.9      1     33   0
   20     320    2015    40  16.7   16.5    1.1 +  0.3  ( 20.9)*    73  (  6.0)       4                12.5      2      6  29
   21     822   2880f    71  16.7   18.8    3.1 +  1.2  ( 61.0)*    79  ( 16.6)      11                36.6      2      6  29
   22     588   3989S    72   8.4   22.9    3.1 +  0.6  ( 53.1)*   106  ( 16.0)      20  ( 2.1)*      377.7      2     35   0
   23     348    2063    39   8.4   22.8    1.9 +  0.3  ( 31.4)*   105  (  9.4)       6  ( 0.0)*      166.2      2     35   0
   24     330     22L    72   8.4   10.7    0.6 +  0.3  ( 13.9)     70  (  5.9)      20     +          19.9      2     35   0
   25     251     22L    72   8.4    6.3    0.2 +  0.3  (  6.3)     65  (  4.2)      20     +          10.5      2     35   0
   26      75     22L    72   8.4   17.1    0.3 +  0.1  (  5.1)     54  (  1.1)      20     +           6.1      2     35   0
   30      63    2015    17  16.7   26.6    0.4 +  0.1  (  6.6)*    90  (  1.5)       1                 4.0      3      6  16
   31     523    4270    67  16.7   29.7    3.3 +  1.0  ( 61.2)*   100  ( 13.4)       9                36.7      3      6  16
   32     289   1926S    38  10.9    7.2    0.4 +  0.2  (  8.2)*    74  (  5.5)       5  ( 0.0)*       46.6      3     22   0
   33     543   2063S    66  10.9    9.1    0.8 +  0.6  ( 19.4)*    84  ( 11.8)       9  ( 0.0)*      108.8      3     22   0
   34     279    2063    21  10.9    3.9    0.2 +  0.1  (  4.3)*    52  (  3.7)       3  ( 0.0)*       25.5      3     22   0
   35     152     32L    38  10.9    9.4    0.3 +  0.1  (  5.6)     44  (  1.7)       5                 7.4      3     22   0
   36      39     32L    38  10.9   11.1    0.1 +  0.0  (  1.7)     52  (  0.5)       5                 2.2      3     22   0
   37     348     33L    66  10.9    4.8    0.1 +  0.4  (  6.6)     11  (  1.0)       9                 7.5      3     22   0
   40     294    1995    88  16.7   64.4    2.0 +  3.3  ( 74.7)*   150  ( 11.4)       8                44.8      4      6  15
   41     336    4230    48  16.7   27.5    2.1 +  0.5  ( 36.5)*    95  (  8.2)       5                21.9      4      6  15
   42     260   1941S    89  11.7   21.9    0.7 +  0.9  ( 22.4)*   116  (  7.8)      21  ( 2.0)*      211.2      4     21   0
   43     263   2077S    39  11.7    4.2    0.2 +  0.2  (  4.4)*    59  (  4.0)       4  ( 0.0)*       26.0      4     21   0
   44     542     42L    89  11.7   14.4    0.4 +  1.8  ( 30.8)     80  ( 11.2)      21     +          42.1      4     21   0
   45     348     42L    89  11.7   25.3    1.3 +  1.2  ( 34.8)     95  (  8.6)      21     +          43.3      4     21   0
   46     280     43L    39  11.7    2.3    0.0 +  0.2  (  2.6)      5  (  0.3)       4                 2.9      4     21   0
   50     168    1975    26  16.7   18.3    0.7 +  0.2  ( 12.1)*    75  (  3.2)       2                 2.4      5      6  25
   51     715    4250    50  16.7   18.6    3.2 +  0.5  ( 52.4)*    80  ( 14.7)      10                10.5      5      6  25
   52     254   1936S    51  10.5   18.0    1.0 +  0.3  ( 18.1)*   106  (  6.9)       6  ( 0.0)*       97.2      5     31   0
   53     280   2072S    49  10.5    6.4    0.2 +  0.3  (  7.1)*    18  (  1.3)       3  ( 0.0)*       36.6      5     31   0
   54     336   4144S    18  10.5   15.1    1.3 +  0.1  ( 20.0)*   101  (  8.7)       6  ( 0.0)*      108.5      5     31   0
   55     159     52L    51  10.5    4.1    0.0 +  0.2  (  2.6)     17  (  0.7)       6                 3.3      5     31   0
   56      57     52L    51  10.5   10.2    0.1 +  0.1  (  2.3)     31  (  0.5)       6                 2.7      5     31   0
   57      19     52L    51  10.5   11.7    0.0 +  0.0  (  0.9)     78  (  0.4)       6                 1.3      5     31   0
   58     231     53L    49  10.5    3.9    0.0 +  0.2  (  3.6)     24  (  1.4)       3                 5.0      5     31   0
   59      32     54L    18  10.5    2.7    0.0 +  0.0  (  0.3)     41  (  0.3)       6                 0.7      5     31   0
   60     450    2108    35  10.5    2.6    0.1 +  0.3  (  4.7)     21  (  2.5)       1                 7.1
```

60 SECOND CYCLE 60 STEPS

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	COST DELAY ($/H)	STOPS MEAN /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	START 2ND (SECONDS)	END (SECONDS)
61	860	6000S	29	10.5	0.4	0.0 + 0.1 (1.4)	1	(0.2)	0			1.6				
62	280	61L	29	10.5	0.4	0.0 + 0.0 (0.5)	1	(0.1)	0			0.5				
63	263	61L	29	10.5	0.4	0.0 + 0.0 (0.4)	1	(0.0)	0			0.5				
64	336	61L	29	10.5	0.4	0.0 + 0.0 (0.6)	1	(0.1)	0			0.6				
191	75	14L	51	9.2	6.0	0.0 + 0.1 (1.8)	14	(0.3)	6			2.0	1	33	0	
192	251	14L	51	9.2	11.2	0.5 + 0.3 (11.1)	92	(5.9)	6			17.0	1	33	0	

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2117.6	105.3	20.1	37.3	18.7	(1455.7) + (142.2)	+ (187.3)	= 1785.2	TOTALS	

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	113.6	+	64.4	+	110.7	=	288.7

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 49

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

1	2	9	36
2	2	0	29
3	2	0	16
4	2	9	24
5	2	0	25

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2117.6	104.3	20.3	36.3	18.7	(1301.1) + (141.8)	+ (105.3)	= 1548.2	TOTALS	

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 372

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

1	2	9	36
2	2	0	29
3	2	0	16
4	2	9	24
5	2	0	25

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2117.6	104.3	20.3	36.3	18.7	(1301.1) + (141.8)	+ (105.3)	= 1548.2	TOTALS	

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 390

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

1	2	17	36
2	2	7	28
3	2	2	16
4	2	10	24
5	2	9	25

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2117.6	122.2	17.3	35.1	37.9	(1015.2) + (100.2)	+ (41.4)	= 1156.8	TOTALS	

NO. OF ENTRIES TO SUBPT = 48
NO. OF LINKS RECALCULATED= 1211

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1	2	17	36
2	2	7	28
3	2	2	16
4	2	10	24
5	2	9	25

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2117.6	122.2	17.3	35.1	37.9	(1015.2) + (100.2)	+ (41.4)	= 1156.8	TOTALS	

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 396

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1	2	17	36
2	2	7	28
3	2	2	16
4	2	46	0
5	2	9	25

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2117.6	125.1	16.9	38.0	37.9	(999.5) + (100.0)	+ (32.2)	= 1131.7	TOTALS	

NO. OF ENTRIES TO SUBPT = 12
NO. OF LINKS RECALCULATED= 461

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1	2	26	45
2	2	7	28
3	2	2	16
4	2	46	0
5	2	23	39

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2117.6	122.8	17.2	35.7	37.9	(875.2) + (79.6)	+ (13.0)	= 967.8	TOTALS	

NO. OF ENTRIES TO SUBPT = 32
NO. OF LINKS RECALCULATED= 1046

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1	2	25	45
2	2	6	29
3	2	3	16
4	2	46	0
5	2	23	40

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2117.6	116.4	18.2	35.4	31.7	(856.9) + (85.2)	+ (2.9)	= 945.0	TOTALS	

NO. OF ENTRIES TO SUBPT = 22
NO. OF LINKS RECALCULATED= 763

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	24	44								
2	2	6	29								
3	2	2	15								
4	2	45	59								
5	2	22	39								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	RANDOM+ OVERSAT (U+R+O=MEAN Q) (PCU-H/H)	COST OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN MAX. QUEUE (PCU)	AVERAGE EXCESS QUEUE (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	START 2ND (SECONDS)	END 1ST (SECONDS)	END 2ND (SECONDS)
10	891	4100	87	16.7	34.4	5.3 +	3.2	(120.9)*	111	(25.6)	17		72.5	1	30		44	
11	348	2120	66	16.7	30.0	2.0 +	0.9	(41.2)*	101	(9.0)	6		24.7	1	30		44	
12	100	1892S	45	9.2	9.3	0.2 +	0.1	(3.7)*	53	(1.4)	6	(0.0)*	19.6	1	50		24	
13	178	2029S	46	9.2	9.3	0.3 +	0.1	(6.6)*	55	(2.5)	6	(0.0)*	35.3	1	50		24	
14	152	2029S	40	9.2	8.7	0.3 +	0.1	(5.2)*	52	(2.1)	6	(0.0)*	28.2	1	50		24	
15	232	12L	45	9.2	7.0	0.3 +	0.2	(6.4)	76	(4.6)	6		10.9	1	50		24	
16	130	12L	45	9.2	11.5	0.3 +	0.1	(5.9)	45	(1.5)	6		7.4	1	50		24	
17	32	12L	45	9.2	3.1	0.0 +	0.0	(0.4)	6	(0.0)	6		0.4	1	50		24	
18	232	13L	46	9.2	7.3	0.3 +	0.2	(6.7)	79	(4.7)	6		11.4	1	50		24	
19	131	13L	46	9.2	11.4	0.3 +	0.1	(5.9)	45	(1.5)	6		7.4	1	50		24	
20	320	2015	53	16.7	23.8	1.6 +	0.6	(30.0)*	89	(7.3)	5		18.0	2	12		29	
21	822	3130f	88	16.7	32.9	4.2 +	3.3	(106.8)*	108	(22.9)	16		64.1	2	12		29	
22	588	3989S	59	8.4	2.4	0.1 +	0.3	(5.5)*	15	(2.3)	8	(0.0)*	29.8	2	35		6	
23	348	2063	32	8.4	2.4	0.0 +	0.2	(3.3)*	4	(0.4)	0	(0.0)*	16.8	2	35		6	
24	330	22L	59	8.4	11.6	0.9 +	0.2	(15.1)	54	(4.6)	8		19.7	2	35		6	
25	251	22L	59	8.4	8.2	0.4 +	0.1	(8.2)	28	(1.8)	8		10.0	2	35		6	
26	75	22L	59	8.4	7.9	0.1 +	0.0	(2.3)	61	(1.2)	8		3.5	2	35		6	
30	63	2015	23	16.7	32.1	0.4 +	0.2	(8.0)*	99	(1.6)	1		4.8	3	8		15	
31	523	4270	92	16.7	58.0	3.7 +	4.7	(119.6)*	142	(19.1)	13		71.8	3	8		15	
32	289	1926S	36	10.9	2.6	0.0 +	0.2	(2.9)*	23	(1.7)	5	(0.0)*	16.3	3	21		2	
33	543	2063S	62	10.9	3.5	0.0 +	0.5	(7.5)*	18	(2.5)	6	(0.0)*	40.0	3	21		2	
34	279	2063	19	10.9	1.5	0.0 +	0.1	(1.7)*	3	(0.2)	0	(0.0)*	8.7	3	21		2	
35	152	32L	36	10.9	6.7	0.2 +	0.1	(4.0)	49	(1.9)	5		5.9	3	21		2	
36	39	32L	36	10.9	8.1	0.1 +	0.0	(1.2)	72	(0.7)	5		2.0	3	21		2	
37	348	33L	62	10.9	4.6	0.1 +	0.3	(6.4)	15	(1.3)	6		7.7	3	21		2	
40	294	1995	98	16.7	115.6	2.1 +	7.4	(134.0)*	201	(15.2)	12		80.4	4	51		59	
41	336	4230	53	16.7	29.6	2.2 +	0.6	(39.2)*	98	(8.5)	6		23.5	4	51		59	
42	260	1941S	87	11.7	10.3	0.0 +	0.7	(10.6)*	33	(2.2)	14	(0.2)*	65.3	4	5		45	
43	263	2077S	38	11.7	2.1	0.0 +	0.1	(2.2)*	4	(0.2)	2	(0.0)*	11.1	4	5		45	
44	543	42L	87	11.7	15.9	0.9 +	1.5	(34.1)	52	(7.3)	14	+	41.4	4	5		45	
45	348	42L	87	11.7	17.3	0.7 +	1.0	(23.8)	100	(8.9)	14	+	32.7	4	5		45	
46	279	43L	38	11.7	7.1	0.4 +	0.2	(7.9)	37	(2.6)	2		10.5	4	5		45	
50	168	1975	43	16.7	28.9	1.0 +	0.4	(19.2)*	96	(4.2)	3		3.8	5	28		39	
51	715	4250	84	16.7	35.9	4.6 +	2.6	(101.4)*	112	(20.6)	14		20.3	5	28		39	
52	254	1936S	40	10.5	2.5	0.0 +	0.2	(2.5)*	4	(0.3)	3	(0.0)*	12.8	5	45		22	
53	279	2072S	39	10.5	5.2	0.2 +	0.2	(5.7)*	51	(3.7)	7	(0.0)*	32.2	5	45		22	
54	336	4144S	14	10.5	0.8	0.0 +	0.1	(1.1)*	1	(0.1)	1	(0.0)*	5.6	5	45		22	
55	159	52L	40	10.5	14.2	0.5 +	0.1	(8.9)	100	(4.1)	3		13.0	5	45		22	
56	58	52L	40	10.5	4.4	0.0 +	0.0	(1.0)	29	(0.4)	3		1.4	5	45		22	
57	19	52L	40	10.5	15.2	0.1 +	0.0	(1.1)	80	(0.4)	3		1.5	5	45		22	
58	231	53L	39	10.5	14.9	0.8 +	0.1	(13.6)	101	(6.0)	7		19.6	5	45		22	
59	32	54L	14	10.5	10.6	0.1 +	0.0	(1.3)	90	(0.7)	1		2.1	5	45		22	
60	450	2108	35	10.5	2.8	0.1 +	0.3	(5.0)	17	(2.0)	2		7.0					

60 SECOND CYCLE 60 STEPS

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	RANDOM+ OVERSAT (U+R+O=MEAN Q) (PCU-H/H)	COST OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN MAX. QUEUE (PCU)	AVERAGE EXCESS QUEUE (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	START 2ND (SECONDS)	END 1ST (SECONDS)	END 2ND (SECONDS)
61	860	6000S	29	10.5	0.4	0.0 +	0.1	(1.4)	1	(0.2)	0		1.6					
62	279	61L	29	10.5	0.4	0.0 +	0.0	(0.5)	1	(0.1)	0		0.5					
63	263	61L	29	10.5	0.4	0.0 +	0.0	(0.4)	1	(0.0)	0		0.5					
64	336	61L	29	10.5	0.4	0.0 +	0.0	(0.6)	1	(0.1)	0		0.6					
191	75	14L	40	9.2	11.0	0.2 +	0.1	(3.3)	45	(0.9)	6		4.1	1	50		24	
192	251	14L	40	9.2	6.4	0.3 +	0.2	(6.3)	75	(4.8)	6		11.1	1	50		24	

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2117.6	116.2	18.2	35.2	31.7	(847.7) + (	82.0) + (	10.0) =	939.7	TOTALS

ROUTE

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	113.6	+	76.9	+	98.4	=	289.0

NO. OF ENTRIES TO SUBPT = 15
NO. OF LINKS RECALCULATED= 538

PROGRAM TRANSYT FINISHED
========== end of file ==========

Printed at 16:21:51 on 10/09/2015]

T R A N S Y T 12

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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For sales and distribution information,
program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770864
Email: softwarebureau@trl.co.uk
Web: www.trlsoftware.co.uk

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "2017 AM WITH DEV.DAT" at 09:19 on 20150720

TRANSYT 12.0

M69 Junction 1 AM Peak 2017 With Development

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	= 5
NUMBER OF LINKS	= 49
NUMBER OF OPTIMISED NODES	= 5
MAXIMUM NUMBER OF GRAPHIC PLOTS	= 0
NUMBER OF STEPS IN CYCLE	= 60
MAXIMUM NUMBER OF SHARED STOPLINES	= 4
MAXIMUM NUMBER OF TIMING POINTS	= 2
MAXIMUM LINKS AT ANY NODE	= 12

CORE REQUESTED = 11409 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

(1)= TITLE:- M69 Junction 1 AM Peak 2017 With Development

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME PERIOD 1-1200 MINS.	EFFECTIVE-GREEN START (SEC)	EFFECTIVE-GREEN END (SEC)	EQUISAT 0=UNEQUAL 1=YES	FLOW CYCLE 0=NO 1=EQUAL	CRUISE-SPEEDS SCALE 10-200 %	CRUISE-SPEEDS SCALE 50-200 %	CARD32 0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL-CLIMB OUTPUT 1=FULL	DELAY VALUE P PER PCU-H	STOP VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260

CARD NO.	CARD TYPE	LIST OF NODES TO BE OPTIMISED														
3)=	2	1	2	3	4	5	0	0	0	0	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET.....					SECOND SET.....					THIRD SET.....				
4)=	7	12	15	16	17	0	13	19	18	0	0	14	191	192	0	0
5)=	7	22	24	25	26	0	32	35	36	0	0	33	37	0	0	0
6)=	7	42	44	45	0	0	43	46	0	0	0	52	55	56	57	0
7)=	7	53	58	0	0	0	54	59	0	0	0	61	62	63	64	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
8)=	10	1	7	7								
9)=	10	2	7	7								
10)=	10	3	7	7								
11)=	10	4	7	7								
12)=	10	5	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
13)=	11	1	6	6								
14)=	11	2	6	6								
15)=	11	3	6	6								
16)=	11	4	6	6								
17)=	11	5	6	6								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
18)=	12	1	1	0	0								
19)=	12	2	1	0	0								
20)=	12	3	1	0	0								
21)=	12	4	1	0	0								
22)=	12	5	1	0	0								

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY LINKS LINK1 NO.	PRIORITY LINKS LINK2 NO.	LINK1 GIVEWAY COEFFS. ONLY % FLOW	A1 X100	A2 X100				LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
23)=	30	60	61	0	0	47	100	0	0	0	0	125	0	2108	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN START STAGE	FIRST GREEN START LAG	FIRST GREEN END STAGE	FIRST GREEN END LAG	SECOND GREEN START STAGE	SECOND GREEN START LAG	SECOND GREEN END STAGE	SECOND GREEN END LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
24)=	31	10	1	1	6	2	0	0	0	0	0	200	-9999	4100	60	0
25)=	31	11	1	1	6	2	0	0	0	0	0	200	-9999	2120	60	0
26)=	31	12	1	2	6	1	0	0	0	0	0	110	0	1892	500	0
27)=	31	13	1	2	6	1	0	0	0	0	0	110	0	2029	500	0
28)=	31	14	1	2	6	1	0	0	0	0	0	110	0	2029	500	0
29)=	31	15	1	1	0	1	0	0	0	0	0	110	0	0	0	0
30)=	31	16	1	1	0	1	0	0	0	0	0	110	0	0	0	0
31)=	31	17	1	1	0	1	0	0	0	0	0	110	0	0	0	0
32)=	31	18	1	1	0	1	0	0	0	0	0	110	0	0	0	0
33)=	31	19	1	1	0	1	0	0	0	0	0	110	0	0	0	0
34)=	31	20	2	1	6	2	0	0	0	0	0	200	-9999	2015	60	0
35)=	31	21	2	1	6	2	0	0	0	0	0	200	-9999	2130	60	0
36)=	31	22	2	2	6	1	0	0	0	0	0	100	0	3989	500	0
37)=	31	23	2	2	6	1	0	0	0	0	0	100	0	2063	500	0
38)=	31	24	2	1	0	1	0	0	0	0	0	100	0	0	0	0
39)=	31	25	2	1	0	1	0	0	0	0	0	100	0	0	0	0
40)=	31	26	2	1	0	1	0	0	0	0	0	100	0	0	0	0
41)=	31	30	3	1	6	2	0	0	0	0	0	200	-9999	2015	60	0
42)=	31	31	3	1	6	2	0	0	0	0	0	200	-9999	4270	60	0
43)=	31	32	3	2	6	1	0	0	0	0	0	130	0	1926	500	0
44)=	31	33	3	2	6	1	0	0	0	0	0	130	0	2063	500	0
45)=	31	34	3	2	6	1	0	0	0	0	0	130	0	2063	500	0
46)=	31	35	3	1	0	1	0	0	0	0	0	130	0	0	0	0
47)=	31	36	3	1	0	1	0	0	0	0	0	130	0	0	0	0
48)=	31	37	3	1	0	1	0	0	0	0	0	130	0	0	0	0
49)=	31	40	4	1	6	2	0	0	0	0	0	200	-9999	1995	60	0
50)=	31	41	4	1	6	2	0	0	0	0	0	200	-9999	4230	60	0
51)=	31	42	4	2	6	1	0	0	0	0	0	140	0	1941	500	0
52)=	31	43	4	2	6	1	0	0	0	0	0	140	0	2077	500	0
53)=	31	44	4	1	0	1	0	0	0	0	0	140	0	0	0	0
54)=	31	45	4	1	0	1	0	0	0	0	0	140	0	0	0	0
55)=	31	46	4	1	0	1	0	0	0	0	0	140	0	0	0	0
56)=	31	50	5	1	6	2	0	0	0	0	0	200	-9999	1975	20	0
57)=	31	51	5	1	6	2	0	0	0	0	0	200	-9999	4250	20	0
58)=	31	52	5	2	6	1	0	0	0	0	0	125	0	1936	500	0
59)=	31	53	5	2	6	1	0	0	0	0	0	125	0	2072	500	0
60)=	31	54	5	2	6	1	0	0	0	0	0	125	0	4144	500	0
61)=	31	55	5	1	0	1	0	0	0	0	0	125	0	0	0	0
62)=	31	56	5	1	0	1	0	0	0	0	0	125	0	0	0	0
63)=	31	57	5	1	0	1	0	0	0	0	0	125	0	0	0	0
64)=	31	58	5	1	0	1	0	0	0	0	0	125	0	0	0	0
65)=	31	59	5	1	0	1	0	0	0	0	0	125	0	0	0	0
66)=	31	61	0	0	0	0	0	0	0	0	0	125	0	6000	0	0
67)=	31	62	0	0	0	0	0	0	0	0	0	125	0	0	0	0
68)=	31	63	0	0	0	0	0	0	0	0	0	125	0	0	0	0
69)=	31	64	0	0	0	0	0	0	0	0	0	125	0	0	0	0
70)=	31	191	1	1	0	1	0	0	0	0	0	110	0	0	0	0
71)=	31	192	1	1	0	1	0	0	0	0	0	110	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 ..... LINK NO.	ENTRY 1 ..... CRUISE FLOW	ENTRY 1 ..... CRUISE SPEED	ENTRY 2 ..... LINK NO.	ENTRY 2 ..... CRUISE FLOW	ENTRY 2 ..... CRUISE SPEED	ENTRY 3 ..... LINK NO.	ENTRY 3 ..... CRUISE FLOW	ENTRY 3 ..... CRUISE SPEED	ENTRY 4 ..... LINK NO.	ENTRY 4 ..... CRUISE FLOW	ENTRY 4 ..... CRUISE SPEED
72)=	32	10	611	0	0	0	43	0	0	0	0	0	0	0	0	0
73)=	32	11	211	0	0	0	43	0	0	0	0	0	0	0	0	0
74)=	32	12	82	0	60	82	43	0	0	0	0	0	0	0	0	0
75)=	32	13	83	0	60	83	43	0	0	0	0	0	0	0	0	0
76)=	32	14	201	0	60	201	43	0	0	0	0	0	0	0	0	0
77)=	32	15	267	0	61	267	43	0	0	0	0	0	0	0	0	0
78)=	32	16	191	0	64	191	43	0	0	0	0	0	0	0	0	0
79)=	32	17	92	0	63	92	43	0	0	0	0	0	0	0	0	0
80)=	32	18	268	0	61	268	43	0	0	0	0	0	0	0	0	0
81)=	32	19	191	0	64	191	43	0	0	0	0	0	0	0	0	0
82)=	32	20	358	0	0	0	43	0	0	0	0	0	0	0	0	0

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 83)=  32      21     843       0       0       0      43       0       0       0       0       0       0       0       0       0
 84)=  32      22     256       0      10     256      43       0       0       0       0       0       0       0       0       0
 85)=  32      23     211       0      11     211      43       0       0       0       0       0       0       0       0       0
 86)=  32      24     284       0      14     201      43      13      83      43       0       0       0       0       0       0
 87)=  32      25     176       0     192     176      43       0       0       0       0       0       0       0       0       0
 88)=  32      26      43       0     191      43      43       0       0       0       0       0       0       0       0       0
 89)=  32      30     160       0       0       0      43       0       0       0       0       0       0       0       0       0
 90)=  32      31    1378       0       0       0      43       0       0       0       0       0       0       0       0       0
 91)=  32      32     349       0      20     349      43       0       0       0       0       0       0       0       0       0
 92)=  32      33     563       0      21     563      43       0       0       0       0       0       0       0       0       0
 93)=  32      34     280       0      21     280      43       0       0       0       0       0       0       0       0       0
 94)=  32      35     201       0      24     201      43       0       0       0       0       0       0       0       0       0
 95)=  32      36      33       0      25      33      43       0       0       0       0       0       0       0       0       0
 96)=  32      37     211       0      23     211      43       0       0       0       0       0       0       0       0       0
 97)=  32      40     213       0       0       0      43       0       0       0       0       0       0       0       0       0
 98)=  32      41     425       0       0       0      43       0       0       0       0       0       0       0       0       0
 99)=  32      42     595       0      31     595      43       0       0       0       0       0       0       0       0       0
100)=  32      43     783       0      31     783      43       0       0       0       0       0       0       0       0       0
101)=  32      44     563       0      33     563      43       0       0       0       0       0       0       0       0       0
102)=  32      45     211       0      37     211      43       0       0       0       0       0       0       0       0       0
103)=  32      46     280       0      34     280      43       0       0       0       0       0       0       0       0       0
104)=  32      50     273       0       0       0      43       0       0       0       0       0       0       0       0       0
105)=  32      51     711       0       0       0      43       0       0       0       0       0       0       0       0       0
106)=  32      52     160       0      40     160      43       0       0       0       0       0       0       0       0       0
107)=  32      53     280       0      46     280      43       0       0       0       0       0       0       0       0       0
108)=  32      54     425       0      41     425      43       0       0       0       0       0       0       0       0       0
109)=  32      55     250       0      42     250      43       0       0       0       0       0       0       0       0       0
110)=  32      56      83       0      44      83      43       0       0       0       0       0       0       0       0       0
111)=  32      57      10       0      45      10      43       0       0       0       0       0       0       0       0       0
112)=  32      58     691       0      43     691      43       0       0       0       0       0       0       0       0       0
113)=  32      59      92       0      43      92      43       0       0       0       0       0       0       0       0       0
114)=  32      60     380       0       0       0      43       0       0       0       0       0       0       0       0       0
115)=  32      61     980       0      51     711      43      50     269      43       0       0       0       0       0       0
116)=  32      62     280       0      53     280      43       0       0       0       0       0       0       0       0       0
117)=  32      63     783       0      58     691      43      59      92      43       0       0       0       0       0       0
118)=  32      64     425       0      54     425      43       0       0       0       0       0       0       0       0       0
119)=  32     191      43       0      64      43      43       0       0       0       0       0       0       0       0       0
120)=  32     192     176       0      61     176      43       0       0       0       0       0       0       0       0       0

                    LINK CARDS : FLARE SATURATION FLOW DATA
                     ..LANE  1..     ..LANE  2..     ..LANE  3..
      CARD   LINK   SAT.     CAPAC  SAT.     CAPAC  SAT.     CAPAC
      TYPE    NO.   FLOW      VEH.  FLOW      VEH.  FLOW      VEH.
121)=  33      21    2130       5       0       0       0       0

                                                 LINK DATA:  QUEUE CONSTRAINTS
CARD   CARD   LINK    LIMIT   QUEUE   LINK    LIMIT   QUEUE   LINK    LIMIT   QUEUE   LINK    LIMIT   QUEUE   LINK    LIMIT   QUEUE
 NO.   TYPE    NO.    QUEUE  WEIGHT    NO.   QUEUE  WEIGHT    NO.   QUEUE  WEIGHT    NO.   QUEUE  WEIGHT    NO.   QUEUE  WEIGHT
122)=  38      12      10    4500      13      10    4500      14      10    4500      22       9    4500      23       7    4500
123)=  38      32       6    4500      33      10    4500      34      10    4500      42      11    4500      43      11    4500
124)=  38      52       9    4500      53       9    4500      54      18    4500       0       0       0       0       0       0

*****END OF SUBROUTINE TINPUT****


     60 SECOND CYCLE  60 STEPS

INITIAL SETTINGS
 - (SECONDS)

  NODE   NUMBER   STAGE   STAGE   STAGE   STAGE   STAGE  STAGE   STAGE   STAGE   STAGE   STAGE
   NO   OF STAGES   1       2       3       4       5      6       7       8       9      10

    1       2       0      21
    2       2       0      36
    3       2       0      28
    4       2       0      13
    5       2       0      18

 LINK    FLOW   SAT   DEGREE  MEAN TIMES  -------DELAY--------    ----STOPS----   ----QUEUE----  PERFORMANCE   EXIT   GREEN TIMES
NUMBER   INTO   FLOW    OF      PER PCU    UNIFORM RANDOM+ COST    MEAN    COST    MEAN            INDEX.       NODE   START  START
         LINK          SAT     CRUISE                  OVERSAT  OF    STOPS   OF    MAX.  AVERAGE  WEIGHTED SUM          END    END
                                      DELAY (U+R+O=MEAN Q) DELAY    /PCU   STOPS                 EXCESS  OF ( ) VALUES         1ST    2ND
       (PCU/H) (PCU/H)  (%)  (SEC) (SEC)    (PCU-H/H)    ($/H)    (%)    ($/H)   (PCU)  (PCU)     ($/H)                (SECONDS)

   10     611   4100     56  16.7  22.7    3.2 +  0.6  ( 54.7)*    88  ( 13.8)      9                32.8      1      6  21
   11     211   2120     37  16.7  23.0    1.1 +  0.3  ( 19.1)*    85  (  4.6)      3                11.5      1      6  21
   12      82   1892S    59   9.2  10.7    0.2 +  0.1  (  3.5)*    56  (  1.2)      6  ( 0.0)*       18.5      1     27   0
   13      83   2029S    47   9.2   8.9    0.1 +  0.1  (  2.9)*    46  (  1.0)      4  ( 0.0)*       15.5      1     27   0
   14     201   2029S    37   9.2   8.6    0.3 +  0.1  (  6.9)*    45  (  2.3)      4  ( 0.0)*       36.6      1     27   0
   15     267     12L    59   9.2   7.3    0.2 +  0.3  (  7.7)     72  (  5.0)      6                12.6      1     27   0
   16     191     12L    59   9.2   4.4    0.0 +  0.2  (  3.3)      8  (  0.4)      6                 3.7      1     27   0
   17      92     12L    59   9.2  14.5    0.3 +  0.1  (  5.3)     59  (  1.4)      6                 6.7      1     27   0
   18     269     13L    47   9.2   4.7    0.1 +  0.2  (  5.0)     50  (  3.5)      4                 8.4      1     27   0
   19     191     13L    47   9.2   3.3    0.0 +  0.2  (  2.5)      6  (  0.3)      4                 2.8      1     27   0
   20     358   2015     34  16.7  11.2    0.8 +  0.3  ( 15.8)*    59  (  5.4)      4                 9.5      2      6  36
   21     843   2710f    60  16.7  12.0    2.0 +  0.8  ( 39.8)*    61  ( 13.2)      9                23.9      2      6  36
   22     255   3989S    60   8.4  29.2    1.8 +  0.3  ( 29.4)*   106  (  7.0)     12  ( 0.4)*      172.5      2     42   0
   23     211   2063     32   8.4  31.1    1.6 +  0.2  ( 25.9)*   107  (  5.8)      4  ( 0.0)*      135.3      2     42   0
   24     283     22L    60   8.4  15.6    0.9 +  0.3  ( 17.4)     85  (  6.2)     12     +          23.6      2     42   0
   25     176     22L    60   8.4  12.3    0.4 +  0.2  (  8.5)     98  (  4.4)     12     +          13.0      2     42   0
   26      43     22L    60   8.4   9.5    0.1 +  0.0  (  1.6)     38  (  0.4)     12     +           2.0      2     42   0
   30     160   2015     21  16.7  15.3    0.6 +  0.1  (  9.7)*    68  (  2.8)      2                 5.8      3      6  28
   31    1378   4270     84  16.7  23.7    6.4 +  2.6  (128.6)*    97  ( 34.3)     23                77.2      3      6  28
   32     349   1926S    67  10.9  21.6    1.5 +  0.6  ( 29.8)*   103  (  9.3)      8  ( 0.5)*      181.5      3     34   0
   33     563   2063S    83  10.9  26.6    2.4 +  1.8  ( 59.0)*   114  ( 16.6)     12  ( 0.4)*      328.4      3     34   0
   34     280   2063     30  10.9  13.6    0.8 +  0.2  ( 15.0)*    86  (  6.2)      4  ( 0.0)*       81.1      3     34   0
   35     201     32L    67  10.9  20.5    0.8 +  0.4  ( 16.2)     58  (  3.0)      8     +          19.2      3     34   0
   36      33     32L    67  10.9  21.7    0.1 +  0.1  (  2.8)     60  (  0.5)      8     +           3.3      3     34   0
   37     211     33L    83  10.9  15.7    0.3 +  0.7  ( 13.1)     33  (  1.8)     12     +          14.8      3     34   0
   40     213   1995     80  16.7  57.0    1.5 +  1.9  ( 47.9)*   139  (  7.7)      5                28.7      4      6  13
   41     425   4230     75  16.7  37.7    3.0 +  1.5  ( 63.3)*   112  ( 12.3)      8                38.0      4      6  13
   42     595   1941S   101  11.7  65.1    1.5 +  9.3  (152.7)*   170  ( 26.1)     44  (21.5)*     1759.0      4     19   0
   43     783   2077S    73  11.7   6.3    0.4 +  1.0  ( 19.4)*    63  ( 12.8)     14  ( 0.2)*      119.1      4     19   0
   44     563     42L   101  11.7  61.2    0.8 +  8.8  (135.8)    122  ( 17.8)     44     +          153.6      4     19   0
   45     211     42L   101  11.7  70.2    0.8 +  3.3  ( 58.4)    168  (  9.1)     44     +           67.5      4     19   0
   46     280     43L    73  11.7   5.6    0.1 +  0.4  (  6.2)     14  (  1.0)     14     +           7.2      4     19   0
   50     273   1975     64  16.7  32.9    1.6 +  0.9  ( 35.4)*   105  (  7.4)      5                 7.1      5      6  18
   51     711   4250     77  16.7  30.6    4.4 +  1.7  ( 85.7)*   103  ( 18.9)     13                17.1      5      6  18
   52     160   1936S    42  10.5  10.8    0.4 +  0.1  (  6.8)*    97  (  4.0)      4  ( 0.0)*       38.1      5     24   0
   53     280   2072S    76  10.5  15.6    0.8 +  0.5  ( 17.2)*    59  (  4.2)      4  ( 0.0)*       90.4      5     24   0
   54     425   4144S    20  10.5   8.2    0.9 +  0.1  ( 13.7)*    92  ( 10.1)      7  ( 0.0)*       78.7      5     24   0
   55     250     52L    42  10.5   3.2    0.0 +  0.2  (  3.2)      8  (  0.5)      4                 3.7      5     24   0
   56      82     52L    42  10.5  13.1    0.2 +  0.1  (  4.2)     65  (  1.4)      4                 5.6      5     24   0
   57      10     52L    42  10.5   3.7    0.0 +  0.0  (  0.1)     11  (  0.0)      4                 0.2      5     24   0
   58     690     53L    76  10.5   6.0    0.0 +  1.1  ( 16.4)     11  (  1.9)      4                18.3      5     24   0
   59      92     54L    20  10.5   1.2    0.0 +  0.0  (  0.4)      5  (  0.1)      7                 0.5      5     24   0
   60     380   2108     39  10.5   4.1    0.1 +  0.3  (  6.2)     33  (  3.3)      1                 9.4
```

60 SECOND CYCLE 60 STEPS

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	COST OF DELAY ($/H)	STOPS MEAN /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	END 1ST	END 2ND
61	980	6000S	41	10.5	0.5	0.0 + 0.1 (2.0)	1	(0.2)	0			2.2					
62	280	61L	41	10.5	0.5	0.0 + 0.0 (0.6)	1	(0.1)	0			0.6					
63	783	61L	41	10.5	0.5	0.0 + 0.1 (1.6)	1	(0.2)	0			1.7					
64	425	61L	41	10.5	0.5	0.0 + 0.1 (0.9)	1	(0.1)	0			0.9					
191	43	14L	37	9.2	2.8	0.0 + 0.0 (0.5)	6	(0.1)	4			0.5	1	27	0		
192	176	14L	37	9.2	4.5	0.1 + 0.1 (3.1)	49	(2.2)	4			5.3	1	27	0		

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2467.1	142.2	17.3	42.7	42.1	(2484.9) + (171.6)	+ (1037.6)	= 3694.0	TOTALS	

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	132.3	+	97.6	+	133.0	=	362.9

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 49

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

1	2	27	48
2	2	0	36
3	2	0	28
4	2	0	13
5	2	51	9

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2467.1	143.8	17.2	44.3	42.1	(2316.4) + (167.9)	+ (1027.9)	= 3512.2	TOTALS	

NO. OF ENTRIES TO SUBPT = 14
NO. OF LINKS RECALCULATED= 429

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

1	2	27	48
2	2	0	36
3	2	24	52
4	2	0	13
5	2	51	9

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2467.1	146.5	16.8	47.0	42.1	(2236.5) + (181.2)	+ (1041.2)	= 3458.8	TOTALS	

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 373

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

1	2	32	48
2	2	59	32
3	2	26	52
4	2	0	13
5	2	53	9

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2467.1	151.8	16.3	45.8	48.6	(2081.1) + (157.6)	+ (972.8)	= 3211.5	TOTALS	

NO. OF ENTRIES TO SUBPT = 31
NO. OF LINKS RECALCULATED= 886

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1	2	32	48
2	2	59	32
3	2	26	52
4	2	0	13
5	2	44	0

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2467.1	150.7	16.4	44.7	48.6	(2072.2) + (152.7)	+	(985.4)	= 3210.3	TOTALS

NO. OF ENTRIES TO SUBPT = 12
NO. OF LINKS RECALCULATED= 434

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1	2	32	48
2	2	59	32
3	2	26	52
4	2	0	13
5	2	44	0

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2467.1	150.7	16.4	44.7	48.6	(2072.2) + (152.7)	+	(985.4)	= 3210.3	TOTALS

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 413

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1	2	34	50
2	2	56	29
3	2	25	51
4	2	1	14
5	2	46	2

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2467.1	150.0	16.4	44.0	48.6	(2022.4) + (151.6)	+	(991.8)	= 3165.8	TOTALS

NO. OF ENTRIES TO SUBPT = 17
NO. OF LINKS RECALCULATED= 626

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1	2	32	49
2	2	56	20
3	2	25	51
4	2	1	14
5	2	46	2

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2467.1	151.9	16.2	44.4	50.1	(1966.8) + (146.1)	+	(980.0)	= 3092.9	TOTALS

NO. OF ENTRIES TO SUBPT = 28
NO. OF LINKS RECALCULATED= 1055

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	30	47								
2	2	52	16								
3	2	26	52								
4	2	2	15								
5	2	47	3								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	OVERSAT OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN MAX. QUEUE (PCU)	AVERAGE EXCESS QUEUE (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST	START END 2ND (SECONDS)
10	611	4100	75	16.7	31.1	3.8 + 1.4	(74.9)*	103	(16.3)	11		44.9	1	36	47
11	211	2120	50	16.7	29.7	1.3 + 0.5	(24.8)*	98	(5.4)	4		14.9	1	36	47
12	82	1892S	53	9.2	9.6	0.1 + 0.1	(3.1)*	55	(1.2)	6	(0.0)*	16.7	1	53	30
13	83	2029S	42	9.2	7.8	0.1 + 0.1	(2.6)*	48	(1.0)	4	(0.0)*	13.9	1	53	30
14	201	2029S	33	9.2	6.5	0.2 + 0.1	(5.2)*	42	(2.2)	2	(0.0)*	28.1	1	53	30
15	267	12L	53	9.2	3.6	0.0 + 0.2	(3.8)	7	(0.5)	6		4.3	1	53	30
16	191	12L	53	9.2	18.9	0.8 + 0.2	(14.3)	104	(5.1)	6		19.4	1	53	30
17	92	12L	53	9.2	16.1	0.3 + 0.1	(5.8)	87	(2.1)	6		7.9	1	53	30
18	269	13L	42	9.2	2.8	0.0 + 0.2	(3.0)	6	(0.4)	4		3.4	1	53	30
19	191	13L	42	9.2	16.7	0.8 + 0.1	(12.6)	102	(5.0)	4		17.6	1	53	30
20	358	2015	56	16.7	23.4	1.7 + 0.6	(33.1)*	89	(8.2)	6		19.9	2	58	16
21	843	3077f	87	16.7	30.7	4.1 + 3.1	(102.1)*	104	(22.6)	15		61.3	2	58	16
22	255	3989S	37	8.4	4.7	0.2 + 0.1	(4.7)*	15	(1.0)	7	(0.0)*	24.6	2	22	52
23	211	2063	20	8.4	4.3	0.1 + 0.1	(3.6)*	12	(0.6)	0	(0.0)*	18.6	2	22	52
24	284	22L	37	8.4	13.4	0.9 + 0.1	(15.0)	73	(5.3)	7		20.4	2	22	52
25	177	22L	37	8.4	4.5	0.2 + 0.1	(3.2)	53	(2.4)	7		5.6	2	22	52
26	43	22L	37	8.4	22.2	0.2 + 0.0	(3.8)	103	(1.1)	7		4.9	2	22	52
30	160	2015	23	16.7	17.1	0.6 + 0.1	(10.8)*	72	(3.0)	2		6.5	3	32	52
31	1378	4270	92	16.7	32.9	7.2 + 5.4	(178.6)*	113	(40.0)	27		107.2	3	32	52
32	349	1926S	63	10.9	6.6	0.1 + 0.5	(9.0)*	13	(1.2)	5	(0.0)*	46.4	3	58	26
33	563	2063S	78	10.9	9.8	0.3 + 1.2	(21.9)*	34	(4.9)	8	(0.0)*	114.2	3	58	26
34	280	2063	28	10.9	4.1	0.1 + 0.2	(4.5)*	10	(0.7)	0	(0.0)*	23.2	3	58	26
35	201	32L	63	10.9	28.0	1.3 + 0.3	(22.2)	108	(5.6)	5		27.8	3	58	26
36	33	32L	63	10.9	27.6	0.2 + 0.0	(3.6)	109	(0.9)	5		4.5	3	58	26
37	211	33L	78	10.9	13.4	0.3 + 0.5	(11.1)	85	(4.6)	8		15.8	3	58	26
40	213	1995	80	16.7	57.0	1.5 + 1.9	(47.9)*	139	(7.7)	5		28.7	4	8	15
41	425	4230	75	16.7	37.7	3.0 + 1.5	(63.3)*	112	(12.3)	8		38.0	4	8	15
42	595	1941S	101	11.7	60.2	0.7 + 9.3	(141.3)*	139	(21.3)	44	(21.4)*	1689.2	4	21	2
43	783	2077S	73	11.7	7.9	0.7 + 1.0	(24.4)*	41	(8.3)	10	(0.0)*	130.1	4	21	2
44	563	42L	101	11.7	65.8	1.5 + 8.8	(146.1)	172	(24.9)	44	+	171.0	4	21	2
45	211	42L	101	11.7	68.5	0.7 + 3.3	(57.0)	174	(9.5)	44	+	66.5	4	21	2
46	280	43L	73	11.7	6.6	0.2 + 0.4	(7.2)	43	(3.1)	10		10.4	4	21	2
50	273	1975	75	16.7	42.8	1.8 + 1.5	(46.1)*	120	(8.5)	6		9.2	5	53	3
51	711	4250	91	16.7	47.3	4.7 + 4.6	(132.7)*	129	(23.6)	16		26.5	5	53	3
52	160	1936S	40	10.5	2.4	0.0 + 0.1	(1.5)*	4	(0.2)	5	(0.0)*	7.7	5	9	47
53	280	2072S	72	10.5	7.1	0.2 + 0.4	(7.9)*	21	(1.5)	11	(0.6)*	66.5	5	9	47
54	425	4144S	19	10.5	0.8	0.0 + 0.1	(1.4)*	1	(0.2)	1	(0.0)*	7.1	5	9	47
55	246	52L	40	10.5	9.0	0.5 + 0.2	(8.8)	78	(5.1)	5		13.8	5	9	47
56	83	52L	40	10.5	11.7	0.2 + 0.1	(3.8)	61	(1.3)	5		5.1	5	9	47
57	10	52L	40	10.5	3.4	0.0 + 0.0	(0.1)	9	(0.0)	5		0.2	5	9	47
58	690	53L	72	10.5	16.4	2.2 + 0.9	(44.6)	90	(16.1)	11	+	60.7	5	9	47
59	92	54L	19	10.5	5.8	0.1 + 0.0	(2.1)	56	(1.3)	1		3.4	5	9	47
60	380	2108	39	10.5	4.2	0.1 + 0.3	(6.4)	35	(3.4)	1		9.7			

60 SECOND CYCLE 60 STEPS

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	OVERSAT OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN MAX. QUEUE (PCU)	AVERAGE EXCESS QUEUE (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST	START END 2ND (SECONDS)
61	980	6000S	41	10.5	0.5	0.0 + 0.1	(2.0)	1	(0.2)	0		2.2			
62	280	61L	41	10.5	0.5	0.0 + 0.0	(0.6)	1	(0.1)	0		0.6			
63	783	61L	41	10.5	0.5	0.0 + 0.1	(1.6)	1	(0.2)	0		1.7			
64	425	61L	41	10.5	0.5	0.0 + 0.1	(0.9)	1	(0.1)	0		0.9			
191	43	14L	33	9.2	14.8	0.2 + 0.0	(2.5)	100	(1.1)	2		3.6	1	53	30
192	176	14L	33	9.2	2.5	0.0 + 0.1	(1.7)	5	(0.2)	2		2.0	1	53	30

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2467.1	150.9	16.3	43.5	50.1	(1895.4) + (143.9)	+ (987.1)	= 3026.5	TOTALS	
								ROUTE	

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	132.3	+	107.6	+	132.8	=	372.7

NO. OF ENTRIES TO SUBPT = 17
NO. OF LINKS RECALCULATED= 646

PROGRAM TRANSYT FINISHED
========== end of file ==========

Printed at 16:22:05 on 10/09/2015]

T R A N S Y T 12

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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For sales and distribution information,
program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770864
Email: softwarebureau@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:- "2017 PM WITH DEV.DAT" at 16:39 on 20150710

TRANSYT 12.0

M69 Junction 1 PM Peak 2017 With Development

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	= 5
NUMBER OF LINKS	= 49
NUMBER OF OPTIMISED NODES	= 5
MAXIMUM NUMBER OF GRAPHIC PLOTS	= 0
NUMBER OF STEPS IN CYCLE	= 60
MAXIMUM NUMBER OF SHARED STOPLINES	= 4
MAXIMUM NUMBER OF TIMING POINTS	= 2
MAXIMUM LINKS AT ANY NODE	= 12

CORE REQUESTED = 11409 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

(1)= TITLE:- M69 Junction 1 PM Peak 2017 With Development

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME PERIOD 1-1200 MINS.	EFFECTIVE-GREEN DISPLACEMENTS START (SEC)	EFFECTIVE-GREEN DISPLACEMENTS END (SEC)	EQUISAT SETTINGS 0=NO 1=YES	0=UNEQUAL FLOW CYCLE	FLOW SCALE %	CRUISE-SPEEDS SCALE 10-200 %	CRUISE-SPEEDS CARD32 50-200	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL-CLIMB OUTPUT 1=FULL	DELAY VALUE P PER PCU-H	STOP VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260

CARD NO.	CARD TYPE	LIST OF NODES TO BE OPTIMISED														
3)=	2	1	2	3	4	5	0	0	0	0	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET.....					SECOND SET.....					THIRD SET.....				
4)=	7	12	15	16	17	0	13	19	18	0	0	14	191	192	0	0
5)=	7	22	24	25	26	0	32	35	36	0	0	33	37	0	0	0
6)=	7	42	44	45	0	0	43	46	0	0	0	52	55	56	57	0
7)=	7	53	58	0	0	0	54	59	0	0	0	61	62	63	64	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
8)=	10	1	7	7								
9)=	10	2	7	7								
10)=	10	3	7	7								
11)=	10	4	7	7								
12)=	10	5	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
13)=	11	1	6	6								
14)=	11	2	6	6								
15)=	11	3	6	6								
16)=	11	4	6	6								
17)=	11	5	6	6								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
18)=	12	1	1	0	0								
19)=	12	2	1	0	0								
20)=	12	3	1	0	0								
21)=	12	4	1	0	0								
22)=	12	5	1	0	0								

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY LINKS LINK1 NO.	PRIORITY LINKS LINK2 NO.	LINK1 GIVEWAY COEFFS. ONLY % FLOW	A1 X100	A2 X100				LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
23)=	30	60	61	0	0	47	100	0	0	0	0	125	0	2108	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN START STAGE	FIRST GREEN START LAG	FIRST GREEN END STAGE	FIRST GREEN END LAG	SECOND GREEN START STAGE	SECOND GREEN START LAG	SECOND GREEN END STAGE	SECOND GREEN END LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
24)=	31	10	1	1	6	2	0	0	0	0	0	200	-9999	4100	60	0
25)=	31	11	1	1	6	2	0	0	0	0	0	200	-9999	2120	60	0
26)=	31	12	1	2	6	1	0	0	0	0	0	110	0	1892	500	0
27)=	31	13	1	2	6	1	0	0	0	0	0	110	0	2029	500	0
28)=	31	14	1	2	6	1	0	0	0	0	0	110	0	2029	500	0
29)=	31	15	1	1	0	1	0	0	0	0	0	110	0	0	0	0
30)=	31	16	1	1	0	1	0	0	0	0	0	110	0	0	0	0
31)=	31	17	1	1	0	1	0	0	0	0	0	110	0	0	0	0
32)=	31	18	1	1	0	1	0	0	0	0	0	110	0	0	0	0
33)=	31	19	1	1	0	1	0	0	0	0	0	110	0	0	0	0
34)=	31	20	2	1	6	2	0	0	0	0	0	200	-9999	2015	60	0
35)=	31	21	2	1	6	2	0	0	0	0	0	200	-9999	2130	60	0
36)=	31	22	2	2	6	1	0	0	0	0	0	100	0	3989	500	0
37)=	31	23	2	2	6	1	0	0	0	0	0	100	0	2063	500	0
38)=	31	24	2	1	0	1	0	0	0	0	0	100	0	0	0	0
39)=	31	25	2	1	0	1	0	0	0	0	0	100	0	0	0	0
40)=	31	26	2	1	0	1	0	0	0	0	0	100	0	0	0	0
41)=	31	30	3	1	6	2	0	0	0	0	0	200	-9999	2015	60	0
42)=	31	31	3	1	6	2	0	0	0	0	0	200	-9999	4270	60	0
43)=	31	32	3	2	6	1	0	0	0	0	0	130	0	1926	500	0
44)=	31	33	3	2	6	1	0	0	0	0	0	130	0	2063	500	0
45)=	31	34	3	2	6	1	0	0	0	0	0	130	0	2063	500	0
46)=	31	35	3	1	0	1	0	0	0	0	0	130	0	0	0	0
47)=	31	36	3	1	0	1	0	0	0	0	0	130	0	0	0	0
48)=	31	37	3	1	0	1	0	0	0	0	0	130	0	0	0	0
49)=	31	40	4	1	6	2	0	0	0	0	0	200	-9999	1995	60	0
50)=	31	41	4	1	6	2	0	0	0	0	0	200	-9999	4230	60	0
51)=	31	42	4	2	6	1	0	0	0	0	0	140	0	1941	500	0
52)=	31	43	4	2	6	1	0	0	0	0	0	140	0	2077	500	0
53)=	31	44	4	1	0	1	0	0	0	0	0	140	0	0	0	0
54)=	31	45	4	1	0	1	0	0	0	0	0	140	0	0	0	0
55)=	31	46	4	1	0	1	0	0	0	0	0	140	0	0	0	0
56)=	31	50	5	1	6	2	0	0	0	0	0	200	-9999	1975	20	0
57)=	31	51	5	1	6	2	0	0	0	0	0	200	-9999	4250	20	0
58)=	31	52	5	2	6	1	0	0	0	0	0	125	0	1936	500	0
59)=	31	53	5	2	6	1	0	0	0	0	0	125	0	2072	500	0
60)=	31	54	5	2	6	1	0	0	0	0	0	125	0	4144	500	0
61)=	31	55	5	1	0	1	0	0	0	0	0	125	0	0	0	0
62)=	31	56	5	1	0	1	0	0	0	0	0	125	0	0	0	0
63)=	31	57	5	1	0	1	0	0	0	0	0	125	0	0	0	0
64)=	31	58	5	1	0	1	0	0	0	0	0	125	0	0	0	0
65)=	31	59	5	1	0	1	0	0	0	0	0	125	0	0	0	0
66)=	31	61	0	0	0	0	0	0	0	0	0	125	0	6000	0	0
67)=	31	62	0	0	0	0	0	0	0	0	0	125	0	0	0	0
68)=	31	63	0	0	0	0	0	0	0	0	0	125	0	0	0	0
69)=	31	64	0	0	0	0	0	0	0	0	0	125	0	0	0	0
70)=	31	191	1	1	0	1	0	0	0	0	0	110	0	0	0	0
71)=	31	192	1	1	0	1	0	0	0	0	0	110	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 ..... LINK NO.	ENTRY 1 ..... CRUISE FLOW	ENTRY 1 ..... CRUISE SPEED	ENTRY 2 ..... LINK NO.	ENTRY 2 ..... CRUISE FLOW	ENTRY 2 ..... CRUISE SPEED	ENTRY 3 ..... LINK NO.	ENTRY 3 ..... CRUISE FLOW	ENTRY 3 ..... CRUISE SPEED	ENTRY 4 ..... LINK NO.	ENTRY 4 ..... CRUISE FLOW	ENTRY 4 ..... CRUISE SPEED
72)=	32	10	891	0	0	0	43	0	0	0	0	0	0	0	0	0
73)=	32	11	348	0	0	0	43	0	0	0	0	0	0	0	0	0
74)=	32	12	100	0	60	100	43	0	0	0	0	0	0	0	0	0
75)=	32	13	178	0	60	178	43	0	0	0	0	0	0	0	0	0
76)=	32	14	152	0	60	152	43	0	0	0	0	0	0	0	0	0
77)=	32	15	237	0	61	237	43	0	0	0	0	0	0	0	0	0
78)=	32	16	130	0	64	130	43	0	0	0	0	0	0	0	0	0
79)=	32	17	32	0	63	32	43	0	0	0	0	0	0	0	0	0
80)=	32	18	238	0	61	238	43	0	0	0	0	0	0	0	0	0
81)=	32	19	131	0	64	131	43	0	0	0	0	0	0	0	0	0
82)=	32	20	320	0	0	0	43	0	0	0	0	0	0	0	0	0

83)=	32	21	826	0	0	0	43	0	0	0	0	0	0	0	0	0
84)=	32	22	588	0	10	588	43	0	0	0	0	0	0	0	0	0
85)=	32	23	348	0	11	348	43	0	0	0	0	0	0	0	0	0
86)=	32	24	330	0	14	152	43	13	178	43	0	0	0	0	0	0
87)=	32	25	254	0	192	254	43	0	0	0	0	0	0	0	0	0
88)=	32	26	75	0	191	75	43	0	0	0	0	0	0	0	0	0
89)=	32	30	63	0	0	0	43	0	0	0	0	0	0	0	0	0
90)=	32	31	526	0	0	0	43	0	0	0	0	0	0	0	0	0
91)=	32	32	289	0	20	289	43	0	0	0	0	0	0	0	0	0
92)=	32	33	547	0	21	547	43	0	0	0	0	0	0	0	0	0
93)=	32	34	279	0	21	279	43	0	0	0	0	0	0	0	0	0
94)=	32	35	152	0	24	152	43	0	0	0	0	0	0	0	0	0
95)=	32	36	39	0	25	39	43	0	0	0	0	0	0	0	0	0
96)=	32	37	348	0	23	348	43	0	0	0	0	0	0	0	0	0
97)=	32	40	294	0	0	0	43	0	0	0	0	0	0	0	0	0
98)=	32	41	336	0	0	0	43	0	0	0	0	0	0	0	0	0
99)=	32	42	263	0	31	263	43	0	0	0	0	0	0	0	0	0
100)=	32	43	263	0	31	263	43	0	0	0	0	0	0	0	0	0
101)=	32	44	547	0	33	547	43	0	0	0	0	0	0	0	0	0
102)=	32	45	348	0	37	348	43	0	0	0	0	0	0	0	0	0
103)=	32	46	279	0	34	279	43	0	0	0	0	0	0	0	0	0
104)=	32	50	168	0	0	0	43	0	0	0	0	0	0	0	0	0
105)=	32	51	729	0	0	0	43	0	0	0	0	0	0	0	0	0
106)=	32	52	254	0	40	254	43	0	0	0	0	0	0	0	0	0
107)=	32	53	279	0	46	279	43	0	0	0	0	0	0	0	0	0
108)=	32	54	336	0	41	336	43	0	0	0	0	0	0	0	0	0
109)=	32	55	159	0	42	159	43	0	0	0	0	0	0	0	0	0
110)=	32	56	58	0	44	58	43	0	0	0	0	0	0	0	0	0
111)=	32	57	19	0	45	19	43	0	0	0	0	0	0	0	0	0
112)=	32	58	231	0	43	231	43	0	0	0	0	0	0	0	0	0
113)=	32	59	32	0	43	32	43	0	0	0	0	0	0	0	0	0
114)=	32	60	450	0	0	0	43	0	0	0	0	0	0	0	0	0
115)=	32	61	874	0	51	729	43	50	145	43	0	0	0	0	0	0
116)=	32	62	279	0	53	279	43	0	0	0	0	0	0	0	0	0
117)=	32	63	263	0	58	231	43	59	32	43	0	0	0	0	0	0
118)=	32	64	336	0	54	336	43	0	0	0	0	0	0	0	0	0
119)=	32	191	75	0	64	75	43	0	0	0	0	0	0	0	0	0
120)=	32	192	254	0	61	254	43	0	0	0	0	0	0	0	0	0

LINK CARDS : FLARE SATURATION FLOW DATA

	CARD TYPE	LINK NO.	..LANE 1.. SAT. FLOW	CAPAC VEH.	..LANE 2.. SAT. FLOW	CAPAC VEH.	..LANE 3.. SAT. FLOW	CAPAC VEH.
121)=	33	21	2130	5	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
122)=	38	12	10	4500	13	10	4500	14	10	4500	22	9	4500	23	7	4500
123)=	38	32	6	4500	33	10	4500	34	10	4500	42	11	4500	43	11	4500
124)=	38	52	9	4500	53	9	4500	54	18	4500	0	0	0	0	0	0

*****END OF SUBROUTINE TINPUT****

60 SECOND CYCLE 60 STEPS

INITIAL SETTINGS
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	0	27								
2	2	0	29								
3	2	0	16								
4	2	0	15								
5	2	0	25								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY UNIFORM RANDOM+ OVERSAT (U+R+O=MEAN Q) (PCU-H/H)	COST OF DELAY ($/H)	STOPS MEAN /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	START 2ND (SECONDS)
10	891	4100	59	16.7	18.3	3.8 + 0.7	(64.4)*	81	(18.6)	13		38.6	1	6	27
11	348	2120	45	16.7	18.6	1.4 + 0.4	(25.5)*	78	(7.0)	5		15.3	1	6	27
12	100	1892S	57	9.2	14.8	0.3 + 0.1	(5.8)*	72	(1.8)	6	(0.0)*	31.0	1	33	0
13	178	2029S	58	9.2	14.9	0.5 + 0.2	(10.4)*	73	(3.4)	7	(0.0)*	55.6	1	33	0
14	152	2029S	51	9.2	14.1	0.4 + 0.2	(8.4)*	72	(2.8)	6	(0.0)*	45.0	1	33	0
15	238	12L	57	9.2	11.7	0.5 + 0.3	(11.0)	92	(5.6)	6		16.6	1	33	0
16	130	12L	57	9.2	6.8	0.1 + 0.2	(3.5)	15	(0.5)	6		4.0	1	33	0
17	32	12L	57	9.2	10.8	0.1 + 0.0	(1.4)	30	(0.2)	6		1.6	1	33	0
18	238	13L	58	9.2	12.0	0.5 + 0.3	(11.3)	93	(5.7)	7		17.0	1	33	0
19	131	13L	58	9.2	6.6	0.1 + 0.2	(3.4)	15	(0.5)	7		3.9	1	33	0
20	320	2015	40	16.7	16.5	1.1 + 0.3	(20.9)*	73	(6.0)	4		12.5	2	6	29
21	826	2880f	72	16.7	18.9	3.1 + 1.3	(61.5)*	79	(16.7)	11		36.9	2	6	29
22	588	3989S	72	8.4	22.9	3.1 + 0.6	(53.2)*	106	(16.0)	20	(2.1)*	378.1	2	35	0
23	348	2063	39	8.4	22.8	1.9 + 0.3	(31.4)*	105	(9.4)	6	(0.0)*	166.2	2	35	0
24	330	22L	72	8.4	10.7	0.6 + 0.3	(13.9)	70	(5.9)	20	+	19.9	2	35	0
25	254	22L	72	8.4	6.3	0.2 + 0.3	(6.3)	65	(4.2)	20	+	10.6	2	35	0
26	75	22L	72	8.4	17.2	0.3 + 0.1	(5.1)	54	(1.1)	20	+	6.1	2	35	0
30	63	2015	17	16.7	26.6	0.4 + 0.1	(6.6)*	90	(1.5)	1		4.0	3	6	16
31	526	4270	67	16.7	29.8	3.3 + 1.0	(61.8)*	100	(13.5)	9		37.1	3	6	16
32	289	1926S	38	10.9	7.2	0.4 + 0.2	(8.2)*	74	(5.5)	5	(0.0)*	46.7	3	22	0
33	547	2063S	67	10.9	9.1	0.8 + 0.6	(19.7)*	84	(11.9)	9	(0.0)*	110.5	3	22	0
34	279	2063	21	10.9	3.9	0.2 + 0.1	(4.3)*	52	(3.7)	3	(0.0)*	25.3	3	22	0
35	152	32L	38	10.9	9.4	0.3 + 0.1	(5.6)	44	(1.7)	5		7.4	3	22	0
36	39	32L	38	10.9	11.1	0.1 + 0.0	(1.7)	52	(0.5)	5		2.2	3	22	0
37	348	33L	67	10.9	4.8	0.1 + 0.4	(6.6)	11	(1.0)	9		7.6	3	22	0
40	294	1995	88	16.7	64.4	2.0 + 3.3	(74.7)*	150	(11.4)	8		44.8	4	6	15
41	336	4230	48	16.7	27.5	2.1 + 0.5	(36.5)*	95	(8.2)	5		21.9	4	6	15
42	263	1941S	89	11.7	22.4	0.7 + 0.9	(23.2)*	117	(7.9)	21	(2.3)*	228.3	4	21	0
43	263	2077S	39	11.7	4.2	0.2 + 0.2	(4.4)*	59	(4.0)	4	(0.0)*	26.0	4	21	0
44	547	42L	89	11.7	15.0	0.4 + 1.9	(32.4)	82	(11.6)	21	+	44.0	4	21	0
45	348	42L	89	11.7	25.9	1.3 + 1.2	(35.5)	96	(8.6)	21	+	44.1	4	21	0
46	279	43L	39	11.7	2.3	0.0 + 0.2	(2.6)	5	(0.3)	4		2.9	4	21	0
50	168	1975	26	16.7	18.3	0.7 + 0.2	(12.1)*	75	(3.2)	2		2.4	5	6	25
51	729	4250	51	16.7	18.7	3.3 + 0.5	(53.8)*	80	(15.1)	10		10.8	5	6	25
52	254	1936S	51	10.5	18.0	1.0 + 0.3	(18.1)*	106	(6.9)	6	(0.0)*	97.3	5	31	0
53	279	2072S	49	10.5	6.4	0.2 + 0.3	(7.1)*	18	(1.3)	3	(0.0)*	36.6	5	31	0
54	336	4144S	18	10.5	15.1	1.3 + 0.1	(20.0)*	101	(8.7)	6	(0.0)*	108.5	5	31	0
55	159	52L	51	10.5	4.1	0.0 + 0.2	(2.6)	16	(0.7)	6		3.3	5	31	0
56	58	52L	51	10.5	10.3	0.1 + 0.1	(2.4)	32	(0.5)	6		2.8	5	31	0
57	19	52L	51	10.5	11.7	0.0 + 0.0	(0.9)	78	(0.4)	6		1.3	5	31	0
58	231	53L	49	10.5	3.9	0.0 + 0.2	(3.6)	24	(1.4)	3		5.0	5	31	0
59	32	54L	18	10.5	2.7	0.0 + 0.0	(0.3)	41	(0.3)	6		0.7	5	31	0
60	450	2108	35	10.5	2.7	0.1 + 0.3	(4.8)	22	(2.5)	1		7.3			

60 SECOND CYCLE 60 STEPS

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	COST DELAY ($/H)	STOPS MEAN /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	END 1ST (SECONDS)	END 2ND (SECONDS)
61	874	6000S	29	10.5	0.4	0.0 + 0.1 (1.5)	1	(0.2)	0			1.6					
62	279	61L	29	10.5	0.4	0.0 + 0.0 (0.5)	1	(0.1)	0			0.5					
63	263	61L	29	10.5	0.4	0.0 + 0.0 (0.4)	1	(0.0)	0			0.5					
64	336	61L	29	10.5	0.4	0.0 + 0.0 (0.6)	1	(0.1)	0			0.6					
191	75	14L	51	9.2	6.0	0.0 + 0.1 (1.8)	14	(0.3)	6			2.0	1	33	0		
192	254	14L	51	9.2	11.1	0.5 + 0.3 (11.2)	91	(6.0)	6			17.1	1	33	0		

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2126.9	106.0	20.1	37.5	19.1	(1466.2) + (143.4)	+ (200.4)	= 1810.0	TOTALS	

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	114.1	+	65.0	+	111.5	=	290.6

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 49

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

1	2	9	36
2	2	0	29
3	2	0	16
4	2	9	24
5	2	0	25

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2126.9	105.1	20.2	36.6	19.1	(1313.3) + (143.2)	+ (115.3)	= 1571.9	TOTALS	

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 368

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

1	2	9	36
2	2	0	29
3	2	0	16
4	2	9	24
5	2	0	25

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2126.9	105.1	20.2	36.6	19.1	(1313.3) + (143.2)	+ (115.3)	= 1571.9	TOTALS	

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 390

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

1	2	17	36
2	2	7	28
3	2	2	16
4	2	10	24
5	2	8	24

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2126.9	124.4	17.1	35.4	39.6	(1024.6) + (102.1)	+ (43.6)	= 1170.3	TOTALS	

NO. OF ENTRIES TO SUBPT = 47
NO. OF LINKS RECALCULATED= 1176

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1	2	17	36
2	2	7	28
3	2	2	16
4	2	10	24
5	2	8	24

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2126.9	124.4	17.1	35.4	39.6	(1024.6) + (102.1)	+ (43.6)	=	1170.3	TOTALS

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 396

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1	2	17	36
2	2	7	28
3	2	2	16
4	2	46	0
5	2	8	24

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2126.9	127.5	16.7	38.5	39.6	(1026.4) + (101.2)	+ (35.5)	=	1163.1	TOTALS

NO. OF ENTRIES TO SUBPT = 12
NO. OF LINKS RECALCULATED= 461

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1	2	26	45
2	2	7	28
3	2	2	16
4	2	46	0
5	2	23	39

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2126.9	125.0	17.0	35.9	39.6	(889.6) + (80.6)	+ (14.9)	=	985.2	TOTALS

NO. OF ENTRIES TO SUBPT = 33
NO. OF LINKS RECALCULATED= 1078

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1	2	25	45
2	2	6	29
3	2	2	15
4	2	46	0
5	2	22	39

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2126.9	117.6	18.1	35.6	32.5	(859.9) + (82.8)	+ (6.9)	=	949.6	TOTALS

NO. OF ENTRIES TO SUBPT = 21
NO. OF LINKS RECALCULATED= 731

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	26	46								
2	2	6	29								
3	2	2	15								
4	2	46	0								
5	2	24	41								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY UNIFORM (U+R+O=MEAN Q) (PCU-H/H)	DELAY RANDOM+ OVERSAT (U+R+O=MEAN Q) (PCU-H/H)	COST OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END 1ST (SECONDS)	GREEN TIMES END 2ND (SECONDS)
10	891	4100	87	16.7	34.4	5.3 +	3.2	(120.9)*	111	(25.6)	17		72.5	1	32		46	
11	348	2120	66	16.7	30.0	2.0 +	0.9	(41.2)*	101	(9.0)	6		24.7	1	32		46	
12	100	1892S	45	9.2	9.2	0.2 +	0.1	(3.6)*	52	(1.3)	5	(0.0)*	19.4	1	52		26	
13	178	2029S	46	9.2	9.3	0.3 +	0.1	(6.5)*	54	(2.5)	6	(0.0)*	35.0	1	52		26	
14	152	2029S	41	9.2	8.7	0.3 +	0.1	(5.2)*	51	(2.0)	6	(0.0)*	28.0	1	52		26	
15	238	12L	45	9.2	6.7	0.2 +	0.2	(6.3)	74	(4.5)	5		10.9	1	52		26	
16	130	12L	45	9.2	10.2	0.3 +	0.1	(5.2)	39	(1.3)	5		6.5	1	52		26	
17	32	12L	45	9.2	3.2	0.0 +	0.0	(0.4)	6	(0.0)	5		0.4	1	52		26	
18	238	13L	46	9.2	7.1	0.3 +	0.2	(6.7)	78	(4.8)	6		11.4	1	52		26	
19	131	13L	46	9.2	10.1	0.3 +	0.1	(5.2)	39	(1.3)	6		6.5	1	52		26	
20	320	2015	53	16.7	23.8	1.6 +	0.6	(30.0)*	89	(7.3)	5		18.0	2	12		29	
21	826	3130f	88	16.7	33.4	4.2 +	3.4	(108.9)*	109	(23.2)	16		65.3	2	12		29	
22	588	3989S	59	8.4	2.2	0.0 +	0.3	(5.1)*	9	(1.4)	8	(0.0)*	26.7	2	35		6	
23	348	2063	32	8.4	2.4	0.0 +	0.2	(3.3)*	4	(0.4)	0	(0.0)*	16.8	2	35		6	
24	330	22L	59	8.4	13.6	1.1 +	0.2	(17.7)	63	(5.3)	8		23.0	2	35		6	
25	254	22L	59	8.4	12.7	0.8 +	0.1	(12.8)	45	(2.9)	8		15.7	2	35		6	
26	75	22L	59	8.4	8.4	0.1 +	0.0	(2.5)	67	(1.3)	8		3.8	2	35		6	
30	63	2015	23	16.7	32.1	0.4 +	0.2	(8.0)*	99	(1.6)	1		4.8	3	8		15	
31	526	4270	92	16.7	59.5	3.8 +	4.9	(123.5)*	144	(19.5)	14		74.1	3	8		15	
32	289	1926S	36	10.9	2.3	0.0 +	0.2	(2.6)*	12	(0.9)	3	(0.0)*	14.0	3	21		2	
33	547	2063S	62	10.9	3.7	0.1 +	0.5	(7.9)*	24	(3.4)	9	(0.0)*	43.0	3	21		2	
34	279	2063	19	10.9	1.5	0.0 +	0.1	(1.7)*	3	(0.2)	0	(0.0)*	8.7	3	21		2	
35	152	32L	36	10.9	5.5	0.1 +	0.1	(3.3)	40	(1.6)	3		4.8	3	21		2	
36	39	32L	36	10.9	6.0	0.0 +	0.0	(0.9)	54	(0.5)	3		1.5	3	21		2	
37	348	33L	62	10.9	5.5	0.2 +	0.3	(7.6)	20	(1.8)	9		9.4	3	21		2	
40	294	1995	98	16.7	115.6	2.1 +	7.4	(134.0)*	201	(15.2)	12		80.4	4	52		0	
41	336	4230	53	16.7	29.6	2.2 +	0.6	(39.2)*	98	(8.5)	6		23.5	4	52		0	
42	263	1941S	87	11.7	10.5	0.0 +	0.8	(10.9)*	26	(1.8)	13	(0.1)*	59.1	4	6		46	
43	263	2077S	38	11.7	2.1	0.0 +	0.1	(2.2)*	4	(0.2)	2	(0.0)*	11.0	4	6		46	
44	547	42L	87	11.7	15.5	0.8 +	1.6	(33.5)	49	(6.9)	13	+	40.4	4	6		46	
45	348	42L	87	11.7	16.1	0.6 +	1.0	(22.1)	91	(8.2)	13	+	30.3	4	6		46	
46	279	43L	38	11.7	6.5	0.3 +	0.2	(7.1)	32	(2.3)	2		9.5	4	6		46	
50	168	1975	43	16.7	28.9	1.0 +	0.4	(19.2)*	96	(4.2)	3		3.8	5	30		41	
51	729	4250	86	16.7	37.4	4.7 +	2.9	(107.5)*	114	(21.4)	14		21.5	5	30		41	
52	254	1936S	40	10.5	2.5	0.0 +	0.2	(2.5)*	4	(0.3)	4	(0.0)*	12.7	5	47		24	
53	279	2072S	39	10.5	6.3	0.3 +	0.2	(6.9)*	61	(4.4)	7	(0.0)*	38.9	5	47		24	
54	336	4144S	14	10.5	0.8	0.0 +	0.1	(1.1)*	1	(0.1)	1	(0.0)*	5.6	5	47		24	
55	159	52L	40	10.5	16.1	0.6 +	0.1	(10.1)	101	(4.1)	4		14.2	5	47		24	
56	58	52L	40	10.5	4.7	0.0 +	0.0	(1.1)	37	(0.6)	4		1.6	5	47		24	
57	19	52L	40	10.5	13.2	0.1 +	0.0	(1.0)	69	(0.3)	4		1.3	5	47		24	
58	231	53L	39	10.5	16.9	0.9 +	0.1	(15.4)	103	(6.1)	7		21.5	5	47		24	
59	32	54L	14	10.5	12.5	0.1 +	0.0	(1.6)	94	(0.8)	1		2.3	5	47		24	
60	450	2108	35	10.5	2.9	0.1 +	0.3	(5.1)	17	(2.0)	2		7.1					

60 SECOND CYCLE 60 STEPS

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY UNIFORM (U+R+O=MEAN Q) (PCU-H/H)	DELAY RANDOM+ OVERSAT (U+R+O=MEAN Q) (PCU-H/H)	COST OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END 1ST (SECONDS)	GREEN TIMES END 2ND (SECONDS)
61	874	6000S	29	10.5	0.4	0.0 +	0.1	(1.5)	1	(0.2)	0		1.6					
62	279	61L	29	10.5	0.4	0.0 +	0.0	(0.5)	1	(0.1)	0		0.5					
63	263	61L	29	10.5	0.4	0.0 +	0.0	(0.4)	1	(0.0)	0		0.5					
64	336	61L	29	10.5	0.4	0.0 +	0.0	(0.6)	1	(0.1)	0		0.6					
191	75	14L	41	9.2	9.8	0.1 +	0.1	(2.9)	39	(0.7)	6		3.6	1	52		26	
192	254	14L	41	9.2	6.2	0.3 +	0.2	(6.2)	73	(4.8)	6		11.0	1	52		26	

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2126.9	117.7	18.1	35.7	32.5	(863.2) + (	81.6) + (	2.7) =	947.5	TOTALS

ROUTE

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	114.1	+	78.5	+	98.9	=	291.5

NO. OF ENTRIES TO SUBPT = 12
NO. OF LINKS RECALCULATED= 442

PROGRAM TRANSYT FINISHED
========== end of file ==========

Printed at 16:22:18 on 10/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770356
Nine Mile Ride Email: software@trl.co.uk
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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\Gibbet Hill\
2017 assessments\am2017nd.vai"
(drive-on-the-left) at 15:40:45 on Thursday, 9 July 2015

FILE PROPERTIES

RUN TITLE: Gibbet Hill Roundabout AM Peak 2017 No Development
LOCATION: Gibbet Hill Roundabout
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - Gibbet Lane
ARM B - A5 South
ARM C - A426 South
ARM D - A5 North
ARM E - Rugby Road

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	2.90	8.00	10.00	19.00	66.00	68.0	0.421	21.146
ARM B	4.70	7.30	25.00	24.00	70.00	40.0	0.540	32.695
ARM C	3.65	6.90	20.00	44.00	70.00	56.0	0.481	27.373
ARM D	4.00	8.80	36.00	15.00	70.00	54.0	0.530	33.487
ARM E	3.65	7.20	27.00	100.00	70.00	52.0	0.511	29.895

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM D Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100
E	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TO TOP OF PEAK	FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
	TO RISE	IS REACHED	FALLING			
ARM A	15.00	45.00	75.00	1.19	1.78	1.19
ARM B	15.00	45.00	75.00	6.54	9.81	6.54
ARM C	15.00	45.00	75.00	11.51	17.27	11.51
ARM D	15.00	45.00	75.00	11.85	17.78	11.85
ARM E	15.00	45.00	75.00	8.13	12.19	8.13

DEMAND SET TITLE: AM Peak 2006 Base Flows

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D	ARM E
07.15 - 08.45	ARM A	0.000	0.147	0.453	0.168	0.232
		0.0	14.0	43.0	16.0	22.0
		(28.4)	(28.4)	(28.4)	(28.4)	(28.4)
	ARM B	0.040	0.017	0.149	0.583	0.210
		21.0	9.0	78.0	305.0	110.0
		(22.2)	(22.2)	(22.2)	(22.2)	(22.2)
	ARM C	0.029	0.112	0.000	0.374	0.485
		27.0	103.0	0.0	344.0	447.0
		(10.6)	(10.6)	(10.6)	(10.6)	(10.6)
	ARM D	0.016	0.474	0.502	0.000	0.008
		15.0	449.0	476.0	0.0	8.0
		(11.7)	(11.7)	(11.7)	(11.7)	(11.7)
	ARM E	0.042	0.220	0.735	0.003	0.000
		27.0	143.0	478.0	2.0	0.0
		(10.3)	(10.3)	(10.3)	(10.3)	(10.3)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	1.19	8.92	0.134	- - -	0.0	0.2	2.2	-	0.129
ARM B	6.56	20.33	0.323	- - -	0.0	0.5	6.9	-	0.072
ARM C	11.56	21.52	0.537	- - -	0.0	1.1	16.4	-	0.099
ARM D	11.90	25.02	0.475	- - -	0.0	0.9	13.0	-	0.075
ARM E	8.16	19.98	0.408	- - -	0.0	0.7	9.9	-	0.084
07.30-07.45									
ARM A	1.42	7.43	0.192	- - -	0.2	0.2	3.4	-	0.166
ARM B	7.84	19.06	0.411	- - -	0.5	0.7	10.1	-	0.089
ARM C	13.80	20.88	0.661	- - -	1.1	1.9	27.0	-	0.139
ARM D	14.20	24.04	0.591	- - -	0.9	1.4	20.5	-	0.101
ARM E	9.74	18.58	0.524	- - -	0.7	1.1	15.7	-	0.112
07.45-08.00									
ARM A	1.74	5.45	0.320	- - -	0.2	0.5	6.5	-	0.267
ARM B	9.60	17.37	0.553	- - -	0.7	1.2	17.4	-	0.128
ARM C	16.90	20.02	0.844	- - -	1.9	4.8	63.2	-	0.286
ARM D	17.40	22.75	0.765	- - -	1.4	3.1	42.6	-	0.180
ARM E	11.93	16.71	0.714	- - -	1.1	2.4	33.0	-	0.202
08.00-08.15									
ARM A	1.74	5.37	0.324	- - -	0.5	0.5	7.0	-	0.276
ARM B	9.60	17.31	0.555	- - -	1.2	1.2	18.4	-	0.130
ARM C	16.90	20.00	0.845	- - -	4.8	5.1	75.0	-	0.316
ARM D	17.40	22.69	0.767	- - -	3.1	3.2	47.3	-	0.188
ARM E	11.93	16.64	0.717	- - -	2.4	2.5	36.5	-	0.212
08.15-08.30									
ARM A	1.42	7.32	0.194	- - -	0.5	0.2	3.8	-	0.170
ARM B	7.84	18.97	0.413	- - -	1.2	0.7	11.0	-	0.090
ARM C	13.80	20.85	0.662	- - -	5.1	2.0	32.9	-	0.150
ARM D	14.20	23.95	0.593	- - -	3.2	1.5	23.4	-	0.105
ARM E	9.74	18.48	0.527	- - -	2.5	1.1	17.8	-	0.117
08.30-08.45									
ARM A	1.19	8.85	0.135	- - -	0.2	0.2	2.4	-	0.131
ARM B	6.56	20.27	0.324	- - -	0.7	0.5	7.4	-	0.073
ARM C	11.56	21.49	0.538	- - -	2.0	1.2	18.4	-	0.102
ARM D	11.90	24.97	0.476	- - -	1.5	0.9	14.2	-	0.077
ARM E	8.16	19.92	0.409	- - -	1.1	0.7	10.8	-	0.085

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.2
07.45	0.2
08.00	0.5
08.15	0.5
08.30	0.2
08.45	0.2

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.5	
07.45	0.7	*
08.00	1.2	*
08.15	1.2	*
08.30	0.7	*
08.45	0.5	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.1	*
07.45	1.9	**
08.00	4.8	*****
08.15	5.1	*****
08.30	2.0	**
08.45	1.2	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.9	*
07.45	1.4	*
08.00	3.1	***
08.15	3.2	***
08.30	1.5	*
08.45	0.9	*

QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.7	*
07.45	1.1	*
08.00	2.4	**
08.15	2.5	**
08.30	1.1	*
08.45	0.7	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *		T75
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)	
A	130.8	87.2	25.4	0.19	25.4	0.19	
B	719.9	479.9	71.2	0.10	71.2	0.10	
C	1267.7	845.1	232.9	0.18	233.0	0.18	
D	1304.9	869.9	161.1	0.12	161.1	0.12	
E	894.7	596.5	123.7	0.14	123.7	0.14	
ALL	4317.8	2878.6	614.3	0.14	614.4	0.14	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 16:23:02 on 10/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770356
Nine Mile Ride Email: software@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk
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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\Gibbet Hill\
2017 assessments\pm2017nd.vai"
(drive-on-the-left) at 15:42:09 on Thursday, 9 July 2015

FILE PROPERTIES

RUN TITLE: Gibbet Hill Roundabout PM Peak 2017 No Development
LOCATION: Gibbet Hill Roundabout
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - Gibbet Lane
ARM B - A5 South
ARM C - A426 South
ARM D - A5 North
ARM E - Rugby Road

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	2.90	8.00	10.00	19.00	66.00	68.0	0.421	21.146
ARM B	4.70	7.30	25.00	24.00	70.00	40.0	0.540	32.695
ARM C	3.65	6.90	20.00	44.00	70.00	56.0	0.481	27.373
ARM D	4.00	8.80	36.00	15.00	70.00	54.0	0.530	33.487
ARM E	3.65	7.20	27.00	100.00	70.00	52.0	0.511	29.895

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM D Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100
E	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	1.19	1.78	1.19
ARM B	15.00	45.00	75.00	8.77	13.16	8.77
ARM C	15.00	45.00	75.00	12.24	18.36	12.24
ARM D	15.00	45.00	75.00	8.40	12.60	8.40
ARM E	15.00	45.00	75.00	8.31	12.47	8.31

DEMAND SET TITLE: AM Peak 2006 Base Flows

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D	ARM E
16.45 - 18.15						
	ARM A	0.000	0.168	0.400	0.232	0.200
		0.0	16.0	38.0	22.0	19.0
		(1.1)	(1.1)	(1.1)	(1.1)	(1.1)
	ARM B	0.027	0.013	0.097	0.630	0.234
		19.0	9.0	68.0	442.0	164.0
		(9.1)	(9.1)	(9.1)	(9.1)	(9.1)
	ARM C	0.051	0.079	0.000	0.350	0.520
		50.0	77.0	0.0	343.0	509.0
		(9.6)	(9.6)	(9.6)	(9.6)	(9.6)
	ARM D	0.021	0.446	0.525	0.000	0.007
		14.0	300.0	353.0	0.0	5.0
		(9.5)	(9.5)	(9.5)	(9.5)	(9.5)
	ARM E	0.039	0.232	0.710	0.020	0.000
		26.0	154.0	472.0	13.0	0.0
		(7.5)	(7.5)	(7.5)	(7.5)	(7.5)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	1.19	13.13	0.091	- -	0.0	0.1	1.5	-	0.084
ARM B	8.81	23.86	0.369	- -	0.0	0.6	8.5	-	0.066
ARM C	12.28	20.88	0.588	- -	0.0	1.4	19.9	-	0.114
ARM D	8.43	24.99	0.337	- -	0.0	0.5	7.4	-	0.060
ARM E	8.34	22.46	0.371	- -	0.0	0.6	8.6	-	0.070
17.00-17.15									
ARM A	1.42	11.60	0.123	- -	0.1	0.1	2.0	-	0.098
ARM B	10.52	22.65	0.464	- -	0.6	0.9	12.5	-	0.082
ARM C	14.67	20.07	0.731	- -	1.4	2.6	36.3	-	0.180
ARM D	10.07	23.89	0.421	- -	0.5	0.7	10.6	-	0.072
ARM E	9.96	21.41	0.465	- -	0.6	0.9	12.6	-	0.087
17.15-17.30									
ARM A	1.74	9.54	0.183	- -	0.1	0.2	3.2	-	0.128
ARM B	12.88	21.02	0.613	- -	0.9	1.6	22.2	-	0.122
ARM C	17.96	18.98	0.947	- -	2.6	10.3	117.6	-	0.533
ARM D	12.33	22.54	0.547	- -	0.7	1.2	17.2	-	0.097
ARM E	12.20	20.01	0.610	- -	0.9	1.5	21.9	-	0.127
17.30-17.45									
ARM A	1.74	9.49	0.184	- -	0.2	0.2	3.3	-	0.129
ARM B	12.88	20.99	0.614	- -	1.6	1.6	23.5	-	0.123
ARM C	17.96	18.95	0.948	- -	10.3	12.5	173.3	-	0.741
ARM D	12.33	22.41	0.550	- -	1.2	1.2	18.1	-	0.099
ARM E	12.20	19.96	0.611	- -	1.5	1.6	23.2	-	0.129
17.45-18.00									
ARM A	1.42	11.53	0.124	- -	0.2	0.1	2.2	-	0.099
ARM B	10.52	22.61	0.465	- -	1.6	0.9	13.6	-	0.083
ARM C	14.67	20.04	0.732	- -	12.5	2.9	57.4	-	0.238
ARM D	10.07	23.63	0.426	- -	1.2	0.7	11.5	-	0.074
ARM E	9.96	21.33	0.467	- -	1.6	0.9	13.7	-	0.089
18.00-18.15									
ARM A	1.19	13.08	0.091	- -	0.1	0.1	1.5	-	0.084
ARM B	8.81	23.82	0.370	- -	0.9	0.6	9.1	-	0.067
ARM C	12.28	20.85	0.589	- -	2.9	1.5	23.0	-	0.119
ARM D	8.43	24.92	0.338	- -	0.7	0.5	7.9	-	0.061
ARM E	8.34	22.42	0.372	- -	0.9	0.6	9.2	-	0.071

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.2
17.45	0.2
18.00	0.1
18.15	0.1

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.6	*
17.15	0.9	*
17.30	1.6	**
17.45	1.6	**
18.00	0.9	*
18.15	0.6	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.4	*
17.15	2.6	***
17.30	10.3	**********
17.45	12.5	************
18.00	2.9	***
18.15	1.5	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.5	*
17.15	0.7	*
17.30	1.2	*
17.45	1.2	*
18.00	0.7	*
18.15	0.5	*

QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.6	*
17.15	0.9	*
17.30	1.5	**
17.45	1.6	**
18.00	0.9	*
18.15	0.6	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *		T75
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)	
A	130.8	87.2	13.8	0.11	13.8	0.11	
B	966.3	644.2	89.4	0.09	89.4	0.09	
C	1347.5	898.3	427.6	0.32	427.6	0.32	
D	925.0	616.6	72.7	0.08	72.7	0.08	
E	915.3	610.2	89.1	0.10	89.1	0.10	
ALL	4284.8	2856.5	692.6	0.16	692.7	0.16	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 16:23:15 on 10/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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Nine Mile Ride Email: software@trl.co.uk
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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\Gibbet Hill\
2017 assessments\am2017wd.vai"
(drive-on-the-left) at 15:41:13 on Thursday, 9 July 2015

FILE PROPERTIES

RUN TITLE: Gibbet Hill Roundabout AM Peak 2017 With Development
LOCATION: Gibbet Hill Roundabout
DATE: 14/07/31
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - Gibbet Lane
ARM B - A5 South
ARM C - A426 South
ARM D - A5 North
ARM E - Rugby Road

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
A	2.90	8.00	10.00	19.00	66.00	68.0	0.421	21.146
B	4.70	7.30	25.00	24.00	70.00	40.0	0.540	32.695
C	3.65	6.90	20.00	44.00	70.00	56.0	0.481	27.373
D	4.00	8.80	36.00	15.00	70.00	54.0	0.530	33.487
E	3.65	7.20	27.00	100.00	70.00	52.0	0.511	29.895

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM D Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100
E	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK	NUMBER OF MINUTES FROM START WHEN FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
	TO RISE	IS REACHED	FALLING			
A	15.00	45.00	75.00	1.19	1.78	1.19
B	15.00	45.00	75.00	6.65	9.98	6.65
C	15.00	45.00	75.00	11.57	17.36	11.57
D	15.00	45.00	75.00	11.99	17.98	11.99
E	15.00	45.00	75.00	8.13	12.19	8.13

DEMAND SET TITLE: AM Peak 2006 Base Flows

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D	ARM E
07.15 - 08.45	ARM A	0.000	0.147	0.453	0.168	0.232
		0.0	14.0	43.0	16.0	22.0
		(28.4)	(28.4)	(28.4)	(28.4)	(28.4)
	ARM B	0.039	0.017	0.147	0.590	0.207
		21.0	9.0	78.0	314.0	110.0
		(22.0)	(22.0)	(22.0)	(22.0)	(22.0)
	ARM C	0.029	0.111	0.000	0.377	0.483
		27.0	103.0	0.0	349.0	447.0
		(10.7)	(10.7)	(10.7)	(10.7)	(10.7)
	ARM D	0.016	0.474	0.502	0.000	0.008
		15.0	455.0	481.0	0.0	8.0
		(12.2)	(12.2)	(12.2)	(12.2)	(12.2)
	ARM E	0.042	0.220	0.735	0.003	0.000
		27.0	143.0	478.0	2.0	0.0
		(10.3)	(10.3)	(10.3)	(10.3)	(10.3)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	1.19	8.85	0.135	- - -	0.0	0.2	2.2	-	0.130
ARM B	6.68	20.32	0.329	- - -	0.0	0.5	7.1	-	0.073
ARM C	11.62	21.44	0.542	- - -	0.0	1.2	16.7	-	0.100
ARM D	12.03	24.91	0.483	- - -	0.0	0.9	13.4	-	0.077
ARM E	8.16	19.88	0.410	- - -	0.0	0.7	10.0	-	0.085
07.30-07.45									
ARM A	1.42	7.35	0.194	- - -	0.2	0.2	3.4	-	0.169
ARM B	7.97	19.04	0.419	- - -	0.5	0.7	10.4	-	0.090
ARM C	13.87	20.79	0.667	- - -	1.2	2.0	27.7	-	0.142
ARM D	14.37	23.93	0.600	- - -	0.9	1.5	21.3	-	0.104
ARM E	9.74	18.46	0.528	- - -	0.7	1.1	15.9	-	0.114
07.45-08.00									
ARM A	1.74	5.35	0.326	- - -	0.2	0.5	6.7	-	0.275
ARM B	9.76	17.34	0.563	- - -	0.7	1.3	18.1	-	0.131
ARM C	16.99	19.92	0.853	- - -	2.0	5.1	66.3	-	0.301
ARM D	17.60	22.66	0.777	- - -	1.5	3.3	45.2	-	0.189
ARM E	11.93	16.57	0.720	- - -	1.1	2.5	33.8	-	0.208
08.00-08.15									
ARM A	1.74	5.27	0.331	- - -	0.5	0.5	7.2	-	0.284
ARM B	9.76	17.27	0.565	- - -	1.3	1.3	19.2	-	0.133
ARM C	16.99	19.90	0.854	- - -	5.1	5.4	79.6	-	0.335
ARM D	17.60	22.59	0.779	- - -	3.3	3.4	50.6	-	0.199
ARM E	11.93	16.50	0.723	- - -	2.5	2.5	37.6	-	0.218
08.15-08.30									
ARM A	1.42	7.23	0.197	- - -	0.5	0.2	3.9	-	0.173
ARM B	7.97	18.94	0.421	- - -	1.3	0.7	11.4	-	0.092
ARM C	13.87	20.77	0.668	- - -	5.4	2.1	34.1	-	0.155
ARM D	14.37	23.83	0.603	- - -	3.4	1.5	24.5	-	0.108
ARM E	9.74	18.36	0.531	- - -	2.5	1.1	18.1	-	0.119
08.30-08.45									
ARM A	1.19	8.78	0.136	- - -	0.2	0.2	2.5	-	0.132
ARM B	6.68	20.26	0.330	- - -	0.7	0.5	7.6	-	0.074
ARM C	11.62	21.42	0.542	- - -	2.1	1.2	18.8	-	0.103
ARM D	12.03	24.85	0.484	- - -	1.5	0.9	14.7	-	0.078
ARM E	8.16	19.82	0.411	- - -	1.1	0.7	10.9	-	0.086

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.2
07.45	0.2
08.00	0.5
08.15	0.5
08.30	0.2
08.45	0.2

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.5	
07.45	0.7	*
08.00	1.3	*
08.15	1.3	*
08.30	0.7	*
08.45	0.5	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.2	*
07.45	2.0	**
08.00	5.1	*****
08.15	5.4	*****
08.30	2.1	**
08.45	1.2	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.9	*
07.45	1.5	*
08.00	3.3	***
08.15	3.4	***
08.30	1.5	**
08.45	0.9	*

QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.7	*
07.45	1.1	*
08.00	2.5	**
08.15	2.5	***
08.30	1.1	*
08.45	0.7	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *		T75
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)	
A	130.8	87.2	25.9	0.20	25.9	0.20	
B	732.3	488.2	73.8	0.10	73.8	0.10	
C	1274.6	849.7	243.2	0.19	243.2	0.19	
D	1320.0	880.0	169.6	0.13	169.6	0.13	
E	894.7	596.5	126.3	0.14	126.3	0.14	
ALL	4352.3	2901.5	638.7	0.15	638.8	0.15	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 16:23:28 on 10/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770356
Nine Mile Ride Email: software@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk
RG40 3GA,UK

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\10 Junction Assessments Detailed\Gibbet Hill\
2017 assessments\pm2017wd.vai"
(drive-on-the-left) at 15:43:13 on Thursday, 9 July 2015

FILE PROPERTIES

RUN TITLE: Gibbet Hill Roundabout PM Peak 2017 With Development
LOCATION: Gibbet Hill Roundabout
DATE: 14/07/31
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027]
JOB NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - Gibbet Lane
ARM B - A5 South
ARM C - A426 South
ARM D - A5 North
ARM E - Rugby Road

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
A	2.90	8.00	10.00	19.00	66.00	68.0	0.421	21.146
B	4.70	7.30	25.00	24.00	70.00	40.0	0.540	32.695
C	3.65	6.90	20.00	44.00	70.00	56.0	0.481	27.373
D	4.00	8.80	36.00	15.00	70.00	54.0	0.530	33.487
E	3.65	7.20	27.00	100.00	70.00	52.0	0.511	29.895

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM D Effective flare length is outside normal range.
Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100
E	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
A	15.00	45.00	75.00	1.19	1.78	1.19
B	15.00	45.00	75.00	8.84	13.26	8.84
C	15.00	45.00	75.00	12.25	18.38	12.25
D	15.00	45.00	75.00	8.55	12.83	8.55
E	15.00	45.00	75.00	8.31	12.47	8.31

DEMAND SET TITLE: AM Peak 2006 Base Flows

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D	ARM E
16.45 - 18.15						
	ARM A	0.000	0.168	0.400	0.232	0.200
		0.0	16.0	38.0	22.0	19.0
		(1.1)	(1.1)	(1.1)	(1.1)	(1.1)
	ARM B	0.027	0.013	0.096	0.632	0.232
		19.0	9.0	68.0	447.0	164.0
		(9.2)	(9.2)	(9.2)	(9.2)	(9.2)
	ARM C	0.051	0.079	0.000	0.351	0.519
		50.0	77.0	0.0	344.0	509.0
		(9.7)	(9.7)	(9.7)	(9.7)	(9.7)
	ARM D	0.020	0.450	0.522	0.000	0.007
		14.0	308.0	357.0	0.0	5.0
		(9.7)	(9.7)	(9.7)	(9.7)	(9.7)
	ARM E	0.039	0.232	0.710	0.020	0.000
		26.0	154.0	472.0	13.0	0.0
		(7.5)	(7.5)	(7.5)	(7.5)	(7.5)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	1.19	13.06	0.091	- -	0.0	0.1	1.5	-	0.084
ARM B	8.87	23.80	0.373	- -	0.0	0.6	8.6	-	0.067
ARM C	12.30	20.82	0.591	- -	0.0	1.4	20.1	-	0.115
ARM D	8.58	24.94	0.344	- -	0.0	0.5	7.6	-	0.061
ARM E	8.34	22.37	0.373	- -	0.0	0.6	8.6	-	0.071
17.00-17.15									
ARM A	1.42	11.51	0.124	- -	0.1	0.1	2.1	-	0.099
ARM B	10.59	22.59	0.469	- -	0.6	0.9	12.8	-	0.083
ARM C	14.68	20.01	0.734	- -	1.4	2.6	36.8	-	0.182
ARM D	10.25	23.84	0.430	- -	0.5	0.7	11.0	-	0.073
ARM E	9.96	21.30	0.468	- -	0.6	0.9	12.7	-	0.088
17.15-17.30									
ARM A	1.74	9.43	0.185	- -	0.1	0.2	3.3	-	0.130
ARM B	12.97	20.95	0.619	- -	0.9	1.6	22.8	-	0.124
ARM C	17.98	18.91	0.951	- -	2.6	10.7	120.9	-	0.547
ARM D	12.55	22.50	0.558	- -	0.7	1.2	18.0	-	0.100
ARM E	12.20	19.88	0.614	- -	0.9	1.6	22.2	-	0.129
17.30-17.45									
ARM A	1.74	9.38	0.186	- -	0.2	0.2	3.4	-	0.131
ARM B	12.97	20.93	0.620	- -	1.6	1.6	24.1	-	0.126
ARM C	17.98	18.89	0.952	- -	10.7	13.1	180.8	-	0.773
ARM D	12.55	22.37	0.561	- -	1.2	1.3	18.9	-	0.102
ARM E	12.20	19.84	0.615	- -	1.6	1.6	23.6	-	0.131
17.45-18.00									
ARM A	1.42	11.43	0.125	- -	0.2	0.1	2.2	-	0.100
ARM B	10.59	22.55	0.470	- -	1.6	0.9	13.9	-	0.084
ARM C	14.68	19.98	0.735	- -	13.1	2.9	59.6	-	0.246
ARM D	10.25	23.57	0.435	- -	1.3	0.8	12.0	-	0.075
ARM E	9.96	21.23	0.469	- -	1.6	0.9	13.9	-	0.089
18.00-18.15									
ARM A	1.19	13.00	0.092	- -	0.1	0.1	1.6	-	0.085
ARM B	8.87	23.76	0.373	- -	0.9	0.6	9.2	-	0.067
ARM C	12.30	20.80	0.591	- -	2.9	1.5	23.2	-	0.120
ARM D	8.58	24.87	0.345	- -	0.8	0.5	8.1	-	0.062
ARM E	8.34	22.33	0.374	- -	0.9	0.6	9.2	-	0.072

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.2
17.45	0.2
18.00	0.1
18.15	0.1

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.6	*
17.15	0.9	*
17.30	1.6	**
17.45	1.6	**
18.00	0.9	*
18.15	0.6	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.4	*
17.15	2.6	***
17.30	10.7	**********
17.45	13.1	**********
18.00	2.9	***
18.15	1.5	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.5	*
17.15	0.7	*
17.30	1.2	*
17.45	1.3	*
18.00	0.8	*
18.15	0.5	*

QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.6	*
17.15	0.9	*
17.30	1.6	**
17.45	1.6	**
18.00	0.9	*
18.15	0.6	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	130.8	87.2	13.9	0.11	13.9	0.11
B	973.1	648.8	91.3	0.09	91.3	0.09
C	1348.9	899.3	441.4	0.33	441.5	0.33
D	941.5	627.7	75.5	0.08	75.5	0.08
E	915.3	610.2	90.2	0.10	90.2	0.10
ALL	4309.6	2873.1	712.4	0.17	712.4	0.17

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* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

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T R A N S Y T 12

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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For sales and distribution information,
program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770864
Email: softwarebureau@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:- "2017 AM NO DEV.DAT" at 15:40 on 20150710

TRANSYT 12.0

M6 Junction 1 2017 AM Peak No Development

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	= 2
NUMBER OF LINKS	= 18
NUMBER OF OPTIMISED NODES	= 2
MAXIMUM NUMBER OF GRAPHIC PLOTS	= 0
NUMBER OF STEPS IN CYCLE	= 60
MAXIMUM NUMBER OF SHARED STOPLINES	= 3
MAXIMUM NUMBER OF TIMING POINTS	= 2
MAXIMUM LINKS AT ANY NODE	= 6

CORE REQUESTED = 6891 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

(1)= TITLE:- M6 Junction 1 2017 AM Peak No Development

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME PERIOD 1-1200 MINS.	EFFECTIVE-GREEN START (SEC)	EFFECTIVE-GREEN END (SEC)	EQUISAT 0=UNEQUAL SETTINGS 1=EQUAL 0=NO 1=YES	FLOW CYCLE	FLOW SCALE %	CRUISE-SPEEDS 10-200 SCALE %	CRUISE-SPEEDS 50-200 CARD32 0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL-CLIMB OUTPUT 1=FULL	DELAY VALUE P PER PCU-H	STOP VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260

CARD NO.	CARD TYPE	LIST OF NODES TO BE OPTIMISED														
3)=	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET.....				SECOND SET.....				THIRD SET.....				
4)=	7	12	14	0	0	0	13	15	0	0	0	21	22	23	0	0
5)=	7	32	34	0	0	0	41	42	0	0	0	0	0	0	0	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
6)=	10	1	7	7								
7)=	10	3	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
8)=	11	1	7	7								
9)=	11	3	7	7								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
10)=	12	1	1	0	0								
11)=	12	3	1	0	0								

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY LINKS LINK1 NO.	PRIORITY LINKS LINK2 NO.	LINK1 GIVEWAY COEFFS. ONLY % FLOW	A1 X100	A2 X100				LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
12)=	30	20	21	0	0	51	100	0	0	0	0	200	0	2207	0	0
13)=	30	40	41	0	0	51	100	0	0	0	0	200	0	2197	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN START STAGE	FIRST GREEN START LAG	FIRST GREEN END STAGE	FIRST GREEN END LAG	SECOND GREEN START STAGE	SECOND GREEN START LAG	SECOND GREEN END STAGE	SECOND GREEN END LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
14)=	31	10	1	1	7	2	0	0	0	0	0	200	-9999	1945	60	0
15)=	31	11	1	1	7	2	0	0	0	0	0	200	-9999	4170	60	0
16)=	31	12	1	2	7	1	0	0	0	0	0	158	0	3885	500	0
17)=	31	13	1	2	7	1	0	0	0	0	0	158	0	2010	500	0
18)=	31	14	1	1	0	1	0	0	0	0	0	158	0	0	0	0
19)=	31	15	1	1	0	1	0	0	0	0	0	158	0	0	0	0
20)=	31	21	0	0	0	0	0	0	0	0	0	84	0	4000	0	0
21)=	31	22	0	0	0	0	0	0	0	0	0	84	0	0	0	0
22)=	31	23	0	0	0	0	0	0	0	0	0	84	0	0	0	0
23)=	31	30	3	1	7	2	0	0	0	0	0	200	-9999	1945	60	0
24)=	31	31	3	1	7	2	0	0	0	0	0	200	-9999	4170	60	0
25)=	31	32	3	2	7	1	0	0	0	0	0	147	0	3896	500	0
26)=	31	33	3	2	7	1	0	0	0	0	0	147	0	2016	500	0
27)=	31	34	3	1	0	1	0	0	0	0	0	147	0	0	0	0
28)=	31	41	0	0	0	0	0	0	0	0	0	84	0	4000	0	0
29)=	31	42	0	0	0	0	0	0	0	0	0	84	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 LINK NO.	ENTRY 1 CRUISE FLOW	ENTRY 1 CRUISE SPEED	ENTRY 2 LINK NO.	ENTRY 2 CRUISE FLOW	ENTRY 2 CRUISE SPEED	ENTRY 3 LINK NO.	ENTRY 3 CRUISE FLOW	ENTRY 3 CRUISE SPEED	ENTRY 4 LINK NO.	ENTRY 4 CRUISE FLOW	ENTRY 4 CRUISE SPEED
30)=	32	10	327	0	0	0	43	0	0	0	0	0	0	0	0	0
31)=	32	11	789	0	0	0	43	0	0	0	0	0	0	0	0	0
32)=	32	12	674	0	40	674	43	0	0	0	0	0	0	0	0	0
33)=	32	13	186	0	40	186	43	0	0	0	0	0	0	0	0	0
34)=	32	14	32	0	41	32	43	0	0	0	0	0	0	0	0	0
35)=	32	15	80	0	41	80	43	0	0	0	0	0	0	0	0	0
36)=	32	20	1276	0	0	0	43	0	0	0	0	0	0	0	0	0
37)=	32	21	789	0	11	789	43	0	0	0	0	0	0	0	0	0
38)=	32	22	80	0	15	80	43	0	0	0	0	0	0	0	0	0
39)=	32	23	186	0	13	186	43	0	0	0	0	0	0	0	0	0
40)=	32	30	274	0	0	0	43	0	0	0	0	0	0	0	0	0
41)=	32	31	295	0	0	0	43	0	0	0	0	0	0	0	0	0
42)=	32	32	917	0	20	917	43	0	0	0	0	0	0	0	0	0
43)=	32	33	315	0	20	315	43	0	0	0	0	0	0	0	0	0
44)=	32	34	789	0	21	789	43	0	0	0	0	0	0	0	0	0
45)=	32	40	1564	0	0	0	43	0	0	0	0	0	0	0	0	0
46)=	32	41	112	0	31	112	43	0	0	0	0	0	0	0	0	0
47)=	32	42	315	0	33	315	43	0	0	0	0	0	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
48)=	38	12	28	4500	13	14	4500	32	24	4500	33	12	4500	0	0	0

*****END OF SUBROUTINE TINPUT*****

60 SECOND CYCLE 60 STEPS

INITIAL SETTINGS
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	0	30								
3	2	0	18								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) UNIFORM (PCU-H/H)	RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	STOPS MEAN /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END 1ST (SECONDS)	GREEN TIMES END 2ND (SECONDS)
10	327	1945	42	16.7	17.0	1.2	+ 0.4	(21.9)*	74	(6.3)	4		13.1	1	7	30		
11	789	4170	47	16.7	15.4	2.9	+ 0.4	(47.8)*	73	(14.8)	10		28.7	1	7	30		
12	673	3885S	45	13.2	15.3	2.5	+ 0.4	(40.6)*	72	(12.5)	9	(0.0)*	215.4	1	37	0		
13	185	2010S	33	13.2	15.6	0.6	+ 0.2	(11.4)*	71	(3.4)	4	(0.0)*	60.4	1	37	0		
14	32	12L	45	13.2	13.4	0.1	+ 0.0	(1.7)	98	(0.8)	9		2.5	1	37	0		
15	80	13L	33	13.2	13.2	0.2	+ 0.1	(4.2)	98	(2.0)	4		6.2	1	37	0		
20	1276	2207	76	16.7	5.7	0.4	+ 1.6	(28.9)	34	(11.2)	10		40.1					
21	789	4000S	26	7.0	0.6	0.0	+ 0.1	(1.9)	1	(0.2)	0		2.1					
22	80	21L	26	7.0	0.6	0.0	+ 0.0	(0.2)	1	(0.0)	0		0.2					
23	185	21L	26	7.0	0.6	0.0	+ 0.0	(0.4)	1	(0.0)	0		0.5					
30	274	1945	70	16.7	37.7	1.7	+ 1.2	(40.7)*	112	(7.9)	5		24.4	3	7	18		
31	295	4170	35	16.7	24.0	1.7	+ 0.3	(28.0)*	87	(6.6)	4		16.8	3	7	18		
32	916	3896S	73	12.3	9.6	1.7	+ 0.7	(34.8)*	63	(14.9)	23	(0.0)*	189.0	3	25	0		
33	314	2016	26	12.3	7.7	0.5	+ 0.2	(9.5)*	45	(3.7)	3	(0.0)*	51.3	3	25	0		
34	789	32L	73	12.3	6.1	0.7	+ 0.6	(19.0)	70	(14.2)	23		33.2	3	25	0		
40	1564	2197	79	16.7	4.3	0.0	+ 1.9	(26.5)	7	(3.0)	3		29.5					
41	112	4000S	11	7.0	0.5	0.0	+ 0.0	(0.2)	1	(0.0)	0		0.2					
42	314	41L	11	7.0	0.5	0.0	+ 0.0	(0.6)	1	(0.1)	0		0.7					

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1480.2	56.8	26.0	14.3	8.1	(648.4) + (	66.1) + (	0.0) =	714.5	TOTALS

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	79.4	+	25.8	+	46.4	=	151.5

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 26

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	9	39								
3	2	0	18								

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1480.2	56.6	26.1	14.0	8.1	(647.9) + (	52.1) + (	0.0) =	699.9	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 86

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	9	39								
3	2	0	18								

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1480.2	56.6	26.1	14.0	8.1	(647.9) + (	52.1) + (	0.0) =	699.9	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 92

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	15	36								
3	2	2	18								

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1480.2	60.5	24.5	15.3	10.8	(574.0) + (	51.0) + (	0.0) =	625.0	TOTALS

NO. OF ENTRIES TO SUBPT = 19
NO. OF LINKS RECALCULATED= 306

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1 2 6 27
3 2 2 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1480.2	59.8	24.7	14.6	10.8	(542.4) + (	48.4) + (	0.0) =	590.8	TOTALS

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 120

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1 2 6 27
3 2 2 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1480.2	59.8	24.7	14.6	10.8	(542.4) + (	48.4) + (	0.0) =	590.8	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 114

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1 2 5 26
3 2 2 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1480.2	59.8	24.8	14.6	10.8	(540.3) + (	49.4) + (	0.0) =	589.6	TOTALS

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 118

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1 2 5 25
3 2 2 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1480.2	60.8	24.4	14.8	11.6	(540.3) + (	49.0) + (	0.0) =	589.3	TOTALS

NO. OF ENTRIES TO SUBPT = 9
NO. OF LINKS RECALCULATED= 188

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	5	25								
3	2	2	18								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY UNIFORM (U+R+O=MEAN Q) (PCU-H/H)	DELAY RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	STOPS MEAN STOPS /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES END 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END 2ND (SECONDS)
10	327	1945	72	16.7	35.1	1.9 +	1.3	(45.3)*	110	(9.2)	6		27.2	1	12	25		
11	789	4170	81	16.7	31.3	4.8 +	2.1	(97.5)*	105	(21.4)	14		58.5	1	12	25		
12	673	3885S	32	13.2	8.1	1.3 +	0.2	(21.4)*	50	(8.7)	6	(0.0)*	115.6	1	32	5		
13	185	2010S	23	13.2	8.4	0.3 +	0.1	(6.1)*	49	(2.4)	3	(0.0)*	33.0	1	32	5		
14	32	12L	32	13.2	5.6	0.0 +	0.0	(0.7)	70	(0.6)	6		1.3	1	32	5		
15	80	13L	23	13.2	5.4	0.1 +	0.0	(1.7)	64	(1.3)	3		3.0	1	32	5		
20	1276	2207	76	16.7	6.5	0.7 +	1.6	(32.9)	44	(14.6)	13		47.5					
21	789	4000S	26	7.0	0.6	0.0 +	0.1	(1.9)	1	(0.2)	1		2.2					
22	80	21L	26	7.0	0.6	0.0 +	0.0	(0.2)	1	(0.0)	1		0.2					
23	185	21L	26	7.0	0.6	0.0 +	0.0	(0.4)	1	(0.0)	1		0.5					
30	274	1945	85	16.7	56.9	1.8 +	2.5	(61.5)*	140	(9.9)	7		36.9	3	9	18		
31	295	4170	42	16.7	26.9	1.8 +	0.4	(31.3)*	93	(7.0)	5		18.8	3	9	18		
32	916	3896S	69	12.3	8.0	1.4 +	0.6	(29.0)*	50	(11.8)	14	(0.0)*	156.6	3	25	2		
33	314	2016	25	12.3	7.0	0.4 +	0.2	(8.6)*	44	(3.5)	3	(0.0)*	46.6	3	25	2		
34	789	32L	69	12.3	2.6	0.1 +	0.5	(8.1)	13	(2.7)	14		10.8	3	25	2		
40	1564	2197	79	16.7	4.3	0.0 +	1.9	(26.5)	7	(3.0)	3		29.5					
41	112	4000S	11	7.0	0.5	0.0 +	0.0	(0.2)	1	(0.0)	0		0.2					
42	314	41L	11	7.0	0.5	0.0 +	0.0	(0.6)	1	(0.1)	0		0.7					

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1480.2	60.8	24.4	14.8	11.6	(540.3) +	(49.0) +	(0.0) =	589.3	TOTALS

ROUTE

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	79.4	+	30.3	+	44.0	=	153.7

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 130

PROGRAM TRANSYT FINISHED

========== end of file ==========

Printed at 16:24:04 on 10/09/2015]

T R A N S Y T 12

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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For sales and distribution information,
program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770864
Email: softwarebureau@trl.co.uk
Web: www.trlsoftware.co.uk

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "2017 PM NO DEV.DAT" at 15:44 on 20150710

TRANSYT 12.0

M6 Junction 1 2017 PM Peak No Development

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	= 2
NUMBER OF LINKS	= 18
NUMBER OF OPTIMISED NODES	= 2
MAXIMUM NUMBER OF GRAPHIC PLOTS	= 0
NUMBER OF STEPS IN CYCLE	= 60
MAXIMUM NUMBER OF SHARED STOPLINES	= 3
MAXIMUM NUMBER OF TIMING POINTS	= 2
MAXIMUM LINKS AT ANY NODE	= 6

CORE REQUESTED = 6891 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

(1)= TITLE:- M6 Junction 1 2017 PM Peak No Development

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME PERIOD 1-1200 MINS.	EFFECTIVE-GREEN START (SEC)	EFFECTIVE-GREEN END (SEC)	EQUISAT 0=UNEQUAL FLOW SETTINGS 1=EQUAL CYCLE	FLOW SCALE %	CRUISE-SPEEDS 10-200 SCALE %	CRUISE-SPEEDS 50-200 CARD32 0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL-CLIMB OUTPUT 1=FULL	DELAY VALUE P PER PCU-H	STOP VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260

CARD NO.	CARD TYPE	LIST OF NODES TO BE OPTIMISED													
3)=	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET.....				SECOND SET.....				THIRD SET.....				
4)=	7	12	14	0	0	0	13	15	0	0	0	21	22	23	0	0
5)=	7	32	34	0	0	0	41	42	0	0	0	0	0	0	0	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
6)=	10	1	7	7								
7)=	10	3	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
8)=	11	1	7	7								
9)=	11	3	7	7								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
10)=	12	1	1	0	0								
11)=	12	3	1	0	0								

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY LINKS LINK1 NO.	PRIORITY LINKS LINK2 NO.	LINK1 GIVEWAY COEFFS. ONLY % FLOW	A1 X100	A2 X100	LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
12)=	30	20	21	0	0	51	100	0	0	0	0	200	0	2207	0	0
13)=	30	40	41	0	0	51	100	0	0	0	0	200	0	2197	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN START STAGE	FIRST GREEN START LAG	FIRST GREEN END STAGE	FIRST GREEN END LAG	SECOND GREEN START STAGE	SECOND GREEN START LAG	SECOND GREEN END STAGE	SECOND GREEN END LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
14)=	31	10	1	1	7	2	0	0	0	0	0	200	-9999	1945	60	0
15)=	31	11	1	1	7	2	0	0	0	0	0	200	-9999	4170	60	0
16)=	31	12	1	2	7	1	0	0	0	0	0	158	0	3885	500	0
17)=	31	13	1	2	7	1	0	0	0	0	0	158	0	2010	500	0
18)=	31	14	1	1	0	1	0	0	0	0	0	158	0	0	0	0
19)=	31	15	1	1	0	1	0	0	0	0	0	158	0	0	0	0
20)=	31	21	0	0	0	0	0	0	0	0	0	84	0	4000	0	0
21)=	31	22	0	0	0	0	0	0	0	0	0	84	0	0	0	0
22)=	31	23	0	0	0	0	0	0	0	0	0	84	0	0	0	0
23)=	31	30	3	1	7	2	0	0	0	0	0	200	-9999	1945	60	0
24)=	31	31	3	1	7	2	0	0	0	0	0	200	-9999	4170	60	0
25)=	31	32	3	2	7	1	0	0	0	0	0	147	0	3896	500	0
26)=	31	33	3	2	7	1	0	0	0	0	0	147	0	2016	500	0
27)=	31	34	3	1	0	1	0	0	0	0	0	147	0	0	0	0
28)=	31	41	0	0	0	0	0	0	0	0	0	84	0	4000	0	0
29)=	31	42	0	0	0	0	0	0	0	0	0	84	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 LINK NO.	ENTRY 1 CRUISE FLOW	ENTRY 1 CRUISE SPEED	ENTRY 2 LINK NO.	ENTRY 2 CRUISE FLOW	ENTRY 2 CRUISE SPEED	ENTRY 3 LINK NO.	ENTRY 3 CRUISE FLOW	ENTRY 3 CRUISE SPEED	ENTRY 4 LINK NO.	ENTRY 4 CRUISE FLOW	ENTRY 4 CRUISE SPEED
30)=	32	10	296	0	0	0	43	0	0	0	0	0	0	0	0	0
31)=	32	11	672	0	0	0	43	0	0	0	0	0	0	0	0	0
32)=	32	12	758	0	40	758	43	0	0	0	0	0	0	0	0	0
33)=	32	13	229	0	40	229	43	0	0	0	0	0	0	0	0	0
34)=	32	14	61	0	41	61	43	0	0	0	0	0	0	0	0	0
35)=	32	15	25	0	41	25	43	0	0	0	0	0	0	0	0	0
36)=	32	20	1029	0	0	0	43	0	0	0	0	0	0	0	0	0
37)=	32	21	672	0	11	672	43	0	0	0	0	0	0	0	0	0
38)=	32	22	25	0	15	25	43	0	0	0	0	0	0	0	0	0
39)=	32	23	229	0	13	229	43	0	0	0	0	0	0	0	0	0
40)=	32	30	142	0	0	0	43	0	0	0	0	0	0	0	0	0
41)=	32	31	181	0	0	0	43	0	0	0	0	0	0	0	0	0
42)=	32	32	686	0	20	686	43	0	0	0	0	0	0	0	0	0
43)=	32	33	314	0	20	314	43	0	0	0	0	0	0	0	0	0
44)=	32	34	672	0	21	672	43	0	0	0	0	0	0	0	0	0
45)=	32	40	1593	0	0	0	43	0	0	0	0	0	0	0	0	0
46)=	32	41	86	0	31	86	43	0	0	0	0	0	0	0	0	0
47)=	32	42	314	0	33	314	43	0	0	0	0	0	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
48)=	38	12	28	4500	13	14	4500	32	24	4500	33	12	4500	0	0	0

*****END OF SUBROUTINE TINPUT*****

60 SECOND CYCLE 60 STEPS

INITIAL SETTINGS
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	0	27								
3	2	0	15								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) UNIFORM (PCU-H/H)	DELAY RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	STOPS MEAN STOPS /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND END (SECONDS)
10	296	1945	43	16.7	19.6	1.2	0.4	(22.9)*	79	(6.1)	4		13.7	1	7	27
11	672	4170	46	16.7	17.4	2.8	0.4	(46.1)*	77	(13.3)	9		27.7	1	7	27
12	758	3885S	47	13.2	13.4	2.4	0.4	(40.1)*	69	(13.4)	10	(0.0)*	213.9	1	34	0
13	229	2010S	28	13.2	13.1	0.7	0.2	(11.9)*	63	(3.7)	3	(0.0)*	63.1	1	34	0
14	61	12L	47	13.2	11.9	0.2	0.0	(2.9)	97	(1.5)	10		4.4	1	34	0
15	25	13L	28	13.2	10.4	0.1	0.0	(1.0)	90	(0.6)	3		1.6	1	34	0
20	1029	2207	59	16.7	3.0	0.1	0.7	(12.1)	17	(4.4)	4		16.5			
21	672	4000S	23	7.0	0.6	0.0	0.1	(1.6)	1	(0.2)	0		1.7			
22	25	21L	23	7.0	0.6	0.0	0.0	(0.1)	1	(0.0)	0		0.1			
23	229	21L	23	7.0	0.6	0.0	0.0	(0.5)	1	(0.1)	0		0.6			
30	142	1945	49	16.7	35.3	0.9	0.5	(19.8)*	106	(3.9)	3		11.9	3	7	15
31	181	4170	29	16.7	26.7	1.1	0.2	(19.1)*	92	(4.3)	3		11.5	3	7	15
32	685	3896S	54	12.3	6.0	0.9	0.3	(16.3)*	41	(7.3)	7	(0.0)*	88.8	3	22	0
33	315	2016	24	12.3	6.2	0.4	0.2	(7.7)*	40	(3.2)	2	(0.0)*	41.5	3	22	0
34	672	32L	54	12.3	1.7	0.0	0.3	(4.5)	9	(1.5)	7		6.0	3	22	0
40	1593	2197	80	16.7	4.5	0.0	2.0	(28.1)	8	(3.1)	3		31.2			
41	86	4000S	10	7.0	0.5	0.0	0.0	(0.2)	1	(0.0)	0		0.2			
42	315	41L	10	7.0	0.5	0.0	0.0	(0.6)	1	(0.1)	0		0.7			

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1309.3	47.0	27.8	10.8	5.8	(496.1) + (39.1)	+ (0.0)	= 535.2		TOTALS

	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	70.2	+ 19.1	+ 30.4	= 119.7

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 24

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	0	27								
3	2	0	15								

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1309.3	47.0	27.8	10.8	5.8	(496.1) + (39.1)	+ (0.0)	= 535.2		TOTALS

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 104

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	0	27								
3	2	0	15								

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1309.3	47.0	27.8	10.8	5.8	(496.1) + (39.1)	+ (0.0)	= 535.2		TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 86

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	9	27								
3	2	1	15								

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1309.3	50.3	26.0	11.5	8.4	(412.8) + (33.4)	+ (0.0)	= 446.2		TOTALS

NO. OF ENTRIES TO SUBPT = 17
NO. OF LINKS RECALCULATED= 272

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1 2 0 18
3 2 1 15

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1309.3	50.1	26.1	11.3	8.4	(408.3) + (	32.8) + (	0.0) =	441.1	TOTALS

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 110

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1 2 0 18
3 2 1 15

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1309.3	50.1	26.1	11.3	8.4	(408.3) + (	32.8) + (	0.0) =	441.1	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 94

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1 2 1 19
3 2 1 15

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1309.3	50.1	26.1	11.3	8.4	(408.3) + (	32.4) + (	0.0) =	440.7	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 94

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1 2 1 19
3 2 1 15

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1309.3	50.1	26.1	11.3	8.4	(408.3) + (	32.4) + (	0.0) =	440.7	TOTALS

NO. OF ENTRIES TO SUBPT = 7
NO. OF LINKS RECALCULATED= 126

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	1	19								
3	2	1	15								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY UNIFORM (U+R+O=MEAN Q) (PCU-H/H)	DELAY RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	STOPS MEAN STOPS /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES END 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END 2ND (SECONDS)
10	296	1945	76	16.7	41.4	1.9 +	1.5	(48.3)*	119	(9.1)	6		29.0	1	8	19		
11	672	4170	81	16.7	33.7	4.3 +	2.0	(89.4)*	108	(18.8)	13		53.7	1	8	19		
12	758	3885S	35	13.2	7.2	1.3 +	0.3	(21.5)*	48	(9.4)	7	(0.0)*	117.1	1	26	1		
13	229	2010S	21	13.2	7.3	0.3 +	0.1	(6.6)*	45	(2.6)	2	(0.0)*	35.8	1	26	1		
14	61	12L	35	13.2	3.2	0.0 +	0.0	(0.8)	48	(0.8)	7		1.5	1	26	1		
15	25	13L	21	13.2	2.7	0.0 +	0.0	(0.3)	28	(0.2)	2		0.4	1	26	1		
20	1029	2207	59	16.7	3.3	0.2 +	0.7	(13.3)	21	(5.5)	5		18.8					
21	672	4000S	23	7.0	0.6	0.0 +	0.1	(1.6)	1	(0.2)	0		1.7					
22	25	21L	23	7.0	0.6	0.0 +	0.0	(0.1)	1	(0.0)	0		0.1					
23	229	21L	23	7.0	0.6	0.0 +	0.0	(0.5)	1	(0.1)	0		0.6					
30	142	1945	55	16.7	39.5	1.0 +	0.6	(22.1)*	113	(4.1)	3		13.3	3	8	15		
31	181	4170	33	16.7	28.4	1.2 +	0.2	(20.3)*	95	(4.4)	3		12.2	3	8	15		
32	685	3896S	52	12.3	5.5	0.8 +	0.3	(14.9)*	39	(6.8)	5	(0.0)*	81.3	3	22	1		
33	315	2016	23	12.3	5.7	0.3 +	0.2	(7.1)*	38	(3.1)	2	(0.0)*	38.6	3	22	1		
34	672	32L	52	12.3	1.5	0.0 +	0.3	(4.0)	4	(0.7)	5		4.6	3	22	1		
40	1593	2197	80	16.7	4.5	0.0 +	2.0	(28.1)	8	(3.1)	3		31.2					
41	86	4000S	10	7.0	0.5	0.0 +	0.0	(0.2)	1	(0.0)	0		0.2					
42	315	41L	10	7.0	0.5	0.0 +	0.0	(0.6)	1	(0.1)	0		0.7					

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1309.3	50.1	26.1	11.3	8.4	(408.3) +	(32.4) +	(0.0) =	440.7	TOTALS

ROUTE

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	70.2	+	22.6	+	31.3	=	124.2

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 94

PROGRAM TRANSYT FINISHED
========== end of file ==========

Printed at 16:24:20 on 10/09/2015]

T R A N S Y T 12

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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For sales and distribution information,
program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770864
Email: softwarebureau@trl.co.uk
Web: www.trlsoftware.co.uk

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "2017 AM WITH DEV.DAT" at 15:47 on 20150710

TRANSYT 12.0

M6 Junction 1 2017 AM Peak With Development

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	= 2
NUMBER OF LINKS	= 18
NUMBER OF OPTIMISED NODES	= 2
MAXIMUM NUMBER OF GRAPHIC PLOTS	= 0
NUMBER OF STEPS IN CYCLE	= 60
MAXIMUM NUMBER OF SHARED STOPLINES	= 3
MAXIMUM NUMBER OF TIMING POINTS	= 2
MAXIMUM LINKS AT ANY NODE	= 6

CORE REQUESTED = 6891 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

(1)= TITLE:- M6 Junction 1 2017 AM Peak With Development

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME PERIOD 1-1200 MINS.	EFFECTIVE-GREEN DISPLACEMENTS START (SEC)	EFFECTIVE-GREEN DISPLACEMENTS END (SEC)	EQUISAT SETTINGS 0=NO 1=YES	0=UNEQUAL FLOW CYCLE	SCALE %	CRUISE-SPEEDS SCALE 10-200 %	CRUISE-SPEEDS SCALE 50-200 %	CARD32 0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL-CLIMB OUTPUT 1=FULL	DELAY VALUE P PER PCU-H	STOP VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	0	1	2	0	0	1420	260

CARD NO.	CARD TYPE	LIST OF NODES TO BE OPTIMISED														
3)=	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET.....				SECOND SET.....				THIRD SET.....				
4)=	7	12	14	0	0	0	13	15	0	0	0	21	22	23	0	0
5)=	7	32	34	0	0	0	41	42	0	0	0	0	0	0	0	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
6)=	10	1	7	7								
7)=	10	3	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
8)=	11	1	7	7								
9)=	11	3	7	7								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
10)=	12	1	1	0	0								
11)=	12	3	1	0	0								

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY LINKS LINK1 NO.	PRIORITY LINKS LINK2 NO.	LINK1 GIVEWAY COEFFS. ONLY % FLOW	A1 X100	A2 X100	LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
12)=	30	20	21	0	0	51	100	0	0	0	0	200	0	2207	0	0
13)=	30	40	41	0	0	51	100	0	0	0	0	200	0	2197	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN START STAGE	FIRST GREEN START LAG	FIRST GREEN END STAGE	FIRST GREEN END LAG	SECOND GREEN START STAGE	SECOND GREEN START LAG	SECOND GREEN END STAGE	SECOND GREEN END LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
14)=	31	10	1	1	7	2	0	0	0	0	0	200	-9999	1945	60	0
15)=	31	11	1	1	7	2	0	0	0	0	0	200	-9999	4170	60	0
16)=	31	12	1	2	7	1	0	0	0	0	0	158	0	3885	500	0
17)=	31	13	1	2	7	1	0	0	0	0	0	158	0	2010	500	0
18)=	31	14	1	1	0	1	0	0	0	0	0	158	0	0	0	0
19)=	31	15	1	1	0	1	0	0	0	0	0	158	0	0	0	0
20)=	31	21	0	0	0	0	0	0	0	0	0	84	0	4000	0	0
21)=	31	22	0	0	0	0	0	0	0	0	0	84	0	0	0	0
22)=	31	23	0	0	0	0	0	0	0	0	0	84	0	0	0	0
23)=	31	30	3	1	7	2	0	0	0	0	0	200	-9999	1945	60	0
24)=	31	31	3	1	7	2	0	0	0	0	0	200	-9999	4170	60	0
25)=	31	32	3	2	7	1	0	0	0	0	0	147	0	3896	500	0
26)=	31	33	3	2	7	1	0	0	0	0	0	147	0	2016	500	0
27)=	31	34	3	1	0	1	0	0	0	0	0	147	0	0	0	0
28)=	31	41	0	0	0	0	0	0	0	0	0	84	0	4000	0	0
29)=	31	42	0	0	0	0	0	0	0	0	0	84	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 ..... LINK NO.	ENTRY 1 ..... CRUISE FLOW	ENTRY 1 ..... CRUISE SPEED	ENTRY 2 ..... LINK NO.	ENTRY 2 ..... CRUISE FLOW	ENTRY 2 ..... CRUISE SPEED	ENTRY 3 ..... LINK NO.	ENTRY 3 ..... CRUISE FLOW	ENTRY 3 ..... CRUISE SPEED	ENTRY 4 ..... LINK NO.	ENTRY 4 ..... CRUISE FLOW	ENTRY 4 ..... CRUISE SPEED
30)=	32	10	329	0	0	0	43	0	0	0	0	0	0	0	0	0
31)=	32	11	789	0	0	0	43	0	0	0	0	0	0	0	0	0
32)=	32	12	678	0	40	678	43	0	0	0	0	0	0	0	0	0
33)=	32	13	186	0	40	186	43	0	0	0	0	0	0	0	0	0
34)=	32	14	32	0	41	32	43	0	0	0	0	0	0	0	0	0
35)=	32	15	80	0	41	80	43	0	0	0	0	0	0	0	0	0
36)=	32	20	1285	0	0	0	43	0	0	0	0	0	0	0	0	0
37)=	32	21	789	0	11	789	43	0	0	0	0	0	0	0	0	0
38)=	32	22	80	0	15	80	43	0	0	0	0	0	0	0	0	0
39)=	32	23	186	0	13	186	43	0	0	0	0	0	0	0	0	0
40)=	32	30	274	0	0	0	43	0	0	0	0	0	0	0	0	0
41)=	32	31	295	0	0	0	43	0	0	0	0	0	0	0	0	0
42)=	32	32	925	0	20	925	43	0	0	0	0	0	0	0	0	0
43)=	32	33	316	0	20	316	43	0	0	0	0	0	0	0	0	0
44)=	32	34	789	0	21	789	43	0	0	0	0	0	0	0	0	0
45)=	32	40	1568	0	0	0	43	0	0	0	0	0	0	0	0	0
46)=	32	41	112	0	31	112	43	0	0	0	0	0	0	0	0	0
47)=	32	42	316	0	33	316	43	0	0	0	0	0	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
48)=	38	12	28	4500	13	14	4500	32	24	4500	33	12	4500	0	0	0

*****END OF SUBROUTINE TINPUT*****

60 SECOND CYCLE 60 STEPS

INITIAL SETTINGS
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	0	30								
3	2	0	18								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) UNIFORM (PCU-H/H)	RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES END 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END 2ND (SECONDS)
10	329	1945	42	16.7	17.0	1.2 +	0.4	(22.1)*	74	(6.3)	4		13.2	1	7	30		
11	789	4170	47	16.7	15.4	2.9 +	0.4	(47.8)*	73	(14.8)	10		28.7	1	7	30		
12	677	3885S	46	13.2	15.3	2.5 +	0.4	(41.0)*	73	(12.7)	9	(0.0)*	217.5	1	37	0		
13	185	2010S	33	13.2	15.7	0.6 +	0.2	(11.4)*	71	(3.4)	4	(0.0)*	60.6	1	37	0		
14	32	12L	46	13.2	13.5	0.1 +	0.0	(1.7)	98	(0.8)	9		2.5	1	37	0		
15	80	13L	33	13.2	13.2	0.2 +	0.1	(4.2)	98	(2.0)	4		6.2	1	37	0		
20	1285	2207	77	16.7	5.9	0.4 +	1.7	(29.8)	35	(11.5)	10		41.3					
21	789	4000S	26	7.0	0.6	0.0 +	0.1	(1.9)	1	(0.2)	0		2.1					
22	80	21L	26	7.0	0.6	0.0 +	0.0	(0.2)	1	(0.0)	0		0.2					
23	185	21L	26	7.0	0.6	0.0 +	0.0	(0.4)	1	(0.0)	0		0.5					
30	274	1945	70	16.7	37.7	1.7 +	1.2	(40.7)*	112	(7.9)	5		24.4	3	7	18		
31	295	4170	35	16.7	24.0	1.7 +	0.3	(28.0)*	87	(6.6)	4		16.8	3	7	18		
32	925	3896S	73	12.3	9.7	1.8 +	0.7	(35.4)*	63	(15.1)	23	(0.0)*	192.2	3	25	0		
33	316	2016	26	12.3	7.7	0.5 +	0.2	(9.6)*	45	(3.7)	3	(0.0)*	51.7	3	25	0		
34	789	32L	73	12.3	6.2	0.7 +	0.6	(19.3)	70	(14.3)	23		33.6	3	25	0		
40	1568	2197	79	16.7	4.4	0.0 +	1.9	(26.9)	7	(3.0)	3		29.9					
41	112	4000S	11	7.0	0.5	0.0 +	0.0	(0.2)	1	(0.0)	0		0.2					
42	316	41L	11	7.0	0.5	0.0 +	0.0	(0.6)	1	(0.1)	0		0.7					

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1485.2	57.2	26.0	14.4	8.3	(655.6) +	(66.9) +	(0.0) =	722.5	TOTALS

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	79.7	+	26.0	+	46.8	=	152.4

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 26

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

1	2	9	39
3	2	0	18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1485.2	56.9	26.1	14.1	8.3	(655.3) +	(52.9) +	(0.0) =	708.2	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 86

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

1	2	9	39
3	2	0	18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1485.2	56.9	26.1	14.1	8.3	(655.3) +	(52.9) +	(0.0) =	708.2	TOTALS

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 110

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

1	2	16	36
3	2	2	18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1485.2	61.9	24.0	15.7	11.7	(585.5) +	(52.1) +	(0.0) =	637.5	TOTALS

NO. OF ENTRIES TO SUBPT = 20
NO. OF LINKS RECALCULATED= 324

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1 2 7 27
3 2 2 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1485.2	61.2	24.3	14.9	11.7	(553.3) + (	48.8) + (	0.0) =	602.1	TOTALS

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 120

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1 2 7 27
3 2 2 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1485.2	61.2	24.3	14.9	11.7	(553.3) + (	48.8) + (	0.0) =	602.1	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 114

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1 2 5 25
3 2 2 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1485.2	61.1	24.3	14.9	11.7	(546.9) + (	50.2) + (	0.0) =	597.1	TOTALS

NO. OF ENTRIES TO SUBPT = 7
NO. OF LINKS RECALCULATED= 136

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1 2 5 25
3 2 2 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1485.2	61.1	24.3	14.9	11.7	(546.9) + (	50.2) + (	0.0) =	597.0	TOTALS

NO. OF ENTRIES TO SUBPT = 9
NO. OF LINKS RECALCULATED= 184

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	5	25								
3	2	2	18								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) UNIFORM (PCU-H/H)	DELAY RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	STOPS MEAN STOPS /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES END 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END 2ND (SECONDS)
10	329	1945	72	16.7	35.4	1.9 +	1.3	(45.9)*	110	(9.3)	6		27.5	1	12	25		
11	789	4170	81	16.7	31.3	4.8 +	2.1	(97.5)*	105	(21.4)	14		58.5	1	12	25		
12	677	3885S	32	13.2	8.1	1.3 +	0.2	(21.6)*	50	(8.8)	7	(0.0)*	116.7	1	32	5		
13	185	2010S	23	13.2	8.4	0.3 +	0.1	(6.1)*	49	(2.4)	3	(0.0)*	33.1	1	32	5		
14	32	12L	32	13.2	5.6	0.0 +	0.0	(0.7)	71	(0.6)	7		1.3	1	32	5		
15	80	13L	23	13.2	5.4	0.1 +	0.0	(1.7)	64	(1.3)	3		3.0	1	32	5		
20	1285	2207	77	16.7	6.7	0.7 +	1.7	(33.9)	45	(14.9)	13		48.9					
21	789	4000S	26	7.0	0.6	0.0 +	0.1	(1.9)	1	(0.2)	1		2.2					
22	80	21L	26	7.0	0.6	0.0 +	0.0	(0.2)	1	(0.0)	1		0.2					
23	185	21L	26	7.0	0.6	0.0 +	0.0	(0.4)	1	(0.0)	1		0.5					
30	274	1945	85	16.7	56.9	1.8 +	2.5	(61.5)*	140	(9.9)	7		36.9	3	9	18		
31	295	4170	42	16.7	26.9	1.8 +	0.4	(31.3)*	93	(7.0)	5		18.8	3	9	18		
32	925	3896S	69	12.3	8.1	1.5 +	0.6	(29.6)*	50	(12.0)	16	(0.0)*	159.9	3	25	2		
33	316	2016	25	12.3	7.0	0.5 +	0.2	(8.7)*	44	(3.6)	3	(0.0)*	47.2	3	25	2		
34	789	32L	69	12.3	2.7	0.1 +	0.5	(8.4)	15	(3.1)	16		11.5	3	25	2		
40	1568	2197	79	16.7	4.4	0.0 +	1.9	(26.9)	8	(3.0)	3		30.0					
41	112	4000S	11	7.0	0.5	0.0 +	0.0	(0.2)	1	(0.0)	0		0.2					
42	316	41L	11	7.0	0.5	0.0 +	0.0	(0.6)	1	(0.1)	0		0.7					

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1485.2	61.1	24.3	14.9	11.7	(546.9) +	(50.2) +	(0.0) =	597.1	TOTALS

ROUTE

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	79.7	+	30.6	+	44.6	=	154.8

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 130

PROGRAM TRANSYT FINISHED
========== end of file ==========

Printed at 16:24:32 on 10/09/2015]

T R A N S Y T 12

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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For sales and distribution information,
program advice and maintenance, contact:

TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770864
Nine Mile Ride Email: softwarebureau@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk
RG40 3GA,UK

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "2017 PM WITH DEV.DAT" at 15:50 on 20150710

TRANSYT 12.0

M6 Junction 1 2017 PM Peak With Development

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	= 2
NUMBER OF LINKS	= 18
NUMBER OF OPTIMISED NODES	= 2
MAXIMUM NUMBER OF GRAPHIC PLOTS	= 0
NUMBER OF STEPS IN CYCLE	= 60
MAXIMUM NUMBER OF SHARED STOPLINES	= 3
MAXIMUM NUMBER OF TIMING POINTS	= 2
MAXIMUM LINKS AT ANY NODE	= 6

CORE REQUESTED = 6891 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

(1)= TITLE:- M6 Junction 1 2017 PM Peak With Development

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME PERIOD 1-1200 MINS.	EFFECTIVE-GREEN START (SEC)	EFFECTIVE-GREEN END (SEC)	EQUISAT SETTINGS 0=NO 1=YES	0=UNEQUAL FLOW CYCLE	SCALE %	CRUISE-SPEEDS 10-200 %	CRUISE-SPEEDS 50-200 %	0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL-CLIMB 0=VALUE 1=FULL	DELAY VALUE P PER PCU-H	STOP VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260	

CARD NO.	CARD TYPE	LIST OF NODES TO BE OPTIMISED
3)=	2	1 3 0 0 0 0 0 0 0 0 0 0 0 0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET.....				SECOND SET.....					THIRD SET.....				
4)=	7	12	14	0	0	0	13	15	0	0	0	21	22	23	0	0
5)=	7	32	34	0	0	0	41	42	0	0	0	0	0	0	0	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
6)=	10	1	7	7								
7)=	10	3	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
8)=	11	1	7	7								
9)=	11	3	7	7								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
10)=	12	1	1	0	0								
11)=	12	3	1	0	0								

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY LINKS LINK1 NO.	PRIORITY LINKS LINK2 NO.	LINK1 GIVEWAY COEFFS. ONLY % FLOW	A1 X100	A2 X100				LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
12)=	30	20	21	0	0	51	100	0	0	0	0	200	0	2207	0	0
13)=	30	40	41	0	0	51	100	0	0	0	0	200	0	2197	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN START STAGE	FIRST GREEN START LAG	FIRST GREEN END STAGE	FIRST GREEN END LAG	SECOND GREEN START STAGE	SECOND GREEN START LAG	SECOND GREEN END STAGE	SECOND GREEN END LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
14)=	31	10	1	1	7	2	0	0	0	0	0	200	-9999	1945	60	0
15)=	31	11	1	1	7	2	0	0	0	0	0	200	-9999	4170	60	0
16)=	31	12	1	2	7	1	0	0	0	0	0	158	0	3885	500	0
17)=	31	13	1	2	7	1	0	0	0	0	0	158	0	2010	500	0
18)=	31	14	1	1	0	1	0	0	0	0	0	158	0	0	0	0
19)=	31	15	1	1	0	1	0	0	0	0	0	158	0	0	0	0
20)=	31	21	0	0	0	0	0	0	0	0	0	84	0	4000	0	0
21)=	31	22	0	0	0	0	0	0	0	0	0	84	0	0	0	0
22)=	31	23	0	0	0	0	0	0	0	0	0	84	0	0	0	0
23)=	31	30	3	1	7	2	0	0	0	0	0	200	-9999	1945	60	0
24)=	31	31	3	1	7	2	0	0	0	0	0	200	-9999	4170	60	0
25)=	31	32	3	2	7	1	0	0	0	0	0	147	0	3896	500	0
26)=	31	33	3	2	7	1	0	0	0	0	0	147	0	2016	500	0
27)=	31	34	3	1	0	1	0	0	0	0	0	147	0	0	0	0
28)=	31	41	0	0	0	0	0	0	0	0	0	84	0	4000	0	0
29)=	31	42	0	0	0	0	0	0	0	0	0	84	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 LINK NO.	ENTRY 1 CRUISE FLOW	ENTRY 1 CRUISE SPEED	ENTRY 2 LINK NO.	ENTRY 2 CRUISE FLOW	ENTRY 2 CRUISE SPEED	ENTRY 3 LINK NO.	ENTRY 3 CRUISE FLOW	ENTRY 3 CRUISE SPEED	ENTRY 4 LINK NO.	ENTRY 4 CRUISE FLOW	ENTRY 4 CRUISE SPEED
30)=	32	10	297	0	0	0	43	0	0	0	0	0	0	0	0	0
31)=	32	11	672	0	0	0	43	0	0	0	0	0	0	0	0	0
32)=	32	12	760	0	40	760	43	0	0	0	0	0	0	0	0	0
33)=	32	13	229	0	40	229	43	0	0	0	0	0	0	0	0	0
34)=	32	14	61	0	41	61	43	0	0	0	0	0	0	0	0	0
35)=	32	15	25	0	41	25	43	0	0	0	0	0	0	0	0	0
36)=	32	20	1035	0	0	0	43	0	0	0	0	0	0	0	0	0
37)=	32	21	672	0	11	672	43	0	0	0	0	0	0	0	0	0
38)=	32	22	25	0	15	25	43	0	0	0	0	0	0	0	0	0
39)=	32	23	229	0	13	229	43	0	0	0	0	0	0	0	0	0
40)=	32	30	142	0	0	0	43	0	0	0	0	0	0	0	0	0
41)=	32	31	181	0	0	0	43	0	0	0	0	0	0	0	0	0
42)=	32	32	691	0	20	691	43	0	0	0	0	0	0	0	0	0
43)=	32	33	315	0	20	315	43	0	0	0	0	0	0	0	0	0
44)=	32	34	672	0	21	672	43	0	0	0	0	0	0	0	0	0
45)=	32	40	1595	0	0	0	43	0	0	0	0	0	0	0	0	0
46)=	32	41	86	0	31	86	43	0	0	0	0	0	0	0	0	0
47)=	32	42	315	0	33	315	43	0	0	0	0	0	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
48)=	38	12	28	4500	13	14	4500	32	24	4500	33	12	4500	0	0	0

*****END OF SUBROUTINE TINPUT*****

60 SECOND CYCLE 60 STEPS

INITIAL SETTINGS
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	0	27								
3	2	0	15								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) UNIFORM (PCU-H/H)	RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	STOPS MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES END 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END 2ND (SECONDS)
10	297	1945	44	16.7	19.6	1.2	+ 0.4	(23.0)*	80	(6.1)	4		13.8	1	7	27		
11	672	4170	46	16.7	17.4	2.8	+ 0.4	(46.1)*	77	(13.3)	9		27.7	1	7	27		
12	759	3885S	47	13.2	13.4	2.4	+ 0.4	(40.2)*	69	(13.4)	10	(0.0)*	214.3	1	34	0		
13	230	2010S	28	13.2	13.1	0.7	+ 0.2	(11.9)*	64	(3.8)	3	(0.0)*	63.2	1	34	0		
14	61	12L	47	13.2	11.9	0.2	+ 0.0	(2.9)	97	(1.5)	10		4.4	1	34	0		
15	25	13L	28	13.2	10.4	0.1	+ 0.0	(1.0)	90	(0.6)	3		1.6	1	34	0		
20	1035	2207	60	16.7	3.0	0.1	+ 0.7	(12.3)	17	(4.5)	4		16.8					
21	672	4000S	23	7.0	0.6	0.0	+ 0.1	(1.6)	1	(0.2)	0		1.7					
22	25	21L	23	7.0	0.6	0.0	+ 0.0	(0.1)	1	(0.0)	0		0.1					
23	230	21L	23	7.0	0.6	0.0	+ 0.0	(0.5)	1	(0.1)	0		0.6					
30	142	1945	49	16.7	35.3	0.9	+ 0.5	(19.8)*	106	(3.9)	3		11.9	3	7	15		
31	181	4170	29	16.7	26.7	1.1	+ 0.2	(19.1)*	92	(4.3)	3		11.5	3	7	15		
32	691	3896S	54	12.3	6.1	0.9	+ 0.3	(16.5)*	42	(7.4)	7	(0.0)*	89.9	3	22	0		
33	315	2016	24	12.3	6.2	0.4	+ 0.2	(7.7)*	40	(3.2)	2	(0.0)*	41.5	3	22	0		
34	672	32L	54	12.3	1.7	0.0	+ 0.3	(4.6)	9	(1.5)	7		6.1	3	22	0		
40	1595	2197	80	16.7	4.5	0.0	+ 2.0	(28.2)	8	(3.2)	3		31.4					
41	86	4000S	10	7.0	0.5	0.0	+ 0.0	(0.2)	1	(0.0)	0		0.2					
42	315	41L	10	7.0	0.5	0.0	+ 0.0	(0.6)	1	(0.1)	0		0.7					

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1312.4	47.2	27.8	10.8	5.8	(497.9) +	(39.4) +	(0.0) =	537.3	TOTALS

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	70.4	+	19.1	+	30.5	=	120.0

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 24

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	0	27								
3	2	0	15								

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1312.4	47.2	27.8	10.8	5.8	(497.9) +	(39.4) +	(0.0) =	537.3	TOTALS

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 104

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	0	27								
3	2	0	15								

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1312.4	47.2	27.8	10.8	5.8	(497.9) +	(39.4) +	(0.0) =	537.3	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 86

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	9	27								
3	2	1	15								

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1312.4	50.5	26.0	11.5	8.5	(414.5) +	(33.6) +	(0.0) =	448.1	TOTALS

NO. OF ENTRIES TO SUBPT = 17
NO. OF LINKS RECALCULATED= 272

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1 2 0 18
3 2 1 15

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1312.4	50.3	26.1	11.3	8.5	(410.0) + (	33.0) + (	0.0) =	443.1	TOTALS

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 110

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1 2 0 18
3 2 1 15

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1312.4	50.3	26.1	11.3	8.5	(410.0) + (	33.0) + (	0.0) =	443.1	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 94

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1 2 1 19
3 2 1 15

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1312.4	50.3	26.1	11.3	8.5	(410.0) + (	32.6) + (	0.0) =	442.5	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 94

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1 2 1 19
3 2 1 15

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1312.4	50.3	26.1	11.3	8.5	(410.0) + (	32.6) + (	0.0) =	442.5	TOTALS

NO. OF ENTRIES TO SUBPT = 7
NO. OF LINKS RECALCULATED= 126

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	1	19								
3	2	1	15								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY UNIFORM (U+R+O=MEAN Q) (PCU-H/H)	DELAY RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	STOPS MEAN STOPS /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES END 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END 2ND (SECONDS)
10	297	1945	76	16.7	41.6	1.9 +	1.6	(48.7)*	119	(9.1)	6		29.2	1	8	19		
11	672	4170	81	16.7	33.7	4.3 +	2.0	(89.4)*	108	(18.8)	13		53.7	1	8	19		
12	759	3885S	35	13.2	7.2	1.3 +	0.3	(21.6)*	48	(9.4)	7	(0.0)*	117.3	1	26	1		
13	230	2010S	21	13.2	7.3	0.3 +	0.1	(6.6)*	45	(2.6)	2	(0.0)*	35.9	1	26	1		
14	61	12L	35	13.2	3.2	0.0 +	0.0	(0.8)	48	(0.8)	7		1.5	1	26	1		
15	25	13L	21	13.2	2.7	0.0 +	0.0	(0.3)	28	(0.2)	2		0.4	1	26	1		
20	1035	2207	60	16.7	3.3	0.2 +	0.7	(13.5)	21	(5.5)	5		19.0					
21	672	4000S	23	7.0	0.6	0.0 +	0.1	(1.6)	1	(0.2)	0		1.7					
22	25	21L	23	7.0	0.6	0.0 +	0.0	(0.1)	1	(0.0)	0		0.1					
23	230	21L	23	7.0	0.6	0.0 +	0.0	(0.5)	1	(0.1)	0		0.6					
30	142	1945	55	16.7	39.5	1.0 +	0.6	(22.1)*	113	(4.1)	3		13.3	3	8	15		
31	181	4170	33	16.7	28.4	1.2 +	0.2	(20.3)*	95	(4.4)	3		12.2	3	8	15		
32	691	3896S	52	12.3	5.5	0.8 +	0.3	(15.1)*	39	(6.9)	5	(0.0)*	82.3	3	22	1		
33	315	2016	23	12.3	5.7	0.3 +	0.2	(7.1)*	38	(3.1)	2	(0.0)*	38.5	3	22	1		
34	672	32L	52	12.3	1.5	0.0 +	0.3	(4.0)	4	(0.7)	5		4.6	3	22	1		
40	1595	2197	80	16.7	4.5	0.0 +	2.0	(28.2)	8	(3.1)	3		31.4					
41	86	4000S	10	7.0	0.5	0.0 +	0.0	(0.2)	1	(0.0)	0		0.2					
42	315	41L	10	7.0	0.5	0.0 +	0.0	(0.6)	1	(0.1)	0		0.7					

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1312.4	50.3	26.1	11.3	8.5	(410.0) +	(32.6) +	(0.0) =	442.5	TOTALS

ROUTE

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	70.4	+	22.7	+	31.4	=	124.6

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 94

PROGRAM TRANSYT FINISHED
========== end of file ==========

Printed at 16:24:47 on 10/09/2015]

2026-

Network Performance

(With and Without Development)

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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For sales and distribution information, program
advice and maintenance, contact:

TRL Limited
Crowthorne House
Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356 Nine
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\A5_Mere Lane\ S4 2026 AM Base+PD+CD.vai"
(drive-on-the-left) at 11:12:59 on Thursday, 27 August 2015

FILE PROPERTIES

RUN TITLE: S4 New A5/ Mere Lane Roundabout AM Peak 2026 + PD + CD LOCATION:
Magna Park Site Access
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB
NUMBER: 47071103
STATUS:
DESCRIPTION:

INPUT DATA

ARM A - A5 North ARM B - Mere Lane ARM C - A5 South

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.30	7.50	5.00	30.00	56.00	47.0	0.652	36.148
ARM B	3.65	8.00	29.00	25.00	56.00	49.0	0.597	31.407
ARM C	4.50	7.50	28.00	30.00	56.00	45.0	0.617	32.791

V = approach half-width E = entry width L = effective flare length R = entry radius D = inscribed circle diameter PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING FACTORS

T13 IARM

I	FLOW SCALE(%) I
A	100
B	100
C	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	FLOW STARTS I TOP OF PEAK	FLOW STOPS I BEFORE I AT TOP	AFTER I	NUMBER OF MINUTES FROM START WHEN TO RISE I IS REACHED	FALLING I PEAK	RATE OF FLOW (VEH/MIN) I OF PEAK	PEAK	I ARM
A	15.00	45.00	75.00	16.44	24.66	16.44		
ARM B	15.00	45.00	75.00	2.49	3.73	2.49		
ARM C	15.00	45.00	75.00	13.35	20.03	13.35		

DEMAND SET TITLE: AM Peak 2006 Base Flows

T33

TIME	FROM/T	ARM A	ARM B	ARM C
07.15 - 08.45				
	ARM A	0.000	0.184	0.816
		(0.0)	(10.7)	(10.2)
	ARM B	0.302	0.000	0.698
		60.0	0.0	139.0
		(35.0)	(0.0)	(10.1)
	ARM C	0.834	0.166	0.000
		891.0	177.0	0.0
		(10.3)	(2.8)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	16.50	31.43	0.525	- -	0.0	1.1	15.9	-	0.066
ARM B	2.50	19.21	0.130	- -	0.0	0.1	2.2	-	0.060
ARM C	13.40	29.49	0.454	- -	0.0	0.8	12.0	-	0.062
07.30-07.45									
ARM A	19.70	31.17	0.632	- -	1.1	1.7	24.5	-	0.087
ARM B	2.98	17.73	0.168	- -	0.1	0.2	3.0	-	0.068
ARM C	16.00	29.38	0.545	- -	0.8	1.2	17.3	-	0.075
07.45-08.00									
ARM A	24.13	30.81	0.783	- -	1.7	3.5	48.1	-	0.145
ARM B	3.65	15.75	0.232	- -	0.2	0.3	4.4	-	0.083
ARM C	19.60	29.23	0.671	- -	1.2	2.0	28.6	-	0.103
08.00-08.15									
ARM A	24.13	30.80	0.783	- -	3.5	3.5	52.6	-	0.149
ARM B	3.65	15.69	0.233	- -	0.3	0.3	4.5	-	0.083
ARM C	19.60	29.23	0.671	- -	2.0	2.0	30.1	-	0.104
08.15-08.30									
ARM A	19.70	31.16	0.632	- -	3.5	1.7	27.4	-	0.089
ARM B	2.98	17.66	0.169	- -	0.3	0.2	3.1	-	0.068
ARM C	16.00	29.38	0.545	- -	2.0	1.2	18.7	-	0.075
08.30-08.45									
ARM A	16.50	31.42	0.525	- -	1.7	1.1	17.2	-	0.067
ARM B	2.50	19.16	0.130	- -	0.2	0.2	2.3	-	0.060
ARM C	13.40	29.49	0.454	- -	1.2	0.8	12.9	-	0.062

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.1	*
07.45	1.7	**
08.00	3.5	***
08.15	3.5	****
08.30	1.7	**
08.45	1.1	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.1
07.45	0.2
08.00	0.3
08.15	0.3
08.30	0.2
08.45	0.2

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.8	*
07.45	1.2	*
08.00	2.0	**
08.15	2.0	**
08.30	1.2	*
08.45	0.8	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)	T75 I A
B	273.9	182.6	19.5	0.07	19.5	0.07	
C	1470.0	980.0	119.7	0.08	119.7	0.08	
ALL	3553.9	2369.3	324.9	0.09	324.9	0.09	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 15:54:21 on 09/09/2015]

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\A5_Mere Lane\ S4 2026 PM Base+PD+CD.vai"
(drive-on-the-left) at 11:16:39 on Thursday, 27 August 2015

FILE PROPERTIES

RUN TITLE: S4 New A5/ Mere Lane Roundabout PM Peak 2026 Plus PD + CD
LOCATION: Magna Park Site Access
DATE: 14/07/31
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - A5 North ARM B - Mere Lane ARM C - A5 South

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.30	7.50	5.00	30.00	56.00	47.0	0.652	36.148
ARM B	3.65	8.00	29.00	25.00	56.00	49.0	0.597	31.407
ARM C	4.50	7.50	28.00	30.00	56.00	45.0	0.617	32.791

V = approach half-width E = entry width L = effective flare length R = entry radius D = inscribed circle diameter PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING FACTORS

IARM	FLOW SCALE(%)
A	
B	100
C	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
A	15.00	45.00	75.00	10.95	16.42	10.95
ARM B	15.00	45.00	75.00	4.22	6.34	4.22
ARM C	15.00	45.00	75.00	13.80	20.70	13.80

SET TITLE: AM Peak 2006 Base Flows

T33

TIME	FROM/T	ARM A	ARM B	ARM C
16.45 - 18.15				
ARM A	0.000	0.064	0.936	
		0.0	56.0	820.0
		(0.0)	(30.4)	(9.5)
ARM B		0.509	0.000	0.491
		172.0	0.0	166.0
		(6.4)	(0.0)	(3.0)
ARM C		0.902	0.098	0.000
		996.0	108.0	0.0
		(8.0)	(4.6)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	10.99	31.78	0.346	- -	0.0	0.5	7.7	-	0.048
ARM B	4.24	23.59	0.180	- -	0.0	0.2	3.2	-	0.052
ARM C	13.85	29.14	0.475	- -	0.0	0.9	13.1	-	0.065
17.00-17.15									
ARM A	13.13	31.62	0.415	- -	0.5	0.7	10.4	-	0.054
ARM B	5.06	22.33	0.227	- -	0.2	0.3	4.3	-	0.058
ARM C	16.54	28.89	0.573	- -	0.9	1.3	19.3	-	0.081
17.15-17.30									
ARM A	16.07	31.40	0.512	- -	0.7	1.0	15.2	-	0.065
ARM B	6.20	20.61	0.301	- -	0.3	0.4	6.3	-	0.069
ARM C	20.26	28.53	0.710	- -	1.3	2.4	33.9	-	0.119
17.30-17.45									
ARM A	16.07	31.40	0.512	- -	1.0	1.0	15.6	-	0.065
ARM B	6.20	20.60	0.301	- -	0.4	0.4	6.4	-	0.069
ARM C	20.26	28.53	0.710	- -	2.4	2.4	36.1	-	0.121
17.45-18.00									
ARM A	13.13	31.61	0.415	- -	1.0	0.7	10.9	-	0.054
ARM B	5.06	22.31	0.227	- -	0.4	0.3	4.5	-	0.058
ARM C	16.54	28.88	0.573	- -	2.4	1.4	21.1	-	0.082
18.00-18.15									
ARM A	10.99	31.78	0.346	- -	0.7	0.5	8.1	-	0.048
ARM B	4.24	23.56	0.180	- -	0.3	0.2	3.4	-	0.052
ARM C	13.85	29.14	0.475	- -	1.4	0.9	14.1	-	0.066

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.5	*
17.15	0.7	*
17.30	1.0	*
17.45	1.0	*
18.00	0.7	*
18.15	0.5	*

---------- QUEUE

AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.2	
17.15	0.3	
17.30	0.4	
17.45	0.4	
18.00	0.3	
18.15	0.2	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.9	*
17.15	1.3	*
17.30	2.4	**
17.45	2.4	**
18.00	1.4	*
18.15	0.9	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)	T75
A	1205.7	803.8	68.0	0.06	68.0	0.06	
B	465.2	310.2	28.1	0.06	28.1	0.06	
C	1519.6	1013.0	137.4	0.09	137.5	0.09	
ALL	3190.6	2127.0	233.6	0.07	233.6	0.07	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 15:54:52 on 09/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\New A5 North Rbt\S4\ S3 2026 AM Peak Base+PD.vai"
(drive-on-the-left) at 18:06:44 on Tuesday, 1 September 2015

FILE PROPERTIES

RUN TITLE: New A5 North Access- S4 2026 AM Base + PD + CD
LOCATION: New A5 North Roundabout
DATE: 09/01/15
CLIENT: IDI Gazeley
ENUMERATOR: JM
JOB NUMBER: 47071103
STATUS: Final Version
DESCRIPTION:

INPUT DATA

ARM A - A5 North
ARM B - Proposed Access
ARM C - A5 South

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	6.50	8.00	9.00	5.00	60.00	42.0	0.532	30.653
ARM B	3.75	8.00	6.00	8.00	60.00	38.0	0.474	22.929
ARM C	6.50	8.00	5.00	9.00	60.00	40.0	0.583	33.224

V = approach half-width E = entry width L = effective flare length R = entry radius D = inscribed circle diameter PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING

FACTORS

I	FLOW SCALE(%)
A	100
B	100
C	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: New A5 North Access- S3 2026 Base Plus Proposed Development

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK	FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE	AT TOP	AFTER
	TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK
A	15.00	45.00	75.00	14.94	22.41	14.94
ARM B	15.00	45.00	75.00	1.31	1.97	1.31
ARM C	15.00	45.00	75.00	10.57	15.86	10.57

DEMAND SET TITLE: New A5 North Access- S3 2026 Base Plus Proposed Development

T33

TIME	FROM/T	ARM A	ARM B	ARM C
07.15 - 08.45				
	ARM A	0.000	0.062	0.938
		(0.0)	(8.1)	(8.7)
	ARM B	0.162	0.000	0.838
		17.0	0.0	88.0
		(29.4)	(0.0)	(35.2)
	ARM C	0.725	0.275	0.000
		613.0	233.0	0.0
		(13.5)	(9.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	14.99	26.65	0.563	- -	-	0.0	1.3	18.3	-	0.085
ARM B	1.32	11.71	0.113	- -	-	0.0	0.1	1.8	-	0.096
ARM C	10.62	29.45	0.360	- -	-	0.0	0.6	8.2	-	0.053
07.30-07.45									
ARM A	17.90	26.35	0.680	- -	-	1.3	2.1	29.6	-	0.117
ARM B	1.57	10.65	0.148	- -	-	0.1	0.2	2.5	-	0.110
ARM C	12.68	29.42	0.431	- -	-	0.6	0.8	11.1	-	0.060
07.45-08.00									
ARM A	21.93	25.93	0.846	- -	-	2.1	5.0	66.3	-	0.229
ARM B	1.93	9.25	0.208	- -	-	0.2	0.3	3.8	-	0.136
ARM C	15.52	29.39	0.528	- -	-	0.8	1.1	16.2	-	0.072
08.00-08.15									
ARM A	21.93	25.93	0.846	- -	-	5.0	5.2	76.9	-	0.247
ARM B	1.93	9.18	0.210	- -	-	0.3	0.3	3.9	-	0.138
ARM C	15.52	29.39	0.528	- -	-	1.1	1.1	16.7	-	0.072
08.15-08.30									
ARM A	17.90	26.34	0.680	- -	-	5.2	2.2	35.1	-	0.124
ARM B	1.57	10.55	0.149	- -	-	0.3	0.2	2.7	-	0.112
ARM C	12.68	29.42	0.431	- -	-	1.1	0.8	11.7	-	0.060
08.30-08.45									
ARM A	14.99	26.65	0.563	- -	-	2.2	1.3	20.3	-	0.087
ARM B	1.32	11.66	0.113	- -	-	0.2	0.1	2.0	-	0.097
ARM C	10.62	29.45	0.360	- -	-	0.8	0.6	8.6	-	0.053

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.3	*
07.45	2.1	**
08.00	5.0	*****
08.15	5.2	*****
08.30	2.2	**
08.45	1.3	*

---------- QUEUE

AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.1
07.45	0.2
08.00	0.3
08.15	0.3
08.30	0.2
08.45	0.1

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.6	*
07.45	0.8	*
08.00	1.1	*
08.15	1.1	*
08.30	0.8	*
08.45	0.6	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	1644.8	1096.6	246.4	0.15	246.5	0.15
B	144.5	96.3	16.8	0.12	16.8	0.12
C	1164.5	776.3	72.5	0.06	72.5	0.06
ALL	2953.8	1969.2	335.7	0.11	335.7	0.11

T75

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OF JOB

========== end of file ==========

Printed at 17:12:08 on 09/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\New A5 North Rbt\S4\ S3 2026 PM Peak Base+PD.vai"
(drive-on-the-left) at 18:07:54 on Tuesday, 1 September 2015

FILE PROPERTIES

RUN TITLE: New A5 North Access- S4 2026 PM Base + PD + CD
LOCATION: New A5 North Roundabout
DATE: 01/09/15
CLIENT: IDI Gazeley
ENUMERATOR: JM
JOB NUMBER: 47071103
STATUS: Final Version
DESCRIPTION:

INPUT DATA

ARM A - A5 North
ARM B - Proposed Access
ARM C - A5 South

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	6.50	8.00	9.00	5.00	60.00	42.0	0.532	30.653
ARM B	3.75	8.00	6.00	8.00	60.00	38.0	0.474	22.929
ARM C	6.50	8.00	5.00	9.00	60.00	40.0	0.583	33.224

V = approach half-width E = entry width L = effective flare length R = entry radius D = inscribed circle diameter PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING

FACTORS

I	FLOW SCALE(%)
A	100
B	100
C	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: New A5 North Access- S3 2026 Base Plus Proposed Development

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK	FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE	AT TOP	AFTER
	TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK
A	15.00	45.00	75.00	7.15	10.73	7.15
ARM B	15.00	45.00	75.00	3.04	4.56	3.04
ARM C	15.00	45.00	75.00	13.09	19.63	13.09

DEMAND SET TITLE: New A5 North Access- S3 2026 Base Plus Proposed Development

T33

TIME	FROM/T	ARM A	ARM B	ARM C
16.45 - 18.15				
ARM A		0.000	0.040	0.960
		0.0	23.0	549.0
		(0.0)	(21.7)	(10.7)
ARM B		0.160	0.000	0.840
		39.0	0.0	204.0
		(10.3)	(0.0)	(11.3)
ARM C		0.929	0.071	0.000
		973.0	74.0	0.0
		(6.9)	(20.3)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME		DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00										
	ARM A	7.18	27.05	0.265	- -	-	0.0	0.4	5.3	-	0.050
	ARM B	3.05	17.39	0.175	- -	-	0.0	0.2	3.1	-	0.070
	ARM C	13.14	30.52	0.431	- -	-	0.0	0.8	11.0	-	0.057
17.00-17.15										
	ARM A	8.57	26.94	0.318	- -	-	0.4	0.5	6.9	-	0.054
	ARM B	3.64	16.75	0.217	- -	-	0.2	0.3	4.1	-	0.076
	ARM C	15.69	30.46	0.515	- -	-	0.8	1.1	15.4	-	0.068
17.15-17.30										
	ARM A	10.50	26.80	0.392	- -	-	0.5	0.6	9.4	-	0.061
	ARM B	4.46	15.88	0.281	- -	-	0.3	0.4	5.7	-	0.087
	ARM C	19.21	30.38	0.632	- -	-	1.1	1.7	24.5	-	0.089
17.30-17.45										
	ARM A	10.50	26.80	0.392	- -	-	0.6	0.6	9.6	-	0.061
	ARM B	4.46	15.87	0.281	- -	-	0.4	0.4	5.8	-	0.088
	ARM C	19.21	30.38	0.632	- -	-	1.7	1.7	25.5	-	0.089
17.45-18.00										
	ARM A	8.57	26.94	0.318	- -	-	0.6	0.5	7.2	-	0.054
	ARM B	3.64	16.74	0.218	- -	-	0.4	0.3	4.3	-	0.076
	ARM C	15.69	30.46	0.515	- -	-	1.7	1.1	16.5	-	0.068
18.00-18.15										
	ARM A	7.18	27.04	0.265	- -	-	0.5	0.4	5.5	-	0.050
	ARM B	3.05	17.37	0.176	- -	-	0.3	0.2	3.3	-	0.070
	ARM C	13.14	30.51	0.431	- -	-	1.1	0.8	11.7	-	0.058

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	
17.30	0.6	*
17.45	0.6	*
18.00	0.5	
18.15	0.4	

---------- QUEUE

AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.2
17.15	0.3
17.30	0.4
17.45	0.4
18.00	0.3
18.15	0.2

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.8	*
17.15	1.1	*
17.30	1.7	**
17.45	1.7	**
18.00	1.1	*
18.15	0.8	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)	T75
A	787.3	524.9	43.9	0.06	43.9	0.06	
B	334.5	223.0	26.2	0.08	26.2	0.08	
C	1441.1	960.7	104.6	0.07	104.6	0.07	
ALL	2562.9	1708.6	174.7	0.07	174.7	0.07	

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* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 17:12:43 on 09/09/2015]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS PICADY 5.1

ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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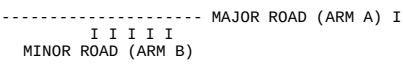
Run with file:- "C:\Users\james_mcinnerny\Desktop\S2 2026 AM Base+CD.vpi" (drive-on-the-left) at 11:06:07 on Friday, 28 August 2015

RUN INFORMATION

RUN TITLE	: S2 A5/ Mere Lane 2026 AM Peak Base + CD LOCATION :
DATE	: 07/08/14
CLIENT	:
ENUMERATOR	: jon_ashcroft [UK1005963L] JOB NUMBER
	:
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A5 North ARM B IS Mere Lane ARM C IS A5 South

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C ETC.

GEOMETRIC DATA

	MINOR ROAD B	DATA ITEM TOTAL
MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.10 M.	
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.	
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.80 M.	
- VISIBILITY	(VC-B)200.00 M.	
- BLOCKS TRAFFIC (SPACES)	NO (0)	
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 250.0 M.	
- VISIBILITY TO RIGHT	(VB-A) 150.0 M.	
- LANE 1 WIDTH	(WB-C) -	
- LANE 2 WIDTH	(WB-A) -	
WIDTH AT 0 M FROM JUNCTION	10.00 M.	
WIDTH AT 5 M FROM JUNCTION	8.40 M.	
WIDTH AT 10 M FROM JUNCTION	4.50 M.	
WIDTH AT 15 M FROM JUNCTION	2.80 M.	
WIDTH AT 20 M FROM JUNCTION	2.80 M.	
- LENGTH OF FLARED SECTION	2 VEHS	

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	I STREAM
0.00	0.00		0.00

* Due to the presence of a flare, data is not available

Intercept For B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	I STREAM
0.00	0.00	0.00	0.00	0.00	

* Due to the presence of a flare, data is not available

Intercept For C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	I STREAM
0.27	0.27		734.83

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

FLOW SCALE(%)	ARM A
	100
B	100
C	100

Demand set: A5/ Mere Lane 2014 AM Base

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN. LENGTH
OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

NUMBER OF MINUTES FROM START WHEN STARTS TOP OF PEAK	FLOW STOPS BEFORE AT TOP	RATE OF FLOW (VEH/MIN) AFTER	ARM	FLOW TO RISE
IS REACHED FALLING	PEAK OF PEAK	PEAK		
			ARM A	
15.00	45.00	75.00	13.93	20.89	13.93	
ARM B 15.00	45.00	75.00	1.25	1.88	1.25	
ARM C 15.00	45.00	75.00	8.93	13.39	8.93	

Demand set: A5/ Mere Lane 2014 AM Base

TIME	TURNING PROPORTIONS / TURNING COUNTS / (PERCENTAGE OF H.V.S) FROM/TO	ARM A	ARM B	ARM C	07.30 ARM A
- 09.00		0.000	0.007	0.993	
	ARM B	0.080	0.000	0.920	
		0.0	8.0	1106.0	
		(0.0)	(0.0)	(8.4)	
	ARM C	0.958	0.042	0.000	
		684.0	30.0	0.0	
		(11.8)	(3.3)	(0.0)	

PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT FOR COMBINED DEMAND SETS

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-C	1.15	8.40	0.137		0.00	0.16	2.3		0.14
B-A	0.10	4.05	0.025		0.00	0.02	0.4		0.25
C-A	8.58								
C-B	0.38	7.88	0.048		0.00	0.05	0.7		0.13
A-B	0.10								
A-C	13.88								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	1.38	7.55	0.182		0.16	0.22	3.2		0.16
B-A	0.12	3.00	0.040		0.02	0.04	0.6		0.35
C-A	10.25								
C-B	0.45	7.11	0.063		0.05	0.07	1.0		0.15
A-B	0.12								
A-C	16.57								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	1.69	6.34	0.266		0.22	0.36	5.1		0.21
B-A	0.15	1.56	0.094		0.04	0.10	1.4		0.70
C-A	12.55								
C-B	0.55	6.04	0.091		0.07	0.10	1.4		0.18
A-B	0.15								
A-C	20.30								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	1.69	6.33	0.267		0.36	0.36	5.4		0.22
B-A	0.15	1.56	0.094		0.10	0.10	1.5		0.71
C-A	12.55								
C-B	0.55	6.04	0.091		0.10	0.10	1.5		0.18
A-B	0.15								
A-C	20.30								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	1.38	7.55	0.183		0.36	0.23	3.5		0.16
B-A	0.12	3.00	0.040		0.10	0.04	0.7		0.35
C-A	10.25								
C-B	0.45	7.11	0.063		0.10	0.07	1.1		0.15
A-B	0.12								
A-C	16.57								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	1.15	8.40	0.137		0.23	0.16	2.5		0.14
B-A	0.10	4.05	0.025		0.04	0.03	0.4		0.25
C-A	8.58								
C-B	0.38	7.88	0.048		0.07	0.05	0.8		0.13
A-B	0.10								
A-C	13.88								

QUEUE FOR STREAM B-C

SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.2
08.00	0.2
08.15	0.4
08.30	0.4
08.45	0.2
09.00	0.2

QUEUE FOR STREAM B-A

SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.1
08.30	0.1
08.45	0.0
09.00	0.0

QUEUE FOR STREAM C-B

SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	TIME
07.45	0.0	
08.00	0.1	
08.15	0.1	
08.30	0.1	
08.45	0.1	
09.00	0.1	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

	TOTAL DEMAND (MIN)	* QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN)	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	STREAM * (MIN/VEH)
B-C	126.6	84.4	22.0	0.17	22.0	0.17		
B-A	11.0	7.3	4.9	0.44	4.9	0.44		
C-A	941.5	627.7						
C-B	41.3	27.5	6.5	0.16	6.5	0.16		
A-B	11.0	7.3						
A-C	1522.3	1014.9						
	2653.8	1769.2	33.3	0.01	33.3	0.01		ALL

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 17:50:14 on 10/09/2015]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS PICADY 5.1

ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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Run with file:- "C:\Users\james_mcinnerny\Desktop\S2 2026 PM Base+CD.vpi" (drive-on-the-left) at 11:10:44 on Friday, 28 August 2015

RUN INFORMATION
****

RUN TITLE : S2 A5/ Mere Lane 2026 PM Peak Base + CD LOCATION
:
DATE : 07/08/14
CLIENT :
ENUMERATOR : jon_ashcroft [UK1005963L] JOB
NUMBER :
STATUS :
DESCRIPTION :

MAJOR/MINOR JUNCTION CAPACITY AND DELAY
****

INPUT DATA

MAJOR ROAD (ARM C) ---------- MAJOR ROAD (ARM A) I
I I I I
MINOR ROAD (ARM B)

ARM A IS A5 North ARM B IS
Mere Lane ARM C IS A5 South

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C ETC.

```
GEOMETRIC DATA
--------------
------------------------------------------------------------------------------- I DATA ITEM
                I                                                MINOR ROAD B        I
------------------------------------------------------------------------------- I  TOTAL
MAJOR ROAD CARRIAGEWAY WIDTH                                    I ( W  )  7.10 M.   I
I  CENTRAL RESERVE WIDTH                                        I (WCR )  0.00 M.   I
I                                                               I                   I
I  MAJOR ROAD RIGHT  TURN - WIDTH                               I (WC-B)  2.80 M.   I
I                         - VISIBILITY                          I (VC-B)200.00 M.   I
I                         - BLOCKS TRAFFIC (SPACES)             I          NO  ( 0) I
I                                                               I                   I
I  MINOR ROAD - VISIBILITY TO LEFT                              I (VB-C) 250.0 M.   I
I             - VISIBILITY TO RIGHT                             I (VB-A) 150.0 M.   I
I             - LANE 1 WIDTH                                    I (WB-C)    -       I
I             - LANE 2 WIDTH                                    I (WB-A)    -       I
I          WIDTH AT  0 M FROM JUNCTION                          I       10.00 M.    I
I          WIDTH AT  5 M FROM JUNCTION                          I        8.40 M.    I
I          WIDTH AT 10 M FROM JUNCTION                          I        4.50 M.    I
I          WIDTH AT 15 M FROM JUNCTION                          I        2.80 M.    I
I          WIDTH AT 20 M FROM JUNCTION                          I        2.80 M.    I
I             - LENGTH OF FLARED SECTION                        I            2 VEHS I
-------------------------------------------------------------------------------------
```

```
.SLOPES AND INTERCEPT
 --------------------
 (NB:Streams may be combined, in which case capacity will be adjusted)

--------------------------------------------------------
I Intercept For Slope For Opposing   Slope For Opposing I I STREAM
B-C              STREAM  A-C         STREAM A-B         I
------------------------------------------------------- I  0.00
        0.00            0.00                I
--------------------------------------------------------

* Due to the presence of a flare, data is not available

-------------------------------------------------------------------------------------------------
I Intercept For Slope For Opposing   Slope For Opposing   Slope For Opposing   Slope For OpposingI I STREAM
B-A              STREAM  A-C         STREAM A-B           STREAM  C-A          STREAM  C-B       I
------------------------------------------------------------------------------------------------- I
        0.00            0.00                0.00                  0.00                0.00       I
-------------------------------------------------------------------------------------------------

* Due to the presence of a flare, data is not available

--------------------------------------------------------
I Intercept For Slope For Opposing   Slope For Opposing I I STREAM
C-B              STREAM  A-C         STREAM A-B         I
------------------------------------------------------- I  734.83
      0.27              0.27                I
--------------------------------------------------------
 (NB These values do not allow for any site specific corrections)


TRAFFIC DEMAND DATA
-------------------
---------------------- I ARM I
FLOW SCALE(%) I
---------------------- I A  I
      100    I
I B   I      100      I
I C   I      100      I
-----------------------


Demand set:        A5/ Mere Lane 2014 AM Base


TIME PERIOD BEGINS 16.45 AND ENDS  18.15

LENGTH OF TIME PERIOD  -   90 MIN. LENGTH
OF TIME SEGMENT -          15 MIN.


DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

------------------------------------------------------------------------------- I          I
NUMBER OF MINUTES FROM START WHEN     I    RATE OF FLOW (VEH/MIN)         I I  ARM    I FLOW
STARTS I TOP OF PEAK I FLOW STOPS I BEFORE I AT TOP  I AFTER       I I        I   TO RISE   I
IS REACHED I FALLING    I  PEAK  I OF PEAK I PEAK        I I        I              I    I
                        I        I         I       I
------------------------------------------------------------------------------- I ARM  A I
               15.00   I     45.00   I    75.00   I  8.06  I  12.09  I  8.06       I
I ARM  B I     15.00   I     45.00   I    75.00   I  0.60  I   0.90  I  0.60       I
I ARM  C I     15.00   I     45.00   I    75.00   I 13.29  I  19.93  I 13.29       I
-------------------------------------------------------------------------------------


Demand set:        A5/ Mere Lane 2014 AM Base
------------------------------------------------------- II
                     TURNING PROPORTIONS                 I
I                    I        TURNING COUNTS             I
I                    I       (PERCENTAGE OF H.V.S)       I
I                    ------------------------------------ I
         TIME        I FROM/TO I ARM  A I ARM  B I ARM  C I
------------------------------------------------------- I    16.45
- 18.15    I         I        I        I        I I       I  ARM   A
I  0.000 I  0.011 I  0.989 I
I                    I         I    0.0 I    7.0 I  638.0 I
I                    I         I (  0.0)I (  0.0)I (  9.9)I
I                    I         I        I        I        I
I                    I ARM  B  I  0.188 I  0.000 I  0.813 I
I                    I         I    9.0 I    0.0 I   39.0 I
I                    I         I (  0.0)I (  0.0)I (  2.6)I
I                    I         I        I        I        I
I                    I ARM  C  I  0.942 I  0.058 I  0.000 I
I                    I         I 1001.0 I   62.0 I    0.0 I
I                    I         I (  6.8)I (  3.2)I (  0.0)I
I                    I         I        I        I        I
------------------------------------------------------- TURNING
PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS


                   QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT
              ------------------------------------------------------- FOR
               COMBINED DEMAND SETS
```

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.49	10.14	0.048		0.00	0.05	0.7		0.10
B-A	0.11	5.55	0.020		0.00	0.02	0.3		0.18
C-A	12.56								
C-B	0.78	9.53	0.082		0.00	0.09	1.3		0.11
A-B	0.09								
A-C	8.01								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.58	9.63	0.061		0.05	0.06	0.9		0.11
B-A	0.13	4.54	0.030		0.02	0.03	0.4		0.23
C-A	15.00								
C-B	0.93	9.08	0.102		0.09	0.11	1.7		0.12
A-B	0.10								
A-C	9.56								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.72	8.92	0.080		0.06	0.09	1.3		0.12
B-A	0.17	3.14	0.053		0.03	0.05	0.8		0.34
C-A	18.37								
C-B	1.14	8.45	0.135		0.11	0.15	2.3		0.14
A-B	0.13								
A-C	11.71								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.72	8.92	0.080		0.09	0.09	1.3		0.12
B-A	0.17	3.14	0.053		0.05	0.05	0.8		0.34
C-A	18.37								
C-B	1.14	8.45	0.135		0.15	0.15	2.3		0.14
A-B	0.13								
A-C	11.71								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.58	9.63	0.061		0.09	0.07	1.0		0.11
B-A	0.13	4.53	0.030		0.05	0.03	0.5		0.23
C-A	15.00								
C-B	0.93	9.08	0.102		0.15	0.11	1.8		0.12
A-B	0.10								
A-C	9.56								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.49	10.14	0.048		0.07	0.05	0.8		0.10
B-A	0.11	5.55	0.020		0.03	0.02	0.3		0.18
C-A	12.56								
C-B	0.78	9.53	0.082		0.11	0.09	1.4		0.11
A-B	0.09								
A-C	8.01								

QUEUE FOR STREAM B-C

SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1
18.15	0.1

QUEUE FOR STREAM B-A

SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.1
17.45	0.1
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-B

SEGMENT ENDING	TIME NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.2
17.45	0.2
18.00	0.1
18.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

TOTAL DEMAND	* QUEUEING * DELAY *	* INCLUSIVE QUEUEING * DELAY *			STREAM *
(MIN)	(MIN/VEH)	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
B-C	53.7	35.8	6.0	0.11	6.0	0.11	0.11
B-A	12.4	8.3	3.1	0.25	3.1	0.25	0.25
C-A	1377.8	918.5					
C-B	85.3	56.9	10.6	0.12	10.6	0.12	0.12
A-B	9.6	6.4					
A-C	878.2	585.4					
	2417.0	1611.3	19.8	0.01	19.8	0.01	ALL

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

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ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\A5_Mere Lane\ S4 2026 AM Base+PD+CD.vai"
(drive-on-the-left) at 11:12:59 on Thursday, 27 August 2015

FILE PROPERTIES

RUN TITLE: S4 New A5/ Mere Lane Roundabout AM Peak 2026 + PD + CD LOCATION:
Magna Park Site Access
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB NUMBER:
47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - A5 North ARM B - Mere Lane ARM C - A5 South

GEOMETRIC DATA

T5 ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.30	7.50	5.00	30.00	56.00	47.0	0.652	36.148
ARM B	3.65	8.00	29.00	25.00	56.00	49.0	0.597	31.407
ARM C	4.50	7.50	28.00	30.00	56.00	45.0	0.617	32.791

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING FACTORS

T13 IARM	FLOW SCALE(%)
A	100
B	100
C	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45) LENGTH OF TIME

PERIOD -(90) MINUTES LENGTH OF TIME SEGMENT - (15)

MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15	ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK	FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE	AT TOP	AFTER	TO RISE IS REACHED	FALLING	PEAK	OF PEAK	PEAK
ARM A		15.00	45.00	75.00	16.44	24.66	16.44					
ARM B		15.00	45.00	75.00	2.49	3.73	2.49					
ARM C		15.00	45.00	75.00	13.35	20.03	13.35					

DEMAND SET TITLE:

AM Peak 2006 Base Flows

T33

TIME	FROM/T	ARM A	ARM B	ARM C
07.15 - 08.45				
	ARM A	0.000	0.184	0.816
		(0.0)%	(10.7)%	(10.2)%
	ARM B	0.302	0.000	0.698
		60.0	0.0	139.0
		(35.0)%	(0.0)%	(10.1)%
	ARM C	0.834	0.166	0.000
		891.0	177.0	0.0
		(10.3)%	(2.8)%	(0.0)%

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	16.50	31.43	0.525	- -	0.0	1.1	15.9	-	0.066
ARM B	2.50	19.21	0.130	- -	0.0	0.1	2.2	-	0.060
ARM C	13.40	29.49	0.454	- -	0.0	0.8	12.0	-	0.062
07.30-07.45									
ARM A	19.70	31.17	0.632	- -	1.1	1.7	24.5	-	0.087
ARM B	2.98	17.73	0.168	- -	0.1	0.2	3.0	-	0.068
ARM C	16.00	29.38	0.545	- -	0.8	1.2	17.3	-	0.075
07.45-08.00									
ARM A	24.13	30.81	0.783	- -	1.7	3.5	48.1	-	0.145
ARM B	3.65	15.75	0.232	- -	0.2	0.3	4.4	-	0.083
ARM C	19.60	29.23	0.671	- -	1.2	2.0	28.6	-	0.103
08.00-08.15									
ARM A	24.13	30.80	0.783	- -	3.5	3.5	52.6	-	0.149
ARM B	3.65	15.69	0.233	- -	0.3	0.3	4.5	-	0.083
ARM C	19.60	29.23	0.671	- -	2.0	2.0	30.1	-	0.104
08.15-08.30									
ARM A	19.70	31.16	0.632	- -	3.5	1.7	27.4	-	0.089
ARM B	2.98	17.66	0.169	- -	0.3	0.2	3.1	-	0.068
ARM C	16.00	29.38	0.545	- -	2.0	1.2	18.7	-	0.075
08.30-08.45									
ARM A	16.50	31.42	0.525	- -	1.7	1.1	17.2	-	0.067
ARM B	2.50	19.16	0.130	- -	0.2	0.2	2.3	-	0.060
ARM C	13.40	29.49	0.454	- -	1.2	0.8	12.9	-	0.062

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.1	*
07.45	1.7	**
08.00	3.5	***
08.15	3.5	****
08.30	1.7	**
08.45	1.1	*

---------- QUEUE

AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.1
07.45	0.2
08.00	0.3
08.15	0.3
08.30	0.2
08.45	0.2

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.8	*
07.45	1.2	*
08.00	2.0	**
08.15	2.0	**
08.30	1.2	*
08.45	0.8	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)	T75
A	1810.0	1206.7	185.8	0.10	185.8	0.10	
B	273.9	182.6	19.5	0.07	19.5	0.07	
C	1470.0	980.0	119.7	0.08	119.7	0.08	
ALL	3553.9	2369.3	324.9	0.09	324.9	0.09	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 15:54:21 on 09/09/2015]

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\A5_Mere Lane\ S4 2026 PM Base+PD+CD.vai"
(drive-on-the-left) at 11:16:39 on Thursday, 27 August 2015

FILE PROPERTIES

RUN TITLE: S4 New A5/ Mere Lane Roundabout PM Peak 2026 Plus PD + CD
LOCATION: Magna Park Site Access
DATE: 14/07/31
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - A5 North ARM B - Mere Lane ARM C - A5 South

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.30	7.50	5.00	30.00	56.00	47.0	0.652	36.148
ARM B	3.65	8.00	29.00	25.00	56.00	49.0	0.597	31.407
ARM C	4.50	7.50	28.00	30.00	56.00	45.0	0.617	32.791

V = approach half-width E = entry width L = effective flare length R = entry radius D = inscribed circle diameter PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING FACTORS

IARM	FLOW SCALE(%)
A	
B	100
C	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
A	15.00	45.00	75.00	10.95	16.42	10.95
ARM B	15.00	45.00	75.00	4.22	6.34	4.22
ARM C	15.00	45.00	75.00	13.80	20.70	13.80

SET TITLE: AM Peak 2006 Base Flows

T33

TIME	FROM/T	ARM A	ARM B	ARM C
16.45 - 18.15				
ARM A	0.000	0.064	0.936	
		0.0	56.0	820.0
		(0.0)	(30.4)	(9.5)
ARM B		0.509	0.000	0.491
		172.0	0.0	166.0
		(6.4)	(0.0)	(3.0)
ARM C		0.902	0.098	0.000
		996.0	108.0	0.0
		(8.0)	(4.6)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	10.99	31.78	0.346	- -	0.0	0.5	7.7	-	0.048
ARM B	4.24	23.59	0.180	- -	0.0	0.2	3.2	-	0.052
ARM C	13.85	29.14	0.475	- -	0.0	0.9	13.1	-	0.065
17.00-17.15									
ARM A	13.13	31.62	0.415	- -	0.5	0.7	10.4	-	0.054
ARM B	5.06	22.33	0.227	- -	0.2	0.3	4.3	-	0.058
ARM C	16.54	28.89	0.573	- -	0.9	1.3	19.3	-	0.081
17.15-17.30									
ARM A	16.07	31.40	0.512	- -	0.7	1.0	15.2	-	0.065
ARM B	6.20	20.61	0.301	- -	0.3	0.4	6.3	-	0.069
ARM C	20.26	28.53	0.710	- -	1.3	2.4	33.9	-	0.119
17.30-17.45									
ARM A	16.07	31.40	0.512	- -	1.0	1.0	15.6	-	0.065
ARM B	6.20	20.60	0.301	- -	0.4	0.4	6.4	-	0.069
ARM C	20.26	28.53	0.710	- -	2.4	2.4	36.1	-	0.121
17.45-18.00									
ARM A	13.13	31.61	0.415	- -	1.0	0.7	10.9	-	0.054
ARM B	5.06	22.31	0.227	- -	0.4	0.3	4.5	-	0.058
ARM C	16.54	28.88	0.573	- -	2.4	1.4	21.1	-	0.082
18.00-18.15									
ARM A	10.99	31.78	0.346	- -	0.7	0.5	8.1	-	0.048
ARM B	4.24	23.56	0.180	- -	0.3	0.2	3.4	-	0.052
ARM C	13.85	29.14	0.475	- -	1.4	0.9	14.1	-	0.066

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.5	*
17.15	0.7	*
17.30	1.0	*
17.45	1.0	*
18.00	0.7	*
18.15	0.5	*

---------- QUEUE

AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.2	
17.15	0.3	
17.30	0.4	
17.45	0.4	
18.00	0.3	
18.15	0.2	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.9	*
17.15	1.3	*
17.30	2.4	**
17.45	2.4	**
18.00	1.4	*
18.15	0.9	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)	T75
A	1205.7	803.8	68.0	0.06	68.0	0.06	
B	465.2	310.2	28.1	0.06	28.1	0.06	
C	1519.6	1013.0	137.4	0.09	137.5	0.09	
ALL	3190.6	2127.0	233.6	0.07	233.6	0.07	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 15:54:52 on 09/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\A4303_Hunter Bld\ S2 2026 AM Base+CD.vai"
(drive-on-the-left) at 14:52:27 on Tuesday, 1 September 2015

FILE PROPERTIES

RUN TITLE: S2 Magna Park Access Roundabout AM Peak 2026 Base + CD
LOCATION: Magna Park Site Access
DATE: 14/07/31
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB
NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - Hunter Bld ARM
B - A4303 East
ARM C - Site Access ARM D
- A4303 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.20	10.70	31.00	19.00	67.00	57.0	0.654	44.594
ARM B	7.30	10.20	32.00	100.00	67.00	54.0	0.681	46.088
ARM C	7.30	8.50	10.00	25.00	67.00	62.0	0.579	37.067
ARM D	7.60	10.00	11.00	42.00	67.00	60.0	0.632	41.945

V = approach half-width E = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range. Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range. Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING

FACTORS

FLOW SCALE(%)	IARM A
B	100
C	100
D	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK	FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE	AT TOP	AFTER
	TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK
A	15.00	45.00	75.00	3.72	5.59	3.72
ARM B	15.00	45.00	75.00	16.98	25.46	16.98
ARM C	15.00	45.00	75.00	0.56	0.84	0.56
ARM D	15.00	45.00	75.00	14.84	22.26	14.84

DEMAND

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.15 - 08.45	ARM A	0.000	0.362	0.000	0.638
		0.0	108.0	0.0	190.0
		(0.0)%	(54.6)%	(0.0)%	(43.2)%
	ARM B	0.346	0.033	0.077	0.544
		470.0	45.0	104.0	739.0
		(15.1)%	(35.6)%	(11.5)%	(3.7)%
	ARM C	0.111	0.400	0.000	0.489
		5.0	18.0	0.0	22.0
		(60.0)%	(50.0)%	(0.0)%	(50.0)%
	ARM D	0.489	0.430	0.081	0.000
		581.0	510.0	96.0	0.0
		(12.6)%	(6.1)%	(11.5)%	(0.0)%

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	3.74	26.18	0.143	- -	-	0.0	0.2	2.5	-	0.045
ARM B	17.04	39.21	0.435	- -	-	0.0	0.8	11.2	-	0.045
ARM C	0.56	16.66	0.034	- -	-	0.0	0.0	0.5	-	0.062
ARM D	14.89	33.64	0.443	- -	-	0.0	0.8	11.6	-	0.053
07.30-07.45									
ARM A	4.46	25.38	0.176	- -	-	0.2	0.2	3.2	-	0.048
ARM B	20.35	38.63	0.527	- -	-	0.8	1.1	16.2	-	0.055
ARM C	0.67	15.11	0.045	- -	-	0.0	0.0	0.7	-	0.069
ARM D	17.78	32.73	0.543	- -	-	0.8	1.2	17.2	-	0.067
07.45-08.00									
ARM A	5.47	24.29	0.225	- -	-	0.2	0.3	4.3	-	0.053
ARM B	24.92	37.84	0.659	- -	-	1.1	1.9	27.5	-	0.077
ARM C	0.83	13.01	0.063	- -	-	0.0	0.1	1.0	-	0.082
ARM D	21.78	31.51	0.691	- -	-	1.2	2.2	31.3	-	0.101
08.00-08.15									
ARM A	5.47	24.27	0.225	- -	-	0.3	0.3	4.3	-	0.053
ARM B	24.92	37.83	0.659	- -	-	1.9	1.9	28.6	-	0.077
ARM C	0.83	12.99	0.064	- -	-	0.1	0.1	1.0	-	0.082
ARM D	21.78	31.49	0.692	- -	-	2.2	2.2	33.1	-	0.103
08.15-08.30									
ARM A	4.46	25.36	0.176	- -	-	0.3	0.2	3.3	-	0.048
ARM B	20.35	38.62	0.527	- -	-	1.9	1.1	17.3	-	0.055
ARM C	0.67	15.08	0.045	- -	-	0.1	0.0	0.7	-	0.069
ARM D	17.78	32.71	0.544	- -	-	2.2	1.2	18.6	-	0.068
08.30-08.45									
ARM A	3.74	26.16	0.143	- -	-	0.2	0.2	2.5	-	0.045
ARM B	17.04	39.20	0.435	- -	-	1.1	0.8	11.8	-	0.045
ARM C	0.56	16.63	0.034	- -	-	0.0	0.0	0.5	-	0.062
ARM D	14.89	33.62	0.443	- -	-	1.2	0.8	12.3	-	0.054

---------- QUEUE

AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.2	
07.45	0.2	
08.00	0.3	
08.15	0.3	
08.30	0.2	
08.45	0.2	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.8	*
07.45	1.1	*
08.00	1.9	**
08.15	1.9	**
08.30	1.1	*
08.45	0.8	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.0
07.45	0.0
08.00	0.1
08.15	0.1
08.30	0.0
08.45	0.0

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.8	*
07.45	1.2	*
08.00	2.2	**
08.15	2.2	**
08.30	1.2	*
08.45	0.8	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)	T75
A	410.2	273.5	20.0	0.05	20.0	0.05	
B	1869.2	1246.1	112.6	0.06	112.6	0.06	
C	61.9	41.3	4.5	0.07	4.5	0.07	
D	1633.8	1089.2	124.1	0.08	124.1	0.08	
ALL	3975.1	2650.1	261.2	0.07	261.3	0.07	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 16:37:37 on 09/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\A4303_Hunter Bld\ S2 2026 PM Base+CD.vai"
(drive-on-the-left) at 14:59:52 on Tuesday, 1 September 2015

FILE PROPERTIES

RUN TITLE: S2 Magna Park Access Roundabout PM Peak 2026 Base + CD
LOCATION: Magna Park Site Access
DATE: 14/07/31
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB
NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - Hunter Bld ARM
B - A4303 East
ARM C - Site Access ARM D
- A4303 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.20	10.70	31.00	19.00	67.00	57.0	0.654	44.594
ARM B	7.30	10.20	32.00	100.00	67.00	54.0	0.681	46.088
ARM C	7.30	8.50	10.00	25.00	67.00	62.0	0.579	37.067
ARM D	7.60	10.00	11.00	42.00	67.00	60.0	0.632	41.945

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range. Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range. Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING

FACTORS

I FLOW SCALE(%) I	I A
I	100 I
I B I	100 I
I C I	100 I
I D I	100 I

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

I ARM I	NUMBER OF MINUTES FROM START WHEN FLOW STARTS I	TOP OF PEAK I	FLOW STOPS I	RATE OF FLOW (VEH/MIN) BEFORE I	AT TOP I	AFTER I
I	I	I	I	I	I	I
I TO RISE I	IS REACHED I FALLING I	PEAK I	OF PEAK I PEAK I			
A I	15.00 I	45.00 I	75.00 I	8.95 I	13.42 I	8.95 I
ARM B I	15.00 I	45.00 I	75.00 I	8.86 I	13.29 I	8.86 I
ARM C I	15.00 I	45.00 I	75.00 I	3.91 I	5.87 I	3.91 I
ARM D I	15.00 I	45.00 I	75.00 I	10.43 I	15.64 I	10.43 I

DEMAND

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.346	0.004	0.649
		0.0	248.0	3.0	465.0
		(0.0)%	(16.9)%	(100.0)%	(13.1)%
	ARM B	0.228	0.038	0.054	0.680
		162.0	27.0	38.0	482.0
		(32.7)%	(3.7)%	(50.0)%	(3.3)%
	ARM C	0.035	0.588	0.000	0.377
		11.0	184.0	0.0	118.0
		(45.5)%	(4.9)%	(0.0)%	(8.5)%
	ARM D	0.155	0.803	0.042	0.000
		129.0	670.0	35.0	0.0
		(36.4)%	(3.6)%	(40.0)%	(0.0)%

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	8.98	31.98	0.281	- -	-	0.0	0.4	5.7	-	0.043
ARM B	8.90	36.56	0.243	- -	-	0.0	0.3	4.7	-	0.036
ARM C	3.93	25.89	0.152	- -	-	0.0	0.2	2.6	-	0.045
ARM D	10.46	34.82	0.301	- -	-	0.0	0.4	6.3	-	0.041
17.00-17.15									
ARM A	10.73	30.63	0.350	- -	-	0.4	0.5	7.9	-	0.050
ARM B	10.62	35.69	0.298	- -	-	0.3	0.4	6.3	-	0.040
ARM C	4.69	24.22	0.194	- -	-	0.2	0.2	3.5	-	0.051
ARM D	12.50	34.18	0.366	- -	-	0.4	0.6	8.5	-	0.046
17.15-17.30									
ARM A	13.14	28.79	0.456	- -	-	0.5	0.8	12.2	-	0.064
ARM B	13.01	34.51	0.377	- -	-	0.4	0.6	8.9	-	0.046
ARM C	5.74	21.93	0.262	- -	-	0.2	0.4	5.2	-	0.062
ARM D	15.30	33.31	0.459	- -	-	0.6	0.8	12.4	-	0.055
17.30-17.45									
ARM A	13.14	28.78	0.457	- -	-	0.8	0.8	12.5	-	0.064
ARM B	13.01	34.50	0.377	- -	-	0.6	0.6	9.0	-	0.047
ARM C	5.74	21.91	0.262	- -	-	0.4	0.4	5.3	-	0.062
ARM D	15.30	33.30	0.460	- -	-	0.8	0.8	12.7	-	0.056
17.45-18.00									
ARM A	10.73	30.61	0.350	- -	-	0.8	0.5	8.3	-	0.050
ARM B	10.62	35.68	0.298	- -	-	0.6	0.4	6.5	-	0.040
ARM C	4.69	24.19	0.194	- -	-	0.4	0.2	3.7	-	0.051
ARM D	12.50	34.17	0.366	- -	-	0.8	0.6	8.8	-	0.046
18.00-18.15									
ARM A	8.98	31.96	0.281	- -	-	0.5	0.4	6.0	-	0.044
ARM B	8.90	36.54	0.243	- -	-	0.4	0.3	4.9	-	0.036
ARM C	3.93	25.86	0.152	- -	-	0.2	0.2	2.7	-	0.046
ARM D	10.46	34.80	0.301	- -	-	0.6	0.4	6.6	-	0.041

---------- QUEUE

AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	*
17.30	0.8	*
17.45	0.8	*
18.00	0.5	*
18.15	0.4	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.6	*
17.45	0.6	*
18.00	0.4	
18.15	0.3	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.2
17.15	0.2
17.30	0.4
17.45	0.4
18.00	0.2
18.15	0.2

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.6	*
17.30	0.8	*
17.45	0.8	*
18.00	0.6	*
18.15	0.4	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	985.5	657.0	52.7	0.05	52.7	0.05
B	975.9	650.6	40.3	0.04	40.3	0.04
C	430.8	287.2	23.1	0.05	23.1	0.05
D	1147.9	765.3	55.3	0.05	55.3	0.05
ALL	3540.2	2360.1	171.3	0.05	171.3	0.05

T75

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 16:38:12 on 09/09/2015]

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\A4303_Hunter Bld\ S4 2026 AM Base+CD+PD.vai"
(drive-on-the-left) at 15:22:12 on Tuesday, 1 September 2015

FILE PROPERTIES

RUN TITLE: S4 Magna Park Access Roundabout AM Peak 2026 Base + CD + PD LOCATION:
Magna Park Site Access
DATE: 14/07/31
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB
NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - Hunter Bld ARM
B - A4303 East
ARM C - Site Access ARM D
- A4303 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.20	10.70	31.00	19.00	67.00	57.0	0.654	44.594
ARM B	7.30	10.20	32.00	100.00	67.00	54.0	0.681	46.088
ARM C	7.30	8.50	10.00	25.00	67.00	62.0	0.579	37.067
ARM D	7.60	10.00	11.00	42.00	67.00	60.0	0.632	41.945

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range. Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range. Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING

FACTORS

I FLOW SCALE(%) I	T13 IARM
	I A
I B	100
I C	100
I D	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

I ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK	FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE	AT TOP	AFTER	T15 I
I	I	I	I	I	I	I	I I
I TO RISE	I IS REACHED	I FALLING	I PEAK	I OF PEAK	I PEAK	I	
A	15.00	45.00	75.00	4.19	6.28	4.19	I ARM I
ARM B	15.00	45.00	75.00	21.34	32.01	21.34	I
ARM C	15.00	45.00	75.00	0.56	0.84	0.56	I
ARM D	15.00	45.00	75.00	13.71	20.57	13.71	I DEMAND

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.15 - 08.45					
ARM A	0.000	0.516	0.000	0.484	
		0.0	173.0	0.0	162.0
		(0.0)%	(46.8)%	(0.0)%	(44.4)%
ARM B	0.400	0.026	0.061	0.513	
		682.0	45.0	104.0	876.0
		(13.3)%	(35.6)%	(11.5)%	(5.0)%
ARM C	0.111	0.400	0.000	0.489	
		5.0	18.0	0.0	22.0
		(60.0)%	(50.0)%	(0.0)%	(50.0)%
ARM D	0.407	0.506	0.088	0.000	
		446.0	555.0	96.0	0.0
		(13.0)%	(9.0)%	(11.5)%	(0.0)%

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	4.20	26.13	0.161	- -	-	0.0	0.2	2.8	-	0.046
ARM B	21.42	39.43	0.543	- -	-	0.0	1.2	17.2	-	0.055
ARM C	0.56	15.00	0.038	- -	-	0.0	0.0	0.6	-	0.069
ARM D	13.76	31.65	0.435	- -	-	0.0	0.8	11.2	-	0.056
07.30-07.45									
ARM A	5.02	25.25	0.199	- -	-	0.2	0.2	3.7	-	0.049
ARM B	25.58	38.91	0.657	- -	-	1.2	1.9	27.4	-	0.074
ARM C	0.67	13.13	0.051	- -	-	0.0	0.1	0.8	-	0.080
ARM D	16.44	30.43	0.540	- -	-	0.8	1.2	17.0	-	0.071
07.45-08.00									
ARM A	6.15	24.06	0.256	- -	-	0.2	0.3	5.0	-	0.056
ARM B	31.32	38.20	0.820	- -	-	1.9	4.3	59.7	-	0.139
ARM C	0.83	10.61	0.078	- -	-	0.1	0.1	1.2	-	0.102
ARM D	20.13	28.79	0.699	- -	-	1.2	2.3	32.2	-	0.114
08.00-08.15									
ARM A	6.15	24.03	0.256	- -	-	0.3	0.3	5.1	-	0.056
ARM B	31.32	38.19	0.820	- -	-	4.3	4.4	66.0	-	0.145
ARM C	0.83	10.55	0.078	- -	-	0.1	0.1	1.3	-	0.103
ARM D	20.13	28.75	0.700	- -	-	2.3	2.3	34.4	-	0.116
08.15-08.30									
ARM A	5.02	25.21	0.199	- -	-	0.3	0.2	3.8	-	0.050
ARM B	25.58	38.90	0.657	- -	-	4.4	1.9	30.7	-	0.077
ARM C	0.67	13.04	0.052	- -	-	0.1	0.1	0.8	-	0.081
ARM D	16.44	30.37	0.541	- -	-	2.3	1.2	18.5	-	0.072

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
ARM A	4.20	26.10	0.161	- -	-	0.2	0.2	2.9	-	0.046
ARM B	21.42	39.42	0.543	- -	-	1.9	1.2	18.5	-	0.056
ARM C	0.56	14.95	0.038	- -	-	0.1	0.0	0.6	-	0.070
ARM D	13.76	31.61	0.435	- -	-	1.2	0.8	11.9	-	0.056

---------- QUEUE

AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.2
07.45	0.2
08.00	0.3
08.15	0.3
08.30	0.2
08.45	0.2

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.2	*
07.45	1.9	**
08.00	4.3	****
08.15	4.4	****
08.30	1.9	**
08.45	1.2	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.0
07.45	0.1
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.0

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.8	*
07.45	1.2	*
08.00	2.3	**
08.15	2.3	**
08.30	1.2	*
08.45	0.8	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)	T75
A	461.1	307.4	23.4	0.05	23.4	0.05	
B	2349.6	1566.4	219.4	0.09	219.4	0.09	
C	61.9	41.3	5.3	0.09	5.3	0.09	
D	1509.9	1006.6	125.1	0.08	125.1	0.08	
ALL	4382.5	2921.7	373.2	0.09	373.2	0.09	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 16:42:26 on 09/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\A4303_Hunter Bld\ S4 2026 PM Base+CD+PD.vai"
(drive-on-the-left) at 15:29:29 on Tuesday, 1 September 2015

FILE PROPERTIES

RUN TITLE: S4 Magna Park Access Roundabout PM Peak 2026 Base + CD + PD LOCATION:
Magna Park Site Access
DATE: 14/07/31
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB
NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - Hunter Bld ARM
B - A4303 East
ARM C - Site Access ARM D
- A4303 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.20	10.70	31.00	19.00	67.00	57.0	0.654	44.594
ARM B	7.30	10.20	32.00	100.00	67.00	54.0	0.681	46.088
ARM C	7.30	8.50	10.00	25.00	67.00	62.0	0.579	37.067
ARM D	7.60	10.00	11.00	42.00	67.00	60.0	0.632	41.945

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range. Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range. Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING

FACTORS

I FLOW SCALE(%) I	I A
I B	100
I C	100
I D	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK	FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE	AT TOP	AFTER
	TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK
A	15.00	45.00	75.00	9.96	14.94	9.96
ARM B	15.00	45.00	75.00	10.09	15.13	10.09
ARM C	15.00	45.00	75.00	3.91	5.87	3.91
ARM D	15.00	45.00	75.00	11.40	17.10	11.40

DEMAND

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15					
ARM A	0.000	0.527	0.004	0.469	
		0.0	420.0	3.0	374.0
		(0.0)	(15.5)	(100.0)	(15.2)
ARM B	0.268	0.033	0.047	0.652	
		216.0	27.0	38.0	526.0
		(31.5)	(3.7)	(50.0)	(5.3)
ARM C	0.035	0.588	0.000	0.377	
		11.0	184.0	0.0	118.0
		(45.5)	(4.9)	(0.0)	(8.5)
ARM D	0.113	0.849	0.038	0.000	
		103.0	774.0	35.0	0.0
		(37.9)	(4.9)	(40.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	10.00	30.90	0.324	- -	0.0	0.5	7.0	-	0.048
ARM B	10.13	36.68	0.276	- -	0.0	0.4	5.6	-	0.038
ARM C	3.93	25.69	0.153	- -	0.0	0.2	2.7	-	0.046
ARM D	11.44	34.39	0.333	- -	0.0	0.5	7.3	-	0.043
17.00-17.15									
ARM A	11.94	29.40	0.406	- -	0.5	0.7	10.0	-	0.057
ARM B	12.09	35.97	0.336	- -	0.4	0.5	7.5	-	0.042
ARM C	4.69	23.98	0.196	- -	0.2	0.2	3.6	-	0.052
ARM D	13.66	33.65	0.406	- -	0.5	0.7	10.0	-	0.050
17.15-17.30									
ARM A	14.63	27.35	0.535	- -	0.7	1.1	16.5	-	0.078
ARM B	14.81	35.00	0.423	- -	0.5	0.7	10.7	-	0.049
ARM C	5.74	21.63	0.265	- -	0.2	0.4	5.3	-	0.063
ARM D	16.74	32.65	0.513	- -	0.7	1.0	15.3	-	0.063
17.30-17.45									
ARM A	14.63	27.33	0.535	- -	1.1	1.1	17.1	-	0.079
ARM B	14.81	34.99	0.423	- -	0.7	0.7	11.0	-	0.050
ARM C	5.74	21.62	0.266	- -	0.4	0.4	5.4	-	0.063
ARM D	16.74	32.64	0.513	- -	1.0	1.0	15.7	-	0.063
17.45-18.00									
ARM A	11.94	29.37	0.407	- -	1.1	0.7	10.6	-	0.058
ARM B	12.09	35.95	0.336	- -	0.7	0.5	7.7	-	0.042
ARM C	4.69	23.95	0.196	- -	0.4	0.2	3.7	-	0.052
ARM D	13.66	33.65	0.406	- -	1.0	0.7	10.5	-	0.050
18.00-18.15									
ARM A	10.00	30.87	0.324	- -	0.7	0.5	7.3	-	0.048
ARM B	10.13	36.67	0.276	- -	0.5	0.4	5.8	-	0.038
ARM C	3.93	25.66	0.153	- -	0.2	0.2	2.8	-	0.046
ARM D	11.44	34.38	0.333	- -	0.7	0.5	7.6	-	0.044

---------- QUEUE

AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.5	
17.15	0.7	*
17.30	1.1	*
17.45	1.1	*
18.00	0.7	*
18.15	0.5	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	*
17.30	0.7	*
17.45	0.7	*
18.00	0.5	*
18.15	0.4	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.2
17.15	0.2
17.30	0.4
17.45	0.4
18.00	0.2
18.15	0.2

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.5	
17.15	0.7	*
17.30	1.0	*
17.45	1.0	*
18.00	0.7	*
18.15	0.5	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	1097.0	731.3	68.6	0.06	68.6	0.06
B	1110.8	740.5	48.3	0.04	48.3	0.04
C	430.8	287.2	23.4	0.05	23.4	0.05
D	1255.3	836.9	66.4	0.05	66.4	0.05
ALL	3893.9	2595.9	206.8	0.05	206.8	0.05

T75

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 16:42:58 on 09/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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For sales and distribution information, program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\Cross in Hand A5_A4303\ S2 2026 AM Peak Base+CD.vai"
(drive-on-the-left) at 17:09:58 on Tuesday, 1 September 2015

FILE PROPERTIES
****

RUN TITLE: S2 Cross in Hand Roundabout AM Peak 2026 Base + CD
LOCATION: Cross In Hand Roundabout
DATE: 14/07/31
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB
NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA
****
ARM A - A5 North ARM B
- A4303
ARM C - A5 South ARM D
- B4027
ARM E - Coal Pit Lane

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.70	7.50	47.00	45.00	98.00	48.0	0.494	34.354
ARM B	7.10	8.80	25.00	35.00	79.00	54.0	0.566	40.232
ARM C	5.10	7.50	50.00	37.00	98.00	54.0	0.486	34.056
ARM D	3.20	6.20	24.00	40.00	88.00	64.0	0.405	24.458
ARM E	3.50	7.20	9.00	19.00	88.00	64.0	0.384	22.641

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range. Treat capacities with increasing caution.

WARNING ARM C Effective flare length is outside normal range. Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING

FACTORS

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100
E	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
A	15.00	45.00	75.00	15.16	22.74	15.16
B	15.00	45.00	75.00	11.85	17.78	11.85
C	15.00	45.00	75.00	9.16	13.74	9.16
D	15.00	45.00	75.00	1.99	2.98	1.99
E	15.00	45.00	75.00	4.01	6.02	4.01

DEMAND SET TITLE: AM Peak 2006 Base Flows

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D	ARM E
07.15 - 08.45	ARM A	0.000	0.477	0.482	0.038	0.003
		0.0	578.0	585.0	46.0	4.0
		(0.0)	(7.4)	(6.7)	(0.0)	(0.0)
	ARM B	0.404	0.000	0.273	0.195	0.128
		383.0	0.0	259.0	185.0	121.0
		(11.2)	(0.0)	(27.8)	(1.1)	(0.8)
	ARM C	0.487	0.389	0.000	0.023	0.101
		357.0	285.0	0.0	17.0	74.0
		(9.2)	(24.2)	(0.0)	(11.8)	(4.1)
	ARM D	0.132	0.811	0.050	0.000	0.006
		21.0	129.0	8.0	0.0	1.0
		(4.8)	(3.1)	(0.0)	(0.0)	(0.0)
	ARM E	0.019	0.620	0.346	0.016	0.000
		6.0	199.0	111.0	5.0	0.0
		(0.0)	(1.5)	(2.7)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	15.22	27.47	0.554	- -	0.0	1.2	17.7	-	0.081
ARM B	11.90	30.75	0.387	- -	0.0	0.6	9.2	-	0.053
ARM C	9.20	25.54	0.360	- -	0.0	0.6	8.2	-	0.061
ARM D	2.00	16.97	0.118	- -	0.0	0.1	1.9	-	0.067
ARM E	4.03	15.95	0.252	- -	0.0	0.3	4.9	-	0.084
07.30-07.45									
ARM A	18.17	26.54	0.685	- -	1.2	2.1	30.3	-	0.118
ARM B	14.20	29.76	0.477	- -	0.6	0.9	13.3	-	0.064
ARM C	10.98	24.71	0.444	- -	0.6	0.8	11.6	-	0.073
ARM D	2.38	15.65	0.152	- -	0.1	0.2	2.6	-	0.075
ARM E	4.81	14.72	0.327	- -	0.3	0.5	7.0	-	0.101
07.45-08.00									
ARM A	22.26	25.28	0.881	- -	2.1	6.4	81.3	-	0.282
ARM B	17.40	28.46	0.611	- -	0.9	1.5	22.4	-	0.090
ARM C	13.45	23.60	0.570	- -	0.8	1.3	18.9	-	0.098
ARM D	2.92	13.84	0.211	- -	0.2	0.3	3.9	-	0.092
ARM E	5.89	13.04	0.452	- -	0.5	0.8	11.7	-	0.139
08.00-08.15									
ARM A	22.26	25.26	0.881	- -	6.4	6.8	99.6	-	0.322
ARM B	17.40	28.39	0.613	- -	1.5	1.6	23.4	-	0.091
ARM C	13.45	23.58	0.570	- -	1.3	1.3	19.7	-	0.099
ARM D	2.92	13.82	0.211	- -	0.3	0.3	4.0	-	0.092
ARM E	5.89	13.02	0.453	- -	0.8	0.8	12.2	-	0.140
08.15-08.30									
ARM A	18.17	26.51	0.686	- -	6.8	2.2	37.2	-	0.129
ARM B	14.20	29.65	0.479	- -	1.6	0.9	14.3	-	0.065
ARM C	10.98	24.69	0.445	- -	1.3	0.8	12.5	-	0.073
ARM D	2.38	15.61	0.153	- -	0.3	0.2	2.8	-	0.076
ARM E	4.81	14.68	0.328	- -	0.8	0.5	7.6	-	0.102

DEMAND (VEH/MIN) (PEDS/MIN)	CAPACITY (VEH/MIN) (VEHS)	DEMAND/ CAPACITY (VEHS)	PEDESTRIAN FLOW TIME SEGMENT)	START QUEUE TIME SEGMENT)	END QUEUE	DELAY (VEH.MIN/ VEHICLE (MIN)		GEOMETRIC DELAY (VEH.MIN/	AVERAGE DELAY PER ARRIVING (RFC)	TIME
08.30-08.45										
ARM A	15.22	27.44	0.555	- -	-	2.2	1.3	19.6	0.083	
ARM B	11.90	30.70	0.387	- -	-	0.9	0.6	9.7	0.053	
ARM C	9.20	25.51	0.360	- -	-	0.8	0.6	8.7	0.061	
ARM D	2.00	16.94	0.118	- -	-	0.2	0.1	2.0	0.067	
ARM E	4.03	15.92	0.253	- -	-	0.5	0.3	5.2	0.084	

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.2	*
07.45	2.1	**
08.00	6.4	******
08.15	6.8	*******
08.30	2.2	**
08.45	1.3	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.6	*
07.45	0.9	*
08.00	1.5	**
08.15	1.6	**
08.30	0.9	*
08.45	0.6	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.6	*
07.45	0.8	*
08.00	1.3	*
08.15	1.3	*
08.30	0.8	*
08.45	0.6	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.1	
07.45	0.2	
08.00	0.3	
08.15	0.3	
08.30	0.2	
08.45	0.1	

QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.3	
07.45	0.5	
08.00	0.8	*
08.15	0.8	*
08.30	0.5	
08.45	0.3	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	1669.6	1113.1	285.6	0.17	285.7	0.17
B	1304.9	869.9	92.3	0.07	92.3	0.07
C	1008.9	672.6	79.5	0.08	79.5	0.08
D	218.9	145.9	17.3	0.08	17.3	0.08
E	441.8	294.6	48.7	0.11	48.7	0.11
ALL	4644.1	3096.0	523.4	0.11	523.5	0.11

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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For sales and distribution information, program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\Cross in Hand A5_A4303\ S2 2026 PM Peak Base+CD.vai"
(drive-on-the-left) at 17:13:41 on Tuesday, 1 September 2015

FILE PROPERTIES

RUN TITLE: S2 Cross in Hand Roundabout PM Peak 2026 Base + CD
LOCATION: Cross In Hand Roundabout
DATE: 14/07/31
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB
NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - A5 North ARM B
- A4303
ARM C - A5 South ARM D
- B4027
ARM E - Coal Pit Lane

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.70	7.50	47.00	45.00	98.00	48.0	0.494	34.354
ARM B	7.10	8.80	25.00	35.00	79.00	54.0	0.566	40.232
ARM C	5.10	7.50	50.00	37.00	98.00	54.0	0.486	34.056
ARM D	3.20	6.20	24.00	40.00	88.00	64.0	0.405	24.458
ARM E	3.50	7.20	9.00	19.00	88.00	64.0	0.384	22.641

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range. Treat capacities with increasing caution.

WARNING ARM C Effective flare length is outside normal range. Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING

FACTORS

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100
E	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
A	15.00	45.00	75.00	9.14	13.71	9.14
B	15.00	45.00	75.00	13.77	20.66	13.77
C	15.00	45.00	75.00	10.59	15.88	10.59
D	15.00	45.00	75.00	3.47	5.21	3.47
E	15.00	45.00	75.00	2.44	3.66	2.44

DEMAND SET TITLE: AM Peak 2006 Base Flows

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D	ARM E
16.45 - 18.15	ARM A	0.000	0.473	0.506	0.018	0.003
		0.0	346.0	370.0	13.0	2.0
		(0.0)	(9.2)	(5.7)	(7.7)	(0.0)
	ARM B	0.479	0.000	0.229	0.132	0.161
		528.0	0.0	252.0	145.0	177.0
		(7.8)	(0.0)	(17.9)	(0.0)	(2.3)
	ARM C	0.667	0.194	0.000	0.011	0.129
		565.0	164.0	0.0	9.0	109.0
		(5.0)	(31.1)	(0.0)	(0.0)	(2.8)
	ARM D	0.237	0.712	0.029	0.000	0.022
		66.0	198.0	8.0	0.0	6.0
		(1.5)	(0.5)	(0.0)	(0.0)	(0.0)
	ARM E	0.026	0.605	0.349	0.021	0.000
		5.0	118.0	68.0	4.0	0.0
		(20.0)	(0.8)	(4.4)	(50.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	9.17	28.45	0.322	- -	0.0	0.5	7.0	-	0.052
ARM B	13.83	33.96	0.407	- -	0.0	0.7	10.0	-	0.049
ARM C	10.63	25.96	0.409	- -	0.0	0.7	10.0	-	0.065
ARM D	3.49	15.88	0.220	- -	0.0	0.3	4.1	-	0.080
ARM E	2.45	14.22	0.172	- -	0.0	0.2	3.0	-	0.085

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	10.95	27.75	0.395	- -	0.5	0.6	9.5	-	0.059
ARM B	16.51	33.33	0.495	- -	0.7	1.0	14.3	-	0.059
ARM C	12.69	24.96	0.508	- -	0.7	1.0	14.9	-	0.081
ARM D	4.17	14.22	0.293	- -	0.3	0.4	6.0	-	0.099
ARM E	2.92	12.71	0.230	- -	0.2	0.3	4.3	-	0.102

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
ARM A	13.41	26.80	0.500	- -	0.6	1.0	14.5	-	0.074
ARM B	20.22	32.47	0.623	- -	1.0	1.6	23.6	-	0.081
ARM C	15.54	23.60	0.658	- -	1.0	1.9	26.9	-	0.122
ARM D	5.10	11.98	0.426	- -	0.4	0.7	10.5	-	0.144
ARM E	3.58	10.67	0.335	- -	0.3	0.5	7.2	-	0.140

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
ARM A	13.41	26.78	0.501	- -	1.0	1.0	14.9	-	0.075
ARM B	20.22	32.46	0.623	- -	1.6	1.6	24.5	-	0.082
ARM C	15.54	23.59	0.659	- -	1.9	1.9	28.5	-	0.124
ARM D	5.10	11.94	0.427	- -	0.7	0.7	11.0	-	0.146
ARM E	3.58	10.64	0.336	- -	0.5	0.5	7.5	-	0.142

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
ARM A	10.95	27.72	0.395	- -	1.0	0.7	10.1	-	0.060
ARM B	16.51	33.32	0.496	- -	1.6	1.0	15.2	-	0.060
ARM C	12.69	24.94	0.509	- -	1.9	1.0	16.3	-	0.082
ARM D	4.17	14.17	0.294	- -	0.7	0.4	6.5	-	0.100
ARM E	2.92	12.66	0.231	- -	0.5	0.3	4.7	-	0.103

DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ VEHICLE (MIN) TIME SEGMENT)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY PER ARRIVING (RFC)	AVERAGE DELAY (RFC)	TIME
I 18.00-18.15										I
I ARM A	9.17	28.42	0.323	- -	-	0.7	0.5	7.3	-	0.052	I
I ARM B	13.83	33.95	0.407	- -	-	1.0	0.7	10.6	-	0.050	I
I ARM C	10.63	25.94	0.410	- -	-	1.0	0.7	10.7	-	0.066	I
I ARM D	3.49	15.83	0.220	- -	-	0.4	0.3	4.4	-	0.081	I
I ARM E	2.45	14.17	0.173	- -	-	0.3	0.2	3.2	-	0.085	I
I										I

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.5	
17.15	0.6	*
17.30	1.0	*
17.45	1.0	*
18.00	0.7	*
18.15	0.5	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.7	*
17.15	1.0	*
17.30	1.6	**
17.45	1.6	**
18.00	1.0	*
18.15	0.7	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.7	*
17.15	1.0	*
17.30	1.9	**
17.45	1.9	**
18.00	1.0	*
18.15	0.7	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.7	*
17.45	0.7	*
18.00	0.4	
18.15	0.3	

QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.2	
17.15	0.3	
17.30	0.5	
17.45	0.5	*
18.00	0.3	
18.15	0.2	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)	T75
A	1006.2	670.8	63.3	0.06	63.3	0.06	
B	1516.8	1011.2	98.2	0.06	98.2	0.06	
C	1165.8	777.2	107.3	0.09	107.3	0.09	
D	382.6	255.1	42.5	0.11	42.5	0.11	
E	268.4	178.9	30.0	0.11	30.0	0.11	
ALL	4339.9	2893.2	341.3	0.08	341.3	0.08	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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For sales and distribution information, program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\Cross in Hand A5_A4303\ S4 2026 AM Peak Base+CD+PD.vai"
(drive-on-the-left) at 17:31:55 on Tuesday, 1 September 2015

FILE PROPERTIES

RUN TITLE: S4 Cross in Hand Roundabout AM Peak 2026 Base + CD + PD LOCATION:
Cross In Hand Roundabout
DATE: 14/07/31
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB
NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - A5 North ARM B
- A4303
ARM C - A5 South ARM D
- B4027
ARM E - Coal Pit Lane

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.70	7.50	47.00	45.00	98.00	48.0	0.494	34.354
ARM B	7.10	8.80	25.00	35.00	79.00	54.0	0.566	40.232
ARM C	5.10	7.50	50.00	37.00	98.00	54.0	0.486	34.056
ARM D	3.20	6.20	24.00	40.00	88.00	64.0	0.405	24.458
ARM E	3.50	7.20	9.00	19.00	88.00	64.0	0.384	22.641

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range. Treat capacities with increasing caution.

WARNING ARM C Effective flare length is outside normal range. Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING

FACTORS

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100
E	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	NUMBER OF MINUTES FROM START TO TOP OF PEAK	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
TO	RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK
A	15.00	45.00	75.00	15.32	22.99	15.32
ARM B	15.00	45.00	75.00	13.21	19.82	13.21
ARM C	15.00	45.00	75.00	10.13	15.19	10.13
ARM D	15.00	45.00	75.00	2.95	4.43	2.95
ARM E	15.00	45.00	75.00	5.15	7.73	5.15

DEMAND SET TITLE: AM Peak 2006 Base Flows

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D	ARM E
07.15 - 08.45	ARM A	0.000	0.398	0.515	0.068	0.020
		0.0	488.0	631.0	83.0	24.0
		(0.0)	(9.6)	(9.4)	(2.4)	(0.0)
	ARM B	0.465	0.000	0.245	0.175	0.114
		492.0	0.0	259.0	185.0	121.0
		(10.2)	(0.0)	(27.8)	(1.1)	(0.8)
	ARM C	0.536	0.352	0.000	0.021	0.091
		434.0	285.0	0.0	17.0	74.0
		(9.7)	(24.2)	(0.0)	(11.8)	(4.1)
	ARM D	0.415	0.547	0.034	0.000	0.004
		98.0	129.0	8.0	0.0	1.0
		(1.0)	(3.1)	(0.0)	(0.0)	(0.0)
	ARM E	0.235	0.483	0.269	0.012	0.000
		97.0	199.0	111.0	5.0	0.0
		(0.0)	(1.5)	(2.7)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	15.38	26.95	0.571	- -	0.0	1.3	18.9	-	0.085
ARM B	13.26	30.12	0.440	- -	0.0	0.8	11.4	-	0.059
ARM C	10.16	24.66	0.412	- -	0.0	0.7	10.1	-	0.069
ARM D	2.96	16.05	0.185	- -	0.0	0.2	3.3	-	0.076
ARM E	5.17	14.70	0.352	- -	0.0	0.5	7.8	-	0.104

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
ARM A	18.37	26.04	0.705	- -	1.3	2.3	33.0	-	0.128
ARM B	15.84	28.97	0.547	- -	0.8	1.2	17.4	-	0.076
ARM C	12.14	23.66	0.513	- -	0.7	1.0	15.2	-	0.086
ARM D	3.54	14.49	0.244	- -	0.2	0.3	4.7	-	0.091
ARM E	6.17	13.20	0.468	- -	0.5	0.9	12.5	-	0.141

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
ARM A	22.50	24.82	0.906	- -	2.3	7.8	95.9	-	0.334
ARM B	19.40	27.50	0.705	- -	1.2	2.3	33.0	-	0.121
ARM C	14.86	22.30	0.666	- -	1.0	1.9	27.7	-	0.132
ARM D	4.33	12.39	0.350	- -	0.3	0.5	7.7	-	0.124
ARM E	7.56	11.17	0.677	- -	0.9	2.0	27.2	-	0.267

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	22.50	24.78	0.908	- -	7.8	8.6	124.1	-	0.408
ARM B	19.40	27.39	0.708	- -	2.3	2.4	35.5	-	0.125
ARM C	14.86	22.27	0.668	- -	1.9	2.0	29.5	-	0.135
ARM D	4.33	12.34	0.351	- -	0.5	0.5	8.0	-	0.125
ARM E	7.56	11.13	0.679	- -	2.0	2.1	30.4	-	0.279

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
ARM A	18.37	25.98	0.707	- -	8.6	2.5	42.9	-	0.146
ARM B	15.84	28.80	0.550	- -	2.4	1.2	19.2	-	0.078
ARM C	12.14	23.60	0.514	- -	2.0	1.1	16.7	-	0.088
ARM D	3.54	14.42	0.245	- -	0.5	0.3	5.0	-	0.092
ARM E	6.17	13.14	0.470	- -	2.1	0.9	14.3	-	0.147

DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ VEHICLE (MIN)	DELAY PER ARRIVING	AVERAGE DELAY (RFC)	TIME
08.30-08.45											
ARM A	15.38	26.91	0.572	- -	-	2.5	1.4	21.1	-	0.088	
ARM B	13.26	30.06	0.441	- -	-	1.2	0.8	12.2	-	0.060	
ARM C	10.16	24.63	0.413	- -	-	1.1	0.7	10.9	-	0.069	
ARM D	2.96	15.99	0.185	- -	-	0.3	0.2	3.5	-	0.077	
ARM E	5.17	14.65	0.353	- -	-	0.9	0.6	8.5	-	0.106	

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.3	*
07.45	2.3	**
08.00	7.8	********
08.15	8.6	*********
08.30	2.5	**
08.45	1.4	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.8	*
07.45	1.2	*
08.00	2.3	**
08.15	2.4	**
08.30	1.2	*
08.45	0.8	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.7	*
07.45	1.0	*
08.00	1.9	**
08.15	2.0	**
08.30	1.1	*
08.45	0.7	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.2	
07.45	0.3	
08.00	0.5	*
08.15	0.5	*
08.30	0.3	
08.45	0.2	

QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.5	*
07.45	0.9	*
08.00	2.0	**
08.15	2.1	**
08.30	0.9	*
08.45	0.6	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)	T75
A	1687.5	1125.0	336.0	0.20	336.0	0.20	
B	1454.9	969.9	128.7	0.09	128.7	0.09	
C	1114.9	743.3	110.0	0.10	110.0	0.10	
D	324.8	216.6	32.3	0.10	32.3	0.10	
E	567.1	378.1	100.7	0.18	100.7	0.18	
ALL	5149.2	3432.8	707.6	0.14	707.7	0.14	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\Cross in Hand A5_A4303\ S4 2026 PM Peak Base+CD+PD.vai"
(drive-on-the-left) at 17:36:34 on Tuesday, 1 September 2015

FILE PROPERTIES

RUN TITLE: S4 Cross in Hand Roundabout PM Peak 2026 Base + CD + PD LOCATION:
Cross In Hand Roundabout
DATE: 14/07/31
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB
NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - A5 North ARM B
- A4303
ARM C - A5 South ARM D
- B4027
ARM E - Coal Pit Lane

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.70	7.50	47.00	45.00	98.00	48.0	0.494	34.354
ARM B	7.10	8.80	25.00	35.00	79.00	54.0	0.566	40.232
ARM C	5.10	7.50	50.00	37.00	98.00	54.0	0.486	34.056
ARM D	3.20	6.20	24.00	40.00	88.00	64.0	0.405	24.458
ARM E	3.50	7.20	9.00	19.00	88.00	64.0	0.384	22.641

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range. Treat capacities with increasing caution.

WARNING ARM C Effective flare length is outside normal range. Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING

FACTORS

FLOW SCALE(%)
A	100
B	100
C	100
D	100
E	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
A	15.00	45.00	75.00	13.04	19.56	13.04
B	15.00	45.00	75.00	13.19	19.78	13.19
C	15.00	45.00	75.00	10.96	16.44	10.96
D	15.00	45.00	75.00	3.86	5.79	3.86
E	15.00	45.00	75.00	2.80	4.20	2.80

DEMAND SET TITLE: AM Peak 2006 Base Flows

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C	ARM D	ARM E
16.45 - 18.15	ARM A	0.000	0.407	0.439	0.105	0.049
		0.0	424.0	458.0	110.0	51.0
		(0.0)%	(9.0)%	(7.4)%	(1.8)%	(0.0)%
	ARM B	0.456	0.000	0.239	0.137	0.168
		481.0	0.0	252.0	145.0	177.0
		(10.2)%	(0.0)%	(17.9)%	(0.0)%	(2.3)%
	ARM C	0.678	0.187	0.000	0.010	0.124
		595.0	164.0	0.0	9.0	109.0
		(5.9)%	(31.1)%	(0.0)%	(0.0)%	(2.8)%
	ARM D	0.314	0.641	0.026	0.000	0.019
		97.0	198.0	8.0	0.0	6.0
		(1.0)%	(0.6)%	(0.0)%	(0.0)%	(0.0)%
	ARM E	0.152	0.527	0.304	0.018	0.000
		34.0	118.0	68.0	4.0	0.0
		(2.9)%	(0.8)%	(4.4)%	(50.0)%	(0.0)%

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	13.09	28.52	0.459	- -	0.0	0.8	12.3	-	0.064
ARM B	13.24	32.02	0.413	- -	0.0	0.7	10.3	-	0.053
ARM C	11.00	25.26	0.436	- -	0.0	0.8	11.1	-	0.070
ARM D	3.88	15.65	0.248	- -	0.0	0.3	4.8	-	0.085
ARM E	2.81	14.15	0.199	- -	0.0	0.2	3.6	-	0.088

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	15.63	27.82	0.562	- -	0.8	1.3	18.4	-	0.082
ARM B	15.81	31.07	0.509	- -	0.7	1.0	15.0	-	0.065
ARM C	13.14	24.15	0.544	- -	0.8	1.2	17.1	-	0.090
ARM D	4.63	13.94	0.332	- -	0.3	0.5	7.2	-	0.107
ARM E	3.36	12.61	0.266	- -	0.2	0.4	5.3	-	0.108

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
ARM A	19.14	26.88	0.712	- -	1.3	2.4	34.0	-	0.127
ARM B	19.36	29.80	0.650	- -	1.0	1.8	26.2	-	0.095
ARM C	16.09	22.64	0.711	- -	1.2	2.4	33.4	-	0.149
ARM D	5.67	11.65	0.487	- -	0.5	0.9	13.3	-	0.166
ARM E	4.11	10.54	0.390	- -	0.4	0.6	9.1	-	0.155

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
ARM A	19.14	26.85	0.713	- -	2.4	2.4	36.4	-	0.130
ARM B	19.36	29.77	0.650	- -	1.8	1.8	27.5	-	0.096
ARM C	16.09	22.62	0.711	- -	2.4	2.4	36.1	-	0.153
ARM D	5.67	11.60	0.489	- -	0.9	0.9	14.1	-	0.168
ARM E	4.11	10.49	0.392	- -	0.6	0.6	9.5	-	0.157

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
ARM A	15.63	27.78	0.562	- -	2.4	1.3	20.3	-	0.083
ARM B	15.81	31.04	0.509	- -	1.8	1.0	16.2	-	0.066
ARM C	13.14	24.12	0.545	- -	2.4	1.2	18.9	-	0.092
ARM D	4.63	13.88	0.334	- -	0.9	0.5	7.9	-	0.109
ARM E	3.36	12.54	0.268	- -	0.6	0.4	5.7	-	0.109

DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ VEHICLE (MIN))	AVERAGE DELAY PER ARRIVING	DELAY (RFC)
I 18.00-18.15										
I ARM A	13.09	28.49	0.459	- -	-	1.3	0.9	13.2	-	0.065
I ARM B	13.24	31.99	0.414	- -	-	1.0	0.7	10.9	-	0.053
I ARM C	11.00	25.23	0.436	- -	-	1.2	0.8	12.0	-	0.071
I ARM D	3.88	15.59	0.249	- -	-	0.5	0.3	5.1	-	0.086
I ARM E	2.81	14.10	0.199	- -	-	0.4	0.3	3.9	-	0.089

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.8	*
17.15	1.3	*
17.30	2.4	**
17.45	2.4	**
18.00	1.3	*
18.15	0.9	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.7	*
17.15	1.0	*
17.30	1.8	**
17.45	1.8	**
18.00	1.0	*
18.15	0.7	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.8	*
17.15	1.2	*
17.30	2.4	**
17.45	2.4	**
18.00	1.2	*
18.15	0.8	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.5	
17.30	0.9	*
17.45	0.9	*
18.00	0.5	*
18.15	0.3	

QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.2	
17.15	0.4	
17.30	0.6	*
17.45	0.6	*
18.00	0.4	
18.15	0.3	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	1435.6	957.1	134.6	0.09	134.6	0.09
B	1452.1	968.1	106.0	0.07	106.0	0.07
C	1207.1	804.8	128.6	0.11	128.7	0.11
D	425.3	283.5	52.3	0.12	52.3	0.12
E	308.3	205.5	37.0	0.12	37.0	0.12
ALL	4828.5	3219.0	458.5	0.09	458.6	0.09

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS PICADY 5.1

ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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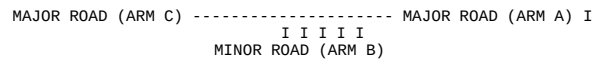
Run with file:- "C:\Users\james_mcinnerny\Desktop\S2 AM Peak 2026 Base+CD.vpi" (drive-on-the-left) at 12:11:01 on Friday, 28 August 2015

RUN INFORMATION

RUN TITLE	: S2 A4303/ Shackelton Way 2026 AM Peak Base + CD LOCATION
	:
DATE	: 12/02/15
CLIENT	:
ENUMERATOR	: jon_ashcroft [UK1005963L] JOB
NUMBER	:
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A4303 West
ARM B IS Shackelton Way ARM C IS
A4303 East

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C ETC.

GEOMETRIC DATA

	MINOR ROAD B	DATA ITEM
MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.30 M.	TOTAL
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.	
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.	
- VISIBILITY	(VC-B)200.00 M.	
- BLOCKS TRAFFIC (SPACES)	NO (0)	
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 100.0 M.	
- VISIBILITY TO RIGHT	(VB-A) 150.0 M.	
- LANE 1 WIDTH	(WB-C) 4.00 M.	
- LANE 2 WIDTH	(WB-A) 0.00 M.	

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For B-C	Slope For STREAM A-C	Slope For Opposing STREAM A-B	I STREAM
0.29	0.11		790.29

Intercept For B-A	Slope For STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	I STREAM
645.16	0.28	0.11	0.18	0.40	

Intercept For C-B	Slope For STREAM A-C	Slope For Opposing STREAM A-B	I STREAM
0.25	0.25		689.79

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

SCALE(%)	I ARM I FLOW
	I A I
100	I
I B I	100 I
I C I	100 I

Demand set: A4303/ Shackelton Way 2014 AM Peak Base Flows TIME PERIOD

BEGINS 07.15 AND ENDS 08.45

LENGTH OF TIME PERIOD - 90 MIN. LENGTH OF
TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

NUMBER OF MINUTES FROM START WHEN I FALLING	I PEAK	I RATE OF FLOW (VEH/MIN) I OF PEAK	I BEFORE I AT TOP	I AFTER I PEAK	I ARM	I FLOW STARTS I TO RISE	I IS REACHED I
TOP OF PEAK I FLOW STOPS							
					I ARM	A I	
	15.00	45.00	75.00	8.57	12.86	8.57	
I ARM B I	15.00	45.00	75.00	0.80	1.20	0.80	
I ARM C I	15.00	45.00	75.00	0.00	0.00	0.00	

Demand set: A4303/ Shackelton Way 2014 AM Peak Base Flows

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

I FROM/TO I	ARM A	ARM B	ARM C	TIME 07.15 - 08.45
I	I	I	I	I ARM A I
0.000 I	0.089 I	0.911 I		
I	I	0.0 I	61.0 I	625.0 I
I	I	(0.0)I	(16.4)I	(16.8)I
I	I	I	I	I
I	ARM B	I 0.000 I	0.000 I	1.000 I
I	I	0.0 I	0.0 I	64.0 I
I	I	(0.0)I	(0.0)I	(51.6)I
I	I	I	I	I
I	ARM C	I 0.000 I	0.000 I	0.000 I
I	I	0.0 I	0.0 I	0.0 I
I	I	(0.0)I	(0.0)I	(0.0)I
I	I	I	I	I

TURNING
PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT
FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

CAPACITY I	DEMAND/ (VEH/MIN)	(VEH/MIN)	CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME I
I 07.15-07.30										I
I B-AC	0.80	6.88	0.117		0.00	0.13	1.9		0.16	I
I C-A	0.00									I
I C-B	0.00	8.15	0.000		0.00	0.00	0.0		0.00	I
I A-B	0.77									I
I A-C	7.84									I
I										I

CAPACITY I	DEMAND/ (VEH/MIN)	(VEH/MIN)	CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME I
I 07.30-07.45										I
I B-AC	0.96	6.52	0.147		0.13	0.17	2.5		0.18	I
I C-A	0.00									I
I C-B	0.00	7.70	0.000		0.00	0.00	0.0		0.00	I
I A-B	0.91									I
I A-C	9.36									I
I										I

CAPACITY I	DEMAND/ (VEH/MIN)	(VEH/MIN)	CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME I
I 07.45-08.00										I
I B-AC	1.17	6.04	0.195		0.17	0.24	3.4		0.21	I
I C-A	0.00									I
I C-B	0.00	7.08	0.000		0.00	0.00	0.0		0.00	I
I A-B	1.12									I
I A-C	11.47									I
I										I

CAPACITY I	DEMAND/ (VEH/MIN)	(VEH/MIN)	CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME I
I 08.00-08.15										I
I B-AC	1.17	6.04	0.195		0.24	0.24	3.6		0.21	I
I C-A	0.00									I
I C-B	0.00	7.08	0.000		0.00	0.00	0.0		0.00	I
I A-B	1.12									I
I A-C	11.47									I

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-AC	0.96	6.52	0.147		0.24	0.17	2.7		0.18
C-A	0.00								
C-B	0.00	7.70	0.000		0.00	0.00	0.0		0.00
A-B	0.91								
A-C	9.36								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-AC	0.80	6.88	0.117		0.17	0.13	2.1		0.16
C-A	0.00								
C-B	0.00	8.15	0.000		0.00	0.00	0.0		0.00
A-B	0.77								
A-C	7.84								

QUEUE FOR STREAM B-AC

SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.1
07.45	0.2
08.00	0.2
08.15	0.2
08.30	0.2
08.45	0.1

QUEUE FOR STREAM C-B

SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.0
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	* QUEUEING * DELAY * (VEH)	* QUEUEING * DELAY * (VEH/H)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	88.1	58.7	16.2	0.18	16.2	0.18	
C-A	0.0	0.0					
C-B	0.0	0.0	0.0	0.00	0.0	0.00	
A-B	84.0	56.0					
A-C	860.3	573.5					
ALL	1032.3	688.2	16.2	0.02	16.2	0.02	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 18:10:24 on 10/09/2015]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS PICADY 5.1

ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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Run with file:- "C:\Users\james_mcinnerny\Desktop\S2 PM Peak 2026 Base+CD.vpi" (drive-on-the-left) at 12:14:08 on Friday, 28 August 2015

RUN INFORMATION

RUN TITLE	: S2 A4303/ Shackelton Way 2026 PM Peak Base + CD LOCATION
	:
DATE	: 12/02/15
CLIENT	:
ENUMERATOR	: jon_ashcroft [UK1005963L] JOB
NUMBER	:
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

MAJOR ROAD (ARM C) ---------- MAJOR ROAD (ARM A)
I I I I I
MINOR ROAD (ARM B)

ARM A IS A4303 West
ARM B IS Shackelton Way ARM C IS
A4303 East

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C ETC.

GEOMETRIC DATA

	MINOR ROAD B	DATA ITEM / TOTAL
MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.30 M.	
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.	
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.	
- VISIBILITY	(VC-B)200.00 M.	
- BLOCKS TRAFFIC (SPACES)	NO (0)	
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 100.0 M.	
- VISIBILITY TO RIGHT	(VB-A) 150.0 M.	
- LANE 1 WIDTH	(WB-C) 4.00 M.	
- LANE 2 WIDTH	(WB-A) 0.00 M.	

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For B-C	Slope For STREAM A-C	Slope For Opposing STREAM A-B	I STREAM
0.29	0.11		790.29

Intercept For B-A	Slope For STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	I STREAM
645.16	0.28	0.11	0.18	0.40	

Intercept For C-B	Slope For STREAM A-C	Slope For Opposing STREAM A-B	I STREAM
0.25	0.25		689.79

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

SCALE(%)	ARM	FLOW
	A	
100		
B	100	
C	100	

Demand set: A4303/ Shackelton Way 2014 AM Peak Base Flows TIME PERIOD

BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN. LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

NUMBER OF MINUTES FROM START WHEN TOP OF PEAK FLOW STOPS BEFORE FALLING	AT TOP OF PEAK	AFTER PEAK	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK	ARM	FLOW STARTS TO RISE	FLOW IS REACHED
15.00	45.00	75.00	14.10	21.15	14.10			
ARM B	15.00	45.00	75.00	2.30	3.45	2.30		
ARM C	15.00	45.00	75.00	0.00	0.00	0.00		

Demand set: A4303/ Shackelton Way 2014 AM Peak Base Flows

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

FROM/TO	ARM A	ARM B	ARM C	TIME
ARM A	0.000	0.015	0.985	16.45 - 18.15
	0.0	17.0	1111.0	
	(0.0)	(11.8)	(6.7)	
ARM B	0.000	0.000	1.000	
	0.0	0.0	184.0	
	(0.0)	(0.0)	(8.7)	
ARM C	0.000	0.000	0.000	
	0.0	0.0	0.0	
	(0.0)	(0.0)	(0.0)	

PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT
FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

CAPACITY	DEMAND/ (VEH/MIN)	(VEH/MIN)	CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME
16.45-17.00										
B-AC	2.31	8.14	0.284		0.00	0.39	5.6		0.17	
C-A	0.00									
C-B	0.00	6.99	0.000		0.00	0.00	0.0		0.00	
A-B	0.21									
A-C	13.94									

CAPACITY	DEMAND/ (VEH/MIN)	(VEH/MIN)	CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME
17.00-17.15										
B-AC	2.76	7.37	0.374		0.39	0.59	8.4		0.22	
C-A	0.00									
C-B	0.00	6.31	0.000		0.00	0.00	0.0		0.00	
A-B	0.25									
A-C	16.65									

CAPACITY	DEMAND/ (VEH/MIN)	(VEH/MIN)	CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME
17.15-17.30										
B-AC	3.38	6.30	0.536		0.59	1.10	15.3		0.33	
C-A	0.00									
C-B	0.00	5.39	0.000		0.00	0.00	0.0		0.00	
A-B	0.31									
A-C	20.39									

CAPACITY	DEMAND/ (VEH/MIN)	(VEH/MIN)	CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME
17.30-17.45										
B-AC	3.38	6.30	0.536		1.10	1.13	16.8		0.34	
C-A	0.00									
C-B	0.00	5.39	0.000		0.00	0.00	0.0		0.00	
A-B	0.31									
A-C	20.39									

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-AC	2.76	7.37	0.374		1.13	0.61	9.7		0.22
C-A	0.00								
C-B	0.00	6.31	0.000		0.00	0.00	0.0		0.00
A-B	0.25								
A-C	16.65								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-AC	2.31	8.14	0.284		0.61	0.40	6.3		0.17
C-A	0.00								
C-B	0.00	6.99	0.000		0.00	0.00	0.0		0.00
A-B	0.21								
A-C	13.94								

QUEUE FOR STREAM B-AC

SEGMENT ENDING	TIME NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.6	*
17.30	1.1	*
17.45	1.1	*
18.00	0.6	*
18.15	0.4	

QUEUE FOR STREAM C-B

SEGMENT ENDING	TIME NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

TOTAL DEMAND (MIN)	* QUEUEING * DELAY * (VEH)	* QUEUEING * DELAY * (VEH/H)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)	STREAM	* (MIN/VEH)
253.3	168.8	62.0	0.24	62.1	0.25	C-A	0.0	0.0
0.0						C-B		
0.0	0.0	0.0	0.00	0.0	0.00	A-B	23.4	15.6
						A-C		
1529.2	1019.5							
						ALL		
	1805.9	1203.9	62.0	0.03	62.1		0.03	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS PICADY

5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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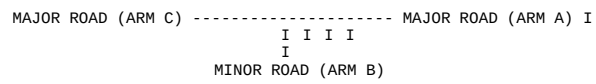
Run with file:- "C:\Users\james_mcinnerny\Desktop\S4 AM Peak 2026 Base+CD+PD.vpi" (drive-on-the-left) at 12:32:14 on Friday, 28 August 2015

RUN INFORMATION

RUN TITLE	: S4 A4303/ Shackelton Way 2026 AM Peak Base + CD + PD
LOCATION	:
DATE	: 12/02/15
CLIENT	:
ENUMERATOR	: jon_ashcroft [UK1005963L] JOB
NUMBER	:
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS A4303 West
ARM B IS Shackelton Way ARM C IS
A4303 East

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C ETC.

GEOMETRIC DATA

ITEM	MINOR ROAD B	DATA TOTAL
MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.30 M.	
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.	
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.	
- VISIBILITY	(VC-B)200.00 M.	
- BLOCKS TRAFFIC (SPACES)	NO (0)	
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 100.0 M.	
- VISIBILITY TO RIGHT	(VB-A) 150.0 M.	
- LANE 1 WIDTH	(WB-C) 4.00 M.	
- LANE 2 WIDTH	(WB-A) 0.00 M.	

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	
0.29	0.11		790.29

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	
645.16	0.28	0.11	0.18	0.40	

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	
0.25	0.25		689.79

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

SCALE(%)	FLOW
	ARM A
100	
B	100
C	100

Demand set: A4303/ Shackelton Way 2014 AM Peak Base Flows TIME PERIOD

BEGINS 07.15 AND ENDS 08.45

LENGTH OF TIME PERIOD - 90 MIN. LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

NUMBER OF MINUTES FROM START WHEN TOP OF PEAK FLOW STOPS FALLING	BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK	TO RISE	FLOW STARTS IS REACHED	ARM
									A
	15.00	45.00	75.00	9.73	14.59	9.73			
ARM B	15.00	45.00	75.00	0.80	1.20	0.80			
ARM C	15.00	45.00	75.00	0.00	0.00	0.00			

Demand set: A4303/ Shackelton Way 2014 AM Peak Base Flows

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

FROM/TO	ARM A	ARM B	ARM C	TIME 07.15 - 08.45	ARM A
ARM A	0.0	61.0	717.0		
	(0.0)	(16.4)	(20.4)		
ARM B	0.000	0.000	1.000		
	0.0	0.0	64.0		
	(0.0)	(0.0)	(51.6)		
ARM C	0.000	0.000	0.000		
	0.0	0.0	0.0		
	(0.0)	(0.0)	(0.0)		
				TURNING	

PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT
FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

CAPACITY	DEMAND/ (VEH/MIN)	(VEH/MIN)	CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME	DEMAND
07.15-07.30											
B-AC	0.80	6.56	0.122		0.00	0.14	2.0		0.17		
C-A	0.00										
C-B	0.00	7.76	0.000		0.00	0.00	0.0		0.00		
A-B	0.77										
A-C	9.00										

CAPACITY	DEMAND/ (VEH/MIN)	(VEH/MIN)	CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME	DEMAND
07.30-07.45											
B-AC	0.96	6.14	0.156		0.14	0.18	2.7		0.19		
C-A	0.00										
C-B	0.00	7.24	0.000		0.00	0.00	0.0		0.00		
A-B	0.91										
A-C	10.74										

CAPACITY	DEMAND/ (VEH/MIN)	(VEH/MIN)	CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME	DEMAND
07.45-08.00											
B-AC	1.17	5.57	0.211		0.18	0.26	3.8		0.23		
C-A	0.00										
C-B	0.00	6.52	0.000		0.00	0.00	0.0		0.00		
A-B	1.12										
A-C	13.16										

CAPACITY	DEMAND/ (VEH/MIN)	(VEH/MIN)	CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME	DEMAND
08.00-08.15											
B-AC	1.17	5.57	0.211		0.26	0.26	4.0		0.23		
C-A	0.00										
C-B	0.00	6.52	0.000		0.00	0.00	0.0		0.00		
A-B	1.12										
A-C	13.16										

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-AC	0.96	6.14	0.156		0.26	0.19	2.9		0.19
C-A	0.00								
C-B	0.00	7.24	0.000		0.00	0.00	0.0		0.00
A-B	0.91								
A-C	10.74								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-AC	0.80	6.56	0.122		0.19	0.14	2.2		0.17
C-A	0.00								
C-B	0.00	7.76	0.000		0.00	0.00	0.0		0.00
A-B	0.77								
A-C	9.00								

QUEUE FOR STREAM B-AC

SEGMENT ENDING	NO. OF VEHICLES IN QUEUE TIME
07.30	0.1
07.45	0.2
08.00	0.3
08.15	0.3
08.30	0.2
08.45	0.1

QUEUE FOR STREAM C-B

SEGMENT ENDING	NO. OF VEHICLES IN QUEUE TIME
07.30	0.0
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *		* STREAM *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)	
B-AC	88.1	58.7	17.5	0.20	17.5	0.20	
C-A	0.0	0.0					
C-B	0.0	0.0	0.0	0.00	0.0	0.00	
A-B	84.0	56.0					
A-C	986.9	657.9					
ALL	1159.0	772.6	17.5	0.02	17.5	0.02	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS PICADY

5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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Run with file:- "C:\Users\james_mcinnerny\Desktop\S4 PM Peak 2026 Base+CD+PD.vpi" (drive-on-the-left) at 12:38:00 on Friday, 28 August 2015

RUN INFORMATION

RUN TITLE : S4 A4303/ Shackelton Way 2026 PM Peak Base + CD + PD
LOCATION :
DATE : 12/02/15
CLIENT :
ENUMERATOR : jon_ashcroft [UK1005963L] JOB
NUMBER :
STATUS :
DESCRIPTION :

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

ARM A IS A4303 West
ARM B IS Shackelton Way ARM C IS
A4303 East

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C ETC.

GEOMETRIC DATA

ITEM	MINOR ROAD B	DATA TOTAL
MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.30 M.	
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.	
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.	
- VISIBILITY	(VC-B)200.00 M.	
- BLOCKS TRAFFIC (SPACES)	NO (0)	
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 100.0 M.	
- VISIBILITY TO RIGHT	(VB-A) 150.0 M.	
- LANE 1 WIDTH	(WB-C) 4.00 M.	
- LANE 2 WIDTH	(WB-A) 0.00 M.	

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	I	
0.29	0.11		I	790.29

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	I	
645.16	0.28	0.11	0.18	0.40	I	

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	I	
0.25	0.25		I	689.79

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

SCALE(%)	ARM	FLOW
	A	
100		
B	100	
C	100	

Demand set: A4303/ Shackelton Way 2014 AM Peak Base Flows TIME PERIOD

BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN. LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK FALLING	FLOW STOPS BEFORE PEAK	FLOW STOPS AT TOP OF PEAK	FLOW STOPS AFTER PEAK	RATE OF FLOW (VEH/MIN)		TO RISE	ARM	FLOW STARTS IS REACHED
	15.00	45.00	75.00	17.21	25.82	17.21			
ARM B	15.00	45.00	75.00	2.30	3.45	2.30			
ARM C	15.00	45.00	75.00	0.00	0.00	0.00			

Demand set: A4303/ Shackelton Way 2014 AM Peak Base Flows

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

FROM/TO	ARM A	ARM B	ARM C	TIME
				16.45 - 18.15
ARM	A			
	0.000	0.012	0.988	
		0.0	17.0	1360.0
		(0.0)%	(11.8)%	(8.2)%
ARM B				
	0.000	0.000	1.000	
		0.0	0.0	184.0
		(0.0)%	(0.0)%	(8.7)%
ARM C				
	0.000	0.000	0.000	
		0.0	0.0	0.0
		(0.0)%	(0.0)%	(0.0)%

PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT
FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

CAPACITY	DEMAND/ (VEH/MIN)	(VEH/MIN)	CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME
16.45-17.00										
B-AC	2.31	7.19	0.321		0.00	0.46	6.6		0.20	
C-A	0.00									
C-B	0.00	6.16	0.000		0.00	0.00	0.0		0.00	
A-B	0.21									
A-C	17.06									

CAPACITY	DEMAND/ (VEH/MIN)	(VEH/MIN)	CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME
17.00-17.15										
B-AC	2.76	6.23	0.443		0.46	0.77	10.9		0.28	
C-A	0.00									
C-B	0.00	5.33	0.000		0.00	0.00	0.0		0.00	
A-B	0.25									
A-C	20.38									

CAPACITY	DEMAND/ (VEH/MIN)	(VEH/MIN)	CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME
17.15-17.30										
B-AC	3.38	4.90	0.688		0.77	1.97	25.6		0.59	
C-A	0.00									
C-B	0.00	4.18	0.000		0.00	0.00	0.0		0.00	
A-B	0.31									
A-C	24.96									

CAPACITY	DEMAND/ (VEH/MIN)	(VEH/MIN)	CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME
17.30-17.45										
B-AC	3.38	4.90	0.688		1.97	2.07	30.5		0.64	
C-A	0.00									
C-B	0.00	4.18	0.000		0.00	0.00	0.0		0.00	
A-B	0.31									
A-C	24.96									

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-AC	2.76	6.23	0.443		2.07	0.82	13.6		0.30
C-A	0.00								
C-B	0.00	5.33	0.000		0.00	0.00	0.0		0.00
A-B	0.25								
A-C	20.38								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-AC	2.31	7.19	0.321		0.82	0.48	7.6		0.21
C-A	0.00								
C-B	0.00	6.16	0.000		0.00	0.00	0.0		0.00
A-B	0.21								
A-C	17.06								

QUEUE FOR STREAM B-AC

SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	TIME
17.00	0.5	
17.15	0.8	*
17.30	2.0	**
17.45	2.1	**
18.00	0.8	*
18.15	0.5	

QUEUE FOR STREAM C-B

SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	TIME
17.00	0.0	
17.15	0.0	
17.30	0.0	
17.45	0.0	
18.00	0.0	
18.15	0.0	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

TOTAL DEMAND (VEH)	* QUEUEING * DELAY * (VEH)	* INCLUSIVE QUEUEING * DELAY * (VEH)	STREAM	* QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (VEH/H)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
253.3	168.8	94.6	0.37	94.6	0.37	0.0	0.0
C-A	B-AC	C-B					
0.0	0.0	0.0	0.00	0.0	0.00	15.6	1871.9
A-B	A-C	ALL					
23.4	1248.0	2148.6	1432.4	94.6	0.04	94.6	0.04

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

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ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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Ride Email: software@trl.co.uk Wokingham,
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COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR
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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\A4303_Coventry Road\ S2 AM 2026 Base+CD.vai"
(drive-on-the-left) at 11:21:45 on Tuesday, 1 September 2015

FILE PROPERTIES

RUN TITLE: S2 A4303/Coventry Road Roundabout AM Peak 2026 Base + CD LOCATION: A4303_Coventry Road
DATE: 14/07/31
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - Coventry Road ARM B - A4303
East
ARM C - Mobile Home Park ARM D - A4303
West

GEOMETRIC DATA

	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.20	7.20	31.00	14.00	56.00	62.0	0.523	26.437
ARM B	7.20	8.40	13.00	35.00	56.00	58.0	0.662	37.911
ARM C	3.65	5.50	8.00	28.00	56.00	50.0	0.501	22.482
ARM D	7.20	8.80	29.00	35.00	56.00	45.0	0.717	41.883

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range. Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING FACTORS

SCALE(%)	T13 IARM I FLOW
	A
	100
B	100
C	100
D	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45) LENGTH OF TIME

PERIOD -(90) MINUTES LENGTH OF TIME SEGMENT - (15)

MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

IARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK	FLOW STOPS	BEFORE AT TOP	AFTER IS REACHED	FALLING TO RISE	RATE OF FLOW (VEH/MIN) PEAK	OF PEAK	PEAK
ARM A	15.00	45.00	75.00	9.74	14.61	9.74			
ARM B	15.00	45.00	75.00	11.05	16.58	11.05			
ARM C	15.00	45.00	75.00	0.22	0.34	0.22			
ARM D	15.00	45.00	75.00	8.14	12.21	8.14			

DEMAND SET TITLE:

AM Peak 2006 Base Flows

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.15 - 08.45					
ARM A	0.000	0.214	0.000	0.786	
		0.0	167.0	0.0	612.0
		(0.0)	(0.6)	(0.0)	(1.1)
ARM B	0.037	0.000	0.000	0.963	
		33.0	0.0	0.0	851.0
		(9.1)	(0.0)	(0.0)	(15.3)
ARM C	0.389	0.444	0.000	0.167	
		7.0	8.0	0.0	3.0
		(14.3)	(0.0)	(0.0)	(0.0)
ARM D	0.270	0.717	0.005	0.008	
		176.0	467.0	3.0	5.0
		(2.3)	(25.9)	(33.3)	(40.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	9.77	22.25	0.439	- -	0.0	0.8	11.3	-	0.079
ARM B	11.09	28.43	0.390	- -	0.0	0.6	9.3	-	0.057
ARM C	0.23	11.56	0.020	- -	0.0	0.0	0.3	-	0.088
ARM D	8.17	34.61	0.236	- -	0.0	0.3	4.5	-	0.038
07.30-07.45									
ARM A	11.67	21.47	0.544	- -	0.8	1.2	17.0	-	0.102
ARM B	13.24	27.53	0.481	- -	0.6	0.9	13.5	-	0.070
ARM C	0.27	9.64	0.028	- -	0.0	0.0	0.4	-	0.107
ARM D	9.75	34.54	0.282	- -	0.3	0.4	5.8	-	0.040
07.45-08.00									
ARM A	14.29	20.42	0.700	- -	1.2	2.3	31.7	-	0.160
ARM B	16.22	26.33	0.616	- -	0.9	1.6	22.7	-	0.098
ARM C	0.33	7.05	0.047	- -	0.0	0.0	0.7	-	0.149
ARM D	11.95	34.43	0.347	- -	0.4	0.5	7.8	-	0.044
08.00-08.15									
ARM A	14.29	20.41	0.700	- -	2.3	2.3	34.2	-	0.163
ARM B	16.22	26.30	0.617	- -	1.6	1.6	23.8	-	0.099
ARM C	0.33	7.00	0.047	- -	0.0	0.0	0.7	-	0.150
ARM D	11.95	34.43	0.347	- -	0.5	0.5	7.9	-	0.044
08.15-08.30									
ARM A	11.67	21.47	0.544	- -	2.3	1.2	18.9	-	0.104
ARM B	13.24	27.49	0.482	- -	1.6	0.9	14.5	-	0.071
ARM C	0.27	9.57	0.028	- -	0.0	0.0	0.4	-	0.107
ARM D	9.75	34.53	0.282	- -	0.5	0.4	6.0	-	0.040
08.30-08.45									
ARM A	9.77	22.23	0.440	- -	1.2	0.8	12.2	-	0.081
ARM B	11.09	28.39	0.391	- -	0.9	0.6	9.9	-	0.058
ARM C	0.23	11.50	0.020	- -	0.0	0.0	0.3	-	0.089
ARM D	8.17	34.61	0.236	- -	0.4	0.3	4.7	-	0.038

---------- QUEUE

AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.8	*
07.45	1.2	*
08.00	2.3	**
08.15	2.3	**
08.30	1.2	*
08.45	0.8	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.6	*
07.45	0.9	*
08.00	1.6	**
08.15	1.6	**
08.30	0.9	*
08.45	0.6	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.0
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.3	
07.45	0.4	
08.00	0.5	*
08.15	0.5	*
08.30	0.4	
08.45	0.3	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	1072.2	714.8	125.3	0.12	125.3	0.12
B	1216.8	811.2	93.7	0.08	93.7	0.08
C	24.8	16.5	2.9	0.12	2.9	0.12
D	896.1	597.4	36.8	0.04	36.8	0.04
ALL	3209.8	2139.9	258.7	0.08	258.8	0.08

T75

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 16:14:06 on 09/09/2015]

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\A4303_Coventry Road\ S2 PM 2026 Base+CD.vai"
(drive-on-the-left) at 11:32:29 on Tuesday, 1 September 2015

FILE PROPERTIES

RUN TITLE: S2 A4303/Coventry Road Roundabout PM Peak 2026 Base + CD LOCATION: A4303_Coventry Road
DATE: 14/07/31
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB NUMBER: 7071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - Coventry Road ARM
B - A4303 East
ARM C - Mobile Home Park ARM D
- A4303 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.20	7.20	31.00	14.00	56.00	62.0	0.523	26.437
ARM B	7.20	8.40	13.00	35.00	56.00	58.0	0.662	37.911
ARM C	3.65	5.50	8.00	28.00	56.00	50.0	0.501	22.482
ARM D	7.20	8.80	29.00	35.00	56.00	45.0	0.717	41.883

V = approach half-width E = entry width L = effective flare length R = entry radius D = inscribed circle diameter PHI = entry angle

WARNING ARM A Effective flare length is outside normal range. Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING FACTORS

I FLOW SCALE(%) I	A
B	100
C	100
D	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK	FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE	AT TOP	AFTER
	TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK
A	15.00	45.00	75.00	4.72	7.09	4.72
ARM B	15.00	45.00	75.00	7.89	11.83	7.89
ARM C	15.00	45.00	75.00	0.15	0.23	0.15
ARM D	15.00	45.00	75.00	16.94	25.41	16.94

SET TITLE: AM Peak 2006 Base Flows

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15					
ARM A	0.000	0.331	0.011	0.659	
		0.0	125.0	4.0	249.0
		(0.0)%	(0.8)%	(0.0)%	(2.4)%
ARM B	0.130	0.000	0.010	0.861	
	82.0	0.0	6.0	543.0	
	(0.0)%	(0.0)%	(0.0)%	(22.7)%	
ARM C	0.583	0.083	0.000	0.333	
	7.0	1.0	0.0	4.0	
	(0.0)%	(0.0)%	(0.0)%	(0.0)%	
ARM D	0.415	0.579	0.004	0.001	
	563.0	785.0	5.0	2.0	
	(0.7)%	(13.2)%	(0.0)%	(0.0)%	

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	4.74	20.20	0.235	- -	-	0.0	0.3	4.5	-	0.065
ARM B	7.92	29.88	0.265	- -	-	0.0	0.4	5.3	-	0.045
ARM C	0.15	16.19	0.009	- -	-	0.0	0.0	0.1	-	0.062
ARM D	17.00	38.06	0.447	- -	-	0.0	0.8	11.8	-	0.047
17.00-17.15									
ARM A	5.66	19.07	0.297	- -	-	0.3	0.4	6.2	-	0.075
ARM B	9.45	29.51	0.320	- -	-	0.4	0.5	6.9	-	0.050
ARM C	0.18	14.95	0.012	- -	-	0.0	0.0	0.2	-	0.068
ARM D	20.30	37.91	0.536	- -	-	0.8	1.1	16.8	-	0.057
17.15-17.30									
ARM A	6.94	17.53	0.396	- -	-	0.4	0.6	9.5	-	0.094
ARM B	11.58	29.02	0.399	- -	-	0.5	0.7	9.7	-	0.057
ARM C	0.22	13.26	0.017	- -	-	0.0	0.0	0.2	-	0.077
ARM D	24.86	37.71	0.659	- -	-	1.1	1.9	27.6	-	0.077
17.30-17.45									
ARM A	6.94	17.52	0.396	- -	-	0.6	0.7	9.8	-	0.094
ARM B	11.58	29.01	0.399	- -	-	0.7	0.7	9.9	-	0.057
ARM C	0.22	13.25	0.017	- -	-	0.0	0.0	0.3	-	0.077
ARM D	24.86	37.71	0.659	- -	-	1.9	1.9	28.7	-	0.078
17.45-18.00									
ARM A	5.66	19.05	0.297	- -	-	0.7	0.4	6.5	-	0.075
ARM B	9.45	29.50	0.320	- -	-	0.7	0.5	7.2	-	0.050
ARM C	0.18	14.93	0.012	- -	-	0.0	0.0	0.2	-	0.068
ARM D	20.30	37.91	0.536	- -	-	1.9	1.2	17.9	-	0.057
18.00-18.15									
ARM A	4.74	20.18	0.235	- -	-	0.4	0.3	4.7	-	0.065
ARM B	7.92	29.86	0.265	- -	-	0.5	0.4	5.5	-	0.046
ARM C	0.15	16.16	0.009	- -	-	0.0	0.0	0.1	-	0.062
ARM D	17.00	38.05	0.447	- -	-	1.2	0.8	12.4	-	0.048

---------- QUEUE

AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.6	*
17.45	0.7	*
18.00	0.4	
18.15	0.3	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	
17.30	0.7	*
17.45	0.7	*
18.00	0.5	
18.15	0.4	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.8	*
17.15	1.1	*
17.30	1.9	**
17.45	1.9	**
18.00	1.2	*
18.15	0.8	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)	T75
A	520.3	346.9	41.1	0.08	41.1	0.08	
B	868.5	579.0	44.6	0.05	44.6	0.05	
C	16.5	11.0	1.1	0.07	1.1	0.07	
D	1865.1	1243.4	115.2	0.06	115.2	0.06	
ALL	3270.4	2180.3	202.1	0.06	202.1	0.06	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 16:14:44 on 09/09/2015]

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\A4303_Coventry Road\ S4 AM 2026 Base+CD+PD.vai"
(drive-on-the-left) at 12:20:21 on Tuesday, 1 September 2015

FILE PROPERTIES

RUN TITLE: S4 A4303/Coventry Road Roundabout AM Peak 2026 Base + CD + PD
LOCATION: A4303_Coventry Road
DATE: 14/07/31
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB
NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - Coventry Road ARM
B - A4303 East
ARM C - Mobile Home Park ARM D
- A4303 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.20	7.20	31.00	14.00	56.00	62.0	0.523	26.437
ARM B	7.20	8.40	13.00	35.00	56.00	58.0	0.662	37.911
ARM C	3.65	5.50	8.00	28.00	56.00	50.0	0.501	22.482
ARM D	7.20	8.80	29.00	35.00	56.00	45.0	0.717	41.883

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range. Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING

FACTORS

I FLOW SCALE(%) I	A
B	100
C	100
D	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK	FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE	AT TOP	AFTER
	TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK
A	15.00	45.00	75.00	11.13	16.69	11.13
ARM B	15.00	45.00	75.00	14.01	21.02	14.01
ARM C	15.00	45.00	75.00	0.22	0.34	0.22
ARM D	15.00	45.00	75.00	9.51	14.27	9.51

SET TITLE: AM Peak 2006 Base Flows

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.15 - 08.45	ARM A	0.000	0.188	0.000	0.812
		0.0	167.0	0.0	723.0
		(0.0)	(0.6)	(0.0)	(1.0)
	ARM B	0.029	0.000	0.000	0.971
		33.0	0.0	0.0	1088.0
		(9.1)	(0.0)	(0.0)	(15.3)
	ARM C	0.389	0.444	0.000	0.167
		7.0	8.0	0.0	3.0
		(14.3)	(0.0)	(0.0)	(0.0)
	ARM D	0.273	0.716	0.004	0.007
		208.0	545.0	3.0	5.0
		(1.9)	(29.7)	(33.3)	(40.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	11.17	21.49	0.520	- -	0.0	1.1	15.3	-	0.096
ARM B	14.07	27.62	0.509	- -	0.0	1.0	14.9	-	0.073
ARM C	0.23	9.30	0.024	- -	0.0	0.0	0.4	-	0.110
ARM D	9.55	33.90	0.282	- -	0.0	0.4	5.8	-	0.041
07.30-07.45									
ARM A	13.33	20.57	0.648	- -	1.1	1.8	25.6	-	0.136
ARM B	16.80	26.57	0.632	- -	1.0	1.7	24.3	-	0.101
ARM C	0.27	6.93	0.039	- -	0.0	0.0	0.6	-	0.150
ARM D	11.40	33.82	0.337	- -	0.4	0.5	7.5	-	0.045
07.45-08.00									
ARM A	16.33	19.31	0.846	- -	1.8	4.9	63.3	-	0.297
ARM B	20.57	25.21	0.816	- -	1.7	4.1	55.8	-	0.202
ARM C	0.33	3.82	0.086	- -	0.0	0.1	1.3	-	0.285
ARM D	13.96	33.72	0.414	- -	0.5	0.7	10.4	-	0.051
08.00-08.15									
ARM A	16.33	19.30	0.846	- -	4.9	5.2	75.6	-	0.330
ARM B	20.57	25.12	0.819	- -	4.1	4.3	63.9	-	0.218
ARM C	0.33	3.67	0.090	- -	0.1	0.1	1.4	-	0.299
ARM D	13.96	33.72	0.414	- -	0.5	0.7	10.6	-	0.051
08.15-08.30									
ARM A	13.33	20.56	0.649	- -	5.2	1.9	31.1	-	0.147
ARM B	16.80	26.45	0.635	- -	4.3	1.8	28.3	-	0.107
ARM C	0.27	6.71	0.040	- -	0.1	0.0	0.7	-	0.155
ARM D	11.40	33.82	0.337	- -	0.7	0.5	7.8	-	0.045
08.30-08.45									
ARM A	11.17	21.47	0.520	- -	1.9	1.1	17.1	-	0.098
ARM B	14.07	27.56	0.510	- -	1.8	1.1	16.3	-	0.075
ARM C	0.23	9.18	0.025	- -	0.0	0.0	0.4	-	0.112
ARM D	9.55	33.89	0.282	- -	0.5	0.4	6.0	-	0.041

---------- QUEUE

AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.1	*
07.45	1.8	**
08.00	4.9	*****
08.15	5.2	*****
08.30	1.9	**
08.45	1.1	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.0	*
07.45	1.7	**
08.00	4.1	****
08.15	4.3	****
08.30	1.8	**
08.45	1.1	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.0
07.45	0.0
08.00	0.1
08.15	0.1
08.30	0.0
08.45	0.0

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.4	
07.45	0.5	*
08.00	0.7	*
08.15	0.7	*
08.30	0.5	*
08.45	0.4	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)	T75
A	1225.0	816.7	228.0	0.19	228.0	0.19	
B	1543.0	1028.6	203.4	0.13	203.4	0.13	
C	24.8	16.5	4.8	0.19	4.8	0.19	
D	1047.5	698.3	47.9	0.05	47.9	0.05	
ALL	3840.2	2560.2	484.1	0.13	484.1	0.13	

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* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

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ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\A4303_Coventry Road\ S4 PM 2026 Base+CD+PD.vai"
(drive-on-the-left) at 12:22:37 on Tuesday, 1 September 2015

FILE PROPERTIES

RUN TITLE: S4 A4303/Coventry Road Roundabout PM Peak 2026 Base + CD + PD
LOCATION: A4303_Coventry Road
DATE: 14/07/31
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB
NUMBER: 7071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - Coventry Road ARM
B - A4303 East
ARM C - Mobile Home Park ARM D
- A4303 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.20	7.20	31.00	14.00	56.00	62.0	0.523	26.437
ARM B	7.20	8.40	13.00	35.00	56.00	58.0	0.662	37.911
ARM C	3.65	5.50	8.00	28.00	56.00	50.0	0.501	22.482
ARM D	7.20	8.80	29.00	35.00	56.00	45.0	0.717	41.883

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range. Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING

FACTORS

I FLOW SCALE(%) I	I A
B	100
C	100
D	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK	FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE	AT TOP	AFTER
	TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK
A	15.00	45.00	75.00	5.14	7.71	5.14
ARM B	15.00	45.00	75.00	8.70	13.05	8.70
ARM C	15.00	45.00	75.00	0.15	0.23	0.15
ARM D	15.00	45.00	75.00	20.39	30.58	20.39

SET TITLE: AM Peak 2006 Base Flows

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15					
ARM A	0.000	0.304	0.010	0.686	
		0.0	125.0	4.0	282.0
		(0.0)%	(0.8)%	(0.0)%	(2.1)%
ARM B	0.118	0.000	0.009	0.874	
		82.0	0.0	6.0	608.0
		(0.0)%	(0.0)%	(0.0)%	(24.7)%
ARM C	0.583	0.083	0.000	0.333	
		7.0	1.0	0.0	4.0
		(0.0)%	(0.0)%	(0.0)%	(0.0)%
ARM D	0.399	0.597	0.003	0.001	
		651.0	973.0	5.0	2.0
		(0.6)%	(14.5)%	(0.0)%	(0.0)%

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	5.16	18.79	0.274	- -	-	0.0	0.4	5.5	-	0.073
ARM B	8.73	29.15	0.300	- -	-	0.0	0.4	6.3	-	0.049
ARM C	0.15	15.41	0.010	- -	-	0.0	0.0	0.1	-	0.066
ARM D	20.47	37.72	0.543	- -	-	0.0	1.2	17.1	-	0.057
17.00-17.15									
ARM A	6.16	17.37	0.354	- -	-	0.4	0.5	8.0	-	0.089
ARM B	10.43	28.75	0.363	- -	-	0.4	0.6	8.4	-	0.055
ARM C	0.18	14.01	0.013	- -	-	0.0	0.0	0.2	-	0.072
ARM D	24.44	37.58	0.650	- -	-	1.2	1.8	26.6	-	0.076
17.15-17.30									
ARM A	7.54	15.47	0.488	- -	-	0.5	0.9	13.5	-	0.125
ARM B	12.77	28.21	0.453	- -	-	0.6	0.8	12.0	-	0.065
ARM C	0.22	12.12	0.018	- -	-	0.0	0.0	0.3	-	0.084
ARM D	29.93	37.38	0.801	- -	-	1.8	3.9	53.6	-	0.130
17.30-17.45									
ARM A	7.54	15.42	0.489	- -	-	0.9	0.9	14.2	-	0.127
ARM B	12.77	28.20	0.453	- -	-	0.8	0.8	12.3	-	0.065
ARM C	0.22	12.10	0.018	- -	-	0.0	0.0	0.3	-	0.084
ARM D	29.93	37.38	0.801	- -	-	3.9	3.9	58.5	-	0.134
17.45-18.00									
ARM A	6.16	17.31	0.356	- -	-	0.9	0.6	8.6	-	0.090
ARM B	10.43	28.73	0.363	- -	-	0.8	0.6	8.8	-	0.055
ARM C	0.18	13.99	0.013	- -	-	0.0	0.0	0.2	-	0.072
ARM D	24.44	37.57	0.650	- -	-	3.9	1.9	29.6	-	0.078
18.00-18.15									
ARM A	5.16	18.75	0.275	- -	-	0.6	0.4	5.9	-	0.074
ARM B	8.73	29.14	0.300	- -	-	0.6	0.4	6.5	-	0.049
ARM C	0.15	15.37	0.010	- -	-	0.0	0.0	0.2	-	0.066
ARM D	20.47	37.72	0.543	- -	-	1.9	1.2	18.4	-	0.058

---------- QUEUE

AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	*
17.30	0.9	*
17.45	0.9	*
18.00	0.6	*
18.15	0.4	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.6	*
17.30	0.8	*
17.45	0.8	*
18.00	0.6	*
18.15	0.4	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.2	*
17.15	1.8	**
17.30	3.9	****
17.45	3.9	****
18.00	1.9	**
18.15	1.2	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	565.7	377.1	55.6	0.10	55.6	0.10
B	958.0	638.7	54.3	0.06	54.3	0.06
C	16.5	11.0	1.2	0.07	1.2	0.07
D	2245.0	1496.6	203.8	0.09	203.8	0.09
ALL	3785.2	2523.4	314.9	0.08	315.0	0.08

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
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* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

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ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\A4303_A426\ S2 AM 2026 Base+CD.vai"
(drive-on-the-left) at 15:03:50 on Friday, 28 August 2015

FILE PROPERTIES

RUN TITLE: S2 A4303/ A426 Roundabout AM Peak 2026 Base + CD
LOCATION: A4303_Rugby Road
DATE: 14/07/31
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB
NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - Rugby Road
ARM B - A4303 East
ARM C - A426 South
ARM D - A4303 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.30	7.40	30.00	23.00	70.00	53.0	0.492	28.789
ARM B	7.30	11.10	25.00	28.00	70.00	50.0	0.669	47.016
ARM C	3.20	7.80	20.00	27.00	70.00	44.0	0.498	28.481
ARM D	7.30	8.40	19.00	28.00	70.00	52.0	0.591	38.960

V = approach half-width E = entry width L = effective flare length R = entry radius D = inscribed circle diameter PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING

FACTORS

I	FLOW SCALE(%)
B	100
C	100
D	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
A	15.00	45.00	75.00	12.49	18.73	12.49
ARM B	15.00	45.00	75.00	21.79	32.68	21.79
ARM C	15.00	45.00	75.00	8.64	12.96	8.64
ARM D	15.00	45.00	75.00	8.20	12.30	8.20

SET TITLE: AM Peak 2006 Base Flows

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.15 - 08.45					
ARM A	0.000	0.539	0.358	0.103	
		0.0	538.0	358.0	103.0
		(0.0)%	(8.4)%	(4.5)%	(2.9)%
ARM B		0.271	0.028	0.312	0.390
		473.0	48.0	543.0	679.0
		(8.9)%	(0.0)%	(9.0)%	(18.7)%
ARM C		0.431	0.524	0.000	0.045
		298.0	362.0	0.0	31.0
		(4.7)%	(11.9)%	(0.0)%	(9.7)%
ARM D		0.099	0.848	0.053	0.000
		65.0	556.0	35.0	0.0
		(12.3)%	(19.2)%	(17.1)%	(0.0)%

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	12.53	20.37	0.615	- -	-	0.0	1.6	22.1	-	0.124
ARM B	21.87	37.94	0.577	- -	-	0.0	1.3	19.5	-	0.062
ARM C	8.67	17.75	0.488	- -	-	0.0	0.9	13.5	-	0.109
ARM D	8.23	24.93	0.330	- -	-	0.0	0.5	7.2	-	0.060
07.30-07.45									
ARM A	14.97	19.05	0.786	- -	-	1.6	3.4	46.4	-	0.232
ARM B	26.12	37.19	0.702	- -	-	1.3	2.3	33.2	-	0.089
ARM C	10.35	16.10	0.643	- -	-	0.9	1.7	24.7	-	0.171
ARM D	9.83	23.37	0.421	- -	-	0.5	0.7	10.6	-	0.074
07.45-08.00									
ARM A	18.33	17.35	1.057	- -	-	3.4	25.7	237.7	-	1.081
ARM B	31.98	36.53	0.875	- -	-	2.3	6.4	83.6	-	0.197
ARM C	12.68	13.96	0.908	- -	-	1.7	7.0	83.0	-	0.526
ARM D	12.04	21.41	0.562	- -	-	0.7	1.3	18.2	-	0.106
08.00-08.15									
ARM A	18.33	17.25	1.063	- -	-	25.7	43.8	522.8	-	2.196
ARM B	31.98	36.45	0.877	- -	-	6.4	6.7	98.9	-	0.219
ARM C	12.68	13.86	0.915	- -	-	7.0	8.4	117.2	-	0.706
ARM D	12.04	21.23	0.567	- -	-	1.3	1.3	19.3	-	0.109
08.15-08.30									
ARM A	14.97	18.89	0.792	- -	-	43.8	4.5	289.1	-	1.155
ARM B	26.12	36.40	0.717	- -	-	6.7	2.6	42.1	-	0.102
ARM C	10.35	15.84	0.654	- -	-	8.4	2.0	36.3	-	0.214
ARM D	9.83	23.07	0.426	- -	-	1.3	0.7	11.6	-	0.076
08.30-08.45									
ARM A	12.53	20.31	0.617	- -	-	4.5	1.6	26.8	-	0.135
ARM B	21.87	37.85	0.578	- -	-	2.6	1.4	21.4	-	0.063
ARM C	8.67	17.68	0.490	- -	-	2.0	1.0	15.3	-	0.113
ARM D	8.23	24.84	0.331	- -	-	0.7	0.5	7.6	-	0.060

---------- QUEUE

AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.6	**
07.45	3.4	***
08.00	25.7	*************************
08.15	43.8	**
08.30	4.5	*****
08.45	1.6	**

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.3	*
07.45	2.3	**
08.00	6.4	******
08.15	6.7	*******
08.30	2.6	***
08.45	1.4	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.9	*
07.45	1.7	**
08.00	7.0	*******
08.15	8.4	********
08.30	2.0	**
08.45	1.0	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.5	
07.45	0.7	*
08.00	1.3	*
08.15	1.3	*
08.30	0.7	*
08.45	0.5	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)	T75
A	1375.0	916.7	1145.0	0.83	1145.0	0.83	
B	2399.1	1599.4	298.8	0.12	298.8	0.12	
C	951.1	634.1	290.0	0.30	290.0	0.30	
D	902.9	602.0	74.4	0.08	74.4	0.08	
ALL	5628.2	3752.1	1808.1	0.32	1808.3	0.32	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

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ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\A4303_A426\ S2 PM 2026 Base+CD.vai"
(drive-on-the-left) at 15:14:14 on Friday, 28 August 2015

FILE PROPERTIES

RUN TITLE: S2 A4303/ A426 Roundabout PM Peak 2026 Base + CD
LOCATION: A4303_Rugby Road
DATE: 14/07/31
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB
NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - Rugby Road
ARM B - A4303 East
ARM C - A426 South
ARM D - A4303 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.30	7.40	30.00	23.00	70.00	53.0	0.492	28.789
ARM B	7.30	11.10	25.00	28.00	70.00	50.0	0.669	47.016
ARM C	3.20	7.80	20.00	27.00	70.00	44.0	0.498	28.481
ARM D	7.30	8.40	19.00	28.00	70.00	52.0	0.591	38.960

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING

FACTORS

ARM	FLOW SCALE(%)
A	
B	100
C	100
D	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
A	15.00	45.00	75.00	10.89	16.33	10.89
ARM B	15.00	45.00	75.00	18.24	27.36	18.24
ARM C	15.00	45.00	75.00	9.71	14.57	9.71
ARM D	15.00	45.00	75.00	11.24	16.86	11.24

SET TITLE: AM Peak 2006 Base Flows

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15					
ARM A	0.000	0.494	0.367	0.139	
		0.0	430.0	320.0	121.0
		(0.0)%	(1.6)%	(1.6)%	(5.0)%
ARM B	0.363	0.003	0.289	0.344	
		530.0	5.0	422.0	502.0
		(2.8)%	(0.0)%	(10.7)%	(22.5)%
ARM C	0.479	0.484	0.000	0.037	
		372.0	376.0	0.0	29.0
		(1.6)%	(7.7)%	(0.0)%	(0.0)%
ARM D	0.107	0.853	0.040	0.000	
		96.0	767.0	36.0	0.0
		(4.2)%	(13.0)%	(5.6)%	(0.0)%

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	10.93	20.29	0.539	- -	-	0.0	1.2	16.5	-	0.105
ARM B	18.31	38.38	0.477	- -	-	0.0	0.9	13.3	-	0.050
ARM C	9.75	19.55	0.499	- -	-	0.0	1.0	14.1	-	0.101
ARM D	11.28	26.06	0.433	- -	-	0.0	0.8	11.0	-	0.067
17.00-17.15									
ARM A	13.05	18.73	0.697	- -	-	1.2	2.2	31.0	-	0.172
ARM B	21.86	37.67	0.580	- -	-	0.9	1.4	20.0	-	0.063
ARM C	11.64	18.04	0.645	- -	-	1.0	1.8	25.1	-	0.154
ARM D	13.47	24.34	0.554	- -	-	0.8	1.2	17.7	-	0.092
17.15-17.30									
ARM A	15.98	16.70	0.957	- -	-	2.2	10.8	119.2	-	0.608
ARM B	26.77	36.84	0.727	- -	-	1.4	2.6	37.0	-	0.098
ARM C	14.26	16.02	0.890	- -	-	1.8	6.4	77.6	-	0.432
ARM D	16.50	22.11	0.746	- -	-	1.2	2.8	39.0	-	0.172
17.30-17.45									
ARM A	15.98	16.58	0.964	- -	-	10.8	14.1	189.8	-	0.926
ARM B	26.77	36.73	0.729	- -	-	2.6	2.7	39.5	-	0.100
ARM C	14.26	15.97	0.893	- -	-	6.4	7.2	102.5	-	0.536
ARM D	16.50	21.96	0.751	- -	-	2.8	2.9	43.4	-	0.182
17.45-18.00									
ARM A	13.05	18.56	0.703	- -	-	14.1	2.5	55.0	-	0.244
ARM B	21.86	37.40	0.584	- -	-	2.7	1.4	22.0	-	0.065
ARM C	11.64	17.94	0.649	- -	-	7.2	1.9	33.4	-	0.178
ARM D	13.47	24.10	0.559	- -	-	2.9	1.3	20.2	-	0.096
18.00-18.15									
ARM A	10.93	20.22	0.541	- -	-	2.5	1.2	18.8	-	0.110
ARM B	18.31	38.33	0.478	- -	-	1.4	0.9	14.1	-	0.050
ARM C	9.75	19.51	0.500	- -	-	1.9	1.0	15.8	-	0.104
ARM D	11.28	25.98	0.434	- -	-	1.3	0.8	11.9	-	0.068

---------- QUEUE

AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.2	*
17.15	2.2	**
17.30	10.8	**********
17.45	14.1	**************
18.00	2.5	**
18.15	1.2	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.9	*
17.15	1.4	*
17.30	2.6	***
17.45	2.7	***
18.00	1.4	*
18.15	0.9	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.0	*
17.15	1.8	**
17.30	6.4	******
17.45	7.2	*******
18.00	1.9	**
18.15	1.0	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.8	*
17.15	1.2	*
17.30	2.8	***
17.45	2.9	***
18.00	1.3	*
18.15	0.8	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *		T75 I
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)	
A	1198.9	799.2	430.3	0.36	430.4	0.36	
B	2008.2	1338.8	145.9	0.07	145.9	0.07	
C	1069.5	713.0	268.5	0.25	268.6	0.25	
D	1237.4	824.9	143.2	0.12	143.3	0.12	
ALL	5514.0	3676.0	988.0	0.18	988.1	0.18	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 16:01:05 on 09/09/2015]

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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For sales and distribution information, program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\A4303_A426\ S4 AM 2026 Base+CD+PD No Imps.vai"
(drive-on-the-left) at 13:53:18 on Monday, 7 September 2015

FILE PROPERTIES

RUN TITLE: S4 A4303/ A426 Roundabout AM Peak 2026 Base + CD + PD (No Improvements) LOCATION: A4303_Rugby Road
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - Rugby Road
ARM B - A4303 East
ARM C - A426 South
ARM D - A4303 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.30	7.40	30.00	23.00	70.00	53.0	0.492	28.789
ARM B	7.30	11.10	25.00	28.00	70.00	50.0	0.669	47.016
ARM C	3.20	7.80	20.00	27.00	70.00	44.0	0.498	28.481
ARM D	7.30	8.40	19.00	28.00	70.00	52.0	0.591	38.960

V = approach half-width E = entry width L = effective flare length R = entry radius D = inscribed circle diameter PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING FACTORS

I	FLOW SCALE(%)
B	100
C	100
D	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN FLOW IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
A	15.00	45.00	75.00	13.09	19.63	13.09
ARM B	15.00	45.00	75.00	24.14	36.21	24.14
ARM C	15.00	45.00	75.00	8.64	12.96	8.64
ARM D	15.00	45.00	75.00	9.18	13.76	9.18

SET TITLE: AM Peak 2006 Base Flows

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
		TURNING PROPORTIONS			
		TURNING COUNTS			
		(PERCENTAGE OF H.V.S)			
07.15 - 08.45					
ARM A	0.000	0.514	0.342	0.144	
		0.0	538.0	358.0	151.0
		(0.0)%	(8.4)%	(4.5)%	(8.6)%
	ARM B	0.245	0.025	0.281	0.449
		473.0	48.0	543.0	867.0
		(8.9)%	(0.0)%	(9.0)%	(17.8)%
	ARM C	0.431	0.524	0.000	0.045
		298.0	362.0	0.0	31.0
		(4.7)%	(11.9)%	(0.0)%	(9.7)%
	ARM D	0.110	0.842	0.048	0.000
		81.0	618.0	35.0	0.0
		(22.2)%	(22.3)%	(17.1)%	(0.0)%

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	13.14	19.71	0.666	- -	0.0	1.9	27.0	-	0.146
ARM B	24.23	37.45	0.647	- -	0.0	1.8	25.9	-	0.074
ARM C	8.67	16.20	0.535	- -	0.0	1.1	16.1	-	0.130
ARM D	9.21	24.20	0.381	- -	0.0	0.6	8.9	-	0.066
07.30-07.45									
ARM A	15.69	18.31	0.857	- -	1.9	5.2	66.7	-	0.329
ARM B	28.93	36.64	0.790	- -	1.8	3.6	50.5	-	0.126
ARM C	10.35	14.25	0.726	- -	1.1	2.5	34.3	-	0.245
ARM D	11.00	22.70	0.484	- -	0.6	0.9	13.6	-	0.085
07.45-08.00									
ARM A	19.21	16.68	1.152	- -	5.2	46.2	396.4	-	1.767
ARM B	35.43	36.25	0.978	- -	3.6	17.6	191.3	-	0.436
ARM C	12.68	12.04	1.053	- -	2.5	19.3	180.9	-	1.207
ARM D	13.47	21.24	0.634	- -	0.9	1.7	24.2	-	0.127
08.00-08.15									
ARM A	19.21	16.61	1.157	- -	46.2	85.6	989.5	-	4.079
ARM B	35.43	36.21	0.978	- -	17.6	22.6	305.4	-	0.662
ARM C	12.68	11.81	1.074	- -	19.3	34.2	403.0	-	2.485
ARM D	13.47	21.09	0.639	- -	1.7	1.7	25.9	-	0.131
08.15-08.30									
ARM A	15.69	17.69	0.887	- -	85.6	58.6	1082.1	-	4.109
ARM B	28.93	36.02	0.803	- -	22.6	4.3	98.1	-	0.203
ARM C	10.35	13.60	0.761	- -	34.2	3.7	219.6	-	1.240
ARM D	11.00	21.45	0.513	- -	1.7	1.1	16.6	-	0.097
08.30-08.45									
ARM A	13.14	19.61	0.670	- -	58.6	2.2	293.1	-	0.962
ARM B	24.23	36.26	0.668	- -	4.3	2.0	32.2	-	0.085
ARM C	8.67	15.82	0.548	- -	3.7	1.2	20.2	-	0.146
ARM D	9.21	24.04	0.383	- -	1.1	0.6	9.6	-	0.068

---------- QUEUE

AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.9	**
07.45	5.2	*****
08.00	46.2	**********
08.15	85.6	**********
08.30	58.6	**********
08.45	2.2	**

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.8	**
07.45	3.6	****
08.00	17.6	**********
08.15	22.6	**********
08.30	4.3	****
08.45	2.0	**

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.1	*
07.45	2.5	***
08.00	19.3	**********
08.15	34.2	**********
08.30	3.7	****
08.45	1.2	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.6	*
07.45	0.9	*
08.00	1.7	**
08.15	1.7	**
08.30	1.1	*
08.45	0.6	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	1441.1	960.7	2854.8	1.98	2854.9	1.98
B	2657.9	1771.9	703.6	0.26	703.6	0.26
C	951.1	634.1	874.1	0.92	874.1	0.92
D	1010.3	673.5	98.7	0.10	98.7	0.10
ALL	6060.4	4040.3	4531.2	0.75	4531.4	0.75

T75

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 16:03:14 on 09/09/2015]

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\A4303_A426\ S4 PM 2026 Base+CD+PD No Imps.vai"
(drive-on-the-left) at 13:56:07 on Monday, 7 September 2015

FILE PROPERTIES

RUN TITLE: S4 A4303/ A426 Roundabout PM Peak 2026 Base + CD + PD (No Improvements) LOCATION: A4303_Rugby Road
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - Rugby Road
ARM B - A4303 East
ARM C - A426 South
ARM D - A4303 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.30	7.40	30.00	23.00	70.00	53.0	0.492	28.789
ARM B	7.30	11.10	25.00	28.00	70.00	50.0	0.669	47.016
ARM C	3.20	7.80	20.00	27.00	70.00	44.0	0.498	28.481
ARM D	7.30	8.40	19.00	28.00	70.00	52.0	0.591	38.960

V = approach half-width E = entry width L = effective flare length R = entry radius D = inscribed circle diameter PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING FACTORS

I	FLOW SCALE(%)
B	100
C	100
D	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN FLOW IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
A	15.00	45.00	75.00	11.01	16.52	11.01
ARM B	15.00	45.00	75.00	18.92	28.39	18.92
ARM C	15.00	45.00	75.00	9.71	14.57	9.71
ARM D	15.00	45.00	75.00	13.57	20.36	13.57

SET TITLE: AM Peak 2006 Base Flows

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15					
ARM A		0.000	0.488	0.363	0.149
		0.0	430.0	320.0	131.0
		(0.0)%	(1.6)%	(1.6)%	(9.9)%
	ARM B	0.350	0.003	0.279	0.368
		530.0	5.0	422.0	557.0
		(2.8)%	(0.0)%	(10.7)%	(24.2)%
	ARM C	0.479	0.484	0.000	0.037
		372.0	376.0	0.0	29.0
		(1.6)%	(7.7)%	(0.0)%	(0.0)%
	ARM D	0.120	0.847	0.033	0.000
		130.0	920.0	36.0	0.0
		(8.5)%	(14.1)%	(5.6)%	(0.0)%

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	11.05	19.05	0.580	- -	-	0.0	1.4	19.2	-	0.122
ARM B	19.00	37.92	0.501	- -	-	0.0	1.0	14.6	-	0.052
ARM C	9.75	19.00	0.513	- -	-	0.0	1.0	14.9	-	0.107
ARM D	13.63	25.75	0.529	- -	-	0.0	1.1	16.0	-	0.081
17.00-17.15									
ARM A	13.20	17.30	0.763	- -	-	1.4	3.0	41.2	-	0.232
ARM B	22.68	37.19	0.610	- -	-	1.0	1.5	22.5	-	0.069
ARM C	11.64	17.38	0.670	- -	-	1.0	2.0	27.6	-	0.171
ARM D	16.27	24.04	0.677	- -	-	1.1	2.0	29.0	-	0.127
17.15-17.30									
ARM A	16.17	15.13	1.068	- -	-	3.0	25.2	230.0	-	1.192
ARM B	27.78	36.62	0.759	- -	-	1.5	3.1	43.1	-	0.111
ARM C	14.26	15.28	0.933	- -	-	2.0	8.6	98.8	-	0.564
ARM D	19.93	21.91	0.909	- -	-	2.0	7.8	94.5	-	0.373
17.30-17.45									
ARM A	16.17	14.91	1.084	- -	-	25.2	45.5	531.6	-	2.544
ARM B	27.78	36.57	0.760	- -	-	3.1	3.1	46.3	-	0.114
ARM C	14.26	15.24	0.936	- -	-	8.6	10.4	144.9	-	0.780
ARM D	19.93	21.72	0.917	- -	-	7.8	9.2	128.9	-	0.489
17.45-18.00									
ARM A	13.20	16.90	0.781	- -	-	45.5	4.4	320.0	-	1.421
ARM B	22.68	36.29	0.625	- -	-	3.1	1.7	26.3	-	0.075
ARM C	11.64	17.10	0.681	- -	-	10.4	2.2	43.6	-	0.225
ARM D	16.27	23.70	0.687	- -	-	9.2	2.3	40.2	-	0.153
18.00-18.15									
ARM A	11.05	18.94	0.584	- -	-	4.4	1.4	23.4	-	0.133
ARM B	19.00	37.82	0.502	- -	-	1.7	1.0	15.6	-	0.053
ARM C	9.75	18.93	0.515	- -	-	2.2	1.1	16.9	-	0.111
ARM D	13.63	25.65	0.531	- -	-	2.3	1.1	17.8	-	0.084

---------- QUEUE

AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.4	*
17.15	3.0	***
17.30	25.2	************************
17.45	45.5	***
18.00	4.4	****
18.15	1.4	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.0	*
17.15	1.5	**
17.30	3.1	***
17.45	3.1	***
18.00	1.7	**
18.15	1.0	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.0	*
17.15	2.0	**
17.30	8.6	*********
17.45	10.4	**********
18.00	2.2	**
18.15	1.1	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.1	*
17.15	2.0	**
17.30	7.8	********
17.45	9.2	*********
18.00	2.3	**
18.15	1.1	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	1212.6	808.4	1165.4	0.96	1165.4	0.96
B	2083.9	1389.3	168.4	0.08	168.4	0.08
C	1069.5	713.0	346.7	0.32	346.7	0.32
D	1494.8	996.5	326.5	0.22	326.5	0.22
ALL	5860.8	3907.2	2006.9	0.34	2007.0	0.34

T75

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 16:04:40 on 09/09/2015]

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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For sales and distribution information, program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\A4303_A426\ S4 AM 2026 Base+CD+PD+Imps.vai"
(drive-on-the-left) at 16:16:34 on Friday, 28 August 2015

FILE PROPERTIES

RUN TITLE: S4 A4303/ A426 Roundabout AM Peak 2026 Base + CD + PD + Improvements
LOCATION: A4303_Rugby Road
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB
NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - Rugby Road
ARM B - A4303 East
ARM C - A426 South
ARM D - A4303 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.30	10.50	41.00	22.00	74.00	44.0	0.570	38.181
ARM B	7.30	10.50	41.00	20.00	74.00	42.0	0.657	47.722
ARM C	3.20	10.50	40.00	22.00	74.00	48.0	0.557	37.146
ARM D	7.30	10.50	30.00	22.00	74.00	46.0	0.643	46.415

V = approach half-width E = entry width L = effective flare length R = entry radius D = inscribed circle diameter PHI = entry angle

WARNING ARM A Effective flare length is outside normal range. Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range. Treat capacities with increasing caution.

WARNING ARM C Effective flare length is outside normal range. Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING

FACTORS

FLOW SCALE(%)	IARM
	A
B	100
C	100
D	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK	NUMBER OF MINUTES FROM START WHEN FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
	TO RISE	IS REACHED	FALLING	PEAK		
A	15.00	45.00	75.00	13.09	19.63	13.09
ARM B	15.00	45.00	75.00	24.14	36.21	24.14
ARM C	15.00	45.00	75.00	8.64	12.96	8.64
ARM D	15.00	45.00	75.00	9.18	13.76	9.18

DEMAND SET TITLE: AM Peak 2006 Base Flows

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.15 - 08.45					
	ARM A	0.000	0.514	0.342	0.144
		TURNING PROPORTIONS			
		TURNING COUNTS			
		(PERCENTAGE OF H.V.S)			
		0.0	538.0	358.0	151.0
		(0.0)	(8.4)	(4.5)	(8.6)
	ARM B	0.245	0.025	0.281	0.449
		473.0	48.0	543.0	867.0
		(8.9)	(0.0)	(9.0)	(17.8)
	ARM C	0.431	0.524	0.000	0.045
		298.0	362.0	0.0	31.0
		(4.7)	(11.9)	(0.0)	(9.7)
	ARM D	0.110	0.842	0.048	0.000
		81.0	618.0	35.0	0.0
		(22.2)	(22.3)	(17.1)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/ MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	13.14	27.34	0.480	- -	-	0.0	0.9	13.3	-	0.070
ARM B	24.23	38.12	0.636	- -	-	0.0	1.7	24.8	-	0.071
ARM C	8.67	22.99	0.377	- -	-	0.0	0.6	8.8	-	0.069
ARM D	9.21	29.61	0.311	- -	-	0.0	0.4	6.6	-	0.049

DEMAND (VEH/MIN) (PEDS/MIN)	CAPACITY (VEH/MIN) (VEHS)	DEMAND/ CAPACITY (VEHS)	PEDESTRIAN FLOW TIME SEGMENT)	START QUEUE TIME SEGMENT)	END QUEUE	DELAY (VEH.MIN/ VEHICLE (MIN)	GEOMETRIC DELAY (VEH.MIN/	AVERAGE DELAY PER ARRIVING	TIME (RFC)
07.30-07.45									
ARM A	15.69	25.71	0.610	- -	-	0.9	1.5	22.2	-	0.099
ARM B	28.93	37.30	0.776	- -	-	1.7	3.3	47.0	-	0.117
ARM C	10.35	20.80	0.498	- -	-	0.6	1.0	14.2	-	0.095
ARM D	11.00	27.95	0.393	- -	-	0.4	0.6	9.5	-	0.059

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
ARM A	19.21	23.51	0.817	- -	-	1.5	4.1	55.5	-	0.215
ARM B	35.43	36.20	0.979	- -	-	3.3	17.9	192.6	-	0.436
ARM C	12.68	18.16	0.698	- -	-	1.0	2.2	31.0	-	0.177
ARM D	13.47	25.85	0.521	- -	-	0.6	1.1	15.7	-	0.080

TIME	DEMAND (VEH/ MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	19.21	23.46	0.819	- -	-	4.1	4.3	63.9	-	0.233
ARM B	35.43	36.15	0.980	- -	-	17.9	23.2	311.7	-	0.678
ARM C	12.68	17.89	0.709	- -	-	2.2	2.4	34.8	-	0.191
ARM D	13.47	25.71	0.524	- -	-	1.1	1.1	16.3	-	0.082

DEMAND (VEH/MIN) (PEDS/MIN)	CAPACITY (VEH/MIN) (VEHS)	DEMAND/ CAPACITY (VEHS)	PEDESTRIAN FLOW TIME SEGMENT)	START QUEUE TIME SEGMENT)	END QUEUE	DELAY (VEH.MIN/ VEHICLE (MIN)	GEOMETRIC DELAY (VEH.MIN/	AVERAGE DELAY PER ARRIVING	TIME (RFC)
08.15-08.30									
ARM A	15.69	25.63	0.612	- -	-	4.3	1.6	25.7	-	0.104
ARM B	28.93	37.23	0.777	- -	-	23.2	3.6	85.6	-	0.169
ARM C	10.35	20.19	0.513	- -	-	2.4	1.1	16.8	-	0.104
ARM D	11.00	27.68	0.397	- -	-	1.1	0.7	10.2	-	0.060

DEMAND (VEH/MIN) (PEDS/MIN)	CAPACITY (VEH/MIN) (VEHS)	DEMAND/ CAPACITY (VEHS)	PEDESTRIAN FLOW TIME SEGMENT)	START QUEUE TIME SEGMENT)	END QUEUE	DELAY (VEH.MIN/ VEHICLE (MIN)		GEOMETRIC DELAY (VEH.MIN/	AVERAGE DELAY PER ARRIVING (RFC)	TIME
08.30-08.45										
ARM A	13.14	27.29	0.481	- -	-	1.6	0.9	14.5	-	0.071
ARM B	24.23	38.09	0.636	- -	-	3.6	1.8	27.7	-	0.073
ARM C	8.67	22.88	0.379	- -	-	1.1	0.6	9.5	-	0.071
ARM D	9.21	29.53	0.312	- -	-	0.7	0.5	6.9	-	0.049

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.9	*
07.45	1.5	**
08.00	4.1	****
08.15	4.3	****
08.30	1.6	**
08.45	0.9	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.7	**
07.45	3.3	***
08.00	17.9	******************
08.15	23.2	**********************
08.30	3.6	****
08.45	1.8	**

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.6	*
07.45	1.0	*
08.00	2.2	**
08.15	2.4	**
08.30	1.1	*
08.45	0.6	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.4	
07.45	0.6	*
08.00	1.1	*
08.15	1.1	*
08.30	0.7	*
08.45	0.5	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	(VEH/H)	* QUEUEING * DELAY * (MIN)	(MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	(MIN/VEH)	T75
A	1441.1	960.7	195.1	0.14	195.1	0.14	
B	2657.9	1771.9	689.3	0.26	689.4	0.26	
C	951.1	634.1	115.0	0.12	115.1	0.12	
D	1010.3	673.5	65.2	0.06	65.2	0.06	
ALL	6060.4	4040.3	1064.7	0.18	1064.7	0.18	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 16:04:05 on 09/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\A4303_A426\ S4 PM 2026 Base+CD+PD+Imps.vai"
(drive-on-the-left) at 16:29:43 on Friday, 28 August 2015

FILE PROPERTIES

RUN TITLE: S4 A4303/ A426 Roundabout PM Peak 2026 Base + CD + PD + Improvements
LOCATION: A4303_Rugby Road
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB
NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - Rugby Road
ARM B - A4303 East
ARM C - A426 South
ARM D - A4303 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.30	10.50	41.00	22.00	74.00	44.0	0.570	38.181
ARM B	7.30	10.50	41.00	20.00	74.00	42.0	0.657	47.722
ARM C	3.20	10.50	40.00	22.00	74.00	48.0	0.557	37.146
ARM D	7.30	10.50	30.00	22.00	74.00	46.0	0.643	46.415

V = approach half-width E = entry width L = effective flare length R = entry radius D = inscribed circle diameter PHI = entry angle

WARNING ARM A Effective flare length is outside normal range. Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range. Treat capacities with increasing caution.

WARNING ARM C Effective flare length is outside normal range. Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING

FACTORS

FLOW SCALE(%)	IARM
	A
B	100
C	100
D	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK	NUMBER OF MINUTES FROM START WHEN FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
	TO RISE	IS REACHED	FALLING	PEAK		
A	15.00	45.00	75.00	11.01	16.52	11.01
B	15.00	45.00	75.00	18.92	28.39	18.92
C	15.00	45.00	75.00	9.71	14.57	9.71
D	15.00	45.00	75.00	13.57	20.36	13.57

DEMAND SET TITLE: AM Peak 2006 Base Flows

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15					
	ARM A	0.000	0.488	0.363	0.149
		0.0	430.0	320.0	131.0
		(0.0)	(1.6)	(1.6)	(9.9)
	ARM B	0.350	0.003	0.279	0.368
		530.0	5.0	422.0	557.0
		(2.8)	(0.0)	(10.7)	(24.2)
	ARM C	0.479	0.484	0.000	0.037
		372.0	376.0	0.0	29.0
		(1.6)	(7.7)	(0.0)	(0.0)
	ARM D	0.120	0.847	0.033	0.000
		130.0	920.0	36.0	0.0
		(8.5)	(14.1)	(5.6)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/ MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	11.05	26.76	0.413	- -	0.0	0.7	10.2	-	0.063
ARM B	19.00	38.59	0.492	- -	0.0	1.0	14.1	-	0.051
ARM C	9.75	26.32	0.370	- -	0.0	0.6	8.6	-	0.060
ARM D	13.63	31.55	0.432	- -	0.0	0.8	11.0	-	0.055

DEMAND (VEH/MIN) (PEDS/MIN)	CAPACITY (VEH/MIN) (VEHS)	DEMAND/ CAPACITY (VEHS)	PEDESTRIAN FLOW TIME SEGMENT)	START QUEUE TIME SEGMENT)	END QUEUE	DELAY (VEH.MIN/ VEHICLE (MIN)	GEOMETRIC DELAY (VEH.MIN/	AVERAGE DELAY PER ARRIVING (RFC)	TIME
17.00-17.15									
ARM A	13.20	24.72	0.534	- -	0.7	1.1	16.4	-	0.086	
ARM B	22.68	37.87	0.599	- -	1.0	1.5	21.6	-	0.066	
ARM C	11.64	24.50	0.475	- -	0.6	0.9	13.1	-	0.078	
ARM D	16.27	29.69	0.548	- -	0.8	1.2	17.5	-	0.074	

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME
17.15-17.30										
ARM A	16.17	21.98	0.736	- -	1.1	2.7	37.1	-	0.166	
ARM B	27.78	36.90	0.753	- -	1.5	3.0	41.9	-	0.107	
ARM C	14.26	22.05	0.647	- -	0.9	1.8	25.4	-	0.127	
ARM D	19.93	27.17	0.733	- -	1.2	2.7	37.3	-	0.134	

TIME	DEMAND (VEH/ MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME
17.30-17.45										
ARM A	16.17	21.91	0.738	- -	2.7	2.7	40.8	-	0.174	
ARM B	27.78	36.87	0.754	- -	3.0	3.0	44.9	-	0.110	
ARM C	14.26	22.00	0.648	- -	1.8	1.8	27.1	-	0.129	
ARM D	19.93	27.12	0.735	- -	2.7	2.7	40.5	-	0.139	

DEMAND (VEH/MIN) (PEDS/MIN)	CAPACITY (VEH/MIN) (VEHS)	DEMAND/ CAPACITY (VEHS)	PEDESTRIAN FLOW TIME SEGMENT)	START QUEUE TIME SEGMENT)	END QUEUE	DELAY (VEH.MIN/ VEHICLE (MIN)	GEOMETRIC DELAY (VEH.MIN/	AVERAGE DELAY PER ARRIVING (RFC)	TIME
17.45-18.00									
ARM A	13.20	24.63	0.536	- -	2.7	1.2	18.3	-	0.089	
ARM B	22.68	37.82	0.600	- -	3.0	1.5	23.5	-	0.067	
ARM C	11.64	24.43	0.476	- -	1.8	0.9	14.2	-	0.079	
ARM D	16.27	29.62	0.549	- -	2.7	1.2	19.2	-	0.076	

DEMAND (VEH/MIN) (PEDS/MIN)	CAPACITY (VEH/MIN) (VEHS)	DEMAND/ CAPACITY (VEHS)	PEDESTRIAN FLOW TIME SEGMENT)	START QUEUE TIME SEGMENT)	END QUEUE	DELAY (VEH.MIN/ VEHICLE (MIN)		GEOMETRIC DELAY (VEH.MIN/	AVERAGE DELAY PER ARRIVING	TIME (RFC)
I 18.00-18.15										
I ARM A	11.05	26.70	0.414	- -	-	1.2	0.7	10.9	-	0.064
I ARM B	19.00	38.57	0.493	- -	-	1.5	1.0	15.0	-	0.051
I ARM C	9.75	26.26	0.371	- -	-	0.9	0.6	9.1	-	0.061
I ARM D	13.63	31.50	0.433	- -	-	1.2	0.8	11.8	-	0.056

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.7	*
17.15	1.1	*
17.30	2.7	***
17.45	2.7	***
18.00	1.2	*
18.15	0.7	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.0	*
17.15	1.5	*
17.30	3.0	***
17.45	3.0	***
18.00	1.5	**
18.15	1.0	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.6	*
17.15	0.9	*
17.30	1.8	**
17.45	1.8	**
18.00	0.9	*
18.15	0.6	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.8	*
17.15	1.2	*
17.30	2.7	***
17.45	2.7	***
18.00	1.2	*
18.15	0.8	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	(VEH/H)	* QUEUEING * DELAY * (MIN)	(MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	(MIN/VEH)
A	1212.6	808.4	133.8	0.11	133.8	0.11
B	2083.9	1389.3	160.9	0.08	161.0	0.08
C	1069.5	713.0	97.5	0.09	97.5	0.09
D	1494.8	996.5	137.3	0.09	137.3	0.09
ALL	5860.8	3907.2	529.6	0.09	529.6	0.09

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 16:05:01 on 09/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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For sales and distribution information, program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\M1 Junction 20\ S2 2026 AM Peak Base+CD.vai"
(drive-on-the-left) at 16:25:16 on Tuesday, 1 September 2015

FILE PROPERTIES

RUN TITLE: S2 M1 Junction 20 AM Peak 2026 Base + CD LOCATION:
M1 Junction 20
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB
NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - M1 North ARM B
- A4304
ARM C - M1 South ARM D
- A4303

GEOMETRIC DATA

GRADE SEPARATED / MOTORWAY FACTORS APPLY TO ALL ARMS

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.30	12.70	35.00	45.00	103.00	43.0	1.171	60.667
ARM B	3.50	7.70	51.00	45.00	176.00	40.0	0.749	42.425
ARM C	7.30	12.00	49.00	50.00	103.00	41.0	0.920	57.132
ARM D	7.30	8.90	7.00	50.00	176.00	35.0	1.125	55.156

V = approach half-width E = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range. Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range. Treat capacities with increasing caution.

WARNING ARM C Effective flare length is outside normal range. Treat capacities with increasing caution.

DATA FOR VERY LARGE ROUNDABOUTS

ARM	CIRFLO	SEP
A	16.0	120.0
B	27.0	0.0
C	33.0	120.0
D	6.0	0.0

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING

FACTORS

IARM	FLOW SCALE(%)
A	
B	100
C	100
D	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK	NUMBER OF MINUTES FROM START WHEN FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
	TO RISE	IS REACHED	FALLING	PEAK		
A	15.00	45.00	75.00	11.59	17.38	11.59
B	15.00	45.00	75.00	10.31	15.47	10.31
C	15.00	45.00	75.00	6.16	9.24	6.16
D	15.00	45.00	75.00	17.08	25.61	17.08

DEMAND SET TITLE: AM Peak 2006 Base Flows

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.15 - 08.45					
	ARM A	0.000	0.125	0.000	0.875
		0.0	116.0	0.0	811.0
		(0.0)	(6.9)	(0.0)	(11.8)
	ARM B	0.293	0.000	0.132	0.575
		242.0	0.0	109.0	474.0
		(2.5)	(0.0)	(4.6)	(5.5)
	ARM C	0.000	0.073	0.049	0.878
		0.0	36.0	24.0	433.0
		(0.0)	(25.0)	(37.5)	(23.6)
	ARM D	0.465	0.205	0.317	0.013
		635.0	280.0	433.0	18.0
		(15.6)	(6.4)	(17.8)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/ MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	11.63	42.65	0.273	- -	-	0.0	0.4	5.5	-	0.032
ARM B	10.35	27.43	0.377	- -	-	0.0	0.6	8.8	-	0.058
ARM C	6.19	30.45	0.203	- -	-	0.0	0.3	3.8	-	0.041
ARM D	17.14	44.28	0.387	- -	-	0.0	0.6	9.3	-	0.037

DEMAND (VEH/MIN) (PEDS/MIN)	CAPACITY (VEH/MIN) (VEHS)	DEMAND/ CAPACITY (VEHS)	PEDESTRIAN FLOW TIME SEGMENT)	START QUEUE TIME SEGMENT)	END QUEUE	DELAY (VEH.MIN/ VEHICLE (MIN)	GEOMETRIC DELAY (VEH.MIN/	AVERAGE DELAY PER ARRIVING	TIME (RFC)
07.30-07.45									
ARM A	13.89	40.31	0.345	- -	-	0.4	0.5	7.8	-	0.038
ARM B	12.36	24.85	0.497	- -	-	0.6	1.0	14.3	-	0.080
ARM C	7.39	27.42	0.269	- -	-	0.3	0.4	5.4	-	0.050
ARM D	20.47	43.49	0.471	- -	-	0.6	0.9	13.0	-	0.043

	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME
07.45-08.00										
ARM A	17.01	37.12	0.458	- -	-	0.5	0.8	12.4	-	0.050
ARM B	15.14	21.33	0.710	- -	-	1.0	2.4	33.0	-	0.157
ARM C	9.05	23.31	0.388	- -	-	0.4	0.6	9.2	-	0.070
ARM D	25.07	42.43	0.591	- -	-	0.9	1.4	20.9	-	0.057

	DEMAND (VEH/ MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME
08.00-08.15										
ARM A	17.01	37.09	0.459	- -	-	0.8	0.8	12.6	-	0.050
ARM B	15.14	21.30	0.711	- -	-	2.4	2.4	35.9	-	0.162
ARM C	9.05	23.23	0.389	- -	-	0.6	0.6	9.5	-	0.070
ARM D	25.07	42.40	0.591	- -	-	1.4	1.4	21.5	-	0.058

DEMAND (VEH/MIN) (PEDS/MIN)	CAPACITY (VEH/MIN) (VEHS)	DEMAND/ CAPACITY (VEHS)	PEDESTRIAN FLOW TIME SEGMENT)	START QUEUE TIME SEGMENT)	END QUEUE	DELAY (VEH.MIN/ VEHICLE (MIN)	GEOMETRIC DELAY (VEH.MIN/	AVERAGE DELAY PER ARRIVING	TIME (RFC)
08.15-08.30									
ARM A	13.89	40.27	0.345	- -	-	0.8	0.5	8.0	-	0.038
ARM B	12.36	24.82	0.498	- -	-	2.4	1.0	15.7	-	0.081
ARM C	7.39	27.32	0.270	- -	-	0.6	0.4	5.7	-	0.050
ARM D	20.47	43.45	0.471	- -	-	1.4	0.9	13.7	-	0.044

DEMAND (VEH/MIN) (PEDS/MIN)	CAPACITY (VEH/MIN) (VEHS)	DEMAND/ CAPACITY (VEHS)	PEDESTRIAN FLOW TIME SEGMENT)	START QUEUE TIME SEGMENT)	END QUEUE	DELAY (VEH.MIN/ VEHICLE (MIN)		GEOMETRIC DELAY (VEH.MIN/	AVERAGE DELAY PER ARRIVING	TIME (RFC)
08.30-08.45										
ARM A	11.63	42.60	0.273	- -	-	0.5	0.4	5.7	-	0.032
ARM B	10.35	27.39	0.378	- -	-	1.0	0.6	9.4	-	0.059
ARM C	6.19	30.38	0.204	- -	-	0.4	0.3	3.9	-	0.041
ARM D	17.14	44.26	0.387	- -	-	0.9	0.6	9.7	-	0.037

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.4	
07.45	0.5	*
08.00	0.8	*
08.15	0.8	*
08.30	0.5	*
08.45	0.4	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.6	*
07.45	1.0	*
08.00	2.4	**
08.15	2.4	**
08.30	1.0	*
08.45	0.6	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.3	
07.45	0.4	
08.00	0.6	*
08.15	0.6	*
08.30	0.4	
08.45	0.3	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.6	*
07.45	0.9	*
08.00	1.4	*
08.15	1.4	*
08.30	0.9	*
08.45	0.6	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	1275.9	850.6	52.1	0.04	52.1	0.04
B	1135.6	757.0	117.0	0.10	117.0	0.10
C	678.6	452.4	37.5	0.06	37.5	0.06
D	1880.2	1253.5	88.1	0.05	88.1	0.05
ALL	4970.3	3313.5	294.6	0.06	294.6	0.06

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 17:06:51 on 09/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\M1 Junction 20\ S2 2026 PM Peak Base+CD.vai"
(drive-on-the-left) at 16:28:19 on Tuesday, 1 September 2015

FILE PROPERTIES

RUN TITLE: S2 M1 Junction 20 PM Peak 2026 Base + CD LOCATION:
M1 Junction 20
DATE: 14/07/31
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB
NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - M1 North ARM B
- A4304
ARM C - M1 South ARM D
- A4303

GEOMETRIC DATA

GRADE SEPARATED / MOTORWAY FACTORS APPLY TO ALL ARMS

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.30	12.70	35.00	45.00	103.00	43.0	1.217	61.363
ARM B	3.50	7.70	51.00	45.00	176.00	40.0	0.817	43.817
ARM C	7.30	12.00	49.00	50.00	103.00	41.0	1.027	58.756
ARM D	7.30	8.90	7.00	50.00	176.00	35.0	1.138	55.388

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range. Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range. Treat capacities with increasing caution.

WARNING ARM C Effective flare length is outside normal range. Treat capacities with increasing caution.

DATA FOR VERY LARGE ROUNDABOUTS

ARM	CIRFLO	SEP
A	13.0	120.0
B	21.0	0.0
C	26.0	120.0
D	5.0	0.0

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING

FACTORS

I	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK	NUMBER OF MINUTES FROM START WHEN FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE TO RISE	RATE OF FLOW (VEH/MIN) AT PEAK	RATE OF FLOW (VEH/MIN) AFTER FALLING	
A	15.00	45.00	75.00	10.40	15.60	10.40	
B	15.00	45.00	75.00	7.46	11.19	7.46	
C	15.00	45.00	75.00	6.32	9.49	6.32	
D	15.00	45.00	75.00	21.09	31.63	21.09	

DEMAND SET TITLE: AM Peak 2006 Base Flows

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.275	0.000	0.725
		0.0	229.0	0.0	603.0
		(0.0)	(4.4)	(0.0)	(12.3)
	ARM B	0.236	0.000	0.085	0.678
		141.0	0.0	51.0	405.0
		(7.1)	(0.0)	(11.8)	(5.7)
	ARM C	0.000	0.172	0.030	0.798
		0.0	87.0	15.0	404.0
		(0.0)	(5.7)	(66.7)	(19.3)
	ARM D	0.441	0.292	0.217	0.050
		744.0	492.0	366.0	85.0
		(9.7)	(1.6)	(15.6)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/ MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	10.44	40.17	0.260	- -	-	0.0	0.4	5.2	-	0.034
ARM B	7.49	29.51	0.254	- -	-	0.0	0.3	5.0	-	0.045
ARM C	6.35	35.07	0.181	- -	-	0.0	0.2	3.3	-	0.035
ARM D	21.17	47.69	0.444	- -	-	0.0	0.8	11.7	-	0.038

DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (VEHS)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME (RFC)
17.00-17.15									
ARM A 12.47	37.12	0.336	- -	-	0.4	0.5	7.5	-	0.041	
ARM B 8.94	27.24	0.328	- -	-	0.3	0.5	7.2	-	0.055	
ARM C 7.58	32.22	0.235	- -	-	0.2	0.3	4.5	-	0.041	
ARM D 25.28	47.00	0.538	- -	-	0.8	1.2	17.0	-	0.046	

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
ARM A	15.27	32.96	0.463	- -	-	0.5	0.9	12.6	-	0.056
ARM B	10.96	24.13	0.454	- -	-	0.5	0.8	12.0	-	0.076
ARM C	9.29	28.32	0.328	- -	-	0.3	0.5	7.2	-	0.052
ARM D	30.96	46.06	0.672	- -	-	1.2	2.0	29.3	-	0.066

TIME	DEMAND (VEH/ MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
ARM A	15.27	32.92	0.464	- -	-	0.9	0.9	12.9	-	0.057
ARM B	10.96	24.10	0.455	- -	-	0.8	0.8	12.4	-	0.076
ARM C	9.29	28.28	0.328	- -	-	0.5	0.5	7.3	-	0.053
ARM D	30.96	46.05	0.672	- -	-	2.0	2.0	30.5	-	0.066

DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (VEHS)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME (RFC)
17.45-18.00									
ARM A 12.47	37.06	0.336	- -	-	0.9	0.5	7.8	-	0.041	
ARM B 8.94	27.20	0.329	- -	-	0.8	0.5	7.5	-	0.055	
ARM C 7.58	32.16	0.236	- -	-	0.5	0.3	4.7	-	0.041	
ARM D 25.28	46.99	0.538	- -	-	2.0	1.2	18.0	-	0.046	

DEMAND (VEH/MIN) (PEDS/MIN)	CAPACITY (VEH/MIN) (VEHS)	DEMAND/ CAPACITY (VEHS)	PEDESTRIAN FLOW TIME SEGMENT)	START QUEUE TIME SEGMENT)	END QUEUE	DELAY (VEH.MIN/ VEHICLE (MIN)		GEOMETRIC DELAY (VEH.MIN/	AVERAGE DELAY PER ARRIVING (RFC)	TIME
18.00-18.15										
ARM A	10.44	40.11	0.260	- -	-	0.5	0.4	5.4	-	0.034
ARM B	7.49	29.47	0.254	- -	-	0.5	0.3	5.2	-	0.046
ARM C	6.35	35.02	0.181	- -	-	0.3	0.2	3.4	-	0.035
ARM D	21.17	47.68	0.444	- -	-	1.2	0.8	12.2	-	0.038

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	*
17.30	0.9	*
17.45	0.9	*
18.00	0.5	*
18.15	0.4	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.5	
17.30	0.8	*
17.45	0.8	*
18.00	0.5	
18.15	0.3	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.2	
17.15	0.3	
17.30	0.5	
17.45	0.5	
18.00	0.3	
18.15	0.2	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.8	*
17.15	1.2	*
17.30	2.0	**
17.45	2.0	**
18.00	1.2	*
18.15	0.8	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	(VEH/H)	* QUEUEING * DELAY * (MIN)	(MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	(MIN/VEH)	T75
A	1145.2	763.5	51.2	0.04	51.2	0.04	
B	821.7	547.8	49.4	0.06	49.4	0.06	
C	696.5	464.3	30.3	0.04	30.3	0.04	
D	2322.0	1548.0	118.7	0.05	118.7	0.05	
ALL	4985.4	3323.6	249.6	0.05	249.7	0.05	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 17:07:15 on 09/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\M1 Junction 20\ S4 2026 AM Peak Base+CD+PD.vai"
(drive-on-the-left) at 16:40:34 on Tuesday, 1 September 2015

FILE PROPERTIES

RUN TITLE: S4 M1 Junction 20 AM Peak 2026 Base + CD + PD
LOCATION: M1 Junction 20
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - M1 North ARM B - A4304
ARM C - M1 South ARM D - A4303

GEOMETRIC DATA

GRADE SEPARATED / MOTORWAY FACTORS APPLY TO ALL ARMS

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.30	12.70	35.00	45.00	103.00	43.0	1.171	60.667
ARM B	3.50	7.70	51.00	45.00	176.00	40.0	0.749	42.425
ARM C	7.30	12.00	49.00	50.00	103.00	41.0	0.920	57.132
ARM D	7.30	8.90	7.00	50.00	176.00	35.0	1.125	55.156

V = approach half-width E = entry width L = effective flare length R = entry radius D = inscribed circle diameter PHI = entry angle

WARNING ARM A Effective flare length is outside normal range. Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range. Treat capacities with increasing caution.

WARNING ARM C Effective flare length is outside normal range. Treat capacities with increasing caution.

DATA FOR VERY LARGE ROUNDABOUTS

ARM	CIRFLO	SEP
A	16.0	120.0
B	27.0	0.0
C	33.0	120.0
D	6.0	0.0

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING FACTORS

I	FLOW SCALE(%) I
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK	NUMBER OF MINUTES FROM START WHEN FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE TO RISE	RATE OF FLOW (VEH/MIN) AT PEAK	RATE OF FLOW (VEH/MIN) AFTER FALLING
A	15.00	45.00	75.00	13.11	19.67	13.11
ARM B	15.00	45.00	75.00	10.57	15.86	10.57
ARM C	15.00	45.00	75.00	6.75	10.13	6.75
ARM D	15.00	45.00	75.00	17.84	26.76	17.84

DEMAND SET TITLE: AM Peak 2006 Base Flows

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.15 - 08.45	ARM A	0.000	0.111	0.000	0.889
		0.0	116.0	0.0	933.0
		(0.0)	(6.9)	(0.0)	(13.1)
	ARM B	0.286	0.000	0.129	0.585
		242.0	0.0	109.0	495.0
		(2.5)	(0.0)	(4.6)	(5.5)
	ARM C	0.000	0.067	0.044	0.889
		0.0	36.0	24.0	480.0
		(0.0)	(25.0)	(37.5)	(21.3)
	ARM D	0.479	0.198	0.310	0.013
		684.0	283.0	442.0	18.0
		(18.6)	(6.7)	(17.9)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/ MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	13.16	41.99	0.313	- -	0.0	0.5	6.7	-	0.035
ARM B	10.62	26.00	0.408	- -	0.0	0.7	10.0	-	0.065
ARM C	6.78	29.38	0.231	- -	0.0	0.3	4.4	-	0.044
ARM D	17.91	43.67	0.410	- -	0.0	0.7	10.2	-	0.039
07.30-07.45									
ARM A	15.72	39.64	0.397	- -	0.5	0.7	9.7	-	0.042
ARM B	12.68	23.14	0.548	- -	0.7	1.2	17.3	-	0.095
ARM C	8.09	25.98	0.311	- -	0.3	0.4	6.6	-	0.056
ARM D	21.38	42.90	0.498	- -	0.7	1.0	14.5	-	0.046
07.45-08.00									
ARM A	19.25	36.43	0.528	- -	0.7	1.1	16.3	-	0.058
ARM B	15.52	19.23	0.807	- -	1.2	3.9	51.1	-	0.247
ARM C	9.91	21.42	0.463	- -	0.4	0.9	12.4	-	0.086
ARM D	26.19	41.88	0.625	- -	1.0	1.7	24.0	-	0.063
08.00-08.15									
ARM A	19.25	36.40	0.529	- -	1.1	1.1	16.7	-	0.058
ARM B	15.52	19.20	0.809	- -	3.9	4.0	59.4	-	0.270
ARM C	9.91	21.29	0.466	- -	0.9	0.9	12.9	-	0.088
ARM D	26.19	41.83	0.626	- -	1.7	1.7	24.9	-	0.064
08.15-08.30									
ARM A	15.72	39.59	0.397	- -	1.1	0.7	10.1	-	0.042
ARM B	12.68	23.09	0.549	- -	4.0	1.2	19.8	-	0.099
ARM C	8.09	25.79	0.314	- -	0.9	0.5	7.0	-	0.057
ARM D	21.38	42.83	0.499	- -	1.7	1.0	15.4	-	0.047

DEMAND (VEH/MIN) (PEDS/MIN)	CAPACITY (VEH/MIN) (VEHS)	DEMAND/ CAPACITY (VEHS)	PEDESTRIAN FLOW TIME SEGMENT)	START QUEUE TIME SEGMENT)	END QUEUE	DELAY (VEH.MIN/ VEHICLE (MIN)		GEOMETRIC DELAY (VEH.MIN/	AVERAGE DELAY PER ARRIVING (RFC)	TIME
08.30-08.45										
ARM A	13.16	41.94	0.314	- -	-	0.7	0.5	7.0	0.035	
ARM B	10.62	25.95	0.409	- -	-	1.2	0.7	10.7	0.065	
ARM C	6.78	29.29	0.231	- -	-	0.5	0.3	4.6	0.044	
ARM D	17.91	43.65	0.410	- -	-	1.0	0.7	10.6	0.039	

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.5	
07.45	0.7	*
08.00	1.1	*
08.15	1.1	*
08.30	0.7	*
08.45	0.5	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.7	*
07.45	1.2	*
08.00	3.9	****
08.15	4.0	****
08.30	1.2	*
08.45	0.7	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.3	
07.45	0.4	
08.00	0.9	*
08.15	0.9	*
08.30	0.5	
08.45	0.3	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.7	*
07.45	1.0	*
08.00	1.7	**
08.15	1.7	**
08.30	1.0	*
08.45	0.7	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	(VEH/H)	* QUEUEING * DELAY * (MIN)	(MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	(MIN/VEH)	T75
A	1443.9	962.6	66.5	0.05	66.5	0.05	
B	1164.5	776.3	168.4	0.14	168.4	0.14	
C	743.3	495.5	48.0	0.06	48.0	0.06	
D	1964.2	1309.4	99.7	0.05	99.7	0.05	
ALL	5315.8	3543.8	382.5	0.07	382.5	0.07	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 17:08:57 on 09/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\M1 Junction 20\ S4 2026 PM Peak Base+CD+PD.vai"
(drive-on-the-left) at 16:43:30 on Tuesday, 1 September 2015

FILE PROPERTIES

RUN TITLE: S4 M1 Junction 20 PM Peak 2026 Base + CD + PD
LOCATION: M1 Junction 20
DATE: 14/07/31
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - M1 North ARM B - A4304
ARM C - M1 South ARM D - A4303

GEOMETRIC DATA

GRADE SEPARATED / MOTORWAY FACTORS APPLY TO ALL ARMS

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.30	12.70	35.00	45.00	103.00	43.0	1.217	61.363
ARM B	3.50	7.70	51.00	45.00	176.00	40.0	0.817	43.817
ARM C	7.30	12.00	49.00	50.00	103.00	41.0	1.027	58.756
ARM D	7.30	8.90	7.00	50.00	176.00	35.0	1.138	55.388

V = approach half-width E = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range. Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range. Treat capacities with increasing caution.

WARNING ARM C Effective flare length is outside normal range. Treat capacities with increasing caution.

DATA FOR VERY LARGE ROUNDABOUTS

ARM	CIRFLO	SEP
A	13.0	120.0
B	21.0	0.0
C	26.0	120.0
D	5.0	0.0

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING FACTORS

FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
A	15.00	45.00	75.00	10.88	16.31	10.88
B	15.00	45.00	75.00	7.53	11.29	7.53
C	15.00	45.00	75.00	6.45	9.67	6.45
D	15.00	45.00	75.00	23.01	34.52	23.01

DEMAND SET TITLE: AM Peak 2006 Base Flows

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.263	0.000	0.737
		0.0	229.0	0.0	641.0
		(0.0)	(4.4)	(0.0)	(14.7)
	ARM B	0.234	0.000	0.085	0.681
		141.0	0.0	51.0	410.0
		(7.1)	(0.0)	(11.8)	(5.9)
	ARM C	0.000	0.169	0.029	0.802
		0.0	87.0	15.0	414.0
		(0.0)	(5.7)	(66.7)	(18.8)
	ARM D	0.468	0.274	0.211	0.046
		862.0	505.0	389.0	85.0
		(11.7)	(1.8)	(14.9)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/ MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	10.92	38.98	0.280	- -	-	0.0	0.4	5.7	-	0.036
ARM B	7.55	28.69	0.263	- -	-	0.0	0.4	5.2	-	0.047
ARM C	6.47	34.49	0.188	- -	-	0.0	0.2	3.4	-	0.036
ARM D	23.10	47.26	0.489	- -	-	0.0	1.0	14.0	-	0.041
17.00-17.15									
ARM A	13.04	35.89	0.363	- -	-	0.4	0.6	8.4	-	0.044
ARM B	9.02	26.27	0.343	- -	-	0.4	0.5	7.7	-	0.058
ARM C	7.73	31.49	0.246	- -	-	0.2	0.3	4.8	-	0.042
ARM D	27.58	46.57	0.592	- -	-	1.0	1.4	21.1	-	0.052
17.15-17.30									
ARM A	15.96	31.67	0.504	- -	-	0.6	1.0	14.7	-	0.063
ARM B	11.05	22.96	0.481	- -	-	0.5	0.9	13.4	-	0.084
ARM C	9.47	27.39	0.346	- -	-	0.3	0.5	7.7	-	0.056
ARM D	33.78	45.64	0.740	- -	-	1.4	2.8	39.9	-	0.083
17.30-17.45									
ARM A	15.96	31.61	0.505	- -	-	1.0	1.0	15.2	-	0.064
ARM B	11.05	22.92	0.482	- -	-	0.9	0.9	13.8	-	0.084
ARM C	9.47	27.35	0.346	- -	-	0.5	0.5	7.9	-	0.056
ARM D	33.78	45.63	0.740	- -	-	2.8	2.8	42.1	-	0.084
17.45-18.00									
ARM A	13.04	35.80	0.364	- -	-	1.0	0.6	8.8	-	0.044
ARM B	9.02	26.21	0.344	- -	-	0.9	0.5	8.1	-	0.058
ARM C	7.73	31.42	0.246	- -	-	0.5	0.3	5.0	-	0.042
ARM D	27.58	46.56	0.592	- -	-	2.8	1.5	22.6	-	0.053

DEMAND (VEH/MIN) (PEDS/MIN)	CAPACITY (VEH/MIN) (VEHS)	DEMAND/ CAPACITY (VEHS)	PEDESTRIAN FLOW TIME SEGMENT)	START QUEUE TIME SEGMENT)	END QUEUE	DELAY (VEH.MIN/ VEHICLE (MIN)		GEOMETRIC DELAY (VEH.MIN/	AVERAGE DELAY PER ARRIVING	TIME (RFC)
18.00-18.15										
ARM A	10.92	38.92	0.280	- -	-	0.6	0.4	5.9	-	0.036
ARM B	7.55	28.64	0.264	- -	-	0.5	0.4	5.5	-	0.047
ARM C	6.47	34.43	0.188	- -	-	0.3	0.2	3.5	-	0.036
ARM D	23.10	47.25	0.489	- -	-	1.5	1.0	14.7	-	0.042

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.6	*
17.30	1.0	*
17.45	1.0	*
18.00	0.6	*
18.15	0.4	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	*
17.30	0.9	*
17.45	0.9	*
18.00	0.5	*
18.15	0.4	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.2	
17.15	0.3	
17.30	0.5	*
17.45	0.5	*
18.00	0.3	
18.15	0.2	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.0	*
17.15	1.4	*
17.30	2.8	***
17.45	2.8	***
18.00	1.5	*
18.15	1.0	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	(VEH/H)	* QUEUEING * DELAY * (MIN)	(MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	(MIN/VEH)
A	1197.5	798.3	58.8	0.05	58.8	0.05
B	828.6	552.4	53.7	0.06	53.7	0.06
C	710.2	473.5	32.4	0.05	32.4	0.05
D	2534.0	1689.3	154.4	0.06	154.4	0.06
ALL	5270.3	3513.6	299.2	0.06	299.2	0.06

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 17:09:17 on 09/09/2015]

T R A N S Y T 12

Traffic Network Study Tool Analysis

Program Release 7 (July 2010)
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For sales and distribution information, program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770864
Email: softwarebureau@trl.co.uk
Web: www.trlsoftware.co.uk RG40

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Run with file:- "S2 2026 AM CD.DAT" at 12:18 on 20150825

TRANSYT 12.0

S2 M69 Junction 1 2026 + Committed Development

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	= 5
NUMBER OF LINKS	= 49
NUMBER OF OPTIMISED NODES	= 5
MAXIMUM NUMBER OF GRAPHIC PLOTS	= 0
NUMBER OF STEPS IN CYCLE	= 60
MAXIMUM NUMBER OF SHARED STOPLINES	= 4
MAXIMUM NUMBER OF TIMING POINTS	= 2
MAXIMUM LINKS AT ANY NODE	= 12

CORE REQUESTED = 11409 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

(1)= TITLE:- S2 M69 Junction 1 2026 + Committed Development

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME EFFECTIV PERIOD 1-1200 MINS.	DISPLAC START (SEC)	E-GREEN EMENTS END (SEC)	EQUISAT SETTINGS 0=NO 1=YES	0=UNEQUAL FLOW CYCLE 1=EQUAL CYCLE	10-200 %	CRUISE-SPEEDS 50-200 %	CARD32 0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL- CLIMB OUTPUT 1=FULL	DELAY VALUE P PER PCU-H	STOP VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260

CARD NO.	CARD TYPE	LIST OF NODES TO BE OPTIMISED										
3)=	2	1	2	3	4	5	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET.....				SECOND SET.....				THIRD SET.....					
4)=	7	12	15	16	17	0	13	19	18	0	0	14	191	192	0	0
5)=	7	22	24	25	26	0	32	35	36	0	0	33	37	0	0	0
6)=	7	42	44	45	0	0	43	46	0	0	0	52	55	56	57	0
7)=	7	53	58	0	0	0	54	59	0	0	0	61	62	63	64	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
8)=	10	1	7	7								
9)=	10	2	7	7								
10)=	10	3	7	7								
11)=	10	4	7	7								
12)=	10	5	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
13)=	11	1	6	6								
14)=	11	2	6	6								
15)=	11	3	6	6								
16)=	11	4	6	6								
17)=	11	5	6	6								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
18)=	12	1	1	0	0								
19)=	12	2	1	0	0								
20)=	12	3	1	0	0								
21)=	12	4	1	0	0								
22)=	12	5	1	0	0								

LINK CARDS:

CARD NO.	CARD TYPE	LINK NO.	LINK1 NO.	LINK2 NO.	ONLY % FLOW	GIVEWAY DATA PRIORITY LINKS LINK1 GIVEWAY X100	LINK2 GIVEWAY X100	GIVEWAY COEFFS.				LINK WT.X100	STOP FLOW	MAX WT.X100	DELAY X100	DISPSN LENGTH
23)=	30	60	61	0	0	47	100	0	0	0	0	125	0	2108	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN START STAGE	FIRST GREEN START LAG	FIRST GREEN END STAGE	FIRST GREEN END LAG	SECOND GREEN START STAGE	SECOND GREEN START LAG	SECOND GREEN END STAGE	SECOND GREEN END LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
24)=	31	10	1	1	6	2	0	0	0	0	0	200	-9999	4100	60	0
25)=	31	11	1	1	6	2	0	0	0	0	0	200	-9999	2120	60	0
26)=	31	12	1	2	6	1	0	0	0	0	0	110	0	1892	500	0
27)=	31	13	1	2	6	1	0	0	0	0	0	110	0	2029	500	0
28)=	31	14	1	2	6	1	0	0	0	0	0	110	0	2029	500	0
29)=	31	15	1	1	0	1	0	0	0	0	0	110	0	0	0	0
30)=	31	16	1	1	0	1	0	0	0	0	0	110	0	0	0	0
31)=	31	17	1	1	0	1	0	0	0	0	0	110	0	0	0	0
32)=	31	18	1	1	0	1	0	0	0	0	0	110	0	0	0	0
33)=	31	19	1	1	0	1	0	0	0	0	0	110	0	0	0	0
34)=	31	20	2	1	6	2	0	0	0	0	0	200	-9999	2015	60	0
35)=	31	21	2	1	6	2	0	0	0	0	0	200	-9999	2130	60	0
36)=	31	22	2	2	6	1	0	0	0	0	0	100	0	3989	500	0
37)=	31	23	2	2	6	1	0	0	0	0	0	100	0	2063	500	0
38)=	31	24	2	1	0	1	0	0	0	0	0	100	0	0	0	0
39)=	31	25	2	1	0	1	0	0	0	0	0	100	0	0	0	0
40)=	31	26	2	1	0	1	0	0	0	0	0	100	0	0	0	0
41)=	31	30	3	1	6	2	0	0	0	0	0	200	-9999	2015	60	0
42)=	31	31	3	1	6	2	0	0	0	0	0	200	-9999	4270	60	0
43)=	31	32	3	2	6	1	0	0	0	0	0	130	0	1926	500	0
44)=	31	33	3	2	6	1	0	0	0	0	0	130	0	2063	500	0
45)=	31	34	3	2	6	1	0	0	0	0	0	130	0	2063	500	0
46)=	31	35	3	1	0	1	0	0	0	0	0	130	0	0	0	0
47)=	31	36	3	1	0	1	0	0	0	0	0	130	0	0	0	0
48)=	31	37	3	1	0	1	0	0	0	0	0	130	0	0	0	0
49)=	31	40	4	1	6	2	0	0	0	0	0	200	-9999	1995	60	0
50)=	31	41	4	1	6	2	0	0	0	0	0	200	-9999	4230	60	0
51)=	31	42	4	2	6	1	0	0	0	0	0	140	0	1941	500	0
52)=	31	43	4	2	6	1	0	0	0	0	0	140	0	2077	500	0
53)=	31	44	4	1	0	1	0	0	0	0	0	140	0	0	0	0
54)=	31	45	4	1	0	1	0	0	0	0	0	140	0	0	0	0
55)=	31	46	4	1	0	1	0	0	0	0	0	140	0	0	0	0
56)=	31	50	5	1	6	2	0	0	0	0	0	200	-9999	1975	20	0
57)=	31	51	5	1	6	2	0	0	0	0	0	200	-9999	4250	20	0
58)=	31	52	5	2	6	1	0	0	0	0	0	125	0	1936	500	0
59)=	31	53	5	2	6	1	0	0	0	0	0	125	0	2072	500	0
60)=	31	54	5	2	6	1	0	0	0	0	0	125	0	4144	500	0
61)=	31	55	5	1	0	1	0	0	0	0	0	125	0	0	0	0
62)=	31	56	5	1	0	1	0	0	0	0	0	125	0	0	0	0
63)=	31	57	5	1	0	1	0	0	0	0	0	125	0	0	0	0
64)=	31	58	5	1	0	1	0	0	0	0	0	125	0	0	0	0
65)=	31	59	5	1	0	1	0	0	0	0	0	125	0	0	0	0
66)=	31	61	0	0	0	0	0	0	0	0	0	125	0	6000	0	0
67)=	31	62	0	0	0	0	0	0	0	0	0	125	0	0	0	0
68)=	31	63	0	0	0	0	0	0	0	0	0	125	0	0	0	0
69)=	31	64	0	0	0	0	0	0	0	0	0	125	0	0	0	0
70)=	31	191	1	1	0	1	0	0	0	0	0	110	0	0	0	0
71)=	31	192	1	1	0	1	0	0	0	0	0	110	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 ..... LINK NO.	ENTRY 1 ..... FLOW	ENTRY 1 ..... CRUISE SPEED	ENTRY 2 ..... LINK NO.	ENTRY 2 ..... FLOW	ENTRY 2 ..... CRUISE SPEED	ENTRY 3 ..... LINK NO.	ENTRY 3 ..... FLOW	ENTRY 3 ..... CRUISE SPEED	ENTRY 4 ..... LINK NO.	ENTRY 4 ..... FLOW	ENTRY 4 ..... CRUISE SPEED
72)=	32	10	653	0	0	0	43	0	0	0	0	0	0	0	0	0
73)=	32	11	211	0	0	0	43	0	0	0	0	0	0	0	0	0
74)=	32	12	84	0	60	84	43	0	0	0	0	0	0	0	0	0
75)=	32	13	80	0	60	80	43	0	0	0	0	0	0	0	0	0
76)=	32	14	193	0	60	193	43	0	0	0	0	0	0	0	0	0
77)=	32	15	291	0	61	291	43	0	0	0	0	0	0	0	0	0

78)=	32	16	210	0	64	210	43	0	0	0	0	0	0	0	0
79)=	32	17	88	0	63	88	43	0	0	0	0	0	0	0	0
80)=	32	18	292	0	61	292	43	0	0	0	0	0	0	0	0
81)=	32	19	210	0	64	210	43	0	0	0	0	0	0	0	0
82)=	32	20	368	0	0	0	43	0	0	0	0	0	0	0	0

83)=	32	21	882	0	0	0	43	0	0	0	0	0	0	0	0	0
84)=	32	22	264	0	10	264	43	0	0	0	0	0	0	0	0	0
85)=	32	23	211	0	11	211	43	0	0	0	0	0	0	0	0	0
86)=	32	24	273	0	14	193	43	13	80	43	0	0	0	0	0	0
87)=	32	25	181	0	192	181	43	0	0	0	0	0	0	0	0	0
88)=	32	26	52	0	191	52	43	0	0	0	0	0	0	0	0	0
89)=	32	30	192	0	0	0	43	0	0	0	0	0	0	0	0	0
90)=	32	31	1397	0	0	0	43	0	0	0	0	0	0	0	0	0
91)=	32	32	359	0	20	359	43	0	0	0	0	0	0	0	0	0
92)=	32	33	591	0	21	591	43	0	0	0	0	0	0	0	0	0
93)=	32	34	291	0	21	291	43	0	0	0	0	0	0	0	0	0
94)=	32	35	193	0	24	193	43	0	0	0	0	0	0	0	0	0
95)=	32	36	32	0	25	32	43	0	0	0	0	0	0	0	0	0
96)=	32	37	211	0	23	211	43	0	0	0	0	0	0	0	0	0
97)=	32	40	205	0	0	0	43	0	0	0	0	0	0	0	0	0
98)=	32	41	472	0	0	0	43	0	0	0	0	0	0	0	0	0
99)=	32	42	601	0	31	601	43	0	0	0	0	0	0	0	0	0
100)=	32	43	796	0	31	796	43	0	0	0	0	0	0	0	0	0
101)=	32	44	591	0	33	591	43	0	0	0	0	0	0	0	0	0
102)=	32	45	211	0	37	211	43	0	0	0	0	0	0	0	0	0
103)=	32	46	291	0	34	291	43	0	0	0	0	0	0	0	0	0
104)=	32	50	282	0	0	0	43	0	0	0	0	0	0	0	0	0
105)=	32	51	764	0	0	0	43	0	0	0	0	0	0	0	0	0
106)=	32	52	153	0	40	153	43	0	0	0	0	0	0	0	0	0
107)=	32	53	291	0	46	291	43	0	0	0	0	0	0	0	0	0
108)=	32	54	472	0	41	472	43	0	0	0	0	0	0	0	0	0
109)=	32	55	240	0	42	240	43	0	0	0	0	0	0	0	0	0
110)=	32	56	82	0	44	82	43	0	0	0	0	0	0	0	0	0
111)=	32	57	10	0	45	10	43	0	0	0	0	0	0	0	0	0
112)=	32	58	708	0	43	708	43	0	0	0	0	0	0	0	0	0
113)=	32	59	88	0	43	88	43	0	0	0	0	0	0	0	0	0
114)=	32	60	370	0	0	0	43	0	0	0	0	0	0	0	0	0
115)=	32	61	1042	0	51	764	43	50	278	43	0	0	0	0	0	0
116)=	32	62	291	0	53	291	43	0	0	0	0	0	0	0	0	0
117)=	32	63	796	0	58	708	43	59	88	43	0	0	0	0	0	0
118)=	32	64	472	0	54	472	43	0	0	0	0	0	0	0	0	0
119)=	32	191	52	0	64	52	43	0	0	0	0	0	0	0	0	0
120)=	32	192	181	0	61	181	43	0	0	0	0	0	0	0	0	0

LINK CARDS : FLARE SATURATION FLOW DATA

			..LANE 1..		..LANE 2..		..LANE 3..	
	CARD TYPE	LINK NO.	SAT. FLOW	CAPAC VEH.	SAT. FLOW	CAPAC VEH.	SAT. FLOW	CAPAC VEH.
121)=	33	21	2130	5	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

	CARD NO.	CARD TYPE	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
122)=	38	12	10	4500	13	10	4500	14	10	4500	22	9	4500	23	7	4500
123)=	38	32	6	4500	33	10	4500	34	10	4500	42	11	4500	43	11	4500
124)=	38	52	9	4500	53	9	4500	54	18	4500	0	0	0	0	0	0

*****END OF SUBROUTINE TINPUT****

60 SECOND CYCLE 60 STEPS

INITIAL SETTINGS
- (SECONDS)

NO	NODE OF STAGES	NUMBER 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	0	21								
2	2	0	36								
3	2	0	28								
4	2	0	13								
5	2	0	19								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	OVERSAT OF DELAY ($/H)	STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN MAX. (PCU)	AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST	START 2ND	END	EN	D
														(SECONDS)				
10	653	4100	60	16.7	23.3	3.5 + 0.7	(59.9)*	90	(15.1)	10		36.0	1	6	21			
11	211	2120	37	16.7	23.0	1.1 + 0.3	(19.1)*	85	(4.6)	3		11.5	1	6	21			
12	84	1892S	63	9.2	11.3	0.2 + 0.1	(3.7)*	58	(1.3)	7	(0.0)*	20.0	1	27	0			
13	80	2029S	51	9.2	9.2	0.1 + 0.1	(2.9)*	47	(1.0)	5	(0.0)*	15.4	1	27	0			
14	193	2029S	37	9.2	8.7	0.3 + 0.1	(6.6)*	45	(2.2)	3	(0.0)*	35.4	1	27	0			
15	292	12L	63	9.2	7.8	0.3 + 0.4	(9.0)	75	(5.6)	7		14.5	1	27	0			
16	210	12L	63	9.2	5.0	0.0 + 0.3	(4.1)	10	(0.5)	7		4.6	1	27	0			
17	88	12L	63	9.2	14.9	0.3 + 0.1	(5.2)	60	(1.4)	7		6.5	1	27	0			
18	292	13L	51	9.2	4.9	0.1 + 0.3	(5.6)	50	(3.8)	5		9.4	1	27	0			
19	210	13L	51	9.2	3.7	0.0 + 0.2	(3.0)	7	(0.4)	5		3.4	1	27	0			
20	368	2015	35	16.7	11.3	0.9 + 0.3	(16.3)*	59	(5.6)	4		9.8	2	6	36			
21	882	2710f	63	16.7	12.3	2.2 + 0.8	(42.8)*	62	(14.1)	10		25.7	2	6	36			
22	264	3989S	61	8.4	29.2	1.9 + 0.3	(30.4)*	106	(7.2)	12	(0.5)*	180.0	2	42	0			
23	211	2063	32	8.4	31.1	1.6 + 0.2	(25.9)*	107	(5.8)	4	(0.0)*	135.3	2	42	0			
24	273	22L	61	8.4	16.7	1.0 + 0.3	(18.0)	89	(6.2)	12	+	24.2	2	42	0			
25	181	22L	61	8.4	12.4	0.4 + 0.2	(8.9)	98	(4.6)	12	+	13.4	2	42	0			
26	52	22L	61	8.4	11.0	0.1 + 0.1	(2.3)	37	(0.5)	12	+	2.8	2	42	0			
30	192	2015	25	16.7	15.7	0.7 + 0.2	(11.9)*	69	(3.4)	2		7.1	3	6	28			
31	1397	4270	85	16.7	24.3	6.6 + 2.8	(133.8)*	98	(35.2)	24		80.3	3	6	28			
32	359	1926S	67	10.9	21.7	1.5 + 0.6	(30.7)*	104	(9.6)	9	(0.6)*	189.7	3	34	0			
33	591	2063S	86	10.9	29.1	2.6 + 2.2	(67.9)*	118	(18.0)	13	(0.7)*	391.4	3	34	0			
34	291	2063	31	10.9	13.6	0.9 + 0.2	(15.7)*	87	(6.5)	4	(0.0)*	84.8	3	34	0			
35	193	32L	67	10.9	20.5	0.8 + 0.3	(15.6)	58	(2.9)	9	+	18.4	3	34	0			
36	32	32L	67	10.9	22.6	0.1 + 0.1	(2.8)	63	(0.5)	9	+	3.4	3	34	0			
37	211	33L	86	10.9	18.0	0.3 + 0.8	(15.0)	37	(2.0)	13	+	17.0	3	34	0			
40	205	1995	77	16.7	53.2	1.4 + 1.6	(43.0)*	134	(7.1)	5		25.8	4	6	13			
41	472	4230	84	16.7	44.0	3.3 + 2.4	(81.8)*	122	(14.9)	10		49.1	4	6	13			
42	601	1941S	103	11.7	94.6	1.8 + 14.0	(224.2)*	199	(30.8)	57	(34.2)*	2692.7	4	19	0			
43	796	2077S	75	11.7	6.7	0.4 + 1.1	(21.1)*	66	(13.5)	14	(0.3)*	132.0	4	19	0			
44	591	42L	103	11.7	92.1	1.3 + 13.8	(214.7)	174	(26.5)	57	+	241.1	4	19	0			
45	211	42L	103	11.7	99.7	0.9 + 4.9	(83.0)	197	(10.7)	57	+	93.7	4	19	0			
46	291	43L	75	11.7	5.9	0.1 + 0.4	(6.8)	15	(1.1)	14	+	7.9	4	19	0			
50	282	1975	61	16.7	30.6	1.6 + 0.8	(34.0)*	101	(7.3)	5		6.8	5	6	19			
51	764	4250	77	16.7	29.3	4.6 + 1.7	(88.3)*	101	(19.9)	14		17.7	5	6	19			
52	153	1936S	41	10.5	11.8	0.4 + 0.1	(7.1)*	99	(3.9)	4	(0.0)*	39.6	5	25	0			
53	291	2072S	80	10.5	17.9	0.9 + 0.6	(20.6)*	64	(4.8)	6	(0.0)*	107.7	5	25	0			
54	472	4144S	23	10.5	9.2	1.1 + 0.1	(17.2)*	95	(11.6)	8	(0.0)*	97.6	5	25	0			
55	240	52L	41	10.5	3.8	0.1 + 0.2	(3.6)	10	(0.6)	4		4.3	5	25	0			
56	76	52L	41	10.5	13.1	0.2 + 0.1	(3.9)	61	(1.3)	4		5.2	5	25	0			
57	10	52L	41	10.5	4.2	0.0 + 0.0	(0.2)	13	(0.0)	4		0.2	5	25	0			
58	709	53L	80	10.5	7.6	0.1 + 1.4	(21.2)	15	(2.8)	6		24.0	5	25	0			
59	88	54L	23	10.5	1.3	0.0 + 0.0	(0.4)	7	(0.2)	8		0.6	5	25	0			
60	370	2108	39	10.5	4.7	0.2 + 0.3	(6.8)	39	(3.7)	2		10.5						

60 SECOND CYCLE 60 STEPS

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	OVERSAT OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN MAX. QUEUE (PCU)	AVERAGE EXCESS QUEUE (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END 1ST (SECONDS)	GREEN TIMES END 2ND (SECONDS)
61	1042	6000S	43	10.5	0.5	0.0 + 0.2	(2.2)	1	(0.2)	0		2.4					
62	291	61L	43	10.5	0.5	0.0 + 0.0	(0.6)	1	(0.1)	0		0.7					
63	796	61L	43	10.5	0.5	0.0 + 0.1	(1.7)	1	(0.2)	0		1.8					
64	472	61L	43	10.5	0.5	0.0 + 0.1	(1.0)	1	(0.1)	0		1.1					
191	52	14L	37	9.2	3.0	0.0 + 0.0	(0.6)	6	(0.1)	3		0.7	1	27	0		
192	181	14L	37	9.2	4.3	0.1 + 0.1	(3.1)	45	(2.1)	3		5.2	1	27	0		

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2561.7	161.3	15.9	45.7	56.0	(3078.7) + (194.3)	+ (1635.5)	= 4908.5	TOTALS	

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	137.4	+	117.0	+	146.5	=	400.8

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 49

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

1	2	27	48
2	2	0	36
3	2	0	28
4	2	0	13
5	2	51	10

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2561.7	163.2	15.7	47.6	56.0	(2904.6) + (191.6)	+ (1629.4)	= 4725.6	TOTALS	

NO. OF ENTRIES TO SUBPT = 14
NO. OF LINKS RECALCULATED= 402

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

1	2	27	48
2	2	0	36
3	2	24	52
4	2	0	13
5	2	51	10

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2561.7	165.6	15.5	50.1	56.0	(2831.3) + (203.3)	+ (1645.6)	= 4680.2	TOTALS	

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 373

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

1	2	32	48
2	2	59	32
3	2	26	52
4	2	0	13
5	2	54	10

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2561.7	178.1	14.4	48.9	69.6	(2662.3) + (177.7)	+ (1540.8)	= 4380.8	TOTALS	

NO. OF ENTRIES TO SUBPT = 32
NO. OF LINKS RECALCULATED= 893

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1	2	32	48
2	2	59	32
3	2	26	52
4	2	0	13
5	2	45	1

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2561.7	176.9	14.5	47.6	69.7	(2644.2) + (169.4)	+	(1552.4)	= 4365.9	TOTALS

NO. OF ENTRIES TO SUBPT = 12
NO. OF LINKS RECALCULATED= 434

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1	2	32	48
2	2	59	32
3	2	26	52
4	2	0	13
5	2	45	1

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2561.7	176.9	14.5	47.6	69.7	(2644.2) + (169.4)	+	(1552.4)	= 4365.9	TOTALS

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 413

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1	2	32	48
2	2	54	27
3	2	25	51
4	2	2	15
5	2	46	2

TOTAL TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL DISTANCE PERFORMANCE INDEX ($/H)	
2561.7	175.9	14.6	46.7	69.7	(2561.4) + (169.1)	+	(1572.5)	= 4302.9	TOTALS

NO. OF ENTRIES TO SUBPT = 18
NO. OF LINKS RECALCULATED= 684

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1	2	30	47
2	2	55	20
3	2	25	51
4	2	2	15
5	2	45	2

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2561.7	170.2	15.0	46.8	63.8	(2497.4) + (164.8)	+	(1566.6)	= 4228.7	TOTALS

NO. OF ENTRIES TO SUBPT = 27
NO. OF LINKS RECALCULATED= 1010

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	28	45								
2	2	51	16								
3	2	26	52								
4	2	3	16								
5	2	46	3								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	COST OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN MAX. QUEUE (PCU)	AVERAGE EXCESS QUEUE (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	START 2ND (SECONDS)	END 1ST (SECONDS)	END 2ND (SECONDS)
10	653	4100	80	16.7	33.4	4.1 + 1.9	(86.0)*	107	(18.1)	12		51.6	1	34	45		
11	211	2120	50	16.7	29.7	1.3 + 0.5	(24.8)*	98	(5.4)	4		14.9	1	34	45		
12	84	1892S	56	9.2	9.8	0.1 + 0.1	(3.2)*	57	(1.2)	6	(0.0)*	17.5	1	51	28		
13	80	2029S	45	9.2	7.9	0.1 + 0.1	(2.5)*	50	(1.0)	5	(0.0)*	13.5	1	51	28		
14	193	2029S	33	9.2	6.5	0.2 + 0.1	(5.0)*	43	(2.1)	3	(0.0)*	27.0	1	51	28		
15	292	12L	56	9.2	4.0	0.0 + 0.3	(4.6)	9	(0.6)	6		5.3	1	51	28		
16	210	12L	56	9.2	16.6	0.8 + 0.2	(13.8)	103	(5.6)	6		19.4	1	51	28		
17	88	12L	56	9.2	16.2	0.3 + 0.1	(5.6)	93	(2.1)	6		7.7	1	51	28		
18	292	13L	45	9.2	3.1	0.0 + 0.2	(3.6)	7	(0.5)	5		4.1	1	51	28		
19	210	13L	45	9.2	14.0	0.7 + 0.1	(11.6)	100	(5.4)	5		17.0	1	51	28		
20	368	2015	55	16.7	22.2	1.7 + 0.6	(32.3)*	86	(8.2)	6		19.4	2	57	16		
21	882	3030f	87	16.7	30.4	4.2 + 3.3	(105.8)*	104	(23.7)	16		63.5	2	57	16		
22	264	3989S	39	8.4	4.1	0.2 + 0.1	(4.2)*	12	(0.8)	7	(0.0)*	22.0	2	22	51		
23	211	2063	20	8.4	3.7	0.1 + 0.1	(3.1)*	9	(0.5)	0	(0.0)*	16.1	2	22	51		
24	273	22L	39	8.4	15.1	1.0 + 0.1	(16.3)	77	(5.4)	7		21.7	2	22	51		
25	181	22L	39	8.4	5.5	0.2 + 0.1	(3.9)	60	(2.8)	7		6.7	2	22	51		
26	52	22L	39	8.4	23.7	0.3 + 0.0	(4.9)	102	(1.4)	7		6.2	2	22	51		
30	192	2015	27	16.7	17.5	0.7 + 0.2	(13.3)*	74	(3.6)	2		8.0	3	32	52		
31	1397	4270	93	16.7	35.2	7.3 + 6.3	(193.8)*	116	(41.9)	28		116.3	3	32	52		
32	359	1926S	63	10.9	6.5	0.1 + 0.5	(9.2)*	13	(1.2)	5	(0.0)*	47.4	3	58	26		
33	591	2063S	80	10.9	10.9	0.3 + 1.5	(25.3)*	35	(5.4)	8	(0.0)*	132.0	3	58	26		
34	291	2063	29	10.9	4.1	0.1 + 0.2	(4.7)*	10	(0.7)	0	(0.0)*	24.0	3	58	26		
35	193	32L	63	10.9	28.3	1.2 + 0.3	(21.5)	108	(5.4)	5		26.9	3	58	26		
36	32	32L	63	10.9	27.5	0.2 + 0.0	(3.5)	108	(0.9)	5		4.4	3	58	26		
37	211	33L	80	10.9	15.4	0.4 + 0.5	(12.8)	96	(5.2)	8		18.0	3	58	26		
40	205	1995	77	16.7	53.2	1.4 + 1.6	(43.0)*	134	(7.1)	5		25.8	4	9	16		
41	472	4230	84	16.7	44.0	3.3 + 2.4	(81.8)*	122	(14.9)	10		49.1	4	9	16		
42	601	1941S	103	11.7	90.3	1.1 + 14.0	(214.1)*	177	(27.4)	56	(34.1)*	2631.0	4	22	3		
43	796	2077S	75	11.7	7.7	0.6 + 1.1	(24.2)*	41	(8.4)	10	(0.0)*	129.6	4	22	3		
44	591	42L	103	11.7	96.0	2.0 + 13.8	(223.8)	200	(30.5)	56	+	254.2	4	22	3		
45	211	42L	103	11.7	98.1	0.8 + 4.9	(81.6)	201	(10.9)	56	+	92.5	4	22	3		
46	291	43L	75	11.7	7.5	0.2 + 0.4	(8.7)	54	(4.1)	10		12.7	4	22	3		
50	282	1975	71	16.7	38.0	1.8 + 1.2	(42.3)*	113	(8.2)	6		8.5	5	52	3		
51	764	4250	90	16.7	42.5	5.0 + 4.1	(128.2)*	123	(24.1)	16		25.6	5	52	3		
52	153	1936S	38	10.5	2.4	0.0 + 0.1	(1.4)*	4	(0.2)	4	(0.0)*	7.3	5	9	46		
53	291	2072S	76	10.5	8.6	0.2 + 0.5	(9.9)*	25	(1.9)	12	(0.9)*	91.7	5	9	46		
54	472	4144S	21	10.5	0.9	0.0 + 0.1	(1.6)*	1	(0.2)	1	(0.0)*	8.3	5	9	46		
55	223<	52L	38	10.5	7.3	0.3 + 0.1	(6.4)	66	(4.1)	4		10.5	5	9	46		
56	81	52L	38	10.5	13.7	0.3 + 0.1	(4.4)	75	(1.6)	4		5.9	5	9	46		
57	10	52L	38	10.5	4.3	0.0 + 0.0	(0.2)	14	(0.0)	4		0.2	5	9	46		
58	709	53L	76	10.5	18.0	2.4 + 1.1	(50.3)	95	(17.3)	12	+	67.6	5	9	46		
59	88	54L	21	10.5	5.7	0.1 + 0.0	(2.0)	55	(1.2)	1		3.2	5	9	46		
60	370	2108	40	10.5	4.7	0.2 + 0.3	(6.9)	39	(3.7)	2		10.6					

60 SECOND CYCLE 60 STEPS

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	COST OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN MAX. QUEUE (PCU)	AVERAGE EXCESS QUEUE (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	START 2ND (SECONDS)	END 1ST (SECONDS)	END 2ND (SECONDS)
61	1042	6000S	43	10.5	0.5	0.0 + 0.2	(2.2)	1	(0.2)	0		2.4					
62	291	61L	43	10.5	0.5	0.0 + 0.0	(0.6)	1	(0.1)	0		0.7					
63	796	61L	43	10.5	0.5	0.0 + 0.1	(1.7)	1	(0.2)	0		1.8					
64	472	61L	43	10.5	0.5	0.0 + 0.1	(1.0)	1	(0.1)	0		1.1					
191	52	14L	33	9.2	11.9	0.1 + 0.0	(2.4)	94	(1.3)	3		3.7	1	51	28		
192	181	14L	33	9.2	2.7	0.0 + 0.1	(1.9)	6	(0.3)	3		2.2	1	51	28		

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2561.7	169.1	15.1	45.7	63.8	(2421.4) + (161.8)	+ (1573.6)	= 4156.9	TOTALS	
								ROUTE	

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	137.4	+	126.0	+	144.4	=	407.8

NO. OF ENTRIES TO SUBPT = 17
NO. OF LINKS RECALCULATED= 646

PROGRAM TRANSYT FINISHED
========== end of file ==========

Printed at 17:26:20 on 09/09/2015]

T R A N S Y T 12

Traffic Network Study Tool Analysis

Program Release 7 (July 2010)

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For sales and distribution information, program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770864
Email: softwarebureau@trl.co.uk
Web: www.trlsoftware.co.uk RG40

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Run with file:- "S2 2026 PM CD.DAT" at 12:23 on 20150825

TRANSYT 12.0

S2 M69 Junction 1 2026 PM + Committed Development

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	=	5
NUMBER OF LINKS	=	50
NUMBER OF OPTIMISED NODES	=	5
MAXIMUM NUMBER OF GRAPHIC PLOTS	=	0
NUMBER OF STEPS IN CYCLE	=	60
MAXIMUM NUMBER OF SHARED STOPLINES	=	4
MAXIMUM NUMBER OF TIMING POINTS	=	2
MAXIMUM LINKS AT ANY NODE	=	12

CORE REQUESTED = 11544 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

(1)= TITLE:- S2 M69 Junction 1 2026 PM + Committed Development

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME PERIOD 1-1200 MINS.	EFFECTIVE-GREEN DISPLACEMENTS START (SEC)	EFFECTIVE-GREEN DISPLACEMENTS END (SEC)	EQUISAT 0=UNEQUAL SETTINGS 1=YES	FLOW CYCLE 0=NO 1=EQUAL	FLOW SCALE 10-200 %	CRUISE-SPEEDS SCALE 50-200 %	CRUISE-SPEEDS CARD32 0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL-CLIMB OUTPUT 1=FULL	DELAY VALUE P PER PCU-H	STOP NO. VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260

CARD NO.	CARD TYPE	LIST OF NODES TO BE OPTIMISED														
3)=	2	1	2	3	4	5	0	0	0	0	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET.....					SECOND SET.....					THIRD SET.....				
4)=	7	12	15	16	17	0	13	19	18	0	0	14	191	192	0	0
5)=	7	22	24	25	26	0	32	35	36	0	0	33	37	0	0	0
6)=	7	42	44	45	47	0	43	46	0	0	0	52	55	56	57	0
7)=	7	53	58	0	0	0	54	59	0	0	0	61	62	63	64	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
8)=	10	1	7	7								
9)=	10	2	7	7								
10)=	10	3	7	7								
11)=	10	4	7	7								
12)=	10	5	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
13)=	11	1	6	6								
14)=	11	2	6	6								
15)=	11	3	6	6								
16)=	11	4	6	6								
17)=	11	5	6	6								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
18)=	12	1	1	0	0								
19)=	12	2	1	0	0								
20)=	12	3	1	0	0								
21)=	12	4	1	0	0								
22)=	12	5	1	0	0								

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY LINKS LINK1 NO.	PRIORITY LINKS LINK2 NO.	LINK1 GIVEWAY COEFFS. ONLY % FLOW	A1 X100	A2 X100				LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
23)=	30	60	61	0	0	47	100	0	0	0	0	125	0	2108	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREE START STAGE	FIRST GREE START LAG	FIRST GREE END STAG	FIRST GREE END LAG	SECOND GREEN START STAGE	SECOND GREEN START LAG	SECOND GREEN END STAGE	SECOND GREEN END LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
24)=	31	10	1	1	6	2	0	0	0	0	0	200	-9999	4100	60	0
25)=	31	11	1	1	6	2	0	0	0	0	0	200	-9999	2120	60	0
26)=	31	12	1	2	6	1	0	0	0	0	0	110	0	1892	500	0
27)=	31	13	1	2	6	1	0	0	0	0	0	110	0	2029	500	0
28)=	31	14	1	2	6	1	0	0	0	0	0	110	0	2029	500	0
29)=	31	15	1	1	0	1	0	0	0	0	0	110	0	0	0	0
30)=	31	16	1	1	0	1	0	0	0	0	0	110	0	0	0	0
31)=	31	17	1	1	0	1	0	0	0	0	0	110	0	0	0	0
32)=	31	18	1	1	0	1	0	0	0	0	0	110	0	0	0	0
33)=	31	19	1	1	0	1	0	0	0	0	0	110	0	0	0	0
34)=	31	20	2	1	6	2	0	0	0	0	0	200	-9999	2015	60	0
35)=	31	21	2	1	6	2	0	0	0	0	0	200	-9999	2130	60	0
36)=	31	22	2	2	6	1	0	0	0	0	0	100	0	3989	500	0
37)=	31	23	2	2	6	1	0	0	0	0	0	100	0	2063	500	0
38)=	31	24	2	1	0	1	0	0	0	0	0	100	0	0	0	0
39)=	31	25	2	1	0	1	0	0	0	0	0	100	0	0	0	0
40)=	31	26	2	1	0	1	0	0	0	0	0	100	0	0	0	0
41)=	31	30	3	1	6	2	0	0	0	0	0	200	-9999	2015	60	0
42)=	31	31	3	1	6	2	0	0	0	0	0	200	-9999	4270	60	0
43)=	31	32	3	2	6	1	0	0	0	0	0	130	0	1926	500	0
44)=	31	33	3	2	6	1	0	0	0	0	0	130	0	2063	500	0
45)=	31	34	3	2	6	1	0	0	0	0	0	130	0	2063	500	0
46)=	31	35	3	1	0	1	0	0	0	0	0	130	0	0	0	0
47)=	31	36	3	1	0	1	0	0	0	0	0	130	0	0	0	0
48)=	31	37	3	1	0	1	0	0	0	0	0	130	0	0	0	0
49)=	31	40	4	1	6	2	0	0	0	0	0	200	-9999	1995	60	0
50)=	31	41	4	1	6	2	0	0	0	0	0	200	-9999	4230	60	0
51)=	31	42	4	2	6	1	0	0	0	0	0	140	0	1941	500	0
52)=	31	43	4	2	6	1	0	0	0	0	0	140	0	2077	500	0
53)=	31	44	4	1	0	1	0	0	0	0	0	140	0	0	0	0
54)=	31	45	4	1	0	1	0	0	0	0	0	140	0	0	0	0
55)=	31	46	4	1	0	1	0	0	0	0	0	140	0	0	0	0
56)=	31	47	4	1	0	1	0	0	0	0	0	140	0	0	0	0
57)=	31	50	5	1	6	2	0	0	0	0	0	200	-9999	1975	20	0
58)=	31	51	5	1	6	2	0	0	0	0	0	200	-9999	4250	20	0
59)=	31	52	5	2	6	1	0	0	0	0	0	125	0	1936	500	0
60)=	31	53	5	2	6	1	0	0	0	0	0	125	0	2072	500	0
61)=	31	54	5	2	6	1	0	0	0	0	0	125	0	4144	500	0
62)=	31	55	5	1	0	1	0	0	0	0	0	125	0	0	0	0
63)=	31	56	5	1	0	1	0	0	0	0	0	125	0	0	0	0
64)=	31	57	5	1	0	1	0	0	0	0	0	125	0	0	0	0
65)=	31	58	5	1	0	1	0	0	0	0	0	125	0	0	0	0
66)=	31	59	5	1	0	1	0	0	0	0	0	125	0	0	0	0
67)=	31	61	0	0	0	0	0	0	0	0	0	125	0	6000	0	0
68)=	31	62	0	0	0	0	0	0	0	0	0	125	0	0	0	0
69)=	31	63	0	0	0	0	0	0	0	0	0	125	0	0	0	0
70)=	31	64	0	0	0	0	0	0	0	0	0	125	0	0	0	0
71)=	31	191	1	1	0	1	0	0	0	0	0	110	0	0	0	0
72)=	31	192	1	1	0	1	0	0	0	0	0	110	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 ..... LINK NO.	ENTRY 1 ..... CRUISE SPEED	ENTRY 2 ..... LINK NO.	ENTRY 2 ..... FLOW	ENTRY 2 ..... CRUISE SPEED	ENTRY 3 ..... LINK NO.	ENTRY 3 ..... FLOW	ENTRY 3 ..... CRUISE SPEED	ENTRY 4 ..... LINK NO.	ENTRY 4 ..... FLOW	ENTRY 4 ..... CRUISE SPEED
73)=	32	10	896	0	0	0	43	0	0	0	0	0	0	0	0
74)=	32	11	367	0	0	0	43	0	0	0	0	0	0	0	0
75)=	32	12	97	0	60	97	43	0	0	0	0	0	0	0	0
76)=	32	13	171	0	60	171	43	0	0	0	0	0	0	0	0
77)=	32	14	148	0	60	148	43	0	0	0	0	0	0	0	0

78)=	32	15	259	0	61	259	43	0	0	0	0	0	0	0	0	0
79)=	32	16	141	0	64	141	43	0	0	0	0	0	0	0	0	0
80)=	32	17	31	0	63	31	43	0	0	0	0	0	0	0	0	0
81)=	32	18	259	0	61	259	43	0	0	0	0	0	0	0	0	0
82)=	32	19	142	0	64	142	43	0	0	0	0	0	0	0	0	0

83)=	32	20	366	0	0	0	43	0	0	0	0	0	0	0	0	0	0
84)=	32	21	933	0	0	0	43	0	0	0	0	0	0	0	0	0	0
85)=	32	22	574	0	10	574	43	0	0	0	0	0	0	0	0	0	0
86)=	32	23	367	0	11	367	43	0	0	0	0	0	0	0	0	0	0
87)=	32	24	319	0	14	148	43	13	171	43	0	0	0	0	0	0	0
88)=	32	25	282	0	192	282	43	0	0	0	0	0	0	0	0	0	0
89)=	32	26	107	0	191	107	43	0	0	0	0	0	0	0	0	0	0
90)=	32	30	71	0	0	0	43	0	0	0	0	0	0	0	0	0	0
91)=	32	31	538	0	0	0	43	0	0	0	0	0	0	0	0	0	0
92)=	32	32	336	0	20	336	43	0	0	0	0	0	0	0	0	0	0
93)=	32	33	612	0	21	612	43	0	0	0	0	0	0	0	0	0	0
94)=	32	34	321	0	21	321	43	0	0	0	0	0	0	0	0	0	0
95)=	32	35	148	0	24	148	43	0	0	0	0	0	0	0	0	0	0
96)=	32	36	38	0	25	38	43	0	0	0	0	0	0	0	0	0	0
97)=	32	37	367	0	23	367	43	0	0	0	0	0	0	0	0	0	0
98)=	32	40	281	0	0	0	43	0	0	0	0	0	0	0	0	0	0
99)=	32	41	390	0	0	0	43	0	0	0	0	0	0	0	0	0	0
100)=	32	42	270	0	31	270	43	0	0	0	0	0	0	0	0	0	0
101)=	32	43	268	0	31	268	43	0	0	0	0	0	0	0	0	0	0
102)=	32	44	612	0	33	612	43	0	0	0	0	0	0	0	0	0	0
103)=	32	45	367	0	37	367	43	0	0	0	0	0	0	0	0	0	0
104)=	32	46	321	0	34	321	43	0	0	0	0	0	0	0	0	0	0
105)=	32	47	10	0	35	10	43	0	0	0	0	0	0	0	0	0	0
106)=	32	50	179	0	0	0	43	0	0	0	0	0	0	0	0	0	0
107)=	32	51	800	0	0	0	43	0	0	0	0	0	0	0	0	0	0
108)=	32	52	243	0	40	243	43	0	0	0	0	0	0	0	0	0	0
109)=	32	53	321	0	46	321	43	0	0	0	0	0	0	0	0	0	0
110)=	32	54	390	0	41	390	43	0	0	0	0	0	0	0	0	0	0
111)=	32	55	152	0	42	152	43	0	0	0	0	0	0	0	0	0	0
112)=	32	56	62	0	44	62	43	0	0	0	0	0	0	0	0	0	0
113)=	32	57	18	0	45	18	43	0	0	0	0	0	0	0	0	0	0
114)=	32	58	237	0	43	237	43	0	0	0	0	0	0	0	0	0	0
115)=	32	59	31	0	43	31	43	0	0	0	0	0	0	0	0	0	0
116)=	32	60	436	0	0	0	43	0	0	0	0	0	0	0	0	0	0
117)=	32	61	957	0	51	800	43	50	157	43	0	0	0	0	0	0	0
118)=	32	62	321	0	53	321	43	0	0	0	0	0	0	0	0	0	0
119)=	32	63	268	0	58	237	43	59	31	43	0	0	0	0	0	0	0
120)=	32	64	390	0	54	390	43	0	0	0	0	0	0	0	0	0	0
121)=	32	191	107	0	64	107	43	0	0	0	0	0	0	0	0	0	0
122)=	32	192	282	0	61	282	43	0	0	0	0	0	0	0	0	0	0

LINK CARDS : FLARE SATURATION FLOW DATA

			..LANE 1..		..LANE 2..		..LANE 3..	
	CARD TYPE	LINK NO.	SAT. FLOW	CAPAC VEH.	SAT. FLOW	CAPAC VEH.	SAT. FLOW	CAPAC VEH.
123)=	33	21	2130	5	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
124)=	38	12	10	4500	13	10	4500	14	10	4500	22	9	4500	23	7	4500
125)=	38	32	6	4500	33	10	4500	34	10	4500	42	11	4500	43	11	4500
126)=	38	52	9	4500	53	9	4500	54	18	4500	0	0	0	0	0	0

*****END OF SUBROUTINE TINPUT****

60 SECOND CYCLE 60 STEPS

INITIAL SETTINGS
- (SECONDS)

NODE	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10	STAGE NO
1	2	27	0									
2	2	30	0									
3	2	16	0									
4	2	14	0									
5	2	26	0									

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	-------DELAY-------- UNIFORM (U+R+O=MEAN Q) (PCU-H/H)	RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	----STOPS---- MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	----QUEUE---- MEAN MAX. (PCU)	AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST END	START 2ND END (SECONDS)
10	896	4100	60	16.7	18.4	3.8 + 0.7	(64.9)*	81	(18.7)	13		38.9	1	6		27
11	367	2120	47	16.7	18.9	1.5 + 0.4	(27.4)*	79	(7.5)	5		16.4	1	6		27
12	97	1892S	60	9.2	15.4	0.3 + 0.1	(5.9)*	74	(1.8)	6	(0.0)*	31.4	1	33		0
13	171	2029S	60	9.2	15.4	0.5 + 0.2	(10.4)*	75	(3.3)	7	(0.0)*	55.4	1	33		0
14	148	2029S	57	9.2	15.0	0.4 + 0.2	(8.7)*	75	(2.8)	7	(0.0)*	46.5	1	33		0
15	258	12L	60	9.2	12.2	0.5 + 0.4	(12.4)	92	(6.1)	6		18.5	1	33		0
16	141	12L	60	9.2	8.2	0.1 + 0.2	(4.5)	19	(0.7)	6		5.2	1	33		0
17	31	12L	60	9.2	11.8	0.1 + 0.0	(1.4)	32	(0.3)	6		1.7	1	33		0
18	258	13L	60	9.2	12.3	0.5 + 0.3	(12.5)	93	(6.2)	7		18.7	1	33		0
19	142	13L	60	9.2	7.9	0.1 + 0.2	(4.4)	19	(0.7)	7		5.1	1	33		0
20	366	2015	44	16.7	16.3	1.3 + 0.4	(23.5)*	73	(6.9)	5		14.1	2	6		30
21	933	2850f	79	16.7	20.1	3.4 + 1.8	(74.2)*	84	(20.1)	14		44.5	2	6		30
22	573	3989S	77	8.4	25.1	3.3 + 0.7	(56.7)*	107	(15.9)	21	(2.8)*	424.6	2	36		0
23	367	2063	43	8.4	24.3	2.1 + 0.4	(35.2)*	106	(10.0)	6	(0.0)*	186.2	2	36		0
24	319	22L	77	8.4	12.5	0.7 + 0.4	(15.8)	79	(6.5)	21	+	22.2	2	36		0
25	281	22L	77	8.4	8.1	0.3 + 0.4	(9.0)	75	(5.4)	21	+	14.5	2	36		0
26	107	22L	77	8.4	21.5	0.5 + 0.1	(9.1)	68	(1.9)	21	+	10.9	2	36		0
30	71	2015	19	16.7	26.8	0.4 + 0.1	(7.5)*	90	(1.6)	1		4.5	3	6		16
31	538	4270	69	16.7	30.2	3.4 + 1.1	(64.1)*	101	(14.0)	9		38.4	3	6		16
32	336	1926S	42	10.9	7.8	0.5 + 0.2	(10.4)*	77	(6.7)	7	(0.0)*	59.8	3	22		0
33	612	2063S	73	10.9	10.4	0.9 + 0.8	(25.1)*	89	(14.0)	11	(0.1)*	142.9	3	22		0
34	321	2063	24	10.9	3.8	0.2 + 0.2	(4.9)*	49	(4.1)	4	(0.0)*	28.4	3	22		0
35	148	32L	42	10.9	11.4	0.4 + 0.1	(6.6)	54	(2.1)	7	+	8.7	3	22		0
36	38	32L	42	10.9	14.1	0.1 + 0.0	(2.1)	68	(0.7)	7	+	2.8	3	22		0
37	367	33L	73	10.9	6.1	0.1 + 0.5	(8.8)	15	(1.4)	11	+	10.2	3	22		0
40	281	1995	94	16.7	89.0	2.0 + 5.0	(98.7)*	177	(12.8)	10		59.2	4	6		14
41	390	4230	61	16.7	31.2	2.6 + 0.8	(48.0)*	102	(10.2)	7		28.8	4	6		14
42	270	1941S	95	11.7	32.0	0.8 + 1.6	(34.1)*	131	(9.1)	27	(5.8)*	441.3	4	20		0
43	268	2077S	41	11.7	3.5	0.1 + 0.2	(3.7)*	46	(3.2)	4	(0.0)*	21.6	4	20		0
44	612	42L	95	11.7	25.1	0.6 + 3.7	(60.6)	104	(16.3)	27	+	76.9	4	20		0
45	367	42L	95	11.7	35.4	1.4 + 2.2	(51.3)	116	(11.0)	27	+	62.3	4	20		0
46	321	43L	41	11.7	2.4	0.0 + 0.2	(3.0)	5	(0.4)	4		3.5	4	20		0
47	10	42L	95	11.7	30.8	0.0 + 0.1	(1.2)	116	(0.3)	27	+	1.5	4	20		0
50	179	1975	26	16.7	17.5	0.7 + 0.2	(12.3)*	73	(3.4)	2		2.5	5	6		26
51	800	4250	54	16.7	18.2	3.5 + 0.6	(57.5)*	80	(16.4)	11		11.5	5	6		26
52	243	1936S	51	10.5	19.4	1.0 + 0.3	(18.6)*	106	(6.6)	6	(0.0)*	99.7	5	32		0
53	321	2072S	56	10.5	7.6	0.3 + 0.4	(9.6)*	21	(1.7)	4	(0.0)*	50.0	5	32		0
54	390	4144S	21	10.5	16.3	1.6 + 0.1	(25.1)*	101	(10.2)	7	(0.0)*	135.5	5	32		0
55	152	52L	51	10.5	4.5	0.0 + 0.2	(2.7)	23	(0.9)	6		3.6	5	32		0
56	62	52L	51	10.5	14.0	0.2 + 0.1	(3.4)	45	(0.7)	6		4.1	5	32		0
57	18	52L	51	10.5	12.0	0.0 + 0.0	(0.9)	84	(0.4)	6		1.2	5	32		0
58	237	53L	56	10.5	6.1	0.1 + 0.3	(5.7)	58	(3.6)	4		9.3	5	32		0
59	31	54L	21	10.5	4.4	0.0 + 0.0	(0.5)	58	(0.5)	7		1.0	5	32		0

60 SECOND CYCLE 60 STEPS

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	DELAY COST OVERSAT OF ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN QUEUE MAX. (PCU)	AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	START 2ND	END
60	436	2108	36	10.5	3.1	0.1 + 0.3	(5.4)	27	(3.1)	1		8.5				
61	957	6000S	32	10.5	0.4	0.0 + 0.1	(1.7)	1	(0.2)	0		1.9				
62	321	61L	32	10.5	0.4	0.0 + 0.0	(0.6)	1	(0.1)	0		0.6				
63	268	61L	32	10.5	0.4	0.0 + 0.0	(0.5)	1	(0.1)	0		0.5				
64	390	61L	32	10.5	0.4	0.0 + 0.0	(0.7)	1	(0.1)	0		0.8				
191	107	14L	57	9.2	7.5	0.1 + 0.1	(3.1)	18	(0.5)	7		3.6	1	33	0	
192	281	14L	57	9.2	11.8	0.6 + 0.3	(13.1)	93	(6.7)	7		19.8	1	33	0	

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2283.0	121.2	18.8	41.2	26.9	(1742.2) + (166.1)	+ (391.3)	= 2299.7		TOTALS

	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTION	122.4	+ 78.4	+ 126.5	= 327.3

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 50

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

1	2	9	36
2	2	42	12
3	2	9	25
4	2	0	14
5	2	33	59

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2283.0	121.0	18.9	41.0	26.9	(1394.6) + (136.0)	+ (266.2)	= 1796.8		TOTALS

NO. OF ENTRIES TO SUBPT = 16
NO. OF LINKS RECALCULATED= 515

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

1	2	9	36
2	2	42	12
3	2	9	25
4	2	0	14
5	2	33	59

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2283.0	121.0	18.9	41.0	26.9	(1394.6) + (136.0)	+ (266.2)	= 1796.8		TOTALS

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 369

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

1	2	12	32
2	2	45	10
3	2	11	25
4	2	1	14
5	2	37	55

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2283.0	137.0	16.7	41.9	42.0	(1258.7) + (108.1)	+ (75.9)	= 1442.6		TOTALS

NO. OF ENTRIES TO SUBPT = 39
NO. OF LINKS RECALCULATED= 1137

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1	2	12	32
2	2	45	10
3	2	20	34
4	2	1	14
5	2	37	55

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2283.0	135.7	16.8	40.6	42.0	(1128.4) + (107.4)	+	(143.7)	= 1379.5	TOTALS

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 412

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1	2	12	32
2	2	45	10
3	2	20	34
4	2	1	14
5	2	37	55

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2283.0	135.7	16.8	40.6	42.0	(1128.4) + (107.4)	+	(143.7)	= 1379.5	TOTALS

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 412

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1	2	13	33
2	2	45	10
3	2	20	34
4	2	1	14
5	2	36	54

TOTAL TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL DISTANCE PERFORMANCE INDEX ($/H)	
2283.0	135.2	16.9	40.1	42.0	(1119.1) + (105.6)	+	(143.4)	= 1368.1	TOTALS

NO. OF ENTRIES TO SUBPT = 12
NO. OF LINKS RECALCULATED= 448

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1	2	13	33
2	2	45	10
3	2	20	34
4	2	1	14
5	2	36	54

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2283.0	135.2	16.9	40.1	42.0	(1119.1) + (105.6)	+	(143.4)	= 1368.1	TOTALS

NO. OF ENTRIES TO SUBPT = 19
NO. OF LINKS RECALCULATED= 686

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	13	33								
2	2	47	12								
3	2	18	32								
4	2	1	14								
5	2	35	53								

NUMBER	LINK INTO LINK	FLOW (PCU/H)	SAT OF FLOW (PCU/H)	SAT (%)	DEGREE OF CRUISE PER PCU (SEC)	MEAN TIMES DELAY (SEC)	UNIFORM RANDOM+ OVERSAT (U+R+O=MEAN Q) (PCU-H/H)	COST OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN MAX. STOPS (PCU)	AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST	GREEN TIMES START 2ND	GREEN TIMES END 1ST	GREEN TIMES END 2ND
															(SECONDS)			
10	896	4100	87	16.7	34.9	5.4 + 3.3	(123.3)*	112	(25.9)	17		74.0	1	19			33	
11	367	2120	69	16.7	31.3	2.1 + 1.1	(45.3)*	104	(9.8)	7		27.2	1	19			33	
12	97	1892S	48	9.2	10.2	0.2 + 0.1	(3.9)*	57	(1.4)	4	(0.0)*	21.0	1	39			13	
13	171	2029S	48	9.2	10.0	0.3 + 0.1	(6.7)*	56	(2.5)	4	(0.0)*	36.2	1	39			13	
14	148	2029S	45	9.2	9.7	0.3 + 0.1	(5.7)*	54	(2.1)	4	(0.0)*	30.4	1	39			13	
15	258	12L	48	9.2	5.2	0.1 + 0.2	(5.3)	14	(1.0)	4		6.2	1	39			13	
16	141	12L	48	9.2	7.4	0.2 + 0.1	(4.1)	73	(2.7)	4		6.8	1	39			13	
17	31	12L	48	9.2	18.8	0.1 + 0.0	(2.3)	104	(0.8)	4		3.1	1	39			13	
18	258	13L	48	9.2	5.0	0.1 + 0.2	(5.1)	14	(0.9)	4		6.0	1	39			13	
19	142	13L	48	9.2	7.0	0.2 + 0.1	(3.9)	71	(2.6)	4		6.5	1	39			13	
20	366	2015	54	16.7	22.2	1.7 + 0.6	(32.0)*	86	(8.1)	5		19.2	2	53			12	
21	933	3030f	92	16.7	38.0	4.5 + 5.3	(139.9)*	118	(28.4)	20		84.0	2	53			12	
	22	573	3989S	64	8.4	2.8	0.0 + 0.4	(6.2)*	10	(1.5)	12	(0.4)*	50.3	2	18	47		
	23	367	2063	36	8.4	2.8	0.0 + 0.3	(4.0)*	5	(0.4)	0	(0.0)*	20.5	2	18	47		
	24	319	22L	64	8.4	19.4	1.5 + 0.2	(24.4)	83	(6.8)	12	+	31.3	2	18	47		
	25	281	22L	64	8.4	13.7	0.9 + 0.2	(15.1)	95	(6.9)	12	+	22.1	2	18	47		
	26	107	22L	64	8.4	28.4	0.8 + 0.1	(12.0)	99	(2.7)	12	+	14.7	2	18	47		
	30	71	2015	23	16.7	30.3	0.4 + 0.2	(8.5)*	96	(1.8)	1		5.1	3	24	32		
	31	538	4270	84	16.7	41.6	3.7 + 2.5	(88.2)*	119	(16.5)	11		52.9	3	24	32		
	32	336	1926S	40	10.9	4.2	0.2 + 0.2	(5.6)*	16	(1.4)	3	(0.0)*	29.6	3	38	18		
	33	612	2063S	69	10.9	7.1	0.5 + 0.7	(17.2)*	34	(5.3)	8	(0.0)*	91.2	3	38	18		
	34	321	2063	23	10.9	4.3	0.2 + 0.1	(5.4)*	19	(1.6)	1	(0.0)*	28.7	3	38	18		
	35	148	32L	40	10.9	8.3	0.2 + 0.1	(4.8)	75	(2.9)	3		7.7	3	38	18		
	36	38	32L	40	10.9	7.8	0.1 + 0.0	(1.2)	81	(0.8)	3		2.0	3	38	18		
	37	367	33L	69	10.9	6.3	0.2 + 0.4	(9.2)	62	(5.8)	8		15.0	3	38	18		
40	281	1995	106	16.7	194.2	2.2 + 12.9	(215.3)*	243	(17.6)	18		129.2	4	7			14	
41	390	4230	69	16.7	35.1	2.7 + 1.1	(53.9)*	108	(10.8)	7		32.4	4	7			14	
42	270	1941S	93	11.7	18.8	0.2 + 1.2	(20.0)*	88	(6.1)	20	(2.0)*	198.0	4	20			1	
43	268	2077S	41	11.7	2.1	0.0 + 0.2	(2.2)*	4	(0.3)	3	(0.0)*	11.4	4	20			1	
44	612	42L	93	11.7	22.5	1.1 + 2.8	(54.3)	104	(16.3)	20	+	70.6	4	20			1	
45	367	42L	93	11.7	21.0	0.5 + 1.7	(30.4)	57	(5.4)	20	+	35.8	4	20			1	
46	321	43L	41	11.7	3.2	0.1 + 0.2	(4.1)	30	(2.5)	3		6.6	4	20			1	
47	10	42L	93	11.7	19.6	0.0 + 0.0	(0.8)	51	(0.1)	20	+	0.9	4	20			1	
50	179	1975	42	16.7	27.5	1.0 + 0.4	(19.4)*	94	(4.3)	3		3.9	5	41			53	
51	800	4250	87	16.7	36.8	5.0 + 3.1	(116.2)*	114	(23.5)	16		23.2	5	41			53	
52	230<	1936S	39	10.5	2.6	0.0 + 0.2	(2.3)*	4	(0.3)	4	(0.0)*	12.0	5	59			35	
53	321	2072S	44	10.5	10.9	0.7 + 0.2	(13.8)*	54	(4.5)	7	(0.0)*	73.3	5	59			35	
54	390	4144S	16	10.5	0.9	0.0 + 0.1	(1.4)*	2	(0.2)	1	(0.0)*	7.3	5	59			35	
55	152	52L	39	10.5	10.7	0.3 + 0.1	(6.4)	95	(3.7)	4		10.1	5	59			35	
56	62	52L	39	10.5	14.5	0.2 + 0.0	(3.5)	84	(1.3)	4		4.9	5	59			35	
57	18	52L	39	10.5	4.0	0.0 + 0.0	(0.3)	21	(0.1)	4		0.4	5	59			35	
58	237	53L	44	10.5	16.1	0.9 + 0.2	(15.1)	102	(6.2)	7		21.3	5	59			35	
59	31	54L	16	10.5	8.7	0.1 + 0.0	(1.1)	83	(0.7)	1		1.7	5	59			35	

60 SECOND CYCLE 60 STEPS

LINK NUMBER	FLOW INTO LINK	FLOW (PCU/H)	SAT OF FLOW (PCU/H)	SAT (%)	DEGREE OF CRUISE PER PCU (SEC)	MEAN TIMES DELAY (SEC)	UNIFORM RANDOM+ OVERSAT (U+R+O=MEAN Q) (PCU-H/H)	COST OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN MAX. STOPS (PCU)	AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END 1ST (SECONDS)	GREEN TIMES END 2ND (SECONDS)
60	436	2108	36	10.5	3.3	0.1 + 0.3	(5.7)	20	(2.3)	2		8.0						
61	957	6000S	32	10.5	0.4	0.0 + 0.1	(1.7)	1	(0.2)	0		1.9						
62	321	61L	32	10.5	0.4	0.0 + 0.0	(0.6)	1	(0.1)	0		0.6						
63	268	61L	32	10.5	0.4	0.0 + 0.0	(0.5)	1	(0.1)	0		0.5						
64	390	61L	32	10.5	0.4	0.0 + 0.0	(0.7)	1	(0.1)	0		0.8						
191	107	14L	45	9.2	6.3	0.1 + 0.1	(2.7)	65	(1.8)	4		4.4	1	39	13			
192	281	14L	45	9.2	4.8	0.2 + 0.2	(5.4)	14	(1.0)	4		6.4	1	39	13			

*** f - average saturation flow for flared link ***

TOTAL TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL DISTANCE PERFORMANCE INDEX ($/H)	
2283.0	134.6	17.0	39.5	42.0	(1144.5) + (103.3)	+ (109.2)	= 1357.0	TOTALS	
								ROUTE	

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	122.4	+	93.7	+	113.9	=	330.1

NO. OF ENTRIES TO SUBPT = 15
NO. OF LINKS RECALCULATED= 562

PROGRAM TRANSYT FINISHED

========== end of file ==========

Printed at 17:26:39 on 09/09/2015]

T R A N S Y T 12

Traffic Network Study Tool Analysis

Program Release 7 (July 2010)
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For sales and distribution information, program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
3GA,UK
Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770864
Email: softwarebureau@trl.co.uk
Web: www.trlsoftware.co.uk RG40

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Run with file:- "S4 2026 AM CD PD.DAT" at 14:11 on 20150825

TRANSYT 12.0

S4 M69 Junction 1 2026 + Committed & Proposed Development

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	=	5
NUMBER OF LINKS	=	49
NUMBER OF OPTIMISED NODES	=	5
MAXIMUM NUMBER OF GRAPHIC PLOTS	=	0
NUMBER OF STEPS IN CYCLE	=	60
MAXIMUM NUMBER OF SHARED STOPLINES	=	4
MAXIMUM NUMBER OF TIMING POINTS	=	2
MAXIMUM LINKS AT ANY NODE	=	12

CORE REQUESTED = 11409 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

(1)= TITLE:- S4 M69 Junction 1 2026 + Committed & Proposed Development

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME PERIOD 1-1200 MINS.	EFFECTIV DISPLAC START (SEC)	E-GREEN EMENTS END (SEC)	EQUISAT SETTINGS 0=NO 1=YES	0=UNEQUAL CYCLE 1=EQUAL	FLOW SCALE 10-200 %	CRUISE-SPEEDS SCALE 50-200 %	CARD32 0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL- CLIMB OUTPUT 1=FULL	DELAY VALUE P PER PCU-H	STOP VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260

CARD NO.	CARD TYPE	LIST OF NODES TO BE OPTIMISED										
3)=	2	1	2	3	4	5	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET.....				SECOND SET.....				THIRD SET.....					
4)=	7	12	15	16	17	0	13	19	18	0	0	14	191	192	0	0
5)=	7	22	24	25	26	0	32	35	36	0	0	33	37	0	0	0
6)=	7	42	44	45	0	0	43	46	0	0	0	52	55	56	57	0
7)=	7	53	58	0	0	0	54	59	0	0	0	61	62	63	64	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
8)=	10	1	7	7								
9)=	10	2	7	7								
10)=	10	3	7	7								
11)=	10	4	7	7								
12)=	10	5	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
13)=	11	1	6	6								
14)=	11	2	6	6								
15)=	11	3	6	6								
16)=	11	4	6	6								
17)=	11	5	6	6								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
18)=	12	1	1	0	0								
19)=	12	2	1	0	0								
20)=	12	3	1	0	0								
21)=	12	4	1	0	0								
22)=	12	5	1	0	0								

LINK CARDS:

GIVEWAY DATA PRIORITY LINKS

CARD NO.	CARD TYPE	LINK NO.	LINK1 NO.	LINK2 NO.	ONLY % FLOW	LINK1 GIVEWAY X100	LINK2 GIVEWAY X100					LINK WT.X100	STOP FLOW	MAX WT.X100	DELAY X100	DISPSN LENGTH
23)=	30	60	61	0	0	47	100	0	0	0	0	125	0	2108	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN START STAGE	FIRST GREEN START LAG	FIRST GREEN END STAGE	FIRST GREEN END LAG	SECOND GREEN START STAGE	SECOND GREEN START LAG	SECOND GREEN END STAGE	SECOND GREEN END LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
24)=	31	10	1	1	6	2	0	0	0	0	0	200	-9999	4100	60	0
25)=	31	11	1	1	6	2	0	0	0	0	0	200	-9999	2120	60	0
26)=	31	12	1	2	6	1	0	0	0	0	0	110	0	1892	500	0
27)=	31	13	1	2	6	1	0	0	0	0	0	110	0	2029	500	0
28)=	31	14	1	2	6	1	0	0	0	0	0	110	0	2029	500	0
29)=	31	15	1	1	0	1	0	0	0	0	0	110	0	0	0	0
30)=	31	16	1	1	0	1	0	0	0	0	0	110	0	0	0	0
31)=	31	17	1	1	0	1	0	0	0	0	0	110	0	0	0	0
32)=	31	18	1	1	0	1	0	0	0	0	0	110	0	0	0	0
33)=	31	19	1	1	0	1	0	0	0	0	0	110	0	0	0	0
34)=	31	20	2	1	6	2	0	0	0	0	0	200	-9999	2015	60	0
35)=	31	21	2	1	6	2	0	0	0	0	0	200	-9999	2130	60	0
36)=	31	22	2	2	6	1	0	0	0	0	0	100	0	3989	500	0
37)=	31	23	2	2	6	1	0	0	0	0	0	100	0	2063	500	0
38)=	31	24	2	1	0	1	0	0	0	0	0	100	0	0	0	0
39)=	31	25	2	1	0	1	0	0	0	0	0	100	0	0	0	0
40)=	31	26	2	1	0	1	0	0	0	0	0	100	0	0	0	0
41)=	31	30	3	1	6	2	0	0	0	0	0	200	-9999	2015	60	0
42)=	31	31	3	1	6	2	0	0	0	0	0	200	-9999	4270	60	0
43)=	31	32	3	2	6	1	0	0	0	0	0	130	0	1926	500	0
44)=	31	33	3	2	6	1	0	0	0	0	0	130	0	2063	500	0
45)=	31	34	3	2	6	1	0	0	0	0	0	130	0	2063	500	0
46)=	31	35	3	1	0	1	0	0	0	0	0	130	0	0	0	0
47)=	31	36	3	1	0	1	0	0	0	0	0	130	0	0	0	0
48)=	31	37	3	1	0	1	0	0	0	0	0	130	0	0	0	0
49)=	31	40	4	1	6	2	0	0	0	0	0	200	-9999	1995	60	0
50)=	31	41	4	1	6	2	0	0	0	0	0	200	-9999	4230	60	0
51)=	31	42	4	2	6	1	0	0	0	0	0	140	0	1941	500	0
52)=	31	43	4	2	6	1	0	0	0	0	0	140	0	2077	500	0
53)=	31	44	4	1	0	1	0	0	0	0	0	140	0	0	0	0
54)=	31	45	4	1	0	1	0	0	0	0	0	140	0	0	0	0
55)=	31	46	4	1	0	1	0	0	0	0	0	140	0	0	0	0
56)=	31	50	5	1	6	2	0	0	0	0	0	200	-9999	1975	20	0
57)=	31	51	5	1	6	2	0	0	0	0	0	200	-9999	4250	20	0
58)=	31	52	5	2	6	1	0	0	0	0	0	125	0	1936	500	0
59)=	31	53	5	2	6	1	0	0	0	0	0	125	0	2072	500	0
60)=	31	54	5	2	6	1	0	0	0	0	0	125	0	4144	500	0
61)=	31	55	5	1	0	1	0	0	0	0	0	125	0	0	0	0
62)=	31	56	5	1	0	1	0	0	0	0	0	125	0	0	0	0
63)=	31	57	5	1	0	1	0	0	0	0	0	125	0	0	0	0
64)=	31	58	5	1	0	1	0	0	0	0	0	125	0	0	0	0
65)=	31	59	5	1	0	1	0	0	0	0	0	125	0	0	0	0
66)=	31	61	0	0	0	0	0	0	0	0	0	125	0	6000	0	0
67)=	31	62	0	0	0	0	0	0	0	0	0	125	0	0	0	0
68)=	31	63	0	0	0	0	0	0	0	0	0	125	0	0	0	0
69)=	31	64	0	0	0	0	0	0	0	0	0	125	0	0	0	0
70)=	31	191	1	1	0	1	0	0	0	0	0	110	0	0	0	0
71)=	31	192	1	1	0	1	0	0	0	0	0	110	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 ..... LINK NO.	ENTRY 1 ..... FLOW	ENTRY 1 ..... CRUISE SPEED	ENTRY 2 ..... LINK NO.	ENTRY 2 ..... FLOW	ENTRY 2 ..... CRUISE SPEED	ENTRY 3 ..... LINK NO.	ENTRY 3 ..... FLOW	ENTRY 3 ..... CRUISE SPEED	ENTRY 4 ..... LINK NO.	ENTRY 4 ..... FLOW	ENTRY 4 ..... CRUISE SPEED
72)=	32	10	653	0	0	0	43	0	0	0	0	0	0	0	0	0
73)=	32	11	214	0	0	0	43	0	0	0	0	0	0	0	0	0
74)=	32	12	84	0	60	84	43	0	0	0	0	0	0	0	0	0
75)=	32	13	80	0	60	80	43	0	0	0	0	0	0	0	0	0
76)=	32	14	193	0	60	193	43	0	0	0	0	0	0	0	0	0
77)=	32	15	305	0	61	305	43	0	0	0	0	0	0	0	0	0

78)=	32	16	210	0	64	210	43	0	0	0	0	0	0	0	0
79)=	32	17	88	0	63	88	43	0	0	0	0	0	0	0	0
80)=	32	18	306	0	61	306	43	0	0	0	0	0	0	0	0
81)=	32	19	210	0	64	210	43	0	0	0	0	0	0	0	0
82)=	32	20	368	0	0	0	43	0	0	0	0	0	0	0	0

83)=	32	21	955	0	0	0	43	0	0	0	0	0	0	0	0	0
84)=	32	22	264	0	10	264	43	0	0	0	0	0	0	0	0	0
85)=	32	23	214	0	11	211	43	0	0	0	0	0	0	0	0	0
86)=	32	24	273	0	14	193	43	13	80	43	0	0	0	0	0	0
87)=	32	25	192	0	192	192	43	0	0	0	0	0	0	0	0	0
88)=	32	26	52	0	191	52	43	0	0	0	0	0	0	0	0	0
89)=	32	30	192	0	0	0	43	0	0	0	0	0	0	0	0	0
90)=	32	31	1440	0	0	0	43	0	0	0	0	0	0	0	0	0
91)=	32	32	359	0	20	359	43	0	0	0	0	0	0	0	0	0
92)=	32	33	664	0	21	664	43	0	0	0	0	0	0	0	0	0
93)=	32	34	291	0	21	291	43	0	0	0	0	0	0	0	0	0
94)=	32	35	193	0	24	193	43	0	0	0	0	0	0	0	0	0
95)=	32	36	32	0	25	32	43	0	0	0	0	0	0	0	0	0
96)=	32	37	214	0	23	214	43	0	0	0	0	0	0	0	0	0
97)=	32	40	205	0	0	0	43	0	0	0	0	0	0	0	0	0
98)=	32	41	472	0	0	0	43	0	0	0	0	0	0	0	0	0
99)=	32	42	644	0	31	644	43	0	0	0	0	0	0	0	0	0
100)=	32	43	796	0	31	796	43	0	0	0	0	0	0	0	0	0
101)=	32	44	664	0	33	664	43	0	0	0	0	0	0	0	0	0
102)=	32	45	214	0	37	214	43	0	0	0	0	0	0	0	0	0
103)=	32	46	291	0	34	291	43	0	0	0	0	0	0	0	0	0
104)=	32	50	285	0	0	0	43	0	0	0	0	0	0	0	0	0
105)=	32	51	803	0	0	0	43	0	0	0	0	0	0	0	0	0
106)=	32	52	153	0	40	153	43	0	0	0	0	0	0	0	0	0
107)=	32	53	291	0	46	291	43	0	0	0	0	0	0	0	0	0
108)=	32	54	472	0	41	472	43	0	0	0	0	0	0	0	0	0
109)=	32	55	240	0	42	240	43	0	0	0	0	0	0	0	0	0
110)=	32	56	82	0	44	82	43	0	0	0	0	0	0	0	0	0
111)=	32	57	10	0	45	10	43	0	0	0	0	0	0	0	0	0
112)=	32	58	708	0	43	708	43	0	0	0	0	0	0	0	0	0
113)=	32	59	88	0	43	88	43	0	0	0	0	0	0	0	0	0
114)=	32	60	370	0	0	0	43	0	0	0	0	0	0	0	0	0
115)=	32	61	1084	0	51	803	43	50	281	43	0	0	0	0	0	0
116)=	32	62	291	0	53	291	43	0	0	0	0	0	0	0	0	0
117)=	32	63	796	0	58	708	43	59	88	43	0	0	0	0	0	0
118)=	32	64	472	0	54	472	43	0	0	0	0	0	0	0	0	0
119)=	32	191	52	0	64	52	43	0	0	0	0	0	0	0	0	0
120)=	32	192	192	0	61	192	43	0	0	0	0	0	0	0	0	0

LINK CARDS : FLARE SATURATION FLOW DATA

			..LANE 1..		..LANE 2..		..LANE 3..	
	CARD TYPE	LINK NO.	SAT. FLOW	CAPAC VEH.	SAT. FLOW	CAPAC VEH.	SAT. FLOW	CAPAC VEH.
121)=	33	21	2130	5	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

	CARD NO.	CARD TYPE	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
122)=	38	12	10	4500	13	10	4500	14	10	4500	22	9	4500	23	7	4500
123)=	38	32	6	4500	33	10	4500	34	10	4500	42	11	4500	43	11	4500
124)=	38	52	9	4500	53	9	4500	54	18	4500	0	0	0	0	0	0

*****END OF SUBROUTINE TINPUT****

60 SECOND CYCLE 60 STEPS

INITIAL SETTINGS
- (SECONDS)

NO	NODE OF STAGES	NUMBER 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	0	20								
2	2	0	37								
3	2	0	27								
4	2	0	13								
5	2	0	19								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) UNIFORM RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	STOPS (%)	COST OF STOPS /PCU ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	START 2ND (SECONDS)	END	EN	D
10	653	4100	64	16.7	24.9	3.6 + 0.9	(64.1)*	93	(15.6)	10		38.5	1	6	20			
11	214	2120	40	16.7	24.5	1.1 + 0.3	(20.6)*	88	(4.9)	3		12.4	1	6	20			
12	84	1892S	62	9.2	10.5	0.1 + 0.1	(3.5)*	53	(1.1)	7	(0.0)*	18.5	1	26	0			
13	80	2029S	50	9.2	8.6	0.1 + 0.1	(2.7)*	45	(0.9)	4	(0.0)*	14.5	1	26	0			
14	193	2029S	37	9.2	8.2	0.3 + 0.1	(6.2)*	44	(2.2)	3	(0.0)*	33.4	1	26	0			
15	306	12L	62	9.2	6.7	0.2 + 0.4	(8.1)	64	(5.1)	7		13.2	1	26	0			
16	210	12L	62	9.2	4.8	0.0 + 0.3	(4.0)	9	(0.5)	7		4.5	1	26	0			
17	87	12L	62	9.2	14.3	0.2 + 0.1	(4.9)	59	(1.3)	7		6.3	1	26	0			
18	306	13L	50	9.2	4.1	0.1 + 0.3	(4.9)	35	(2.8)	4		7.7	1	26	0			
19	210	13L	50	9.2	3.5	0.0 + 0.2	(2.9)	7	(0.4)	4		3.3	1	26	0			
20	368	2015	34	16.7	10.5	0.8 + 0.3	(15.3)*	57	(5.4)	4		9.2	2	6	37			
21	955	2692f	67	16.7	12.2	2.2 + 1.0	(45.8)*	61	(15.1)	11		27.5	2	6	37			
22	264	3989S	65	8.4	30.9	2.0 + 0.3	(32.2)*	107	(7.3)	13	(0.6)*	195.3	2	43	0			
23	214	2063	35	8.4	32.7	1.7 + 0.3	(27.6)*	107	(5.9)	4	(0.0)*	143.9	2	43	0			
24	273	22L	65	8.4	18.4	1.1 + 0.3	(19.8)	91	(6.4)	13	+	26.2	2	43	0			
25	193	22L	65	8.4	14.6	0.5 + 0.2	(11.1)	102	(5.0)	13	+	16.1	2	43	0			
26	52	22L	65	8.4	12.2	0.1 + 0.1	(2.5)	44	(0.6)	13	+	3.1	2	43	0			
30	192	2015	26	16.7	16.6	0.7 + 0.2	(12.6)*	71	(3.5)	2		7.5	3	6	27			
31	1440	4270	92	16.7	31.4	7.3 + 5.3	(178.2)*	111	(41.1)	28		106.9	3	6	27			
32	359	1926S	65	10.9	20.4	1.5 + 0.6	(28.9)*	101	(9.3)	9	(0.6)*	182.3	3	33	0			
33	665	2063S	91	10.9	34.6	2.8 + 3.6	(90.8)*	127	(21.8)	17	(2.2)*	573.0	3	33	0			
34	290	2063	30	10.9	12.2	0.8 + 0.2	(14.0)*	82	(6.2)	4	(0.0)*	76.0	3	33	0			
35	193	32L	65	10.9	22.5	0.9 + 0.3	(17.1)	67	(3.3)	9	+	20.4	3	33	0			
36	32	32L	65	10.9	26.1	0.2 + 0.1	(3.3)	77	(0.6)	9	+	3.9	3	33	0			
37	214	33L	91	10.9	25.0	0.3 + 1.1	(21.1)	52	(2.9)	17	+	24.0	3	33	0			
40	205	1995	77	16.7	53.2	1.4 + 1.6	(43.0)*	134	(7.1)	5		25.8	4	6	13			
41	472	4230	84	16.7	44.0	3.3 + 2.4	(81.8)*	122	(14.9)	10		49.1	4	6	13			
42	645	1941S	112	11.7	221.7	2.9 + 36.8	(564.0)*	263	(43.7)	115	(93.0)*	7050.3	4	19	0			
43	795	2077S	75	11.7	6.5	0.4 + 1.1	(20.3)*	63	(12.9)	14	(0.3)*	126.8	4	19	0			
44	665	42L	112	11.7	221.5	3.0 + 37.9	(581.1)	240	(41.0)	115	+	622.1	4	19	0			
45	214	42L	112	11.7	225.2	1.2 + 12.2	(190.1)	259	(14.3)	115	+	204.4	4	19	0			
46	290	43L	75	11.7	5.9	0.1 + 0.4	(6.7)	15	(1.1)	14	+	7.9	4	19	0			
50	285	1975	62	16.7	30.8	1.6 + 0.8	(34.6)*	101	(7.4)	5		6.9	5	6	19			
51	803	4250	81	16.7	31.1	4.9 + 2.1	(98.5)*	105	(21.7)	15		19.7	5	6	19			
52	153	1936S	40	10.5	12.7	0.4 + 0.1	(7.6)*	101	(4.0)	4	(0.0)*	42.2	5	25	0			
53	290	2072S	80	10.5	16.3	0.7 + 0.6	(18.7)*	56	(4.2)	5	(0.0)*	97.6	5	25	0			
54	472	4144S	23	10.5	9.2	1.1 + 0.1	(17.2)*	95	(11.6)	8	(0.0)*	97.6	5	25	0			
55	238	52L	40	10.5	8.5	0.4 + 0.2	(8.0)	32	(2.0)	4		10.0	5	25	0			
56	64<	52L	40	10.5	7.9	0.1 + 0.0	(2.0)	34	(0.7)	4		2.7	5	25	0			
57	9	52L	40	10.5	5.7	0.0 + 0.0	(0.2)	18	(0.0)	4		0.2	5	25	0			
58	707	53L	80	10.5	7.5	0.1 + 1.4	(20.9)	14	(2.5)	5		23.4	5	25	0			
59	87	54L	23	10.5	1.3	0.0 + 0.0	(0.4)	7	(0.2)	8		0.6	5	25	0			
60	370	2108	40	10.5	4.8	0.2 + 0.3	(7.1)	40	(3.8)	2		10.8						

60 SECOND CYCLE 60 STEPS

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	DELAY COST OVERSAT OF ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN MAX. QUEUE (PCU)	AVERAGE EXCESS QUEUE (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END 1ST (SECONDS)	GREEN TIMES END 2ND (SECONDS)
61	1084	6000S	44	10.5	0.5	0.0 + 0.2	(2.3)	1	(0.2)	0		2.5					
62	290	61L	44	10.5	0.5	0.0 + 0.0	(0.6)	1	(0.1)	0		0.7					
63	795	61L	44	10.5	0.5	0.0 + 0.1	(1.7)	1	(0.2)	0		1.9					
64	472	61L	44	10.5	0.5	0.0 + 0.1	(1.0)	1	(0.1)	0		1.1					
191	52	14L	37	9.2	2.9	0.0 + 0.0	(0.6)	6	(0.1)	3		0.7	1	26	0		
192	193	14L	37	9.2	3.6	0.1 + 0.1	(2.7)	34	(1.7)	3		4.4	1	26	0		

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2631.4	226.9	11.6	50.6	115.1	(5397.4) + (227.9)	+ (4351.5)	= 9976.9	TOTALS	

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	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	141.1	+	190.6	+	166.1	=	497.8

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 49

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

1	2	18	38
2	2	0	37
3	2	0	27
4	2	51	4
5	2	42	1

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2631.4	228.3	11.5	52.0	115.1	(5186.8) + (229.8)	+ (4272.7)	= 9689.3	TOTALS	

NO. OF ENTRIES TO SUBPT = 15
NO. OF LINKS RECALCULATED= 452

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

1	2	18	38
2	2	24	1
3	2	0	27
4	2	51	4
5	2	42	1

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2631.4	228.6	11.5	52.4	115.1	(5186.3) + (225.5)	+ (4239.8)	= 9651.6	TOTALS	

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 372

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

1	2	22	40
2	2	29	56
3	2	9	27
4	2	51	4
5	2	43	0

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2631.4	406.3	6.5	54.3	290.8	(3585.4) + (121.0)	+ (271.1)	= 3977.5	TOTALS	

NO. OF ENTRIES TO SUBPT = 44
NO. OF LINKS RECALCULATED= 1166

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1	2	49	7
2	2	29	56
3	2	9	27
4	2	51	4
5	2	43	0

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2631.4	401.6	6.6	49.6	290.8	(3329.2) + (110.6)	+	(271.0)	= 3710.8	TOTALS

NO. OF ENTRIES TO SUBPT = 13
NO. OF LINKS RECALCULATED= 441

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1	2	49	7
2	2	29	56
3	2	9	27
4	2	51	4
5	2	43	0

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2631.4	401.6	6.6	49.6	290.8	(3329.2) + (110.6)	+	(271.0)	= 3710.8	TOTALS

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 403

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1	2	48	6
2	2	31	58
3	2	9	27
4	2	51	4
5	2	44	1

TOTAL TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL DISTANCE PERFORMANCE INDEX ($/H)	
2631.4	400.7	6.6	48.7	290.8	(3338.3) + (111.1)	+	(246.4)	= 3695.7	TOTALS

NO. OF ENTRIES TO SUBPT = 13
NO. OF LINKS RECALCULATED= 476

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1	2	49	6
2	2	31	58
3	2	9	27
4	2	51	4
5	2	44	1

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2631.4	401.3	6.6	48.7	291.4	(3333.8) + (109.3)	+	(246.3)	= 3689.3	TOTALS

NO. OF ENTRIES TO SUBPT = 20
NO. OF LINKS RECALCULATED= 719

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	50	7								
2	2	31	58								
3	2	9	27								
4	2	51	4								
5	2	44	1								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY UNIFORM (U+R+O=MEAN Q) (PCU-H/H)	DELAY RANDOM+ OVERSAT (U+R+O=MEAN Q) (PCU-H/H)	COST OF DELAY ($/H)	STOPS MEAN /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END 1ST (SECONDS)	GREEN TIMES END 2ND (SECONDS)
10	653	4100	80	16.7	33.4	4.1 + 1.9	(86.0)*	107	(18.1)	12		51.6	1	56			7	
11	214	2120	50	16.7	29.9	1.3 + 0.5	(25.2)*	99	(5.4)	4		15.1	1	56			7	
12	84	1892S	55	9.2	8.1	0.1 + 0.1	(2.7)*	50	(1.1)	7	(0.0)*	14.5	1	13			50	
13	80	2029S	46	9.2	6.9	0.1 + 0.1	(2.2)*	42	(0.9)	6	(0.0)*	11.8	1	13			50	
14	193	2029S	34	9.2	6.4	0.2 + 0.1	(4.9)*	36	(1.8)	4	(0.0)*	26.3	1	13			50	
15	306	12L	55	9.2	7.5	0.4 + 0.3	(9.1)	81	(6.4)	7		15.5	1	13			50	
16	210	12L	55	9.2	3.4	0.0 + 0.2	(2.9)	7	(0.4)	7		3.3	1	13			50	
17	56<	12L	55	9.2	9.6	0.1 + 0.1	(2.1)	34	(0.8)	7		2.9	1	13			50	
18	306	13L	46	9.2	5.7	0.3 + 0.2	(6.9)	69	(5.4)	6		12.3	1	13			50	
19	210	13L	46	9.2	2.7	0.0 + 0.2	(2.2)	5	(0.3)	6		2.5	1	13			50	
20	368	2015	50	16.7	19.6	1.5 + 0.5	(28.4)*	81	(7.7)	5		17.0	2	37			58	
21	955	2948f	88	16.7	29.4	4.2 + 3.6	(110.6)*	104	(25.5)	18		66.4	2	37			58	
22	264	3989S	42	8.4	2.8	0.1 + 0.1	(2.9)*	33	(2.2)	6	(0.0)*	16.6	2	4			31	
23	214	2063	22	8.4	2.8	0.0 + 0.1	(2.4)*	22	(1.2)	2	(0.0)*	13.1	2	4			31	
24	273	22L	42	8.4	11.6	0.8 + 0.1	(12.5)	52	(3.6)	6		16.1	2	4			31	
25	193	22L	42	8.4	4.6	0.2 + 0.1	(3.5)	13	(0.7)	6		4.2	2	4			31	
26	52	22L	42	8.4	24.9	0.3 + 0.0	(5.1)	96	(1.3)	6		6.4	2	4			31	
30	192	2015	44	16.7	27.7	1.1 + 0.4	(21.0)*	94	(4.6)	3		12.6	3	15			27	
31	1440	4270	156	16.7	683.7	14.7 +258.8	(999.9)*	263	(97.7)	286	+	2330.2	3	15			27	
32	359	1926S	49	10.9	3.7	0.1 + 0.3	(5.2)*	8	(0.8)	4	(0.0)*	26.7	3	33			9	
33	665	2063S	69	10.9	5.8	0.2 + 0.8	(15.1)*	31	(5.3)	8	(0.0)*	80.8	3	33			9	
34	290	2063	23	10.9	2.6	0.1 + 0.1	(3.0)*	7	(0.5)	0	(0.0)*	15.4	3	33			9	
35	193	32L	49	10.9	12.6	0.5 + 0.2	(9.6)	79	(3.9)	4		13.5	3	33			9	
36	32	32L	49	10.9	6.6	0.0 + 0.0	(0.8)	55	(0.5)	4		1.3	3	33			9	
37	214	33L	69	10.9	21.3	1.0 + 0.3	(17.9)	107	(5.9)	8		23.8	3	33			9	
40	205	1995	77	16.7	53.2	1.4 + 1.6	(43.0)*	134	(7.1)	5		25.8	4	57			4	
41	472	4230	84	16.7	44.0	3.3 + 2.4	(81.8)*	122	(14.9)	10		49.1	4	57			4	
42	414<	1941S	95	11.7	25.5	0.4 + 2.5	(41.6)*	67	(11.2)	26	(5.5)*	465.8	4	10			51	
43	511<	2077S	55	11.7	2.9	0.0 + 0.4	(5.9)*	5	(1.1)	4	(0.0)*	30.6	4	10			51	
44	665	42L	95	11.7	33.3	2.1 + 4.1	(87.2)	130	(22.2)	26	+	109.4	4	10			51	
45	214	42L	95	11.7	26.2	0.2 + 1.3	(22.1)	60	(3.3)	26	+	25.5	4	10			51	
46	290	43L	55	11.7	7.6	0.4 + 0.2	(8.6)	71	(5.3)	4		14.0	4	10			51	
50	285	1975	72	16.7	38.4	1.8 + 1.3	(43.2)*	114	(8.4)	6		8.6	5	50			1	
51	803	4250	94	16.7	53.5	5.3 + 6.7	(169.5)*	138	(28.6)	20		33.9	5	50			1	
52	153	1936S	33	10.5	4.9	0.1 + 0.1	(3.0)*	66	(2.6)	5	(0.0)*	17.5	5	7			44	
53	290	2072S	57	10.5	3.8	0.1 + 0.3	(4.4)*	9	(0.7)	5	(0.0)*	22.6	5	7			44	
54	472	4144S	20	10.5	1.3	0.1 + 0.1	(2.3)*	18	(2.2)	5	(0.0)*	13.9	5	7			44	
55	154<	52L	33	10.5	15.6	0.6 + 0.1	(9.5)	50	(3.1)	5		12.6	5	7			44	
56	82	52L	33	10.5	3.3	0.0 + 0.0	(1.1)	10	(0.2)	5		1.3	5	7			44	
57	10	52L	33	10.5	10.5	0.0 + 0.0	(0.4)	74	(0.2)	5		0.6	5	7			44	
58	454<	53L	57	10.5	13.6	1.3 + 0.4	(24.3)	36	(6.7)	5		31.0	5	7			44	
59	56<	54L	20	10.5	9.8	0.1 + 0.0	(2.2)	34	(0.8)	5		2.9	5	7			44	
60	370	2108	35	10.5	4.1	0.2 + 0.3	(6.0)	35	(3.3)	2		9.3						

60 SECOND CYCLE 60 STEPS

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY UNIFORM (SEC)	DELAY RANDOM+ OVERSAT (U+R+O=MEAN Q) (PCU-H/H)	COST OF DELAY ($/H)	STOPS MEAN /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END E	ND
61	1084	6000S	39	10.5	0.5	0.0 + 0.1	(2.1)	1	(0.2)	0	2.3						
62	290	61L	39	10.5	0.5	0.0 + 0.0	(0.6)	1	(0.1)	0	0.6						
63	511<	61L	39	10.5	0.5	0.0 + 0.1	(1.0)	1	(0.1)	0	1.1						
64	472	61L	39	10.5	0.5	0.0 + 0.1	(0.9)	1	(0.1)	0	1.0						
191	52	14L	34	9.2	2.2	0.0 + 0.0	(0.5)	4	(0.1)	4	0.5	1	13	50			
192	193	14L	34	9.2	4.9	0.1 + 0.1	(3.7)	60	(3.0)	4	6.7	1	13	50			

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2631.4	401.4	6.6	48.8	291.4	(3330.7) + (109.2)	+ (246.3)	= 3686.2	TOTALS	
								ROUTE	

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	141.1	+	391.2	+	149.1	=	681.4

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 422

PROGRAM TRANSYT FINISHED
========== end of file ==========

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T R A N S Y T 12

Traffic Network Study Tool Analysis

Program Release 7 (July 2010)
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For sales and distribution information, program
advice and maintenance, contact:

TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770864
Nine Mile Ride Email: softwarebureau@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk RG40
3GA,UK

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Run with file:- "S4 2026 PM CD PD.DAT" at 14:18 on 20150825

TRANSYT 12.0

S4 M69 Junction 1 2026 PM + Committed & Proposed Development

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	= 5
NUMBER OF LINKS	= 50
NUMBER OF OPTIMISED NODES	= 5
MAXIMUM NUMBER OF GRAPHIC PLOTS	= 0
NUMBER OF STEPS IN CYCLE	= 60
MAXIMUM NUMBER OF SHARED STOPLINES	= 4
MAXIMUM NUMBER OF TIMING POINTS	= 2
MAXIMUM LINKS AT ANY NODE	= 12

CORE REQUESTED = 11544 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

(1)= TITLE:- S4 M69 Junction 1 2026 PM + Committed & Proposed Development

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME PERIOD 1-1200 MINS.	EFFECTIVE-GREEN DISPLACEMENTS START (SEC)	END (SEC)	EQUISAT SETTINGS 0=NO 1=YES	0=UNEQUAL FLOW CYCLE 1=EQUAL CYCLE	SCALE 10-200 %	SCALE 50-200 %	CRUISE-SPEEDS CARD32 0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL-CLIMB OUTPUT 1=FULL	DELAY VALUE P PER PCU-H	STOP NO. VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260

CARD NO.	CARD TYPE	LIST OF NODES TO BE OPTIMISED														
3)=	2	1	2	3	4	5	0	0	0	0	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET.....					SECOND SET.....					THIRD SET.....				
4)=	7	12	15	16	17	0	13	19	18	0	0	14	191	192	0	0
5)=	7	22	24	25	26	0	32	35	36	0	0	33	37	0	0	0
6)=	7	42	44	45	47	0	43	46	0	0	0	52	55	56	57	0
7)=	7	53	58	0	0	0	54	59	0	0	0	61	62	63	64	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
8)=	10	1	7	7								
9)=	10	2	7	7								
10)=	10	3	7	7								
11)=	10	4	7	7								
12)=	10	5	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
13)=	11	1	6	6								
14)=	11	2	6	6								
15)=	11	3	6	6								
16)=	11	4	6	6								
17)=	11	5	6	6								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
18)=	12	1	1	0	0								
19)=	12	2	1	0	0								
20)=	12	3	1	0	0								
21)=	12	4	1	0	0								
22)=	12	5	1	0	0								

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY LINKS LINK1 NO.	LINK2 NO.	LINK1 GIVEWAY COEFFS. ONLY % FLOW	A1 X100	A2 X100				LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
23)=	30	60	61	0	0	47	100	0	0	0	0	125	0	2108	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN START STAGE	FIRST GREEN START LAG	FIRST GREEN END STAG	FIRST GREEN END LAG	SECOND GREEN START STAGE	SECOND GREEN START LAG	SECOND GREEN END STAGE	SECOND GREEN END LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
24)=	31	10	1	1	6	2	0	0	0	0	0	200	-9999	4100	60	0
25)=	31	11	1	1	6	2	0	0	0	0	0	200	-9999	2120	60	0
26)=	31	12	1	2	6	1	0	0	0	0	0	110	0	1892	500	0
27)=	31	13	1	2	6	1	0	0	0	0	0	110	0	2029	500	0
28)=	31	14	1	2	6	1	0	0	0	0	0	110	0	2029	500	0
29)=	31	15	1	1	0	1	0	0	0	0	0	110	0	0	0	0
30)=	31	16	1	1	0	1	0	0	0	0	0	110	0	0	0	0
31)=	31	17	1	1	0	1	0	0	0	0	0	110	0	0	0	0
32)=	31	18	1	1	0	1	0	0	0	0	0	110	0	0	0	0
33)=	31	19	1	1	0	1	0	0	0	0	0	110	0	0	0	0
34)=	31	20	2	1	6	2	0	0	0	0	0	200	-9999	2015	60	0
35)=	31	21	2	1	6	2	0	0	0	0	0	200	-9999	2130	60	0
36)=	31	22	2	2	6	1	0	0	0	0	0	100	0	3989	500	0
37)=	31	23	2	2	6	1	0	0	0	0	0	100	0	2063	500	0
38)=	31	24	2	1	0	1	0	0	0	0	0	100	0	0	0	0
39)=	31	25	2	1	0	1	0	0	0	0	0	100	0	0	0	0
40)=	31	26	2	1	0	1	0	0	0	0	0	100	0	0	0	0
41)=	31	30	3	1	6	2	0	0	0	0	0	200	-9999	2015	60	0
42)=	31	31	3	1	6	2	0	0	0	0	0	200	-9999	4270	60	0
43)=	31	32	3	2	6	1	0	0	0	0	0	130	0	1926	500	0
44)=	31	33	3	2	6	1	0	0	0	0	0	130	0	2063	500	0
45)=	31	34	3	2	6	1	0	0	0	0	0	130	0	2063	500	0
46)=	31	35	3	1	0	1	0	0	0	0	0	130	0	0	0	0
47)=	31	36	3	1	0	1	0	0	0	0	0	130	0	0	0	0
48)=	31	37	3	1	0	1	0	0	0	0	0	130	0	0	0	0
49)=	31	40	4	1	6	2	0	0	0	0	0	200	-9999	1995	60	0
50)=	31	41	4	1	6	2	0	0	0	0	0	200	-9999	4230	60	0
51)=	31	42	4	2	6	1	0	0	0	0	0	140	0	1941	500	0
52)=	31	43	4	2	6	1	0	0	0	0	0	140	0	2077	500	0
53)=	31	44	4	1	0	1	0	0	0	0	0	140	0	0	0	0
54)=	31	45	4	1	0	1	0	0	0	0	0	140	0	0	0	0
55)=	31	46	4	1	0	1	0	0	0	0	0	140	0	0	0	0
56)=	31	47	4	1	0	1	0	0	0	0	0	140	0	0	0	0
57)=	31	50	5	1	6	2	0	0	0	0	0	200	-9999	1975	20	0
58)=	31	51	5	1	6	2	0	0	0	0	0	200	-9999	4250	20	0
59)=	31	52	5	2	6	1	0	0	0	0	0	125	0	1936	500	0
60)=	31	53	5	2	6	1	0	0	0	0	0	125	0	2072	500	0
61)=	31	54	5	2	6	1	0	0	0	0	0	125	0	4144	500	0
62)=	31	55	5	1	0	1	0	0	0	0	0	125	0	0	0	0
63)=	31	56	5	1	0	1	0	0	0	0	0	125	0	0	0	0
64)=	31	57	5	1	0	1	0	0	0	0	0	125	0	0	0	0
65)=	31	58	5	1	0	1	0	0	0	0	0	125	0	0	0	0
66)=	31	59	5	1	0	1	0	0	0	0	0	125	0	0	0	0
67)=	31	61	0	0	0	0	0	0	0	0	0	125	0	6000	0	0
68)=	31	62	0	0	0	0	0	0	0	0	0	125	0	0	0	0
69)=	31	63	0	0	0	0	0	0	0	0	0	125	0	0	0	0
70)=	31	64	0	0	0	0	0	0	0	0	0	125	0	0	0	0
71)=	31	191	1	1	0	1	0	0	0	0	0	110	0	0	0	0
72)=	31	192	1	1	0	1	0	0	0	0	0	110	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 2 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 3 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 4 ..... LINK NO.	FLOW	CRUISE SPEED
73)=	32	10	896	0	0	0	43	0	0	0	0	0	0	0	0	0
74)=	32	11	370	0	0	0	43	0	0	0	0	0	0	0	0	0
75)=	32	12	97	0	60	97	43	0	0	0	0	0	0	0	0	0
76)=	32	13	171	0	60	171	43	0	0	0	0	0	0	0	0	0
77)=	32	14	148	0	60	148	43	0	0	0	0	0	0	0	0	0

78)=	32	15	287	0	61	287	43	0	0	0	0	0	0	0	0	0
79)=	32	16	141	0	64	141	43	0	0	0	0	0	0	0	0	0
80)=	32	17	31	0	63	31	43	0	0	0	0	0	0	0	0	0
81)=	32	18	288	0	61	288	43	0	0	0	0	0	0	0	0	0
82)=	32	19	142	0	64	142	43	0	0	0	0	0	0	0	0	0

83)=	32	20	366	0	0	0	43	0	0	0	0	0	0	0	0	0
84)=	32	21	955	0	0	0	43	0	0	0	0	0	0	0	0	0
85)=	32	22	574	0	10	574	43	0	0	0	0	0	0	0	0	0
86)=	32	23	370	0	11	370	43	0	0	0	0	0	0	0	0	0
87)=	32	24	319	0	14	148	43	13	171	43	0	0	0	0	0	0
88)=	32	25	303	0	192	303	43	0	0	0	0	0	0	0	0	0
89)=	32	26	107	0	191	107	43	0	0	0	0	0	0	0	0	0
90)=	32	30	71	0	0	0	43	0	0	0	0	0	0	0	0	0
91)=	32	31	552	0	0	0	43	0	0	0	0	0	0	0	0	0
92)=	32	32	336	0	20	336	43	0	0	0	0	0	0	0	0	0
93)=	32	33	634	0	21	634	43	0	0	0	0	0	0	0	0	0
94)=	32	34	321	0	21	321	43	0	0	0	0	0	0	0	0	0
95)=	32	35	148	0	24	148	43	0	0	0	0	0	0	0	0	0
96)=	32	36	38	0	25	38	43	0	0	0	0	0	0	0	0	0
97)=	32	37	370	0	23	370	43	0	0	0	0	0	0	0	0	0
98)=	32	40	281	0	0	0	43	0	0	0	0	0	0	0	0	0
99)=	32	41	390	0	0	0	43	0	0	0	0	0	0	0	0	0
100)=	32	42	284	0	31	284	43	0	0	0	0	0	0	0	0	0
101)=	32	43	268	0	31	268	43	0	0	0	0	0	0	0	0	0
102)=	32	44	634	0	33	634	43	0	0	0	0	0	0	0	0	0
103)=	32	45	370	0	37	370	43	0	0	0	0	0	0	0	0	0
104)=	32	46	321	0	34	321	43	0	0	0	0	0	0	0	0	0
105)=	32	47	10	0	35	10	43	0	0	0	0	0	0	0	0	0
106)=	32	50	182	0	0	0	43	0	0	0	0	0	0	0	0	0
107)=	32	51	878	0	0	0	43	0	0	0	0	0	0	0	0	0
108)=	32	52	243	0	40	243	43	0	0	0	0	0	0	0	0	0
109)=	32	53	321	0	46	321	43	0	0	0	0	0	0	0	0	0
110)=	32	54	390	0	41	390	43	0	0	0	0	0	0	0	0	0
111)=	32	55	152	0	42	152	43	0	0	0	0	0	0	0	0	0
112)=	32	56	62	0	44	62	43	0	0	0	0	0	0	0	0	0
113)=	32	57	18	0	45	18	43	0	0	0	0	0	0	0	0	0
114)=	32	58	237	0	43	237	43	0	0	0	0	0	0	0	0	0
115)=	32	59	31	0	43	31	43	0	0	0	0	0	0	0	0	0
116)=	32	60	436	0	0	0	43	0	0	0	0	0	0	0	0	0
117)=	32	61	1038	0	51	878	43	50	160	43	0	0	0	0	0	0
118)=	32	62	321	0	53	321	43	0	0	0	0	0	0	0	0	0
119)=	32	63	268	0	58	237	43	59	31	43	0	0	0	0	0	0
120)=	32	64	390	0	54	390	43	0	0	0	0	0	0	0	0	0
121)=	32	191	107	0	64	107	43	0	0	0	0	0	0	0	0	0
122)=	32	192	303	0	61	303	43	0	0	0	0	0	0	0	0	0

LINK CARDS : FLARE SATURATION FLOW DATA

	CARD TYPE	LINK NO.	..LANE 1.. SAT. FLOW	CAPAC VEH.	..LANE 2.. SAT. FLOW	CAPAC VEH.	..LANE 3.. SAT. FLOW	CAPAC VEH.
123)=	33	21	2130	5	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
124)=	38	12	10	4500	13	10	4500	14	10	4500	22	9	4500	23	7	4500
125)=	38	32	6	4500	33	10	4500	34	10	4500	42	11	4500	43	11	4500
126)=	38	52	9	4500	53	9	4500	54	18	4500	0	0	0	0	0	0

*****END OF SUBROUTINE TINPUT****

60 SECOND CYCLE 60 STEPS

INITIAL SETTINGS
- (SECONDS)

NODE	NUMBER OF STAGES	STAGE 2 1	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10	STAGE NO
1	2	26 0									
2	2	30 0									
3	2	16 0									
4	2	14 0									
5	2	27 0									

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	-------DELAY-------- UNIFORM (U+R+O=MEAN Q) (PCU-H/H)	RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	----STOPS---- MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	----QUEUE---- MEAN MAX. (PCU)	AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST	START END 2ND
10	896	4100	62	16.7	19.6	4.0 + 0.8	(69.1)*	84	(19.3)	13		41.5	1	6		26
11	370	2120	50	16.7	20.2	1.6 + 0.5	(29.5)*	82	(7.8)	5		17.7	1	6		26
12	97	1892S	61	9.2	15.0	0.3 + 0.1	(5.7)*	73	(1.8)	7	(0.0)*	30.6	1	32		0
13	171	2029S	61	9.2	15.0	0.5 + 0.2	(10.1)*	74	(3.3)	8	(0.0)*	53.8	1	32		0
14	148	2029S	57	9.2	14.4	0.4 + 0.2	(8.4)*	73	(2.8)	7	(0.0)*	44.7	1	32		0
15	287	12L	61	9.2	11.3	0.5 + 0.4	(12.7)	88	(6.5)	7		19.3	1	32		0
16	141	12L	61	9.2	8.8	0.2 + 0.2	(4.9)	22	(0.8)	7		5.7	1	32		0
17	31	12L	61	9.2	12.5	0.1 + 0.0	(1.5)	36	(0.3)	7		1.8	1	32		0
18	289	13L	61	9.2	11.4	0.5 + 0.4	(13.0)	90	(6.7)	8		19.6	1	32		0
19	142	13L	61	9.2	8.6	0.2 + 0.2	(4.8)	21	(0.8)	8		5.6	1	32		0
20	366	2015	44	16.7	16.3	1.3 + 0.4	(23.5)*	73	(6.9)	5		14.1	2	6		30
21	955	2850f	80	16.7	20.9	3.5 + 2.0	(78.8)*	86	(21.1)	15		47.3	2	6		30
22	573	3989S	78	8.4	25.6	3.3 + 0.8	(57.9)*	108	(16.0)	22	(3.2)*	451.5	2	36		0
23	370	2063	43	8.4	24.6	2.2 + 0.4	(35.9)*	106	(10.1)	7	(0.0)*	189.6	2	36		0
24	319	22L	78	8.4	13.0	0.7 + 0.4	(16.3)	83	(6.8)	22	+	23.2	2	36		0
25	303	22L	78	8.4	9.2	0.4 + 0.4	(11.0)	82	(6.4)	22	+	17.4	2	36		0
26	107	22L	78	8.4	23.8	0.6 + 0.1	(10.0)	77	(2.1)	22	+	12.1	2	36		0
30	71	2015	19	16.7	26.8	0.4 + 0.1	(7.5)*	90	(1.6)	1		4.5	3	6		16
31	552	4270	71	16.7	30.7	3.5 + 1.2	(66.9)*	102	(14.5)	10		40.1	3	6		16
32	336	1926S	42	10.9	8.0	0.5 + 0.2	(10.5)*	78	(6.7)	7	(0.0)*	61.0	3	22		0
33	634	2063S	75	10.9	10.9	1.0 + 0.9	(27.3)*	91	(14.9)	12	(0.2)*	158.7	3	22		0
34	321	2063	24	10.9	3.7	0.2 + 0.2	(4.7)*	47	(3.9)	4	(0.0)*	27.6	3	22		0
35	148	32L	42	10.9	11.8	0.4 + 0.1	(6.9)	56	(2.2)	7	+	9.0	3	22		0
36	38	32L	42	10.9	14.7	0.1 + 0.0	(2.2)	71	(0.7)	7	+	2.9	3	22		0
37	370	33L	75	10.9	6.5	0.1 + 0.5	(9.5)	15	(1.5)	12	+	10.9	3	22		0
40	281	1995	94	16.7	89.0	2.0 + 5.0	(98.7)*	177	(12.8)	10		59.2	4	6		14
41	390	4230	61	16.7	31.2	2.6 + 0.8	(48.0)*	102	(10.2)	7		28.8	4	6		14
42	284	1941S	98	11.7	44.3	0.8 + 2.7	(49.6)*	147	(10.8)	33	(10.8)*	746.7	4	20		0
43	268	2077S	42	11.7	3.4	0.1 + 0.2	(3.6)*	45	(3.1)	4	(0.0)*	21.1	4	20		0
44	634	42L	98	11.7	37.8	0.7 + 6.0	(94.6)	125	(20.4)	33	+	115.0	4	20		0
45	370	42L	98	11.7	47.7	1.4 + 3.5	(69.6)	134	(12.8)	33	+	82.4	4	20		0
46	321	43L	42	11.7	2.4	0.0 + 0.2	(3.1)	5	(0.4)	4		3.5	4	20		0
47	10	42L	98	11.7	43.2	0.0 + 0.1	(1.7)	135	(0.3)	33	+	2.1	4	20		0
50	182	1975	25	16.7	16.6	0.7 + 0.2	(11.9)*	71	(3.3)	2		2.4	5	6		27
51	878	4250	56	16.7	17.8	3.7 + 0.6	(61.7)*	79	(17.9)	12		12.3	5	6		27
52	243	1936S	53	10.5	20.8	1.1 + 0.3	(19.9)*	107	(6.7)	7	(0.0)*	106.3	5	33		0
53	321	2072S	58	10.5	8.1	0.3 + 0.4	(10.3)*	22	(1.8)	5	(0.0)*	53.3	5	33		0
54	390	4144S	22	10.5	17.3	1.8 + 0.1	(26.7)*	102	(10.2)	7	(0.0)*	143.6	5	33		0
55	152	52L	53	10.5	5.2	0.0 + 0.2	(3.1)	32	(1.3)	7		4.4	5	33		0
56	62	52L	53	10.5	15.8	0.2 + 0.1	(3.9)	50	(0.8)	7		4.7	5	33		0
57	18	52L	53	10.5	12.7	0.0 + 0.0	(0.9)	85	(0.4)	7		1.3	5	33		0
58	237	53L	58	10.5	7.3	0.2 + 0.3	(6.8)	69	(4.2)	5		11.0	5	33		0
59	31	54L	22	10.5	5.2	0.0 + 0.0	(0.6)	65	(0.5)	7		1.2	5	33		0

60 SECOND CYCLE 60 STEPS

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY UNIFORM (U+R+O=MEAN Q) (PCU-H/H)	DELAY RANDOM+ OVERSAT (PCU-H/H)	DELAY COST OF DELAY ($/H)	STOPS MEAN STOPS /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END 1ST (SECONDS)	GREEN TIMES END 2ND (SECONDS)
60	436	2108	37	10.5	3.4	0.1 +	0.3	(5.9)	30	(3.4)	2		9.3					
61	1038	6000S	34	10.5	0.5	0.0 +	0.1	(1.9)	1	(0.2)	0		2.1					
62	321	61L	34	10.5	0.5	0.0 +	0.0	(0.6)	1	(0.1)	0		0.6					
63	268	61L	34	10.5	0.5	0.0 +	0.0	(0.5)	1	(0.1)	0		0.5					
64	390	61L	34	10.5	0.5	0.0 +	0.0	(0.7)	1	(0.1)	0		0.8					
191	107	14L	57	9.2	8.1	0.1 +	0.1	(3.4)	21	(0.6)	7		4.0	1	32	0		
192	303	14L	57	9.2	10.7	0.5 +	0.4	(12.7)	88	(6.9)	7		19.6	1	32	0		

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2336.8	129.6	18.0	42.8	32.5	(1924.7) + (179.0)	+ (642.6)	= 2746.3	TOTALS	

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	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTION	125.3	+ 86.6	+ 134.2	= 346.2

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 50

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

1	2	9	35
2	2	51	21
3	2	0	16
4	2	0	14
5	2	0	27

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2336.8	131.5	17.8	44.6	32.5	(1876.3) + (176.9)	+ (439.1)	= 2492.2	TOTALS	

NO. OF ENTRIES TO SUBPT = 12
NO. OF LINKS RECALCULATED= 385

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

1	2	9	35
2	2	51	21
3	2	0	16
4	2	0	14
5	2	24	51

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2336.8	130.4	17.9	43.5	32.5	(1799.3) + (159.8)	+ (426.1)	= 2385.2	TOTALS	

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 396

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

1	2	16	35
2	2	59	21
3	2	2	16
4	2	1	14
5	2	32	51

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2336.8	170.0	13.7	41.6	74.1	(1521.3) + (104.9)	+ (36.0)	= 1662.3	TOTALS	

NO. OF ENTRIES TO SUBPT = 45
NO. OF LINKS RECALCULATED= 1228

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1	2	16	35
2	2	59	21
3	2	2	16
4	2	1	14
5	2	23	42

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2336.8	169.4	13.8	41.0	74.1	(1509.5) + (103.6) + (19.5)	=	1632.6	TOTALS	

NO. OF ENTRIES TO SUBPT = 12
NO. OF LINKS RECALCULATED= 444

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1	2	16	35
2	2	59	21
3	2	2	16
4	2	1	14
5	2	23	42

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2336.8	169.4	13.8	41.0	74.1	(1509.5) + (103.6) + (19.5)	=	1632.6	TOTALS	

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 416

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1	2	16	35
2	2	2	24
3	2	2	16
4	2	59	12
5	2	22	41

TOTAL TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL DISTANCE PERFORMANCE INDEX ($/H)	
2336.8	168.4	13.9	40.0	74.1	(1439.3) + (101.8) + (26.2)	=	1567.3	TOTALS	

NO. OF ENTRIES TO SUBPT = 16
NO. OF LINKS RECALCULATED= 572

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1	2	16	36
2	2	1	24
3	2	2	16
4	2	59	12
5	2	22	41

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2336.8	153.7	15.2	39.8	59.6	(1382.7) + (111.2) + (51.9)	=	1545.8	TOTALS	

NO. OF ENTRIES TO SUBPT = 20
NO. OF LINKS RECALCULATED= 704

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	17	37								
2	2	2	25								
3	2	2	16								
4	2	59	12								
5	2	22	41								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	COST OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN MAX. QUEUE (PCU)	AVERAGE EXCESS QUEUE (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	START 2ND (SECONDS)
10	896	4100	87	16.7	34.9	5.4 + 3.3 (123.3)*	112		(25.9)	17		74.0	1	23	37
11	370	2120	70	16.7	31.5	2.1 + 1.1 (46.0)*	104		(9.9)	7		27.6	1	23	37
12	97	1892S	50	9.2	9.4	0.2 + 0.1 (3.6)*	52	(1.3)	5	(0.0)*		19.3	1	43	17
13	171	2029S	51	9.2	9.4	0.3 + 0.1 (6.3)*	52	(2.3)	6	(0.0)*		34.0	1	43	17
14	148	2029S	47	9.2	9.0	0.3 + 0.1 (5.2)*	51	(1.9)	5	(0.0)*		28.1	1	43	17
15	287	12L	50	9.2	3.9	0.1 + 0.3 (4.4)	25	(1.8)	5			6.3	1	43	17
16	141	12L	50	9.2	10.8	0.3 + 0.1 (6.0)	87	(3.2)	5			9.2	1	43	17
17	31	12L	50	9.2	5.2	0.0 + 0.0 (0.6)	14	(0.1)	5			0.8	1	43	17
18	289	13L	51	9.2	3.9	0.1 + 0.2 (4.5)	30	(2.3)	6			6.8	1	43	17
19	142	13L	51	9.2	11.0	0.3 + 0.1 (6.1)	88	(3.2)	6			9.4	1	43	17
20	366	2015	61	16.7	25.5	1.8 + 0.8 (36.8)*	93	(8.8)	6			22.1	2	8	25
21	955	3130f	102	16.7	95.4	5.4 + 20.0 (359.5)*	187	(46.0)	36			215.7	2	8	25
22	573	3989S	61	8.4	4.5	0.4 + 0.3 (10.1)*	60	(8.8)	14	(0.3)*		72.7	2	31	2
23	370	2063	34	8.4	2.8	0.0 + 0.3 (4.0)*	17	(1.7)	4	(0.0)*		21.8	2	31	2
24	319	22L	61	8.4	12.1	0.9 + 0.2 (15.2)	53	(4.3)	14	+		19.5	2	31	2
25	303	22L	61	8.4	12.3	0.9 + 0.2 (14.7)	45	(3.5)	14	+		18.2	2	31	2
26	107	22L	61	8.4	4.7	0.1 + 0.1 (2.0)	16	(0.4)	14	+		2.4	2	31	2
30	71	2015	23	16.7	30.3	0.4 + 0.2 (8.5)*	96	(1.8)	1			5.1	3	8	16
31	552	4270	86	16.7	44.0	3.8 + 2.9 (95.8)*	123	(17.5)	12			57.5	3	8	16
32	336	1926S	40	10.9	6.0	0.3 + 0.2 (7.9)*	74	(6.4)	6	(0.0)*		46.6	3	22	2
33	623<	2063S	70	10.9	8.0	0.6 + 0.7 (19.8)*	81	(13.3)	11	(0.1)*		115.2	3	22	2
34	316	2063	22	10.9	2.5	0.1 + 0.1 (3.1)*	27	(2.3)	3	(0.0)*		17.8	3	22	2
35	148	32L	40	10.9	7.5	0.2 + 0.1 (4.4)	38	(1.5)	6	+		5.8	3	22	2
36	38	32L	40	10.9	9.8	0.1 + 0.0 (1.5)	62	(0.6)	6	+		2.1	3	22	2
37	370	33L	70	10.9	4.6	0.0 + 0.4 (6.7)	9	(0.8)	11	+		7.5	3	22	2
40	281	1995	106		16.7	194.3 2.2 + 12.9 (215.4)*	243	(17.6)	18			129.2	4	5	12
41	390	4230	69		16.7	35.1 2.7 + 1.1 (53.9)*	108	(10.8)	7			32.4	4	5	12
42	284	1941S	95	11.7	25.2	0.3 + 1.6 (28.2)*	110	(8.0)	16	(0.8)*		186.9	4	18	59
43	268	2077S	40	11.7	2.1	0.0 + 0.2 (2.2)*	3	(0.2)	0	(0.0)*		11.2	4	18	59
44	624	42L	95	11.7	21.3	0.1 + 3.6 (52.4)	37	(6.1)	16	+		58.5	4	18	59
45	370	42L	95	11.7	29.9	0.9 + 2.1 (43.7)	90	(8.6)	16	+		52.3	4	18	59
46	315	43L	40	11.7	2.3	0.0 + 0.2 (2.8)	5	(0.4)	0			3.2	4	18	59
47	10	42L	95	11.7	25.8	0.0 + 0.1 (1.0)	69	(0.2)	16	+		1.2	4	18	59
50	182	1975	39	16.7	25.9	1.0 + 0.3 (18.6)*	91	(4.3)	3			3.7	5	28	41
51	878	4250	89	16.7	37.1	5.4 + 3.6 (128.5)*	115	(26.0)	18			25.7	5	28	41
52	230<	1936S	40	10.5	6.3	0.2 + 0.2 (5.7)*	20	(1.3)	4	(0.0)*		29.8	5	47	22
53	315	2072S	44	10.5	9.0	0.6 + 0.2 (11.1)*	82	(6.8)	9	(0.0)*		62.6	5	47	22
54	390	4144S	17	10.5	3.2	0.3 + 0.1 (5.0)*	13	(1.3)	1	(0.0)*		26.1	5	47	22
55	152	52L	40	10.5	13.0	0.4 + 0.1 (7.8)	100	(3.9)	4			11.7	5	47	22
56	61	52L	40	10.5	4.8	0.0 + 0.0 (1.2)	38	(0.6)	4			1.8	5	47	22
57	18	52L	40	10.5	12.0	0.0 + 0.0 (0.9)	63	(0.3)	4			1.1	5	47	22
58	237	53L	44	10.5	17.3	1.0 + 0.2 (16.1)	104	(6.3)	9			22.5	5	47	22
59	31	54L	17	10.5	12.5	0.1 + 0.0 (1.5)	95	(0.8)	1			2.3	5	47	22

60 SECOND CYCLE 60 STEPS

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	COST OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN MAX. QUEUE (PCU)	AVERAGE EXCESS QUEUE (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	START 2ND (SECONDS)
60	436	2108	37	10.5	3.7	0.2 + 0.3 (6.4)	23	(2.6)	2			9.0			
61	1038	6000S	34	10.5	0.5	0.0 + 0.1 (1.8)	1	(0.2)	0			2.0			
62	315	61L	34	10.5	0.5	0.0 + 0.0 (0.6)	1	(0.1)	0			0.6			
63	268	61L	34	10.5	0.5	0.0 + 0.0 (0.5)	1	(0.1)	0			0.5			
64	390	61L	34	10.5	0.5	0.0 + 0.0 (0.7)	1	(0.1)	0			0.8			
191	107	14L	47	9.2	10.2	0.2 + 0.1 (4.3)	85	(2.3)	5			6.6	1	43	17
192	303	14L	47	9.2	3.3	0.0 + 0.2 (3.9)	18	(1.4)	5			5.3	1	43	17

*** f - average saturation flow for flared link ***

TOTAL TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL DISTANCE PERFORMANCE INDEX ($/H)	
2336.8	153.7	15.2	39.7	59.6	(1366.2) + (111.3)	+ (54.9)	= 1532.4	TOTALS	

ROUTE

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	125.3	+	114.2	+	127.5	=	367.0

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 412

PROGRAM TRANSYT FINISHED

========== end of file ==========

Printed at 17:28:04 on 09/09/2015]

T R A N S Y T 12

Traffic Network Study Tool Analysis

Program Release 7 (July 2010)
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For sales and distribution information, program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
3GA,UK
Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770864
Email: softwarebureau@trl.co.uk
Web: www.trlsoftware.co.uk RG40

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "S2 2026 AM CD DIRFT IMPS.DAT" at 11:30 on 20150903

TRANSYT 12.0

S2 Gibbet Hill Rbout DIRFT Improvements 2026 AM Peak + Committed Development

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	= 3
NUMBER OF LINKS	= 30
NUMBER OF OPTIMISED NODES	= 3
MAXIMUM NUMBER OF GRAPHIC PLOTS	= 0
NUMBER OF STEPS IN CYCLE	= 60
MAXIMUM NUMBER OF SHARED STOPLINES	= 4
MAXIMUM NUMBER OF TIMING POINTS	= 2
MAXIMUM LINKS AT ANY NODE	= 8

CORE REQUESTED = 8658 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

(1)= TITLE:- S2 Gibbet Hill Rbout DIRFT Improvements 2026 AM Peak + Committed Development

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME EFFECTIV PERIOD 1-1200 MINS.	DISPLAC START (SEC)	E-GREEN EMENTS END (SEC)	EQUISAT SETTINGS 0=NO 1=YES	0=UNEQUAL CYCLE 1=EQUAL	FLOW SCALE 10-200 %	CRUISE-SPEEDS SCALE 50-200 %	CARD32 0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL- CLIMB OUTPUT 1=FULL	DELAY VALUE P PER PCU-H	STOP VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260

CARD NO.	CARD TYPE	LIST OF NODES TO BE OPTIMISED														
3)=	2	1	2	4	0	0	0	0	0	0	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET.....				SECOND SET.....						THIRD SET.....				
4)=	7	12	14	15	0	0	13	16	0	0	0	22	24	25	0	0
5)=	7	31	32	33	34	0	42	44	45	0	0	43	46	47	0	0
6)=	7	51	52	53	0	0	0	0	0	0	0	0	0	0	0	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
7)=	10	1	7	7								
8)=	10	2	7	7								
9)=	10	4	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
10)=	11	1	5	5								
11)=	11	2	5	5								
12)=	11	4	5	5								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
13)=	12	1	1	0	5								
14)=	12	2	1	0	5								
15)=	12	4	1	0	5								

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY LINKS LINK1 NO.	LINK2 NO.	LINK1 GIVEWAY COEFFS. ONLY % FLOW	A1 X100	A2 X100					LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
16)=	30	30	31	0	0	41	100	0	0	0	0	200	0	1169	0	0
17)=	30	50	51	0	0	50	100	0	0	0	0	200	0	1766	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST START STAGE	GREEN LAG	END STAGE	GREEN LAG	SECOND START STAGE	GREEN LAG	END STAGE	GREEN LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
18)=	31	10	1	1	5	2	0	0	0	0	0	200	-9999	2015	60	0
19)=	31	11	1	1	5	2	0	0	0	0	0	200	-9999	2155	60	0
20)=	31	12	1	2	5	1	0	0	0	0	0	55	0	1800	500	0
21)=	31	13	1	2	5	1	0	0	0	0	0	55	0	1800	500	0
22)=	31	14	1	1	0	1	0	0	0	0	0	55	0	0	0	0
23)=	31	15	1	1	0	1	0	0	0	0	0	55	0	0	0	0
24)=	31	16	1	1	0	1	0	0	0	0	0	55	0	0	0	0
25)=	31	20	2	1	5	2	0	0	0	0	0	200	-9999	2065	60	0
26)=	31	21	2	1	5	2	0	0	0	0	0	200	-9999	2205	60	0
27)=	31	22	2	2	5	1	0	0	0	0	0	31	0	1800	500	0
28)=	31	23	2	2	5	1	0	0	0	0	0	31	0	1800	500	0
29)=	31	24	2	1	0	1	0	0	0	0	0	31	0	0	0	0
30)=	31	25	2	1	0	1	0	0	0	0	0	31	0	0	0	0
31)=	31	31	0	0	0	0	0	0	0	0	0	50	0	6000	0	0
32)=	31	32	0	0	0	0	0	0	0	0	0	50	0	0	0	0
33)=	31	33	0	0	0	0	0	0	0	0	0	50	0	0	0	0
34)=	31	34	0	0	0	0	0	0	0	0	0	50	0	0	0	0
35)=	31	40	4	1	5	2	0	0	0	0	0	200	-9999	2065	60	0
36)=	31	41	4	1	5	2	0	0	0	0	0	200	-9999	2205	60	0
37)=	31	42	4	2	5	1	0	0	0	0	0	25	0	1800	500	0
38)=	31	43	4	2	5	1	0	0	0	0	0	25	0	1800	500	0
39)=	31	44	4	1	0	1	0	0	0	0	0	25	0	0	0	0
40)=	31	45	4	1	0	1	0	0	0	0	0	25	0	0	0	0
41)=	31	46	4	1	0	1	0	0	0	0	0	25	0	0	0	0
42)=	31	47	4	1	0	1	0	0	0	0	0	25	0	0	0	0
43)=	31	51	0	0	0	0	0	0	0	0	0	40	0	4000	0	0
44)=	31	52	0	0	0	0	0	0	0	0	0	40	0	0	0	0
45)=	31	53	0	0	0	0	0	0	0	0	0	40	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 2 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 3 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 4 ..... LINK NO.	FLOW	CRUISE SPEED
46)=	32	10	546	0	0	0	43	0	0	0	0	0	0	0	0	0
47)=	32	11	546	0	0	0	43	0	0	0	0	0	0	0	0	0
48)=	32	12	514	0	50	514	43	0	0	0	0	0	0	0	0	0
49)=	32	13	142	0	50	142	43	0	0	0	0	0	0	0	0	0
50)=	32	14	34	0	53	34	43	0	0	0	0	0	0	0	0	0
51)=	32	15	131	0	51	131	43	0	0	0	0	0	0	0	0	0
52)=	32	16	42	0	51	42	43	0	0	0	0	0	0	0	0	0
53)=	32	20	360	0	0	0	43	0	0	0	0	0	0	0	0	0
54)=	32	21	360	0	0	0	43	0	0	0	0	0	0	0	0	0
55)=	32	22	536	0	10	536	43	0	0	0	0	0	0	0	0	0
56)=	32	23	546	0	11	546	43	0	0	0	0	0	0	0	0	0
57)=	32	24	42	0	16	42	43	0	0	0	0	0	0	0	0	0
58)=	32	25	142	0	13	142	43	0	0	0	0	0	0	0	0	0
59)=	32	30	117	0	0	0	43	0	0	0	0	0	0	0	0	0
60)=	32	31	687	0	20	327	43	21	360	43	0	0	0	0	0	0
61)=	32	32	1066	0	22	520	43	23	546	43	0	0	0	0	0	0
62)=	32	33	13	0	24	13	43	0	0	0	0	0	0	0	0	0
63)=	32	34	111	0	25	111	43	0	0	0	0	0	0	0	0	0
64)=	32	40	511	0	0	0	43	0	0	0	0	0	0	0	0	0
65)=	32	41	173	0	0	0	43	0	0	0	0	0	0	0	0	0
66)=	32	42	46	0	30	46	43	0	0	0	0	0	0	0	0	0
67)=	32	43	54	0	30	54	43	0	0	0	0	0	0	0	0	0
68)=	32	44	273	0	32	273	43	0	0	0	0	0	0	0	0	0
69)=	32	45	147	0	31	147	43	0	0	0	0	0	0	0	0	0
70)=	32	46	273	0	32	273	43	0	0	0	0	0	0	0	0	0
71)=	32	47	378	0	31	378	43	0	0	0	0	0	0	0	0	0
72)=	32	50	1076	0	0	0	43	0	0	0	0	0	0	0	0	0
73)=	32	51	565	0	40	392	43	41	173	43	0	0	0	0	0	0
74)=	32	52	10	0	47	10	43	0	0	0	0	0	0	0	0	0
75)=	32	53	54	0	43	54	43	0	0	0	0	0	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.

			LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
76)=	38	12	5	4500	13	5	4500	22	1	4500	23	1	4500	42	2	4500
77)=	38	43	2	4500	0	0	0	0	0	0	0	0	0	0	0	0

*****END OF SUBROUTINE TINPUT****

60 SECOND CYCLE 60 STEPS

INITIAL SETTINGS
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	0	26								
2	2	0	20								
4	2	0	24								

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN TIMES PER PCU CRUISE (U+R+O=MEAN Q) (SEC) H/H)	DELAY (SEC)	DELAY UNIFORM DELAY (PCU/H)	DELAY RANDOM+ OVERSAT (PCU/H)	DELAY (%)	COST OF DELAY (PCU-$/H)	STOPS MEAN STOPS /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT START	GREEN TIMES INDEX. START END (SECONDS)	END 1ST	NODE 2ND
10	546	2015	74	16.7	25.7	2.5	+ 1.4	(55.4)*	96	(13.6)	9			33.2	1	5	26	
11	546	2155	69	16.7	23.4	2.4	+ 1.1	(50.4)*	91	(12.9)	9			30.3	1	5	26	
12	514	1800S	76	4.6	19.7	1.7	+ 1.2	(39.9)*	89	(11.8)	11	(1.7)*		287.9	1	31	0	
13	142	1800S	20	4.6	9.8	0.3	+ 0.1	(5.5)*	52	(1.9)	2	(0.0)*		29.4	1	31	0	
14	34	12L	76	4.6	16.3	0.1	+ 0.1	(2.2)	65	(0.6)	11	+		2.8	1	31	0	
15	131	12L	76	4.6	26.2	0.7	+ 0.3	(13.5)	113	(3.8)	11	+		17.4	1	31	0	
16	42	13L	20	4.6	15.6	0.2	+ 0.0	(2.6)	100	(1.1)	2			3.7	1	31	0	
20	360	2065	65	16.7	28.9	2.0	+ 0.9	(41.0)*	99	(9.2)	6			24.6	2	5	20	
21	360	2205	61	16.7	27.1	1.9	+ 0.8	(38.5)*	96	(8.9)	6			23.1	2	5	20	
22	536	1800S	67	2.6	22.9	2.7	+ 0.7	(48.5)*	108	(14.9)	12	(5.2)*		489.7	2	25	0	
23	546	1800	51	2.6	21.6	2.8	+ 0.5	(46.6)*	106	(14.8)	10	(3.9)*		423.8	2	25	0	
24	42	22L	67	2.6	14.3	0.1	+ 0.1	(2.4)	105	(1.1)	12	+		3.5	2	25	0	
25	142	22L	67	2.6	12.1	0.3	+ 0.2	(6.8)	80	(2.9)	12	+		9.7	2	25	0	
30	117	1169	23	16.7	8.4	0.1	+ 0.1	(3.9)	59	(1.8)	1			5.6				
31	687	6000S	31	4.2	0.4	0.0	+ 0.1	(1.2)	1	(0.1)	0			1.3				
32	1066	31L	31	4.2	0.4	0.0	+ 0.1	(1.8)	1	(0.2)	0			2.0				
33	13	31L	31	4.2	0.4	0.0	+ 0.0	(0.0)	1	(0.0)	0			0.0				
34	111	31L	31	4.2	0.4	0.0	+ 0.0	(0.2)	1	(0.0)	0			0.2				
40	511	2065	74	16.7	27.7	2.5	+ 1.4	(55.9)*	100	(13.1)	9			33.5	4	5	24	
41	173	2205	24	16.7	17.7	0.7	+ 0.2	(12.1)*	74	(3.3)	2			7.2	4	5	24	
42	46	1800S	49	2.1	11.1	0.1	+ 0.0	(2.0)*	57	(0.7)	5	(0.4)*		29.5	4	29	0	
43	54	1800S	73	2.1	17.1	0.2	+ 0.1	(3.6)*	70	(1.0)	13	(4.2)*		209.3	4	29	0	
44	273	42L	49	2.1	4.2	0.0	+ 0.3	(4.5)	22	(1.6)	5	+		6.1	4	29	0	
45	147	42L	49	2.1	18.2	0.6	+ 0.1	(10.6)	106	(4.0)	5	+		14.6	4	29	0	
46	273	43L	73	2.1	13.2	0.5	+ 0.5	(14.2)	97	(6.8)	13	+		21.0	4	29	0	
47	378	43L	73	2.1	25.5	1.9	+ 0.7	(38.0)	111	(10.8)	13	+		48.8	4	29	0	
50	1076	1766	74	16.7	6.0	0.4	+ 1.4	(25.6)	36	(9.9)	9			35.5				
51	565	4000S	16	3.3	0.5	0.0	+ 0.1	(1.2)	1	(0.1)	0			1.3				
52	10	51L	16	3.3	0.5	0.0	+ 0.0	(0.0)	1	(0.0)	0			0.0				
53	54	51L	16	3.3	0.5	0.0	+ 0.0	(0.1)	1	(0.0)	0			0.1				

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX	
972.8	59.8	16.3	24.5	12.7	(1011.4) + (+ 90613.8)		= 1795.3	TOTALS	

****

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	92.2	+	42.8	+	68.8	=	163.8

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 53

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

1	2	27	53
2	2	9	29
4	2	0	24

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
972.8	53.2	18.3	17.9	12.7	(665.9) + (64.8)		+ (296.5)	= 1027.1	TOTALS

NO. OF ENTRIES TO SUBPT = 9
NO. OF LINKS RECALCULATED= 238

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

1	2	27	53
2	2	9	29
4	2	0	24

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
972.8	53.2	18.3	17.9	12.7	(665.9) + (64.8)		+ (296.5)	= 1027.1	TOTALS NO. OF

ENTRIES TO SUBPT = 8
NO. OF LINKS RECALCULATED= 246

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

1	2	30	53
2	2	12	29
4	2	3	24

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
972.8	58.2	16.7	18.3	17.3	(617.4) + (	54.4)	+ (186.9)	= 858.7	TOTALS

NO. OF ENTRIES TO SUBPT = 22
NO. OF LINKS RECALCULATED= 568

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1	2	30	53
2	2	12	29
4	2	54	15

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
972.8	58.5	16.6	18.6	17.3	(600.6) + (	53.3)	+ (198.1)	= 851.9	TOTALS

NO. OF ENTRIES TO SUBPT = 8
NO. OF LINKS RECALCULATED= 228

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1	2	30	53
2	2	12	29
4	2	54	15

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
972.8	58.5	16.6	18.6	17.3	(600.6) + (	53.3)	+ (198.1)	= 851.9	TOTALS

NO. OF ENTRIES TO SUBPT = 7
NO. OF LINKS RECALCULATED= 213

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1	2	30	53
2	2	12	29
4	2	56	17

TOTAL TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL DISTANCE PERFORMANCE INDEX ($/H)	
972.8	58.5	16.6	18.5	17.3	(607.3) + (	53.5)	+ (185.0)	= 845.8	TOTALS

NO. OF ENTRIES TO SUBPT = 8
NO. OF LINKS RECALCULATED= 228

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1	2	30	53
2	2	12	29
4	2	56	17

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
972.8	58.5	16.6	18.5	17.3	(607.3) + (	53.5)	+ (185.0)	= 845.8	TOTALS

NO. OF ENTRIES TO SUBPT = 13
NO. OF LINKS RECALCULATED= 383

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE NO 10
1	2	30	53								
2	2	12	29								
4	2	56	17								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	OVERSAT OF DELAY ($/H)	COST	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN MAX. QUEUE (PCU)	AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	START END 2ND (SECONDS)
10	546	2015	86	16.7	37.6	2.9 + 2.8	(81.1)*		117	(16.5)	11		48.6	1	35	53
11	546	2155	80	16.7	31.6	2.8 + 1.9	(68.0)*		107	(15.0)	10		40.8	1	35	53
12	514	1800S	69	4.6	15.6	1.4 + 0.8	(31.7)*		72	(9.5)	8	(0.4)*	186.0	1	58	30
13	142	1800S	19	4.6	9.5	0.3 + 0.1	(5.3)*		51	(1.9)	1	(0.0)*	28.4	1	58	30
14	34	12L	69	4.6	26.4	0.2 + 0.1	(3.5)		102	(0.9)	8	+	4.4	1	58	30
15	131	12L	69	4.6	6.1	0.0 + 0.2	(3.2)		22	(0.7)	8	+	3.9	1	58	30
16	42	13L	19	4.6	2.3	0.0 + 0.0	(0.4)		4	(0.0)	1		0.4	1	58	30
20	360	2065	80	16.7	42.0	2.2 + 2.0	(59.6)*		120	(11.2)	8		35.8	2	17	29
21	360	2205	75	16.7	36.9	2.2 + 1.5	(52.4)*		113	(10.4)	7		31.5	2	17	29
22	536	1800S	62	2.6	4.5	0.1 + 0.6	(9.5)*		29	(4.1)	8	(1.1)*	102.3	2	34	12
23	546	1800	47	2.6	3.8	0.1 + 0.4	(8.3)*		41	(5.7)	8	(1.0)*	92.3	2	34	12
24	42	22L	62	2.6	16.3	0.1 + 0.0	(2.7)		87	(0.9)	8	+	3.6	2	34	12
25	142	22L	62	2.6	7.5	0.1 + 0.2	(4.2)		39	(1.4)	8	+	5.6	2	34	12
30	117	1169	22	16.7	8.1	0.1 + 0.1	(3.8)		58	(1.7)	1		5.5			
31	687	6000S	31	4.2	0.4	0.0 + 0.1	(1.2)		1	(0.1)	0		1.3			
32	1066	31L	31	4.2	0.4	0.0 + 0.1	(1.8)		1	(0.2)	0		2.0			
33	13	31L	31	4.2	0.4	0.0 + 0.0	(0.0)		1	(0.0)	0		0.0			
34	111	31L	31	4.2	0.4	0.0 + 0.0	(0.2)		1	(0.0)	0		0.2			
40	511	2065	87	16.7	42.9	2.9 + 3.2	(86.4)*		124	(16.4)	11		51.8	4	1	17
41	173	2205	28	16.7	20.7	0.8 + 0.2	(14.1)*		80	(3.6)	2		8.5	4	1	17
42	46	1800S	44	2.1	13.8	0.1 + 0.0	(2.5)*		68	(0.8)	3	(0.1)*	16.6	4	22	56
43	54	1800S	67	2.1	16.7	0.2 + 0.1	(3.6)*		89	(1.2)	9	(1.5)*	86.6	4	22	56
44	273	42L	44	2.1	9.8	0.5 + 0.2	(10.5)		34	(2.4)	3	+	12.9	4	22	56
45	147	42L	44	2.1	3.5	0.0 + 0.1	(2.1)		21	(0.8)	3	+	2.9	4	22	56
46	273	43L	67	2.1	11.9	0.5 + 0.4	(12.8)		37	(2.6)	9	+	15.4	4	22	56
47	378	43L	67	2.1	8.4	0.3 + 0.5	(12.5)		82	(8.0)	9	+	20.5	4	22	56
50	1076	1766	74	16.7	6.2	0.4 + 1.4	(26.1)		37	(10.2)	9		36.3			
51	565	4000S	16	3.3	0.5	0.0 + 0.1	(1.2)		1	(0.1)	0		1.3			
52	10	51L	16	3.3	0.5	0.0 + 0.0	(0.0)		1	(0.0)	0		0.0			
53	54	51L	16	3.3	0.5	0.0 + 0.0	(0.1)		1	(0.0)	0		0.1			

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
972.8	58.5	16.6	18.5	17.3	(607.3) + (	53.5) +	(185.0) =	845.8	TOTALS

ROUTE

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	52.2	+	41.2	+	57.7	=	151.0

NO. OF ENTRIES TO SUBPT = 7
NO. OF LINKS RECALCULATED= 213

PROGRAM TRANSYT FINISHED

========== end of file ==========

Printed at 17:17:58 on 09/09/2015]

T R A N S Y T 12

Traffic Network Study Tool Analysis

Program Release 7 (July 2010)
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For sales and distribution information, program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
3GA,UK
Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770864
Email: softwarebureau@trl.co.uk
Web: www.trlsoftware.co.uk RG40

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "S2 2026 PM CD DIRFT IMPS.DAT" at 11:31 on 20150903

TRANSYT 12.0

S2 Gibbet Hill Rbout DIRFT Improvements 2026 PM Peak + Committed Development

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	= 3
NUMBER OF LINKS	= 30
NUMBER OF OPTIMISED NODES	= 3
MAXIMUM NUMBER OF GRAPHIC PLOTS	= 0
NUMBER OF STEPS IN CYCLE	= 60
MAXIMUM NUMBER OF SHARED STOPLINES	= 4
MAXIMUM NUMBER OF TIMING POINTS	= 2
MAXIMUM LINKS AT ANY NODE	= 8

CORE REQUESTED = 8658 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

1)= TITLE:- S2 Gibbet Hill Rbout DIRFT Improvements 2026 PM Peak + Committed Development

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME EFFECTIV PERIOD 1-1200 MINS.	DISPLAC START (SEC)	E-GREEN EMENTS END (SEC)	EQUISAT SETTINGS 0=NO 1=YES	0=UNEQUAL CYCLE 1=EQUAL	FLOW SCALE 10-200 %	CRUISE-SPEEDS SCALE 50-200 %	CARD32 0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL- CLIMB OUTPUT 1=FULL	DELAY VALUE P PER PCU-H	STOP VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260

CARD NO.	CARD TYPE	LIST OF NODES TO BE OPTIMISED													
3)=	2	1	2	4	0	0	0	0	0	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET.....				SECOND SET.....					THIRD SET.....				
4)=	7	12	14	15	0	0	13	16	0	0	0	22	24	25	0	0
5)=	7	31	32	33	34	0	42	44	45	0	0	43	46	47	0	0
6)=	7	51	52	53	0	0	0	0	0	0	0	0	0	0	0	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
7)=	10	1	7	7								
8)=	10	2	7	7								
9)=	10	4	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
10)=	11	1	5	5								
11)=	11	2	5	5								
12)=	11	4	5	5								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
13)=	12	1	1	0	0								
14)=	12	2	1	0	0								
15)=	12	4	1	0	0								

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY LINKS LINK1 NO.	LINK2 NO.	ONLY % FLOW	LINK1 GIVEWAY COEFFS. A1 X100	A2 X100				LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
16)=	30	30	31	0	0	41	100	0	0	0	0	200	0	1169	0	0
17)=	30	50	51	0	0	50	100	0	0	0	0	200	0	1766	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST START STAGE	GREEN LAG	END STAGE	GREEN LAG	SECOND START STAGE	GREEN LAG	END STAGE	GREEN LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
18)=	31	10	1	1	5	2	0	0	0	0	0	200	-9999	2015	60	0
19)=	31	11	1	1	5	2	0	0	0	0	0	200	-9999	2155	60	0
20)=	31	12	1	2	5	1	0	0	0	0	0	55	0	1800	500	0
21)=	31	13	1	2	5	1	0	0	0	0	0	55	0	1800	500	0
22)=	31	14	1	1	0	1	0	0	0	0	0	55	0	0	0	0
23)=	31	15	1	1	0	1	0	0	0	0	0	55	0	0	0	0
24)=	31	16	1	1	0	1	0	0	0	0	0	55	0	0	0	0
25)=	31	20	2	1	5	2	0	0	0	0	0	200	-9999	2065	60	0
26)=	31	21	2	1	5	2	0	0	0	0	0	200	-9999	2205	60	0
27)=	31	22	2	2	5	1	0	0	0	0	0	31	0	1800	500	0
28)=	31	23	2	2	5	1	0	0	0	0	0	31	0	1800	500	0
29)=	31	24	2	1	0	1	0	0	0	0	0	31	0	0	0	0
30)=	31	25	2	1	0	1	0	0	0	0	0	31	0	0	0	0
31)=	31	31	0	0	0	0	0	0	0	0	0	50	0	6000	0	0
32)=	31	32	0	0	0	0	0	0	0	0	0	50	0	0	0	0
33)=	31	33	0	0	0	0	0	0	0	0	0	50	0	0	0	0
34)=	31	34	0	0	0	0	0	0	0	0	0	50	0	0	0	0
35)=	31	40	4	1	5	2	0	0	0	0	0	200	-9999	2065	60	0
36)=	31	41	4	1	5	2	0	0	0	0	0	200	-9999	2205	60	0
37)=	31	42	4	2	5	1	0	0	0	0	0	25	0	1800	500	0
38)=	31	43	4	2	5	1	0	0	0	0	0	25	0	1800	500	0
39)=	31	44	4	1	0	1	0	0	0	0	0	25	0	0	0	0
40)=	31	45	4	1	0	1	0	0	0	0	0	25	0	0	0	0
41)=	31	46	4	1	0	1	0	0	0	0	0	25	0	0	0	0
42)=	31	47	4	1	0	1	0	0	0	0	0	25	0	0	0	0
43)=	31	51	0	0	0	0	0	0	0	0	0	40	0	4000	0	0
44)=	31	52	0	0	0	0	0	0	0	0	0	40	0	0	0	0
45)=	31	53	0	0	0	0	0	0	0	0	0	40	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 2 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 3 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 4 ..... LINK NO.	FLOW	CRUISE SPEED
46)=	32	10	421	0	0	0	43	0	0	0	0	0	0	0	0	0
47)=	32	11	408	0	0	0	43	0	0	0	0	0	0	0	0	0
48)=	32	12	566	0	50	566	43	0	0	0	0	0	0	0	0	0
49)=	32	13	157	0	50	157	43	0	0	0	0	0	0	0	0	0
50)=	32	14	18	0	53	18	43	0	0	0	0	0	0	0	0	0
51)=	32	15	192	0	51	192	43	0	0	0	0	0	0	0	0	0
52)=	32	16	28	0	51	28	43	0	0	0	0	0	0	0	0	0
53)=	32	20	373	0	0	0	43	0	0	0	0	0	0	0	0	0
54)=	32	21	372	0	0	0	43	0	0	0	0	0	0	0	0	0
55)=	32	22	416	0	10	416	43	0	0	0	0	0	0	0	0	0
56)=	32	23	408	0	11	408	43	0	0	0	0	0	0	0	0	0
57)=	32	24	28	0	16	28	43	0	0	0	0	0	0	0	0	0
58)=	32	25	157	0	13	157	43	0	0	0	0	0	0	0	0	0
59)=	32	30	91	0	0	0	43	0	0	0	0	0	0	0	0	0
60)=	32	31	720	0	20	348	43	21	372	43	0	0	0	0	0	0
61)=	32	32	810	0	22	402	43	23	408	43	0	0	0	0	0	0
62)=	32	33	10	0	24	10	43	0	0	0	0	0	0	0	0	0
63)=	32	34	107	0	25	107	43	0	0	0	0	0	0	0	0	0
64)=	32	40	623	0	0	0	43	0	0	0	0	0	0	0	0	0
65)=	32	41	220	0	0	0	43	0	0	0	0	0	0	0	0	0
66)=	32	42	37	0	30	37	43	0	0	0	0	0	0	0	0	0
67)=	32	43	39	0	30	39	43	0	0	0	0	0	0	0	0	0
68)=	32	44	204	0	32	204	43	0	0	0	0	0	0	0	0	0
69)=	32	45	135	0	31	135	43	0	0	0	0	0	0	0	0	0
70)=	32	46	204	0	32	204	43	0	0	0	0	0	0	0	0	0
71)=	32	47	391	0	31	391	43	0	0	0	0	0	0	0	0	0
72)=	32	50	1122	0	0	0	43	0	0	0	0	0	0	0	0	0
73)=	32	51	758	0	40	538	43	41	220	43	0	0	0	0	0	0
74)=	32	52	16	0	47	16	43	0	0	0	0	0	0	0	0	0
75)=	32	53	39	0	43	39	43	0	0	0	0	0	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.

			LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
76)=	38	12	5	4500	13	5	4500	22	1	4500	23	1	4500	42	2	4500
77)=	38	43	2	4500	0	0	0	0	0	0	0	0	0	0	0	0

*****END OF SUBROUTINE TINPUT****

60 SECOND CYCLE 60 STEPS

INITIAL SETTINGS
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	0	21								
2	2	0	22								
4	2	0	28								

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (U+R+O=MEAN Q) (SEC)	DELAY (PCU/H)	UNIFORM DELAY (PCU/H)	RANDOM+ OVERSAT (%)	COST OF DELAY (PCU-H/H)	STOPS MEAN /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT START	GREEN TIMES INDEX. START END (SECONDS)	END 1ST	NODE 2ND
10	421	2015	74	16.7	31.3	2.3	+ 1.4	(51.9)*	105	(11.4)	8			31.2	1	5	21	
11	408	2155	67	16.7	27.8	2.2	+ 1.0	(44.8)*	98	(10.3)	7			26.9	1	5	21	
12	566	1800S	74	4.6	14.2	1.2	+ 1.0	(31.6)*	75	(11.0)	12	(1.5)*		238.5	1	26	0	
13	157	1800S	18	4.6	6.7	0.2	+ 0.1	(4.1)*	34	(1.4)	1	(0.0)*		22.0	1	26	0	
14	18	12L	74	4.6	13.4	0.0	+ 0.0	(0.9)	50	(0.2)	12	+		1.2	1	26	0	
15	193	12L	74	4.6	19.3	0.7	+ 0.3	(14.7)	109	(5.4)	12	+		20.1	1	26	0	
16	27	13L	18	4.6	9.1	0.1	+ 0.0	(1.0)	75	(0.5)	1			1.5	1	26	0	
20	373	2065	60	16.7	25.2	1.9	+ 0.8	(37.1)*	93	(8.9)	6			22.3	2	5	22	
21	372	2205	56	16.7	23.9	1.8	+ 0.6	(35.0)*	90	(8.6)	6			21.0	2	5	22	
22	416	1800S	59	2.6	24.3	2.3	+ 0.5	(39.8)*	107	(11.5)	10	(3.9)*		387.7	2	27	0	
23	408	1800	40	2.6	23.0	2.3	+ 0.3	(37.1)*	105	(11.0)	7	(2.7)*		316.8	2	27	0	
24	27	22L	59	2.6	16.1	0.1	+ 0.0	(1.7)	103	(0.7)	10	+		2.5	2	27	0	
25	157	22L	59	2.6	11.4	0.3	+ 0.2	(7.1)	70	(2.8)	10	+		9.9	2	27	0	
30	91	1169	15	16.7	5.9	0.1	+ 0.1	(2.1)	45	(1.1)	0			3.2				
31	720	6000S	27	4.2	0.4	0.0	+ 0.1	(1.2)	1	(0.1)	0			1.3				
32	810	31L	27	4.2	0.4	0.0	+ 0.1	(1.3)	1	(0.1)	0			1.5				
33	10	31L	27	4.2	0.4	0.0	+ 0.0	(0.0)	1	(0.0)	0			0.0				
34	107	31L	27	4.2	0.4	0.0	+ 0.0	(0.2)	1	(0.0)	0			0.2				
40	623	2065	75	16.7	24.2	2.7	+ 1.5	(59.5)*	95	(15.2)	10			35.7	4	5	28	
41	220	2205	25	16.7	14.7	0.7	+ 0.2	(12.8)*	66	(3.8)	3			7.7	4	5	28	
42	37	1800S	45	2.1	13.4	0.1	+ 0.0	(2.0)*	61	(0.6)	5	(0.5)*		31.8	4	33	0	
43	39	1800S	76	2.1	22.5	0.1	+ 0.1	(3.5)*	95	(0.9)	12	(4.5)*		220.3	4	33	0	
44	204	42L	45	2.1	5.4	0.1	+ 0.2	(4.3)	43	(2.3)	5	+		6.6	4	33	0	
45	135	42L	45	2.1	21.9	0.7	+ 0.1	(11.6)	106	(3.7)	5	+		15.3	4	33	0	
46	204	43L	76	2.1	18.1	0.5	+ 0.5	(14.5)	110	(5.8)	12	+		20.3	4	33	0	
47	391	43L	76	2.1	30.9	2.4	+ 0.9	(47.7)	114	(11.5)	12	+		59.2	4	33	0	
50	1122	1766	82	16.7	10.1	0.9	+ 2.3	(44.6)	58	(16.7)	13			61.4				
51	758	4000S	20	3.3	0.6	0.0	+ 0.1	(1.7)	1	(0.2)	0			1.9				
52	16	51L	20	3.3	0.6	0.0	+ 0.0	(0.0)	1	(0.0)	0			0.0				
53	39	51L	20	3.3	0.6	0.0	+ 0.0	(0.1)	1	(0.0)	0			0.1				

TOTAL TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL DISTANCE PERFORMANCE INDEX (PCU-$/H)	
950.3	58.3	16.3	23.6	12.6	(889.5) + (+ 875.0)	1.6)	= 1567.7		TOTALS

****

	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	51.0	+ 41.6	+ 66.4	= 159.0

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 53

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

1	2	27	48
2	2	0	22
4	2	51	19

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
950.3	52.9	18.0	18.2	12.6	(599.8) + (62.3)	+	(228.6) =	890.7	TOTALS

NO. OF ENTRIES TO SUBPT = 10 NO. OF LINKS
RECALCULATED= 230

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

1	2	27	48
2	2	0	22
4	2	27	55

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
950.3	52.0	18.3	17.3	12.6	(543.3) + (61.8)	+	(211.8) =	816.8	TOTALS

NO. OF ENTRIES TO SUBPT = 8
NO. OF LINKS RECALCULATED= 198

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

1	2	30	48
2	2	1	21
4	2	30	55

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
950.3	56.9	16.7	17.9	17.0	(529.2) + (	58.5)	+ (153.1)	= 740.8	TOTALS

NO. OF ENTRIES TO SUBPT = 20
NO. OF LINKS RECALCULATED= 460

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1	2	30	48
2	2	1	21
4	2	30	55

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
950.3	56.9	16.7	17.9	17.0	(529.2) + (	58.5)	+ (153.1)	= 740.8	TOTALS

NO. OF ENTRIES TO SUBPT = 7
NO. OF LINKS RECALCULATED= 203

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1	2	30	48
2	2	1	21
4	2	30	55

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
950.3	56.9	16.7	17.9	17.0	(529.2) + (	58.5)	+ (153.1)	= 740.8	TOTALS

NO. OF ENTRIES TO SUBPT = 7
NO. OF LINKS RECALCULATED= 203

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1	2	30	48
2	2	59	19
4	2	30	55

TOTAL TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL DISTANCE PERFORMANCE INDEX ($/H)	
950.3	56.9	16.7	17.8	17.0	(528.9) + (	58.5)	+ (152.7)	= 740.0	TOTALS

NO. OF ENTRIES TO SUBPT = 9
NO. OF LINKS RECALCULATED= 251

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1	2	30	48
2	2	59	19
4	2	30	55

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
950.3	56.9	16.7	17.8	17.0	(528.9) + (	58.5)	+ (152.7)	= 740.0	TOTALS

NO. OF ENTRIES TO SUBPT = 13
NO. OF LINKS RECALCULATED= 358

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE NO 10
1	2	30	48								
2	2	59	19								
4	2	30	55								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	OVERSAT OF DELAY ($/H)	COST MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	START END 2ND (SECONDS)
10	421	2015	90	16.7	54.1	2.6 + 3.7	(89.8)*	139	(15.0)	11		53.9	1	35	48
11	408	2155	81	16.7	39.9	2.5 + 2.1	(64.3)*	118	(12.4)	8		38.6	1	35	48
12	566	1800S	68	4.6	10.4	0.9 + 0.8	(23.2)*	58	(8.4)	10	(0.8)*	161.2	1	53	30
13	157	1800S	16	4.6	5.5	0.2 + 0.1	(3.4)*	29	(1.2)	1	(0.0)*	18.2	1	53	30
14	18	12L	68	4.6	8.4	0.0 + 0.0	(0.6)	35	(0.2)	10	+	0.8	1	53	30
15	193	12L	68	4.6	14.9	0.5 + 0.3	(11.3)	104	(5.2)	10	+	16.5	1	53	30
16	27	13L	16	4.6	6.7	0.0 + 0.0	(0.7)	62	(0.4)	1		1.2	1	53	30
20	373	2065	68	16.7	29.7	2.0 + 1.0	(43.7)*	101	(9.7)	7		26.2	2	4	19
21	372	2205	63	16.7	27.7	2.0 + 0.9	(40.6)*	97	(9.3)	6		24.4	2	4	19
22	416	1800S	56	2.6	4.1	0.0 + 0.4	(6.8)*	24	(2.6)	6	(0.7)*	66.9	2	24	59
23	408	1800	38	2.6	3.3	0.1 + 0.3	(5.4)*	33	(3.5)	6	(0.5)*	52.8	2	24	59
24	27	22L	56	2.6	8.3	0.0 + 0.0	(0.9)	26	(0.2)	6	+	1.1	2	24	59
25	157	22L	56	2.6	10.9	0.3 + 0.2	(6.7)	61	(2.5)	6	+	9.2	2	24	59
30	91	1169	15	16.7	5.9	0.1 + 0.1	(2.1)	45	(1.1)	0		3.2			
31	720	6000S	27	4.2	0.4	0.0 + 0.1	(1.2)	1	(0.1)	0		1.3			
32	810	31L	27	4.2	0.4	0.0 + 0.1	(1.3)	1	(0.1)	0		1.5			
33	10	31L	27	4.2	0.4	0.0 + 0.0	(0.0)	1	(0.0)	0		0.0			
34	107	31L	27	4.2	0.4	0.0 + 0.0	(0.2)	1	(0.0)	0		0.2			
40	623	2065	86	16.7	35.2	3.1 + 2.9	(86.5)*	114	(18.3)	12		51.9	4	35	55
41	220	2205	29	16.7	17.4	0.9 + 0.2	(15.1)*	74	(4.2)	3		9.0	4	35	55
42	37	1800S	40	2.1	11.1	0.1 + 0.0	(1.6)*	62	(0.6)	4	(0.4)*	28.5	4	0	30
43	39	1800S	68	2.1	14.0	0.1 + 0.1	(2.2)*	72	(0.7)	6	(1.0)*	54.8	4	0	30
44	204	42L	40	2.1	16.0	0.7 + 0.2	(12.8)	105	(5.5)	4	+	18.3	4	0	30
45	135	42L	40	2.1	3.3	0.0 + 0.1	(1.7)	5	(0.2)	4	+	1.9	4	0	30
46	204	43L	68	2.1	18.8	0.7 + 0.3	(15.1)	109	(5.7)	6	+	20.9	4	0	30
47	391	43L	68	2.1	6.5	0.1 + 0.7	(10.1)	31	(3.1)	6	+	13.1	4	0	30
50	1122	1766	82	16.7	10.3	0.9 + 2.3	(45.5)	59	(17.0)	13		62.4			
51	758	4000S	20	3.3	0.6	0.0 + 0.1	(1.7)	1	(0.2)	0		1.9			
52	16	51L	20	3.3	0.6	0.0 + 0.0	(0.0)	1	(0.0)	0		0.0			
53	39	51L	20	3.3	0.6	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1			

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
950.3	56.9	16.7	17.8	17.0	(528.9) +	(58.5) +	(152.7) =	740.0	TOTALS

ROUTE

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	51.0	+	40.1	+	58.0	=	149.1

NO. OF ENTRIES TO SUBPT = 7
NO. OF LINKS RECALCULATED= 213

PROGRAM TRANSYT FINISHED

========== end of file ==========

Printed at 17:18:34 on 09/09/2015]

T R A N S Y T 12

Traffic Network Study Tool Analysis

Program Release 7 (July 2010)
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For sales and distribution information, program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770864
Email: softwarebureau@trl.co.uk
Web: www.trlsoftware.co.uk RG40

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Run with file:- "S4 2026 AM CD PD DIRFT IMPS.DAT" at 11:29 on 20150903

TRANSYT 12.0

S4 Gibbet Hill Rbout DIRFT Imps 2026 AM Peak + Committed & Proposed Development

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	=	3
NUMBER OF LINKS	=	30
NUMBER OF OPTIMISED NODES	=	3
MAXIMUM NUMBER OF GRAPHIC PLOTS	=	0
NUMBER OF STEPS IN CYCLE	=	60
MAXIMUM NUMBER OF SHARED STOPLINES	=	4
MAXIMUM NUMBER OF TIMING POINTS	=	2
MAXIMUM LINKS AT ANY NODE	=	8

CORE REQUESTED = 8658 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

(1)= TITLE:- S4 Gibbet Hill Rbout DIRFT Imps 2026 AM Peak + Committed & Proposed Development

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME EFFECTIV PERIOD 1-1200 MINS.	DISPLAC START (SEC)	E-GREEN EMENTS END (SEC)	EQUISAT SETTINGS 0=NO 1=YES	0=UNEQUAL CYCLE 1=EQUAL	FLOW SCALE 10-200 %	CRUISE-SPEEDS SCALE 50-200 %	CARD32 0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL- CLIMB 1=FULL	DELAY VALUE P PER PCU-H	STOP VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260

CARD NO.	CARD TYPE	LIST OF NODES TO BE OPTIMISED													
3)=	2	1	2	4	0	0	0	0	0	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET.....					SECOND SET.....					THIRD SET.....				
4)=	7	12	14	15	0	0	13	16	0	0	0	22	24	25	0	0
5)=	7	31	32	33	34	0	42	44	45	0	0	43	46	47	0	0
6)=	7	51	52	53	0	0	0	0	0	0	0	0	0	0	0	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
7)=	10	1	7	7								
8)=	10	2	7	7								
9)=	10	4	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
10)=	11	1	5	5								
11)=	11	2	5	5								
12)=	11	4	5	5								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
13)=	12	1	1	0	0								
14)=	12	2	1	0	0								
15)=	12	4	1	0	0								

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY LINKS LINK1 NO.	LINK2 NO.	ONLY % FLOW	LINK1 GIVEWAY COEFFS. A1 X100	A2 X100				LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
16)=	30	30	31	0	0	41	100	0	0	0	0	200	0	1169	0	0
17)=	30	50	51	0	0	50	100	0	0	0	0	200	0	1766	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST START STAGE	GREEN LAG	END STAGE	GREEN LAG	SECOND START STAGE	GREEN LAG	END STAGE	GREEN LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
18)=	31	10	1	1	5	2	0	0	0	0	0	200	-9999	2015	60	0
19)=	31	11	1	1	5	2	0	0	0	0	0	200	-9999	2155	60	0
20)=	31	12	1	2	5	1	0	0	0	0	0	55	0	1800	500	0
21)=	31	13	1	2	5	1	0	0	0	0	0	55	0	1800	500	0
22)=	31	14	1	1	0	1	0	0	0	0	0	55	0	0	0	0
23)=	31	15	1	1	0	1	0	0	0	0	0	55	0	0	0	0
24)=	31	16	1	1	0	1	0	0	0	0	0	55	0	0	0	0
25)=	31	20	2	1	5	2	0	0	0	0	0	200	-9999	2065	60	0
26)=	31	21	2	1	5	2	0	0	0	0	0	200	-9999	2205	60	0
27)=	31	22	2	2	5	1	0	0	0	0	0	31	0	1800	500	0
28)=	31	23	2	2	5	1	0	0	0	0	0	31	0	1800	500	0
29)=	31	24	2	1	0	1	0	0	0	0	0	31	0	0	0	0
30)=	31	25	2	1	0	1	0	0	0	0	0	31	0	0	0	0
31)=	31	31	0	0	0	0	0	0	0	0	0	50	0	6000	0	0
32)=	31	32	0	0	0	0	0	0	0	0	0	50	0	0	0	0
33)=	31	33	0	0	0	0	0	0	0	0	0	50	0	0	0	0
34)=	31	34	0	0	0	0	0	0	0	0	0	50	0	0	0	0
35)=	31	40	4	1	5	2	0	0	0	0	0	200	-9999	2065	60	0
36)=	31	41	4	1	5	2	0	0	0	0	0	200	-9999	2205	60	0
37)=	31	42	4	2	5	1	0	0	0	0	0	25	0	1800	500	0
38)=	31	43	4	2	5	1	0	0	0	0	0	25	0	1800	500	0
39)=	31	44	4	1	0	1	0	0	0	0	0	25	0	0	0	0
40)=	31	45	4	1	0	1	0	0	0	0	0	25	0	0	0	0
41)=	31	46	4	1	0	1	0	0	0	0	0	25	0	0	0	0
42)=	31	47	4	1	0	1	0	0	0	0	0	25	0	0	0	0
43)=	31	51	0	0	0	0	0	0	0	0	0	40	0	4000	0	0
44)=	31	52	0	0	0	0	0	0	0	0	0	40	0	0	0	0
45)=	31	53	0	0	0	0	0	0	0	0	0	40	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 2 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 3 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 4 ..... LINK NO.	FLOW	CRUISE SPEED
46)=	32	10	572	0	0	0	43	0	0	0	0	0	0	0	0	0
47)=	32	11	585	0	0	0	43	0	0	0	0	0	0	0	0	0
48)=	32	12	514	0	50	514	43	0	0	0	0	0	0	0	0	0
49)=	32	13	142	0	50	142	43	0	0	0	0	0	0	0	0	0
50)=	32	14	34	0	53	34	43	0	0	0	0	0	0	0	0	0
51)=	32	15	131	0	51	131	43	0	0	0	0	0	0	0	0	0
52)=	32	16	42	0	51	42	43	0	0	0	0	0	0	0	0	0
53)=	32	20	360	0	0	0	43	0	0	0	0	0	0	0	0	0
54)=	32	21	360	0	0	0	43	0	0	0	0	0	0	0	0	0
55)=	32	22	562	0	10	562	43	0	0	0	0	0	0	0	0	0
56)=	32	23	585	0	11	585	43	0	0	0	0	0	0	0	0	0
57)=	32	24	42	0	16	42	43	0	0	0	0	0	0	0	0	0
58)=	32	25	142	0	13	142	43	0	0	0	0	0	0	0	0	0
59)=	32	30	117	0	0	0	43	0	0	0	0	0	0	0	0	0
60)=	32	31	687	0	20	327	43	21	360	43	0	0	0	0	0	0
61)=	32	32	1131	0	22	546	43	23	585	43	0	0	0	0	0	0
62)=	32	33	13	0	24	13	43	0	0	0	0	0	0	0	0	0
63)=	32	34	111	0	25	111	43	0	0	0	0	0	0	0	0	0
64)=	32	40	554	0	0	0	43	0	0	0	0	0	0	0	0	0
65)=	32	41	173	0	0	0	43	0	0	0	0	0	0	0	0	0
66)=	32	42	46	0	30	46	43	0	0	0	0	0	0	0	0	0
67)=	32	43	54	0	30	54	43	0	0	0	0	0	0	0	0	0
68)=	32	44	292	0	32	292	43	0	0	0	0	0	0	0	0	0
69)=	32	45	147	0	31	147	43	0	0	0	0	0	0	0	0	0
70)=	32	46	293	0	32	293	43	0	0	0	0	0	0	0	0	0
71)=	32	47	378	0	31	378	43	0	0	0	0	0	0	0	0	0
72)=	32	50	1116	0	0	0	43	0	0	0	0	0	0	0	0	0
73)=	32	51	608	0	40	435	43	41	173	43	0	0	0	0	0	0
74)=	32	52	10	0	47	10	43	0	0	0	0	0	0	0	0	0
75)=	32	53	54	0	43	54	43	0	0	0	0	0	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.

			LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
76)=	38	12	5	4500	13	5	4500	22	1	4500	23	1	4500	42	2	4500
77)=	38	43	2	4500	0	0	0	0	0	0	0	0	0	0	0	0

*****END OF SUBROUTINE TINPUT****

60 SECOND CYCLE 60 STEPS

INITIAL SETTINGS
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	0	26								
2	2	0	20								
4	2	0	25								

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN TIMES PER PCU CRUISE (U+R+O=MEAN Q) (SEC)	DELAY (SEC)	DELAY UNIFORM (PCU/H)	DELAY RANDOM+ OVERSAT (PCU/H)	DELAY (%)	DELAY COST OF (PCU-H/H)	STOPS MEAN /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT START	GREEN TIMES INDEX. START END (SECONDS)	END 1ST	NODE 2ND
10	572	2015	77	16.7	27.4	2.7	+ 1.7	(61.8)*	100	(14.7)	10			37.1	1	5	26	
11	585	2155	74	16.7	25.2	2.7	+ 1.4	(58.1)*	96	(14.4)	10			34.9	1	5	26	
12	513	1800S	75	4.6	19.3	1.6	+ 1.1	(39.1)*	89	(11.8)	11	(1.7)*		281.9	1	31	0	
13	143	1800S	21	4.6	9.6	0.3	+ 0.1	(5.4)*	50	(1.8)	2	(0.0)*		28.9	1	31	0	
14	34	12L	75	4.6	18.8	0.1	+ 0.1	(2.5)	70	(0.6)	11	+		3.1	1	31	0	
15	131	12L	75	4.6	25.8	0.6	+ 0.3	(13.3)	113	(3.8)	11	+		17.2	1	31	0	
16	43	13L	21	4.6	15.0	0.1	+ 0.0	(2.5)	101	(1.1)	2			3.6	1	31	0	
20	360	2065	65	16.7	28.9	2.0	+ 0.9	(41.0)*	99	(9.2)	6			24.6	2	5	20	
21	360	2205	61	16.7	27.1	1.9	+ 0.8	(38.5)*	96	(8.9)	6			23.1	2	5	20	
22	562	1800S	69	2.6	23.4	2.8	+ 0.8	(51.9)*	109	(15.7)	13	(5.7)*		530.0	2	25	0	
23	585	1800	54	2.6	22.2	3.0	+ 0.6	(51.1)*	106	(16.0)	10	(4.3)*		467.1	2	25	0	
24	43	22L	69	2.6	15.4	0.1	+ 0.1	(2.6)	109	(1.2)	13	+		3.8	2	25	0	
25	143	22L	69	2.6	13.0	0.3	+ 0.2	(7.3)	83	(3.1)	13	+		10.4	2	25	0	
30	117	1169	24	16.7	9.1	0.1	+ 0.2	(4.2)	62	(1.9)	1			6.1				
31	687	6000S	32	4.2	0.4	0.0	+ 0.1	(1.2)	1	(0.1)	0			1.3				
32	1131	31L	32	4.2	0.4	0.0	+ 0.1	(2.0)	1	(0.2)	0			2.2				
33	13	31L	32	4.2	0.5	0.0	+ 0.0	(0.0)	1	(0.0)	0			0.0				
34	112	31L	32	4.2	0.4	0.0	+ 0.0	(0.2)	1	(0.0)	0			0.2				
40	554	2065	77	16.7	27.8	2.7	+ 1.6	(60.7)*	100	(14.3)	10			36.4	4	5	25	
41	173	2205	22	16.7	16.8	0.7	+ 0.1	(11.5)*	72	(3.2)	2			6.9	4	5	25	
42	46	1800S	52	2.1	12.1	0.1	+ 0.1	(2.2)*	58	(0.7)	5	(0.5)*		36.1	4	30	0	
43	54	1800S	78	2.1	19.4	0.2	+ 0.1	(4.1)*	76	(1.1)	14	(4.9)*		241.4	4	30	0	
44	292	42L	52	2.1	4.9	0.1	+ 0.3	(5.6)	30	(2.2)	5	+		7.9	4	30	0	
45	147	42L	52	2.1	19.6	0.6	+ 0.2	(11.4)	106	(4.0)	5	+		15.4	4	30	0	
46	294	43L	78	2.1	15.7	0.6	+ 0.7	(18.2)	103	(7.8)	14	+		26.0	4	30	0	
47	378	43L	78	2.1	28.2	2.0	+ 0.9	(42.0)	114	(11.1)	14	+		53.1	4	30	0	
50	1116	1766	78	16.7	7.3	0.5	+ 1.8	(32.2)	43	(12.3)	10			44.5				
51	608	4000S	17	3.3	0.5	0.0	+ 0.1	(1.3)	1	(0.1)	0			1.4				
52	10	51L	17	3.3	0.5	0.0	+ 0.0	(0.0)	1	(0.0)	0			0.0				
53	54	51L	17	3.3	0.5	0.0	+ 0.0	(0.1)	1	(0.0)	0			0.1				

TOTAL TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES (PCU-$/H)	TOTAL DISTANCE PERFORMANCE INDEX ($/H)	
1010.4	63.8	15.8	25.9	14.5	(1079.5) + (+ 96768.6)		= 1944.7	TOTALS	

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	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	54.2	+ 46.4	+ 73.6	= 174.1

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 53

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

1	2	27	53
2	2	9	29
4	2	0	25

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1010.4	57.1	17.7	19.2	14.5	(726.4) + (71.7)		+ (358.8)	= 1156.9	TOTALS

NO. OF ENTRIES TO SUBPT = 9
NO. OF LINKS RECALCULATED= 238

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

1	2	27	53
2	2	9	29
4	2	36	1

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1010.4	57.8	17.5	19.8	14.5	(683.0) + (72.7)		+ (388.2)	= 1143.9	TOTALS NO. OF

ENTRIES TO SUBPT = 8
NO. OF LINKS RECALCULATED= 241

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

1	2	30	53
2	2	11	28
4	2	38	0

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)		TOTAL COST OF STOPS ($/H)		PENALTY FOR EXCESS QUEUES ($/H)		TOTAL PERFORMANCE INDEX ($/H)	
1010.4	64.6	15.6	20.5	20.6	(653.3)	+ (	64.7)	+ (	282.5)	=	1000.6	TOTALS

NO. OF ENTRIES TO SUBPT = 20
NO. OF LINKS RECALCULATED= 511

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1	2	39	2
2	2	11	28
4	2	38	0

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)		TOTAL COST OF STOPS ($/H)		PENALTY FOR EXCESS QUEUES ($/H)		TOTAL PERFORMANCE INDEX ($/H)	
1010.4	63.7	15.9	19.6	20.6	(642.5)	+ (	66.1)	+ (	257.7)	=	966.4	TOTALS

NO. OF ENTRIES TO SUBPT = 7
NO. OF LINKS RECALCULATED= 203

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1	2	39	2
2	2	11	28
4	2	38	0

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)		TOTAL COST OF STOPS ($/H)		PENALTY FOR EXCESS QUEUES ($/H)		TOTAL PERFORMANCE INDEX ($/H)	
1010.4	63.7	15.9	19.6	20.6	(642.5)	+ (	66.1)	+ (	257.7)	=	966.4	TOTALS

NO. OF ENTRIES TO SUBPT = 7
NO. OF LINKS RECALCULATED= 221

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1	2	37	0
2	2	13	30
4	2	37	59

TOTAL TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)		TOTAL COST OF STOPS ($/H)		PENALTY FOR EXCESS QUEUES ($/H)		TOTAL DISTANCE PERFORMANCE INDEX ($/H)	
1010.4	63.7	15.9	19.6	20.6	(641.9)	+ (	65.7)	+ (	254.1)	=	961.7	TOTALS

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 304

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1	2	37	0
2	2	12	30
4	2	37	59

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)		TOTAL COST OF STOPS ($/H)		PENALTY FOR EXCESS QUEUES ($/H)		TOTAL PERFORMANCE INDEX ($/H)	
1010.4	62.8	16.1	19.4	19.9	(638.8)	+ (	65.8)	+ (	253.5)	=	958.1	TOTALS

NO. OF ENTRIES TO SUBPT = 13
NO. OF LINKS RECALCULATED= 353

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE NO 10
1	2	39	2								
2	2	12	30								
4	2	35	57								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	OVERSAT OF DELAY ($/H)	COST MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN MAX. (PCU)	AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	START END 2ND
10	572	2015	90	16.7	43.9	3.1 + 3.9	(99.2)*	127	(18.7)	13		59.5	1	44	2
11	585	2155	86	16.7	36.7	3.1 + 2.8	(84.7)*	116	(17.5)	12		50.8	1	44	2
12	513	1800S	69	4.6	14.9	1.3 + 0.8	(30.1)*	79	(10.4)	10	(1.2)*	214.3	1	7	39
13	143	1800S	19	4.6	7.7	0.2 + 0.1	(4.3)*	44	(1.6)	2	(0.0)*	23.3	1	7	39
14	34	12L	69	4.6	14.1	0.1 + 0.1	(1.9)	81	(0.7)	10	+	2.6	1	7	39
15	131	12L	69	4.6	23.4	0.6 + 0.2	(12.1)	110	(3.7)	10	+	15.8	1	7	39
16	43	13L	19	4.6	15.7	0.2 + 0.0	(2.7)	103	(1.1)	2		3.8	1	7	39
20	360	2065	75	16.7	35.8	2.1 + 1.4	(50.8)*	111	(10.3)	7		30.5	2	17	30
21	360	2205	70	16.7	32.6	2.1 + 1.1	(46.2)*	105	(9.7)	7		27.7	2	17	30
22	562	1800S	66	2.6	5.1	0.1 + 0.7	(11.3)*	33	(4.7)	9	(1.4)*	123.3	2	35	12
23	585	1800	51	2.6	4.4	0.2 + 0.5	(10.1)*	46	(6.9)	9	(1.3)*	116.8	2	35	12
24	43	22L	66	2.6	6.6	0.0 + 0.1	(1.1)	17	(0.2)	9	+	1.3	2	35	12
25	143	22L	66	2.6	11.7	0.3 + 0.2	(6.6)	57	(2.1)	9	+	8.6	2	35	12
30	117	1169	24	16.7	8.8	0.1 + 0.2	(4.1)	60	(1.8)	1		5.9			
31	687	6000S	32	4.2	0.4	0.0 + 0.1	(1.2)	1	(0.1)	0		1.3			
32	1131	31L	32	4.2	0.4	0.0 + 0.1	(2.0)	1	(0.2)	0		2.2			
33	13	31L	32	4.2	0.5	0.0 + 0.0	(0.0)	1	(0.0)	0		0.0			
34	112	31L	32	4.2	0.4	0.0 + 0.0	(0.2)	1	(0.0)	0		0.2			
40	554	2065	89	16.7	44.7	3.1 + 3.8	(97.7)*	128	(18.2)	13		58.6	4	40	57
41	173	2205	26	16.7	19.7	0.8 + 0.2	(13.4)*	78	(3.5)	2		8.0	4	40	57
42	46	1800S	48	2.1	8.9	0.1 + 0.0	(1.6)*	37	(0.4)	5	(0.4)*	26.1	4	2	35
43	54	1800S	71	2.1	11.8	0.1 + 0.1	(2.5)*	49	(0.7)	6	(1.1)*	63.0	4	2	35
44	292	42L	48	2.1	8.3	0.4 + 0.3	(9.5)	82	(6.1)	5	+	15.6	4	2	35
45	147	42L	48	2.1	4.3	0.0 + 0.1	(2.5)	9	(0.4)	5	+	2.9	4	2	35
46	294	43L	71	2.1	11.4	0.4 + 0.5	(13.2)	90	(6.8)	6	+	20.0	4	2	35
47	378	43L	71	2.1	7.5	0.1 + 0.6	(11.2)	35	(3.4)	6	+	14.6	4	2	35
50	1116	1766	78	16.7	7.5	0.6 + 1.8	(32.8)	44	(12.6)	10		45.4			
51	608	4000S	17	3.3	0.5	0.0 + 0.1	(1.3)	1	(0.1)	0		1.4			
52	10	51L	17	3.3	0.5	0.0 + 0.0	(0.0)	1	(0.0)	0		0.0			
53	54	51L	17	3.3	0.5	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1			

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1010.4	62.5	16.2	19.2	19.9	(637.5) + (	64.2) +	(242.1) =	943.9	TOTALS

ROUTE

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	54.2	+	44.9	+	64.7	=	163.8

NO. OF ENTRIES TO SUBPT = 10
NO. OF LINKS RECALCULATED= 279

PROGRAM TRANSYT FINISHED
========== end of file ==========

Printed at 17:19:07 on 09/09/2015]

T R A N S Y T 12

Traffic Network Study Tool Analysis

Program Release 7 (July 2010)

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For sales and distribution information, program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770864
Email: softwarebureau@trl.co.uk
Web: www.trlsoftware.co.uk RG40

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "S4 2026 PM CD PD DIRFT IMPS.DAT" at 11:32 on 20150903

TRANSYT 12.0

S4 Gibbet Hill Rbout DIRFT Imps 2026 PM Peak + Committed & Proposed Development

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	= 3
NUMBER OF LINKS	= 30
NUMBER OF OPTIMISED NODES	= 3
MAXIMUM NUMBER OF GRAPHIC PLOTS	= 0
NUMBER OF STEPS IN CYCLE	= 60
MAXIMUM NUMBER OF SHARED STOPLINES	= 4
MAXIMUM NUMBER OF TIMING POINTS	= 2
MAXIMUM LINKS AT ANY NODE	= 8

CORE REQUESTED = 8658 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

1)= TITLE:- S4 Gibbet Hill Rbout DIRFT Imps 2026 PM Peak + Committed & Proposed Development

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME EFFECTIV PERIOD 1-1200 MINS.	DISPLAC START (SEC)	E-GREEN EMENTS END (SEC)	EQUISAT SETTINGS 0=NO 1=YES	0=UNEQUAL CYCLE 1=EQUAL	FLOW SCALE 10-200 %	CRUISE-SPEEDS SCALE 50-200 %	CARD32 0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL- CLIMB 1=FULL	DELAY VALUE P PER PCU-H	STOP VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260

CARD NO.	CARD TYPE	LIST	OF	NODES	TO	BE	OPTIMISED
3)=	2	1	2	4	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET.....				SECOND SET.....				THIRD SET.....				
4)=	7	12	14	15	0	0	13	16	0	0	0	22	24	25	0	0
5)=	7	31	32	33	34	0	42	44	45	0	0	43	46	47	0	0
6)=	7	51	52	53	0	0	0	0	0	0	0	0	0	0	0	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
7)=	10	1	7	7								
8)=	10	2	7	7								
9)=	10	4	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
10)=	11	1	5	5								
11)=	11	2	5	5								
12)=	11	4	5	5								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
13)=	12	1	1	0	0								
14)=	12	2	1	0	0								
15)=	12	4	1	0	0								

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY LINKS LINK1 NO.	LINK2 NO.	ONLY % FLOW	LINK1 GIVEWAY COEFFS. A1 X100	A2 X100				LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
16)=	30	30	31	0	0	41	100	0	0	0	0	200	0	1169	0	0
17)=	30	50	51	0	0	50	100	0	0	0	0	200	0	1766	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST START STAGE	GREEN LAG	END STAGE	GREEN LAG	SECOND START STAGE	GREEN LAG	END STAGE	GREEN LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
18)=	31	10	1	1	5	2	0	0	0	0	0	200	-9999	2015	60	0
19)=	31	11	1	1	5	2	0	0	0	0	0	200	-9999	2155	60	0
20)=	31	12	1	2	5	1	0	0	0	0	0	55	0	1800	500	0
21)=	31	13	1	2	5	1	0	0	0	0	0	55	0	1800	500	0
22)=	31	14	1	1	0	1	0	0	0	0	0	55	0	0	0	0
23)=	31	15	1	1	0	1	0	0	0	0	0	55	0	0	0	0
24)=	31	16	1	1	0	1	0	0	0	0	0	55	0	0	0	0
25)=	31	20	2	1	5	2	0	0	0	0	0	200	-9999	2065	60	0
26)=	31	21	2	1	5	2	0	0	0	0	0	200	-9999	2205	60	0
27)=	31	22	2	2	5	1	0	0	0	0	0	31	0	1800	500	0
28)=	31	23	2	2	5	1	0	0	0	0	0	31	0	1800	500	0
29)=	31	24	2	1	0	1	0	0	0	0	0	31	0	0	0	0
30)=	31	25	2	1	0	1	0	0	0	0	0	31	0	0	0	0
31)=	31	31	0	0	0	0	0	0	0	0	0	50	0	6000	0	0
32)=	31	32	0	0	0	0	0	0	0	0	0	50	0	0	0	0
33)=	31	33	0	0	0	0	0	0	0	0	0	50	0	0	0	0
34)=	31	34	0	0	0	0	0	0	0	0	0	50	0	0	0	0
35)=	31	40	4	1	5	2	0	0	0	0	0	200	-9999	2065	60	0
36)=	31	41	4	1	5	2	0	0	0	0	0	200	-9999	2205	60	0
37)=	31	42	4	2	5	1	0	0	0	0	0	25	0	1800	500	0
38)=	31	43	4	2	5	1	0	0	0	0	0	25	0	1800	500	0
39)=	31	44	4	1	0	1	0	0	0	0	0	25	0	0	0	0
40)=	31	45	4	1	0	1	0	0	0	0	0	25	0	0	0	0
41)=	31	46	4	1	0	1	0	0	0	0	0	25	0	0	0	0
42)=	31	47	4	1	0	1	0	0	0	0	0	25	0	0	0	0
43)=	31	51	0	0	0	0	0	0	0	0	0	40	0	4000	0	0
44)=	31	52	0	0	0	0	0	0	0	0	0	40	0	0	0	0
45)=	31	53	0	0	0	0	0	0	0	0	0	40	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 2 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 3 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 4 ..... LINK NO.	FLOW	CRUISE SPEED
46)=	32	10	468	0	0	0	43	0	0	0	0	0	0	0	0	0
47)=	32	11	460	0	0	0	43	0	0	0	0	0	0	0	0	0
48)=	32	12	566	0	50	566	43	0	0	0	0	0	0	0	0	0
49)=	32	13	157	0	50	157	43	0	0	0	0	0	0	0	0	0
50)=	32	14	18	0	53	18	43	0	0	0	0	0	0	0	0	0
51)=	32	15	192	0	51	192	43	0	0	0	0	0	0	0	0	0
52)=	32	16	28	0	51	28	43	0	0	0	0	0	0	0	0	0
53)=	32	20	373	0	0	0	43	0	0	0	0	0	0	0	0	0
54)=	32	21	372	0	0	0	43	0	0	0	0	0	0	0	0	0
55)=	32	22	463	0	10	463	43	0	0	0	0	0	0	0	0	0
56)=	32	23	460	0	11	460	43	0	0	0	0	0	0	0	0	0
57)=	32	24	28	0	16	28	43	0	0	0	0	0	0	0	0	0
58)=	32	25	157	0	13	157	43	0	0	0	0	0	0	0	0	0
59)=	32	30	91	0	0	0	43	0	0	0	0	0	0	0	0	0
60)=	32	31	720	0	20	348	43	21	372	43	0	0	0	0	0	0
61)=	32	32	909	0	22	449	43	23	460	43	0	0	0	0	0	0
62)=	32	33	10	0	24	10	43	0	0	0	0	0	0	0	0	0
63)=	32	34	107	0	25	107	43	0	0	0	0	0	0	0	0	0
64)=	32	40	641	0	0	0	43	0	0	0	0	0	0	0	0	0
65)=	32	41	220	0	0	0	43	0	0	0	0	0	0	0	0	0
66)=	32	42	37	0	30	37	43	0	0	0	0	0	0	0	0	0
67)=	32	43	39	0	30	39	43	0	0	0	0	0	0	0	0	0
68)=	32	44	230	0	32	230	43	0	0	0	0	0	0	0	0	0
69)=	32	45	135	0	31	135	43	0	0	0	0	0	0	0	0	0
70)=	32	46	230	0	32	230	43	0	0	0	0	0	0	0	0	0
71)=	32	47	391	0	31	391	43	0	0	0	0	0	0	0	0	0
72)=	32	50	1139	0	0	0	43	0	0	0	0	0	0	0	0	0
73)=	32	51	776	0	40	556	43	41	220	43	0	0	0	0	0	0
74)=	32	52	16	0	47	16	43	0	0	0	0	0	0	0	0	0
75)=	32	53	39	0	43	39	43	0	0	0	0	0	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.

			LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
76)=	38	12	5	4500	13	5	4500	22	1	4500	23	1	4500	42	2	4500
77)=	38	43	2	4500	0	0	0	0	0	0	0	0	0	0	0	0

*****END OF SUBROUTINE TINPUT****

60 SECOND CYCLE 60 STEPS

INITIAL SETTINGS
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	0	22								
2	2	0	22								
4	2	0	28								

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (U+R+O=MEAN Q) (SEC)	DELAY UNIFORM DELAY (PCU/H)	DELAY RANDOM+ OVERSAT (PCU/H)	DELAY (%)	COST OF DELAY (PCU-H/H)	STOPS MEAN /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT START	GREEN TIMES INDEX. START END (SECONDS)	END 1ST	NODE 2ND
10	468	2015	77	16.7	32.0	2.5	+ 1.7	(59.1)*	107	(12.9)	9			35.5	1	5	22	
11	460	2155	71	16.7	28.2	2.4	+ 1.2	(51.2)*	100	(11.8)	8			30.7	1	5	22	
12	565	1800S	76	4.6	15.5	1.3	+ 1.1	(34.5)*	78	(11.4)	12	(1.8)*		265.6	1	27	0	
13	157	1800S	18	4.6	7.0	0.2	+ 0.1	(4.4)*	35	(1.4)	1	(0.0)*		23.2	1	27	0	
14	18	12L	76	4.6	16.4	0.0	+ 0.0	(1.2)	60	(0.3)	12	+		1.4	1	27	0	
15	193	12L	76	4.6	20.9	0.7	+ 0.4	(15.9)	111	(5.5)	12	+		21.4	1	27	0	
16	28	13L	18	4.6	9.8	0.1	+ 0.0	(1.1)	80	(0.6)	1			1.7	1	27	0	
20	373	2065	60	16.7	25.2	1.9	+ 0.8	(37.1)*	93	(8.9)	6			22.3	2	5	22	
21	372	2205	56	16.7	23.9	1.8	+ 0.6	(35.0)*	90	(8.6)	6			21.0	2	5	22	
22	463	1800S	64	2.6	24.9	2.6	+ 0.6	(45.6)*	108	(12.9)	11	(4.7)*		450.8	2	27	0	
23	460	1800	45	2.6	23.5	2.6	+ 0.4	(42.6)*	105	(12.5)	8	(3.3)*		371.8	2	27	0	
24	28	22L	64	2.6	17.1	0.1	+ 0.0	(1.9)	107	(0.8)	11	+		2.7	2	27	0	
25	157	22L	64	2.6	12.5	0.3	+ 0.2	(7.7)	74	(3.0)	11	+		10.7	2	27	0	
30	91	1169	16	16.7	6.6	0.1	+ 0.1	(2.4)	49	(1.2)	0			3.5				
31	720	6000S	29	4.2	0.4	0.0	+ 0.1	(1.2)	1	(0.1)	0			1.3				
32	909	31L	29	4.2	0.4	0.0	+ 0.1	(1.5)	1	(0.2)	0			1.7				
33	10	31L	29	4.2	0.4	0.0	+ 0.0	(0.0)	1	(0.0)	0			0.0				
34	107	31L	29	4.2	0.4	0.0	+ 0.0	(0.2)	1	(0.0)	0			0.2				
40	641	2065	78	16.7	25.2	2.8	+ 1.7	(63.8)*	97	(16.0)	11			38.3	4	5	28	
41	220	2205	25	16.7	14.7	0.7	+ 0.2	(12.8)*	66	(3.8)	3			7.7	4	5	28	
42	37	1800S	48	2.1	13.7	0.1	+ 0.0	(2.0)*	62	(0.6)	5	(0.5)*		33.0	4	33	0	
43	39	1800S	79	2.1	23.6	0.1	+ 0.1	(3.6)*	96	(1.0)	13	(4.9)*		240.2	4	33	0	
44	231	42L	48	2.1	5.4	0.1	+ 0.3	(5.0)	40	(2.4)	5	+		7.3	4	33	0	
45	135	42L	48	2.1	22.1	0.7	+ 0.2	(11.8)	107	(3.7)	5	+		15.5	4	33	0	
46	231	43L	79	2.1	18.9	0.6	+ 0.6	(17.3)	112	(6.6)	13	+		23.9	4	33	0	
47	391	43L	79	2.1	32.2	2.4	+ 1.1	(49.6)	116	(11.7)	13	+		61.3	4	33	0	
50	1139	1766	84	16.7	11.2	1.0	+ 2.6	(50.4)	62	(18.2)	14			68.6				
51	776	4000S	21	3.3	0.6	0.0	+ 0.1	(1.7)	1	(0.2)	0			1.9				
52	16	51L	21	3.3	0.6	0.0	+ 0.0	(0.0)	1	(0.0)	0			0.0				
53	39	51L	21	3.3	0.6	0.0	+ 0.0	(0.1)	1	(0.0)	0			0.1				

TOTAL TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES (PCU-$/H)	TOTAL DISTANCE PERFORMANCE INDEX ($/H)	
987.1	62.4	15.8	25.1	14.4	(987.5) + (+ 94621.7)		= 1763.4	TOTALS	

****

	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	52.9	+ 45.4	+ 71.1	= 169.5

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 53

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

1	2	27	49
2	2	0	22
4	2	51	19

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
987.1	57.0	17.3	19.7	14.4	(672.2) + (69.0)		+ (305.6)	= 1046.9	TOTALS

NO. OF ENTRIES TO SUBPT = 10 NO. OF LINKS
RECALCULATED= 230

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

1	2	27	49
2	2	0	22
4	2	27	55

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
987.1	55.7	17.7	18.4	14.4	(603.3) + (67.9)		+ (266.1)	= 937.4	TOTALS

NO. OF ENTRIES TO SUBPT = 8
NO. OF LINKS RECALCULATED= 198

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

1	2	30	49
2	2	2	20
4	2	30	55

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)		TOTAL COST OF STOPS ($/H)		PENALTY FOR EXCESS QUEUES ($/H)		TOTAL PERFORMANCE INDEX ($/H)	
987.1	63.7	15.5	19.3	21.4	(601.2)	+ (	64.2)	+ (195.7)	=	861.1	TOTALS	

NO. OF ENTRIES TO SUBPT = 22
NO. OF LINKS RECALCULATED= 508

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1	2	39	58
2	2	2	20
4	2	30	55

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)		TOTAL COST OF STOPS ($/H)		PENALTY FOR EXCESS QUEUES ($/H)		TOTAL PERFORMANCE INDEX ($/H)	
987.1	63.3	15.6	19.0	21.4	(600.3)	+ (	64.1)	+ (194.9)	=	859.3	TOTALS	

NO. OF ENTRIES TO SUBPT = 7
NO. OF LINKS RECALCULATED= 203

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1	2	39	58
2	2	2	20
4	2	30	55

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)		TOTAL COST OF STOPS ($/H)		PENALTY FOR EXCESS QUEUES ($/H)		TOTAL PERFORMANCE INDEX ($/H)	
987.1	63.3	15.6	19.0	21.4	(600.3)	+ (	64.1)	+ (194.9)	=	859.3	TOTALS	

NO. OF ENTRIES TO SUBPT = 7
NO. OF LINKS RECALCULATED= 203

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1	2	40	59
2	2	3	21
4	2	27	52

TOTAL TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)		TOTAL COST OF STOPS ($/H)		PENALTY FOR EXCESS QUEUES ($/H)		TOTAL DISTANCE PERFORMANCE INDEX ($/H)	
987.1	63.2	15.6	18.9	21.4	(606.5)	+ (	59.6)	+ (176.2)	=	842.3	TOTALS	

NO. OF ENTRIES TO SUBPT = 10
NO. OF LINKS RECALCULATED= 278

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1	2	40	59
2	2	3	21
4	2	27	52

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)		TOTAL COST OF STOPS ($/H)		PENALTY FOR EXCESS QUEUES ($/H)		TOTAL PERFORMANCE INDEX ($/H)	
987.1	63.2	15.6	18.9	21.4	(606.5)	+ (	59.6)	+ (176.2)	=	842.3	TOTALS	

NO. OF ENTRIES TO SUBPT = 13
NO. OF LINKS RECALCULATED= 358

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE NO 10
1	2	40	59								
2	2	2	20								
4	2	27	52								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	OVERSAT OF DELAY ($/H)	COST MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	START END 2ND (SECONDS)
10	468	2015	93	16.7	61.2	2.9 + 5.1	(112.9)*	149	(17.9)	13		67.8	1	45	59
11	460	2155	85	16.7	42.8	2.7 + 2.7	(77.7)*	123	(14.6)	10		46.6	1	45	59
12	565	1800S	70	4.6	12.8	1.2 + 0.8	(28.5)*	76	(11.1)	11	(1.4)*	218.5	1	4	40
13	157	1800S	17	4.6	4.9	0.1 + 0.1	(3.1)*	33	(1.3)	1	(0.0)*	16.6	1	4	40
14	18	12L	70	4.6	11.2	0.0 + 0.0	(0.8)	77	(0.4)	11	+	1.2	1	4	40
15	193	12L	70	4.6	21.7	0.9 + 0.3	(16.5)	97	(4.8)	11	+	21.3	1	4	40
16	28	13L	17	4.6	15.5	0.1 + 0.0	(1.7)	90	(0.6)	1		2.4	1	4	40
20	373	2065	77	16.7	37.6	2.2 + 1.7	(55.3)*	114	(11.0)	7		33.2	2	7	20
21	372	2205	72	16.7	33.6	2.2 + 1.3	(49.3)*	108	(10.3)	7		29.6	2	7	20
22	463	1800S	57	2.6	4.3	0.1 + 0.5	(7.9)*	29	(3.5)	7	(1.3)*	99.9	2	25	2
23	460	1800	40	2.6	3.6	0.1 + 0.3	(6.5)*	38	(4.5)	7	(0.7)*	69.7	2	25	2
24	28	22L	57	2.6	20.0	0.1 + 0.0	(2.2)	94	(0.7)	7	+	2.9	2	25	2
25	157	22L	57	2.6	14.8	0.5 + 0.2	(9.1)	82	(3.3)	7	+	12.5	2	25	2
30	91	1169	16	16.7	6.6	0.1 + 0.1	(2.4)	49	(1.2)	0		3.5			
31	720	6000S	29	4.2	0.4	0.0 + 0.1	(1.2)	1	(0.1)	0		1.3			
32	909	31L	29	4.2	0.4	0.0 + 0.1	(1.5)	1	(0.2)	0		1.7			
33	10	31L	29	4.2	0.4	0.0 + 0.0	(0.0)	1	(0.0)	0		0.0			
34	107	31L	29	4.2	0.4	0.0 + 0.0	(0.2)	1	(0.0)	0		0.2			
40	641	2065	89	16.7	38.6	3.3 + 3.6	(97.6)*	120	(19.8)	14		58.6	4	32	52
41	220	2205	29	16.7	17.4	0.9 + 0.2	(15.1)*	74	(4.2)	3		9.0	4	32	52
42	37	1800S	43	2.1	10.6	0.1 + 0.0	(1.6)*	49	(0.5)	2	(0.0)*	8.7	4	57	27
43	39	1800S	71	2.1	14.0	0.1 + 0.1	(2.2)*	61	(0.6)	6	(0.5)*	32.3	4	57	27
44	231	42L	43	2.1	4.5	0.1 + 0.2	(4.1)	32	(1.9)	2	+	6.0	4	57	27
45	135	42L	43	2.1	3.8	0.0 + 0.1	(2.0)	7	(0.2)	2	+	2.3	4	57	27
46	231	43L	71	2.1	7.9	0.1 + 0.4	(7.2)	39	(2.3)	6	+	9.5	4	57	27
47	391	43L	71	2.1	7.5	0.1 + 0.7	(11.6)	36	(3.6)	6	+	15.2	4	57	27
50	1139	1766	84	16.7	11.4	1.0 + 2.6	(51.2)	63	(18.4)	14		69.7			
51	776	4000S	21	3.3	0.6	0.0 + 0.1	(1.7)	1	(0.2)	0		1.9			
52	16	51L	21	3.3	0.6	0.0 + 0.0	(0.0)	1	(0.0)	0		0.0			
53	39	51L	21	3.3	0.6	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1			

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
987.1	63.2	15.6	18.8	21.4	(607.2) + (59.5)	+ (175.5)	= 842.2	TOTALS	
								ROUTE	

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	52.9	+	46.3	+	62.5	=	161.8

NO. OF ENTRIES TO SUBPT = 8
NO. OF LINKS RECALCULATED= 247

PROGRAM TRANSYT FINISHED
========== end of file ==========

Printed at 17:19:33 on 09/09/2015]

T R A N S Y T 12

Traffic Network Study Tool Analysis

Program Release 7 (July 2010)
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For sales and distribution information, program
advice and maintenance, contact:

TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770864
Nine Mile Ride Email: softwarebureau@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk RG40
3GA,UK

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Run with file:- "S2 2026 AM CD.DAT" at 11:17 on 20150825

TRANSYT 12.0

Scenario 2 M6 Junction 1 2026 AM Peak + Committed Development

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	= 2
NUMBER OF LINKS	= 18
NUMBER OF OPTIMISED NODES	= 2
MAXIMUM NUMBER OF GRAPHIC PLOTS	= 0
NUMBER OF STEPS IN CYCLE	= 60
MAXIMUM NUMBER OF SHARED STOPLINES	= 3
MAXIMUM NUMBER OF TIMING POINTS	= 2
MAXIMUM LINKS AT ANY NODE	= 6

CORE REQUESTED = 6891 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

(1)= TITLE:- Scenario 2 M6 Junction 1 2026 AM Peak + Committed Development

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME PERIOD 1-1200 MINS.	EFFECTIV DISPLAC START (SEC)	E-GREEN EMENTS END (SEC)	EQUISAT SETTINGS 0=NO 1=YES	0=UNEQUAL CYCLE 1=EQUAL	FLOW SCALE 10-200 %	CRUISE-SPEEDS SCALE 50-200 %	CARD32 0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL- CLIMB OUTPUT 1=FULL	DELAY VALUE P PER PCU-H	STOP VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260

CARD NO.	CARD TYPE	LIST OF NODES TO BE OPTIMISED														
3)=	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET.....					SECOND SET.....					THIRD SET.....				
4)=	7	12	14	0	0	0	13	15	0	0	0	21	22	23	0	0
5)=	7	32	34	0	0	0	41	42	0	0	0	0	0	0	0	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
6)=	10	1	7	7								
7)=	10	3	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
8)=	11	1	7	7								
9)=	11	3	7	7								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
10)=	12	1	1	0	0								
11)=	12	3	1	0	0								

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY LINKS LINK1 NO.	LINK2 NO.	LINK1 GIVEWAY COEFFS. ONLY % FLOW	A1 X100	A2 X100				LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
12)=	30	20	21	0	0	51	100	0	0	0	0	200	0	2207	0	0
13)=	30	40	41	0	0	51	100	0	0	0	0	200	0	2197	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN START STAGE	FIRST GREEN START LAG	FIRST GREEN END STAGE	FIRST GREEN END LAG	SECOND GREEN START STAGE	SECOND GREEN START LAG	SECOND GREEN END STAGE	SECOND GREEN END LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
14)=	31	10	1	1	7	2	0	0	0	0	0	200	-9999	1945	60	0
15)=	31	11	1	1	7	2	0	0	0	0	0	200	-9999	4170	60	0
16)=	31	12	1	2	7	1	0	0	0	0	0	158	0	3885	500	0
17)=	31	13	1	2	7	1	0	0	0	0	0	158	0	2010	500	0
18)=	31	14	1	1	0	1	0	0	0	0	0	158	0	0	0	0
19)=	31	15	1	1	0	1	0	0	0	0	0	158	0	0	0	0
20)=	31	21	0	0	0	0	0	0	0	0	0	84	0	4000	0	0
21)=	31	22	0	0	0	0	0	0	0	0	0	84	0	0	0	0
22)=	31	23	0	0	0	0	0	0	0	0	0	84	0	0	0	0
23)=	31	30	3	1	7	2	0	0	0	0	0	200	-9999	1945	60	0
24)=	31	31	3	1	7	2	0	0	0	0	0	200	-9999	4170	60	0
25)=	31	32	3	2	7	1	0	0	0	0	0	147	0	3896	500	0
26)=	31	33	3	2	7	1	0	0	0	0	0	147	0	2016	500	0
27)=	31	34	3	1	0	1	0	0	0	0	0	147	0	0	0	0
28)=	31	41	0	0	0	0	0	0	0	0	0	84	0	4000	0	0
29)=	31	42	0	0	0	0	0	0	0	0	0	84	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 ..... LINK NO.	CRUISE SPEED	ENTRY 2 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 3 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 4 ..... LINK NO.	FLOW	CRUISE SPEED
30)=	32	10	318	0	0	0	43	0	0	0	0	0	0	0	0
31)=	32	11	766	0	0	0	43	0	0	0	0	0	0	0	0
32)=	32	12	741	0	40	741	43	0	0	0	0	0	0	0	0
33)=	32	13	193	0	40	193	43	0	0	0	0	0	0	0	0
34)=	32	14	32	0	41	32	43	0	0	0	0	0	0	0	0
35)=	32	15	77	0	41	77	43	0	0	0	0	0	0	0	0
36)=	32	20	1273	0	0	0	43	0	0	0	0	0	0	0	0
37)=	32	21	766	0	11	766	43	0	0	0	0	0	0	0	0
38)=	32	22	77	0	15	77	43	0	0	0	0	0	0	0	0
39)=	32	23	193	0	13	193	43	0	0	0	0	0	0	0	0
40)=	32	30	265	0	0	0	43	0	0	0	0	0	0	0	0
41)=	32	31	286	0	0	0	43	0	0	0	0	0	0	0	0
42)=	32	32	924	0	20	924	43	0	0	0	0	0	0	0	0
43)=	32	33	307	0	20	307	43	0	0	0	0	0	0	0	0
44)=	32	34	766	0	21	766	43	0	0	0	0	0	0	0	0
45)=	32	40	1668	0	0	0	43	0	0	0	0	0	0	0	0
46)=	32	41	109	0	31	109	43	0	0	0	0	0	0	0	0
47)=	32	42	307	0	33	307	43	0	0	0	0	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.	LIM IT	LINK NQUEUE	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
48)=	38	12	28	4500	14	4500	32	24	4500	33	12	4500	0	0	0

*****END OF SUBROUTINE TINPUT*****

60 SECOND CYCLE 60 STEPS

INITIAL SETTINGS
- (SECONDS)

NODE	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10 NO
1	2	0	29								
3	2	0	18								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	START END 2ND
10	318	1945	43	16.7	17.8	1.2 +	0.4	(22.4)*	76	(6.3)	4		13.4	1	7	29
11	766	4170	48	16.7	16.1	3.0 +	0.5	(48.8)*	75	(14.7)	10		29.3	1	7	29
12	741	3885S	48	13.2	14.8	2.6 +	0.4	(43.4)*	72	(13.7)	10	(0.0)*	230.7	1	36	0
13	193	2010S	32	13.2	14.9	0.6 +	0.2	(11.3)*	70	(3.5)	4	(0.0)*	60.2	1	36	0
14	32	12L	48	13.2	13.0	0.1 +	0.0	(1.6)	98	(0.8)	10		2.5	1	36	0
15	77	13L	32	13.2	12.2	0.2 +	0.1	(3.7)	96	(1.9)	4		5.6	1	36	0
20	1273	2207	76	16.7	5.6	0.4 +	1.6	(27.9)	33	(10.8)	10		38.7			
21	766	4000S	26	7.0	0.6	0.0 +	0.1	(1.8)	1	(0.2)	0		2.0			
22	77	21L	26	7.0	0.6	0.0 +	0.0	(0.2)	1	(0.0)	0		0.2			
23	193	21L	26	7.0	0.6	0.0 +	0.0	(0.5)	1	(0.1)	0		0.5			
30	265	1945	68	16.7	36.5	1.6 +	1.1	(38.2)*	111	(7.6)	5		22.9	3	7	18
31	286	4170	34	16.7	23.9	1.6 +	0.3	(27.0)*	87	(6.4)	4		16.2	3	7	18
32	924	3896S	72	12.3	9.6	1.8 +	0.7	(35.0)*	63	(15.1)	23	(0.0)*	189.8	3	25	0
33	308	2016	25	12.3	7.7	0.5 +	0.2	(9.3)*	45	(3.6)	2	(0.0)*	50.1	3	25	0
34	766	32L	72	12.3	6.1	0.7 +	0.6	(18.5)	71	(14.1)	23		32.6	3	25	0
40	1668	2197	84	16.7	5.6	0.0 +	2.6	(37.0)	10	(4.4)	5		41.3			
41	109	4000S	10	7.0	0.5	0.0 +	0.0	(0.2)	1	(0.0)	0		0.2			
42	308	41L	10	7.0	0.5	0.0 +	0.0	(0.6)	1	(0.1)	0		0.7			

TOTAL TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL DISTANCE PERFORMANCE INDEX ($/H)	
1495.5	57.8	25.9	14.4	8.7	(668.9) + (	68.0) + (	0.0) =	736.9	TOTALS

****

	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	80.2 +	26.5 +	46.9 =	153.7

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 24

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

1 2 9 38
3 2 0 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1495.5	57.5	26.0	14.0	8.7	(665.6) + (	53.9) + (	0.0) =	719.5	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 86

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

1 2 9 38
3 2 0 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1495.5	57.5	26.0	14.0	8.7	(665.6) + (	53.9) + (	0.0) =	719.5	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 92

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

1 2 16 36
3 2 3 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1495.5	63.1	23.7	15.2	13.2	(585.4) + (	51.5) + (	0.0) =	636.9	TOTALS

NO. OF ENTRIES TO SUBPT = 20
NO. OF LINKS RECALCULATED= 328

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1 2 7 27
3 2 3 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1495.5	62.5	23.9	14.5	13.2	(554.3) + (	48.2) + (	0.0) =	602.6	TOTALS

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 120

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1 2 7 27
3 2 3 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1495.5	62.5	23.9	14.5	13.2	(554.3) + (	48.2) + (	0.0) =	602.6	TOTALS

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 136

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1 2 5 25
3 2 3 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1495.5	62.4	24.0	14.4	13.2	(550.8) + (	48.8) + (	0.0) =	599.6	TOTALS

NO. OF ENTRIES TO SUBPT = 7
NO. OF LINKS RECALCULATED= 136

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1 2 5 25
3 2 3 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1495.5	62.4	24.0	14.4	13.2	(550.8) + (	48.8) + (	0.0) =	599.6	TOTALS

NO. OF ENTRIES TO SUBPT = 9
NO. OF LINKS RECALCULATED= 184

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE NO 10
1	2	5	25								
3	2	3	18								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) UNIFORM (PCU-H/H)	DELAY RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	STOPS MEAN STOPS /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END 1ST (SECONDS)	GREEN TIMES END 2ND (SECONDS)
10	318	1945	70	16.7	34.1	1.9 +	1.2	(42.8)*	107	(8.8)	6		25.7	1	12		25	
11	766	4170	79	16.7	30.2	4.6 +	1.8	(91.1)*	103	(20.4)	14		54.7	1	12		25	
12	741	3885S	35	13.2	8.3	1.4 +	0.3	(24.2)*	52	(9.9)	7	(0.0)*	130.7	1	32		5	
13	193	2010S	24	13.2	8.5	0.3 +	0.1	(6.4)*	50	(2.5)	3	(0.0)*	34.7	1	32		5	
14	32	12L	35	13.2	5.5	0.0 +	0.0	(0.7)	70	(0.6)	7		1.3	1	32		5	
15	77	13L	24	13.2	4.9	0.1 +	0.0	(1.5)	59	(1.2)	3		2.7	1	32		5	
20	1273	2207	76	16.7	6.2	0.6 +	1.6	(31.3)	42	(13.8)	12		45.1					
21	766	4000S	26	7.0	0.6	0.0 +	0.1	(1.8)	1	(0.2)	1		2.1					
22	77	21L	26	7.0	0.6	0.0 +	0.0	(0.2)	1	(0.0)	1		0.2					
23	194	21L	26	7.0	0.6	0.0 +	0.0	(0.5)	1	(0.1)	1		0.5					
30	265	1945	91	16.7	77.4	1.8 +	3.8	(80.9)*	164	(11.2)	8		48.5	3	10		18	
31	286	4170	46	16.7	28.6	1.9 +	0.4	(32.2)*	96	(7.0)	5		19.3	3	10		18	
32	924	3896S	67	12.3	7.2	1.3 +	0.5	(26.1)*	46	(11.1)	11	(0.0)*	141.7	3	25		3	
33	308	2016	24	12.3	6.3	0.4 +	0.2	(7.7)*	41	(3.2)	2	(0.0)*	41.5	3	25		3	
34	766	32L	67	12.3	2.3	0.0 +	0.5	(7.0)	10	(1.9)	11		8.9	3	25		3	
40	1668	2197	84	16.7	5.6	0.0 +	2.6	(37.0)	10	(4.3)	5		41.3					
41	109	4000S	10	7.0	0.5	0.0 +	0.0	(0.2)	1	(0.0)	0		0.2					
42	308	41L	10	7.0	0.5	0.0 +	0.0	(0.6)	1	(0.1)	0		0.7					

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1495.5	62.4	24.0	14.4	13.2	(550.8) +	(48.8) +	(0.0) =	599.6	TOTALS

ROUTE

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	80.2	+	31.8	+	43.9	=	155.8

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 130

PROGRAM TRANSYT FINISHED

========== end of file ==========

Printed at 17:22:46 on 09/09/2015]

T R A N S Y T 12

Traffic Network Study Tool Analysis

Program Release 7 (July 2010)
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For sales and distribution information, program
advice and maintenance, contact:

TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770864
Nine Mile Ride Email: softwarebureau@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk RG40
3GA,UK

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "S2 2026 PM CD.DAT" at 11:20 on 20150825

TRANSYT 12.0

S2 M6 Junction 1 2026 PM Peak + Committed Development

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	= 2
NUMBER OF LINKS	= 18
NUMBER OF OPTIMISED NODES	= 2
MAXIMUM NUMBER OF GRAPHIC PLOTS	= 0
NUMBER OF STEPS IN CYCLE	= 60
MAXIMUM NUMBER OF SHARED STOPLINES	= 3
MAXIMUM NUMBER OF TIMING POINTS	= 2
MAXIMUM LINKS AT ANY NODE	= 6

CORE REQUESTED = 6891 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

(1)= TITLE:- S2 M6 Junction 1 2026 PM Peak + Committed Development

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME EFFECTIV PERIOD 1-1200 MINS.	DISPLAC START (SEC)	E-GREEN EMENTS END (SEC)	EQUISAT SETTINGS 0=UNEQUAL 0=NO 1=YES	FLOW CYCLE 1=EQUAL CYCLE	SCALE 10-200 %	CRUISE-SPEEDS SCALE 50-200 %	CARD32 0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL- CLIMB OUTPUT 1=FULL	DELAY VALUE P PER PCU-H	STOP VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260

CARD NO.	CARD TYPE	LIST OF NODES TO BE OPTIMISED														
3)=	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET.....					SECOND SET.....					THIRD SET.....				
4)=	7	12	14	0	0	0	13	15	0	0	0	21	22	23	0	0
5)=	7	32	34	0	0	0	41	42	0	0	0	0	0	0	0	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
6)=	10	1	7	7								
7)=	10	3	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
8)=	11	1	7	7								
9)=	11	3	7	7								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
10)=	12	1	1	0	0								
11)=	12	3	1	0	0								

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY LINKS LINK1 NO.	PRIORITY LINKS LINK2 NO.	LINK1 GIVEWAY COEFFS. ONLY % FLOW	A1 X100	A2 X100				LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
12)=	30	20	21	0	0	51	100	0	0	0	0	200	0	2207	0	0
13)=	30	40	41	0	0	51	100	0	0	0	0	200	0	2197	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN START STAGE	FIRST GREEN START LAG	FIRST GREEN END STAGE	FIRST GREEN END LAG	SECOND GREEN START STAGE	SECOND GREEN START LAG	SECOND GREEN END STAGE	SECOND GREEN END LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
14)=	31	10	1	1	7	2	0	0	0	0	0	200	-9999	1945	60	0
15)=	31	11	1	1	7	2	0	0	0	0	0	200	-9999	4170	60	0
16)=	31	12	1	2	7	1	0	0	0	0	0	158	0	3885	500	0
17)=	31	13	1	2	7	1	0	0	0	0	0	158	0	2010	500	0
18)=	31	14	1	1	0	1	0	0	0	0	0	158	0	0	0	0
19)=	31	15	1	1	0	1	0	0	0	0	0	158	0	0	0	0
20)=	31	21	0	0	0	0	0	0	0	0	0	84	0	4000	0	0
21)=	31	22	0	0	0	0	0	0	0	0	0	84	0	0	0	0
22)=	31	23	0	0	0	0	0	0	0	0	0	84	0	0	0	0
23)=	31	30	3	1	7	2	0	0	0	0	0	200	-9999	1945	60	0
24)=	31	31	3	1	7	2	0	0	0	0	0	200	-9999	4170	60	0
25)=	31	32	3	2	7	1	0	0	0	0	0	147	0	3896	500	0
26)=	31	33	3	2	7	1	0	0	0	0	0	147	0	2016	500	0
27)=	31	34	3	1	0	1	0	0	0	0	0	147	0	0	0	0
28)=	31	41	0	0	0	0	0	0	0	0	0	84	0	4000	0	0
29)=	31	42	0	0	0	0	0	0	0	0	0	84	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 ..... LINK NO.	ENTRY 1 ..... CRUISE SPEED	ENTRY 2 ..... LINK NO.	ENTRY 2 ..... FLOW	ENTRY 2 ..... CRUISE SPEED	ENTRY 3 ..... LINK NO.	ENTRY 3 ..... FLOW	ENTRY 3 ..... CRUISE SPEED	ENTRY 4 ..... LINK NO.	ENTRY 4 ..... FLOW	ENTRY 4 ..... CRUISE SPEED
30)=	32	10	288	0	0	0	43	0	0	0	0	0	0	0	0
31)=	32	11	670	0	0	0	43	0	0	0	0	0	0	0	0
32)=	32	12	817	0	40	817	43	0	0	0	0	0	0	0	0
33)=	32	13	230	0	40	230	43	0	0	0	0	0	0	0	0
34)=	32	14	58	0	41	58	43	0	0	0	0	0	0	0	0
35)=	32	15	24	0	41	24	43	0	0	0	0	0	0	0	0
36)=	32	20	1046	0	0	0	43	0	0	0	0	0	0	0	0
37)=	32	21	670	0	11	670	43	0	0	0	0	0	0	0	0
38)=	32	22	24	0	15	24	43	0	0	0	0	0	0	0	0
39)=	32	23	230	0	13	230	43	0	0	0	0	0	0	0	0
40)=	32	30	142	0	0	0	43	0	0	0	0	0	0	0	0
41)=	32	31	176	0	0	0	43	0	0	0	0	0	0	0	0
42)=	32	32	713	0	20	713	43	0	0	0	0	0	0	0	0
43)=	32	33	305	0	20	305	43	0	0	0	0	0	0	0	0
44)=	32	34	670	0	21	670	43	0	0	0	0	0	0	0	0
45)=	32	40	1672	0	0	0	43	0	0	0	0	0	0	0	0
46)=	32	41	82	0	31	82	43	0	0	0	0	0	0	0	0
47)=	32	42	305	0	33	305	43	0	0	0	0	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.	LIM IT	LINK NQUEUE	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
48)=	38	12	28	4500	14	4500	32	24	4500	33	12	4500	0	0	0

*****END OF SUBROUTINE TINPUT*****

60 SECOND CYCLE 60 STEPS

INITIAL SETTINGS
- (SECONDS)

NODE	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE NO 10
1	2	0	26								
3	2	0	15								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) UNIFORM (PCU-H/H)	RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END 1ST (SECONDS)	GREEN TIMES END 2ND (SECONDS)
10	288	1945	44	16.7	20.6	1.3 +	0.4	(23.4)*	82	(6.1)	4		14.1	1	7	26		
11	670	4170	48	16.7	18.4	3.0 +	0.5	(48.6)*	79	(13.6)	9		29.2	1	7	26		
12	816	3885S	48	13.2	12.9	2.5 +	0.4	(41.5)*	68	(14.2)	11	(0.0)*	221.8	1	33	0		
13	231	2010S	27	13.2	12.4	0.6 +	0.2	(11.3)*	61	(3.6)	3	(0.0)*	59.9	1	33	0		
14	58	12L	48	13.2	11.3	0.2 +	0.0	(2.6)	96	(1.4)	11		4.0	1	33	0		
15	24	13L	27	13.2	9.3	0.0 +	0.0	(0.9)	86	(0.5)	3		1.4	1	33	0		
20	1046	2207	60	16.7	3.1	0.1 +	0.8	(12.8)	18	(4.7)	5		17.5					
21	670	4000S	23	7.0	0.6	0.0 +	0.1	(1.5)	1	(0.2)	0		1.7					
22	24	21L	23	7.0	0.6	0.0 +	0.0	(0.1)	1	(0.0)	0		0.1					
23	231	21L	23	7.0	0.6	0.0 +	0.0	(0.5)	1	(0.1)	0		0.6					
30	142	1945	49	16.7	35.3	0.9 +	0.5	(19.8)*	106	(3.9)	3		11.9	3	7	15		
31	176	4170	28	16.7	26.7	1.1 +	0.2	(18.5)*	92	(4.2)	3		11.1	3	7	15		
32	713	3896S	55	12.3	6.1	0.9 +	0.3	(17.2)*	42	(7.7)	8	(0.0)*	93.7	3	22	0		
33	305	2016	23	12.3	6.1	0.4 +	0.2	(7.4)*	40	(3.1)	2	(0.0)*	40.1	3	22	0		
34	670	32L	55	12.3	1.8	0.0 +	0.3	(4.7)	10	(1.8)	8		6.5	3	22	0		
40	1672	2197	84	16.7	5.4	0.0 +	2.5	(35.8)	10	(4.1)	5		39.9					
41	82	4000S	10	7.0	0.5	0.0 +	0.0	(0.2)	1	(0.0)	0		0.2					
42	305	41L	10	7.0	0.5	0.0 +	0.0	(0.6)	1	(0.1)	0		0.7					

TOTAL TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL DISTANCE PERFORMANCE INDEX ($/H)	
1335.4	48.5	27.5	11.0	6.4	(512.7) + (	41.6) + (	0.0) =	554.3	TOTALS

****

	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	31.6 +	20.0 +	31.6 =	123.3

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 24

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

NODE	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE NO 10
1	2	0	26								
3	2	0	15								

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1335.4	48.5	27.5	11.0	6.4	(512.7) + (	41.6) + (	0.0) =	554.3	TOTALS

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 104

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

NODE	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE NO 10
1	2	0	26								
3	2	0	15								

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1335.4	48.5	27.5	11.0	6.4	(512.7) + (	41.6) + (	0.0) =	554.3	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 86

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

NODE	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE NO 10
1	2	8	26								
3	2	1	15								

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1335.4	51.4	26.0	11.5	8.8	(431.6) + (	35.6) + (	0.0) =	467.2	TOTALS

NO. OF ENTRIES TO SUBPT = 16
NO. OF LINKS RECALCULATED= 256

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1 2 59 17
3 2 1 15

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1335.4	51.3	26.0	11.4	8.8	(428.9) + (	37.7) + (	0.0) =	466.5	TOTALS

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 110

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1 2 59 17
3 2 1 15

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1335.4	51.3	26.0	11.4	8.8	(428.9) + (	37.7) + (	0.0) =	466.5	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 94

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1 2 1 19
3 2 1 15

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1335.4	51.2	26.1	11.3	8.8	(427.8) + (	34.8) + (	0.0) =	462.6	TOTALS

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 110

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1 2 1 19
3 2 1 15

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1335.4	51.2	26.1	11.3	8.8	(427.8) + (	34.8) + (	0.0) =	462.6	TOTALS

NO. OF ENTRIES TO SUBPT = 7
NO. OF LINKS RECALCULATED= 126

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	1	19								
3	2	1	15								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) UNIFORM (PCU-H/H)	DELAY RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	STOPS MEAN STOPS /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END 1ST (SECONDS)	GREEN TIMES END 2ND (SECONDS)
10	288	1945	74	16.7	39.9	1.8 +	1.4	(45.3)*	117	(8.7)	6		27.2	1	8		19	
11	670	4170	80	16.7	33.6	4.3 +	2.0	(88.8)*	108	(18.7)	13		53.3	1	8		19	
12	816	3885S	37	13.2	7.4	1.4 +	0.3	(23.7)*	49	(10.3)	8	(0.0)*	128.7	1	26		1	
13	231	2010S	21	13.2	7.3	0.3 +	0.1	(6.7)*	45	(2.6)	2	(0.0)*	36.1	1	26		1	
14	58	12L	37	13.2	3.6	0.0 +	0.0	(0.8)	52	(0.8)	8		1.6	1	26		1	
15	24	13L	21	13.2	2.7	0.0 +	0.0	(0.3)	28	(0.2)	2		0.4	1	26		1	
20	1046	2207	60	16.7	3.4	0.2 +	0.8	(13.8)	21	(5.7)	5		19.5					
21	670	4000S	23	7.0	0.6	0.0 +	0.1	(1.5)	1	(0.2)	0		1.7					
22	24	21L	23	7.0	0.6	0.0 +	0.0	(0.1)	1	(0.0)	0		0.1					
23	231	21L	23	7.0	0.6	0.0 +	0.0	(0.5)	1	(0.1)	0		0.6					
30	142	1945	55	16.7	39.5	1.0 +	0.6	(22.1)*	113	(4.1)	3		13.3	3	8		15	
31	176	4170	32	16.7	28.3	1.2 +	0.2	(19.6)*	95	(4.3)	3		11.8	3	8		15	
32	713	3896S	53	12.3	5.6	0.8 +	0.3	(15.7)*	39	(7.2)	6	(0.0)*	85.7	3	22		1	
33	305	2016	23	12.3	5.7	0.3 +	0.1	(6.8)*	38	(3.0)	2	(0.0)*	37.2	3	22		1	
34	670	32L	53	12.3	1.5	0.0 +	0.3	(4.1)	4	(0.7)	6		4.8	3	22		1	
40	1672	2197	84	16.7	5.4	0.0 +	2.5	(35.8)	9	(4.1)	4		39.9					
41	82	4000S	10	7.0	0.5	0.0 +	0.0	(0.2)	1	(0.0)	0		0.2					
42	305	41L	10	7.0	0.5	0.0 +	0.0	(0.6)	1	(0.1)	0		0.7					

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1335.4	51.2	26.1	11.3	8.8	(427.8) +	(34.8) +	(0.0) =	462.6	TOTALS

ROUTE

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	71.6	+	23.2	+	32.2	=	127.0

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 94

PROGRAM TRANSYT FINISHED

========== end of file ==========

Printed at 17:23:06 on 09/09/2015]

T R A N S Y T 12

Traffic Network Study Tool Analysis

Program Release 7 (July 2010)
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For sales and distribution information, program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
3GA,UK
Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770864
Email: softwarebureau@trl.co.uk
Web: www.trlsoftware.co.uk RG40

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Run with file:- "S4 2026 AM CD PD.DAT" at 11:39 on 20150825

TRANSYT 12.0

Scenario 4 M6 Junction 1 2026 AM Peak + Committed & Proposed Development

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	= 2
NUMBER OF LINKS	= 18
NUMBER OF OPTIMISED NODES	= 2
MAXIMUM NUMBER OF GRAPHIC PLOTS	= 0
NUMBER OF STEPS IN CYCLE	= 60
MAXIMUM NUMBER OF SHARED STOPLINES	= 3
MAXIMUM NUMBER OF TIMING POINTS	= 2
MAXIMUM LINKS AT ANY NODE	= 6

CORE REQUESTED = 6891 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

(1)= TITLE:- Scenario 4 M6 Junction 1 2026 AM Peak + Committed & Proposed Development

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME PERIOD 1-1200 MINS.	EFFECTIV DISPLAC START (SEC)	E-GREEN EMENTS END (SEC)	EQUISAT SETTINGS 0=NO 1=YES	0=UNEQUAL CYCLE 1=EQUAL	FLOW SCALE 10-200 %	CRUISE-SPEEDS SCALE 50-200 %	CARD32 0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL- CLIMB OUTPUT 1=FULL	DELAY VALUE P PER PCU-H	STOP VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260

CARD NO.	CARD TYPE	LIST OF NODES TO BE OPTIMISED													
3)=	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET.....					SECOND SET.....					THIRD SET.....				
4)=	7	12	14	0	0	0	13	15	0	0	0	21	22	23	0	0
5)=	7	32	34	0	0	0	41	42	0	0	0	0	0	0	0	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
6)=	10	1	7	7								
7)=	10	3	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
8)=	11	1	7	7								
9)=	11	3	7	7								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
10)=	12	1	1	0	0								
11)=	12	3	1	0	0								

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY LINKS LINK1 NO.	LINK2 NO.	LINK1 GIVEWAY COEFFS. ONLY % FLOW	A1 X100	A2 X100					LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
12)=	30	20	21	0	0	51	100	0	0	0	0	200	0	2207	0	0
13)=	30	40	41	0	0	51	100	0	0	0	0	200	0	2197	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN START STAGE	FIRST GREEN START LAG	FIRST GREEN END STAGE	FIRST GREEN END LAG	SECOND GREEN START STAGE	SECOND GREEN START LAG	SECOND GREEN END STAGE	SECOND GREEN END LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
14)=	31	10	1	1	7	2	0	0	0	0	0	200	-9999	1945	60	0
15)=	31	11	1	1	7	2	0	0	0	0	0	200	-9999	4170	60	0
16)=	31	12	1	2	7	1	0	0	0	0	0	158	0	3885	500	0
17)=	31	13	1	2	7	1	0	0	0	0	0	158	0	2010	500	0
18)=	31	14	1	1	0	1	0	0	0	0	0	158	0	0	0	0
19)=	31	15	1	1	0	1	0	0	0	0	0	158	0	0	0	0
20)=	31	21	0	0	0	0	0	0	0	0	0	84	0	4000	0	0
21)=	31	22	0	0	0	0	0	0	0	0	0	84	0	0	0	0
22)=	31	23	0	0	0	0	0	0	0	0	0	84	0	0	0	0
23)=	31	30	3	1	7	2	0	0	0	0	0	200	-9999	1945	60	0
24)=	31	31	3	1	7	2	0	0	0	0	0	200	-9999	4170	60	0
25)=	31	32	3	2	7	1	0	0	0	0	0	147	0	3896	500	0
26)=	31	33	3	2	7	1	0	0	0	0	0	147	0	2016	500	0
27)=	31	34	3	1	0	1	0	0	0	0	0	147	0	0	0	0
28)=	31	41	0	0	0	0	0	0	0	0	0	84	0	4000	0	0
29)=	31	42	0	0	0	0	0	0	0	0	0	84	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 ..... LINK NO.	CRUISE SPEED	ENTRY 2 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 3 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 4 ..... LINK NO.	FLOW	CRUISE SPEED
30)=	32	10	335	0	0	43	0	0	0	0	0	0	0	0	0
31)=	32	11	766	0	0	43	0	0	0	0	0	0	0	0	0
32)=	32	12	765	0	40	43	0	0	0	0	0	0	0	0	0
33)=	32	13	193	0	40	43	0	0	0	0	0	0	0	0	0
34)=	32	14	32	0	41	43	0	0	0	0	0	0	0	0	0
35)=	32	15	77	0	41	43	0	0	0	0	0	0	0	0	0
36)=	32	20	1313	0	0	43	0	0	0	0	0	0	0	0	0
37)=	32	21	766	0	11	43	0	0	0	0	0	0	0	0	0
38)=	32	22	77	0	15	43	0	0	0	0	0	0	0	0	0
39)=	32	23	193	0	13	43	0	0	0	0	0	0	0	0	0
40)=	32	30	265	0	0	43	0	0	0	0	0	0	0	0	0
41)=	32	31	286	0	0	43	0	0	0	0	0	0	0	0	0
42)=	32	32	956	0	20	43	0	0	0	0	0	0	0	0	0
43)=	32	33	315	0	20	43	0	0	0	0	0	0	0	0	0
44)=	32	34	760	0	21	43	0	0	0	0	0	0	0	0	0
45)=	32	40	1692	0	0	43	0	0	0	0	0	0	0	0	0
46)=	32	41	109	0	31	43	0	0	0	0	0	0	0	0	0
47)=	32	42	315	0	33	43	0	0	0	0	0	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.	LIM IT	LINK NQUEUE	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
48)=	38	12	28	1500	14	4500	32	24	4500	33	12	4500	0	0	0

*****END OF SUBROUTINE TINPUT*****

60 SECOND CYCLE 60 STEPS

INITIAL SETTINGS
- (SECONDS)

NODE	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE NO 10
1	2	0	29								
3	2	0	18								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) UNIFORM (PCU-H/H)	RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	STOPS MEAN /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END 1ST (SECONDS)	GREEN TIMES END 2ND (SECONDS)
10	335	1945	45	16.7	18.2	1.3	+ 0.4	(24.0)*	77	(6.7)	5		14.4	1	7		29	
11	766	4170	48	16.7	16.1	3.0	+ 0.5	(48.8)*	75	(14.7)	10		29.3	1	7		29	
12	765	3885S	49	13.2	15.0	2.7	+ 0.5	(45.3)*	72	(14.3)	10	(0.0)*	240.8	1	36		0	
13	193	2010S	32	13.2	14.9	0.6	+ 0.2	(11.3)*	70	(3.5)	4	(0.0)*	60.0	1	36		0	
14	32	12L	49	13.2	13.3	0.1	+ 0.0	(1.7)	98	(0.8)	10		2.5	1	36		0	
15	77	13L	32	13.2	12.2	0.2	+ 0.1	(3.7)	96	(1.9)	4		5.6	1	36		0	
20	1313	2207	78	16.7	6.2	0.5	+ 1.8	(31.9)	36	(12.0)	11		43.9					
21	766	4000S	26	7.0	0.6	0.0	+ 0.1	(1.8)	1	(0.2)	0		2.0					
22	77	21L	26	7.0	0.6	0.0	+ 0.0	(0.2)	1	(0.0)	0		0.2					
23	193	21L	26	7.0	0.6	0.0	+ 0.0	(0.5)	1	(0.1)	0		0.5					
30	265	1945	68	16.7	36.5	1.6	+ 1.1	(38.2)*	111	(7.6)	5		22.9	3	7		18	
31	286	4170	34	16.7	23.9	1.6	+ 0.3	(27.0)*	87	(6.4)	4		16.2	3	7		18	
32	956	3896S	73	12.3	9.8	1.8	+ 0.8	(36.9)*	64	(15.7)	23	(0.0)*	200.1	3	25		0	
33	315	2016	26	12.3	7.7	0.5	+ 0.2	(9.6)*	45	(3.7)	3	(0.0)*	51.6	3	25		0	
34	760	32L	73	12.3	6.4	0.7	+ 0.6	(19.2)	73	(14.2)	23		33.4	3	25		0	
40	1692	2197	85	16.7	6.1	0.0	+ 2.9	(41.0)	11	(5.0)	6		46.0					
41	109	4000S	11	7.0	0.5	0.0	+ 0.0	(0.2)	1	(0.0)	0		0.2					
42	315	41L	11	7.0	0.5	0.0	+ 0.0	(0.6)	1	(0.1)	0		0.7					

TOTAL TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL DISTANCE PERFORMANCE INDEX ($/H)	
1521.2	59.4	25.6	14.7	9.3	(698.8) +	(71.4) +	(0.0) =	770.2	TOTALS

****

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	81.6	+	27.7	+	48.7	=	157.9

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 30

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

1	2	9	38
3	2	0	18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1521.2	59.1	25.7	14.4	9.3	(697.3) +	(57.4) +	(0.0) =	754.8	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 86

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

1	2	9	38
3	2	0	18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1521.2	59.1	25.7	14.4	9.3	(697.3) +	(57.4) +	(0.0) =	754.8	TOTALS

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 110

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

1	2	16	36
3	2	3	18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1521.2	64.9	23.4	15.6	14.0	(614.0) +	(59.5) +	(0.0) =	673.5	TOTALS

NO. OF ENTRIES TO SUBPT = 20
NO. OF LINKS RECALCULATED= 328

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1 2 7 27
3 2 3 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1521.2	64.3	23.7	14.9	14.0	(583.0) +	(56.1) +	(0.0) =	639.1	TOTALS

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 120

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1 2 7 27
3 2 3 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1521.2	64.3	23.7	14.9	14.0	(583.0) +	(56.1) +	(0.0) =	639.1	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 114

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1 2 5 25
3 2 3 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1521.2	64.2	23.7	14.8	14.0	(578.0) +	(57.1) +	(0.0) =	635.0	TOTALS

NO. OF ENTRIES TO SUBPT = 7
NO. OF LINKS RECALCULATED= 136

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1 2 5 25
3 2 3 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1521.2	64.2	23.7	14.8	14.0	(578.0) +	(57.1) +	(0.0) =	635.0	TOTALS

NO. OF ENTRIES TO SUBPT = 9
NO. OF LINKS RECALCULATED= 184

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE NO 10
1	2	5	25								
3	2	3	18								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) UNIFORM (PCU-H/H)	DELAY RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	STOPS MEAN STOPS /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END 1ST (SECONDS)	GREEN TIMES END 2ND (SECONDS)
10	335	1945	74	16.7	36.1	2.0 +	1.4	(47.7)*	111	(9.6)	6		28.6	1	12		25	
11	766	4170	79	16.7	30.2	4.6 +	1.8	(91.1)*	103	(20.4)	14		54.7	1	12		25	
12	765	3885S	36	13.2	8.3	1.5 +	0.3	(25.2)*	52	(10.2)	8	(0.0)*	136.1	1	32		5	
13	193	2010S	24	13.2	8.4	0.3 +	0.1	(6.4)*	49	(2.5)	3	(0.0)*	34.5	1	32		5	
14	32	12L	36	13.2	5.6	0.0 +	0.0	(0.7)	71	(0.6)	8		1.3	1	32		5	
15	77	13L	24	13.2	4.9	0.1 +	0.0	(1.5)	59	(1.2)	3		2.7	1	32		5	
20	1313	2207	78	16.7	6.9	0.7 +	1.8	(35.6)	46	(15.4)	13		51.1					
21	766	4000S	26	7.0	0.6	0.0 +	0.1	(1.8)	1	(0.2)	1		2.1					
22	77	21L	26	7.0	0.6	0.0 +	0.0	(0.2)	1	(0.0)	1		0.2					
23	193	21L	26	7.0	0.6	0.0 +	0.0	(0.5)	1	(0.1)	1		0.5					
30	265	1945	91	16.7	77.4	1.8 +	3.8	(80.9)*	164	(11.2)	8		48.5	3	10		18	
31	286	4170	46	16.7	28.6	1.9 +	0.4	(32.2)*	96	(7.0)	5		19.3	3	10		18	
32	956	3896S	68	12.3	7.4	1.4 +	0.6	(27.9)*	48	(11.8)	14	(0.0)*	151.2	3	25		3	
33	315	2016	24	12.3	6.4	0.4 +	0.2	(8.0)*	41	(3.3)	2	(0.0)*	43.2	3	25		3	
34	760	32L	68	12.3	2.5	0.1 +	0.5	(7.4)	13	(2.6)	14		10.0	3	25		3	
40	1692	2197	85	16.7	6.1	0.0 +	2.9	(41.0)	21	(9.1)	6		50.1					
41	109	4000S	11	7.0	0.5	0.0 +	0.0	(0.2)	1	(0.0)	0		0.2					
42	315	41L	11	7.0	0.5	0.0 +	0.0	(0.6)	1	(0.1)	0		0.7					

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1521.2	64.2	23.7	14.8	14.0	(578.0) +	(57.1) +	(0.0) =	635.0	TOTALS

ROUTE

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	81.6	+	33.1	+	48.0	=	162.7

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 130

PROGRAM TRANSYT FINISHED

========== end of file ==========

Printed at 17:24:04 on 09/09/2015]

T R A N S Y T 12

Traffic Network Study Tool Analysis

Program Release 7 (July 2010)
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For sales and distribution information, program advice and maintenance, contact:

TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770864
Nine Mile Ride Email: softwarebureau@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk RG40
3GA,UK

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Run with file:- "S4 2026 PM CD PD.DAT" at 11:43 on 20150825

TRANSYT 12.0

S4 M6 Junction 1 2026 PM Peak + Committed & Proposed Development

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	= 2
NUMBER OF LINKS	= 18
NUMBER OF OPTIMISED NODES	= 2
MAXIMUM NUMBER OF GRAPHIC PLOTS	= 0
NUMBER OF STEPS IN CYCLE	= 60
MAXIMUM NUMBER OF SHARED STOPLINES	= 3
MAXIMUM NUMBER OF TIMING POINTS	= 2
MAXIMUM LINKS AT ANY NODE	= 6

CORE REQUESTED = 6891 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

(1)= TITLE:- S4 M6 Junction 1 2026 PM Peak + Committed & Proposed Development

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME PERIOD 1-1200 MINS.	EFFECTIV DISPLAC START (SEC)	E-GREEN EMENTS END (SEC)	EQUISAT SETTINGS 0=NO 1=YES	0=UNEQUAL CYCLE 1=EQUAL	FLOW SCALE 10-200 %	CRUISE-SPEEDS SCALE 50-200 %	CARD32 0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL- CLIMB OUTPUT 1=FULL	DELAY VALUE P PER PCU-H	STOP VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260

CARD NO.	CARD TYPE	LIST OF NODES TO BE OPTIMISED													
3)=	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET.....					SECOND SET.....					THIRD SET.....				
4)=	7	12	14	0	0	0	13	15	0	0	0	21	22	23	0	0
5)=	7	32	34	0	0	0	41	42	0	0	0	0	0	0	0	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
6)=	10	1	7	7								
7)=	10	3	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
8)=	11	1	7	7								
9)=	11	3	7	7								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
10)=	12	1	1	0	0								
11)=	12	3	1	0	0								

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY LINKS LINK1 NO.	LINK2 NO.	LINK1 GIVEWAY COEFFS. ONLY % FLOW	A1 X100	A2 X100				LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
12)=	30	20	21	0	0	51	100	0	0	0	0	200	0	2207	0	0
13)=	30	40	41	0	0	51	100	0	0	0	0	200	0	2197	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN START STAGE	FIRST GREEN START LAG	FIRST GREEN END STAGE	FIRST GREEN END LAG	SECOND GREEN START STAGE	SECOND GREEN START LAG	SECOND GREEN END STAGE	SECOND GREEN END LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
14)=	31	10	1	1	7	2	0	0	0	0	0	200	-9999	1945	60	0
15)=	31	11	1	1	7	2	0	0	0	0	0	200	-9999	4170	60	0
16)=	31	12	1	2	7	1	0	0	0	0	0	158	0	3885	500	0
17)=	31	13	1	2	7	1	0	0	0	0	0	158	0	2010	500	0
18)=	31	14	1	1	0	1	0	0	0	0	0	158	0	0	0	0
19)=	31	15	1	1	0	1	0	0	0	0	0	158	0	0	0	0
20)=	31	21	0	0	0	0	0	0	0	0	0	84	0	4000	0	0
21)=	31	22	0	0	0	0	0	0	0	0	0	84	0	0	0	0
22)=	31	23	0	0	0	0	0	0	0	0	0	84	0	0	0	0
23)=	31	30	3	1	7	2	0	0	0	0	0	200	-9999	1945	60	0
24)=	31	31	3	1	7	2	0	0	0	0	0	200	-9999	4170	60	0
25)=	31	32	3	2	7	1	0	0	0	0	0	147	0	3896	500	0
26)=	31	33	3	2	7	1	0	0	0	0	0	147	0	2016	500	0
27)=	31	34	3	1	0	1	0	0	0	0	0	147	0	0	0	0
28)=	31	41	0	0	0	0	0	0	0	0	0	84	0	4000	0	0
29)=	31	42	0	0	0	0	0	0	0	0	0	84	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 ..... LINK NO.	ENTRY 1 ..... CRUISE SPEED	ENTRY 2 ..... LINK NO.	ENTRY 2 ..... FLOW	ENTRY 2 ..... CRUISE SPEED	ENTRY 3 ..... LINK NO.	ENTRY 3 ..... FLOW	ENTRY 3 ..... CRUISE SPEED	ENTRY 4 ..... LINK NO.	ENTRY 4 ..... FLOW	ENTRY 4 ..... CRUISE SPEED
30)=	32	10	294	0	0	0	43	0	0	0	0	0	0	0	0
31)=	32	11	670	0	0	0	43	0	0	0	0	0	0	0	0
32)=	32	12	828	0	40	828	43	0	0	0	0	0	0	0	0
33)=	32	13	230	0	40	230	43	0	0	0	0	0	0	0	0
34)=	32	14	58	0	41	58	43	0	0	0	0	0	0	0	0
35)=	32	15	24	0	41	24	43	0	0	0	0	0	0	0	0
36)=	32	20	1097	0	0	0	43	0	0	0	0	0	0	0	0
37)=	32	21	670	0	11	670	43	0	0	0	0	0	0	0	0
38)=	32	22	24	0	15	24	43	0	0	0	0	0	0	0	0
39)=	32	23	230	0	13	230	43	0	0	0	0	0	0	0	0
40)=	32	30	142	0	0	0	43	0	0	0	0	0	0	0	0
41)=	32	31	176	0	0	0	43	0	0	0	0	0	0	0	0
42)=	32	32	752	0	20	752	43	0	0	0	0	0	0	0	0
43)=	32	33	317	0	20	317	43	0	0	0	0	0	0	0	0
44)=	32	34	670	0	21	670	43	0	0	0	0	0	0	0	0
45)=	32	40	1683	0	0	0	43	0	0	0	0	0	0	0	0
46)=	32	41	82	0	31	82	43	0	0	0	0	0	0	0	0
47)=	32	42	317	0	33	317	43	0	0	0	0	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.	LIM IT	LINK NQUEUE	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
48)=	38	12	28	1500	14	4500	32	24	4500	33	12	4500	0	0	0

*****END OF SUBROUTINE TINPUT*****

60 SECOND CYCLE 60 STEPS

INITIAL SETTINGS
- (SECONDS)

NODE	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10 NO
1	2	0	26								
3	2	0	14								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) UNIFORM (PCU-H/H)	RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND END (SECONDS)
10	294	1945	45	16.7	20.8	1.3 +	0.4	(24.1)*	82	(6.2)	4		14.5	1	7	26
11	670	4170	48	16.7	18.4	3.0 +	0.5	(48.6)*	79	(13.6)	9		29.2	1	7	26
12	828	3885S	49	13.2	13.0	2.5 +	0.4	(42.4)*	68	(14.5)	11	(0.0)*	226.2	1	33	0
13	229	2010S	27	13.2	12.4	0.6 +	0.2	(11.2)*	61	(3.6)	3	(0.0)*	59.4	1	33	0
14	58	12L	49	13.2	11.5	0.2 +	0.0	(2.6)	96	(1.4)	11		4.1	1	33	0
15	24	13L	27	13.2	9.4	0.0 +	0.0	(0.9)	87	(0.5)	3		1.4	1	33	0
20	1097	2207	63	16.7	3.4	0.2 +	0.9	(14.6)	19	(5.5)	5		20.1			
21	670	4000S	23	7.0	0.6	0.0 +	0.1	(1.5)	1	(0.2)	0		1.7			
22	24	21L	23	7.0	0.6	0.0 +	0.0	(0.1)	1	(0.0)	0		0.1			
23	229	21L	23	7.0	0.6	0.0 +	0.0	(0.5)	1	(0.1)	0		0.6			
30	142	1945	55	16.7	39.5	1.0 +	0.6	(22.1)*	113	(4.1)	3		13.3	3	7	14
31	176	4170	32	16.7	28.3	1.2 +	0.2	(19.6)*	95	(4.3)	3		11.8	3	7	14
32	753	3896S	55	12.3	5.7	0.9 +	0.3	(16.9)*	40	(7.7)	6	(0.0)*	92.1	3	21	0
33	316	2016	24	12.3	5.7	0.3 +	0.2	(7.1)*	38	(3.1)	2	(0.0)*	38.7	3	21	0
34	670	32L	55	12.3	1.6	0.0 +	0.3	(4.3)	5	(0.9)	6		5.2	3	21	0
40	1683	2197	84	16.7	5.7	0.0 +	2.7	(37.9)	10	(4.4)	5		42.3			
41	82	4000S	10	7.0	0.5	0.0 +	0.0	(0.2)	1	(0.0)	0		0.2			
42	316	41L	10	7.0	0.5	0.0 +	0.0	(0.6)	1	(0.1)	0		0.7			

TOTAL TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL DISTANCE PERFORMANCE INDEX ($/H)	
1359.3	49.6	27.4	11.1	6.8	(519.5) + (	41.9) + (	0.0) =	561.5	TOTALS

****

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	92.9	+	20.7	+	32.0	=	125.6

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 24

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

1	2	0	26	
3	2	0	14	

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1359.3	49.6	27.4	11.1	6.8	(519.5) + (	41.9) + (	0.0) =	561.5	TOTALS

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 104

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

1	2	0	26	
3	2	0	14	

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1359.3	49.6	27.4	11.1	6.8	(519.5) + (	41.9) + (	0.0) =	561.5	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 86

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

1	2	8	26	
3	2	0	14	

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1359.3	52.5	25.9	11.7	9.2	(447.3) + (	37.6) + (	0.0) =	484.9	TOTALS

NO. OF ENTRIES TO SUBPT = 15
NO. OF LINKS RECALCULATED= 250

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1 2 59 17
3 2 0 14

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1359.3	52.4	25.9	11.5	9.2	(442.9) + (	37.7) + (	0.0) =	480.6	TOTALS

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 110

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1 2 59 17
3 2 0 14

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1359.3	52.4	25.9	11.5	9.2	(442.9) + (	37.7) + (	0.0) =	480.6	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 94

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1 2 0 18
3 2 0 14

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1359.3	52.4	26.0	11.5	9.2	(442.7) + (	36.9) + (	0.0) =	479.6	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 94

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1 2 0 18
3 2 0 14

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1359.3	52.4	26.0	11.5	9.2	(442.7) + (	36.9) + (	0.0) =	479.6	TOTALS

NO. OF ENTRIES TO SUBPT = 7
NO. OF LINKS RECALCULATED= 126

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE NO 10
1	2	0	18								
3	2	0	14								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	RANDOM+ OVERSAT DELAY	COST OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	START END 2ND
10	294	1945	76	16.7	41.0	1.8 +	1.5	(47.5)*	118	(9.0)	6		28.5	1	7	18
11	670	4170	80	16.7	33.6	4.3 +	2.0	(88.8)*	108	(18.7)	13		53.3	1	7	18
12	828	3885S	38	13.2	7.4	1.4 +	0.3	(24.2)*	49	(10.5)	8	(0.0)*	131.3	1	25	0
13	229	2010S	21	13.2	7.3	0.3 +	0.1	(6.6)*	44	(2.6)	2	(0.0)*	35.7	1	25	0
14	58	12L	38	13.2	3.6	0.0 +	0.0	(0.8)	54	(0.8)	8		1.6	1	25	0
15	24	13L	21	13.2	2.7	0.0 +	0.0	(0.3)	28	(0.2)	2		0.4	1	25	0
20	1097	2207	63	16.7	3.6	0.3 +	0.9	(15.7)	23	(6.4)	6		22.1			
21	670	4000S	23	7.0	0.6	0.0 +	0.1	(1.5)	1	(0.2)	0		1.7			
22	24	21L	23	7.0	0.6	0.0 +	0.0	(0.1)	1	(0.0)	0		0.1			
23	229	21L	23	7.0	0.6	0.0 +	0.0	(0.5)	1	(0.1)	0		0.6			
30	142	1945	55	16.7	39.5	1.0 +	0.6	(22.1)*	113	(4.1)	3		13.3	3	7	14
31	176	4170	32	16.7	28.3	1.2 +	0.2	(19.6)*	95	(4.3)	3		11.8	3	7	14
32	753	3896S	55	12.3	5.7	0.9 +	0.3	(16.9)*	40	(7.7)	6	(0.0)*	92.1	3	21	0
33	316	2016	24	12.3	5.7	0.3 +	0.2	(7.1)*	38	(3.1)	2	(0.0)*	38.7	3	21	0
34	670	32L	55	12.3	1.6	0.0 +	0.3	(4.2)	5	(0.9)	6		5.1	3	21	0
40	1683	2197	84	16.7	5.7	0.0 +	2.7	(37.9)	10	(4.4)	5		42.3			
41	82	4000S	10	7.0	0.5	0.0 +	0.0	(0.2)	1	(0.0)	0		0.2			
42	316	41L	10	7.0	0.5	0.0 +	0.0	(0.6)	1	(0.1)	0		0.7			

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1359.3	52.4	26.0	11.5	9.2	(442.7) +	(36.9) +	(0.0) =	479.6	TOTALS

ROUTE

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	72.9	+	23.9	+	33.2	=	130.0

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 94

PROGRAM TRANSYT FINISHED

========== end of file ==========

Printed at 17:24:24 on 09/09/2015]

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\New Rbt on Mere Lane\ S5 2026 AM Peak Base+CD+PD+Symmetry.vai"
(drive-on-the-left) at 15:58:54 on Tuesday, 1 September 2015

FILE PROPERTIES

RUN TITLE: S5 New Access Roundabout on Mere Lane AM Peak 2026 Base + CD + PD + Symmetry Par LOCATION:
Magna Park Site Access
DATE: 14/07/31
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB
NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - Site Access ARM B
- Mere Lane East ARM C -
Hunter Bld
ARM D - Mere Lane West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	5.50	8.00	8.00	30.00	52.00	55.0	0.617	31.686
ARM B	3.00	6.00	22.00	60.00	52.00	40.0	0.569	25.644
ARM C	5.50	6.00	5.00	20.00	52.00	52.0	0.568	27.422
ARM D	3.65	7.50	23.00	65.00	52.00	36.0	0.638	31.499

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING

FACTORS

T13 IARM

I	FLOW SCALE(%) I A
B	100
C	100
D	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	FLOW STOPS	BEFORE AT TOP OF PEAK	AFTER AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) TO RISE	FALLING	PEAK	I ARM
A	15.00	45.00	75.00	1.94	2.91	1.94		
ARM B	15.00	45.00	75.00	1.54	2.31	1.54		
ARM C	15.00	45.00	75.00	3.01	4.52	3.01		
ARM D	15.00	45.00	75.00	5.24	7.86	5.24		DEMAND

SET TITLE: AM Peak 2006 Base Flows

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.15 - 08.45	ARM A	0.000	0.026	0.419	0.555
		0.0	4.0	65.0	86.0
		(0.0)%	(0.0)%	(33.8)%	(24.4)%
	ARM B	0.138	0.000	0.106	0.756
		17.0	0.0	13.0	93.0
		(0.0)%	(0.0)%	(0.0)%	(4.3)%
	ARM C	0.880	0.012	0.000	0.108
		212.0	3.0	0.0	26.0
		(9.4)%	(0.0)%	(0.0)%	(38.5)%
	ARM D	0.623	0.088	0.289	0.000
		261.0	37.0	121.0	0.0
		(5.7)%	(2.7)%	(12.4)%	(0.0)%

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	1.94	23.74	0.082	- -	-	0.0	0.1	1.3	-	0.046
ARM B	1.54	22.56	0.068	- -	-	0.0	0.1	1.1	-	0.048
ARM C	3.02	22.99	0.132	- -	-	0.0	0.2	2.2	-	0.050
ARM D	5.26	27.46	0.191	- -	-	0.0	0.2	3.5	-	0.045
07.30-07.45									
ARM A	2.32	23.53	0.099	- -	-	0.1	0.1	1.6	-	0.047
ARM B	1.84	22.11	0.083	- -	-	0.1	0.1	1.3	-	0.049
ARM C	3.61	22.72	0.159	- -	-	0.2	0.2	2.8	-	0.052
ARM D	6.28	27.09	0.232	- -	-	0.2	0.3	4.4	-	0.048
07.45-08.00									
ARM A	2.84	23.24	0.122	- -	-	0.1	0.1	2.1	-	0.049
ARM B	2.26	21.50	0.105	- -	-	0.1	0.1	1.7	-	0.052
ARM C	4.42	22.35	0.198	- -	-	0.2	0.2	3.6	-	0.056
ARM D	7.69	26.59	0.289	- -	-	0.3	0.4	6.0	-	0.053
08.00-08.15									
ARM A	2.84	23.24	0.122	- -	-	0.1	0.1	2.1	-	0.049
ARM B	2.26	21.50	0.105	- -	-	0.1	0.1	1.8	-	0.052
ARM C	4.42	22.34	0.198	- -	-	0.2	0.2	3.7	-	0.056
ARM D	7.69	26.59	0.289	- -	-	0.4	0.4	6.1	-	0.053
08.15-08.30									
ARM A	2.32	23.53	0.099	- -	-	0.1	0.1	1.7	-	0.047
ARM B	1.84	22.11	0.083	- -	-	0.1	0.1	1.4	-	0.049
ARM C	3.61	22.72	0.159	- -	-	0.2	0.2	2.9	-	0.052
ARM D	6.28	27.09	0.232	- -	-	0.4	0.3	4.6	-	0.048
08.30-08.45									
ARM A	1.94	23.73	0.082	- -	-	0.1	0.1	1.4	-	0.046
ARM B	1.54	22.55	0.068	- -	-	0.1	0.1	1.1	-	0.048
ARM C	3.02	22.99	0.132	- -	-	0.2	0.2	2.3	-	0.050
ARM D	5.26	27.45	0.192	- -	-	0.3	0.2	3.6	-	0.045

---------- QUEUE

AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.1
07.45	0.1
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.1
07.45	0.1
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.2
07.45	0.2
08.00	0.2
08.15	0.2
08.30	0.2
08.45	0.2

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.2
07.45	0.3
08.00	0.4
08.15	0.4
08.30	0.3
08.45	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)	T75
A	213.3	142.2	10.1	0.05	10.1	0.05	
B	169.3	112.9	8.4	0.05	8.4	0.05	
C	331.7	221.1	17.5	0.05	17.5	0.05	
D	576.7	384.5	28.2	0.05	28.2	0.05	
ALL	1291.1	860.7	64.3	0.05	64.3	0.05	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 17:15:52 on 09/09/2015]

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\New Rbt on Mere Lane\ S5 2026 PM Peak Base+CD+PD+Symmetry.vai"
(drive-on-the-left) at 16:01:18 on Tuesday, 1 September 2015

FILE PROPERTIES

RUN TITLE: S5 New Access Roundabout on Mere Lane PM Peak 2026 Base + CD + PD + Symmetry Par LOCATION:
Magna Park Site Access
DATE: 14/07/31
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB
NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - Site Access ARM B
- Mere Lane East ARM C -
Hunter Bld
ARM D - Mere Lane West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	5.50	8.00	8.00	30.00	52.00	55.0	0.617	31.686
ARM B	3.00	6.00	22.00	60.00	52.00	40.0	0.569	25.644
ARM C	5.50	6.00	5.00	20.00	52.00	52.0	0.568	27.422
ARM D	3.65	7.50	23.00	65.00	52.00	36.0	0.638	31.499

V = approach half-width E = entry width L = effective flare length R = entry radius D = inscribed circle diameter PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING

FACTORS

T13 IARM

FLOW SCALE(%) I A
B 100
C 100
D 100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
A	15.00	45.00	75.00	5.04	7.56	5.04
ARM B	15.00	45.00	75.00	0.70	1.05	0.70
ARM C	15.00	45.00	75.00	1.81	2.72	1.81
ARM D	15.00	45.00	75.00	2.24	3.36	2.24

SET TITLE: AM Peak 2006 Base Flows

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15					
ARM A	0.000	0.037	0.427	0.536	
		0.0	15.0	172.0	216.0
		(0.0)%	(0.0)%	(13.4)%	(5.6)%
ARM B	0.107	0.000	0.089	0.804	
		6.0	0.0	5.0	45.0
		(0.0)%	(0.0)%	(0.0)%	(2.2)%
ARM C	0.372	0.083	0.000	0.545	
		54.0	12.0	0.0	79.0
		(27.8)%	(0.0)%	(0.0)%	(5.1)%
ARM D	0.475	0.402	0.123	0.000	
		85.0	72.0	22.0	0.0
		(15.3)%	(4.2)%	(36.4)%	(0.0)%

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	5.06	28.31	0.179	- -	-	0.0	0.2	3.2	-	0.043
ARM B	0.70	22.02	0.032	- -	-	0.0	0.0	0.5	-	0.047
ARM C	1.82	22.48	0.081	- -	-	0.0	0.1	1.3	-	0.048
ARM D	2.25	27.15	0.083	- -	-	0.0	0.1	1.3	-	0.040
17.00-17.15									
ARM A	6.04	28.15	0.215	- -	-	0.2	0.3	4.0	-	0.045
ARM B	0.84	21.39	0.039	- -	-	0.0	0.0	0.6	-	0.049
ARM C	2.17	22.13	0.098	- -	-	0.1	0.1	1.6	-	0.050
ARM D	2.68	27.03	0.099	- -	-	0.1	0.1	1.6	-	0.041
17.15-17.30									
ARM A	7.40	27.93	0.265	- -	-	0.3	0.4	5.3	-	0.049
ARM B	1.03	20.55	0.050	- -	-	0.0	0.1	0.8	-	0.051
ARM C	2.66	21.66	0.123	- -	-	0.1	0.1	2.1	-	0.053
ARM D	3.28	26.87	0.122	- -	-	0.1	0.1	2.1	-	0.042
17.30-17.45									
ARM A	7.40	27.93	0.265	- -	-	0.4	0.4	5.4	-	0.049
ARM B	1.03	20.55	0.050	- -	-	0.1	0.1	0.8	-	0.051
ARM C	2.66	21.66	0.123	- -	-	0.1	0.1	2.1	-	0.053
ARM D	3.28	26.87	0.122	- -	-	0.1	0.1	2.1	-	0.042
17.45-18.00									
ARM A	6.04	28.15	0.215	- -	-	0.4	0.3	4.2	-	0.045
ARM B	0.84	21.39	0.039	- -	-	0.1	0.0	0.6	-	0.049
ARM C	2.17	22.12	0.098	- -	-	0.1	0.1	1.7	-	0.050
ARM D	2.68	27.03	0.099	- -	-	0.1	0.1	1.7	-	0.041

TIME DEMAND (VEH/MIN) CAPACITY (VEH/MIN) DEMAND/ CAPACITY (RFC) PEDESTRIAN FLOW (PEDS/MIN) START QUEUE (VEHS) END QUEUE (VEHS) DELAY (VEH.MIN/ TIME SEGMENT) GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT) AVERAGE DELAY PER ARRIVING VEHICLE (MIN) TIME (RFC)

18.00-18.15										
ARM A	5.06	28.31	0.179	- -	-	0.3	0.2	3.3	-	0.043
ARM B	0.70	22.01	0.032	- -	-	0.0	0.0	0.5	-	0.047
ARM C	1.82	22.47	0.081	- -	-	0.1	0.1	1.3	-	0.048
ARM D	2.25	27.15	0.083	- -	-	0.1	0.1	1.4	-	0.040

---------- QUEUE

AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.2
17.15	0.3
17.30	0.4
17.45	0.4
18.00	0.3
18.15	0.2

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.1
17.45	0.1
18.00	0.0
18.15	0.0

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1
18.15	0.1

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1
18.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *		T75 I
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)	
A	554.7	369.8	25.4	0.05	25.4	0.05	
B	77.1	51.4	3.8	0.05	3.8	0.05	
C	199.6	133.1	10.1	0.05	10.1	0.05	
D	246.4	164.3	10.2	0.04	10.2	0.04	
ALL	1077.7	718.5	49.4	0.05	49.4	0.05	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 17:16:14 on 09/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\New A5 North Rbt\ S5 2026 AM Peak Base+CD+PD+Symmetry.vai"
(drive-on-the-left) at 18:14:07 on Tuesday, 1 September 2015

FILE PROPERTIES
****

RUN TITLE: New A5 North Access- S5 2026 AM Base + PD + CD + Symmetry Park
LOCATION: New A5 North Roundabout
DATE: 01/09/15
CLIENT: IDI Gazeley
ENUMERATOR: JM
JOB NUMBER: 47071103
STATUS: Final Version
DESCRIPTION:

INPUT DATA
****
ARM A - A5 North
ARM B - Proposed Access
ARM C - A5 South

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
A	6.50	8.00	9.00	5.00	60.00	42.0	0.532	30.653
B	3.75	8.00	6.00	8.00	60.00	38.0	0.474	22.929
C	6.50	8.00	5.00	9.00	60.00	40.0	0.583	33.224

V = approach half-width E = entry width L = effective flare length R = entry radius D = inscribed circle diameter PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING

FACTORS

ARM	FLOW SCALE(%)
A	100
B	100
C	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: New A5 North Access- S3 2026 Base Plus Proposed Development

ARM	FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
	NUMBER OF MINUTES FROM START WHEN			RATE OF FLOW (VEH/MIN)		
A	15.00	45.00	75.00	15.76	23.64	15.76
B	15.00	45.00	75.00	1.31	1.97	1.31
C	15.00	45.00	75.00	10.80	16.20	10.80

DEMAND SET TITLE: New A5 North Access- S3 2026 Base Plus Proposed Development

T33

TIME	FROM/T	ARM A	ARM B	ARM C
07.15 - 08.45				
	ARM A	0.000	0.059	0.941
		(0.0)	(8.1)	(9.3)
	ARM B	0.162	0.000	0.838
		17.0	0.0	88.0
		(29.4)	(0.0)	(35.2)
	ARM C	0.730	0.270	0.000
		631.0	233.0	0.0
		(13.9)	(9.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	15.82	26.52	0.597	- -	0.0	1.5	20.9	-	0.092
ARM B	1.32	11.36	0.116	- -	0.0	0.1	1.9	-	0.099
ARM C	10.84	29.37	0.369	- -	0.0	0.6	8.5	-	0.054
07.30-07.45									
ARM A	18.89	26.21	0.721	- -	1.5	2.5	35.4	-	0.134
ARM B	1.57	10.24	0.154	- -	0.1	0.2	2.6	-	0.115
ARM C	12.95	29.34	0.441	- -	0.6	0.8	11.5	-	0.061
07.45-08.00									
ARM A	23.14	25.80	0.897	- -	2.5	7.3	91.2	-	0.308
ARM B	1.93	8.78	0.219	- -	0.2	0.3	4.0	-	0.146
ARM C	15.85	29.30	0.541	- -	0.8	1.2	17.0	-	0.074
08.00-08.15									
ARM A	23.14	25.79	0.897	- -	7.3	7.9	114.1	-	0.359
ARM B	1.93	8.68	0.222	- -	0.3	0.3	4.2	-	0.148
ARM C	15.85	29.30	0.541	- -	1.2	1.2	17.6	-	0.074
08.15-08.30									
ARM A	18.89	26.21	0.721	- -	7.9	2.7	45.1	-	0.150
ARM B	1.57	10.08	0.156	- -	0.3	0.2	2.9	-	0.118
ARM C	12.95	29.34	0.441	- -	1.2	0.8	12.2	-	0.061
08.30-08.45									
ARM A	15.82	26.51	0.597	- -	2.7	1.5	23.5	-	0.095
ARM B	1.32	11.30	0.117	- -	0.2	0.1	2.0	-	0.100
ARM C	10.84	29.37	0.369	- -	0.8	0.6	9.0	-	0.054

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.5	*
07.45	2.5	***
08.00	7.3	*******
08.15	7.9	********
08.30	2.7	***
08.45	1.5	**

---------- QUEUE

AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.1
07.45	0.2
08.00	0.3
08.15	0.3
08.30	0.2
08.45	0.1

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.6	*
07.45	0.8	*
08.00	1.2	*
08.15	1.2	*
08.30	0.8	*
08.45	0.6	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	1735.7	1157.1	330.3	0.19	330.3	0.19
B	144.5	96.3	17.7	0.12	17.7	0.12
C	1189.2	792.8	75.8	0.06	75.8	0.06
ALL	3069.4	2046.3	423.8	0.14	423.8	0.14

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 17:13:02 on 09/09/2015]

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\New A5 North Rbt\ S5 2026 PM Peak Base+CD+PD+Symmetry.vai"
(drive-on-the-left) at 18:16:00 on Tuesday, 1 September 2015

FILE PROPERTIES

RUN TITLE: New A5 North Access- S5 2026 PM Base + PD + CD + Symmetry Park
LOCATION: New A5 North Roundabout
DATE: 09/01/15
CLIENT: IDI Gazeley
ENUMERATOR: JM
JOB NUMBER: 47071103
STATUS: Final Version
DESCRIPTION:

INPUT DATA

ARM A - A5 North
ARM B - Proposed Access
ARM C - A5 South

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	6.50	8.00	9.00	5.00	60.00	42.0	0.532	30.653
ARM B	3.75	8.00	6.00	8.00	60.00	38.0	0.474	22.929
ARM C	6.50	8.00	5.00	9.00	60.00	40.0	0.583	33.224

V = approach half-width E = entry width L = effective flare length R = entry radius D = inscribed circle diameter PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING

FACTORS

I	FLOW SCALE(%)
A	100
B	100
C	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: New A5 North Access- S3 2026 Base Plus Proposed Development

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK	FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE	AT TOP	AFTER
	TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK
A	15.00	45.00	75.00	7.44	11.16	7.44
ARM B	15.00	45.00	75.00	3.04	4.56	3.04
ARM C	15.00	45.00	75.00	13.69	20.53	13.69

DEMAND SET TITLE: New A5 North Access- S3 2026 Base Plus Proposed Development

T33

TIME	FROM/T	ARM A	ARM B	ARM C
16.45 - 18.15				
ARM A	0.000	0.039	0.961	
		0.0	23.0	572.0
		(0.0)	(21.7)	(11.0)
ARM B	0.160	0.000	0.840	
		39.0	0.0	204.0
		(10.3)	(0.0)	(11.3)
ARM C	0.932	0.068	0.000	
		1021.0	74.0	0.0
		(7.8)	(20.3)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	7.47	26.98	0.277	- -	-	0.0	0.4	5.6	- 0.051
ARM B	3.05	17.24	0.177	- -	-	0.0	0.2	3.1	- 0.070
ARM C	13.74	30.29	0.454	- -	-	0.0	0.8	12.0	- 0.060
17.00-17.15									
ARM A	8.91	26.88	0.332	- -	-	0.4	0.5	7.3	- 0.056
ARM B	3.64	16.57	0.220	- -	-	0.2	0.3	4.1	- 0.077
ARM C	16.41	30.23	0.543	- -	-	0.8	1.2	17.2	- 0.072
17.15-17.30									
ARM A	10.92	26.73	0.408	- -	-	0.5	0.7	10.1	- 0.063
ARM B	4.46	15.66	0.285	- -	-	0.3	0.4	5.8	- 0.089
ARM C	20.09	30.16	0.666	- -	-	1.2	2.0	28.1	- 0.098
17.30-17.45									
ARM A	10.92	26.73	0.408	- -	-	0.7	0.7	10.3	- 0.063
ARM B	4.46	15.66	0.285	- -	-	0.4	0.4	5.9	- 0.089
ARM C	20.09	30.16	0.666	- -	-	2.0	2.0	29.6	- 0.099
17.45-18.00									
ARM A	8.91	26.87	0.332	- -	-	0.7	0.5	7.6	- 0.056
ARM B	3.64	16.56	0.220	- -	-	0.4	0.3	4.3	- 0.078
ARM C	16.41	30.23	0.543	- -	-	2.0	1.2	18.6	- 0.073
18.00-18.15									
ARM A	7.47	26.98	0.277	- -	-	0.5	0.4	5.9	- 0.051
ARM B	3.05	17.23	0.177	- -	-	0.3	0.2	3.3	- 0.071
ARM C	13.74	30.29	0.454	- -	-	1.2	0.8	12.8	- 0.061

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	
17.30	0.7	*
17.45	0.7	*
18.00	0.5	
18.15	0.4	

---------- QUEUE

AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.2
17.15	0.3
17.30	0.4
17.45	0.4
18.00	0.3
18.15	0.2

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.8	*
17.15	1.2	*
17.30	2.0	**
17.45	2.0	**
18.00	1.2	*
18.15	0.8	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)	T75
A	819.0	546.0	46.7	0.06	46.8	0.06	
B	334.5	223.0	26.6	0.08	26.6	0.08	
C	1507.2	1004.8	118.3	0.08	118.3	0.08	
ALL	2660.6	1773.8	191.6	0.07	191.7	0.07	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

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ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\A5_Mere Lane\ S5 2026 AM Base+PD+CD+Symmetry.vai"
(drive-on-the-left) at 11:26:21 on Thursday, 27 August 2015

FILE PROPERTIES

RUN TITLE: S5 New A5/ Mere Lane Roundabout AM Peak 2026 + PD + CD + Symmetry Park
LOCATION: Magna Park Site Access
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - A5 North ARM B - Mere Lane ARM C - A5 South

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.30	7.50	5.00	30.00	56.00	47.0	0.652	36.148
ARM B	3.65	8.00	29.00	25.00	56.00	49.0	0.597	31.407
ARM C	4.50	7.50	28.00	30.00	56.00	45.0	0.617	32.791

V = approach half-width E = entry width L = effective flare length R = entry radius D = inscribed circle diameter PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING FACTORS

IARM	FLOW SCALE(%)
A	100
B	100
C	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
A	15.00	45.00	75.00	17.26	25.89	17.26
ARM B	15.00	45.00	75.00	2.56	3.84	2.56
ARM C	15.00	45.00	75.00	13.60	20.40	13.60

SET TITLE: AM Peak 2006 Base Flows

T33

TIME	FROM/T	ARM A	ARM B	ARM C
07.15 - 08.45				
	ARM A	0.000	0.175	0.825
		(0.0)	(10.7)	(10.6)
	ARM B	0.293	0.000	0.707
		60.0	0.0	145.0
		(35.0)	(0.0)	(9.7)
	ARM C	0.835	0.165	0.000
		909.0	179.0	0.0
		(10.7)	(2.8)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	17.33	31.32	0.553	- -	0.0	1.2	17.7	-	0.071
ARM B	2.57	18.80	0.137	- -	0.0	0.2	2.3	-	0.062
ARM C	13.65	29.40	0.464	- -	0.0	0.9	12.5	-	0.063
07.30-07.45									
ARM A	20.69	31.06	0.666	- -	1.2	2.0	28.2	-	0.095
ARM B	3.07	17.22	0.178	- -	0.2	0.2	3.2	-	0.071
ARM C	16.30	29.29	0.557	- -	0.9	1.2	18.1	-	0.077
07.45-08.00									
ARM A	25.34	30.69	0.826	- -	2.0	4.4	60.3	-	0.177
ARM B	3.76	15.11	0.249	- -	0.2	0.3	4.8	-	0.088
ARM C	19.97	29.14	0.685	- -	1.2	2.1	30.5	-	0.107
08.00-08.15									
ARM A	25.34	30.69	0.826	- -	4.4	4.6	67.9	-	0.186
ARM B	3.76	15.04	0.250	- -	0.3	0.3	5.0	-	0.089
ARM C	19.97	29.13	0.685	- -	2.1	2.2	32.2	-	0.109
08.15-08.30									
ARM A	20.69	31.05	0.666	- -	4.6	2.0	32.4	-	0.100
ARM B	3.07	17.12	0.179	- -	0.3	0.2	3.4	-	0.071
ARM C	16.30	29.29	0.557	- -	2.2	1.3	19.7	-	0.078
08.30-08.45									
ARM A	17.33	31.32	0.553	- -	2.0	1.3	19.4	-	0.072
ARM B	2.57	18.74	0.137	- -	0.2	0.2	2.4	-	0.062
ARM C	13.65	29.40	0.464	- -	1.3	0.9	13.4	-	0.064

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.2	*
07.45	2.0	**
08.00	4.4	****
08.15	4.6	*****
08.30	2.0	**
08.45	1.3	*

---------- QUEUE

AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.2
07.45	0.2
08.00	0.3
08.15	0.3
08.30	0.2
08.45	0.2

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.9	*
07.45	1.2	*
08.00	2.1	**
08.15	2.2	**
08.30	1.3	*
08.45	0.9	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)	T75
A	1900.8	1267.2	225.9	0.12	225.9	0.12	
B	282.2	188.1	21.1	0.07	21.1	0.07	
C	1497.6	998.4	126.4	0.08	126.4	0.08	
ALL	3680.6	2453.7	373.3	0.10	373.4	0.10	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 15:55:20 on 09/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\A5_Mere Lane\ S5 2026 PM Base+PD+CD+Symmetry.vai"
(drive-on-the-left) at 11:29:18 on Thursday, 27 August 2015

FILE PROPERTIES

RUN TITLE: S5 New A5/ Mere Lane Roundabout PM Peak 2026 Plus PD + CD + Symmetry
LOCATION: Magna Park Site Access
DATE: 14/07/31
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB
NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - A5 North ARM B - Mere Lane ARM C - A5 South

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.30	7.50	5.00	30.00	56.00	47.0	0.652	36.148
ARM B	3.65	8.00	29.00	25.00	56.00	49.0	0.597	31.407
ARM C	4.50	7.50	28.00	30.00	56.00	45.0	0.617	32.791

V = approach half-width E = entry width L = effective flare length R = entry radius D = inscribed circle diameter PHI = entry angle

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING FACTORS

IARM	FLOW SCALE(%)
A	100
B	100
C	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
A	15.00	45.00	75.00	11.21	16.82	11.21
ARM B	15.00	45.00	75.00	4.25	6.38	4.25
ARM C	15.00	45.00	75.00	14.59	21.88	14.59

SET TITLE: AM Peak 2006 Base Flows

T33

TIME	FROM/T	ARM A	ARM B	ARM C
16.45 - 18.15				
ARM A	0.000	0.062	0.938	
		0.0	56.0	841.0
		(0.0)	(30.4)	(9.8)
ARM B	0.506	0.000	0.494	
		172.0	0.0	168.0
		(6.4)	(0.0)	(3.0)
ARM C	0.895	0.105	0.000	
		1044.0	123.0	0.0
		(8.9)	(4.9)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	11.26	31.60	0.356	- -	-	0.0	0.6	8.1	-	0.049
ARM B	4.27	23.41	0.182	- -	-	0.0	0.2	3.3	-	0.052
ARM C	14.64	28.93	0.506	- -	-	0.0	1.0	14.7	-	0.069
17.00-17.15									
ARM A	13.44	31.41	0.428	- -	-	0.6	0.7	10.9	-	0.056
ARM B	5.09	22.11	0.230	- -	-	0.2	0.3	4.4	-	0.059
ARM C	17.49	28.67	0.610	- -	-	1.0	1.5	22.3	-	0.089
17.15-17.30									
ARM A	16.46	31.16	0.528	- -	-	0.7	1.1	16.2	-	0.068
ARM B	6.24	20.35	0.307	- -	-	0.3	0.4	6.5	-	0.071
ARM C	21.41	28.32	0.756	- -	-	1.5	3.0	41.9	-	0.141
17.30-17.45									
ARM A	16.46	31.15	0.528	- -	-	1.1	1.1	16.7	-	0.068
ARM B	6.24	20.33	0.307	- -	-	0.4	0.4	6.6	-	0.071
ARM C	21.41	28.32	0.756	- -	-	3.0	3.0	45.3	-	0.144
17.45-18.00									
ARM A	13.44	31.40	0.428	- -	-	1.1	0.8	11.5	-	0.056
ARM B	5.09	22.09	0.231	- -	-	0.4	0.3	4.6	-	0.059
ARM C	17.49	28.66	0.610	- -	-	3.0	1.6	24.9	-	0.091
18.00-18.15									
ARM A	11.26	31.59	0.356	- -	-	0.8	0.6	8.5	-	0.049
ARM B	4.27	23.38	0.182	- -	-	0.3	0.2	3.4	-	0.052
ARM C	14.64	28.92	0.506	- -	-	1.6	1.0	16.0	-	0.070

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.6	*
17.15	0.7	*
17.30	1.1	*
17.45	1.1	*
18.00	0.8	*
18.15	0.6	*

---------- QUEUE

AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.2
17.15	0.3
17.30	0.4
17.45	0.4
18.00	0.3
18.15	0.2

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.0	*
17.15	1.5	**
17.30	3.0	***
17.45	3.0	***
18.00	1.6	**
18.15	1.0	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)	T75
A	1234.7	823.1	72.0	0.06	72.0	0.06	
B	468.0	312.0	28.7	0.06	28.7	0.06	
C	1606.3	1070.9	165.1	0.10	165.1	0.10	
ALL	3308.9	2206.0	265.8	0.08	265.8	0.08	

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* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 15:55:49 on 09/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\A4303_Hunter Bld\ S5 2026 AM Base+CD+PD+Symmetry.vai"
(drive-on-the-left) at 18:36:09 on Tuesday, 1 September 2015

FILE PROPERTIES

RUN TITLE: S5 Magna Park Access Roundabout AM Peak 2026 Base + CD + PD + Symmetry Park
LOCATION: Magna Park Site Access
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB
NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - Hunter Bld ARM
B - A4303 East
ARM C - Site Access ARM D
- A4303 West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.00	9.00	29.00	22.50	66.50	45.0	0.640	41.590
ARM B	7.00	9.50	26.50	36.00	66.50	32.0	0.695	45.714
ARM C	7.00	7.50	15.50	20.00	66.50	44.0	0.583	35.810
ARM D	7.50	11.00	45.00	39.00	66.50	45.0	0.732	50.559

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM D Effective flare length is outside normal range. Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING

FACTORS

T13 IARM

FLOW SCALE(%)	A
B	100
C	100
D	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK	FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE	AT TOP	AFTER
	TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK
A	15.00	45.00	75.00	4.19	6.28	4.19
ARM B	15.00	45.00	75.00	22.06	33.09	22.06
ARM C	15.00	45.00	75.00	0.56	0.84	0.56
ARM D	15.00	45.00	75.00	15.96	23.94	15.96

SET TITLE: AM Peak 2006 Base Flows

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.15 - 08.45	ARM A	0.000	0.516	0.000	0.484
			0.0	173.0	0.0	162.0
			(0.0)	(46.8)	(0.0)	(44.4)
	ARM B	0.386	0.025	0.059	0.529
			682.0	45.0	104.0	934.0
			(13.3)	(35.6)	(6.5)	(11.5)
	ARM C	0.111	0.400	0.000	0.489
			5.0	18.0	0.0	22.0
			(60.0)	(50.0)	(0.0)	(50.0)
	ARM D	0.349	0.576	0.075	0.000
			446.0	735.0	96.0	0.0
			(13.0)	(12.4)	(11.5)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	4.20	22.95	0.183	- -	-	0.0	0.2	3.3	-	0.053
ARM B	22.15	38.00	0.583	- -	-	0.0	1.4	20.0	-	0.062
ARM C	0.56	13.53	0.042	- -	-	0.0	0.0	0.6	-	0.077
ARM D	16.02	37.87	0.423	- -	-	0.0	0.7	10.7	-	0.046
07.30-07.45									
ARM A	5.02	21.85	0.230	- -	-	0.2	0.3	4.4	-	0.059
ARM B	26.44	37.48	0.706	- -	-	1.4	2.4	33.7	-	0.090
ARM C	0.67	11.53	0.058	- -	-	0.0	0.1	0.9	-	0.092
ARM D	19.13	36.48	0.524	- -	-	0.7	1.1	16.0	-	0.057
07.45-08.00									
ARM A	6.15	20.35	0.302	- -	-	0.3	0.4	6.3	-	0.070
ARM B	32.39	36.77	0.881	- -	-	2.4	6.6	86.8	-	0.203
ARM C	0.83	8.89	0.093	- -	-	0.1	0.1	1.5	-	0.124
ARM D	23.43	34.65	0.676	- -	-	1.1	2.1	29.5	-	0.088
08.00-08.15									
ARM A	6.15	20.33	0.302	- -	-	0.4	0.4	6.5	-	0.070
ARM B	32.39	36.76	0.881	- -	-	6.6	7.0	102.6	-	0.224
ARM C	0.83	8.78	0.094	- -	-	0.1	0.1	1.5	-	0.126
ARM D	23.43	34.57	0.678	- -	-	2.1	2.1	31.1	-	0.090
08.15-08.30									
ARM A	5.02	21.81	0.230	- -	-	0.4	0.3	4.6	-	0.060
ARM B	26.44	37.47	0.706	- -	-	7.0	2.4	39.8	-	0.096
ARM C	0.67	11.38	0.059	- -	-	0.1	0.1	1.0	-	0.093
ARM D	19.13	36.37	0.526	- -	-	2.1	1.1	17.3	-	0.058
08.30-08.45									
ARM A	4.20	22.92	0.183	- -	-	0.3	0.2	3.4	-	0.053
ARM B	22.15	37.98	0.583	- -	-	2.4	1.4	21.9	-	0.064
ARM C	0.56	13.46	0.042	- -	-	0.1	0.0	0.7	-	0.078
ARM D	16.02	37.82	0.424	- -	-	1.1	0.7	11.3	-	0.046

---------- QUEUE

AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.2
07.45	0.3
08.00	0.4
08.15	0.4
08.30	0.3
08.45	0.2

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.4	*
07.45	2.4	**
08.00	6.6	*******
08.15	7.0	*******
08.30	2.4	**
08.45	1.4	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.0
07.45	0.1
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.0

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.7	*
07.45	1.1	*
08.00	2.1	**
08.15	2.1	**
08.30	1.1	*
08.45	0.7	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)	T75
A	461.1	307.4	28.5	0.06	28.5	0.06	
B	2429.4	1619.6	304.9	0.13	304.9	0.13	
C	61.9	41.3	6.2	0.10	6.2	0.10	
D	1757.7	1171.8	115.9	0.07	115.9	0.07	
ALL	4710.1	3140.1	455.4	0.10	455.5	0.10	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 16:43:23 on 09/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\A4303_Hunter Bld\ S5 2026 PM Base+CD+PD+Symmetry.vai"
(drive-on-the-left) at 18:41:23 on Tuesday, 1 September 2015

FILE PROPERTIES

RUN TITLE: S5 Magna Park Access Roundabout PM Peak 2026 Base + CD + PD + Symmetry Park
LOCATION: Magna Park Site Access
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - Hunter Bld ARM
B - A4303 East
ARM C - Site Access ARM D
- A4303 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.00	9.00	29.00	22.50	66.50	32.0	0.670	43.558
ARM B	7.00	9.50	26.50	36.00	66.50	32.0	0.695	45.714
ARM C	7.00	7.50	15.50	20.00	66.50	44.0	0.583	35.810
ARM D	7.50	11.00	45.00	39.00	66.50	45.0	0.732	50.559

V = approach half-width E = entry width
L = effective flare length R = entry radius
D = inscribed circle diameter PHI = entry angle

WARNING ARM D Effective flare length is outside normal range. Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING FACTORS

I FLOW SCALE(%) I	I A
B	100
C	100
D	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
A	15.00	45.00	75.00	9.96	14.94	9.96
ARM B	15.00	45.00	75.00	12.04	18.06	12.04
ARM C	15.00	45.00	75.00	3.91	5.87	3.91
ARM D	15.00	45.00	75.00	12.13	18.19	12.13

SET TITLE: AM Peak 2006 Base Flows

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15					
ARM A		0.000	0.527	0.004	0.469
		0.0	420.0	3.0	374.0
		(0.0)	(15.5)	(100.0)	(15.2)
ARM B		0.224	0.028	0.039	0.708
		216.0	27.0	38.0	682.0
		(31.5)	(3.7)	(50.0)	(11.1)
ARM C		0.035	0.588	0.000	0.377
		11.0	184.0	0.0	118.0
		(45.5)	(4.9)	(0.0)	(8.5)
ARM D		0.106	0.858	0.036	0.000
		103.0	832.0	35.0	0.0
		(37.9)	(6.1)	(40.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	10.00	29.30	0.341	- -	-	0.0	0.5	7.6	-	0.052
ARM B	12.08	35.46	0.341	- -	-	0.0	0.5	7.6	-	0.043
ARM C	3.93	23.09	0.170	- -	-	0.0	0.2	3.0	-	0.052
ARM D	12.17	41.36	0.294	- -	-	0.0	0.4	6.1	-	0.034
17.00-17.15									
ARM A	11.94	27.66	0.432	- -	-	0.5	0.8	11.1	-	0.064
ARM B	14.43	34.75	0.415	- -	-	0.5	0.7	10.4	-	0.049
ARM C	4.69	21.10	0.222	- -	-	0.2	0.3	4.2	-	0.061
ARM D	14.53	40.52	0.359	- -	-	0.4	0.6	8.3	-	0.038
17.15-17.30									
ARM A	14.63	25.42	0.575	- -	-	0.8	1.3	19.3	-	0.092
ARM B	17.67	33.79	0.523	- -	-	0.7	1.1	15.9	-	0.062
ARM C	5.74	18.37	0.313	- -	-	0.3	0.5	6.6	-	0.079
ARM D	17.80	39.36	0.452	- -	-	0.6	0.8	12.1	-	0.046
17.30-17.45									
ARM A	14.63	25.40	0.576	- -	-	1.3	1.3	20.1	-	0.093
ARM B	17.67	33.77	0.523	- -	-	1.1	1.1	16.4	-	0.062
ARM C	5.74	18.35	0.313	- -	-	0.5	0.5	6.8	-	0.079
ARM D	17.80	39.35	0.452	- -	-	0.8	0.8	12.3	-	0.046
17.45-18.00									
ARM A	11.94	27.64	0.432	- -	-	1.3	0.8	11.8	-	0.064
ARM B	14.43	34.73	0.415	- -	-	1.1	0.7	10.9	-	0.049
ARM C	4.69	21.06	0.223	- -	-	0.5	0.3	4.4	-	0.061
ARM D	14.53	40.50	0.359	- -	-	0.8	0.6	8.6	-	0.039
18.00-18.15									
ARM A	10.00	29.27	0.342	- -	-	0.8	0.5	8.0	-	0.052
ARM B	12.08	35.44	0.341	- -	-	0.7	0.5	7.9	-	0.043
ARM C	3.93	23.05	0.170	- -	-	0.3	0.2	3.1	-	0.052
ARM D	12.17	41.35	0.294	- -	-	0.6	0.4	6.4	-	0.034

---------- QUEUE

AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.5	*
17.15	0.8	*
17.30	1.3	*
17.45	1.3	*
18.00	0.8	*
18.15	0.5	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.5	*
17.15	0.7	*
17.30	1.1	*
17.45	1.1	*
18.00	0.7	*
18.15	0.5	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.2	
17.15	0.3	
17.30	0.5	
17.45	0.5	
18.00	0.3	
18.15	0.2	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.6	*
17.30	0.8	*
17.45	0.8	*
18.00	0.6	*
18.15	0.4	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)	T75
A	1097.0	731.3	77.9	0.07	77.9	0.07	
B	1325.5	883.7	69.1	0.05	69.1	0.05	
C	430.8	287.2	28.2	0.07	28.2	0.07	
D	1335.1	890.1	53.7	0.04	53.7	0.04	
ALL	4188.5	2792.3	228.9	0.05	228.9	0.05	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 16:43:48 on 09/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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For sales and distribution information, program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\Cross in Hand A5_A4303\ S5 2026 AM Peak Base+CD+PD+Symmetry.vai"
(drive-on-the-left) at 19:29:02 on Tuesday, 1 September 2015

FILE PROPERTIES

RUN TITLE: S5 Cross in Hand Roundabout AM Peak 2026 Base + CD + PD + Symmetry Park LOCATION:
Cross In Hand Roundabout
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB
NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - A5 North ARM B
- A4303
ARM C - A5 South ARM D
- B4027
ARM E - Coal Pit Lane

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	5.00	8.60	60.00	60.00	73.00	44.0	0.596	39.854
ARM B	7.00	8.60	29.50	48.00	80.00	47.0	0.577	40.948
ARM C	4.50	7.00	23.00	48.00	80.00	41.0	0.500	31.782
ARM D	3.50	6.00	18.00	70.00	80.00	20.0	0.487	28.255
ARM E	3.00	7.00	14.00	23.00	73.00	56.0	0.430	23.547

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range. Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING

FACTORS

T13 IARM

FLOW SCALE(%)
A	100
B	100
C	100
D	100
E	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK	FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE	AT TOP	AFTER
	TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK	
ARM A	15.00	45.00	75.00	16.23	24.34	16.23
ARM B	15.00	45.00	75.00	13.94	20.91	13.94
ARM C	15.00	45.00	75.00	11.01	16.52	11.01
ARM D	15.00	45.00	75.00	3.06	4.59	3.06
ARM E	15.00	45.00	75.00	5.50	8.25	5.50

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D	ARM E
07.15 - 08.45						
	ARM A	0.000	0.431	0.486	0.064	0.018
			0.0	560.0	631.0	83.0	24.0
			(0.0)	(10.5)	(9.4)	(2.4)	(0.0)
	ARM B	0.459	0.000	0.251	0.170	0.119
			512.0	0.0	280.0	190.0	133.0
			(10.7)	(0.0)	(28.6)	(1.6)	(3.0)
	ARM C	0.493	0.404	0.000	0.019	0.084
			434.0	356.0	0.0	17.0	74.0
			(9.7)	(25.8)	(0.0)	(11.8)	(4.1)
	ARM D	0.400	0.563	0.033	0.000	0.004
			98.0	138.0	8.0	0.0	1.0
			(1.0)	(4.3)	(0.0)	(0.0)	(0.0)
	ARM E	0.220	0.516	0.252	0.011	0.000
			97.0	227.0	111.0	5.0	0.0
			(0.0)	(3.1)	(2.7)	(0.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	16.29	30.00	0.543	- -	0.0	1.2	17.0	-	0.072
ARM B	13.99	30.41	0.460	- -	0.0	0.8	12.3	-	0.060
ARM C	11.05	21.99	0.503	- -	0.0	1.0	14.4	-	0.090
ARM D	3.07	17.26	0.178	- -	0.0	0.2	3.2	-	0.070
ARM E	5.52	13.89	0.398	- -	0.0	0.7	9.4	-	0.118

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
ARM A	19.45	28.73	0.677	- -	1.2	2.1	29.4	-	0.106
ARM B	16.71	29.25	0.571	- -	0.8	1.3	19.1	-	0.079
ARM C	13.20	20.92	0.631	- -	1.0	1.7	23.9	-	0.128
ARM D	3.67	15.25	0.241	- -	0.2	0.3	4.6	-	0.086
ARM E	6.59	12.09	0.545	- -	0.7	1.2	16.6	-	0.180

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
ARM A	23.82	27.09	0.879	- -	2.1	6.4	81.5	-	0.262
ARM B	20.46	27.75	0.737	- -	1.3	2.7	38.2	-	0.134
ARM C	16.17	19.48	0.830	- -	1.7	4.4	58.1	-	0.273
ARM D	4.50	12.58	0.357	- -	0.3	0.5	8.0	-	0.123
ARM E	8.07	9.70	0.832	- -	1.2	4.1	51.3	-	0.503

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	23.82	26.97	0.883	- -	6.4	6.9	100.6	-	0.306
ARM B	20.46	27.65	0.740	- -	2.7	2.8	41.4	-	0.139
ARM C	16.17	19.44	0.832	- -	4.4	4.7	68.5	-	0.301
ARM D	4.50	12.46	0.361	- -	0.5	0.6	8.3	-	0.125
ARM E	8.07	9.60	0.841	- -	4.1	4.6	66.6	-	0.613

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
ARM A	19.45	28.54	0.681	- -	6.9	2.2	36.3	-	0.118
ARM B	16.71	29.10	0.574	- -	2.8	1.4	21.3	-	0.082
ARM C	13.20	20.86	0.633	- -	4.7	1.8	28.7	-	0.137
ARM D	3.67	15.08	0.243	- -	0.6	0.3	5.0	-	0.088
ARM E	6.59	11.94	0.552	- -	4.6	1.3	21.7	-	0.203

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
ARM A	16.29	29.93	0.544	- -	2.2	1.2	18.7	-	0.074
ARM B	13.99	30.35	0.461	- -	1.4	0.9	13.2	-	0.061
ARM C	11.05	21.96	0.504	- -	1.8	1.0	16.0	-	0.093
ARM D	3.07	17.17	0.179	- -	0.3	0.2	3.4	-	0.071
ARM E	5.52	13.81	0.400	- -	1.3	0.7	10.5	-	0.122

---------- QUEUE

AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.2	*
07.45	2.1	**
08.00	6.4	******
08.15	6.9	*******
08.30	2.2	**
08.45	1.2	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.8	*
07.45	1.3	*
08.00	2.7	***
08.15	2.8	***
08.30	1.4	*
08.45	0.9	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.0	*
07.45	1.7	**
08.00	4.4	****
08.15	4.7	*****
08.30	1.8	**
08.45	1.0	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.2	
07.45	0.3	
08.00	0.5	*
08.15	0.6	*
08.30	0.3	
08.45	0.2	

QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.7	*
07.45	1.2	*
08.00	4.1	****
08.15	4.6	*****
08.30	1.3	*
08.45	0.7	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	1786.6	1191.1	283.4	0.16	283.4	0.16
B	1534.7	1023.1	145.6	0.09	145.6	0.09
C	1212.6	808.4	209.5	0.17	209.5	0.17
D	337.2	224.8	32.4	0.10	32.4	0.10
E	605.6	403.8	176.2	0.29	176.2	0.29
ALL	5476.8	3651.2	847.1	0.15	847.2	0.15

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 17:00:50 on 09/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\Cross in Hand A5_A4303\ S5 2026 PM Peak Base+CD+PD+Symmetry.vai"
(drive-on-the-left) at 19:17:30 on Tuesday, 1 September 2015

FILE PROPERTIES

RUN TITLE: S5 Cross in Hand Roundabout PM Peak 2026 Base + CD + PD + Symmetry Park LOCATION:
Cross In Hand Roundabout
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB
NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - A5 North ARM B
- A4303
ARM C - A5 South ARM D
- B4027
ARM E - Coal Pit Lane

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	5.00	8.60	60.00	60.00	73.00	44.0	0.596	39.854
ARM B	7.00	8.60	29.50	48.00	80.00	47.0	0.577	40.948
ARM C	4.50	7.00	23.00	48.00	80.00	41.0	0.500	31.782
ARM D	3.50	6.00	18.00	70.00	80.00	20.0	0.487	28.255
ARM E	3.00	7.00	14.00	23.00	73.00	56.0	0.430	23.547

V = approach half-width E = entry width L = effective flare length R = entry radius D = inscribed circle diameter PHI = entry angle

WARNING ARM A Effective flare length is outside normal range. Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING

FACTORS

T13 IARM

FLOW	SCALE(%)
A	100
B	100
C	100
D	100
E	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK	FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE	AT TOP	AFTER
	TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK
ARM A	15.00	45.00	75.00	13.32	19.99	13.32
ARM B	15.00	45.00	75.00	15.14	22.71	15.14
ARM C	15.00	45.00	75.00	11.25	16.88	11.25
ARM D	15.00	45.00	75.00	3.90	5.85	3.90
ARM E	15.00	45.00	75.00	2.91	4.37	2.91

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D	ARM E
16.45 - 18.15						
ARM A	0.000	0.419	0.430	0.103	0.048	
		0.0	447.0	458.0	110.0	51.0
		(0.0)	(9.4)	(7.4)	(1.8)	(0.0)
ARM B	0.441	0.000	0.256	0.131	0.172	
		534.0	0.0	310.0	159.0	208.0
		(11.8)	(0.0)	(21.9)	(1.9)	(5.8)
ARM C	0.661	0.208	0.000	0.010	0.121	
		595.0	187.0	0.0	9.0	109.0
		(5.9)	(31.0)	(0.0)	(0.0)	(2.8)
ARM D	0.311	0.644	0.026	0.000	0.019	
		97.0	201.0	8.0	0.0	6.0
		(1.0)	(1.0)	(0.0)	(0.0)	(0.0)
ARM E	0.146	0.545	0.292	0.017	0.000	
		34.0	127.0	68.0	4.0	0.0
		(2.9)	(1.6)	(4.4)	(50.0)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME (RFC)
16.45-17.00										
ARM A	13.38	32.56	0.411	- -	0.0	0.7	10.2	-	0.052	
ARM B	15.20	31.78	0.478	- -	0.0	0.9	13.2	-	0.060	
ARM C	11.29	22.23	0.508	- -	0.0	1.0	14.7	-	0.090	
ARM D	3.91	16.81	0.233	- -	0.0	0.3	4.4	-	0.077	
ARM E	2.92	13.53	0.216	- -	0.0	0.3	4.0	-	0.094	
17.00-17.15										
ARM A	15.97	31.65	0.505	- -	0.7	1.0	14.8	-	0.064	
ARM B	18.14	30.85	0.588	- -	0.9	1.4	20.5	-	0.078	
ARM C	13.48	20.95	0.644	- -	1.0	1.8	25.2	-	0.132	
ARM D	4.67	14.62	0.320	- -	0.3	0.5	6.8	-	0.100	
ARM E	3.49	11.71	0.298	- -	0.3	0.4	6.1	-	0.121	
17.15-17.30										
ARM A	19.56	30.46	0.642	- -	1.0	1.8	25.4	-	0.091	
ARM B	22.22	29.58	0.751	- -	1.4	2.9	40.9	-	0.132	
ARM C	16.52	19.23	0.859	- -	1.8	5.3	67.7	-	0.317	
ARM D	5.73	11.73	0.488	- -	0.5	0.9	13.3	-	0.165	
ARM E	4.28	9.32	0.459	- -	0.4	0.8	11.8	-	0.196	
17.30-17.45										
ARM A	19.56	30.41	0.643	- -	1.8	1.8	26.7	-	0.092	
ARM B	22.22	29.56	0.752	- -	2.9	3.0	44.3	-	0.136	
ARM C	16.52	19.19	0.861	- -	5.3	5.7	82.9	-	0.363	
ARM D	5.73	11.58	0.494	- -	0.9	1.0	14.3	-	0.170	
ARM E	4.28	9.20	0.465	- -	0.8	0.9	12.7	-	0.203	
17.45-18.00										
ARM A	15.97	31.57	0.506	- -	1.8	1.0	15.9	-	0.065	
ARM B	18.14	30.82	0.589	- -	3.0	1.4	22.6	-	0.080	
ARM C	13.48	20.90	0.645	- -	5.7	1.9	31.0	-	0.144	
ARM D	4.67	14.41	0.324	- -	1.0	0.5	7.5	-	0.103	
ARM E	3.49	11.54	0.303	- -	0.9	0.4	6.8	-	0.125	
18.00-18.15										
ARM A	13.38	32.51	0.411	- -	1.0	0.7	10.8	-	0.052	
ARM B	15.20	31.76	0.478	- -	1.4	0.9	14.2	-	0.061	
ARM C	11.29	22.19	0.509	- -	1.9	1.0	16.3	-	0.093	
ARM D	3.91	16.72	0.234	- -	0.5	0.3	4.7	-	0.078	
ARM E	2.92	13.44	0.217	- -	0.4	0.3	4.3	-	0.095	

---------- QUEUE

AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.7	*
17.15	1.0	*
17.30	1.8	**
17.45	1.8	**
18.00	1.0	*
18.15	0.7	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.9	*
17.15	1.4	*
17.30	2.9	***
17.45	3.0	***
18.00	1.4	*
18.15	0.9	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.0	*
17.15	1.8	**
17.30	5.3	*****
17.45	5.7	******
18.00	1.9	**
18.15	1.0	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.5	
17.30	0.9	*
17.45	1.0	*
18.00	0.5	
18.15	0.3	

QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.8	*
17.45	0.9	*
18.00	0.4	
18.15	0.3	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	1467.3	978.2	103.8	0.07	103.8	0.07
B	1666.9	1111.2	155.8	0.09	155.8	0.09
C	1238.8	825.9	237.7	0.19	237.7	0.19
D	429.4	286.3	51.1	0.12	51.1	0.12
E	320.7	213.8	45.7	0.14	45.7	0.14
ALL	5123.1	3415.4	594.1	0.12	594.1	0.12

T75

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS PICADY 5.1

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Run with file:-
"C:\Users\james_mcinnerny\Desktop\S5 AM Peak 2026 Base+CD+PD+Symmetry.vpi" (drive-on-the-left) at 12:41:25 on Friday, 28 August 2015

RUN INFORMATION

RUN TITLE : S5 A4303/ Shackelton Way 2026 AM Peak Base + CD + PD + Symmetry Park LOCATION :
DATE : 12/02/15
CLIENT :
ENUMERATOR : jon_ashcroft [UK1005963L] JOB NUMBER
:
STATUS :
DESCRIPTION :

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

MAJOR ROAD (ARM C) ---------- MAJOR ROAD (ARM A)
I I I I I
MINOR ROAD (ARM B)

ARM A IS A4303 West
ARM B IS Shackelton Way ARM C IS A4303 East

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C ETC.

GEOMETRIC DATA

MINOR ROAD B	DATA ITEM	TOTAL MAJOR
ROAD CARRIAGEWAY WIDTH	(W)	7.30 M.
CENTRAL RESERVE WIDTH	(WCR)	0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B)	2.20 M.
- VISIBILITY	(VC-B)	200.00 M.
- BLOCKS TRAFFIC (SPACES)		NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C)	100.0 M.
- VISIBILITY TO RIGHT	(VB-A)	150.0 M.
- LANE 1 WIDTH	(WB-C)	4.00 M.
- LANE 2 WIDTH	(WB-A)	0.00 M.

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	I STREAM B-C
0.29	0.11		790.29

Intercept	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	I STREAM B-A
645.16	0.28	0.11	0.18	0.40	

Intercept	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	I STREAM C-B
0.25	0.25		689.79

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: A4303/ Shackelton Way 2014 AM Peak Base Flows TIME

PERIOD BEGINS 07.15 AND ENDS 08.45

LENGTH OF TIME PERIOD - 90 MIN. LENGTH
OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

NUMBER OF MINUTES FROM START WHEN STARTS TO PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK	ARM	FLOW TO RISE
					A	
15.00	45.00	75.00	11.98	17.96	11.98	
15.00	45.00	75.00	0.80	1.20	0.80	
15.00	45.00	75.00	0.00	0.00	0.00	

Demand set: A4303/ Shackelton Way 2014 AM Peak Base Flows

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C	
- 08.45	ARM A	0.000	0.064	0.936	07.15
		0.0	61.0	897.0	
		(0.0)	(16.4)	(20.8)	
	ARM B	0.000	0.000	1.000	
		0.0	0.0	64.0	
		(0.0)	(0.0)	(51.6)	
	ARM C	0.000	0.000	0.000	
		0.0	0.0	0.0	
		(0.0)	(0.0)	(0.0)	

TURNING
PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT
FOR
COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME		DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30										
	B-AC	0.80	6.03	0.133		0.00	0.15	2.2		0.19
	C-A	0.00								
	C-B	0.00	7.13	0.000		0.00	0.00	0.0		0.00
	A-B	0.77								
	A-C	11.26								
07.30-07.45										
	B-AC	0.96	5.51	0.174		0.15	0.21	3.0		0.22
	C-A	0.00								
	C-B	0.00	6.49	0.000		0.00	0.00	0.0		0.00
	A-B	0.91								
	A-C	13.44								
07.45-08.00										
	B-AC	1.17	4.80	0.245		0.21	0.32	4.5		0.27
	C-A	0.00								
	C-B	0.00	5.59	0.000		0.00	0.00	0.0		0.00
	A-B	1.12								
	A-C	16.46								
08.00-08.15										
	B-AC	1.17	4.80	0.245		0.32	0.32	4.8		0.28
	C-A	0.00								
	C-B	0.00	5.59	0.000		0.00	0.00	0.0		0.00
	A-B	1.12								
	A-C	16.46								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-AC	0.96	5.51	0.174		0.32	0.21	3.3		0.22
C-A	0.00								
C-B	0.00	6.49	0.000		0.00	0.00	0.0		0.00
A-B	0.91								
A-C	13.44								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-AC	0.80	6.03	0.133		0.21	0.16	2.4		0.19
C-A	0.00								
C-B	0.00	7.13	0.000		0.00	0.00	0.0		0.00
A-B	0.77								
A-C	11.26								

QUEUE FOR STREAM B-AC

SEGMENT ENDING	TIME NO. OF VEHICLES IN QUEUE
07.30	0.2
07.45	0.2
08.00	0.3
08.15	0.3
08.30	0.2
08.45	0.2

QUEUE FOR STREAM C-B

SEGMENT ENDING	TIME NO. OF VEHICLES IN QUEUE
07.30	0.0
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

	TOTAL DEMAND (VEH)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)	STREAM * (MIN)	STREAM * (MIN/VEH)
B-AC	88.1	58.7	20.2	0.23	20.2	0.23	
C-A	0.0	0.0					
C-B	0.0	0.0	0.0	0.00	0.0	0.00	
A-B	84.0	56.0					
A-C	1234.7	823.1					
ALL	1406.7	937.8	20.2	0.01	20.2	0.01	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS PICADY 5.1

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Run with file:-
"C:\Users\james_mcinnerny\Desktop\S5 PM Peak 2026 Base+CD+PD+Symmetry.vpi" (drive-on-the-left) at 12:43:25 on Friday, 28 August 2015

RUN INFORMATION

RUN TITLE : S5 A4303/ Shackelton Way 2026 PM Peak Base + CD + PD + Symmetry Park LOCATION
:
DATE : 12/02/15
CLIENT :
ENUMERATOR : jon_ashcroft [UK1005963L] JOB
NUMBER :
STATUS :
DESCRIPTION :

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

MAJOR ROAD (ARM C) ---------- MAJOR ROAD (ARM A)
I I I I I
MINOR ROAD (ARM B)

ARM A IS A4303 West
ARM B IS Shackelton Way ARM C IS
A4303 East

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B	TOTAL
MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.30 M.	
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.	
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.	
- VISIBILITY	(VC-B)200.00 M.	
- BLOCKS TRAFFIC (SPACES)	NO (0)	
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 100.0 M.	
- VISIBILITY TO RIGHT	(VB-A) 150.0 M.	
- LANE 1 WIDTH	(WB-C) 4.00 M.	
- LANE 2 WIDTH	(WB-A) 0.00 M.	

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

I Intercept For B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	I I STREAM
0.29	0.11	I	I 790.29

I Intercept For B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	I I STREAM
645.16	0.28	0.11	0.18	0.40	I

I Intercept For C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	I I STREAM
0.25	0.25	I	I 689.79

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

FLOW SCALE(%)	ARM
	A
B	100
C	100

Demand set: A4303/ Shackelton Way 2014 AM Peak Base Flows TIME

PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN. LENGTH
OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

NUMBER OF MINUTES FROM START WHEN	RATE OF FLOW (VEH/MIN)				ARM	FLOW
STARTS	TOP OF PEAK	FLOW STOPS	BEFORE	AT TOP	AFTER		TO RISE	
IS REACHED	FALLING	PEAK	OF PEAK	PEAK				
						ARM	A	
	15.00	45.00	75.00	17.94	26.91	17.94		
ARM B	15.00	45.00	75.00	2.30	3.45	2.30		
ARM C	15.00	45.00	75.00	0.00	0.00	0.00		

Demand set: A4303/ Shackelton Way 2014 AM Peak Base Flows

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C	16.45
- 18.15					ARM A
0.000	0.012	0.988			
		0.0	17.0	1418.0	
		(0.0)	(11.8)	(8.7)	
	ARM B	0.000	0.000	1.000	
		0.0	0.0	184.0	
		(0.0)	(0.0)	(8.7)	
	ARM C	0.000	0.000	0.000	
		0.0	0.0	0.0	
		(0.0)	(0.0)	(0.0)	

TURNING
PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT
FOR
COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME
16.45-17.00										
B-AC	2.31	6.95	0.332		0.00	0.49	6.9		0.21	
C-A	0.00									
C-B	0.00	5.96	0.000		0.00	0.00	0.0		0.00	
A-B	0.21									
A-C	17.79									

	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME
17.00-17.15										
B-AC	2.76	5.95	0.463		0.49	0.83	11.7		0.31	
C-A	0.00									
C-B	0.00	5.09	0.000		0.00	0.00	0.0		0.00	
A-B	0.25									
A-C	21.25									

	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME
17.15-17.30										
B-AC	3.38	4.56	0.740		0.83	2.40	30.3		0.72	
C-A	0.00									
C-B	0.00	3.89	0.000		0.00	0.00	0.0		0.00	
A-B	0.31									
A-C	26.02									

	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME
17.30-17.45										
B-AC	3.38	4.56	0.740		2.40	2.59	37.7		0.81	
C-A	0.00									
C-B	0.00	3.89	0.000		0.00	0.00	0.0		0.00	
A-B	0.31									
A-C	26.02									

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-AC	2.76	5.95	0.463		2.59	0.90	15.2		0.34
C-A	0.00								
C-B	0.00	5.09	0.000		0.00	0.00	0.0		0.00
A-B	0.25								
A-C	21.25								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-AC	2.31	6.95	0.332		0.90	0.51	8.0		0.22
C-A	0.00								
C-B	0.00	5.96	0.000		0.00	0.00	0.0		0.00
A-B	0.21								
A-C	17.79								

QUEUE FOR STREAM B-AC

SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	TIME
17.00	0.5	
17.15	0.8	*
17.30	2.4	**
17.45	2.6	***
18.00	0.9	*
18.15	0.5	*

QUEUE FOR STREAM C-B

SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

TOTAL DEMAND (VEH)	* QUEUEING * DELAY * (VEH)	* INCLUSIVE QUEUEING * DELAY * (VEH/H)	(MIN)	(MIN/VEH)	STREAM	(MIN)	(MIN/VEH)
253.3	168.8	109.8	0.43	109.8	0.43	C-A	0.0	0.0
						C-B		
0.0	0.0	0.0	0.00	0.0	0.00	A-B	23.4	15.6
						A-C		
1951.8	1301.2							
ALL								
2228.4	1485.6	109.8	0.05	109.8	0.05			

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

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ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\A4303_Coventry Road\ S5 AM 2026 Base+CD+PD+Symmetry.vai"
(drive-on-the-left) at 12:25:00 on Tuesday, 1 September 2015

FILE PROPERTIES

RUN TITLE: S5 A4303/Coventry Road Roundabout AM Peak 2026 Base + CD + PD + Symmetry Park LOCATION: A4303_Coventry Road
DATE: 14/07/31
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - Coventry Road ARM B - A4303
East
ARM C - Mobile Home Park ARM D - A4303
West

GEOMETRIC DATA

T5 I ARM I

	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.20	7.20	31.00	14.00	56.00	62.0	0.523	26.437
ARM B	7.20	8.40	13.00	35.00	56.00	58.0	0.662	37.911
ARM C	3.65	5.50	8.00	28.00	56.00	50.0	0.501	22.482
ARM D	7.20	8.80	29.00	35.00	56.00	45.0	0.717	41.883

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range. Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING FACTORS

T13 IARM I FLOW

SCALE(%)	A
B	100
C	100
D	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45) LENGTH OF TIME

PERIOD -(90) MINUTES LENGTH OF TIME SEGMENT - (15)

MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15 I I

I ARM I	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK	FLOW STOPS	BEFORE	AT TOP	AFTER	RATE OF FLOW (VEH/MIN) I TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK I
ARM A	15.00	45.00	75.00	11.63	17.44	11.63						
ARM B	15.00	45.00	75.00	15.85	23.78	15.85						
ARM C	15.00	45.00	75.00	0.22	0.34	0.22						
ARM D	15.00	45.00	75.00	10.26	15.39	10.26						

DEMAND SET TITLE:

AM Peak 2006 Base Flows

T33

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.15 - 08.45					
ARM A	0.000	0.180	0.000	0.820	
		0.0	167.0	0.0	763.0
		(0.0)%	(0.6)%	(0.0)%	(1.8)%
	ARM B	0.026	0.000	0.000	0.974
		33.0	0.0	0.0	1235.0
		(9.1)%	(0.0)%	(0.0)%	(17.6)%
	ARM C	0.389	0.444	0.000	0.167
		7.0	8.0	0.0	3.0
		(14.3)%	(0.0)%	(0.0)%	(0.0)%
	ARM D	0.269	0.721	0.004	0.006
		221.0	592.0	3.0	5.0
		(2.3)%	(29.4)%	(33.3)%	(40.0)%

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	11.67	20.97	0.556	- -	-	0.0	1.2	17.6	-	0.106
ARM B	15.91	26.76	0.594	- -	-	0.0	1.4	20.7	-	0.090
ARM C	0.23	7.86	0.029	- -	-	0.0	0.0	0.4	-	0.131
ARM D	10.30	33.90	0.304	- -	-	0.0	0.4	6.4	-	0.042
07.30-07.45									
ARM A	13.93	19.98	0.697	- -	-	1.2	2.2	31.4	-	0.162
ARM B	19.00	25.68	0.740	- -	-	1.4	2.7	38.5	-	0.146
ARM C	0.27	5.23	0.052	- -	-	0.0	0.1	0.8	-	0.201
ARM D	12.30	33.82	0.364	- -	-	0.4	0.6	8.4	-	0.046
07.45-08.00									
ARM A	17.07	18.62	0.916	- -	-	2.2	8.0	95.3	-	0.446
ARM B	23.27	24.33	0.956	- -	-	2.7	12.2	136.9	-	0.473
ARM C	0.33	2.02	0.163	- -	-	0.1	0.2	2.5	-	0.587
ARM D	15.07	33.73	0.447	- -	-	0.6	0.8	11.8	-	0.054
08.00-08.15									
ARM A	17.07	18.62	0.917	- -	-	8.0	9.1	129.2	-	0.569
ARM B	23.27	24.18	0.962	- -	-	12.2	15.5	210.7	-	0.702
ARM C	0.33	1.67	0.197	- -	-	0.2	0.2	3.3	-	0.743
ARM D	15.07	33.72	0.447	- -	-	0.8	0.8	12.1	-	0.054
08.15-08.30									
ARM A	13.93	19.96	0.698	- -	-	9.1	2.4	43.4	-	0.193
ARM B	19.00	25.43	0.747	- -	-	15.5	3.1	64.5	-	0.203
ARM C	0.27	4.51	0.060	- -	-	0.2	0.1	1.0	-	0.237
ARM D	12.30	33.80	0.364	- -	-	0.8	0.6	8.8	-	0.047
08.30-08.45									
ARM A	11.67	20.95	0.557	- -	-	2.4	1.3	20.0	-	0.109
ARM B	15.91	26.69	0.596	- -	-	3.1	1.5	23.5	-	0.095
ARM C	0.23	7.69	0.029	- -	-	0.1	0.0	0.5	-	0.134
ARM D	10.30	33.89	0.304	- -	-	0.6	0.4	6.7	-	0.042

---------- QUEUE

AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.2	*
07.45	2.2	**
08.00	8.0	********
08.15	9.1	*********
08.30	2.4	**
08.45	1.3	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.4	*
07.45	2.7	***
08.00	12.2	************
08.15	15.5	****************
08.30	3.1	***
08.45	1.5	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.30	0.0
07.45	0.1
08.00	0.2
08.15	0.2
08.30	0.1
08.45	0.0

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.4	
07.45	0.6	*
08.00	0.8	*
08.15	0.8	*
08.30	0.6	*
08.45	0.4	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)	T75
A	1280.1	853.4	336.8	0.26	336.9	0.26	
B	1745.3	1163.5	494.9	0.28	494.9	0.28	
C	24.8	16.5	8.6	0.35	8.6	0.35	
D	1130.0	753.4	54.1	0.05	54.1	0.05	
ALL	4180.2	2786.8	894.4	0.21	894.5	0.21	

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 16:20:15 on 09/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\A4303_Coventry Road\ S5 PM 2026 Base+CD+PD+Symmetry.vai"
(drive-on-the-left) at 12:27:04 on Tuesday, 1 September 2015

FILE PROPERTIES

RUN TITLE: S5 A4303/Coventry Road Roundabout PM Peak 2026 Base + CD + PD + Symmetry LOCATION: A4303_Coventry Road
DATE: 14/07/31
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB NUMBER: 7071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - Coventry Road ARM
B - A4303 East
ARM C - Mobile Home Park ARM D
- A4303 West

GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.20	7.20	31.00	14.00	56.00	62.0	0.523	26.437
ARM B	7.20	8.40	13.00	35.00	56.00	58.0	0.662	37.911
ARM C	3.65	5.50	8.00	28.00	56.00	50.0	0.501	22.482
ARM D	7.20	8.80	29.00	35.00	56.00	45.0	0.717	41.883

V = approach half-width E = entry width L = effective flare length R = entry radius D = inscribed circle diameter PHI = entry angle

WARNING ARM A Effective flare length is outside normal range. Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING FACTORS

T13 IARM

I FLOW SCALE(%) I	A
B	100
C	100
D	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

T15

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	TOP OF PEAK	FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE	AT TOP	AFTER
	TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK
A	15.00	45.00	75.00	5.30	7.95	5.30
ARM B	15.00	45.00	75.00	9.30	13.95	9.30
ARM C	15.00	45.00	75.00	0.15	0.23	0.15
ARM D	15.00	45.00	75.00	22.41	33.62	22.41

SET TITLE: AM Peak 2006 Base Flows

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15					
ARM A	0.000	0.295	0.009	0.696	
		0.0	125.0	4.0	295.0
		(0.0)	(0.8)	(0.0)	(2.7)
ARM B	0.110	0.000	0.008	0.882	
		82.0	0.0	6.0	656.0
		(0.0)	(0.0)	(0.0)	(25.2)
ARM C	0.583	0.083	0.000	0.333	
		7.0	1.0	0.0	4.0
		(0.0)	(0.0)	(0.0)	(0.0)
ARM D	0.384	0.612	0.003	0.001	
		688.0	1098.0	5.0	2.0
		(1.3)	(15.6)	(0.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	5.32	17.72	0.300	- -	0.0	0.4	6.2	-	0.080
ARM B	9.34	28.90	0.323	- -	0.0	0.5	7.0	-	0.051
ARM C	0.15	14.92	0.010	- -	0.0	0.0	0.1	-	0.068
ARM D	22.50	37.32	0.603	- -	0.0	1.5	21.7	-	0.067
17.00-17.15									
ARM A	6.35	16.12	0.394	- -	0.4	0.6	9.4	-	0.102
ARM B	11.15	28.48	0.391	- -	0.5	0.6	9.4	-	0.058
ARM C	0.18	13.43	0.013	- -	0.0	0.0	0.2	-	0.075
ARM D	26.86	37.18	0.723	- -	1.5	2.5	36.4	-	0.096
17.15-17.30									
ARM A	7.78	14.01	0.555	- -	0.6	1.2	17.4	-	0.158
ARM B	13.65	27.92	0.489	- -	0.6	0.9	13.9	-	0.070
ARM C	0.22	11.41	0.019	- -	0.0	0.0	0.3	-	0.089
ARM D	32.90	36.98	0.890	- -	2.5	7.1	92.6	-	0.215
17.30-17.45									
ARM A	7.78	13.91	0.560	- -	1.2	1.3	18.6	-	0.163
ARM B	13.65	27.90	0.489	- -	0.9	1.0	14.3	-	0.070
ARM C	0.22	11.38	0.019	- -	0.0	0.0	0.3	-	0.090
ARM D	32.90	36.98	0.890	- -	7.1	7.5	110.7	-	0.240
17.45-18.00									
ARM A	6.35	15.98	0.398	- -	1.3	0.7	10.4	-	0.105
ARM B	11.15	28.46	0.392	- -	1.0	0.6	9.9	-	0.058
ARM C	0.18	13.39	0.013	- -	0.0	0.0	0.2	-	0.076
ARM D	26.86	37.18	0.723	- -	7.5	2.7	43.7	-	0.103
18.00-18.15									
ARM A	5.32	17.66	0.301	- -	0.7	0.4	6.7	-	0.081
ARM B	9.34	28.88	0.323	- -	0.6	0.5	7.3	-	0.051
ARM C	0.15	14.88	0.010	- -	0.0	0.0	0.2	-	0.068
ARM D	22.50	37.32	0.603	- -	2.7	1.5	23.8	-	0.068

---------- QUEUE

AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.6	*
17.30	1.2	*
17.45	1.3	*
18.00	0.7	*
18.15	0.4	

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.5	
17.15	0.6	*
17.30	0.9	*
17.45	1.0	*
18.00	0.6	*
18.15	0.5	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.5	**
17.15	2.5	***
17.30	7.1	*******
17.45	7.5	********
18.00	2.7	***
18.15	1.5	**

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	583.6	389.1	68.6	0.12	68.6	0.12
B	1024.1	682.7	61.8	0.06	61.8	0.06
C	16.5	11.0	1.3	0.08	1.3	0.08
D	2467.9	1645.3	328.8	0.13	328.9	0.13
ALL	4092.1	2728.1	460.6	0.11	460.6	0.11

T75

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 16:20:39 on 09/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\A4303_A426\ S5 AM 2026 Base+CD+PD+Symmetry+Imps.vai"
(drive-on-the-left) at 16:44:32 on Friday, 28 August 2015

FILE PROPERTIES

RUN TITLE: S5 A4303/ A426 Roundabout AM Peak 2026 Base + CD + PD + Symmetry Park + Improvem LOCATION: A4303_Rugby Road
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - Rugby Road
ARM B - A4303 East
ARM C - A426 South
ARM D - A4303 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.30	10.50	41.00	22.00	74.00	44.0	0.570	38.181
ARM B	7.30	10.50	41.00	20.00	74.00	42.0	0.657	47.722
ARM C	3.20	10.50	40.00	22.00	74.00	48.0	0.557	37.146
ARM D	7.30	10.50	30.00	22.00	74.00	46.0	0.643	46.415

V = approach half-width E = entry width L = effective flare length R = entry radius D = inscribed circle diameter PHI = entry angle

WARNING ARM A Effective flare length is outside normal range. Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range. Treat capacities with increasing caution.

WARNING ARM C Effective flare length is outside normal range. Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING FACTORS

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK	NUMBER OF MINUTES FROM START WHEN FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
	TO RISE	IS REACHED	FALLING	PEAK		
A	15.00	45.00	75.00	13.29	19.93	13.29
ARM B	15.00	45.00	75.00	25.77	38.66	25.77
ARM C	15.00	45.00	75.00	8.64	12.96	8.64
ARM D	15.00	45.00	75.00	9.76	14.64	9.76

DEMAND SET TITLE: AM Peak 2006 Base Flows

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.15 - 08.45	ARM A	0.000	0.506	0.337	0.157
		0.0	538.0	358.0	167.0
		(0.0)	(8.4)	(4.5)	(10.8)
	ARM B	0.229	0.023	0.263	0.484
		473.0	48.0	543.0	998.0
		(8.9)	(0.0)	(9.0)	(9.7)
	ARM C	0.431	0.524	0.000	0.045
		298.0	362.0	0.0	31.0
		(4.7)	(11.9)	(0.0)	(9.7)
	ARM D	0.111	0.844	0.045	0.000
		87.0	659.0	35.0	0.0
		(23.0)	(22.5)	(17.1)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/ MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	13.34	26.91	0.496	- -	-	0.0	1.0	14.1	-	0.073
ARM B	25.87	39.22	0.660	- -	-	0.0	1.9	27.4	-	0.074
ARM C	8.67	22.39	0.387	- -	-	0.0	0.6	9.1	-	0.072
ARM D	9.80	29.54	0.332	- -	-	0.0	0.5	7.3	-	0.051

DEMAND (VEH/MIN) (PEDS/MIN)	CAPACITY (VEH/MIN) (VEHS)	DEMAND/ CAPACITY (VEHS)	PEDESTRIAN FLOW TIME SEGMENT)	START QUEUE TIME SEGMENT)	END QUEUE	DELAY (VEH.MIN/ VEHICLE (MIN)	GEOMETRIC DELAY (VEH.MIN/	AVERAGE DELAY PER ARRIVING	TIME (RFC)
07.30-07.45									
ARM A	15.93	25.21	0.632	- -	-	1.0	1.7	24.2	-	0.107
ARM B	30.89	38.34	0.806	- -	-	1.9	4.0	55.3	-	0.130
ARM C	10.35	20.09	0.515	- -	-	0.6	1.0	15.2	-	0.102
ARM D	11.70	27.90	0.419	- -	-	0.5	0.7	10.5	-	0.062

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
ARM A	19.51	22.94	0.850	- -	-	1.7	5.1	66.3	-	0.258
ARM B	37.84	37.18	1.018	- -	-	4.0	29.3	283.1	-	0.604
ARM C	12.68	17.56	0.722	- -	-	1.0	2.5	34.2	-	0.197
ARM D	14.33	25.89	0.554	- -	-	0.7	1.2	17.8	-	0.086

TIME	DEMAND (VEH/ MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	19.51	22.89	0.852	- -	-	5.1	5.4	79.2	-	0.289
ARM B	37.84	37.11	1.020	- -	-	29.3	45.7	565.7	-	1.141
ARM C	12.68	17.30	0.733	- -	-	2.5	2.6	38.9	-	0.215
ARM D	14.33	25.76	0.556	- -	-	1.2	1.2	18.6	-	0.087

DEMAND (VEH/MIN) (PEDS/MIN)	CAPACITY (VEH/MIN) (VEHS)	DEMAND/ CAPACITY (VEHS)	PEDESTRIAN FLOW TIME SEGMENT)	START QUEUE TIME SEGMENT)	END QUEUE	DELAY (VEH.MIN/ VEHICLE (MIN)	GEOMETRIC DELAY (VEH.MIN/	AVERAGE DELAY PER ARRIVING	TIME (RFC)
08.15-08.30									
ARM A	15.93	25.11	0.634	- -	-	5.4	1.8	28.9	-	0.115
ARM B	30.89	38.24	0.808	- -	-	45.7	4.5	200.1	-	0.347
ARM C	10.35	18.88	0.548	- -	-	2.6	1.2	19.5	-	0.120
ARM D	11.70	27.42	0.427	- -	-	1.2	0.8	11.5	-	0.064

DEMAND (VEH/MIN) (PEDS/MIN)	CAPACITY (VEH/MIN) (VEHS)	DEMAND/ CAPACITY (VEHS)	PEDESTRIAN FLOW TIME SEGMENT)	START QUEUE TIME SEGMENT)	END QUEUE	DELAY (VEH.MIN/ VEHICLE (MIN)		GEOMETRIC DELAY (VEH.MIN/	AVERAGE DELAY PER ARRIVING	TIME (RFC)
08.30-08.45										
ARM A	13.34	26.85	0.497	- -	-	1.8	1.0	15.4	-	0.075
ARM B	25.87	39.19	0.660	- -	-	4.5	2.0	31.0	-	0.077
ARM C	8.67	22.25	0.390	- -	-	1.2	0.6	9.9	-	0.074
ARM D	9.80	29.45	0.333	- -	-	0.8	0.5	7.7	-	0.051

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.0	*
07.45	1.7	**
08.00	5.1	*****
08.15	5.4	*****
08.30	1.8	**
08.45	1.0	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	1.9	**
07.45	4.0	****
08.00	29.3	*****************************
08.15	45.7	***
08.30	4.5	****
08.45	2.0	**

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.6	*
07.45	1.0	*
08.00	2.5	**
08.15	2.6	***
08.30	1.2	*
08.45	0.6	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.5	
07.45	0.7	*
08.00	1.2	*
08.15	1.2	*
08.30	0.8	*
08.45	0.5	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	1463.1	975.4	228.1	0.16	228.1	0.16
B	2838.2	1892.1	1162.6	0.41	1162.6	0.41
C	951.1	634.1	126.9	0.13	126.9	0.13
D	1075.0	716.7	73.3	0.07	73.3	0.07
ALL	6327.4	4218.3	1590.8	0.25	1590.9	0.25

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 16:06:00 on 09/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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For sales and distribution information, program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\A4303_A426\ S5 PM 2026 Base+CD+PD+Symmetry+Imps.vai"
(drive-on-the-left) at 16:49:22 on Friday, 28 August 2015

FILE PROPERTIES

RUN TITLE: S5 A4303/ A426 Roundabout PM Peak 2026 Base + CD + PD + Symmetry + Improvements LOCATION: A4303_Rugby Road
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA

ARM A - Rugby Road
ARM B - A4303 East
ARM C - A426 South
ARM D - A4303 West

GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.30	10.50	41.00	22.00	74.00	44.0	0.570	38.181
ARM B	7.30	10.50	41.00	20.00	74.00	42.0	0.657	47.722
ARM C	3.20	10.50	40.00	22.00	74.00	48.0	0.557	37.146
ARM D	7.30	10.50	30.00	22.00	74.00	46.0	0.643	46.415

V = approach half-width E = entry width L = effective flare length R = entry radius D = inscribed circle diameter PHI = entry angle

WARNING ARM A Effective flare length is outside normal range. Treat capacities with increasing caution.

WARNING ARM B Effective flare length is outside normal range. Treat capacities with increasing caution.

WARNING ARM C Effective flare length is outside normal range. Treat capacities with increasing caution.

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING FACTORS

FLOW SCALE(%)
A 100
B 100
C 100
D 100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK	NUMBER OF MINUTES FROM START WHEN FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
	TO RISE	IS REACHED	FALLING	PEAK		
A	15.00	45.00	75.00	11.09	16.63	11.09
ARM B	15.00	45.00	75.00	19.45	29.18	19.45
ARM C	15.00	45.00	75.00	9.71	14.57	9.71
ARM D	15.00	45.00	75.00	15.14	22.71	15.14

DEMAND SET TITLE: AM Peak 2006 Base Flows

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
16.45 - 18.15					
	ARM A	0.000	0.485	0.361	0.154
		0.0	430.0	320.0	137.0
		(0.0)	(1.6)	(1.6)	(10.2)
	ARM B	0.341	0.003	0.271	0.385
		530.0	5.0	422.0	599.0
		(2.8)	(0.0)	(10.7)	(24.9)
	ARM C	0.479	0.484	0.000	0.037
		372.0	376.0	0.0	29.0
		(1.6)	(7.7)	(0.0)	(0.0)
	ARM D	0.121	0.849	0.030	0.000
		147.0	1028.0	36.0	0.0
		(9.5)	(15.2)	(5.6)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/ MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	11.13	25.81	0.431	- -	0.0	0.8	11.0	-	0.068
ARM B	19.52	38.35	0.509	- -	0.0	1.0	15.0	-	0.053
ARM C	9.75	25.89	0.377	- -	0.0	0.6	8.8	-	0.062
ARM D	15.20	31.26	0.486	- -	0.0	0.9	13.7	-	0.062

DEMAND (VEH/MIN) (PEDS/MIN)	CAPACITY (VEH/MIN) (VEHS)	DEMAND/ CAPACITY (VEHS)	PEDESTRIAN FLOW TIME SEGMENT)	START QUEUE TIME SEGMENT)	END QUEUE	DELAY (VEH.MIN/ VEHICLE (MIN)	GEOMETRIC DELAY (VEH.MIN/	AVERAGE DELAY PER ARRIVING	TIME (RFC)
17.00-17.15									
ARM A	13.29	23.59	0.563	- -	0.8	1.3	18.4	-	0.096
ARM B	23.31	37.62	0.620	- -	1.0	1.6	23.4	-	0.070
ARM C	11.64	24.00	0.485	- -	0.6	0.9	13.6	-	0.081
ARM D	18.14	29.41	0.617	- -	0.9	1.6	22.9	-	0.088

	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME
17.15-17.30										
ARM A	16.28	20.65	0.788	- -	1.3	3.5	47.1	-	0.215	
ARM B	28.55	36.65	0.779	- -	1.6	3.4	47.7	-	0.120	
ARM C	14.26	21.45	0.665	- -	0.9	1.9	27.3	-	0.137	
ARM D	22.22	26.93	0.825	- -	1.6	4.4	58.9	-	0.197	

	DEMAND (VEH/ MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	TIME
17.30-17.45										
ARM A	16.28	20.53	0.793	- -	3.5	3.7	54.0	-	0.233	
ARM B	28.55	36.61	0.780	- -	3.4	3.5	51.7	-	0.124	
ARM C	14.26	21.38	0.667	- -	1.9	2.0	29.3	-	0.140	
ARM D	22.22	26.87	0.827	- -	4.4	4.6	67.7	-	0.213	

DEMAND (VEH/MIN) (PEDS/MIN)	CAPACITY (VEH/MIN) (VEHS)	DEMAND/ CAPACITY (VEHS)	PEDESTRIAN FLOW TIME SEGMENT)	START QUEUE TIME SEGMENT)	END QUEUE	DELAY (VEH.MIN/ VEHICLE (MIN)	GEOMETRIC DELAY (VEH.MIN/	AVERAGE DELAY PER ARRIVING	TIME (RFC)
17.45-18.00									
ARM A	13.29	23.43	0.567	- -	3.7	1.3	21.2	-	0.102
ARM B	23.31	37.55	0.621	- -	3.5	1.7	25.9	-	0.071
ARM C	11.64	23.91	0.487	- -	2.0	1.0	14.9	-	0.082
ARM D	18.14	29.33	0.619	- -	4.6	1.6	26.3	-	0.093

DEMAND (VEH/MIN) (PEDS/MIN)	CAPACITY (VEH/MIN) (VEHS)	DEMAND/ CAPACITY (VEHS)	PEDESTRIAN FLOW TIME SEGMENT)	START QUEUE TIME SEGMENT)	END QUEUE	DELAY (VEH.MIN/ VEHICLE (MIN)		GEOMETRIC DELAY (VEH.MIN/	AVERAGE DELAY PER ARRIVING	TIME (RFC)
I 18.00-18.15										
I ARM A	11.13	25.73	0.433	- -	-	1.3	0.8	11.8	-	0.069
I ARM B	19.52	38.32	0.510	- -	-	1.7	1.0	16.1	-	0.054
I ARM C	9.75	25.84	0.377	- -	-	1.0	0.6	9.4	-	0.062
I ARM D	15.20	31.20	0.487	- -	-	1.6	1.0	14.8	-	0.063

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.8	*
17.15	1.3	*
17.30	3.5	***
17.45	3.7	****
18.00	1.3	*
18.15	0.8	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.0	*
17.15	1.6	**
17.30	3.4	***
17.45	3.5	***
18.00	1.7	**
18.15	1.0	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.6	*
17.15	0.9	*
17.30	1.9	**
17.45	2.0	**
18.00	1.0	*
18.15	0.6	*

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.9	*
17.15	1.6	**
17.30	4.4	****
17.45	4.6	*****
18.00	1.6	**
18.15	1.0	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	(VEH/H)	* QUEUEING * DELAY * (MIN)	(MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	(MIN/VEH)
A	1220.9	813.9	163.5	0.13	163.5	0.13
B	2141.7	1427.8	179.8	0.08	179.8	0.08
C	1069.5	713.0	103.3	0.10	103.3	0.10
D	1666.9	1111.2	204.3	0.12	204.3	0.12
ALL	6098.9	4066.0	650.9	0.11	650.9	0.11

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 16:06:27 on 09/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\M1 Junction 20\ S5 2026 AM Peak Base+CD+PD+Symmetry.vai"
(drive-on-the-left) at 19:07:40 on Tuesday, 1 September 2015

FILE PROPERTIES
****

RUN TITLE: S5 M1 Junction 20 AM Peak 2026 Base + CD + PD + Symmetry Park
LOCATION: M1 Junction 20
DATE: 14/07/31
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB
NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA
****
ARM A - M1 North ARM B
- A4304
ARM C - M1 South ARM D
- A4303

GEOMETRIC DATA

GRADE SEPARATED / MOTORWAY FACTORS APPLY TO ALL ARMS

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.00	13.00	6.50	50.00	98.00	42.0	1.005	48.972
ARM B	3.25	9.00	150.00	70.00	100.00	45.0	0.846	49.806
ARM C	6.00	11.00	70.00	70.00	100.00	41.0	0.879	53.264
ARM D	7.00	8.00	2.00	70.00	100.00	45.0	1.033	49.758

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM B Effective flare length is outside normal range. Treat capacities with increasing caution.

WARNING ARM C Effective flare length is outside normal range. Treat capacities with increasing caution.

DATA FOR VERY LARGE ROUNDABOUTS

ARM	CIRFLO	SEP
A	16.0	120.0
B	27.0	0.0
C	33.0	120.0
D	6.0	0.0

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING

FACTORS

FLOW SCALE(%)	T13 IARM
	A
B	100
C	100
D	100

TIME PERIOD BEGINS(07.15)AND ENDS(08.45)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK	NUMBER OF MINUTES FROM START WHEN FLOW STOPS	RATE OF FLOW (VEH/MIN) BEFORE TO RISE	RATE OF FLOW (VEH/MIN) AT PEAK	RATE OF FLOW (VEH/MIN) AFTER IS REACHED FALLING
A	15.00	45.00	75.00	14.25	21.38	14.25
ARM B	15.00	45.00	75.00	10.94	16.41	10.94
ARM C	15.00	45.00	75.00	6.89	10.33	6.89
ARM D	15.00	45.00	75.00	18.35	27.53	18.35

DEMAND SET TITLE: AM Peak 2006 Base Flows

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
07.15 - 08.45	ARM A	0.000	0.102	0.000	0.898
		0.0	116.0	0.0	1024.0
		(0.0)	(6.9)	(0.0)	(14.9)
	ARM B	0.277	0.000	0.125	0.599
		242.0	0.0	109.0	524.0
		(2.5)	(0.0)	(4.6)	(7.1)
	ARM C	0.000	0.065	0.044	0.891
		0.0	36.0	24.0	491.0
		(0.0)	(25.0)	(37.5)	(21.6)
	ARM D	0.485	0.199	0.304	0.012
		712.0	292.0	446.0	18.0
		(18.8)	(7.2)	(17.9)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/ MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.15-07.30									
ARM A	14.30	32.63	0.438	- -	0.0	0.8	11.3	-	0.054
ARM B	10.98	29.62	0.371	- -	0.0	0.6	8.6	-	0.053
ARM C	6.91	25.50	0.271	- -	0.0	0.4	5.4	-	0.054
ARM D	18.42	39.27	0.469	- -	0.0	0.9	12.9	-	0.048
07.30-07.45									
ARM A	17.08	30.61	0.558	- -	0.8	1.2	18.2	-	0.074
ARM B	13.11	26.17	0.501	- -	0.6	1.0	14.5	-	0.076
ARM C	8.26	21.98	0.376	- -	0.4	0.6	8.8	-	0.073
ARM D	22.00	38.56	0.570	- -	0.9	1.3	19.2	-	0.060
07.45-08.00									
ARM A	20.92	27.87	0.751	- -	1.2	2.9	40.5	-	0.140
ARM B	16.06	21.52	0.746	- -	1.0	2.8	38.7	-	0.175
ARM C	10.11	17.26	0.586	- -	0.6	1.4	19.7	-	0.138
ARM D	26.94	37.61	0.716	- -	1.3	2.5	35.3	-	0.092
08.00-08.15									
ARM A	20.92	27.82	0.752	- -	2.9	3.0	44.2	-	0.145
ARM B	16.06	21.41	0.750	- -	2.8	2.9	43.1	-	0.186
ARM C	10.11	17.11	0.591	- -	1.4	1.4	21.2	-	0.143
ARM D	26.94	37.58	0.717	- -	2.5	2.5	37.4	-	0.094
08.15-08.30									
ARM A	17.08	30.55	0.559	- -	3.0	1.3	20.0	-	0.075
ARM B	13.11	26.02	0.504	- -	2.9	1.0	16.1	-	0.079
ARM C	8.26	21.77	0.379	- -	1.4	0.6	9.5	-	0.075
ARM D	22.00	38.51	0.571	- -	2.5	1.3	20.8	-	0.061

DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	DELAY (VEH.MIN/ TIME SEGMENT)	DELAY (VEH.MIN/ VEHICLE (MIN))	GEOMETRIC DELAY PER ARRIVING	AVERAGE DELAY (RFC)	TIME
I 08.30-08.45											I
I ARM A	14.30	32.58	0.439	- -	-	1.3	0.8	12.1	-	0.055	I
I ARM B	10.98	29.52	0.372	- -	-	1.0	0.6	9.1	-	0.054	I
I ARM C	6.91	25.39	0.272	- -	-	0.6	0.4	5.7	-	0.054	I
I ARM D	18.42	39.25	0.469	- -	-	1.3	0.9	13.6	-	0.048	I

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.8	*
07.45	1.2	*
08.00	2.9	***
08.15	3.0	***
08.30	1.3	*
08.45	0.8	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.6	*
07.45	1.0	*
08.00	2.8	***
08.15	2.9	***
08.30	1.0	*
08.45	0.6	*

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.4	
07.45	0.6	*
08.00	1.4	*
08.15	1.4	*
08.30	0.6	*
08.45	0.4	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
07.30	0.9	*
07.45	1.3	*
08.00	2.5	**
08.15	2.5	***
08.30	1.3	*
08.45	0.9	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	1569.1	1046.1	146.3	0.09	146.3	0.09
B	1204.4	802.9	130.1	0.11	130.1	0.11
C	758.4	505.6	70.3	0.09	70.3	0.09
D	2020.6	1347.1	139.2	0.07	139.2	0.07
ALL	5552.5	3701.7	486.0	0.09	486.0	0.09

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD. END

OF JOB

========== end of file ==========

Printed at 17:09:37 on 09/09/2015]

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

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For sales and distribution information, program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

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Run with file:-
"j:\Gazeley UK Ltd\47071103 Magna Park Phase 4\Technical\11 Junction Assessments Outline\M1 Junction 20\ S5 2026 PM Peak Base+CD+PD+Symmetry.vai"
(drive-on-the-left) at 19:10:40 on Tuesday, 1 September 2015

FILE PROPERTIES
****

RUN TITLE: S5 M1 Junction 20 PM Peak 2026 Base + CD + PD + Symmetry LOCATION:
M1 Junction 20
DATE: 31/07/14
CLIENT: IDI Gazeley
ENUMERATOR: jon_ashcroft [UKBEDFLT06027] JOB
NUMBER: 47071103
STATUS: DESCRIPTION:

INPUT DATA
****
ARM A - M1 North ARM B
- A4304
ARM C - M1 South ARM D
- A4303

GEOMETRIC DATA

GRADE SEPARATED / MOTORWAY FACTORS APPLY TO ALL ARMS

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.00	13.00	6.50	50.00	98.00	42.0	1.044	49.668
ARM B	3.25	9.00	150.00	70.00	100.00	45.0	0.923	51.198
ARM C	6.00	11.00	70.00	70.00	100.00	41.0	0.982	54.888
ARM D	7.00	8.00	2.00	70.00	100.00	45.0	1.045	49.990

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM B Effective flare length is outside normal range. Treat capacities with increasing caution.

WARNING ARM C Effective flare length is outside normal range. Treat capacities with increasing caution.

DATA FOR VERY LARGE ROUNDABOUTS

ARM	CIRFLO	SEP
A	13.0	120.0
B	21.0	0.0
C	26.0	120.0
D	5.0	0.0

TRAFFIC DEMAND DATA

Only sets included in the current run are shown SCALING

FACTORS

T13 IARM	FLOW SCALE(%)
	A
B	100
C	100
D	100

TIME PERIOD BEGINS(16.45)AND ENDS(18.15)

LENGTH OF TIME PERIOD -(90) MINUTES LENGTH

OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE SYNTHESISED FROM THE TURNING COUNT DATA

DEMAND SET TITLE: AM Peak 2006 Base Flows

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
A	15.00	45.00	75.00	11.24	16.86	11.24
ARM B	15.00	45.00	75.00	7.64	11.46	7.64
ARM C	15.00	45.00	75.00	6.50	9.75	6.50
ARM D	15.00	45.00	75.00	24.36	36.54	24.36

DEMAND SET TITLE: AM Peak 2006 Base Flows

TIME	FROM/TO	TURNING PROPORTIONS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C	ARM D
16.45 - 18.15	ARM A	0.000	0.255	0.000	0.745
		0.0	229.0	0.0	670.0
		(0.0)	(4.4)	(0.0)	(15.5)
	ARM B	0.231	0.000	0.083	0.686
		141.0	0.0	51.0	419.0
		(7.1)	(0.0)	(11.8)	(6.4)
	ARM C	0.000	0.167	0.029	0.804
		0.0	87.0	15.0	418.0
		(0.0)	(5.7)	(66.7)	(18.9)
	ARM D	0.481	0.271	0.204	0.044
		937.0	529.0	398.0	85.0
		(12.7)	(2.8)	(15.1)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/ MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
ARM A	11.28	30.14	0.374	- -	0.0	0.6	8.7	-	0.053
ARM B	7.67	33.37	0.230	- -	0.0	0.3	4.4	-	0.039
ARM C	6.52	31.35	0.208	- -	0.0	0.3	3.9	-	0.040
ARM D	24.46	42.28	0.578	- -	0.0	1.4	19.8	-	0.055
17.00-17.15									
ARM A	13.47	27.41	0.491	- -	0.6	1.0	14.0	-	0.071
ARM B	9.15	30.54	0.300	- -	0.3	0.4	6.3	-	0.047
ARM C	7.79	28.38	0.275	- -	0.3	0.4	5.6	-	0.049
ARM D	29.20	41.66	0.701	- -	1.4	2.3	33.2	-	0.080
17.15-17.30									
ARM A	16.50	23.77	0.694	- -	1.0	2.2	31.1	-	0.135
ARM B	11.21	26.74	0.419	- -	0.4	0.7	10.5	-	0.064
ARM C	9.54	24.37	0.392	- -	0.4	0.6	9.4	-	0.067
ARM D	35.76	40.80	0.877	- -	2.3	6.5	85.5	-	0.180
17.30-17.45									
ARM A	16.50	23.63	0.698	- -	2.2	2.3	33.7	-	0.140
ARM B	11.21	26.62	0.421	- -	0.7	0.7	10.8	-	0.065
ARM C	9.54	24.29	0.393	- -	0.6	0.6	9.6	-	0.068
ARM D	35.76	40.80	0.877	- -	6.5	6.8	99.7	-	0.197
17.45-18.00									
ARM A	13.47	27.22	0.495	- -	2.3	1.0	15.4	-	0.074
ARM B	9.15	30.37	0.301	- -	0.7	0.4	6.6	-	0.047
ARM C	7.79	28.27	0.276	- -	0.6	0.4	5.8	-	0.049
ARM D	29.20	41.64	0.701	- -	6.8	2.4	38.5	-	0.084

DEMAND (VEH/MIN) (PEDS/MIN)	CAPACITY (VEH/MIN) (VEHS)	DEMAND/ CAPACITY (VEHS)	PEDESTRIAN FLOW TIME SEGMENT)	START QUEUE TIME SEGMENT)	END QUEUE	DELAY (VEH.MIN/ VEHICLE (MIN)		GEOMETRIC DELAY (VEH.MIN/	AVERAGE DELAY PER ARRIVING	TIME (RFC)
18.00-18.15										
ARM A	11.28	30.05	0.375	- -	-	1.0	0.6	9.3	-	0.053
ARM B	7.67	33.29	0.230	- -	-	0.4	0.3	4.6	-	0.039
ARM C	6.52	31.28	0.209	- -	-	0.4	0.3	4.0	-	0.040
ARM D	24.46	42.27	0.579	- -	-	2.4	1.4	21.4	-	0.057

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.6	*
17.15	1.0	*
17.30	2.2	**
17.45	2.3	**
18.00	1.0	*
18.15	0.6	*

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.7	*
17.45	0.7	*
18.00	0.4	
18.15	0.3	

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.6	*
17.45	0.6	*
18.00	0.4	
18.15	0.3	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.4	*
17.15	2.3	**
17.30	6.5	******
17.45	6.8	*******
18.00	2.4	**
18.15	1.4	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	(VEH/H)	* QUEUEING * DELAY * (MIN)	(MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	(MIN/VEH)	T75
A	1237.4	824.9	112.1	0.09	112.1	0.09	
B	841.0	560.7	43.2	0.05	43.2	0.05	
C	715.7	477.2	38.3	0.05	38.3	0.05	
D	2682.7	1788.4	298.0	0.11	298.1	0.11	
ALL	5476.8	3651.2	491.7	0.09	491.7	0.09	

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OF JOB

========== end of file ==========

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T R A N S Y T 12

Traffic Network Study Tool Analysis

Program Release 7 (July 2010)
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For sales and distribution information, program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
3GA,UK
Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770864
Email: softwarebureau@trl.co.uk
Web: www.trlsoftware.co.uk RG40

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Run with file:- "S5 2026 AM CD PD SP.DAT" at 14:24 on 20150825

TRANSYT 12.0

S4 M69 Junction 1 2026 + Committed & Proposed & Symmetry Park Development

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	= 5
NUMBER OF LINKS	= 49
NUMBER OF OPTIMISED NODES	= 5
MAXIMUM NUMBER OF GRAPHIC PLOTS	= 0
NUMBER OF STEPS IN CYCLE	= 60
MAXIMUM NUMBER OF SHARED STOPLINES	= 4
MAXIMUM NUMBER OF TIMING POINTS	= 2
MAXIMUM LINKS AT ANY NODE	= 12

CORE REQUESTED = 11409 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

(1)= TITLE:- S4 M69 Junction 1 2026 + Committed & Proposed & Symmetry Park Development

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME EFFECTIV PERIOD 1-1200 MINS.	DISPLAC START (SEC)	E-GREEN EMENTS END (SEC)	EQUISAT SETTINGS 0=NO 1=YES	0=UNEQUAL CYCLE 1=EQUAL	FLOW SCALE 10-200 %	CRUISE-SPEEDS SCALE 50-200 %	CARD32 0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL- CLIMB OUTPUT 1=FULL	DELAY VALUE P PER PCU-H	STOP VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260

CARD NO.	CARD TYPE	LIST OF NODES TO BE OPTIMISED													
3)=	2	1	2	3	4	5	0	0	0	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET.....					SECOND SET.....					THIRD SET.....				
4)=	7	12	15	16	17	0	13	19	18	0	0	14	191	192	0	0
5)=	7	22	24	25	26	0	32	35	36	0	0	33	37	0	0	0
6)=	7	42	44	45	0	0	43	46	0	0	0	52	55	56	57	0
7)=	7	53	58	0	0	0	54	59	0	0	0	61	62	63	64	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
8)=	10	1	7	7								
9)=	10	2	7	7								
10)=	10	3	7	7								
11)=	10	4	7	7								
12)=	10	5	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
13)=	11	1	6	6								
14)=	11	2	6	6								
15)=	11	3	6	6								
16)=	11	4	6	6								
17)=	11	5	6	6								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
18)=	12	1	1	0	0								
19)=	12	2	1	0	0								
20)=	12	3	1	0	0								
21)=	12	4	1	0	0								
22)=	12	5	1	0	0								

LINK CARDS:

CARD NO.	CARD TYPE	LINK NO.	LINK1 NO.	LINK2 NO.	ONLY % FLOW	GIVEWAY DATA PRIORITY LINKS LINK1 GIVEWAY X100	LINK2 GIVEWAY X100	GIVEWAY COEFFS.				LINK WT.X100	STOP FLOW	MAX WT.X100	DELAY X100	DISPSN LENGTH
23)=	30	60	61	0	0	47	100	0	0	0	0	125	0	2108	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN START STAGE	FIRST GREEN START LAG	FIRST GREEN END STAGE	FIRST GREEN END LAG	SECOND GREEN START STAGE	SECOND GREEN START LAG	SECOND GREEN END STAGE	SECOND GREEN END LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
24)=	31	10	1	1	6	2	0	0	0	0	0	200	-9999	4100	60	0
25)=	31	11	1	1	6	2	0	0	0	0	0	200	-9999	2120	60	0
26)=	31	12	1	2	6	1	0	0	0	0	0	110	0	1892	500	0
27)=	31	13	1	2	6	1	0	0	0	0	0	110	0	2029	500	0
28)=	31	14	1	2	6	1	0	0	0	0	0	110	0	2029	500	0
29)=	31	15	1	1	0	1	0	0	0	0	0	110	0	0	0	0
30)=	31	16	1	1	0	1	0	0	0	0	0	110	0	0	0	0
31)=	31	17	1	1	0	1	0	0	0	0	0	110	0	0	0	0
32)=	31	18	1	1	0	1	0	0	0	0	0	110	0	0	0	0
33)=	31	19	1	1	0	1	0	0	0	0	0	110	0	0	0	0
34)=	31	20	2	1	6	2	0	0	0	0	0	200	-9999	2015	60	0
35)=	31	21	2	1	6	2	0	0	0	0	0	200	-9999	2130	60	0
36)=	31	22	2	2	6	1	0	0	0	0	0	100	0	3989	500	0
37)=	31	23	2	2	6	1	0	0	0	0	0	100	0	2063	500	0
38)=	31	24	2	1	0	1	0	0	0	0	0	100	0	0	0	0
39)=	31	25	2	1	0	1	0	0	0	0	0	100	0	0	0	0
40)=	31	26	2	1	0	1	0	0	0	0	0	100	0	0	0	0
41)=	31	30	3	1	6	2	0	0	0	0	0	200	-9999	2015	60	0
42)=	31	31	3	1	6	2	0	0	0	0	0	200	-9999	4270	60	0
43)=	31	32	3	2	6	1	0	0	0	0	0	130	0	1926	500	0
44)=	31	33	3	2	6	1	0	0	0	0	0	130	0	2063	500	0
45)=	31	34	3	2	6	1	0	0	0	0	0	130	0	2063	500	0
46)=	31	35	3	1	0	1	0	0	0	0	0	130	0	0	0	0
47)=	31	36	3	1	0	1	0	0	0	0	0	130	0	0	0	0
48)=	31	37	3	1	0	1	0	0	0	0	0	130	0	0	0	0
49)=	31	40	4	1	6	2	0	0	0	0	0	200	-9999	1995	60	0
50)=	31	41	4	1	6	2	0	0	0	0	0	200	-9999	4230	60	0
51)=	31	42	4	2	6	1	0	0	0	0	0	140	0	1941	500	0
52)=	31	43	4	2	6	1	0	0	0	0	0	140	0	2077	500	0
53)=	31	44	4	1	0	1	0	0	0	0	0	140	0	0	0	0
54)=	31	45	4	1	0	1	0	0	0	0	0	140	0	0	0	0
55)=	31	46	4	1	0	1	0	0	0	0	0	140	0	0	0	0
56)=	31	50	5	1	6	2	0	0	0	0	0	200	-9999	1975	20	0
57)=	31	51	5	1	6	2	0	0	0	0	0	200	-9999	4250	20	0
58)=	31	52	5	2	6	1	0	0	0	0	0	125	0	1936	500	0
59)=	31	53	5	2	6	1	0	0	0	0	0	125	0	2072	500	0
60)=	31	54	5	2	6	1	0	0	0	0	0	125	0	4144	500	0
61)=	31	55	5	1	0	1	0	0	0	0	0	125	0	0	0	0
62)=	31	56	5	1	0	1	0	0	0	0	0	125	0	0	0	0
63)=	31	57	5	1	0	1	0	0	0	0	0	125	0	0	0	0
64)=	31	58	5	1	0	1	0	0	0	0	0	125	0	0	0	0
65)=	31	59	5	1	0	1	0	0	0	0	0	125	0	0	0	0
66)=	31	61	0	0	0	0	0	0	0	0	0	125	0	6000	0	0
67)=	31	62	0	0	0	0	0	0	0	0	0	125	0	0	0	0
68)=	31	63	0	0	0	0	0	0	0	0	0	125	0	0	0	0
69)=	31	64	0	0	0	0	0	0	0	0	0	125	0	0	0	0
70)=	31	191	1	1	0	1	0	0	0	0	0	110	0	0	0	0
71)=	31	192	1	1	0	1	0	0	0	0	0	110	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 ..... LINK NO.	ENTRY 1 ..... FLOW	ENTRY 1 ..... CRUISE SPEED	ENTRY 2 ..... LINK NO.	ENTRY 2 ..... FLOW	ENTRY 2 ..... CRUISE SPEED	ENTRY 3 ..... LINK NO.	ENTRY 3 ..... FLOW	ENTRY 3 ..... CRUISE SPEED	ENTRY 4 ..... LINK NO.	ENTRY 4 ..... FLOW	ENTRY 4 ..... CRUISE SPEED
72)=	32	10	653	0	0	0	43	0	0	0	0	0	0	0	0	0
73)=	32	11	214	0	0	0	43	0	0	0	0	0	0	0	0	0
74)=	32	12	84	0	60	84	43	0	0	0	0	0	0	0	0	0
75)=	32	13	80	0	60	80	43	0	0	0	0	0	0	0	0	0
76)=	32	14	193	0	60	193	43	0	0	0	0	0	0	0	0	0
77)=	32	15	313	0	61	313	43	0	0	0	0	0	0	0	0	0

78)=	32	16	210	0	64	210	43	0	0	0	0	0	0	0	0
79)=	32	17	88	0	63	88	43	0	0	0	0	0	0	0	0
80)=	32	18	313	0	61	313	43	0	0	0	0	0	0	0	0
81)=	32	19	210	0	64	210	43	0	0	0	0	0	0	0	0
82)=	32	20	368	0	0	0	43	0	0	0	0	0	0	0	0

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          83)=  32      21     988       0       0       0      43       0       0       0       0       0       0       0       0       0
          84)=  32      22     264       0      10     264      43       0       0       0       0       0       0       0       0       0
          85)=  32      23     214       0      11     211      43       0       0       0       0       0       0       0       0       0
          86)=  32      24     273       0      14     193      43      13      80      43       0       0       0       0       0       0
          87)=  32      25     200       0     192     200      43       0       0       0       0       0       0       0       0       0
          88)=  32      26      52       0     191      52      43       0       0       0       0       0       0       0       0       0
          89)=  32      30     192       0       0       0      43       0       0       0       0       0       0       0       0       0
          90)=  32      31    1485       0       0       0      43       0       0       0       0       0       0       0       0       0
          91)=  32      32     359       0      20     359      43       0       0       0       0       0       0       0       0       0
          92)=  32      33     697       0      21     697      43       0       0       0       0       0       0       0       0       0
          93)=  32      34     291       0      21     291      43       0       0       0       0       0       0       0       0       0
          94)=  32      35     193       0      24     193      43       0       0       0       0       0       0       0       0       0
          95)=  32      36      32       0      25      32      43       0       0       0       0       0       0       0       0       0
          96)=  32      37     214       0      23     214      43       0       0       0       0       0       0       0       0       0
          97)=  32      40     205       0       0       0      43       0       0       0       0       0       0       0       0       0
          98)=  32      41     472       0       0       0      43       0       0       0       0       0       0       0       0       0
          99)=  32      42     689       0      31     689      43       0       0       0       0       0       0       0       0       0
         100)=  32      43     796       0      31     796      43       0       0       0       0       0       0       0       0       0
         101)=  32      44     697       0      33     697      43       0       0       0       0       0       0       0       0       0
         102)=  32      45     214       0      37     214      43       0       0       0       0       0       0       0       0       0
         103)=  32      46     291       0      34     291      43       0       0       0       0       0       0       0       0       0
         104)=  32      50     285       0       0       0      43       0       0       0       0       0       0       0       0       0
         105)=  32      51     826       0       0       0      43       0       0       0       0       0       0       0       0       0
         106)=  32      52     153       0      40     153      43       0       0       0       0       0       0       0       0       0
         107)=  32      53     291       0      46     291      43       0       0       0       0       0       0       0       0       0
         108)=  32      54     472       0      41     472      43       0       0       0       0       0       0       0       0       0
         109)=  32      55     240       0      42     240      43       0       0       0       0       0       0       0       0       0
         110)=  32      56      82       0      44      82      43       0       0       0       0       0       0       0       0       0
         111)=  32      57      10       0      45      10      43       0       0       0       0       0       0       0       0       0
         112)=  32      58     708       0      43     708      43       0       0       0       0       0       0       0       0       0
         113)=  32      59      88       0      43      88      43       0       0       0       0       0       0       0       0       0
         114)=  32      60     370       0       0       0      43       0       0       0       0       0       0       0       0       0
         115)=  32      61    1107       0      51     826      43      50     281      43       0       0       0       0       0       0
         116)=  32      62     291       0      53     291      43       0       0       0       0       0       0       0       0       0
         117)=  32      63     796       0      58     708      43      59      88      43       0       0       0       0       0       0
         118)=  32      64     472       0      54     472      43       0       0       0       0       0       0       0       0       0
         119)=  32     191      52       0      64      52      43       0       0       0       0       0       0       0       0       0
         120)=  32     192     200       0      61     200      43       0       0       0       0       0       0       0       0       0

                                LINK CARDS : FLARE SATURATION FLOW DATA
                                   ..LANE  1..     ..LANE  2..     ..LANE  3..
                CARD    LINK    SAT.     CAPAC  SAT.     CAPAC  SAT.     CAPAC
                TYPE     NO.    FLOW      VEH.  FLOW      VEH.  FLOW      VEH.
          121)=  33      21     2130       5       0       0       0       0

                                                        LINK DATA:  QUEUE CONSTRAINTS
          CARD    CARD    LINK     LIMIT   QUEUE    LINK     LIMIT   QUEUE    LINK     LIMIT   QUEUE    LINK     LIMIT   QUEUE    LINK     LIMIT   QUEUE
           NO.    TYPE     NO.     QUEUE  WEIGHT     NO.     QUEUE  WEIGHT     NO.     QUEUE  WEIGHT     NO.     QUEUE  WEIGHT     NO.     QUEUE  WEIGHT
          122)=  38       12       10    4500       13       10    4500       14       10    4500       22        9    4500       23        7    4500
          123)=  38       32        6    4500       33       10    4500       34       10    4500       42       11    4500       43       11    4500
          124)=  38       52        9    4500       53        9    4500       54       18    4500        0        0       0        0        0       0

          *****END OF SUBROUTINE TINPUT****


              60 SECOND CYCLE  60 STEPS

          INITIAL SETTINGS
           - (SECONDS)

             NODE    NUMBER    STAGE    STAGE    STAGE    STAGE    STAGE  STAGE    STAGE    STAGE    STAGE    STAGE
    NO    OF STAGES    1        2        3        4        5        6       7        8        9       10

     1        2        0       20
     2        2        0       37
     3        2        0       27
     4        2        0       13
     5        2        0       20

 LINK     FLOW    SAT    DEGREE  MEAN TIMES  -------DELAY--------    ----STOPS----    ----QUEUE----  PERFORMANCE   EXIT   GREEN TIMES
NUMBER    INTO    FLOW     OF      PER PCU    UNIFORM RANDOM+ COST     MEAN    COST     MEAN              INDEX.       NODE   START  START
          LINK             SAT     CRUISE              OVERSAT  OF     STOPS    OF     MAX.  AVERAGE  WEIGHTED SUM          END     EN                D
                                            DELAY  (U+R+O=MEAN Q) DELAY   /PCU   STOPS          EXCESS  OF ( ) VALUES        1ST     2ND
       (PCU/H) (PCU/H)  (%)  (SEC) (SEC)    (PCU-H/H)     ($/H)    (%)   ($/H)   (PCU)  (PCU)    ($/H)                    (SECONDS)

   10     653   4100     64  16.7  24.9    3.6 +  0.9  ( 64.1)*    93  ( 15.6)      10              38.5      1      6  20
   11     214   2120     40  16.7  24.5    1.1 +  0.3  ( 20.6)*    88  (  4.9)       3              12.4      1      6  20
   12      84   1892S    63   9.2  10.6    0.1 +  0.1  (  3.5)*    53  (  1.1)       7  ( 0.0)*     18.8      1     26   0
   13      80   2029S    51   9.2   8.7    0.1 +  0.1  (  2.7)*    45  (  0.9)       4  ( 0.0)*     14.6      1     26   0
   14     193   2029S    38   9.2   8.3    0.3 +  0.1  (  6.3)*    45  (  2.2)       3  ( 0.0)*     33.8      1     26   0
   15     312     12L    63   9.2   6.8    0.2 +  0.4  (  8.3)     64  (  5.1)       7                  13.5      1     26   0
   16     210     12L    63   9.2   5.0    0.0 +  0.3  (  4.1)     10  (  0.5)       7                   4.7      1     26   0
   17      88     12L    63   9.2  14.3    0.2 +  0.1  (  5.0)     60  (  1.4)       7                   6.3      1     26   0
   18     312     13L    51   9.2   4.1    0.1 +  0.3  (  5.1)     35  (  2.8)       4                   7.9      1     26   0
   19     210     13L    51   9.2   3.7    0.0 +  0.2  (  3.1)      8  (  0.4)       4                   3.5      1     26   0
   20     368   2015     34  16.7  10.5    0.8 +  0.3  ( 15.3)*    57  (  5.4)       4                   9.2      2      6  37
   21     988   2692f    69  16.7  12.5    2.3 +  1.1  ( 48.8)*    63  ( 15.9)      11                  29.3      2      6  37
   22     264   3989S    66   8.4  31.1    2.0 +  0.3  ( 32.4)*   107  (  7.3)      13  ( 0.6)*     198.2      2     43   0
   23     214   2063     35   8.4  32.7    1.7 +  0.3  ( 27.6)*   107  (  5.9)       4  ( 0.0)*     143.9      2     43   0
   24     273     22L    66   8.4  19.2    1.1 +  0.3  ( 20.6)     93  (  6.6)      13     +          27.2      2     43   0
   25     199     22L    66   8.4  14.6    0.6 +  0.2  ( 11.5)    101  (  5.2)      13     +          16.7      2     43   0
   26      52     22L    66   8.4  13.6    0.1 +  0.1  (  2.8)     44  (  0.6)      13     +           3.4      2     43   0
   30     192   2015     26  16.7  16.6    0.7 +  0.2  ( 12.6)*    71  (  3.5)       2                   7.5      3      6  27
   31    1485   4270     95  16.7  37.2    7.6 +  7.7  (217.8)*   120  ( 46.0)      32                 130.7      3      6  27
   32     359   1926S    65  10.9  20.4    1.5 +  0.6  ( 28.9)*   101  (  9.3)       9  ( 0.6)*     182.0      3     33   0
   33     698   2063S    95  10.9  43.3    3.1 +  5.4  (119.4)*   139  ( 25.0)      21  ( 4.1)*     808.1      3     33   0
   34     290   2063     30  10.9  12.1    0.8 +  0.2  ( 13.9)*    82  (  6.2)       4  ( 0.0)*      75.6      3     33   0
   35     193     32L    65  10.9  22.4    0.9 +  0.3  ( 17.0)     66  (  3.3)       9     +          20.3      3     33   0
   36      32     32L    65  10.9  26.7    0.2 +  0.1  (  3.4)     79  (  0.7)       9     +           4.0      3     33   0
   37     214     33L    95  10.9  33.6    0.4 +  1.6  ( 28.4)     74  (  4.1)      21     +          32.5      3     33   0
   40     205   1995     77  16.7  53.2    1.4 +  1.6  ( 43.0)*   134  (  7.1)       5                  25.8      4      6  13
   41     472   4230     84  16.7  44.0    3.3 +  2.4  ( 81.8)*   122  ( 14.9)      10                  49.1      4      6  13
   42     689   1941S   118  11.7 299.2    3.8 + 53.5  (813.2)*   269  ( 47.7)     155  (**.1)*   10100.8      4     19   0
   43     796   2077S    75  11.7   6.2    0.3 +  1.1  ( 19.5)*    59  ( 12.1)      14  ( 0.3)*     121.4      4     19   0
   44     698     42L   118  11.7 299.5    4.0 + 54.1  (824.7)    262  ( 47.1)     155     +          871.7      4     19   0
   45     214     42L   118  11.7 302.0    1.4 + 16.6  (254.9)    264  ( 14.6)     155     +          269.5      4     19   0
   46     290     43L    75  11.7   5.9    0.1 +  0.4  (  6.8)     15  (  1.1)      14     +           7.9      4     19   0
   50     285   1975     58  16.7  28.3    1.6 +  0.7  ( 31.8)*    97  (  7.1)       5                   6.4      5      6  20
   51     826   4250     78  16.7  28.5    4.8 +  1.7  ( 92.7)*   100  ( 21.4)      14                  18.5      5      6  20
   52     153   1936S    39  10.5  14.1    0.5 +  0.1  (  8.5)*   102  (  4.0)       5  ( 0.0)*      46.6      5     26   0
   53     290   2072S    83  10.5  18.0    0.8 +  0.7  ( 20.6)*    60  (  4.5)       6  ( 0.0)*     107.4      5     26   0
   54     472   4144S    23  10.5  10.3    1.2 +  0.1  ( 19.1)*    97  ( 11.8)       8  ( 0.0)*     107.3      5     26   0
   55     211<    52L    39  10.5  11.7    0.5 +  0.2  (  9.7)     40  (  2.5)       5                  12.2      5     26   0
   56      68<    52L    39  10.5   6.3    0.1 +  0.0  (  1.7)     31  (  0.7)       5                   2.3      5     26   0
   57       8     52L    39  10.5   3.3    0.0 +  0.0  (  0.1)      7  (  0.0)       5                   0.1      5     26   0
   58     708     53L    83  10.5   8.8    0.1 +  1.7  ( 24.5)     20  (  3.6)       6                  28.1      5     26   0
   59      88     54L    23  10.5   1.5    0.0 +  0.0  (  0.5)      9  (  0.2)       8                   0.7      5     26   0
   60     370   2108     41  10.5   5.0    0.2 +  0.3  (  7.3)     41  (  3.9)       2                  11.3
```

60 SECOND CYCLE 60 STEPS

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	DELAY COST OVERSAT OF ($/H)	STOPS MEAN /PCU (%)	STOPS COST OF ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END 1ST (SECONDS)	GREEN TIMES END 2ND (SECONDS)
61	1107	6000S	44	10.5	0.5	0.0 + 0.2	(2.4)	1	(0.3)	0		2.6					
62	290	61L	44	10.5	0.5	0.0 + 0.0	(0.6)	1	(0.1)	0		0.7					
63	796	61L	44	10.5	0.5	0.0 + 0.1	(1.7)	1	(0.2)	0		1.9					
64	472	61L	44	10.5	0.5	0.0 + 0.1	(1.0)	1	(0.1)	0		1.1					
191	52	14L	38	9.2	3.0	0.0 + 0.0	(0.6)	7	(0.1)	3		0.7	1	26	0		
192	199	14L	38	9.2	3.6	0.1 + 0.1	(2.8)	34	(1.7)	3		4.6	1	26	0		

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2673.0	272.9	9.8	53.7	157.1	(7154.0) + (244.9)	+ (6242.4)	=	13641.3	TOTALS

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	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	143.4	+	242.4	+	176.1	=	561.9

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 49

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

1	2	18	38
2	2	0	37
3	2	0	27
4	2	51	4
5	2	42	2

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2673.0	273.6	9.8	54.4	157.1	(6928.4) + (248.2)	+ (6130.3)	=	13306.9	TOTALS

NO. OF ENTRIES TO SUBPT = 15
NO. OF LINKS RECALCULATED= 452

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

1	2	18	38
2	2	24	1
3	2	0	27
4	2	51	4
5	2	42	2

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2673.0	273.8	9.8	54.6	157.1	(6917.9) + (243.3)	+ (6077.9)	=	13239.1	TOTALS

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 368

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

1	2	22	40
2	2	28	56
3	2	10	27
4	2	51	4
5	2	41	59

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2673.0	465.6	5.7	56.3	347.2	(4120.6) + (123.8)	+ (346.0)	=	4590.4	TOTALS

NO. OF ENTRIES TO SUBPT = 45
NO. OF LINKS RECALCULATED= 1154

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1	2	49	7
2	2	28	56
3	2	10	27
4	2	51	4
5	2	41	59

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2673.0	461.7	5.8	52.3	347.2	(3877.8) + (117.7)	+	(345.9)	= 4341.4	TOTALS

NO. OF ENTRIES TO SUBPT = 13
NO. OF LINKS RECALCULATED= 441

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1	2	49	7
2	2	28	56
3	2	10	27
4	2	15	28
5	2	5	23

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2673.0	460.2	5.8	50.9	347.2	(3991.0) + (103.6)	+	(137.9)	= 4232.5	TOTALS

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 410

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1	2	56	14
2	2	27	55
3	2	14	31
4	2	13	26
5	2	59	17

TOTAL TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL DISTANCE PERFORMANCE INDEX ($/H)	
2673.0	457.3	5.8	48.0	347.2	(3856.1) + (85.6)	+	(80.2)	= 4021.9	TOTALS

NO. OF ENTRIES TO SUBPT = 29
NO. OF LINKS RECALCULATED= 943

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1	2	57	14
2	2	27	55
3	2	14	31
4	2	13	26
5	2	59	17

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2673.0	457.8	5.8	47.9	347.7	(3854.4) + (84.4)	+	(80.3)	= 4019.1	TOTALS

NO. OF ENTRIES TO SUBPT = 20
NO. OF LINKS RECALCULATED= 714

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	55	12								
2	2	27	55								
3	2	14	31								
4	2	12	25								
5	2	57	15								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	COST OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN MAX. QUEUE (PCU)	AVERAGE EXCESS QUEUE (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END 1ST (SECONDS)	GREEN TIMES END 2ND (SECONDS)
10	653	4100	80	16.7	33.4	4.1 + 1.9	(86.0)*	107	(18.1)	12		51.6	1	1		12	
11	214	2120	50	16.7	29.9	1.3 + 0.5	(25.2)*	99	(5.4)	4		15.1	1	1		12	
12	84	1892S	55	9.2	8.4	0.1 + 0.1	(2.8)*	46	(1.0)	4	(0.0)*	14.9	1	18		55	
13	80	2029S	47	9.2	7.3	0.1 + 0.1	(2.3)*	41	(0.9)	2	(0.0)*	12.4	1	18		55	
14	193	2029S	35	9.2	6.7	0.2 + 0.1	(5.1)*	41	(2.0)	2	(0.0)*	27.7	1	18		55	
15	312	12L	55	9.2	3.5	0.0 + 0.3	(4.4)	14	(1.1)	4		5.5	1	18		55	
16	210	12L	55	9.2	7.6	0.3 + 0.2	(6.3)	29	(1.5)	4		7.8	1	18		55	
17	50<	12L	55	9.2	13.5	0.1 + 0.0	(2.7)	51	(1.2)	4		3.8	1	18		55	
18	312	13L	47	9.2	2.7	0.0 + 0.2	(3.3)	6	(0.5)	2		3.7	1	18		55	
19	210	13L	47	9.2	6.9	0.2 + 0.2	(5.7)	27	(1.5)	2		7.2	1	18		55	
20	368	2015	48	16.7	18.4	1.4 + 0.5	(26.7)*	78	(7.4)	5		16.0	2	33		55	
21	988	2912f	88	16.7	28.5	4.2 + 3.6	(111.1)*	103	(26.1)	18		66.6	2	33		55	
22	264	3989S	44	8.4	1.9	0.0 + 0.1	(2.0)*	3	(0.2)	8	(0.0)*	10.0	2	1		27	
23	214	2063	23	8.4	2.6	0.0 + 0.1	(2.2)*	4	(0.2)	0	(0.0)*	11.1	2	1		27	
24	273	22L	44	8.4	15.9	1.1 + 0.1	(17.1)*	73	(5.1)	8		22.2	2	1		27	
25	199	22L	44	8.4	26.8	1.4 + 0.1	(21.0)	99	(5.1)	8		26.1	2	1		27	
26	52	22L	44	8.4	10.2	0.1 + 0.0	(2.1)	79	(1.1)	8		3.1	2	1		27	
30	192	2015	48	16.7	29.7	1.1 + 0.5	(22.5)*	98	(4.8)	3		13.5	3	20		31	
31	1485	4270	174	16.7	805.5	15.6 +316.7	(999.9)*	257	(98.4)	345	+	2830.9	3	20		31	
32	359	1926S	48	10.9	2.9	0.0 + 0.3	(4.1)*	5	(0.5)	3	(0.0)*	21.0	3	37		14	
33	698	2063S	70	10.9	5.1	0.1 + 0.9	(14.2)*	32	(5.8)	9	(0.0)*	76.7	3	37		14	
34	290	2063	22	10.9	1.9	0.0 + 0.1	(2.1)*	3	(0.3)	0	(0.0)*	10.8	3	37		14	
35	193	32L	48	10.9	13.2	0.6 + 0.2	(10.1)	70	(3.5)	3		13.6	3	37		14	
36	32	32L	48	10.9	11.4	0.1 + 0.0	(1.4)	49	(0.4)	3		1.9	3	37		14	
37	214	33L	70	10.9	20.1	0.9 + 0.3	(17.0)	106	(5.9)	9		22.8	3	37		14	
40	205	1995	77	16.7	53.2	1.4 + 1.6	(43.0)*	134	(7.1)	5		25.8	4	18		25	
41	472	4230	84	16.7	44.0	3.3 + 2.4	(81.8)*	122	(14.9)	10		49.1	4	18		25	
42	396<	1941S	96	11.7	28.7	0.3 + 2.8	(44.9)*	61	(10.8)	18	(2.0)*	325.1	4	31		12	
43	458<	2077S	51	11.7	3.0	0.1 + 0.3	(5.3)*	13	(2.6)	8	(0.0)*	29.3	4	31		12	
44	698	42L	96	11.7	29.6	0.7 + 5.0	(81.5)	71	(12.8)	18	+	94.3	4	31		12	
45	214	42L	96	11.7	25.9	0.0 + 1.5	(21.9)	40	(2.2)	18	+	24.1	4	31		12	
46	291	43L	51	11.7	5.4	0.2 + 0.2	(6.3)	25	(1.9)	8		8.1	4	31		12	
50	285	1975	67	16.7	33.9	1.7 + 1.0	(38.2)*	107	(7.8)	5		7.6	5	3		15	
51	826	4250	90	16.7	40.4	5.2 + 4.0	(131.5)*	120	(25.5)	17		26.3	5	3		15	
52	153	1936S	32	10.5	2.2	0.0 + 0.1	(1.3)*	4	(0.1)	2	(0.0)*	6.8	5	21		57	
53	291	2072S	55	10.5	11.9	0.7 + 0.3	(13.6)*	80	(6.0)	5	(0.0)*	74.1	5	21		57	
54	472	4144S	20	10.5	0.9	0.0 + 0.1	(1.7)*	1	(0.2)	0	(0.0)*	8.5	5	21		57	
55	138<	52L	32	10.5	5.3	0.1 + 0.1	(2.9)	11	(0.7)	2		3.6	5	21		57	
56	82	52L	32	10.5	8.4	0.1 + 0.1	(2.7)	67	(1.4)	2		4.1	5	21		57	
57	10	52L	32	10.5	17.5	0.0 + 0.0	(0.7)	94	(0.2)	2		0.9	5	21		57	
58	407<	53L	55	10.5	5.2	0.2 + 0.4	(8.4)	9	(1.7)	5		10.1	5	21		57	
59	50<	54L	20	10.5	3.0	0.0 + 0.0	(0.6)	7	(0.2)	0		0.8	5	21		57	
60	370	2108	35	10.5	3.7	0.1 + 0.3	(5.5)	22	(2.1)	2		7.6					

60 SECOND CYCLE 60 STEPS

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	COST OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN MAX. QUEUE (PCU)	AVERAGE EXCESS QUEUE (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END 1ST (SECONDS)	GREEN TIMES END 2ND (SECONDS)
61	1107	6000S	39	10.5	0.5	0.0 + 0.2	(2.1)	1	(0.2)	0		2.4					
62	291	61L	39	10.5	0.5	0.0 + 0.0	(0.6)	1	(0.1)	0		0.6					
63	458<	61L	39	10.5	0.5	0.0 + 0.1	(0.9)	0	(0.1)	0		1.0					
64	472	61L	39	10.5	0.5	0.0 + 0.1	(0.9)	1	(0.1)	0		1.0					
191	52	14L	35	9.2	6.3	0.1 + 0.0	(1.3)	27	(0.4)	2		1.7	1	18	55		
192	199	14L	35	9.2	2.2	0.0 + 0.1	(1.7)	5	(0.3)	2		2.0	1	18	55		

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2673.0	457.6	5.8	47.7	347.7	(3839.4) + (81.7)	+ (89.8)	= 4010.8	TOTALS	
								ROUTE	

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	143.4	+	454.7	+	135.5	=	733.5

NO. OF ENTRIES TO SUBPT = 16
NO. OF LINKS RECALCULATED= 566

PROGRAM TRANSYT FINISHED
========== end of file ==========

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T R A N S Y T 12

Traffic Network Study Tool Analysis

Program Release 7 (July 2010)
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For sales and distribution information, program
advice and maintenance, contact:

TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770864
Nine Mile Ride Email: softwarebureau@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk RG40
3GA,UK

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "S5 2026 PM CD PD SP.DAT" at 14:30 on 20150825

TRANSYT 12.0

S5 M69 Junction 1 2026 PM + Committed & Proposed & Symmetry Park Development

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	=	5
NUMBER OF LINKS	=	50
NUMBER OF OPTIMISED NODES	=	5
MAXIMUM NUMBER OF GRAPHIC PLOTS	=	0
NUMBER OF STEPS IN CYCLE	=	60
MAXIMUM NUMBER OF SHARED STOPLINES	=	4
MAXIMUM NUMBER OF TIMING POINTS	=	2
MAXIMUM LINKS AT ANY NODE	=	12

CORE REQUESTED = 11544 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

(1)= TITLE:- S5 M69 Junction 1 2026 PM + Committed & Proposed & Symmetry Park Development

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME PERIOD MINS.	EFFECTIVE-GREEN DISPLACEMENTS START (SEC)	EFFECTIVE-GREEN DISPLACEMENTS END (SEC)	EQUISAT SETTINGS 0=NO 1=YES	0=UNEQUAL 1=EQUAL CYCLE	FLOW SCALE 10-200 %	CRUISE-SPEEDS SCALE 50-200 %	CARD32 0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL-CLIMB OUTPUT 1=FULL	DELAY VALUE P PER PCU-H	STOP NO. VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260

CARD NO.	CARD TYPE	LIST OF NODES TO BE OPTIMISED														
3)=	2	1	2	3	4	5	0	0	0	0	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET.....					SECOND SET.....					THIRD SET.....				
4)=	7	12	15	16	17	0	13	19	18	0	0	14	191	192	0	0
5)=	7	22	24	25	26	0	32	35	36	0	0	33	37	0	0	0
6)=	7	42	44	45	47	0	43	46	0	0	0	52	55	56	57	0
7)=	7	53	58	0	0	0	54	59	0	0	0	61	62	63	64	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
8)=	10	1	7	7								
9)=	10	2	7	7								
10)=	10	3	7	7								
11)=	10	4	7	7								
12)=	10	5	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
13)=	11	1	6	6								
14)=	11	2	6	6								
15)=	11	3	6	6								
16)=	11	4	6	6								
17)=	11	5	6	6								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
18)=	12	1	1	0	0								
19)=	12	2	1	0	0								
20)=	12	3	1	0	0								
21)=	12	4	1	0	0								
22)=	12	5	1	0	0								

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY LINKS LINK1 NO.	PRIORITY LINKS LINK2 NO.	LINK1 GIVEWAY COEFFS. ONLY % FLOW	A1 X100	A2 X100				LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
23)=	30	60	61	0	0	47	100	0	0	0	0	125	0	2108	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN START STAGE	FIRST GREEN START LAG	FIRST GREEN END STAG	FIRST GREEN END LAG	SECOND GREEN START STAGE	SECOND GREEN START LAG	SECOND GREEN END STAGE	SECOND GREEN END LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
24)=	31	10	1	1	6	2	0	0	0	0	0	200	-9999	4100	60	0
25)=	31	11	1	1	6	2	0	0	0	0	0	200	-9999	2120	60	0
26)=	31	12	1	2	6	1	0	0	0	0	0	110	0	1892	500	0
27)=	31	13	1	2	6	1	0	0	0	0	0	110	0	2029	500	0
28)=	31	14	1	2	6	1	0	0	0	0	0	110	0	2029	500	0
29)=	31	15	1	1	0	1	0	0	0	0	0	110	0	0	0	0
30)=	31	16	1	1	0	1	0	0	0	0	0	110	0	0	0	0
31)=	31	17	1	1	0	1	0	0	0	0	0	110	0	0	0	0
32)=	31	18	1	1	0	1	0	0	0	0	0	110	0	0	0	0
33)=	31	19	1	1	0	1	0	0	0	0	0	110	0	0	0	0
34)=	31	20	2	1	6	2	0	0	0	0	0	200	-9999	2015	60	0
35)=	31	21	2	1	6	2	0	0	0	0	0	200	-9999	2130	60	0
36)=	31	22	2	2	6	1	0	0	0	0	0	100	0	3989	500	0
37)=	31	23	2	2	6	1	0	0	0	0	0	100	0	2063	500	0
38)=	31	24	2	1	0	1	0	0	0	0	0	100	0	0	0	0
39)=	31	25	2	1	0	1	0	0	0	0	0	100	0	0	0	0
40)=	31	26	2	1	0	1	0	0	0	0	0	100	0	0	0	0
41)=	31	30	3	1	6	2	0	0	0	0	0	200	-9999	2015	60	0
42)=	31	31	3	1	6	2	0	0	0	0	0	200	-9999	4270	60	0
43)=	31	32	3	2	6	1	0	0	0	0	0	130	0	1926	500	0
44)=	31	33	3	2	6	1	0	0	0	0	0	130	0	2063	500	0
45)=	31	34	3	2	6	1	0	0	0	0	0	130	0	2063	500	0
46)=	31	35	3	1	0	1	0	0	0	0	0	130	0	0	0	0
47)=	31	36	3	1	0	1	0	0	0	0	0	130	0	0	0	0
48)=	31	37	3	1	0	1	0	0	0	0	0	130	0	0	0	0
49)=	31	40	4	1	6	2	0	0	0	0	0	200	-9999	1995	60	0
50)=	31	41	4	1	6	2	0	0	0	0	0	200	-9999	4230	60	0
51)=	31	42	4	2	6	1	0	0	0	0	0	140	0	1941	500	0
52)=	31	43	4	2	6	1	0	0	0	0	0	140	0	2077	500	0
53)=	31	44	4	1	0	1	0	0	0	0	0	140	0	0	0	0
54)=	31	45	4	1	0	1	0	0	0	0	0	140	0	0	0	0
55)=	31	46	4	1	0	1	0	0	0	0	0	140	0	0	0	0
56)=	31	47	4	1	0	1	0	0	0	0	0	140	0	0	0	0
57)=	31	50	5	1	6	2	0	0	0	0	0	200	-9999	1975	20	0
58)=	31	51	5	1	6	2	0	0	0	0	0	200	-9999	4250	20	0
59)=	31	52	5	2	6	1	0	0	0	0	0	125	0	1936	500	0
60)=	31	53	5	2	6	1	0	0	0	0	0	125	0	2072	500	0
61)=	31	54	5	2	6	1	0	0	0	0	0	125	0	4144	500	0
62)=	31	55	5	1	0	1	0	0	0	0	0	125	0	0	0	0
63)=	31	56	5	1	0	1	0	0	0	0	0	125	0	0	0	0
64)=	31	57	5	1	0	1	0	0	0	0	0	125	0	0	0	0
65)=	31	58	5	1	0	1	0	0	0	0	0	125	0	0	0	0
66)=	31	59	5	1	0	1	0	0	0	0	0	125	0	0	0	0
67)=	31	61	0	0	0	0	0	0	0	0	0	125	0	6000	0	0
68)=	31	62	0	0	0	0	0	0	0	0	0	125	0	0	0	0
69)=	31	63	0	0	0	0	0	0	0	0	0	125	0	0	0	0
70)=	31	64	0	0	0	0	0	0	0	0	0	125	0	0	0	0
71)=	31	191	1	1	0	1	0	0	0	0	0	110	0	0	0	0
72)=	31	192	1	1	0	1	0	0	0	0	0	110	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 ..... LINK NO.	ENTRY 1 ..... CRUISE SPEED	ENTRY 2 ..... LINK NO.	ENTRY 2 ..... FLOW	ENTRY 2 ..... CRUISE SPEED	ENTRY 3 ..... LINK NO.	ENTRY 3 ..... FLOW	ENTRY 3 ..... CRUISE SPEED	ENTRY 4 ..... LINK NO.	ENTRY 4 ..... FLOW	ENTRY 4 ..... CRUISE SPEED
73)=	32	10	896	0	0	0	43	0	0	0	0	0	0	0	0
74)=	32	11	370	0	0	0	43	0	0	0	0	0	0	0	0
75)=	32	12	97	0	60	97	43	0	0	0	0	0	0	0	0
76)=	32	13	171	0	60	171	43	0	0	0	0	0	0	0	0
77)=	32	14	148	0	60	148	43	0	0	0	0	0	0	0	0

78)=	32	15	299	0	61	299	43	0	0	0	0	0	0	0	0	0
79)=	32	16	141	0	64	141	43	0	0	0	0	0	0	0	0	0
80)=	32	17	31	0	63	31	43	0	0	0	0	0	0	0	0	0
81)=	32	18	299	0	61	299	43	0	0	0	0	0	0	0	0	0
82)=	32	19	142	0	64	142	43	0	0	0	0	0	0	0	0	0

83)=	32	20	366	0	0	0	43	0	0	0	0	0	0	0	0	0
84)=	32	21	971	0	0	0	43	0	0	0	0	0	0	0	0	0
85)=	32	22	574	0	10	574	43	0	0	0	0	0	0	0	0	0
86)=	32	23	370	0	11	370	43	0	0	0	0	0	0	0	0	0
87)=	32	24	319	0	14	148	43	13	171	43	0	0	0	0	0	0
88)=	32	25	341	0	192	341	43	0	0	0	0	0	0	0	0	0
89)=	32	26	107	0	191	107	43	0	0	0	0	0	0	0	0	0
90)=	32	30	71	0	0	0	43	0	0	0	0	0	0	0	0	0
91)=	32	31	561	0	0	0	43	0	0	0	0	0	0	0	0	0
92)=	32	32	336	0	20	336	43	0	0	0	0	0	0	0	0	0
93)=	32	33	650	0	21	650	43	0	0	0	0	0	0	0	0	0
94)=	32	34	321	0	21	321	43	0	0	0	0	0	0	0	0	0
95)=	32	35	148	0	24	148	43	0	0	0	0	0	0	0	0	0
96)=	32	36	38	0	25	38	43	0	0	0	0	0	0	0	0	0
97)=	32	37	370	0	23	370	43	0	0	0	0	0	0	0	0	0
98)=	32	40	281	0	0	0	43	0	0	0	0	0	0	0	0	0
99)=	32	41	390	0	0	0	43	0	0	0	0	0	0	0	0	0
100)=	32	42	293	0	31	293	43	0	0	0	0	0	0	0	0	0
101)=	32	43	268	0	31	268	43	0	0	0	0	0	0	0	0	0
102)=	32	44	650	0	33	650	43	0	0	0	0	0	0	0	0	0
103)=	32	45	370	0	37	370	43	0	0	0	0	0	0	0	0	0
104)=	32	46	321	0	34	321	43	0	0	0	0	0	0	0	0	0
105)=	32	47	10	0	35	10	43	0	0	0	0	0	0	0	0	0
106)=	32	50	182	0	0	0	43	0	0	0	0	0	0	0	0	0
107)=	32	51	939	0	0	0	43	0	0	0	0	0	0	0	0	0
108)=	32	52	243	0	40	243	43	0	0	0	0	0	0	0	0	0
109)=	32	53	321	0	46	321	43	0	0	0	0	0	0	0	0	0
110)=	32	54	390	0	41	390	43	0	0	0	0	0	0	0	0	0
111)=	32	55	152	0	42	152	43	0	0	0	0	0	0	0	0	0
112)=	32	56	62	0	44	62	43	0	0	0	0	0	0	0	0	0
113)=	32	57	18	0	45	18	43	0	0	0	0	0	0	0	0	0
114)=	32	58	237	0	43	237	43	0	0	0	0	0	0	0	0	0
115)=	32	59	31	0	43	31	43	0	0	0	0	0	0	0	0	0
116)=	32	60	436	0	0	0	43	0	0	0	0	0	0	0	0	0
117)=	32	61	1099	0	51	939	43	50	160	43	0	0	0	0	0	0
118)=	32	62	321	0	53	321	43	0	0	0	0	0	0	0	0	0
119)=	32	63	268	0	58	237	43	59	31	43	0	0	0	0	0	0
120)=	32	64	390	0	54	390	43	0	0	0	0	0	0	0	0	0
121)=	32	191	107	0	64	107	43	0	0	0	0	0	0	0	0	0
122)=	32	192	341	0	61	341	43	0	0	0	0	0	0	0	0	0

LINK CARDS : FLARE SATURATION FLOW DATA

	CARD TYPE	LINK NO.	..LANE 1.. SAT. FLOW	CAPAC VEH.	..LANE 2.. SAT. FLOW	CAPAC VEH.	..LANE 3.. SAT. FLOW	CAPAC VEH.
123)=	33	21	2130	5	0	0	0	

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
124)=	38	12	10	4500	13	10	4500	14	10	4500	22	9	4500	23	7	4500
125)=	38	32	6	4500	33	10	4500	34	10	4500	42	11	4500	43	11	4500
126)=	38	52	9	4500	PE	C Ɣ 450	4500	54	18	4500	0	0	0	0	0	0

*****END OF SUBROUTINE TINPUT****

60 SECOND CYCLE 60 STEPS

INITIAL SETTINGS
- (SECONDS)

NODE	NUMBER OF STAGES	STAGE 2 1	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10	STAGE NO
1	2	26 0									
2	2	30 0									
3	2	16 0									
4	2	14 0									
5	2	28 0									

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	-------DELAY-------- UNIFORM (U+R+O=MEAN Q) (PCU-H/H)	RANDOM+ OVERSAT (U+R+O=MEAN Q) (PCU-H/H)	COST OF DELAY ($/H)	----STOPS---- MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	----QUEUE---- MEAN MAX. (PCU)	AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST	START END 2ND
10	896	4100	62	16.7	19.6	4.0 + 0.8	(69.1)*	84	(19.3)	13		41.5	1	6		26
11	370	2120	50	16.7	20.2	1.6 + 0.5	(29.5)*	82	(7.8)	5		17.7	1	6		26
12	97	1892S	62	9.2	15.7	0.3 + 0.1	(6.0)*	75	(1.9)	7	(0.0)*	31.9	1	32		0
13	171	2029S	62	9.2	15.6	0.5 + 0.2	(10.5)*	76	(3.4)	8	(0.0)*	55.9	1	32		0
14	148	2029S	61	9.2	15.4	0.4 + 0.2	(9.0)*	77	(2.9)	8	(0.0)*	47.8	1	32		0
15	299	12L	62	9.2	11.5	0.5 + 0.4	(13.5)	88	(6.8)	7		20.3	1	32		0
16	141	12L	62	9.2	10.1	0.2 + 0.2	(5.6)	26	(0.9)	7		6.6	1	32		0
17	31	12L	62	9.2	14.0	0.1 + 0.0	(1.7)	41	(0.3)	7		2.0	1	32		0
18	299	13L	62	9.2	11.5	0.6 + 0.4	(13.5)	89	(6.9)	8		20.4	1	32		0
19	142	13L	62	9.2	9.8	0.2 + 0.2	(5.5)	25	(0.9)	8		6.4	1	32		0
20	366	2015	44	16.7	16.3	1.3 + 0.4	(23.5)*	73	(6.9)	5		14.1	2	6		30
21	971	2850f	82	16.7	21.6	3.6 + 2.2	(82.6)*	88	(21.9)	15		49.5	2	6		30
22	573	3989S	81	8.4	26.2	3.3 + 0.9	(59.1)*	109	(16.1)	23	(3.4)*	465.7	2	36		0
23	370	2063	43	8.4	24.6	2.2 + 0.4	(35.9)*	106	(10.1)	7	(0.0)*	189.6	2	36		0
24	319	22L	81	8.4	12.9	0.7 + 0.5	(16.3)	83	(6.8)	23	+	23.1	2	36		0
25	341	22L	81	8.4	9.6	0.4 + 0.5	(12.9)	80	(7.0)	23	+	20.0	2	36		0
26	107	22L	81	8.4	25.9	0.6 + 0.2	(10.9)	86	(2.4)	23	+	13.3	2	36		0
30	71	2015	19	16.7	26.8	0.4 + 0.1	(7.5)*	90	(1.6)	1		4.5	3	6		16
31	561	4270	72	16.7	31.1	3.6 + 1.3	(68.8)*	103	(14.9)	10		41.3	3	6		16
32	336	1926S	42	10.9	8.1	0.5 + 0.2	(10.7)*	79	(6.8)	7	(0.1)*	62.9	3	22		0
33	651	2063S	76	10.9	11.3	1.0 + 1.0	(29.0)*	93	(15.5)	12	(0.2)*	170.1	3	22		0
34	320	2063	24	10.9	3.7	0.2 + 0.2	(4.6)*	46	(3.8)	3	(0.0)*	27.0	3	22		0
35	148	32L	42	10.9	12.2	0.4 + 0.1	(7.1)	59	(2.2)	7	+	9.3	3	22		0
36	38	32L	42	10.9	15.3	0.1 + 0.0	(2.3)	75	(0.7)	7	+	3.0	3	22		0
37	370	33L	76	10.9	6.8	0.1 + 0.6	(9.9)	16	(1.5)	12	+	11.4	3	22		0
40	281	1995	94	16.7	89.0	2.0 + 5.0	(98.7)*	177	(12.8)	10		59.2	4	6		14
41	390	4230	61	16.7	31.2	2.6 + 0.8	(48.0)*	102	(10.2)	7		28.8	4	6		14
42	293	1941S	100	11.7	58.0	0.9 + 3.9	(67.0)*	163	(12.3)	39	(16.9)*	1108.5	4	20		0
43	268	2077S	41	11.7	3.4	0.1 + 0.2	(3.6)*	43	(3.0)	4	(0.0)*	20.8	4	20		0
44	651	42L	100	11.7	51.7	0.8 + 8.6	(132.8)	144	(24.2)	39	+	157.0	4	20		0
45	370	42L	100	11.7	61.4	1.4 + 4.9	(89.6)	153	(14.6)	39	+	104.2	4	20		0
46	320	43L	41	11.7	2.4	0.0 + 0.2	(3.0)	5	(0.4)	4		3.5	4	20		0
47	10	42L	100	11.7	56.9	0.0 + 0.1	(2.2)	153	(0.4)	39	+	2.6	4	20		0
50	182	1975	24	16.7	15.7	0.6 + 0.2	(11.3)*	69	(3.2)	2		2.3	5	6		28
51	939	4250	58	16.7	17.3	3.8 + 0.7	(63.9)*	79	(19.0)	13		12.8	5	6		28
52	243	1936S	54	10.5	22.2	1.2 + 0.3	(21.3)*	107	(6.7)	7	(0.0)*	113.1	5	34		0
53	320	2072S	60	10.5	8.7	0.4 + 0.4	(11.0)*	23	(1.9)	5	(0.0)*	57.0	5	34		0
54	390	4144S	23	10.5	18.4	1.9 + 0.1	(28.3)*	102	(10.2)	7	(0.0)*	151.8	5	34		0
55	152	52L	54	10.5	6.1	0.1 + 0.2	(3.6)	45	(1.7)	7		5.4	5	34		0
56	62	52L	54	10.5	17.3	0.2 + 0.1	(4.2)	54	(0.9)	7		5.1	5	34		0
57	18	52L	54	10.5	13.9	0.0 + 0.0	(1.0)	90	(0.4)	7		1.4	5	34		0
58	237	53L	60	10.5	8.5	0.2 + 0.3	(8.0)	77	(4.7)	5		12.7	5	34		0
59	31	54L	23	10.5	6.1	0.0 + 0.0	(0.7)	72	(0.6)	7		1.3	5	34		0

60 SECOND CYCLE 60 STEPS

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY UNIFORM (U+R+O=MEAN Q) (PCU-H/H)	DELAY RANDOM+ OVERSAT (PCU-H/H)	DELAY COST OF ($/H)	STOPS MEAN /PCU (%)	STOPS COST OF ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END 1ST (SECONDS)	GREEN TIMES END 2ND (SECONDS)
60	436	2108	38	10.5	3.6	0.1 +	0.3	(6.3)	32	(3.6)	2		9.9					
61	1099	6000S	35	10.5	0.5	0.0 +	0.1	(2.0)	1	(0.2)	0		2.2					
62	320	61L	35	10.5	0.5	0.0 +	0.0	(0.6)	1	(0.1)	0		0.6					
63	268	61L	35	10.5	0.5	0.0 +	0.0	(0.5)	1	(0.1)	0		0.5					
64	390	61L	35	10.5	0.5	0.0 +	0.0	(0.7)	1	(0.1)	0		0.8					
191	107	14L	61	9.2	9.5	0.1 +	0.1	(4.0)	25	(0.7)	8		4.7	1	32	0		
192	341	14L	61	9.2	11.3	0.6 +	0.4	(15.2)	90	(7.9)	8		23.1	1	32	0		

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2377.7	137.9	17.2	43.9	38.7	(2125.9) + (191.7)	+ (926.7)	= 3244.3	TOTALS	

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	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTION	127.5	+	95.0	+	141.0	=	363.5

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 50

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

1	2	9	35
2	2	51	21
3	2	0	16
4	2	0	14
5	2	0	28

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2377.7	140.1	17.0	46.1	38.7	(2086.8) + (189.3)	+ (742.4)	= 3018.5	TOTALS	

NO. OF ENTRIES TO SUBPT = 12
NO. OF LINKS RECALCULATED= 385

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

1	2	9	35
2	2	51	21
3	2	0	16
4	2	0	14
5	2	24	52

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2377.7	138.8	17.1	44.8	38.7	(2003.7) + (171.0)	+ (744.4)	= 2919.1	TOTALS	

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 396

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

1	2	16	35
2	2	56	21
3	2	2	16
4	2	1	14
5	2	33	53

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2377.7	153.6	15.5	42.4	55.9	(1589.3) + (124.7)	+ (238.0)	= 1952.0	TOTALS	

NO. OF ENTRIES TO SUBPT = 44
NO. OF LINKS RECALCULATED= 1194

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1	2	16	35
2	2	56	21
3	2	2	16
4	2	1	14
5	2	24	44

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2377.7	153.6	15.5	42.4	55.9	(1579.8) + (126.0)	+	(230.9)	= 1936.7	TOTALS

NO. OF ENTRIES TO SUBPT = 12
NO. OF LINKS RECALCULATED= 444

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1	2	16	35
2	2	56	21
3	2	2	16
4	2	1	14
5	2	24	44

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2377.7	153.6	15.5	42.4	55.9	(1579.8) + (126.0)	+	(230.9)	= 1936.7	TOTALS

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 416

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1	2	17	36
2	2	0	25
3	2	2	16
4	2	0	13
5	2	23	43

TOTAL TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL DISTANCE PERFORMANCE INDEX ($/H)	
2377.7	152.3	15.6	41.1	55.9	(1498.5) + (123.0)	+	(201.1)	= 1822.6	TOTALS

NO. OF ENTRIES TO SUBPT = 16
NO. OF LINKS RECALCULATED= 564

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1	2	17	37
2	2	0	25
3	2	2	16
4	2	0	13
5	2	23	42

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
2377.7	152.7	15.6	41.1	56.3	(1479.2) + (124.9)	+	(201.4)	= 1805.5	TOTALS

NO. OF ENTRIES TO SUBPT = 20
NO. OF LINKS RECALCULATED= 704

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	17	37								
2	2	0	25								
3	2	2	16								
4	2	59	12								
5	2	22	41								

NUMBER	LINK INTO LINK	FLOW (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	PER PCU CRUISE (SEC)	DELAY (SEC)	MEAN TIMES UNIFORM (U+R+O=MEAN Q)	RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN MAX. STOPS (PCU)	AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST	GREEN TIMES START 2ND	GREEN TIMES END 1ST	GREEN TIMES END 2ND
																(SECONDS)			
10	896	4100	87	16.7	34.9	5.4 + 3.3	(123.3)*	112	(25.9)	17				74.0	1	23	37		
11	370	2120	70	16.7	31.5	2.1 + 1.1	(46.0)*	104	(9.9)	7				27.6	1	23	37		
	12	97	1892S	51	9.2	9.5	0.2 + 0.1	(3.6)*	52	(1.3)	5	(0.0)*		19.5	1	43	17		
	13	171	2029S	52	9.2	9.5	0.3 + 0.1	(6.4)*	53	(2.3)	6	(0.0)*		34.2	1	43	17		
	14	148	2029S	50	9.2	9.2	0.3 + 0.1	(5.3)*	51	(1.9)	5	(0.0)*		28.7	1	43	17		
	15	299	12L	51	9.2	3.9	0.0 + 0.3	(4.7)	24	(1.8)	5			6.5	1	43	17		
	16	141	12L	51	9.2	10.9	0.3 + 0.1	(6.0)	87	(3.2)	5			9.2	1	43	17		
	17	31	12L	51	9.2	5.3	0.0 + 0.0	(0.7)	15	(0.1)	5			0.8	1	43	17		
	18	299	13L	52	9.2	3.9	0.1 + 0.3	(4.7)	28	(2.2)	6			6.8	1	43	17		
	19	142	13L	52	9.2	11.0	0.3 + 0.1	(6.2)	88	(3.2)	6			9.4	1	43	17		
	20	366	2015	54	16.7	22.2	1.7 + 0.6	(32.0)*	86	(8.1)	5			19.2	2	6	25		
	21	971	3030f	96	16.7	49.9	4.8 + 8.6	(190.9)*	136	(34.1)	24			114.6	2	6	25		
	22	573	3989S	67	8.4	6.1	0.5 + 0.4	(13.8)*	73	(10.9)	16	(0.7)*		112.6	2	31	0		
	23	370	2063	36	8.4	3.0	0.0 + 0.3	(4.4)*	18	(1.7)	4	(0.0)*		23.7	2	31	0		
	24	319	22L	67	8.4	13.5	1.0 + 0.2	(16.9)	56	(4.6)	16	+		21.5	2	31	0		
	25	341	22L	67	8.4	17.7	1.4 + 0.3	(23.8)	62	(5.4)	16	+		29.2	2	31	0		
	26	107	22L	67	8.4	5.8	0.1 + 0.1	(2.5)	19	(0.5)	16	+		3.0	2	31	0		
	30	71	2015	23	16.7	30.3	0.4 + 0.2	(8.5)*	96	(1.8)	1			5.1	3	8	16		
	31	561	4270	88	16.7	45.9	3.9 + 3.3	(101.5)*	125	(18.1)	12			60.9	3	8	16		
	32	336	1926S	40	10.9	7.3	0.5 + 0.2	(9.7)*	81	(7.0)	6	(0.0)*		56.4	3	22	2		
	33	651	2063S	72	10.9	10.3	1.0 + 0.8	(26.4)*	94	(15.7)	12	(0.2)*		156.4	3	22	2		
	34	320	2063	23	10.9	3.6	0.2 + 0.1	(4.5)*	45	(3.8)	3	(0.0)*		26.2	3	22	2		
	35	148	32L	40	10.9	7.3	0.2 + 0.1	(4.3)	37	(1.4)	6	+		5.7	3	22	2		
	36	38	32L	40	10.9	8.1	0.1 + 0.0	(1.2)	46	(0.5)	6	+		1.7	3	22	2		
	37	370	33L	72	10.9	4.9	0.0 + 0.5	(7.1)	9	(0.9)	12	+		8.0	3	22	2		
40	281	1995	106	16.7	194.3	2.2 + 12.9	(215.4)*	243	(17.6)	18			129.2	4	5			12	
41	390	4230	69	16.7	35.1	2.7 + 1.1	(53.9)*	108	(10.8)	7			32.4	4	5			12	
42	293	1941S	97	11.7	35.5	0.4 + 2.5	(41.0)*	125	(9.4)	21	(3.6)*		376.5	4	18			59	
43	268	2077S	40	11.7	2.1	0.0 + 0.2	(2.2)*	3	(0.2)	0	(0.0)*		11.2	4	18			59	
44	651	42L	97	11.7	31.5	0.1 + 5.6	(81.0)	54	(9.1)	21	+		90.1	4	18			59	
45	370	42L	97	11.7	40.1	0.9 + 3.2	(58.6)	104	(10.0)	21	+		68.6	4	18			59	
46	320	43L	40	11.7	2.2	0.0 + 0.2	(2.8)	5	(0.4)	0			3.2	4	18			59	
47	10	42L	97	11.7	36.8	0.0 + 0.1	(1.5)	90	(0.2)	21	+		1.7	4	18			59	
50	182	1975	39	16.7	25.9	1.0 + 0.3	(18.6)*	91	(4.3)	3			3.7	5	28			41	
51	939	4250	95	16.7	49.6	5.9 + 7.0	(183.7)*	134	(32.3)	22			36.7	5	28			41	
52	230<	1936S	40	10.5	6.3	0.2 + 0.2	(5.7)*	20	(1.3)	4	(0.0)*		29.8	5	47			22	
53	320	2072S	45	10.5	9.4	0.6 + 0.2	(11.9)*	87	(7.2)	9	(0.0)*		66.9	5	47			22	
54	390	4144S	17	10.5	3.2	0.3 + 0.1	(5.0)*	13	(1.3)	1	(0.0)*		26.1	5	47			22	
55	152	52L	40	10.5	12.8	0.4 + 0.1	(7.7)	99	(3.9)	4			11.6	5	47			22	
56	62	52L	40	10.5	4.8	0.0 + 0.0	(1.2)	37	(0.6)	4			1.8	5	47			22	
57	18	52L	40	10.5	12.0	0.0 + 0.0	(0.9)	63	(0.3)	4			1.1	5	47			22	
58	237	53L	45	10.5	17.2	1.0 + 0.2	(16.1)	104	(6.3)	9			22.4	5	47			22	
59	31	54L	17	10.5	12.5	0.1 + 0.0	(1.5)	95	(0.8)	1			2.3	5	47			22	

60 SECOND CYCLE 60 STEPS

NUMBER	LINK INTO LINK	FLOW (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	PER PCU CRUISE (SEC)	DELAY (SEC)	MEAN TIMES UNIFORM (U+R+O=MEAN Q)	RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN MAX. STOPS (PCU)	AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST	GREEN TIMES START 2ND	GREEN TIMES END 1ST	GREEN TIMES END 2ND
																(SECONDS)			
60	436	2108	38	10.5	4.0	0.2 + 0.3	(7.0)	25	(2.9)	2				9.8					
61	1099	6000S	35	10.5	0.5	0.0 + 0.1	(2.0)	1	(0.2)	0				2.2					
62	320	61L	35	10.5	0.5	0.0 + 0.0	(0.6)	1	(0.1)	0				0.6					
63	268	61L	35	10.5	0.5	0.0 + 0.0	(0.5)	1	(0.1)	0				0.5					
64	390	61L	35	10.5	0.5	0.0 + 0.0	(0.7)	1	(0.1)	0				0.8					
191	107	14L	50	9.2	10.3	0.2 + 0.1	(4.4)	85	(2.4)	5				6.7	1	43	17		
192	341	14L	50	9.2	3.5	0.0 + 0.3	(4.7)	19	(1.6)	5				6.3	1	43	17		

*** f - average saturation flow for flared link ***

TOTAL TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL DISTANCE PERFORMANCE INDEX ($/H)	
2377.7	152.7	15.6	41.1	56.3	(1472.5) + (126.6)	+ (204.3)	= 1803.4	TOTALS	
								ROUTE	

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	127.5	+	112.0	+	131.9	=	371.5

NO. OF ENTRIES TO SUBPT = 13
NO. OF LINKS RECALCULATED= 486

PROGRAM TRANSYT FINISHED
========== end of file ==========

Printed at 17:28:41 on 09/09/2015]

T R A N S Y T 12

Traffic Network Study Tool Analysis

Program Release 7 (July 2010)

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For sales and distribution information, program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
3GA,UK
Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770864
Email: softwarebureau@trl.co.uk
Web: www.trlsoftware.co.uk RG40

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "S5 2026 AM CD PD SP IMPS.DAT" at 11:52 on 20150903

TRANSYT 12.0

S5 Gibbet Hill Rbout 2026 AM Peak + Committed + Proposed + Symmetry Park

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	= 4
NUMBER OF LINKS	= 32
NUMBER OF OPTIMISED NODES	= 4
MAXIMUM NUMBER OF GRAPHIC PLOTS	= 0
NUMBER OF STEPS IN CYCLE	= 60
MAXIMUM NUMBER OF SHARED STOPLINES	= 4
MAXIMUM NUMBER OF TIMING POINTS	= 2
MAXIMUM LINKS AT ANY NODE	= 11

CORE REQUESTED = 9026 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

(1)= TITLE:- S5 Gibbet Hill Rbout 2026 AM Peak + Committed + Proposed + Symmetry Park

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME PERIOD 1-1200 MINS.	EFFECTIVE-GREEN DISPLACEMENTS START (SEC)	END (SEC)	EQUISAT SETTINGS 0=UNEQUAL 1=EQUAL 0=NO 1=YES	FLOW CYCLE %	SCALE %	CRUISE-SPEEDS SCALE 50-200	CARD32 0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL-CLIMB OUTPUT 1=FULL	DELAY VALUE P PER PCU-H	STOP NO. VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260

CARD NO.	CARD TYPE	LIST OF NODES TO BE OPTIMISED														
3)=	2	1	2	4	5	0	0	0	0	0	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET.....					SECOND SET.....					THIRD SET.....				
4)=	7	12	14	15	0	0	13	16	0	0	0	22	24	25	0	0
5)=	7	31	32	33	34	0	42	44	45	0	0	43	46	47	0	0
6)=	7	51	54	55	0	0	52	53	0	0	0	0	0	0	0	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
7)=	10	1	7	7								
8)=	10	2	7	7								
9)=	10	4	7	7								
10)=	10	5	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
11)=	11	1	5	5								
12)=	11	2	5	5								
13)=	11	4	5	5								
14)=	11	5	5	5								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
15)=	12	1	1	0	0								
16)=	12	2	1	0	0								
17)=	12	4	1	0	0								
18)=	12	5	1	0	0								

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY LINKS LINK1 NO.	LINK2 NO.	LINK1 GIVEWAY COEFFS. ONLY % FLOW	A1 X100	A2 X100				LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
19)=	30	30	31	0	0	41	100	0	0	0	200	0	1169	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN START STAGE	START LAG	END STAGE	END LAG	SECOND GREEN START STAGE	START LAG	END STAGE	END LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
20)=	31	10	1	1	5	2	0	0	0	0	0	200	-9999	2015	60	0
21)=	31	11	1	1	5	2	0	0	0	0	0	200	-9999	2155	60	0
22)=	31	12	1	2	5	1	0	0	0	0	0	55	0	1800	500	0
23)=	31	13	1	2	5	1	0	0	0	0	0	55	0	1800	500	0
24)=	31	14	1	1	0	1	0	0	0	0	0	55	0	0	0	0
25)=	31	15	1	1	0	1	0	0	0	0	0	55	0	0	0	0
26)=	31	16	1	1	0	1	0	0	0	0	0	55	0	0	0	0
27)=	31	20	2	1	5	2	0	0	0	0	0	200	-9999	2065	60	0
28)=	31	21	2	1	5	2	0	0	0	0	0	200	-9999	2205	60	0
29)=	31	22	2	2	5	1	0	0	0	0	0	31	0	1800	500	0
30)=	31	23	2	2	5	1	0	0	0	0	0	31	0	1800	500	0
31)=	31	24	2	1	0	1	0	0	0	0	0	31	0	0	0	0
32)=	31	25	2	1	0	1	0	0	0	0	0	31	0	0	0	0
33)=	31	31	0	0	0	0	0	0	0	0	0	50	0	6000	0	0
34)=	31	32	0	0	0	0	0	0	0	0	0	50	0	0	0	0
35)=	31	33	0	0	0	0	0	0	0	0	0	50	0	0	0	0
36)=	31	34	0	0	0	0	0	0	0	0	0	50	0	0	0	0
37)=	31	40	4	1	5	2	0	0	0	0	0	200	-9999	2065	60	0
38)=	31	41	4	1	5	2	0	0	0	0	0	200	-9999	2205	60	0
39)=	31	42	4	2	5	1	0	0	0	0	0	25	0	1800	500	0
40)=	31	43	4	2	5	1	0	0	0	0	0	25	0	1800	500	0
41)=	31	44	4	1	0	1	0	0	0	0	0	25	0	0	0	0
42)=	31	45	4	1	0	1	0	0	0	0	0	25	0	0	0	0
43)=	31	46	4	1	0	1	0	0	0	0	0	25	0	0	0	0
44)=	31	47	4	1	0	1	0	0	0	0	0	25	0	0	0	0
45)=	31	50	5	1	5	2	0	0	0	0	0	200	-9999	2205	60	0
46)=	31	51	5	2	5	1	0	0	0	0	0	32	0	1800	500	0
47)=	31	52	5	2	5	1	0	0	0	0	0	32	0	1800	500	0
48)=	31	53	4	1	0	1	0	0	0	0	0	32	0	0	0	0
49)=	31	54	4	1	0	1	0	0	0	0	0	32	0	0	0	0
50)=	31	55	4	1	0	1	0	0	0	0	0	32	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 2 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 3 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 4 ..... LINK NO.	FLOW	CRUISE SPEED
51)=	32	10	575	0	0	0	43	0	0	0	0	0	0	0	0	0
52)=	32	11	611	0	0	0	43	0	0	0	0	0	0	0	0	0
53)=	32	12	514	0	50	514	43	0	0	0	0	0	0	0	0	0
54)=	32	13	142	0	50	142	43	0	0	0	0	0	0	0	0	0
55)=	32	14	34	0	53	34	43	0	0	0	0	0	0	0	0	0
56)=	32	15	131	0	51	131	43	0	0	0	0	0	0	0	0	0
57)=	32	16	42	0	51	42	43	0	0	0	0	0	0	0	0	0
58)=	32	20	360	0	0	0	43	0	0	0	0	0	0	0	0	0
59)=	32	21	360	0	0	0	43	0	0	0	0	0	0	0	0	0
60)=	32	22	565	0	10	565	43	0	0	0	0	0	0	0	0	0
61)=	32	23	611	0	11	611	43	0	0	0	0	0	0	0	0	0
62)=	32	24	42	0	16	42	43	0	0	0	0	0	0	0	0	0
63)=	32	25	142	0	13	142	43	0	0	0	0	0	0	0	0	0
64)=	32	30	117	0	0	0	43	0	0	0	0	0	0	0	0	0
65)=	32	31	687	0	20	327	43	21	360	43	0	0	0	0	0	0
66)=	32	32	1160	0	22	549	43	23	611	43	0	0	0	0	0	0
67)=	32	33	13	0	24	13	43	0	0	0	0	0	0	0	0	0
68)=	32	34	111	0	25	111	43	0	0	0	0	0	0	0	0	0
69)=	32	40	565	0	0	0	43	0	0	0	0	0	0	0	0	0
70)=	32	41	173	0	0	0	43	0	0	0	0	0	0	0	0	0
71)=	32	42	66	0	30	66	43	0	0	0	0	0	0	0	0	0
72)=	32	43	34	0	30	34	43	0	0	0	0	0	0	0	0	0
73)=	32	44	305	0	32	305	43	0	0	0	0	0	0	0	0	0
74)=	32	45	147	0	31	147	43	0	0	0	0	0	0	0	0	0
75)=	32	46	306	0	32	306	43	0	0	0	0	0	0	0	0	0
76)=	32	47	378	0	31	378	43	0	0	0	0	0	0	0	0	0
77)=	32	50	1199	0	0	0	43	0	0	0	0	0	0	0	0	0

78)=	32	51	446	0	40	446	43	0	0	0	0	0	0	0	0	0
79)=	32	52	173	0	41	173	43	0	0	0	0	0	0	0	0	0
80)=	32	53	34	0	43	34	43	0	0	0	0	0	0	0	0	0
81)=	32	54	20	0	42	20	43	0	0	0	0	0	0	0	0	0
82)=	32	55	10	0	47	10	43	0	0	0	0	0	0	0	0	0

LINK CARDS : FLARE SATURATION FLOW DATA

	CARD TYPE	LINK NO.	..LANE 1.. SAT. FLOW	CAPAC VEH.	..LANE 2.. SAT. FLOW	CAPAC VEH.	..LANE 3.. SAT. FLOW	CAPAC VEH.
83)=	33	50	2205	3	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD TYPE	CARD NO.	LINK QUEUE	LIMIT WEIGHT	QUEUE NO.	LINK QUEUE	LIMIT WEIGHT	QUEUE NO.	LINK QUEUE	LIMIT WEIGHT	QUEUE NO.	LINK QUEUE	LIMIT WEIGHT	QUEUE NO.	LINK QUEUE	LIMIT WEIGHT	QUEUE NO.
12	5	4500	13	5	4500	22	1	4500	23	1	4500	42	2	4500		
84)=																
85)=	38	43	2	4500	51	1	4500	52	1	4500	0	0	0	0	0	0

*****END OF SUBROUTINE TINPUT****

60 SECOND CYCLE 60 STEPS

INITIAL SETTINGS
- (SECONDS)

NODE	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	0	26								
2	2	0	20								
4	2	0	25								
5	2	0	37								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) (PCU-H/H)	OVERSAT OF DELAY ($/H)	MEAN STOPS /PCU (%)	COST OF STOPS ($/H)	MEAN MAX. (PCU)	AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	START 2ND (SECONDS)	END
10	575	2015	78	16.7	27.6	2.7 + 1.7	(62.6)*	100	(14.9)	10		37.6	1	5	26	
11	611	2155	77	16.7	26.7	2.9 + 1.7	(64.2)*	99	(15.5)	10		38.5	1	5	26	
12	513	1800S	75	4.6	25.3	2.5 + 1.1	(51.1)*	112	(14.8)	11	(1.9)*	356.0	1	31	0	
13	141	1800S	20	4.6	13.5	0.4 + 0.1	(7.5)*	85	(3.1)	2	(0.0)*	40.7	1	31	0	
14	34	12L	75	4.6	16.9	0.1 + 0.1	(2.3)	47	(0.4)	11	+	2.7	1	31	0	
15	131	12L	75	4.6	10.8	0.1 + 0.3	(5.6)	29	(1.0)	11	+	6.6	1	31	0	
16	42	13L	20	4.6	5.1	0.0 + 0.0	(0.8)	13	(0.1)	2		1.0	1	31	0	
20	360	2065	65	16.7	28.9	2.0 + 0.9	(41.0)*	99	(9.2)	6		24.6	2	5	20	
21	360	2205	61	16.7	27.1	1.9 + 0.8	(38.5)*	96	(8.9)	6		23.1	2	5	20	
22	565	1800S	69	2.6	23.5	2.8 + 0.8	(52.3)*	109	(15.8)	13	(5.7)*	534.3	2	25	0	
23	611	1800	57	2.6	22.5	3.2 + 0.6	(54.3)*	106	(16.7)	11	(4.7)*	499.6	2	25	0	
24	42	22L	69	2.6	10.5	0.1 + 0.1	(1.7)	36	(0.4)	13	+	2.1	2	25	0	
25	141	22L	69	2.6	15.2	0.4 + 0.2	(8.5)	105	(3.9)	13	+	12.3	2	25	0	
30	117	1169	24	16.7	9.6	0.2 + 0.2	(4.4)	64	(1.9)	1		6.7				
31	687	6000S	33	4.2	0.4	0.0 + 0.1	(1.2)	1	(0.1)	0		1.3				
32	1160	31L	33	4.2	0.4	0.0 + 0.1	(2.0)	1	(0.2)	0		2.3				
33	13	31L	33	4.2	0.4	0.0 + 0.0	(0.0)	1	(0.0)	0		0.0				
34	111	31L	33	4.2	0.4	0.0 + 0.0	(0.2)	1	(0.0)	0		0.2				
40	565	2065	78	16.7	28.6	2.7 + 1.8	(63.8)*	102	(14.9)	10		38.3	4	5	25	
41	173	2205	22	16.7	16.8	0.7 + 0.1	(11.5)*	72	(3.2)	2		6.9	4	5	25	
42	66	1800S	56	2.1	12.4	0.1 + 0.1	(3.2)*	59	(1.0)	6	(0.7)*	48.3	4	30	0	
43	34	1800S	77	2.1	18.9	0.1 + 0.1	(2.5)*	70	(0.6)	13	(4.7)*	226.4	4	30	0	
44	304	42L	56	2.1	5.4	0.1 + 0.4	(6.4)	33	(2.6)	6	+	9.0	4	30	0	
45	147	42L	56	2.1	20.1	0.6 + 0.2	(11.6)	107	(4.0)	6	+	15.7	4	30	0	
46	306	43L	77	2.1	15.0	0.6 + 0.7	(18.1)	100	(7.9)	13	+	26.0	4	30	0	
47	378	43L	77	2.1	27.7	2.0 + 0.9	(41.3)	113	(11.0)	13	+	52.3	4	30	0	
50	1199	2532f	86	16.7	18.7	3.2 + 3.0	(88.3)*	87	(26.9)	19		53.0	5	5	37	
51	446	1800S	84	2.7	51.6	4.1 + 2.3	(90.8)*	128	(14.7)	10	(6.7)*	768.3	5	42	0	
52	173	1800S	36	2.7	37.4	1.6 + 0.2	(25.5)*	108	(4.8)	3	(1.3)*	190.7	5	42	0	
53	34	52L	36	2.7	11.2	0.1 + 0.0	(1.5)	58	(0.5)	3	+	2.0	5	42	0	
54	20	51L	84	2.7	32.1	0.1 + 0.1	(2.5)	99	(0.5)	10	+	3.0	5	42	0	
55	10	51L	84	2.7	35.8	0.0 + 0.0	(1.4)	126	(0.3)	10	+	1.7	5	42	0	

*** f - average saturation flow for flared link ***

TOTAL TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL DISTANCE PERFORMANCE INDEX ($/H)	
1032.9	78.0	13.2	35.2	18.8	(1768.6) + (106.7)	+ (1155.7)	= 3031.0		TOTALS

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	55.4	+	62.1	+	91.2	=	208.7

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 56

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

1	2	27	53	
2	2	0	20	
4	2	27	52	
5	2	51	28	

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1032.9	64.8	15.9	21.9	18.8	(833.5) + (62.4)	+ (399.1)	= 1295.0		TOTALS

NO. OF ENTRIES TO SUBPT = 14
NO. OF LINKS RECALCULATED= 326

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

1	2	27	53
2	2	0	20
4	2	27	52
5	2	51	28

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1032.9	64.8	15.9	21.9	18.8	(833.5) +	(62.4)	+ (399.1)	= 1295.0	TOTALS

NO. OF ENTRIES TO SUBPT = 9
NO. OF LINKS RECALCULATED= 245

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

1	2	30	53
2	2	2	19
4	2	28	50
5	2	54	27

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1032.9	78.0	13.2	22.7	31.2	(749.4) +	(49.1)	+ (225.3)	= 1023.8	TOTALS

NO. OF ENTRIES TO SUBPT = 27
NO. OF LINKS RECALCULATED= 609

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1	2	30	53
2	2	2	19
4	2	28	50
5	2	54	27

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1032.9	78.0	13.2	22.7	31.2	(749.4) +	(49.1)	+ (225.3)	= 1023.8	TOTALS

NO. OF ENTRIES TO SUBPT = 9
NO. OF LINKS RECALCULATED= 271

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1	2	30	53
2	2	2	19
4	2	28	50
5	2	54	27

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1032.9	78.0	13.2	22.7	31.2	(749.4) +	(49.1)	+ (225.3)	= 1023.8	TOTALS

NO. OF ENTRIES TO SUBPT = 10
NO. OF LINKS RECALCULATED= 308

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1	2	32	55
2	2	3	20
4	2	26	48
5	2	55	28

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1032.9	77.6	13.3	22.3	31.2	(741.6) +	(46.8)	+ (202.8)	= 991.3	TOTALS

NO. OF ENTRIES TO SUBPT = 12
NO. OF LINKS RECALCULATED= 338

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1	2	32	56
2	2	3	20
4	2	26	48
5	2	55	28

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)		TOTAL COST OF STOPS ($/H)		PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1032.9	75.2	13.7	22.2	29.0	(731.1)	+ (	48.4)	+ (211.1)	=	990.6	TOTALS

NO. OF ENTRIES TO SUBPT = 18
NO. OF LINKS RECALCULATED= 519

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NO	NODE OF STAGES	NUMBER 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	32	56								
2	2	3	20								
4	2	26	48								
5	2	55	28								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT	MEAN TIMES PER PCU CRUISE DELA (%)	UNIFORM DELAY (SEC)	RANDOM+ OVERSAT (SEC)	COST OF (U+R+O=MEAN Q) DELAY (PCU-H/H)	MEAN STOPS /PCU	COST OF STOPS ($/H)	MEAN STOPS (%)	MEAN MAX. QUEUE ($/H)	AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	2ND	END 1ST	END 2ND
10	575	2015	86	16.7	36.3	3.0 +	2.8	(82.2)*	115	(17.1)	12		49.3	1	37	56		
11	611	2155	85	16.7	34.6	3.2 +	2.7	(83.3)*	113	(17.7)	12		50.0	1	37	56		
12	513	1800S	71	4.6	7.8	0.2 +	0.9	(15.7)*	35	(4.7)	7	(0.2)*	90.4	1	1	32		
13	141	1800S	19	4.6	3.1	0.0 +	0.1	(1.7)*	7	(0.2)	1	(0.0)*	8.8	1	1	32		
14	34	12L	71	4.6	26.1	0.2 +	0.1	(3.5)	108	(0.9)	7	+	4.4	1	1	32		
15	131	12L	71	4.6	23.5	0.6 +	0.2	(12.2)	110	(3.7)	7	+	15.9	1	1	32		
16	42	13L	19	4.6	16.8	0.2 +	0.0	(2.8)	102	(1.1)	1		3.9	1	1	32		
20	360	2065	80	16.7	42.0	2.2 +	2.0	(59.6)*	120	(11.2)	8		35.8	2	8	20		
21	360	2205	75	16.7	36.9	2.2 +	1.5	(52.4)*	113	(10.4)	7		31.5	2	8	20		
22	565	1800S	64	2.6	4.8	0.1 +	0.7	(10.6)*	31	(4.6)	9	(1.6)*	129.0	2	25	3		
23	611	1800	52	2.6	4.4	0.2 +	0.5	(10.6)*	47	(7.3)	10	(1.5)*	127.3	2	25	3		
24	42	22L	64	2.6	17.2	0.2 +	0.0	(2.8)	70	(0.8)	9	+	3.6	2	25	3		
25	141	22L	64	2.6	13.1	0.3 +	0.2	(7.3)	81	(3.0)	9	+	10.3	2	25	3		
30	117	1169	24	16.7	9.2	0.1 +	0.2	(4.2)	62	(1.9)	1		6.1					
31	687	6000S	33	4.2	0.4	0.0 +	0.1	(1.2)	1	(0.1)	0		1.3					
32	1160	31L	33	4.2	0.4	0.0 +	0.1	(2.0)	1	(0.2)	0		2.3					
33	13	31L	33	4.2	0.4	0.0 +	0.0	(0.0)	1	(0.0)	0		0.0					
34	111	31L	33	4.2	0.4	0.0 +	0.0	(0.2)	1	(0.0)	0		0.2					
40	565	2065	91	16.7	48.6	3.2 +	4.5	(108.4)*	133	(19.4)	13		65.0	4	31	48		
41	173	2205	26	16.7	19.7	0.8 +	0.2	(13.4)*	78	(3.5)	2		8.0	4	31	48		
42	66	1800S	51	2.1	9.4	0.1 +	0.1	(2.4)*	40	(0.7)	5	(0.3)*	27.7	4	53	26		
43	34	1800S	70	2.1	11.8	0.1 +	0.1	(1.6)*	49	(0.4)	6	(0.8)*	43.7	4	53	26		
44	304	42L	51	2.1	6.8	0.3 +	0.3	(8.2)	65	(5.1)	5	+	13.3	4	53	26		
45	147	42L	51	2.1	4.3	0.0 +	0.1	(2.5)	9	(0.3)	5	+	2.8	4	53	26		
46	306	43L	70	2.1	9.1	0.3 +	0.5	(11.0)	68	(5.3)	6	+	16.3	4	53	26		
47	378	43L	70	2.1	7.1	0.1 +	0.6	(10.6)	35	(3.4)	6	+	14.0	4	53	26		
50	1199	2577f	96	16.7	40.8	4.4 +	9.2	(193.0)*	128	(39.6)	28		115.8	5	0	28		
51	446	1800S	69	2.7	8.4	0.0 +	1.0	(14.8)*	15	(1.8)	2	(0.3)*	87.2	5	33	55		
52	173	1800S	30	2.7	4.2	0.0 +	0.2	(2.9)*	30	(1.3)	3	(0.1)*	19.6	5	33	55		
53	34	52L	30	2.7	20.8	0.2 +	0.0	(2.8)	84	(0.7)	3	+	3.5	5	33	55		
54	20	51L	69	2.7	25.8	0.1 +	0.0	(2.0)	93	(0.5)	2	+	2.5	5	33	55		
55	10	51L	69	2.7	18.8	0.0 +	0.0	(0.7)	106	(0.3)	2	+	1.0	5	33	55		

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)		TOTAL COST OF STOPS ($/H)		PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1032.9	75.2	13.7	22.2	29.0	(731.1)	+ (	48.4)	+ (211.1)	=	990.6	TOTALS

ROUTE

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	55.4	+	58.9	+	76.2	=	190.5

NO. OF ENTRIES TO SUBPT = 9
NO. OF LINKS RECALCULATED= 286

PROGRAM TRANSYT FINISHED
========== end of file ==========

Printed at 17:19:50 on 09/09/2015]

T R A N S Y T 12

Traffic Network Study Tool Analysis

Program Release 7 (July 2010)
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For sales and distribution information, program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
3GA,UK
Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770864
Email: softwarebureau@trl.co.uk
Web: www.trlsoftware.co.uk RG40

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "S5 2026 PM CD PD SP IMPS.DAT" at 11:46 on 20150903

TRANSYT 12.0

S5 Gibbet Hill Rbout 2026 PM Peak + Committed + Proposed + Symmetry Park

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	= 4
NUMBER OF LINKS	= 32
NUMBER OF OPTIMISED NODES	= 4
MAXIMUM NUMBER OF GRAPHIC PLOTS	= 0
NUMBER OF STEPS IN CYCLE	= 60
MAXIMUM NUMBER OF SHARED STOPLINES	= 4
MAXIMUM NUMBER OF TIMING POINTS	= 2
MAXIMUM LINKS AT ANY NODE	= 11

CORE REQUESTED = 9026 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

(1)= TITLE:- S5 Gibbet Hill Rbout 2026 PM Peak + Committed + Proposed + Symmetry Park

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME PERIOD 1-1200 MINS.	EFFECTIVE-GREEN DISPLACEMENTS START (SEC)	END (SEC)	EQUISAT SETTINGS 0=NO 1=YES	0=UNEQUAL FLOW CYCLE 1=EQUAL	SCALE %	CRUISE-SPEEDS SCALE %	CARD32 0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL-CLIMB OUTPUT 1=FULL	DELAY VALUE P PER PCU-H	STOP NO. VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260

CARD NO.	CARD TYPE	LIST OF NODES TO BE OPTIMISED														
3)=	2	1	2	4	5	0	0	0	0	0	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET.....					SECOND SET.....					THIRD SET.....				
4)=	7	12	14	15	0	0	13	16	0	0	0	22	24	25	0	0
5)=	7	31	32	33	34	0	42	44	45	0	0	43	46	47	0	0
6)=	7	51	54	55	0	0	52	53	0	0	0	0	0	0	0	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
7)=	10	1	7	7								
8)=	10	2	7	7								
9)=	10	4	7	7								
10)=	10	5	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
11)=	11	1	5	5								
12)=	11	2	5	5								
13)=	11	4	5	5								
14)=	11	5	5	5								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
15)=	12	1	1	0	0								
16)=	12	2	1	0	0								
17)=	12	4	1	0	0								
18)=	12	5	1	0	0								

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY LINKS LINK1 NO.	LINK2 NO.	LINK1 GIVEWAY COEFFS. ONLY % FLOW	A1 X100	A2 X100				LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
19)=	30	30	31	0	0	41	100	0	0	0	200	0	1169	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN START STAGE	START LAG	END STAGE	END LAG	SECOND GREEN START STAGE	START LAG	END STAGE	END LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
20)=	31	10	1	1	5	2	0	0	0	0	0	200	-9999	2015	60	0
21)=	31	11	1	1	5	2	0	0	0	0	0	200	-9999	2155	60	0
22)=	31	12	1	2	5	1	0	0	0	0	0	55	0	1800	500	0
23)=	31	13	1	2	5	1	0	0	0	0	0	55	0	1800	500	0
24)=	31	14	1	1	0	1	0	0	0	0	0	55	0	0	0	0
25)=	31	15	1	1	0	1	0	0	0	0	0	55	0	0	0	0
26)=	31	16	1	1	0	1	0	0	0	0	0	55	0	0	0	0
27)=	31	20	2	1	5	2	0	0	0	0	0	200	-9999	2065	60	0
28)=	31	21	2	1	5	2	0	0	0	0	0	200	-9999	2205	60	0
29)=	31	22	2	2	5	1	0	0	0	0	0	31	0	1800	500	0
30)=	31	23	2	2	5	1	0	0	0	0	0	31	0	1800	500	0
31)=	31	24	2	1	0	1	0	0	0	0	0	31	0	0	0	0
32)=	31	25	2	1	0	1	0	0	0	0	0	31	0	0	0	0
33)=	31	31	0	0	0	0	0	0	0	0	0	50	0	6000	0	0
34)=	31	32	0	0	0	0	0	0	0	0	0	50	0	0	0	0
35)=	31	33	0	0	0	0	0	0	0	0	0	50	0	0	0	0
36)=	31	34	0	0	0	0	0	0	0	0	0	50	0	0	0	0
37)=	31	40	4	1	5	2	0	0	0	0	0	200	-9999	2065	60	0
38)=	31	41	4	1	5	2	0	0	0	0	0	200	-9999	2205	60	0
39)=	31	42	4	2	5	1	0	0	0	0	0	25	0	1800	500	0
40)=	31	43	4	2	5	1	0	0	0	0	0	25	0	1800	500	0
41)=	31	44	4	1	0	1	0	0	0	0	0	25	0	0	0	0
42)=	31	45	4	1	0	1	0	0	0	0	0	25	0	0	0	0
43)=	31	46	4	1	0	1	0	0	0	0	0	25	0	0	0	0
44)=	31	47	4	1	0	1	0	0	0	0	0	25	0	0	0	0
45)=	31	50	5	1	5	2	0	0	0	0	0	200	-9999	2205	60	0
46)=	31	51	5	2	5	1	0	0	0	0	0	32	0	1800	500	0
47)=	31	52	5	2	5	1	0	0	0	0	0	32	0	1800	500	0
48)=	31	53	4	1	0	1	0	0	0	0	0	32	0	0	0	0
49)=	31	54	4	1	0	1	0	0	0	0	0	32	0	0	0	0
50)=	31	55	4	1	0	1	0	0	0	0	0	32	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 2 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 3 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 4 ..... LINK NO.	FLOW	CRUISE SPEED
51)=	32	10	478	0	0	0	43	0	0	0	0	0	0	0	0	0
52)=	32	11	531	0	0	0	43	0	0	0	0	0	0	0	0	0
53)=	32	12	566	0	50	566	43	0	0	0	0	0	0	0	0	0
54)=	32	13	157	0	50	157	43	0	0	0	0	0	0	0	0	0
55)=	32	14	18	0	53	18	43	0	0	0	0	0	0	0	0	0
56)=	32	15	192	0	51	192	43	0	0	0	0	0	0	0	0	0
57)=	32	16	28	0	51	28	43	0	0	0	0	0	0	0	0	0
58)=	32	20	373	0	0	0	43	0	0	0	0	0	0	0	0	0
59)=	32	21	372	0	0	0	43	0	0	0	0	0	0	0	0	0
60)=	32	22	473	0	10	473	43	0	0	0	0	0	0	0	0	0
61)=	32	23	531	0	11	531	43	0	0	0	0	0	0	0	0	0
62)=	32	24	28	0	16	28	43	0	0	0	0	0	0	0	0	0
63)=	32	25	157	0	13	157	43	0	0	0	0	0	0	0	0	0
64)=	32	30	91	0	0	0	43	0	0	0	0	0	0	0	0	0
65)=	32	31	720	0	20	348	43	21	372	43	0	0	0	0	0	0
66)=	32	32	990	0	22	459	43	23	531	43	0	0	0	0	0	0
67)=	32	33	13	0	24	13	43	0	0	0	0	0	0	0	0	0
68)=	32	34	107	0	25	107	43	0	0	0	0	0	0	0	0	0
69)=	32	40	645	0	0	0	43	0	0	0	0	0	0	0	0	0
70)=	32	41	220	0	0	0	43	0	0	0	0	0	0	0	0	0
71)=	32	42	58	0	30	58	43	0	0	0	0	0	0	0	0	0
72)=	32	43	18	0	30	18	43	0	0	0	0	0	0	0	0	0
73)=	32	44	265	0	32	265	43	0	0	0	0	0	0	0	0	0
74)=	32	45	135	0	31	135	43	0	0	0	0	0	0	0	0	0
75)=	32	46	266	0	32	266	43	0	0	0	0	0	0	0	0	0
76)=	32	47	391	0	31	391	43	0	0	0	0	0	0	0	0	0
77)=	32	50	1165	0	0	0	43	0	0	0	0	0	0	0	0	0

78)=	32	51	560	0	40	560	43	0	0	0	0	0	0	0	0	0
79)=	32	52	220	0	41	220	43	0	0	0	0	0	0	0	0	0
80)=	32	53	18	0	43	18	43	0	0	0	0	0	0	0	0	0
81)=	32	54	21	0	42	21	43	0	0	0	0	0	0	0	0	0
82)=	32	55	16	0	47	16	43	0	0	0	0	0	0	0	0	0

LINK CARDS : FLARE SATURATION FLOW DATA

	CARD TYPE	LINK NO.	..LANE 1.. SAT. FLOW	CAPAC VEH.	..LANE 2.. SAT. FLOW	CAPAC VEH.	..LANE 3.. SAT. FLOW	CAPAC VEH.
83)=	33	50	2205	3	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD TYPE	CARD NO.	LINK QUEUE	LIMIT WEIGHT	QUEUE NO.	LINK QUEUE	LIMIT WEIGHT	QUEUE NO.	LINK QUEUE	LIMIT WEIGHT	QUEUE NO.	LINK QUEUE	LIMIT WEIGHT	QUEUE NO.	LINK QUEUE	LIMIT WEIGHT	QUEUE NO. 84)= 38
12	5	4500	13	5	4500	22	1	4500	23	1	4500	42	2	4500		
85)=	38	43	2	4500	51	1	4500	52	1	4500	0	0	0	0	0	0

*****END OF SUBROUTINE TINPUT****

60 SECOND CYCLE 60 STEPS

INITIAL SETTINGS
- (SECONDS)

NODE	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10 NO
1	2	0	23								
2	2	0	21								
4	2	0	28								
5	2	0	34								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY UNIFORM (U+R+O=MEAN Q) (PCU-H/H)	DELAY RANDOM+ OVERSAT (U+R+O=MEAN Q) (PCU-H/H)	DELAY COST OF DELAY ($/H)	STOPS MEAN /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END (SECONDS)
10	478	2015	75	16.7	29.4	2.4 + 1.5	(55.5)*	102	(12.6)	9		33.3	1	5	23	
11	531	2155	78	16.7	30.2	2.7 + 1.7	(63.3)*	104	(14.3)	10		38.0	1	5	23	
12	566	1800S	78	4.6	24.4	2.5 + 1.3	(54.4)*	113	(16.5)	12	(2.6)*	406.5	1	28	0	
13	156	1800S	19	4.6	11.2	0.4 + 0.1	(6.9)*	80	(3.2)	2	(0.0)*	37.7	1	28	0	
14	18	12L	78	4.6	18.1	0.0 + 0.0	(1.3)	56	(0.3)	12	+	1.5	1	28	0	
15	191	12L	78	4.6	11.7	0.2 + 0.4	(8.8)	40	(2.0)	12	+	10.8	1	28	0	
16	28	13L	19	4.6	5.1	0.0 + 0.0	(0.6)	15	(0.1)	2		0.7	1	28	0	
20	373	2065	64	16.7	27.2	1.9 + 0.9	(40.1)*	97	(9.3)	6		24.0	2	5	21	
21	372	2205	60	16.7	25.6	1.9 + 0.7	(37.6)*	93	(8.9)	6		22.6	2	5	21	
22	473	1800S	63	2.6	23.5	2.5 + 0.6	(43.9)*	108	(13.1)	11	(4.8)*	447.8	2	26	0	
23	531	1800	51	2.6	23.0	2.9 + 0.5	(48.2)*	106	(14.5)	9	(3.9)*	429.7	2	26	0	
24	28	22L	63	2.6	9.4	0.0 + 0.0	(1.0)	35	(0.3)	11	+	1.3	2	26	0	
25	156	22L	63	2.6	15.2	0.5 + 0.2	(9.4)	105	(4.3)	11	+	13.6	2	26	0	
30	91	1169	17	16.7	7.6	0.1 + 0.1	(2.7)	55	(1.3)	1		4.0				
31	720	6000S	30	4.2	0.4	0.0 + 0.1	(1.2)	1	(0.1)	0		1.4				
32	990	31L	30	4.2	0.4	0.0 + 0.1	(1.7)	1	(0.2)	0		1.9				
33	13	31L	30	4.2	0.4	0.0 + 0.0	(0.0)	1	(0.0)	0		0.0				
34	106	31L	30	4.2	0.4	0.0 + 0.0	(0.2)	1	(0.0)	0		0.2				
40	645	2065	78	16.7	25.5	2.8 + 1.7	(64.8)*	97	(16.2)	11		38.9	4	5	28	
41	220	2205	25	16.7	14.7	0.7 + 0.2	(12.8)*	66	(3.8)	3		7.7	4	5	28	
42	58	1800S	55	2.1	14.3	0.2 + 0.1	(3.3)*	62	(0.9)	6	(0.8)*	54.0	4	33	0	
43	18	1800S	80	2.1	24.1	0.1 + 0.1	(1.7)*	98	(0.5)	13	(5.3)*	246.3	4	33	0	
44	265	42L	55	2.1	6.9	0.2 + 0.3	(7.2)	55	(3.8)	6	+	11.0	4	33	0	
45	135	42L	55	2.1	23.0	0.7 + 0.2	(12.2)	108	(3.8)	6	+	16.0	4	33	0	
46	265	43L	80	2.1	20.2	0.7 + 0.8	(21.2)	113	(7.7)	13	+	28.9	4	33	0	
47	391	43L	80	2.1	32.9	2.4 + 1.2	(50.8)	117	(11.8)	13	+	62.6	4	33	0	
50	1165	2565f	91	16.7	26.1	3.8 + 4.6	(119.9)*	103	(30.9)	22		72.0	5	5	34	
51	560	1800S	90	2.7	56.0	4.8 + 3.9	(123.8)*	138	(19.9)	14	(9.7)*	1074.5	5	39	0	
52	220	1800S	36	2.7	33.3	1.8 + 0.3	(28.9)*	107	(6.1)	4	(1.6)*	220.3	5	39	0	
53	18	52L	36	2.7	8.1	0.0 + 0.0	(0.6)	32	(0.1)	4	+	0.7	5	39	0	
54	21	51L	90	2.7	38.6	0.1 + 0.1	(3.2)	124	(0.7)	14	+	3.9	5	39	0	
55	16	51L	90	2.7	40.1	0.1 + 0.1	(2.5)	135	(0.6)	14	+	3.1	5	39	0	

*** f - average saturation flow for flared link ***

TOTAL TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL DISTANCE PERFORMANCE INDEX ($/H)	
1011.3	81.9	12.3	36.5	21.9	(1915.9) + (111.5)	+ (1287.2)	= 3314.5		TOTALS

	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	54.2	+ 67.2	+ 94.5	= 215.9

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 56

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

1	2	27	50
2	2	0	21
4	2	27	55
5	2	51	25

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1011.3	67.7	14.9	22.3	21.9	(955.8) + (59.5)	+ (452.8)	= 1468.1		TOTALS

NO. OF ENTRIES TO SUBPT = 14
NO. OF LINKS RECALCULATED= 328

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

1	2	27	50
2	2	0	21
4	2	27	55
5	2	51	25

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1011.3	67.7	14.9	22.3	21.9	(955.7) + (	59.5) + (	452.8) =	1468.0	TOTALS

NO. OF ENTRIES TO SUBPT = 9
NO. OF LINKS RECALCULATED= 240

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

1	2	29	50
2	2	1	19
4	2	28	53
5	2	54	26

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1011.3	75.3	13.4	22.7	29.1	(811.6) + (	48.4) + (	262.8) =	1122.8	TOTALS

NO. OF ENTRIES TO SUBPT = 27
NO. OF LINKS RECALCULATED= 594

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1	2	29	50
2	2	1	19
4	2	28	53
5	2	54	26

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1011.3	75.3	13.4	22.7	29.1	(811.6) + (	48.4) + (	262.8) =	1122.8	TOTALS

NO. OF ENTRIES TO SUBPT = 9
NO. OF LINKS RECALCULATED= 271

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1	2	29	50
2	2	1	19
4	2	28	53
5	2	54	26

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1011.3	75.3	13.4	22.7	29.1	(811.6) + (	48.4) + (	262.8) =	1122.8	TOTALS

NO. OF ENTRIES TO SUBPT = 9
NO. OF LINKS RECALCULATED= 284

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1	2	30	51
2	2	59	17
4	2	25	50
5	2	54	26

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1011.3	74.6	13.6	22.0	29.1	(782.9) + (	46.7) + (	234.2) =	1063.8	TOTALS

NO. OF ENTRIES TO SUBPT = 14
NO. OF LINKS RECALCULATED= 412

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1	2	30	51
2	2	59	17
4	2	25	50
5	2	54	26

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1011.3	74.6	13.6	22.0	29.1	(782.9) + (	46.7) +	(234.2)	= 1063.8	TOTALS

NO. OF ENTRIES TO SUBPT = 17
NO. OF LINKS RECALCULATED= 478

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1	2	30	51								
2	2	59	17								
4	2	25	50								
5	2	54	26								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	UNIFORM DELAY (U+R+O=MEAN Q)	RANDOM+ OVERSAT DELAY	COST OF (PCU-H/H)	MEAN STOPS /PCU	COST OF STOPS ($/H)	MEAN STOPS (%)	QUEUE MAX. ($/H)	AVERAGE EXCESS	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES (PCU)	EXIT NODE (PCU)	($/H)	GREEN TIMES START 1ST (SECONDS)	2ND	START END 1ST	END 2ND
10	478	2015	84	16.7	38.6	2.7	+ 2.4	(72.8)*	118	(14.5)	10			43.7	1		35	51		
11	531	2155	87	16.7	41.4	3.0	+ 3.1	(86.8)*	122	(16.7)	11			52.1	1		35	51		
12	566	1800S	74	4.6	7.2	0.1	+ 1.0	(16.1)*	14	(2.0)	5	(0.0)*		82.9	1		56	30		
13	156	1800S	18	4.6	2.8	0.0	+ 0.1	(1.7)*	6	(0.3)	1	(0.0)*		8.8	1		56	30		
14	18	12L	74	4.6	26.5	0.1	+ 0.0	(1.9)	110	(0.5)	5	+		2.4	1		56	30		
15	191	12L	74	4.6	19.4	0.7	+ 0.3	(14.6)	108	(5.4)	5	+		20.0	1		56	30		
16	28	13L	18	4.6	11.3	0.1	+ 0.0	(1.2)	89	(0.6)	1			1.9	1		56	30		
20	373	2065	77	16.7	37.6	2.2	+ 1.7	(55.3)*	114	(11.0)	7			33.2	2		4	17		
21	372	2205	72	16.7	33.6	2.2	+ 1.3	(49.3)*	108	(10.3)	7			29.6	2		4	17		
22	473	1800S	58	2.6	4.2	0.1	+ 0.5	(7.8)*	27	(3.3)	7	(0.9)*		84.7	2		22	59		
23	531	1800	47	2.6	4.0	0.1	+ 0.4	(8.3)*	42	(5.8)	8	(1.0)*		92.6	2		22	59		
24	28	22L	58	2.6	8.1	0.0	+ 0.0	(0.9)	27	(0.2)	7	+		1.1	2		22	59		
25	156	22L	58	2.6	10.7	0.3	+ 0.2	(6.6)	73	(3.0)	7	+		9.5	2		22	59		
30	91	1169	17	16.7	7.3	0.1	+ 0.1	(2.6)	53	(1.2)	1			3.9						
31	720	6000S	30	4.2	0.4	0.0	+ 0.1	(1.2)	1	(0.1)	0			1.4						
32	990	31L	30	4.2	0.4	0.0	+ 0.1	(1.7)	1	(0.2)	0			1.9						
33	13	31L	30	4.2	0.4	0.0	+ 0.0	(0.0)	1	(0.0)	0			0.0						
34	106	31L	30	4.2	0.4	0.0	+ 0.0	(0.2)	1	(0.0)	0			0.2						
40	645	2065	89	16.7	39.5	3.3	+ 3.8	(100.6)*	121	(20.2)	14			60.4	4		30	50		
41	220	2205	29	16.7	17.4	0.9	+ 0.2	(15.1)*	74	(4.2)	3			9.0	4		30	50		
42	58	1800S	49	2.1	11.0	0.1	+ 0.1	(2.5)*	61	(0.9)	6	(0.6)*		39.8	4		55	25		
43	18	1800S	73	2.1	14.2	0.0	+ 0.0	(1.0)*	69	(0.3)	6	(1.1)*		54.8	4		55	25		
44	265	42L	49	2.1	11.4	0.6	+ 0.3	(11.9)	98	(6.7)	6	+		18.6	4		55	25		
45	135	42L	49	2.1	4.0	0.0	+ 0.1	(2.1)	7	(0.2)	6	+		2.4	4		55	25		
46	265	43L	73	2.1	14.2	0.5	+ 0.5	(14.8)	101	(6.9)	6	+		21.8	4		55	25		
47	391	43L	73	2.1	7.7	0.1	+ 0.8	(11.9)	35	(3.5)	6	+		15.4	4		55	25		
50	1165	2590f	96	16.7	42.5	4.4	+ 9.3	(195.2)*	130	(39.1)	28			117.1	5	59	26			
51	560	1800S	83	2.7	14.1	0.0	+ 2.2	(31.2)*	22	(3.2)	3	(1.5)*		228.3	5	31	54			
52	220	1800S	33	2.7	3.9	0.0	+ 0.2	(3.4)*	10	(0.6)	2	(0.0)*		18.4	5	31	54			
53	18	52L	33	2.7	26.1	0.1	+ 0.0	(1.9)	103	(0.5)	2	+		2.3	5	31	54			
54	21	51L	83	2.7	36.7	0.1	+ 0.1	(3.0)	121	(0.7)	3	+		3.7	5	31	54			
55	16	51L	83	2.7	26.1	0.1	+ 0.1	(1.6)	118	(0.5)	3	+		2.1	5	31	54			

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1011.3	74.6	13.6	22.0	29.1	(782.9) + (	46.7) +	(234.2)	= 1063.8	TOTALS

ROUTE

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	54.2	+	58.7	+	74.1	=	187.1

NO. OF ENTRIES TO SUBPT = 9
NO. OF LINKS RECALCULATED= 284

PROGRAM TRANSYT FINISHED
========== end of file ==========

Printed at 17:20:12 on 09/09/2015]

T R A N S Y T 12

Traffic Network Study Tool Analysis

Program Release 7 (July 2010)
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For sales and distribution information, program
advice and maintenance, contact:

TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770864
Nine Mile Ride Email: softwarebureau@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk RG40
3GA,UK

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "S5 2026 AM CD PD SP.DAT" at 11:47 on 20150825

TRANSYT 12.0

Scenario 5 M6 Junction 1 2026 AM Peak + Committed & Proposed & Symmetry Park

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	= 2
NUMBER OF LINKS	= 18
NUMBER OF OPTIMISED NODES	= 2
MAXIMUM NUMBER OF GRAPHIC PLOTS	= 0
NUMBER OF STEPS IN CYCLE	= 60
MAXIMUM NUMBER OF SHARED STOPLINES	= 3
MAXIMUM NUMBER OF TIMING POINTS	= 2
MAXIMUM LINKS AT ANY NODE	= 6

CORE REQUESTED = 6891 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

(1)= TITLE:- Scenario 5 M6 Junction 1 2026 AM Peak + Committed & Proposed & Symmetry Park

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME PERIOD 1-1200 MINS.	EFFECTIV DISPLAC START (SEC)	E-GREEN EMENTS END (SEC)	EQUISAT SETTINGS 0=NO 1=YES	0=UNEQUAL CYCLE 1=EQUAL	FLOW SCALE 10-200 %	CRUISE-SPEEDS SCALE 50-200 %	CARD32 0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL- CLIMB 1=FULL	DELAY VALUE P PER PCU-H	STOP VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260

CARD NO.	CARD TYPE	LIST OF NODES TO BE OPTIMISED														
3)=	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET.....					SECOND SET.....					THIRD SET.....				
4)=	7	12	14	0	0	0	13	15	0	0	0	21	22	23	0	0
5)=	7	32	34	0	0	0	41	42	0	0	0	0	0	0	0	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
6)=	10	1	7	7								
7)=	10	3	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
8)=	11	1	7	7								
9)=	11	3	7	7								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
10)=	12	1	1	0	0								
11)=	12	3	1	0	0								

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY LINKS LINK1 NO.	LINK2 NO.	LINK1 GIVEWAY COEFFS. ONLY % FLOW	A1 X100	A2 X100				LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
12)=	30	20	21	0	0	51	100	0	0	0	0	200	0	2207	0	0
13)=	30	40	41	0	0	51	100	0	0	0	0	200	0	2197	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN START STAGE	FIRST GREEN START LAG	FIRST GREEN END STAGE	FIRST GREEN END LAG	SECOND GREEN START STAGE	SECOND GREEN START LAG	SECOND GREEN END STAGE	SECOND GREEN END LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
14)=	31	10	1	1	7	2	0	0	0	0	0	200	-9999	1945	60	0
15)=	31	11	1	1	7	2	0	0	0	0	0	200	-9999	4170	60	0
16)=	31	12	1	2	7	1	0	0	0	0	0	158	0	3885	500	0
17)=	31	13	1	2	7	1	0	0	0	0	0	158	0	2010	500	0
18)=	31	14	1	1	0	1	0	0	0	0	0	158	0	0	0	0
19)=	31	15	1	1	0	1	0	0	0	0	0	158	0	0	0	0
20)=	31	21	0	0	0	0	0	0	0	0	0	84	0	4000	0	0
21)=	31	22	0	0	0	0	0	0	0	0	0	84	0	0	0	0
22)=	31	23	0	0	0	0	0	0	0	0	0	84	0	0	0	0
23)=	31	30	3	1	7	2	0	0	0	0	0	200	-9999	1945	60	0
24)=	31	31	3	1	7	2	0	0	0	0	0	200	-9999	4170	60	0
25)=	31	32	3	2	7	1	0	0	0	0	0	147	0	3896	500	0
26)=	31	33	3	2	7	1	0	0	0	0	0	147	0	2016	500	0
27)=	31	34	3	1	0	1	0	0	0	0	0	147	0	0	0	0
28)=	31	41	0	0	0	0	0	0	0	0	0	84	0	4000	0	0
29)=	31	42	0	0	0	0	0	0	0	0	0	84	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 ..... LINK NO.	CRUISE SPEED	ENTRY 2 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 3 ..... LINK NO.	FLOW	CRUISE SPEED	ENTRY 4 ..... LINK NO.	FLOW	CRUISE SPEED
30)=	32	10	389	0	0	0	43	0	0	0	0	0	0	0	0
31)=	32	11	766	0	0	0	43	0	0	0	0	0	0	0	0
32)=	32	12	794	0	40	794	43	0	0	0	0	0	0	0	0
33)=	32	13	193	0	40	193	43	0	0	0	0	0	0	0	0
34)=	32	14	32	0	41	32	43	0	0	0	0	0	0	0	0
35)=	32	15	77	0	41	77	43	0	0	0	0	0	0	0	0
36)=	32	20	1339	0	0	0	43	0	0	0	0	0	0	0	0
37)=	32	21	766	0	11	766	43	0	0	0	0	0	0	0	0
38)=	32	22	77	0	15	77	43	0	0	0	0	0	0	0	0
39)=	32	23	193	0	13	193	43	0	0	0	0	0	0	0	0
40)=	32	30	265	0	0	0	43	0	0	0	0	0	0	0	0
41)=	32	31	286	0	0	0	43	0	0	0	0	0	0	0	0
42)=	32	32	965	0	20	965	43	0	0	0	0	0	0	0	0
43)=	32	33	332	0	20	332	43	0	0	0	0	0	0	0	0
44)=	32	34	766	0	21	766	43	0	0	0	0	0	0	0	0
45)=	32	40	1721	0	0	0	43	0	0	0	0	0	0	0	0
46)=	32	41	109	0	31	109	43	0	0	0	0	0	0	0	0
47)=	32	42	332	0	33	332	43	0	0	0	0	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.	LIM IT	LINK NQUEUE	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
48)=	38	12	28	4500	14	4500	32	24	4500	33	12	4500	0	0	0

*****END OF SUBROUTINE TINPUT*****

60 SECOND CYCLE 60 STEPS

INITIAL SETTINGS
- (SECONDS)

NODE	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE NO 10
1	2	0	29								
3	2	0	18								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) UNIFORM (PCU-H/H)	RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	STOPS MEAN /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END 1ST (SECONDS)	GREEN TIMES END 2ND (SECONDS)
10	389	1945	52	16.7	19.3	1.5 +	0.5 (29.6)*	81	(8.1)	6			17.8	1	7	29		
11	766	4170	48	16.7	16.1	3.0 +	0.5 (48.8)*	75	(14.7)	10			29.3	1	7	29		
12	795	3885S	51	13.2	15.2	2.9 +	0.5 (47.8)*	73	(15.0)	11	(0.0)*		254.0	1	36	0		
13	193	2010S	32	13.2	14.8	0.6 +	0.2 (11.3)*	70	(3.5)	4	(0.0)*		60.0	1	36	0		
14	32	12L	51	13.2	13.6	0.1 +	0.0 (1.7)	99	(0.8)	11			2.5	1	36	0		
15	77	13L	32	13.2	12.2	0.2 +	0.1 (3.7)	96	(1.9)	4			5.6	1	36	0		
20	1339	2207	80	16.7	6.6	0.5 +	1.9 (34.8)	37	(12.9)	11			47.8					
21	766	4000S	26	7.0	0.6	0.0 +	0.1 (1.8)	1	(0.2)	0			2.0					
22	77	21L	26	7.0	0.6	0.0 +	0.0 (0.2)	1	(0.0)	0			0.2					
23	193	21L	26	7.0	0.6	0.0 +	0.0 (0.5)	1	(0.1)	0			0.5					
30	265	1945	68	16.7	36.5	1.6 +	1.1 (38.2)*	111	(7.6)	5			22.9	3	7	18		
31	286	4170	34	16.7	23.9	1.6 +	0.3 (27.0)*	87	(6.4)	4			16.2	3	7	18		
32	964	3896S	74	12.3	9.9	1.9 +	0.8 (37.6)*	64	(15.9)	24	(0.0)*		203.8	3	25	0		
33	332	2016	27	12.3	7.8	0.5 +	0.2 (10.2)*	46	(3.9)	3	(0.0)*		55.0	3	25	0		
34	766	32L	74	12.3	6.5	0.8 +	0.6 (19.8)	74	(14.5)	24			34.3	3	25	0		
40	1721	2197	87	16.7	7.0	0.0 +	3.3 (47.8)	24	(10.8)	7			58.5					
41	109	4000S	11	7.0	0.5	0.0 +	0.0 (0.2)	1	(0.0)	0			0.2					
42	332	41L	11	7.0	0.5	0.0 +	0.0 (0.7)	1	(0.1)	0			0.7					

TOTAL TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL DISTANCE PERFORMANCE INDEX ($/H)	
1553.7	61.6	25.2	15.3	10.2	(731.8) +	(79.5) +	(0.0) =	811.3	TOTALS

	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	83.3 +	29.3 +	53.0 =	165.6

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 30

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

NODE	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE NO 10
1	2	9	38								
3	2	0	18								

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1553.7	61.3	25.3	15.0	10.2	(731.5) +	(65.7) +	(0.0) =	797.1	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 86

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

NODE	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE NO 10
1	2	9	38								
3	2	0	18								

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1553.7	61.3	25.3	15.0	10.2	(731.5) +	(65.7) +	(0.0) =	797.1	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 92

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

NODE	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE NO 10
1	2	16	37								
3	2	3	18								

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1553.7	66.9	23.2	16.0	14.8	(648.4) +	(63.9) +	(0.0) =	712.2	TOTALS

NO. OF ENTRIES TO SUBPT = 19
NO. OF LINKS RECALCULATED= 316

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1 2 7 28
3 2 3 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1553.7	66.3	23.4	15.4	14.8	(621.9) +	(60.9) +	(0.0) =	682.8	TOTALS

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 120

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1 2 7 28
3 2 3 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1553.7	66.3	23.4	15.4	14.8	(621.9) +	(60.9) +	(0.0) =	682.8	TOTALS

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 136

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1 2 5 26
3 2 3 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1553.7	66.2	23.5	15.3	14.8	(615.7) +	(62.3) +	(0.0) =	677.9	TOTALS

NO. OF ENTRIES TO SUBPT = 7
NO. OF LINKS RECALCULATED= 136

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1 2 5 26
3 2 3 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1553.7	66.2	23.5	15.3	14.8	(615.7) +	(62.3) +	(0.0) =	677.9	TOTALS

NO. OF ENTRIES TO SUBPT = 9
NO. OF LINKS RECALCULATED= 184

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE NO 10
1	2	5	26								
3	2	3	18								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) UNIFORM (PCU-H/H)	DELAY RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	STOPS MEAN STOPS /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START END 1ST (SECONDS)	GREEN TIMES START END 2ND (SECONDS)
10	389	1945	80	16.7	38.9	2.3 +	1.9	(59.7)*	117	(11.7)	8		35.8	1	12	26
11	766	4170	73	16.7	27.1	4.4 +	1.4	(81.9)*	98	(19.3)	13		49.2	1	12	26
12	795	3885S	39	13.2	9.1	1.7 +	0.3	(28.5)*	55	(11.3)	8	(0.0)*	153.6	1	33	5
13	193	2010S	24	13.2	9.0	0.4 +	0.1	(6.9)*	52	(2.6)	3	(0.0)*	36.9	1	33	5
14	32	12L	39	13.2	6.8	0.0 +	0.0	(0.9)	79	(0.7)	8		1.5	1	33	5
15	77	13L	24	13.2	5.7	0.1 +	0.0	(1.7)	66	(1.3)	3		3.1	1	33	5
20	1339	2207	80	16.7	7.3	0.8 +	1.9	(38.5)	47	(16.4)	14		54.9			
21	766	4000S	26	7.0	0.6	0.0 +	0.1	(1.8)	1	(0.2)	1		2.1			
22	77	21L	26	7.0	0.6	0.0 +	0.0	(0.2)	1	(0.0)	1		0.2			
23	193	21L	26	7.0	0.6	0.0 +	0.0	(0.5)	1	(0.1)	1		0.5			
30	265	1945	91	16.7	77.4	1.8 +	3.8	(80.9)*	164	(11.2)	8		48.5	3	10	18
31	286	4170	46	16.7	28.6	1.9 +	0.4	(32.2)*	96	(7.0)	5		19.3	3	10	18
32	964	3896S	68	12.3	7.5	1.4 +	0.6	(28.6)*	49	(12.1)	16	(0.0)*	155.2	3	25	3
33	332	2016	25	12.3	6.6	0.4 +	0.2	(8.6)*	42	(3.6)	3	(0.0)*	46.6	3	25	3
34	766	32L	68	12.3	2.6	0.1 +	0.5	(7.7)	16	(3.2)	16		10.9	3	25	3
40	1721	2197	87	16.7	7.0	0.0 +	3.3	(47.8)	24	(10.8)	7		58.6			
41	109	4000S	11	7.0	0.5	0.0 +	0.0	(0.2)	1	(0.0)	0		0.2			
42	332	41L	11	7.0	0.5	0.0 +	0.0	(0.7)	1	(0.1)	0		0.7			

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1553.7	66.2	23.5	15.3	14.8	(615.7) +	(62.3) +	(0.0) =	677.9	TOTALS

ROUTE

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	83.3	+	34.6	+	50.8	=	168.8

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 130

PROGRAM TRANSYT FINISHED

========== end of file ==========

Printed at 17:24:41 on 09/09/2015]

T R A N S Y T 12

Traffic Network Study Tool Analysis

Program Release 7 (July 2010)
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For sales and distribution information, program
advice and maintenance, contact:

TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770864
Nine Mile Ride Email: softwarebureau@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk RG40
3GA,UK

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "S5 2026 PM CD PD SP.DAT" at 11:50 on 20150825

TRANSYT 12.0

S5 M6 Junction 1 2026 PM Peak + Committed & Proposed & Symmetry Park

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES	= 2
NUMBER OF LINKS	= 18
NUMBER OF OPTIMISED NODES	= 2
MAXIMUM NUMBER OF GRAPHIC PLOTS	= 0
NUMBER OF STEPS IN CYCLE	= 60
MAXIMUM NUMBER OF SHARED STOPLINES	= 3
MAXIMUM NUMBER OF TIMING POINTS	= 2
MAXIMUM LINKS AT ANY NODE	= 6

CORE REQUESTED = 6891 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-
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CARD NO. / CARD TYPE

(1)= TITLE:- S5 M6 Junction 1 2026 PM Peak + Committed & Proposed & Symmetry Park

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME PERIOD 1-1200 MINS.	EFFECTIV DISPLAC START (SEC)	E-GREEN EMENTS END (SEC)	EQUISAT SETTINGS 0=NO 1=YES	0=UNEQUAL CYCLE 1=EQUAL	FLOW SCALE 10-200 %	CRUISE-SPEEDS SCALE 50-200 %	CARD32 0=TIMES 1=SPEEDS	OPTIMISE 0=NONE 1=O/SET 2=FULL	EXTRA COPIES FINAL OUTPUT	HILL- CLIMB OUTPUT 1=FULL	DELAY VALUE P PER PCU-H	STOP VALUE P PER 100
2)=	1	60	60	60	2	3	1	0	0	0	1	2	0	0	1420	260

CARD NO.	CARD TYPE	LIST OF NODES TO BE OPTIMISED													
3)=	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET.....					SECOND SET.....					THIRD SET.....				
4)=	7	12	14	0	0	0	13	15	0	0	0	21	22	23	0	0
5)=	7	32	34	0	0	0	41	42	0	0	0	0	0	0	0	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
6)=	10	1	7	7								
7)=	10	3	7	7								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
8)=	11	1	7	7								
9)=	11	3	7	7								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
10)=	12	1	1	0	0								
11)=	12	3	1	0	0								

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY LINKS LINK1 NO.	PRIORITY LINKS LINK2 NO.	LINK1 GIVEWAY COEFFS. ONLY % FLOW	A1 X100	A2 X100					LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
12)=	30	20	21	0	0	51	100	0	0	0	0	200	0	2207	0	0
13)=	30	40	41	0	0	51	100	0	0	0	0	200	0	2197	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN START STAGE	FIRST GREEN START LAG	FIRST GREEN END STAGE	FIRST GREEN END LAG	SECOND GREEN START STAGE	SECOND GREEN START LAG	SECOND GREEN END STAGE	SECOND GREEN END LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
14)=	31	10	1	1	7	2	0	0	0	0	0	200	-9999	1945	60	0
15)=	31	11	1	1	7	2	0	0	0	0	0	200	-9999	4170	60	0
16)=	31	12	1	2	7	1	0	0	0	0	0	158	0	3885	500	0
17)=	31	13	1	2	7	1	0	0	0	0	0	158	0	2010	500	0
18)=	31	14	1	1	0	1	0	0	0	0	0	158	0	0	0	0
19)=	31	15	1	1	0	1	0	0	0	0	0	158	0	0	0	0
20)=	31	21	0	0	0	0	0	0	0	0	0	84	0	4000	0	0
21)=	31	22	0	0	0	0	0	0	0	0	0	84	0	0	0	0
22)=	31	23	0	0	0	0	0	0	0	0	0	84	0	0	0	0
23)=	31	30	3	1	7	2	0	0	0	0	0	200	-9999	1945	60	0
24)=	31	31	3	1	7	2	0	0	0	0	0	200	-9999	4170	60	0
25)=	31	32	3	2	7	1	0	0	0	0	0	147	0	3896	500	0
26)=	31	33	3	2	7	1	0	0	0	0	0	147	0	2016	500	0
27)=	31	34	3	1	0	1	0	0	0	0	0	147	0	0	0	0
28)=	31	41	0	0	0	0	0	0	0	0	0	84	0	4000	0	0
29)=	31	42	0	0	0	0	0	0	0	0	0	84	0	0	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1 ..... LINK NO.	ENTRY 1 ..... CRUISE SPEED	ENTRY 2 ..... LINK NO.	ENTRY 2 ..... FLOW	ENTRY 2 ..... CRUISE SPEED	ENTRY 3 ..... LINK NO.	ENTRY 3 ..... FLOW	ENTRY 3 ..... CRUISE SPEED	ENTRY 4 ..... LINK NO.	ENTRY 4 ..... FLOW	ENTRY 4 ..... CRUISE SPEED
30)=	32	10	311	0	0	0	43	0	0	0	0	0	0	0	0
31)=	32	11	670	0	0	0	43	0	0	0	0	0	0	0	0
32)=	32	12	837	0	40	837	43	0	0	0	0	0	0	0	0
33)=	32	13	230	0	40	230	43	0	0	0	0	0	0	0	0
34)=	32	14	58	0	41	58	43	0	0	0	0	0	0	0	0
35)=	32	15	24	0	41	24	43	0	0	0	0	0	0	0	0
36)=	32	20	1168	0	0	0	43	0	0	0	0	0	0	0	0
37)=	32	21	670	0	11	670	43	0	0	0	0	0	0	0	0
38)=	32	22	24	0	15	24	43	0	0	0	0	0	0	0	0
39)=	32	23	230	0	13	230	43	0	0	0	0	0	0	0	0
40)=	32	30	142	0	0	0	43	0	0	0	0	0	0	0	0
41)=	32	31	176	0	0	0	43	0	0	0	0	0	0	0	0
42)=	32	32	777	0	20	777	43	0	0	0	0	0	0	0	0
43)=	32	33	363	0	20	363	43	0	0	0	0	0	0	0	0
44)=	32	34	670	0	21	670	43	0	0	0	0	0	0	0	0
45)=	32	40	1692	0	0	0	43	0	0	0	0	0	0	0	0
46)=	32	41	82	0	31	82	43	0	0	0	0	0	0	0	0
47)=	32	42	363	0	33	363	43	0	0	0	0	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.	LIMIT NQUEUE	LINK QUEUE	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
48)=	38	12	28	15	14	4500	32	24	4500	33	12	4500	0	0	0

*****END OF SUBROUTINE TINPUT*****
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60 SECOND CYCLE 60 STEPS

INITIAL SETTINGS
- (SECONDS)

NODE	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE NO 10
1	2	0	26								
3	2	0	14								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) UNIFORM (PCU-H/H)	RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	STOPS MEAN /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND END (SECONDS)
10	311	1945	48	16.7	21.2	1.4 +	0.5	(26.0)*	84	(6.7)	5		15.6	1	7	26
11	670	4170	48	16.7	18.4	3.0 +	0.5	(48.6)*	79	(13.6)	9		29.2	1	7	26
12	836	3885S	49	13.2	13.0	2.6 +	0.5	(42.9)*	68	(14.6)	11	(0.0)*	229.1	1	33	0
13	230	2010S	27	13.2	12.4	0.6 +	0.2	(11.2)*	61	(3.6)	3	(0.0)*	59.8	1	33	0
14	58	12L	49	13.2	11.6	0.2 +	0.0	(2.7)	96	(1.4)	11		4.1	1	33	0
15	24	13L	27	13.2	9.4	0.0 +	0.0	(0.9)	87	(0.5)	3		1.4	1	33	0
20	1168	2207	67	16.7	3.8	0.2 +	1.0	(17.7)	22	(6.7)	7		24.4			
21	670	4000S	23	7.0	0.6	0.0 +	0.1	(1.5)	1	(0.2)	0		1.7			
22	24	21L	23	7.0	0.6	0.0 +	0.0	(0.1)	1	(0.0)	0		0.1			
23	230	21L	23	7.0	0.6	0.0 +	0.0	(0.5)	1	(0.1)	0		0.6			
30	142	1945	55	16.7	39.5	1.0 +	0.6	(22.1)*	113	(4.1)	3		13.3	3	7	14
31	176	4170	32	16.7	28.3	1.2 +	0.2	(19.6)*	95	(4.3)	3		11.8	3	7	14
32	778	3896S	56	12.3	5.8	0.9 +	0.3	(17.7)*	40	(8.1)	7	(0.0)*	96.4	3	21	0
33	362	2016	27	12.3	5.9	0.4 +	0.2	(8.4)*	39	(3.7)	3	(0.0)*	45.9	3	21	0
34	670	32L	56	12.3	1.7	0.0 +	0.3	(4.4)	6	(1.1)	7		5.5	3	21	0
40	1692	2197	86	16.7	6.4	0.0 +	3.0	(42.5)	12	(5.3)	6		47.8			
41	82	4000S	11	7.0	0.5	0.0 +	0.0	(0.2)	1	(0.0)	0		0.2			
42	362	41L	11	7.0	0.5	0.0 +	0.1	(0.7)	1	(0.1)	0		0.8			

TOTAL TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL DISTANCE PERFORMANCE INDEX ($/H)	
1394.4	51.3	27.2	11.4	7.5	(542.2) +	(45.3) +	(0.0) =	587.5	TOTALS

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	74.8	+	21.7	+	33.8	=	130.2

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 24

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9
- (SECONDS)

1	2	0	26						
3	2	0	14						

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1394.4	51.3	27.2	11.4	7.5	(542.2) +	(45.3) +	(0.0) =	587.5	TOTALS

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 104

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24
- (SECONDS)

1	2	0	26						
3	2	0	14						

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1394.4	51.3	27.2	11.4	7.5	(542.2) +	(45.3) +	(0.0) =	587.5	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 86

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1
- (SECONDS)

1	2	7	25						
3	2	0	14						

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1394.4	54.6	25.5	12.0	10.2	(471.9) +	(41.1) +	(0.0) =	513.0	TOTALS

NO. OF ENTRIES TO SUBPT = 14
NO. OF LINKS RECALCULATED= 234

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9
- (SECONDS)

1 2 7 25
3 2 0 14

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1394.4	54.6	25.5	12.0	10.2	(471.9) + (	41.1) + (	0.0) =	513.0	TOTALS

NO. OF ENTRIES TO SUBPT = 6
NO. OF LINKS RECALCULATED= 114

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24
- (SECONDS)

1 2 7 25
3 2 0 14

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1394.4	54.6	25.5	12.0	10.2	(471.9) + (	41.1) + (	0.0) =	513.0	TOTALS

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 108

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1
- (SECONDS)

1 2 1 19
3 2 0 14

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1394.4	54.5	25.6	11.8	10.2	(467.9) + (	40.3) + (	0.0) =	508.2	TOTALS

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 193

60 SECOND CYCLE 60 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 9 24 -1 9 24 1 -1
- (SECONDS)

1 2 1 19
3 2 0 14

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1394.4	54.5	25.6	11.8	10.2	(467.9) + (	40.3) + (	0.0) =	508.2	TOTALS

NO. OF ENTRIES TO SUBPT = 8
NO. OF LINKS RECALCULATED= 150

60 SECOND CYCLE 60 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 9 24 -1 9 24 1 -1 1
- (SECONDS)

NODE	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE NO 10
1	2	1	19								
3	2	0	14								

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU CRUISE (SEC)	DELAY (SEC)	DELAY (U+R+O=MEAN Q) UNIFORM (PCU-H/H)	DELAY RANDOM+ OVERSAT (PCU-H/H)	COST OF DELAY ($/H)	STOPS MEAN STOPS /PCU (%)	STOPS COST OF STOPS ($/H)	QUEUE MEAN MAX. (PCU)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF ( ) VALUES ($/H)	EXIT NODE	GREEN TIMES START 1ST (SECONDS)	GREEN TIMES START 2ND (SECONDS)	GREEN TIMES END 1ST (SECONDS)	GREEN TIMES END 2ND (SECONDS)
10	311	1945	80	16.7	44.9	2.0 +	1.9	(55.0)*	124	(10.0)	7		33.0	1	8		19	
11	670	4170	80	16.7	33.6	4.3 +	2.0	(88.8)*	108	(18.7)	13		53.3	1	8		19	
12	836	3885S	38	13.2	7.4	1.4 +	0.3	(24.5)*	49	(10.7)	8	(0.0)*	133.2	1	26		1	
13	230	2010S	21	13.2	7.3	0.3 +	0.1	(6.7)*	45	(2.6)	2	(0.0)*	36.0	1	26		1	
14	58	12L	38	13.2	4.3	0.0 +	0.0	(1.0)	61	(0.9)	8		1.9	1	26		1	
15	24	13L	21	13.2	3.1	0.0 +	0.0	(0.3)	36	(0.2)	2		0.5	1	26		1	
20	1168	2207	67	16.7	4.1	0.3 +	1.0	(19.1)	27	(8.0)	8		27.0					
21	670	4000S	23	7.0	0.6	0.0 +	0.1	(1.5)	1	(0.2)	0		1.7					
22	24	21L	23	7.0	0.6	0.0 +	0.0	(0.1)	1	(0.0)	0		0.1					
23	230	21L	23	7.0	0.6	0.0 +	0.0	(0.5)	1	(0.1)	0		0.6					
30	142	1945	55	16.7	39.5	1.0 +	0.6	(22.1)*	113	(4.1)	3		13.3	3	7		14	
31	176	4170	32	16.7	28.3	1.2 +	0.2	(19.6)*	95	(4.3)	3		11.8	3	7		14	
32	778	3896S	56	12.3	5.8	0.9 +	0.3	(17.7)*	40	(8.0)	6	(0.0)*	96.3	3	21		0	
33	362	2016	27	12.3	5.9	0.4 +	0.2	(8.5)*	39	(3.7)	3	(0.0)*	45.9	3	21		0	
34	670	32L	56	12.3	1.6	0.0 +	0.3	(4.2)	4	(0.6)	6		4.9	3	21		0	
40	1692	2197	86	16.7	6.4	0.0 +	3.0	(42.5)	12	(5.3)	6		47.8					
41	82	4000S	11	7.0	0.5	0.0 +	0.0	(0.2)	1	(0.0)	0		0.2					
42	362	41L	11	7.0	0.5	0.0 +	0.1	(0.7)	1	(0.1)	0		0.8					

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY ($/H)	TOTAL COST OF STOPS ($/H)	PENALTY FOR EXCESS QUEUES ($/H)	TOTAL PERFORMANCE INDEX ($/H)	
1394.4	54.5	25.6	11.8	10.2	(467.9) +	(40.3) +	(0.0) =	508.2	TOTALS

ROUTE

	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	74.8	+	25.3	+	35.3	=	135.4

NO. OF ENTRIES TO SUBPT = 5
NO. OF LINKS RECALCULATED= 106

PROGRAM TRANSYT FINISHED

========== end of file ==========

Printed at 17:25:05 on 09/09/2015]

Magna Park Extension: Hybrid Application
Transport Assessment

Appendix T – Extracts from Trip Generation Report

URS

Magna Park Lutterworth

Trip Generation Report

47066811

Prepared for:
Gazeley UK Ltd

UNITED KINGDOM & IRELAND

REVISION SCHEDULE					
Rev	**Date**	**Details**	**Prepared by**	**Reviewed by**	**Approved by**
1	August 2013	Final Report	Jon Ashcroft Associate	Paget Fulcher Technical Director	Paget Fulcher Technical Director

URS Infrastructure & Environment UK Limited
URS House, Horne Lane
Bedford
MK40 1TS
United Kingdom
Tel: +44 (0)1234 349 641
Fax: +44 (0)1234 216 268
www.ursglobal.com

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The methodology adopted and the sources of information used by URS in providing its services are outlined in this Report. The work described in this Report was undertaken between [1 June 2013] and [31 August 2013] and is based on the conditions encountered and the information available during the said period of time. The scope of this Report and the services are accordingly factually limited by these circumstances.

Where assessments of works or costs identified in this Report are made, such assessments are based upon the information available at the time and where appropriate are subject to further investigations or information which may become available.

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TABLE OF CONTENTS

1 INTRODUCTION 1
1.1 General 1
2 MAGNA PARK 2
2.1 Existing Site 2
3 SURVEY DATA 3
3.1 ATC Surveys 3
3.2 Summary of Results 3
4 TRIP RATES 6
4.1 Vehicle Trip Calculations 6
4.2 Average Trip Generation Rates 6
4.3 85th Percentile Trip Generation Rates 7

LIST OF TABLES

Table 4-1: Average Trip Generation Rates per 100 sq.m.
Table 4-2: Average Trip Generation Rates per 100 sq.m.
Table 4-3: Average Trip Generation Rates per 100 sq.m.
Table 4-4: 85th Percentile Trip Generation Rates per 100 sq.m.
Table 4-5: 85th Trip Generation Rates per 100 sq.m.
Table 4-6: 85th Percentile Trip Generation Rates per 100 sq.m.

1 INTRODUCTION

1.1 General

1.1.1 Gazeley UK Ltd has commissioned URS to undertake Automatic Traffic Counts (ATC) at Magna Park near Lutterworth to produce vehicle trip generation rates. Magna Park is one of the largest dedicated distribution developments in Europe. It occupies some 200 hectares and provides over 8 million sq.ft. (750,000m^2) of floorspace. The site has been established for some 20 years, comprises over 30 units and provides in the region of 6,000 jobs. The location of Magna Park is identified on a plan contained within **Appendix A**.

1.1.2 The purpose of the surveys was to provide trip rate information for the Park as a whole. The information provides an alternative to the TRICS Database, which for floor areas above 20,000m^2 has very few sites available. The trip rates presented in this report will be used as the basis for the trip generation calculation at speculative distribution sites that are being promoted by Gazeley. The range of occupiers and unit sizes at Magna Park reinforces the reliability of the data and will provide a robust estimate of trip generation at units involved in B8 distribution.

2 MAGNA PARK

2.1 Existing Site

2.1.1 Gazeley has unrivalled experience in the provision, operation and management of medium to large distribution employment parks throughout the UK and the largest site is Magna Park near Lutterworth. Over the past 25 years the site has developed to become Europe's largest dedicated distribution park and currently provides over 8 million sq.ft. of floorspace.

2.1.2 There are currently over 30 units occupied at Magna Park and the unit sizes range from 100,000 to 673,659 sq.ft. (9,290 – 62,585m^2). The Park is home to a diverse range of occupiers and many of the units function as national or regional distribution centres though some perform a combination of other functions including operating as Headquarters or administrative centres. Occupiers include, Argos, ASDA, Britvic, BT, Disney, Nissan and other top UK, European and Global businesses.

2.1.3 Magna Park benefits from a central location within the UK and has excellent connections to the Motorway network with Junction 20 of the M1 and Junction 1 of the M6 reachable in less than 5 minutes.

2.1.4 Magna Park has an established internal highway network, which although not adopted by the Highway Authority, has been constructed to adoptable standards. The internal road network operates efficiently at all times of the day with most of the roads constructed to dual carriageway standard. On-street parking is not permitted anywhere within Magna Park and this is strictly enforced by the Park Management. The adopted highway begins at the A4303, Lutterworth Bypass, which provides a direct link to the M1 and the A5.

2.1.5 Magna Park has 24 hour unrestricted operation with most occupiers operating standard continental shift patterns where shift changes occur at 6am, 2pm and 10pm. Referring forward to the ATC data, it is apparent however that some companies change shifts an hour later than the standard model at 7am, 3pm and 11pm. Presumably this is to avoid overloading the highway network in and around the Park.

2.1.6 A roundabout on the Lutterworth Bypass provides the main access to Magna Park. It has four arms with the northern arm, Hunter Boulevard, providing access to the main part of the Park. Hunter Boulevard is a dual carriageway. Approximately 400 metres to the east there is an alternative access to Magna Park via Shackelton Way. This is a single carriageway and forms a left in/ left out junction with the A4303.

2.1.7 The southern arm of the main access roundabout provides access to the new Headquarters for George Clothing and to a separate unit occupied by CERT Drinks Network. Traffic movements to these units were not included in the survey.

3 SURVEY DATA

3.1 ATC Surveys

3.1.1 To establish the level of traffic activity at Magna Park, ATCs were located on Hunter Boulevard and Shackelton Way. Photographs presented in **Appendix B** show the exact location of the ATCs.

3.1.2 Referring to the photographs it can be seen that the ATCs on Hunter Boulevard were located just to the north of the main access roundabout and therefore recorded all traffic entering and leaving the Park by this route. The ATC on Shackelton Way was located to the north of the access to the Toyota building and therefore this has been excluded from the trip generation calculation.

3.1.3 The ATCs were in place between Monday 3 June and Sunday 30 June 2013 providing 24 hour data for a continuous four week period. Vehicles were classified based on axle length into motorcycles, cars, light goods vehicles (LGV), heavy goods vehicles (HGV) and buses. For the purposes of calculating trip rates, cars and LGVs have been combined to establish the total number of light vehicles.

3.1.4 Flows on Hunter Boulevard and Shackelton Way have been combined to establish the total number of arrivals and departures at the Park (excluding Toyota). The data has been arranged to show the total number of light vehicles and HGVs (excluding buses) entering and leaving the Park during the survey period. The ATC data is presented in **Appendix C**.

3.2 Summary of Results

3.2.1 The ATC data has been summarised in a sequence of Excel charts which are presented in **Appendix D**. The charts show the general pattern of arrivals and departures by vehicle type over the entire survey period. A brief commentary on the charts is set out below.

Arrivals at Magna Park – All Vehicles

3.2.2 The first four charts show the total number of arrivals and as can be seen during the weekdays there were identifiable peaks during the hour prior to and the hour following the traditional shift changeover (6am, 2pm and 10pm). A tendency for a large number of arrivals during the hour following the traditional shift changeover implies that some companies operate a shift pattern that starts an hour later than the traditional model probably to avoid overloading the road network in and around the Park.

3.2.3 There were also peaks during the traditional morning peak hours (7am to 8am and 8am to 9am) which probably consisted mostly of management and administrative staff working more standard office hours.

3.2.4 Peaks at the shift changeover were also evident at the weekend although the number of arrivals was significantly lower to reflect a much smaller workforce on a Saturday and a Sunday.

Departures at Magna Park – All Vehicles

3.2.5 The next four charts show the total number of departures and as can be seen during the weekdays there were identifiable peaks during the two hours after the traditional shift changeover. This again implies that some companies stagger their working arrangements to spread the load on the network.

3.2.6 There were also peaks during the traditional evening peak hours (5pm to 6pm and 6pm to 7pm) which is likely to have consisted mostly of management and administrative staff finishing work for the day.

3.2.7 Peaks at the shift changeover were also evident at the weekend although the number of departures was significantly lower to reflect a much smaller workforce on a Saturday and a Sunday.

Arrivals at Magna Park – Cars

3.2.8 The next four charts show the total number of arrivals by car and as can be seen the pattern is almost identical to that presented for all vehicles in the first four charts. This suggests that the general pattern for all vehicles throughout the day is heavily influenced by staff arriving at work by car.

Departures at Magna Park – Cars

3.2.9 The next four charts show the total number of departures by car and as can be seen the pattern is almost identical to that presented for all vehicles in the second set of charts. Again this suggests that the general pattern for all vehicles throughout the day is heavily influenced by staff leaving work by car.

Arrivals at Magna Park – HGV

3.2.10 The next four charts show the total number of arrivals by HGV and as can be seen, unlike the profile for cars, there is no correlation with the shift changeover or the traditional peak commuter hours.

3.2.11 In the course of the first two weeks of the survey there was a tendency during the week for the level of activity to intensify at around 4am and remain reasonably constant until around 6pm. During this period there were generally between 50 and 120 arrivals per hour with the peaks on most days occurring during the mid to late morning period. The level of activity at the weekend was significantly lower although in general there were between 15 and 40 arrivals per hour.

3.2.12 Throughout the second two weeks the number of arrivals by HGV during the week was generally much higher with between 90 and 150 per hour between 6am and 3pm. Outside this period the number of arrivals generally remained above 40 per hour except for a short period during the early hours of the morning when on most days it dropped to around 30 per hour.

Departures at Magna Park – HGV

3.2.13 The next four charts show the total number of departures by HGV and as above there is no correlation with the shift changeover or the traditional peak commuter hours.

3.2.14 With the exception of the second week (commencing 10 June), when there was a discernible dip in demand during several days of the week, the departure profile followed a similar pattern throughout the survey period with the number of departures generally remaining between 80 and 160 per hour between 5am and 7pm. The third week (commencing 17 June) was particularly busy with the number of departures generally remaining above 80 per hour between 2am and 8pm.

3.2.15 The level of activity at the weekend was significantly lower although in general remained reasonably constant throughout the day with between 20 and 60 departures per hour. In general Saturday was the busier day although from the late afternoon/ early evening period there was a higher level of activity on a Sunday to reflect an increase in activity towards the start of the working week.

Peak Hour Activity – Cars

3.2.16 The next four charts show the arrival and departure profile by car during the peak hours and in general it can be seen that the first two weeks of the survey were busier than the second two weeks. It is also apparent that Monday and Friday were the quietest days of the week.

Peak Hour Activity – HGV

3.2.17 The final four charts show the arrival and departure profile by HGV during the peak hours and in contrast to cars, it can be seen that in general the second two weeks of the survey were busier than the first two weeks. There was no marked daily variation in the level of activity although there was a slight tendency for Monday to be the quietest day and Friday the busiest.

4 TRIP RATES

4.1 Vehicle Trip Calculations

4.1.1 The traffic count data and the total occupied floor area have been used to derive the trip generation rates for various time periods including the traditional morning and evening peaks (8am to 9am and 5pm to 6pm) and an off-peak hour to demonstrate the impact during the shift changeover (1pm to 2pm). 12-hour, 16-hour, 18-hour and 24-hour trip rates have also been calculated as these are often required for an Environmental Impact Assessment and by noise and air quality consultants to assess the impact of a development.

4.1.2 At the time of the survey the total occupied floorspace at Magna Park (excluding Toyota) was 8,148,474 sq.ft (757,018m^2). Trip rates have been calculated per 100m^2 and the results are summarised in Tables 4.1 to 4.6 below. Average and 85th percentile trip rates have been calculated.

4.1.3 The decision on which trip rate to use will ultimately depend on the view taken by the local highway authority/ Highways Agency but in general the approach will be to use average rates in all cases where more than one unit involved in distribution is being proposed. In cases where a single speculative unit is being proposed it may be more appropriate to use the 85th percentile rates.

4.1.4 Trip rates have been based on data collected on a Tuesday, Wednesday and Thursday over the four week survey period (12 days). Data collected on Mondays and Fridays has been excluded to avoid the influence of the weekend on traffic flows. For example the charts showing the level of peak hour activity at the Park indicate that car trips are significantly lower on a Friday and that HGV trips are significantly lower on a Monday. The data upon which trip rate calculation is based and a summary of the trip rates is presented in **Appendix E**.

4.2 Average Trip Generation Rates

Table 4-1: Average Trip Generation Rates per 100 sq.m.

	AM Peak (8am – 9am)		PM Peak (5pm – 6pm)		Off Peak (1pm - 2pm)	
Vehicle	**Arrivals**	**Departures**	**Arrivals**	**Departures**	**Arrivals**	**Departures**
Light Vehs	0.129	0.032	0.036	0.100	0.084	0.051
HGV	0.012	0.016	0.009	0.012	0.012	0.015
Total	**0.141**	**0.048**	**0.046**	**0.112**	**0.096**	**0.066**

Table 4-2: Average Trip Generation Rates per 100 sq.m.

	16 hour (6am – 10pm)		18 hour (6am – midnight)		24 hour	
Vehicle	**Arrivals**	**Departures**	**Arrivals**	**Departures**	**Arrivals**	**Departures**
Light Vehs	0.953	0.839	1.031	0.932	1.290	1.058
HGV	0.171	0.223	0.185	0.242	0.218	0.292
Total	**1.124**	**1.062**	**1.215**	**1.175**	**1.508**	**1.350**

Table 4-3: Average Trip Generation Rates per 100 sq.m.				
	12 hour (7am – 7pm)		12 hour (7pm – 7am)	
Vehicle	Arrivals	Departures	Arrivals	Departures
Light Vehs	0.747	0.711	0.542	0.346
HGV	0.138	0.177	0.079	0.115
Total	**0.886**	**0.888**	**0.622**	**0.461**

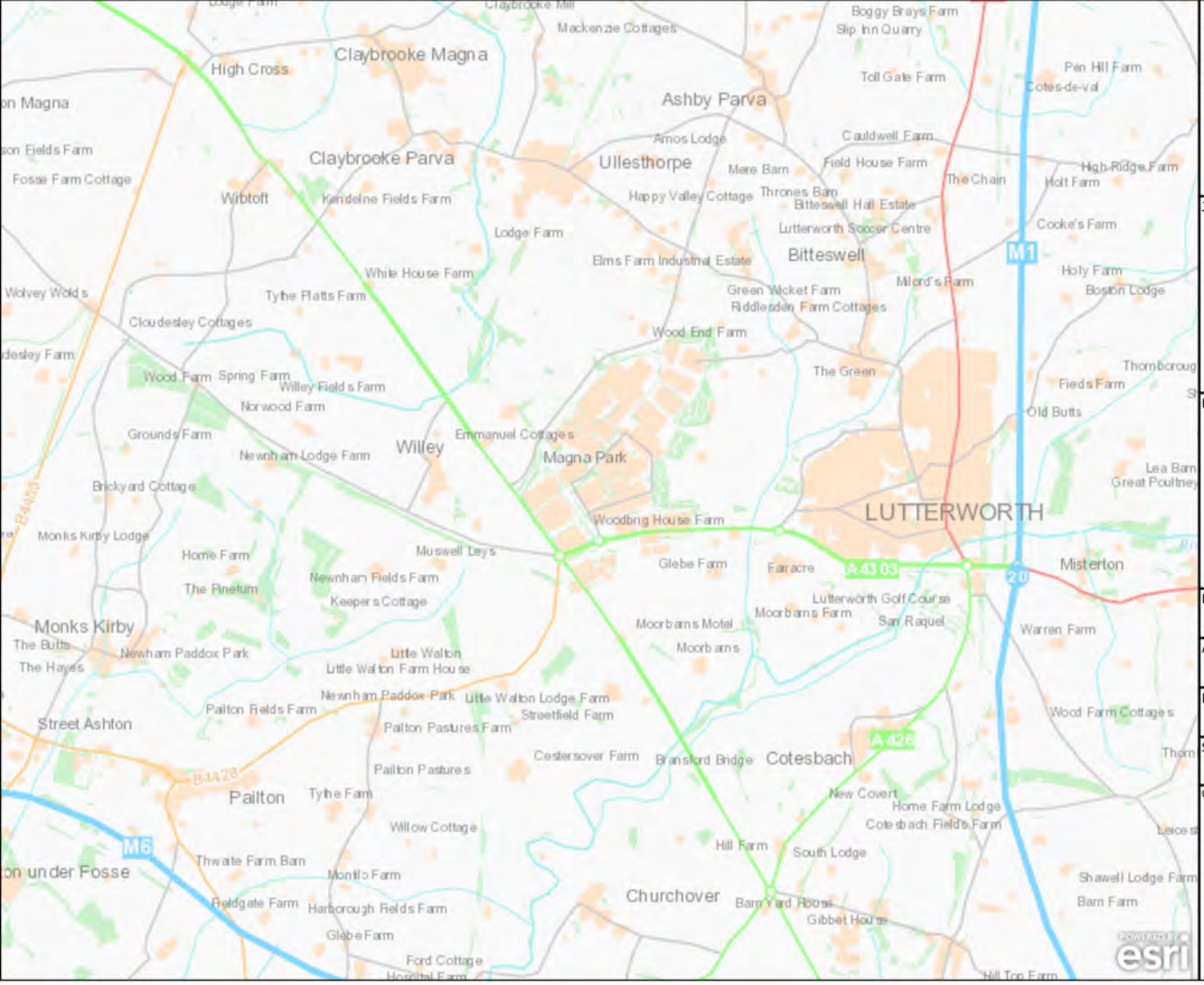
4.3 85th Percentile Trip Generation Rates

Table 4-4: 85th Percentile Trip Generation Rates per 100 sq.m.						
	AM Peak (8am – 9am)		PM Peak (5pm – 6pm)		Off Peak (1pm - 2pm)	
Vehicle	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
Light Vehs	0.140	0.042	0.043	0.104	0.091	0.054
HGV	0.015	0.021	0.010	0.013	0.013	0.017
Total	**0.155**	**0.063**	**0.053**	**0.116**	**0.104**	**0.071**

Table 4-5: 85th Trip Generation Rates per 100 sq.m.						
	16 hour (6am – 10pm)		18 hour (6am – midnight)		24 hour	
Vehicle	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
Light Vehs	1.059	0.899	1.152	1.000	1.440	1.160
HGV	0.203	0.238	0.220	0.259	0.264	0.326
Total	**1.262**	**1.137**	**1.372**	**1.259**	**1.703**	**1.486**

Table 4-6: 85th Percentile Trip Generation Rates per 100 sq.m.				
	12 hour (7am – 7pm)		12 hour (7pm – 7am)	
Vehicle	Arrivals	Departures	Arrivals	Departures
Light Vehs	0.827	0.753	0.610	0.402
HGV	0.161	0.186	0.108	0.139
Total	**0.988**	**0.939**	**0.718**	**0.541**

Appendix A – Site Location Plan



Job Title

Magna Park
Lutterworth

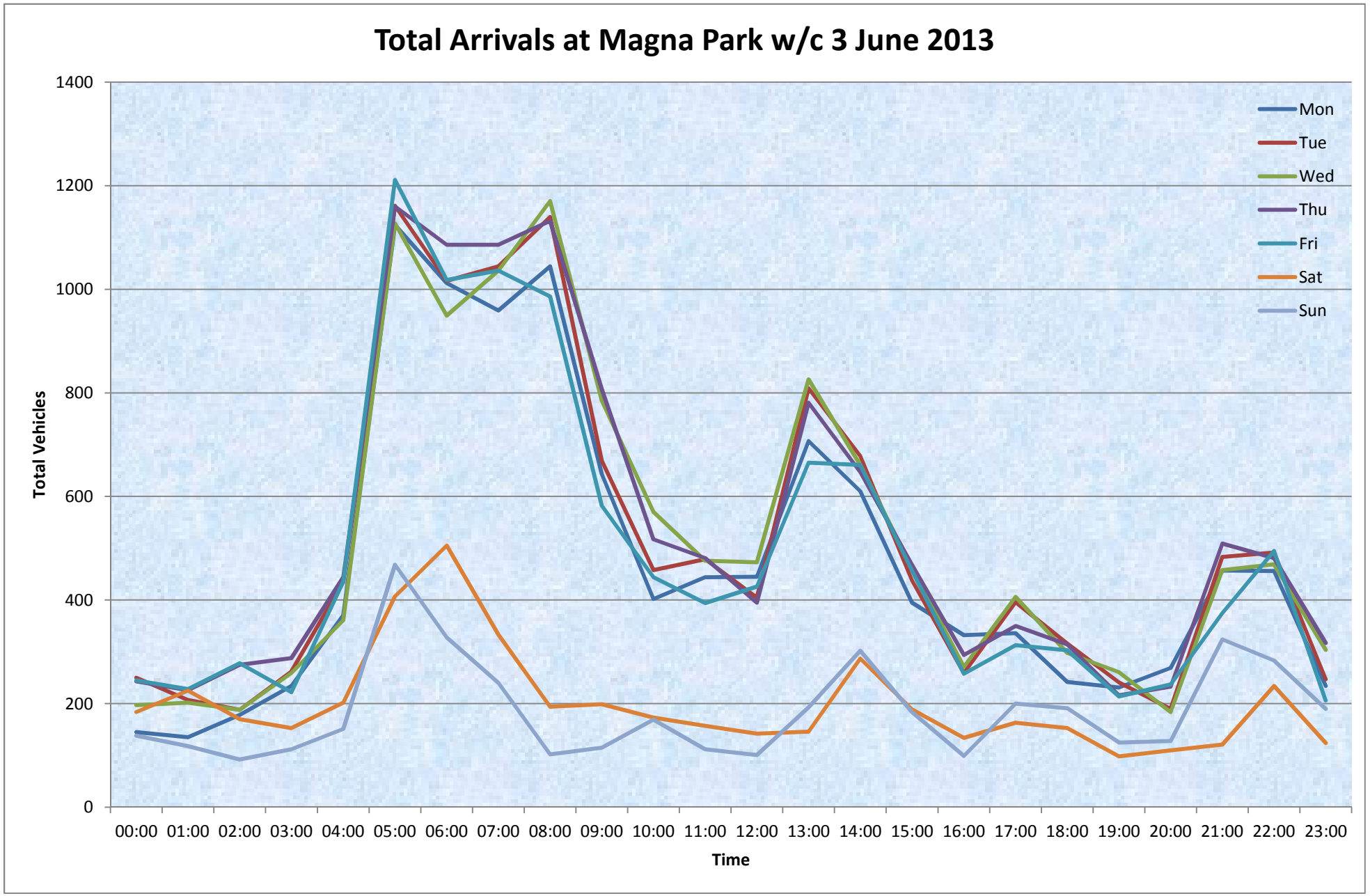
Drawing Title

Site Location Plan

Drawn	JRA
Approved	SCPF
Drawing No.	47066811
Status	Final

URS
Scott House
Alencon Link
Basingstoke
Hampshire RG21 7PP
Telephone (01256) 310200
Fax (01256) 310201
www.ursglobal.com

Arrivals at Magna Park – All Vehicles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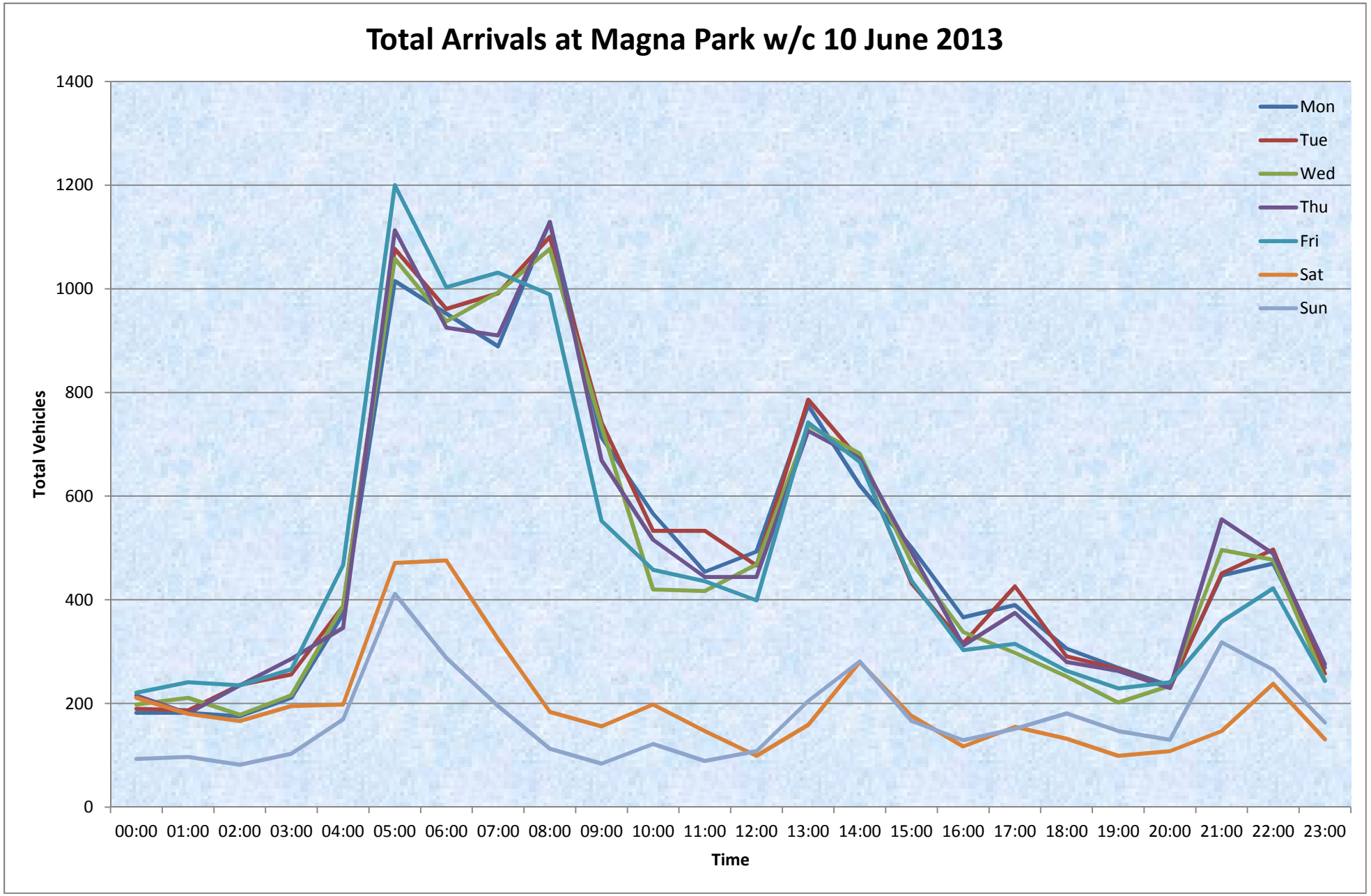
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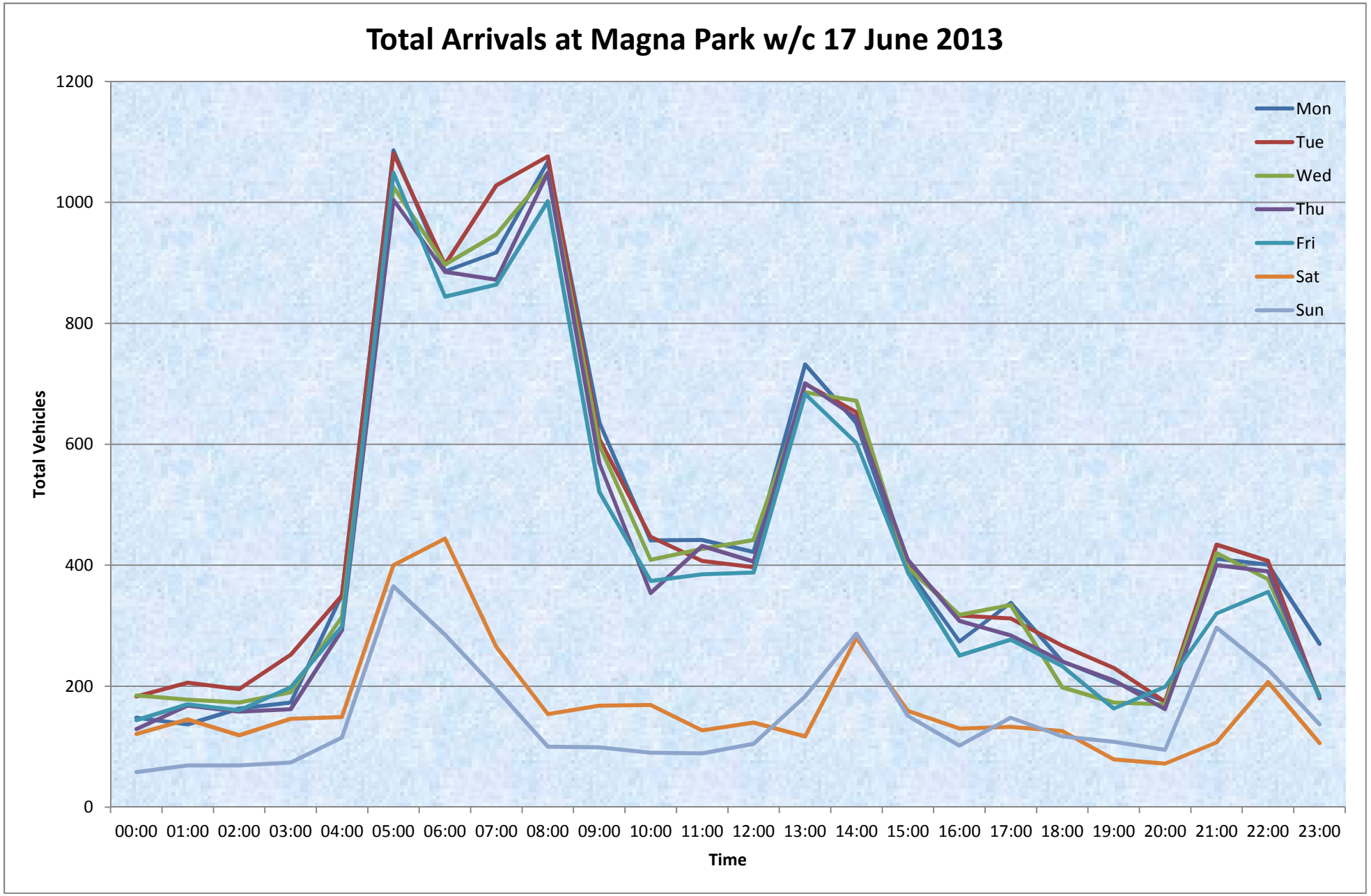
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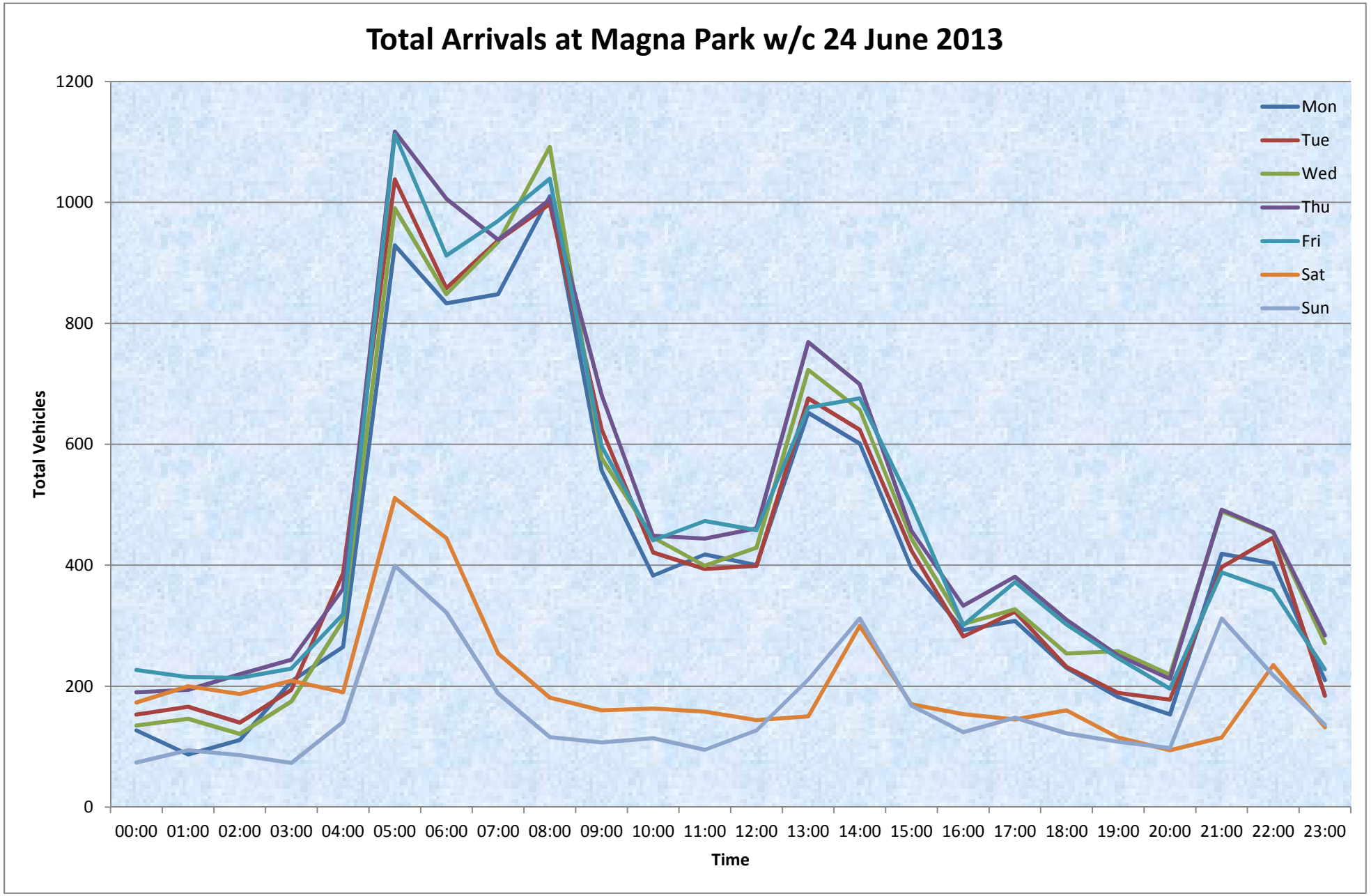
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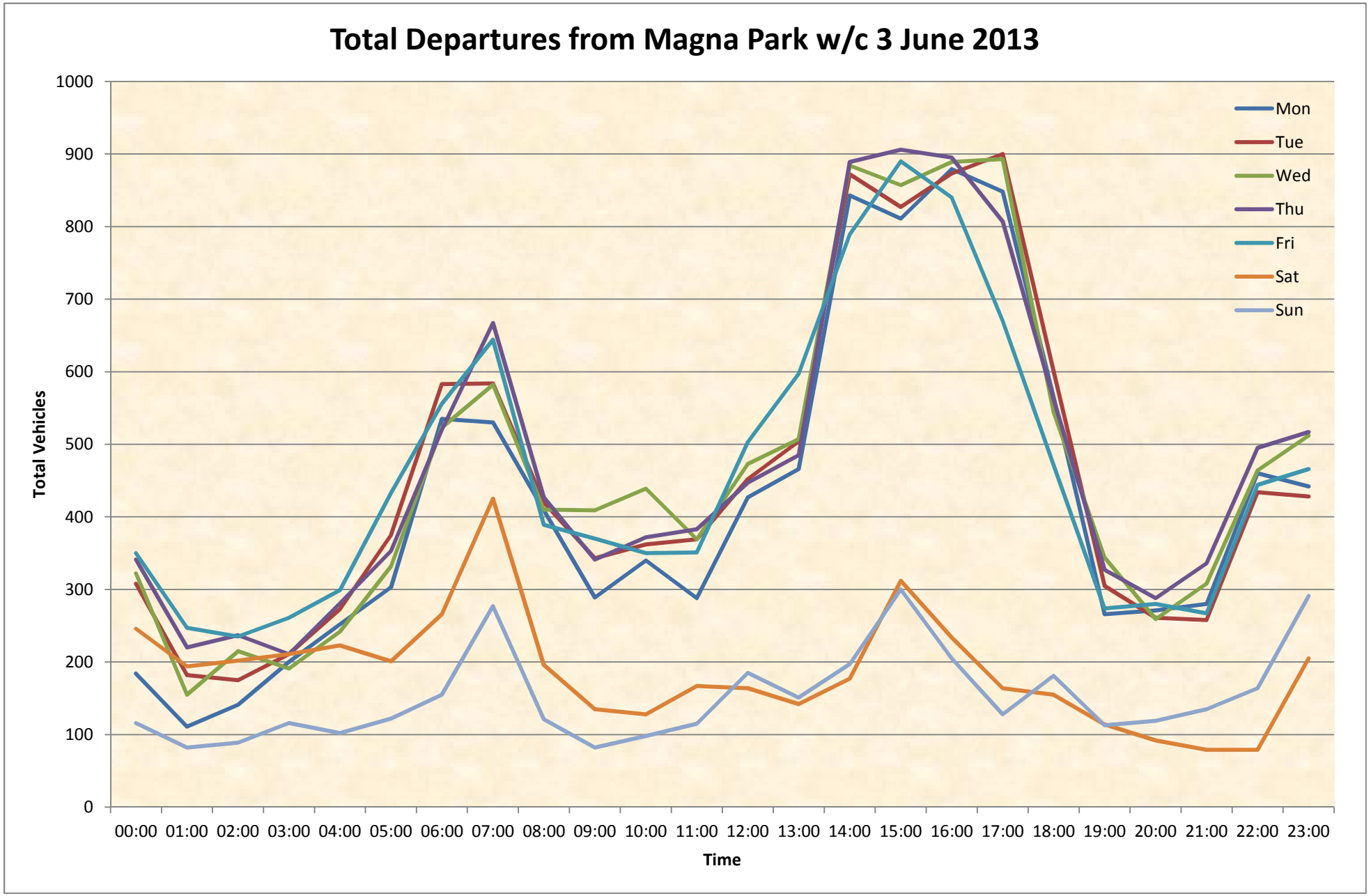
Departures from Magna Park – All Vehicles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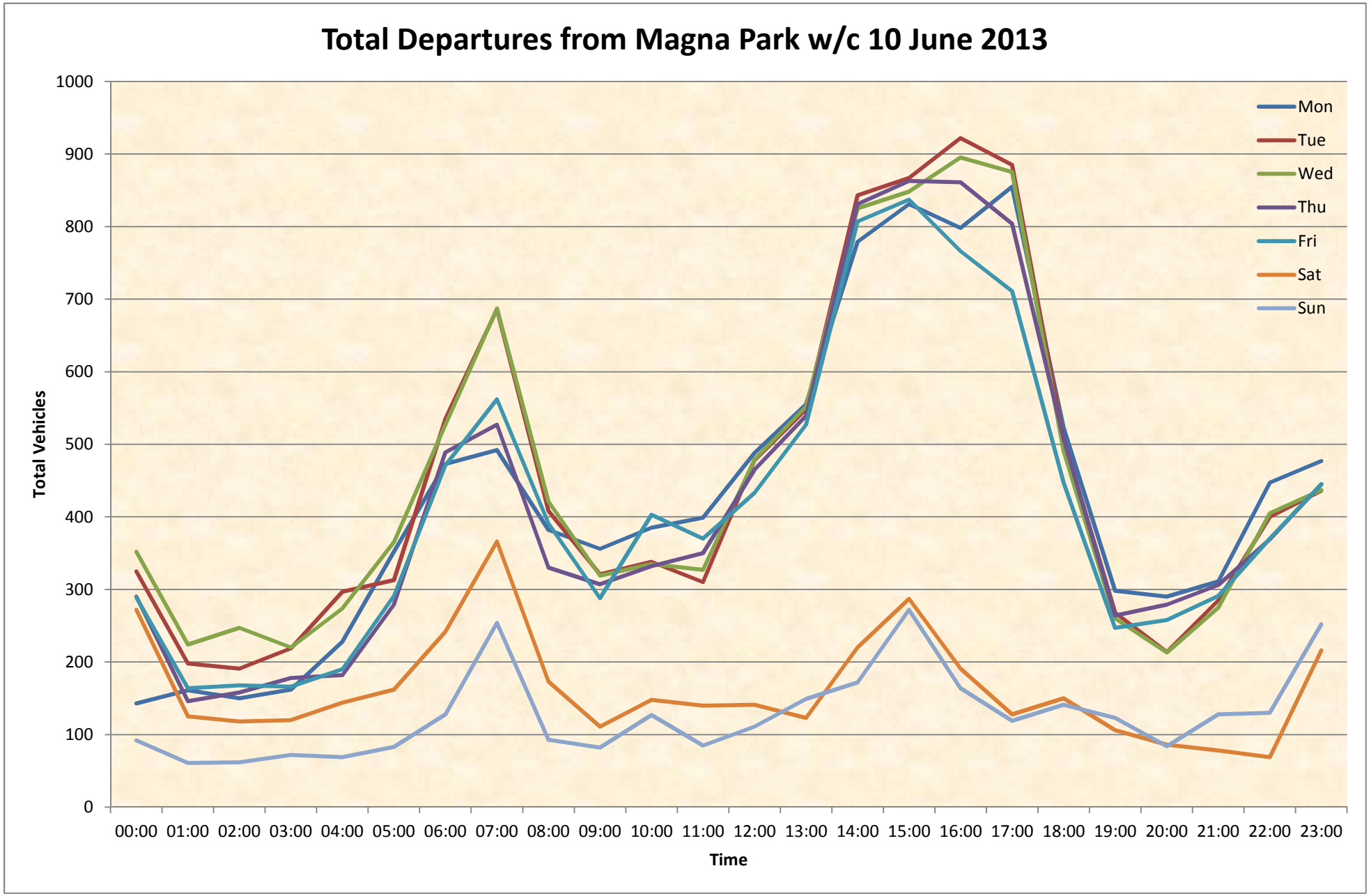
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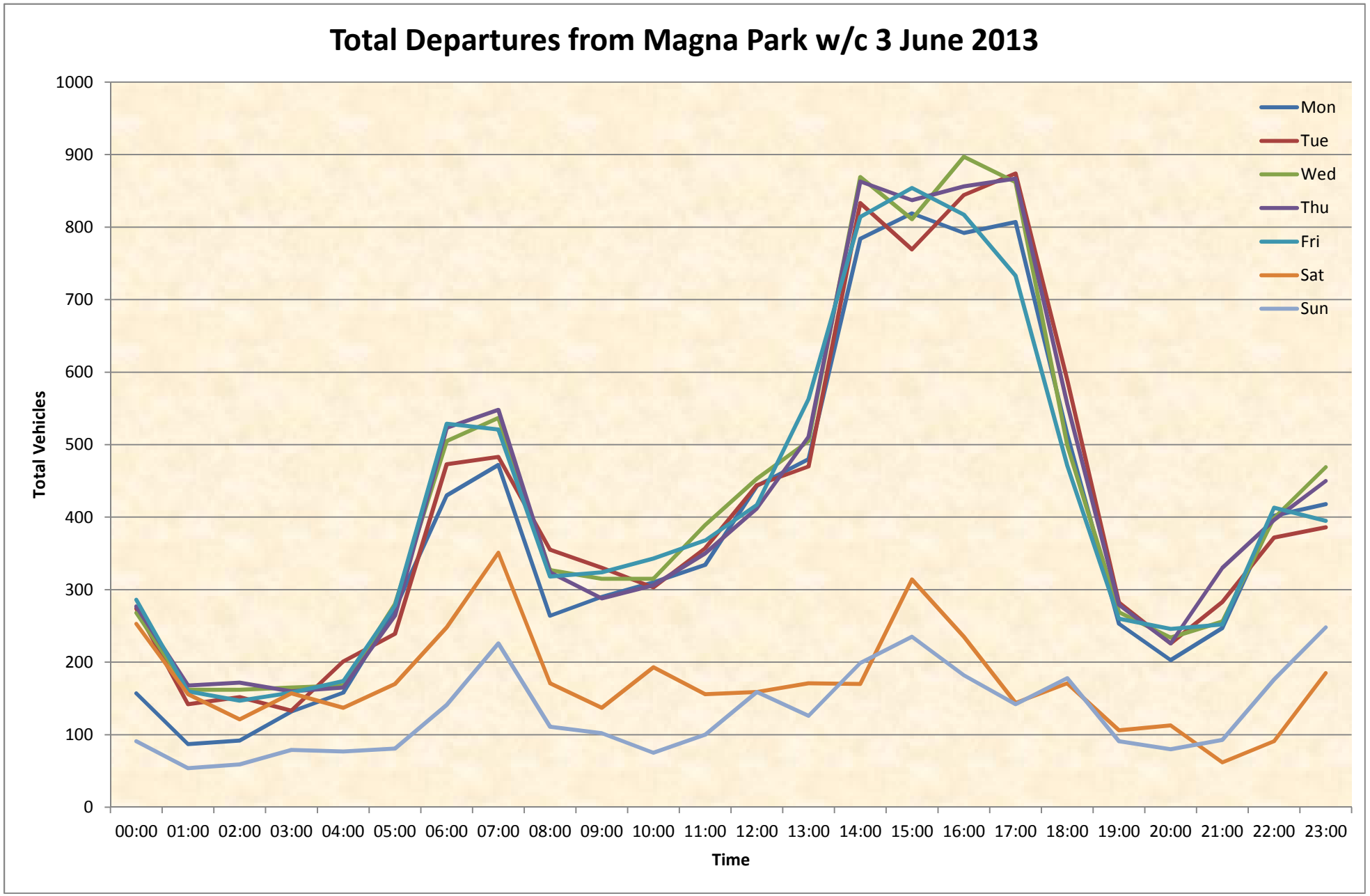
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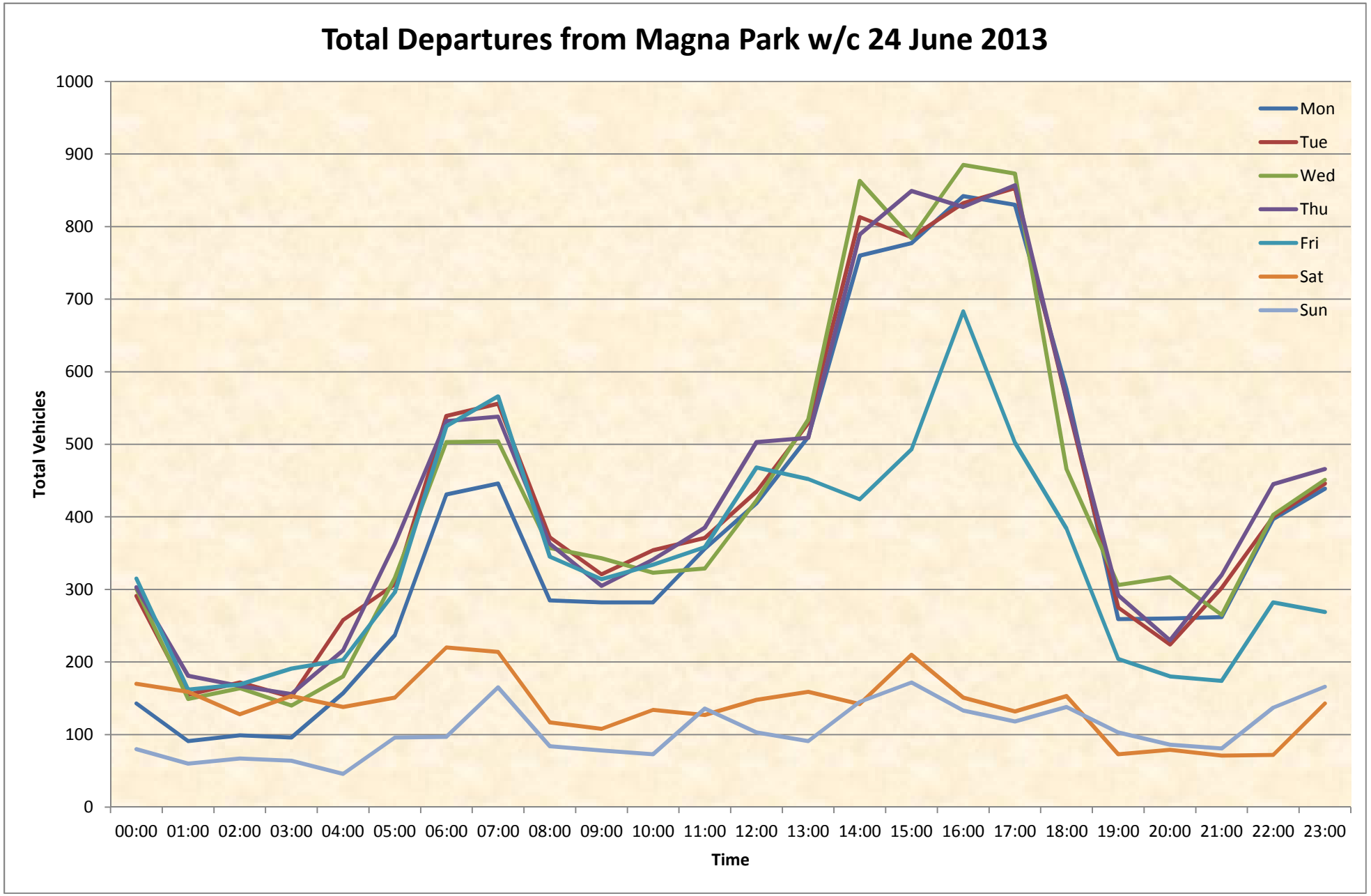
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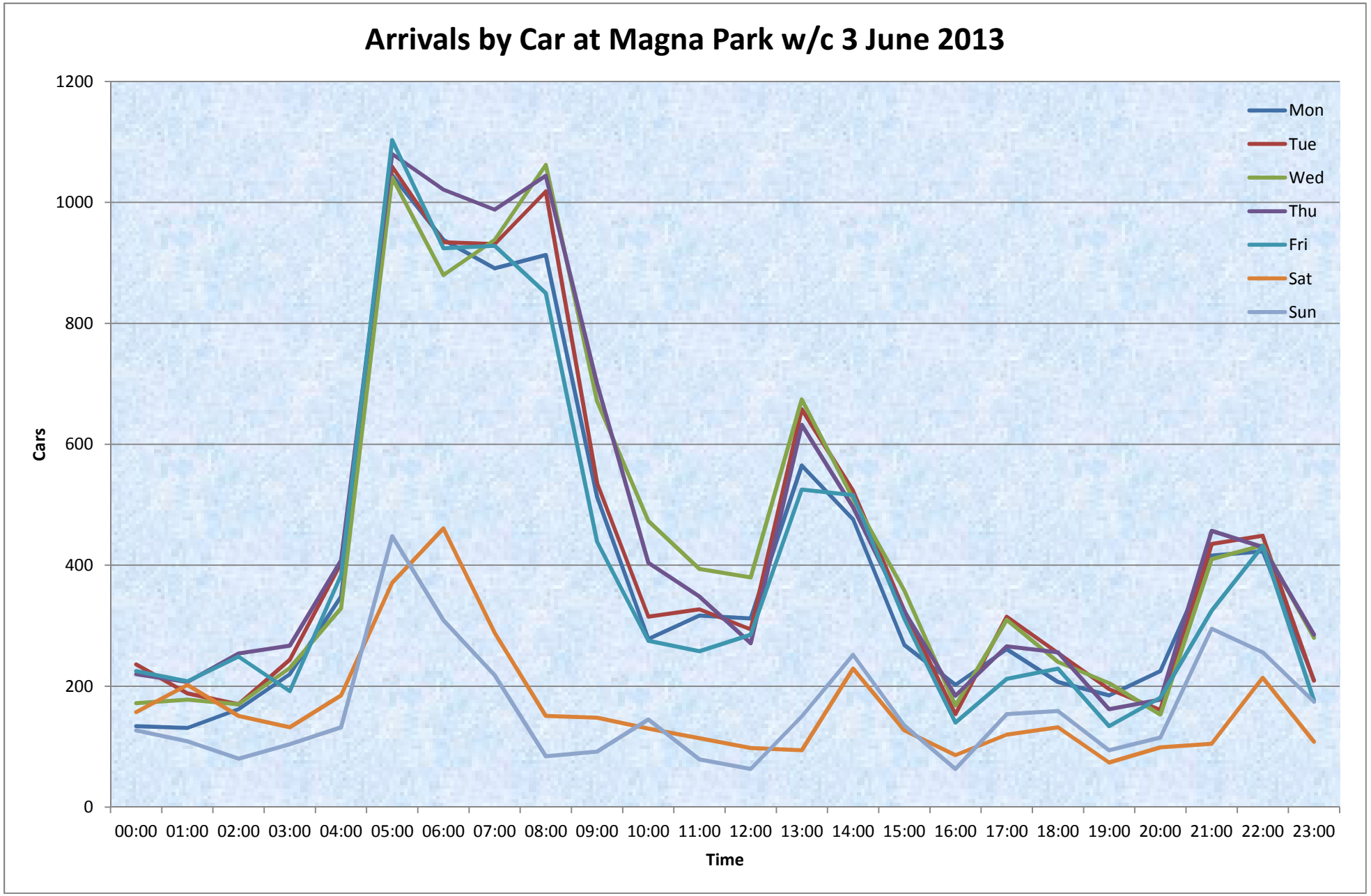
Arrivals at Magna Park - Cars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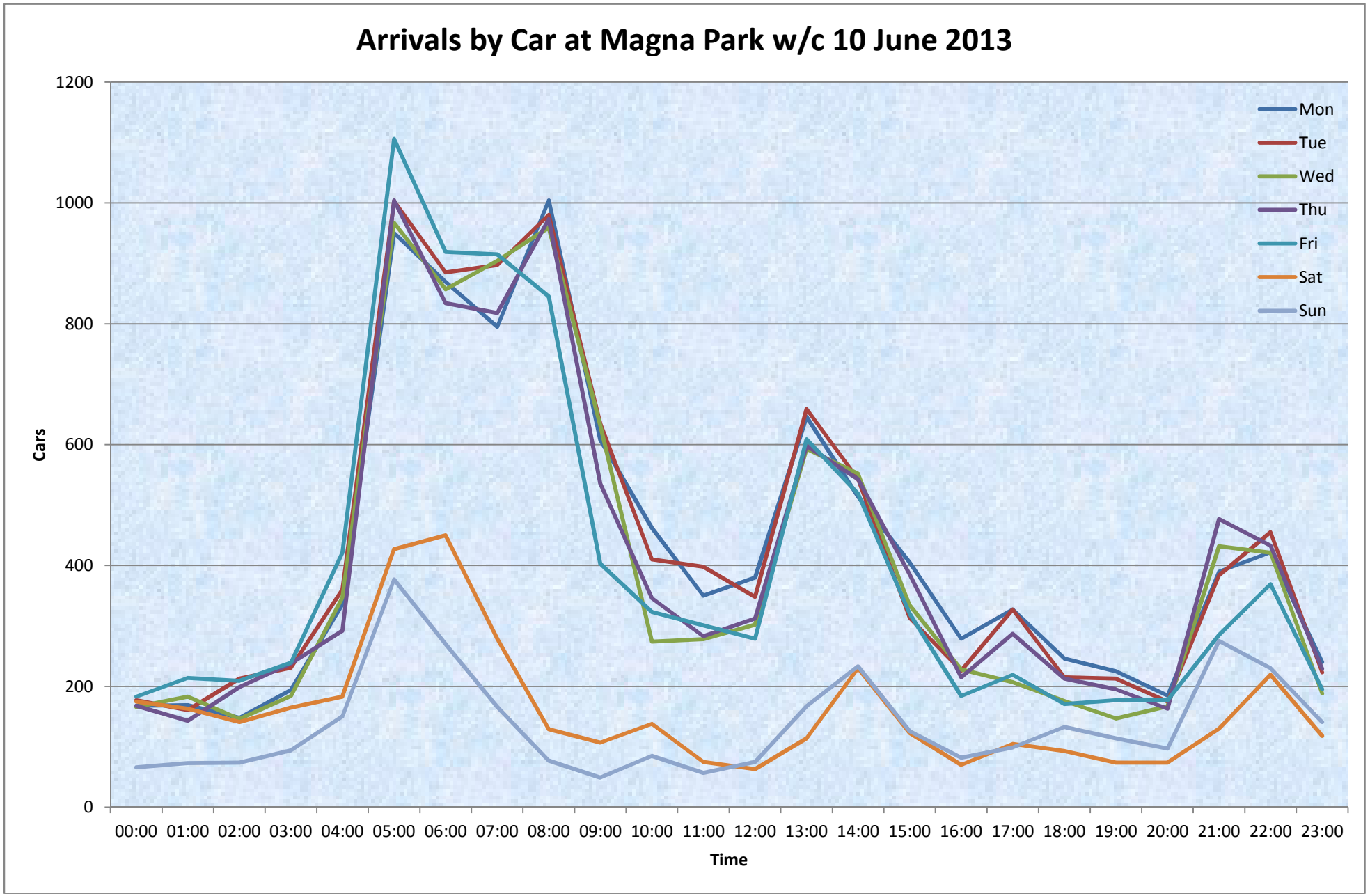
Arrivals by Car at Magna Park w/c 10 June 2013
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1000
800
600
400
200
0
Cars
00:00
01:00
02:00
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04:00
05:00
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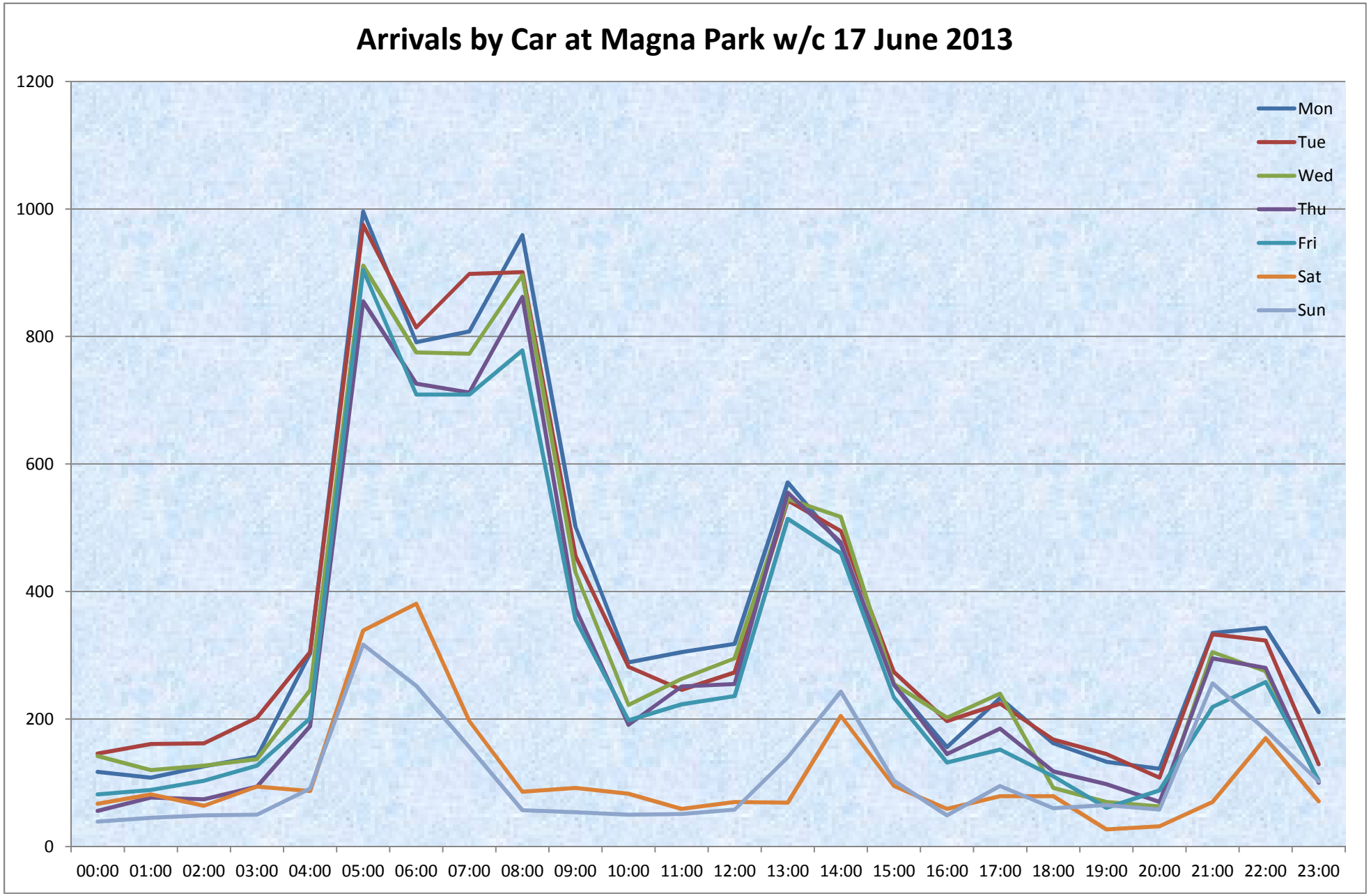
Arrivals by Car at Magna Park w/c 17 June 2013
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800
600
400
200
0
00:00
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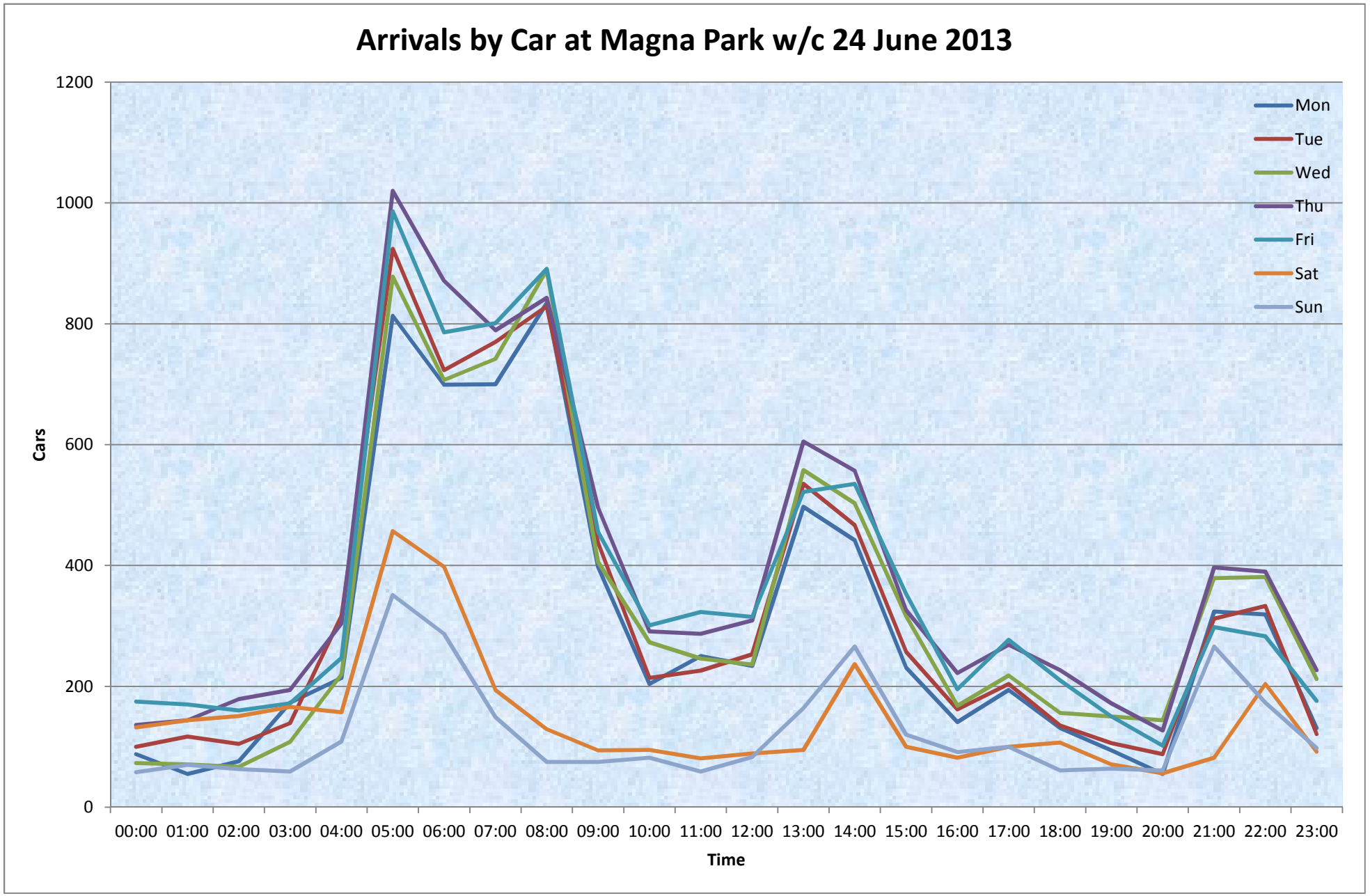
Arrivals by Car at Magna Park w/c 24 June 2013
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800
600
400
200
0
Cars
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01:00
02:00
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05:00
06:00
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Time
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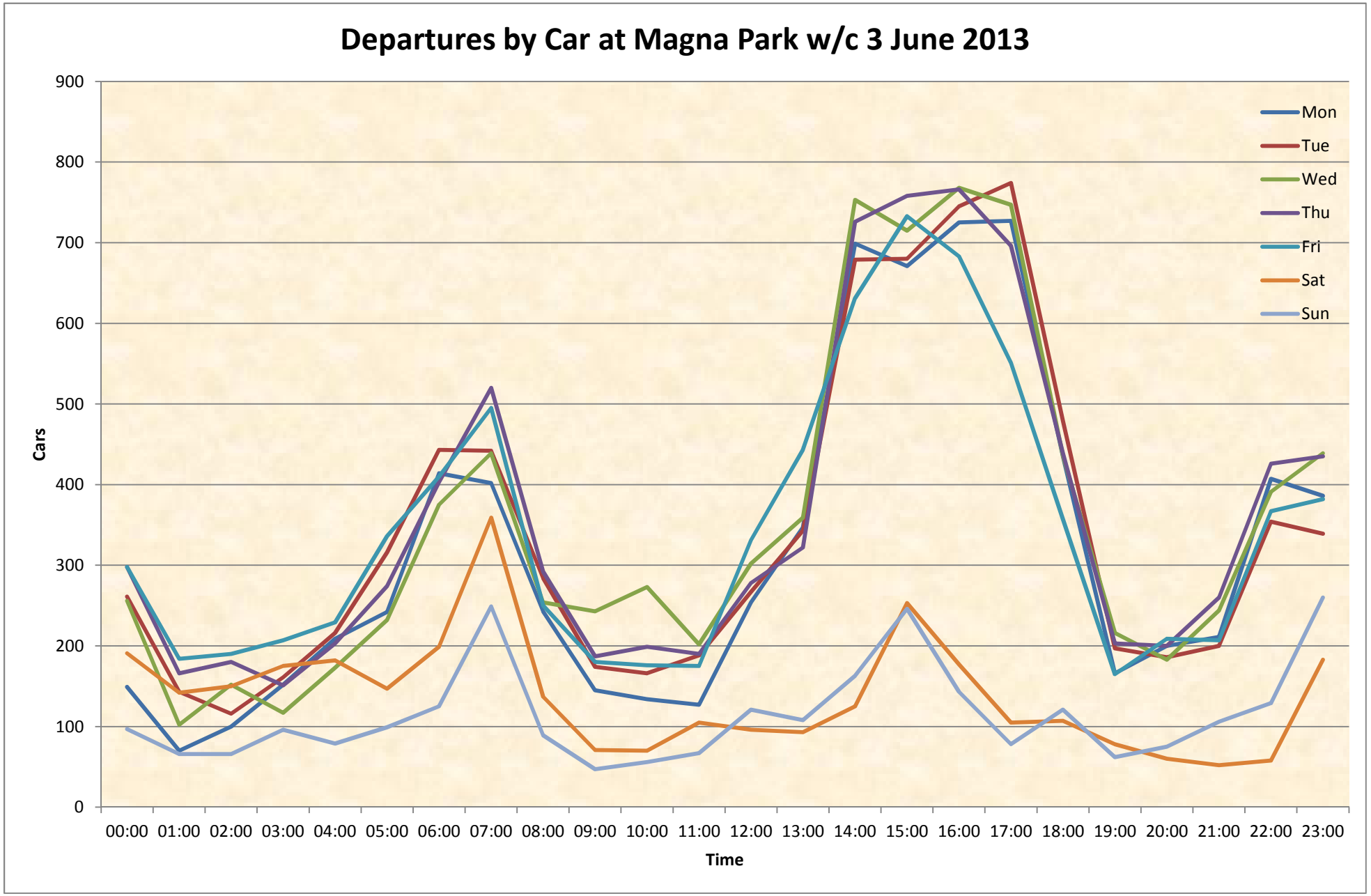
Sun

Departures from Magna Park - Cars


Departures by Car at Magna Park w/c 3 June 2013
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800
700
600
500
400
300
200
100
0
Cars
00:00
01:00
02:00
03:00
04:00
05:00
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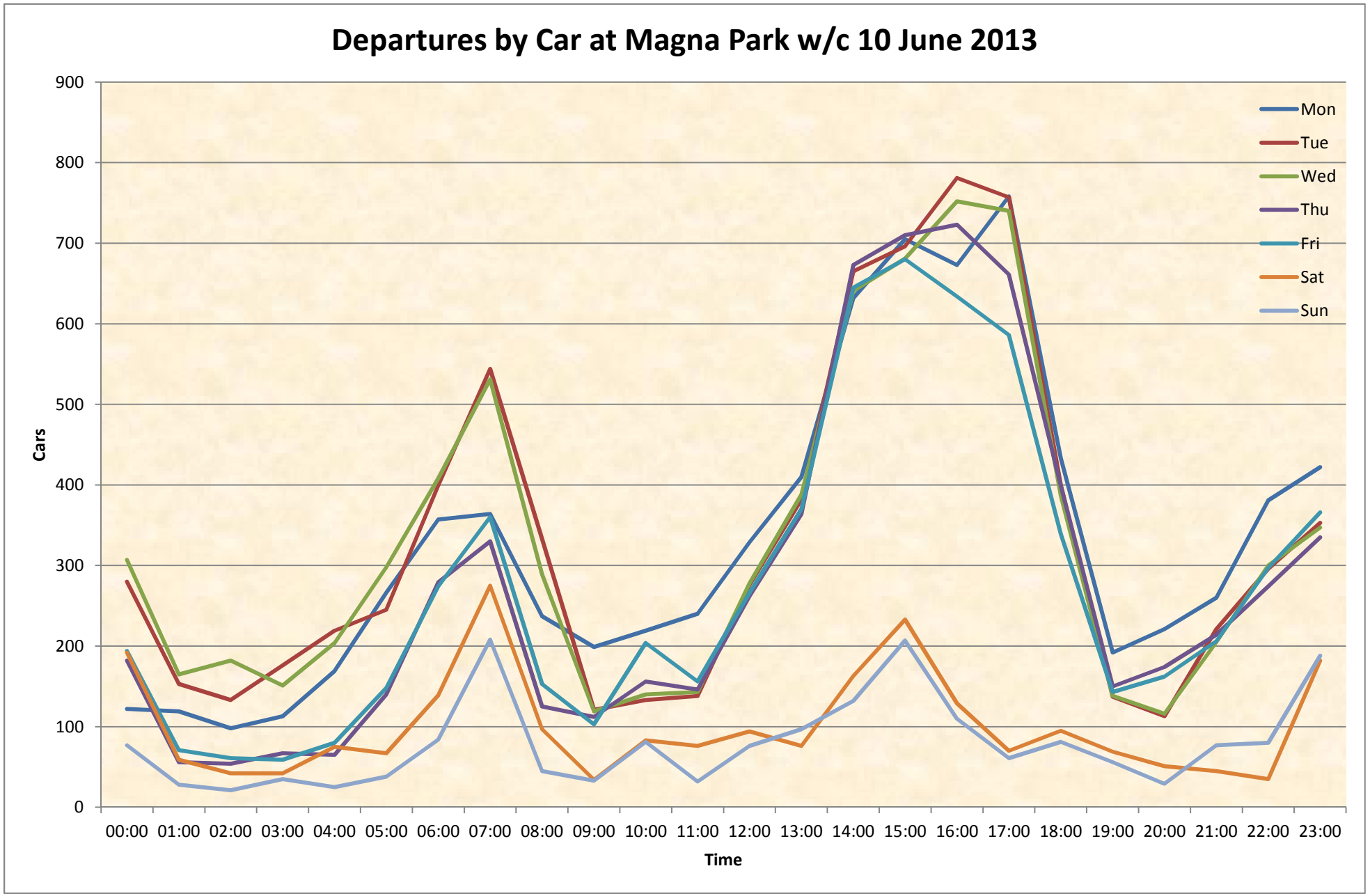
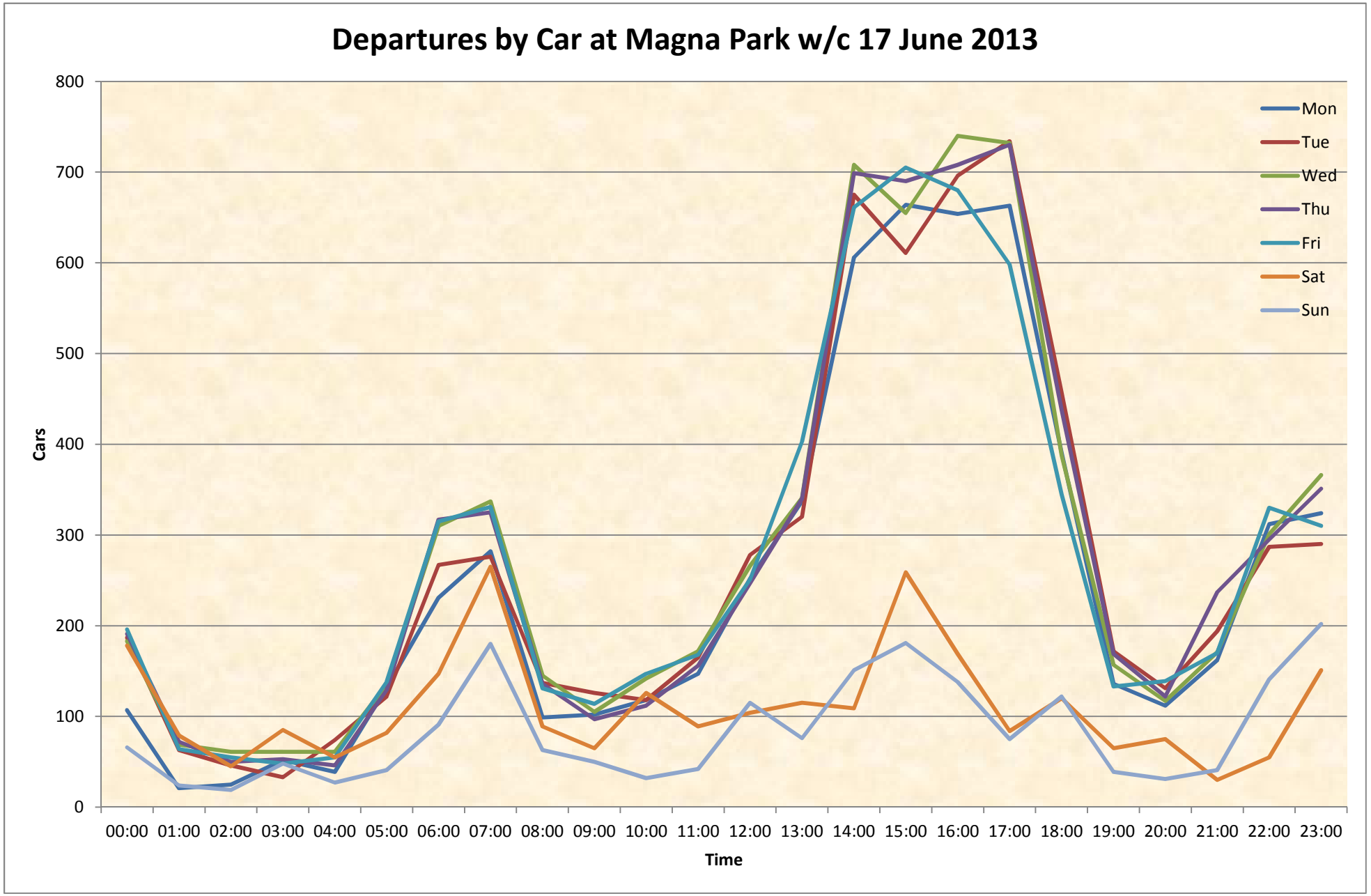

Departures by Car at Magna Park w/c 10 June 2013
900
800
700
600
500
400
300
200
100
0
Cars
Mon
Tue
Wed
Thu
Fri
Sat
Sun
00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00
Time


Departures by Car at Magna Park w/c 17 June 2013
800
700
600
500
400
300
200
100
0
Cars
00:00
01:00
02:00
03:00
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Time
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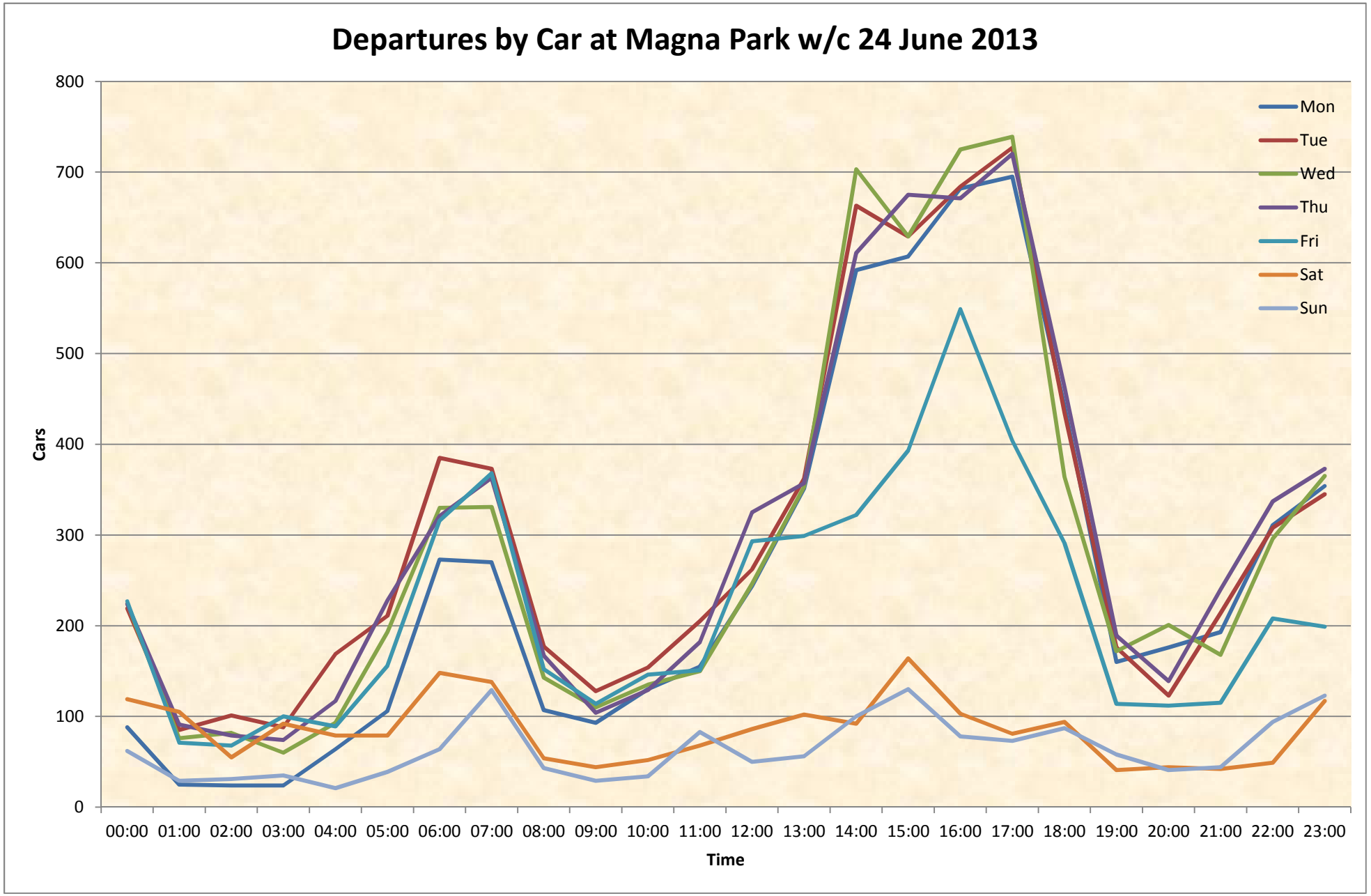
Departures by Car at Magna Park w/c 24 June 2013
800
700
600
500
400
300
200
100
0
Cars
Mon
Tue
Wed
Thu
Fri
Sat
Sun
00:00
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22:00
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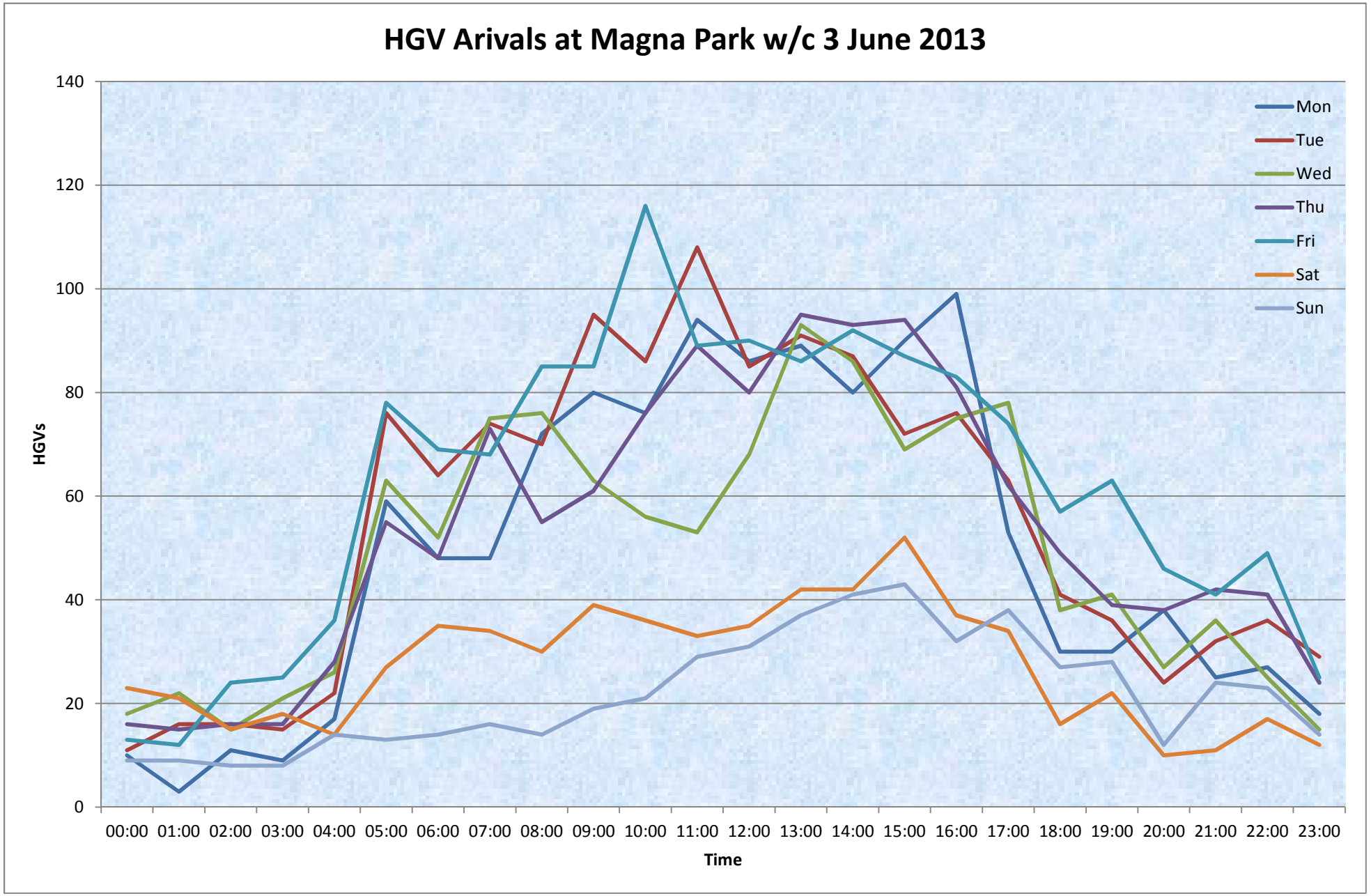
Time

Arrivals at Magna Park - HGV


HGV Arivals at Magna Park w/c 3 June 2013
140
120
100
80
60
40
20
0
HGVs
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01:00
02:00
03:00
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Time
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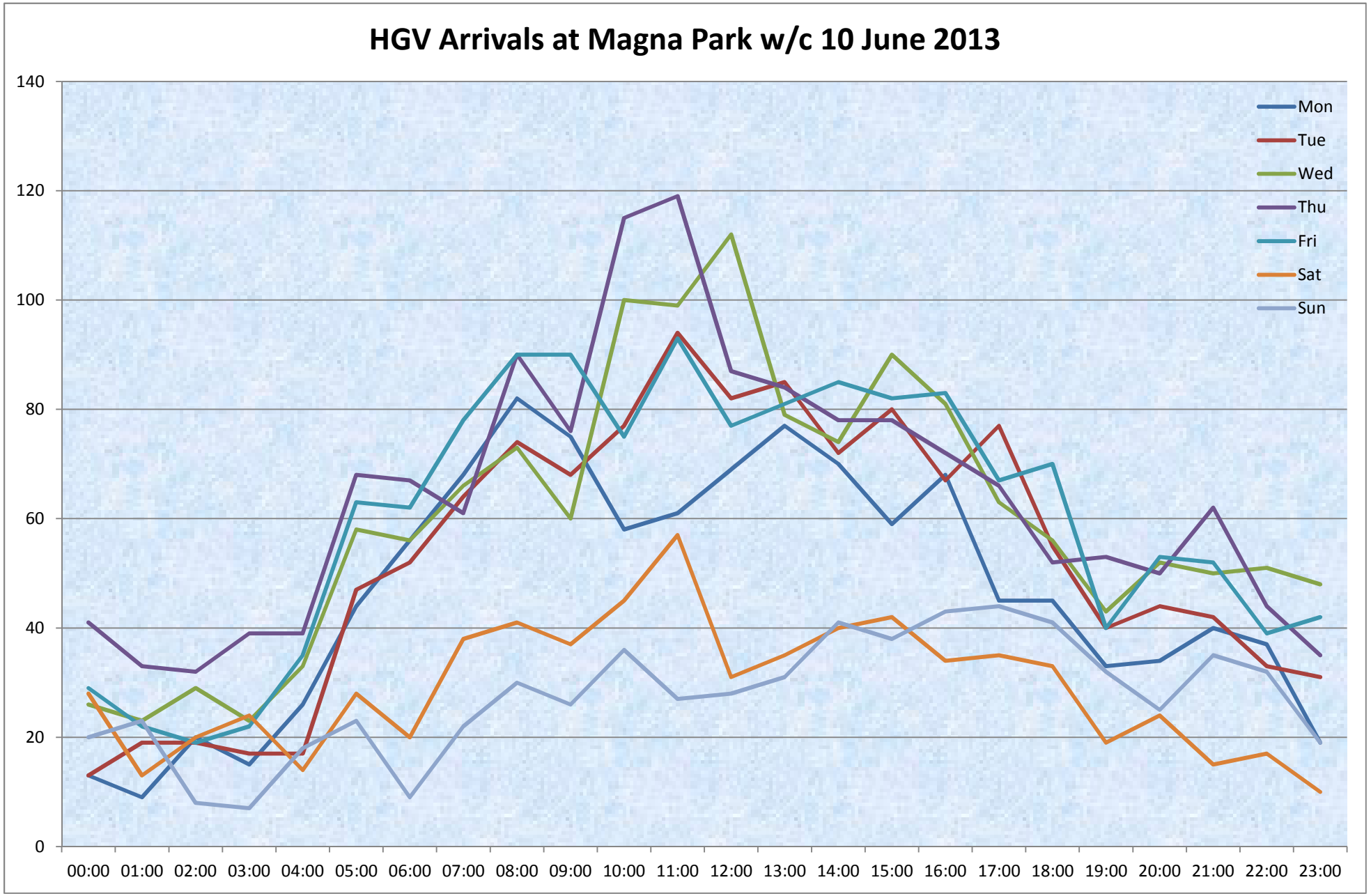
HGV Arrivals at Magna Park w/c 10 June 2013
140
120
100
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60
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04:00
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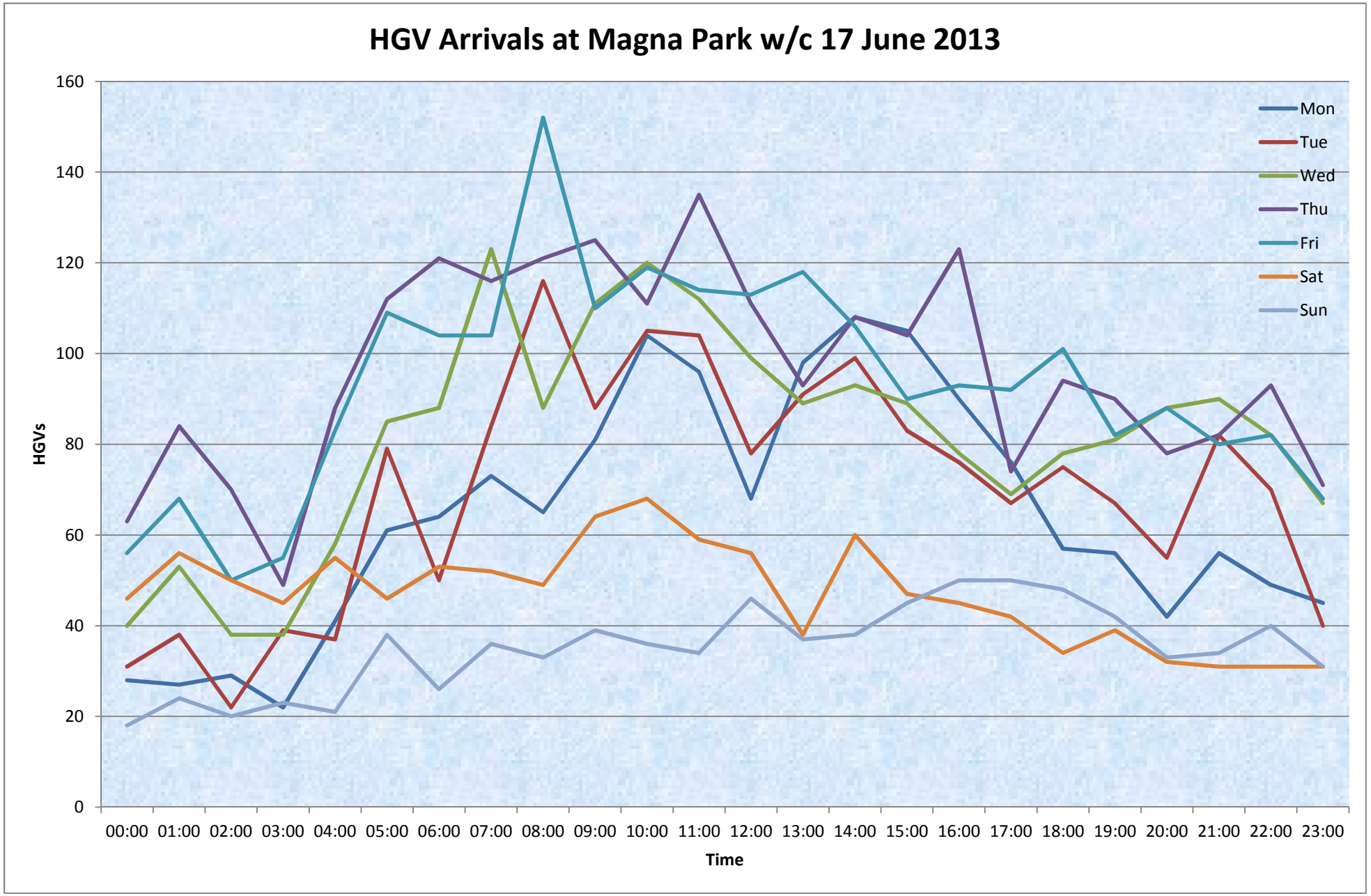
HGV Arrivals at Magna Park w/c 17 June 2013
160
140
120
100
80
60
40
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HGVs
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03:00
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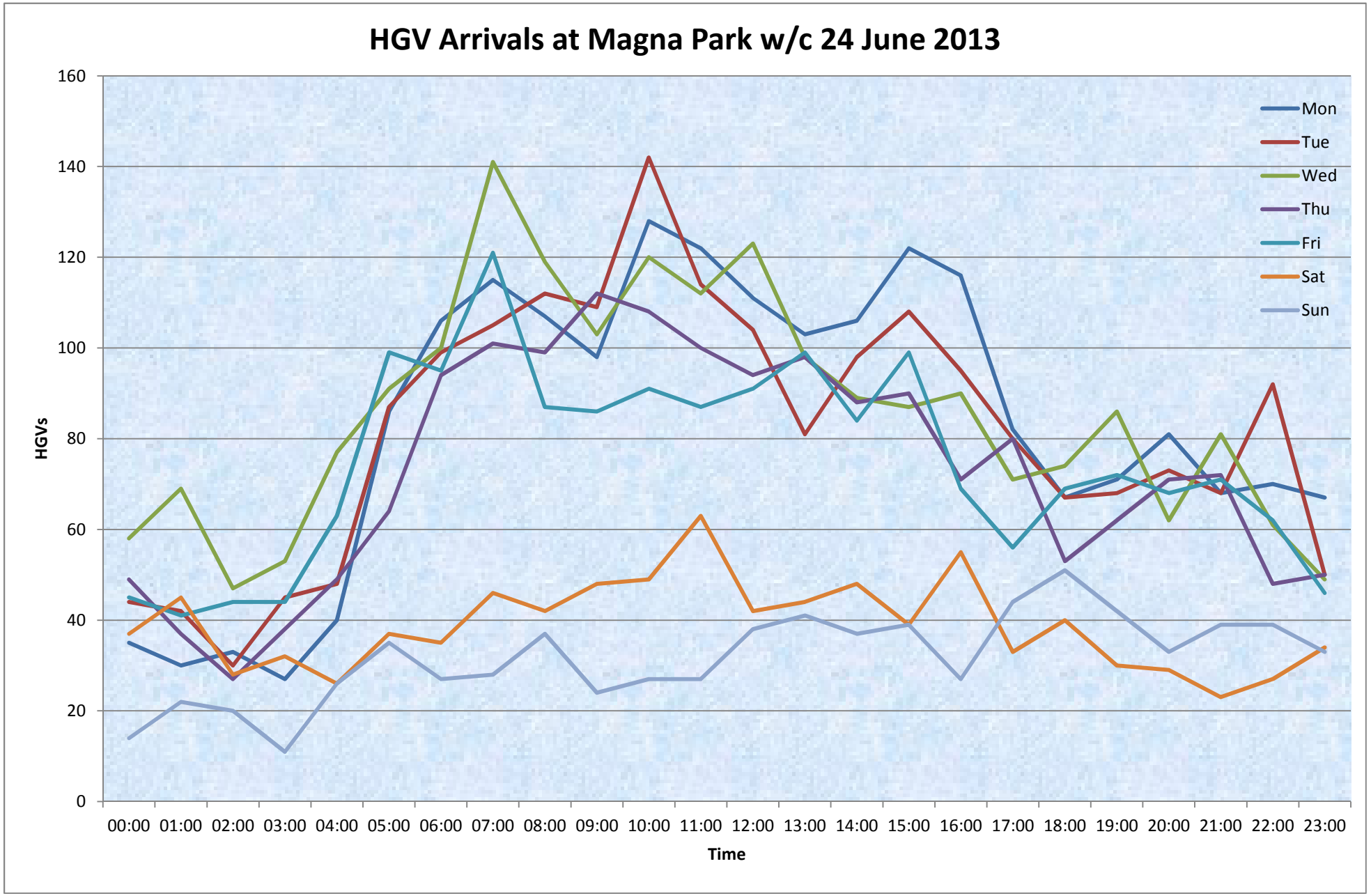
HGV Arrivals at Magna Park w/c 24 June 2013
160
140
120
100
80
60
40
20
0
HGVs
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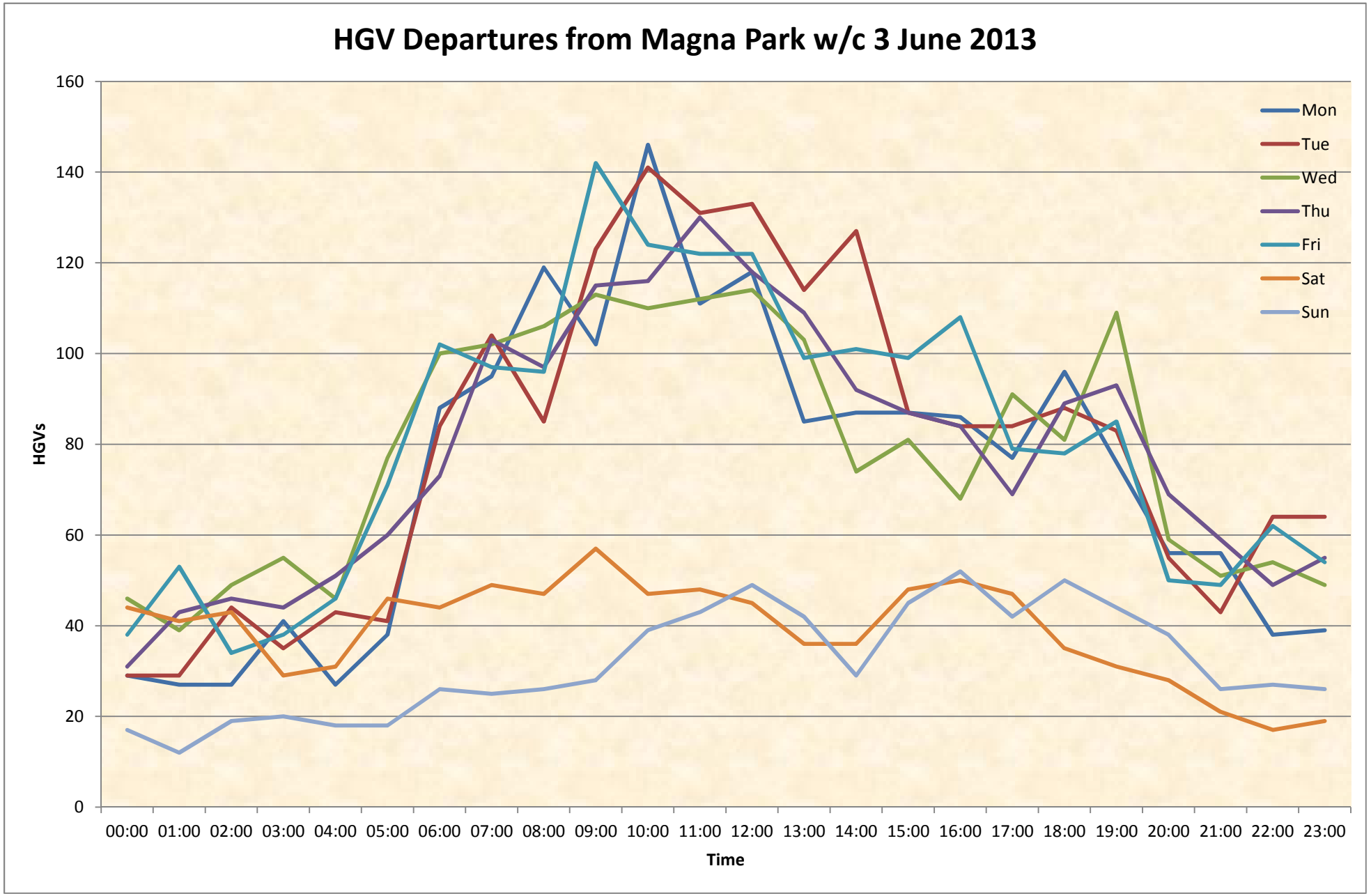
Sat
Sun

Departures from Magna Park - HGV


HGV Departures from Magna Park w/c 3 June 2013
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140
120
100
80
60
40
20
0
HGVs
00:00
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Time
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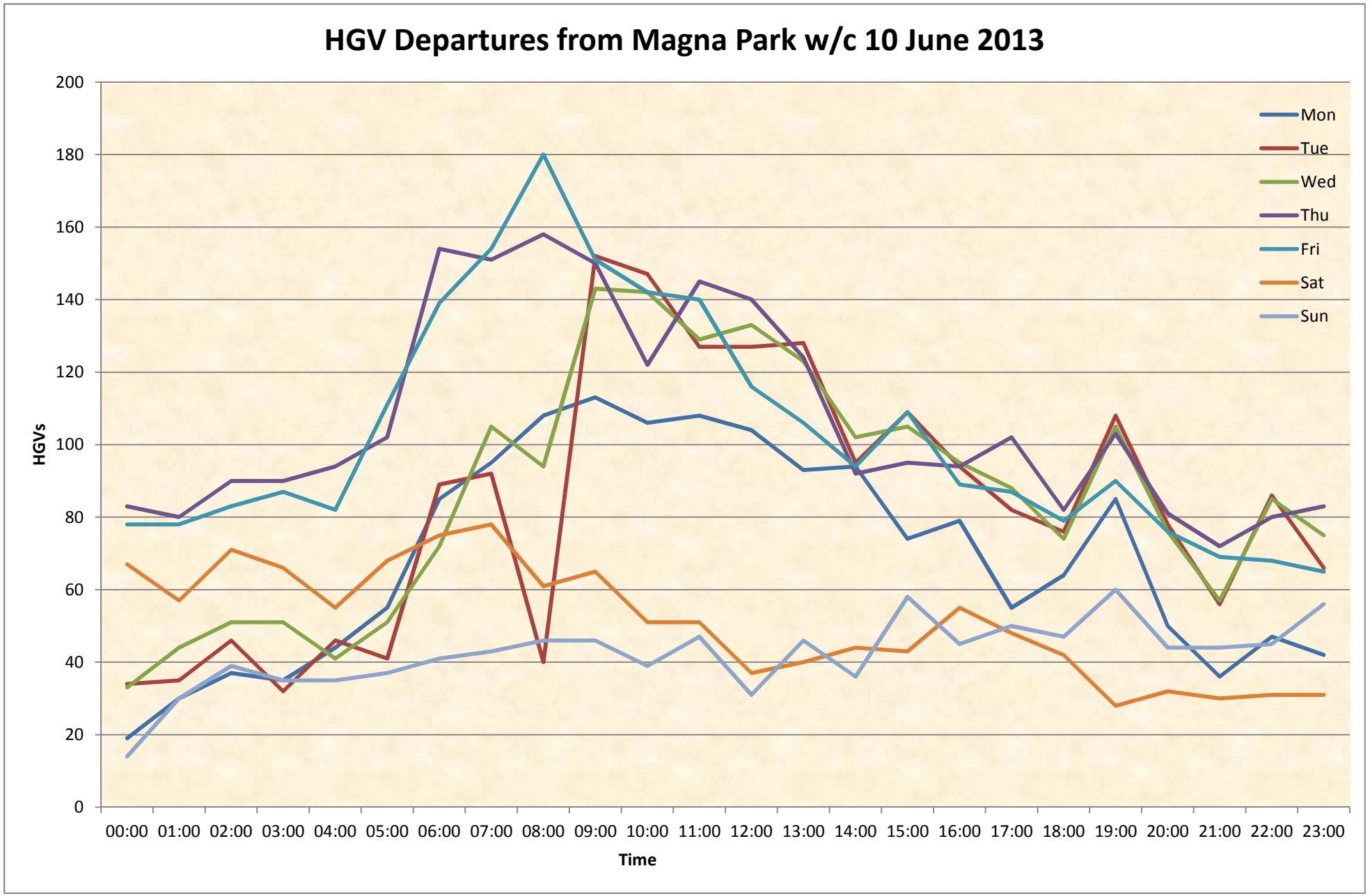
HGV Departures from Magna Park w/c 10 June 2013
HGVs
200
180
160
140
120
100
80
60
40
20
0
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03:00
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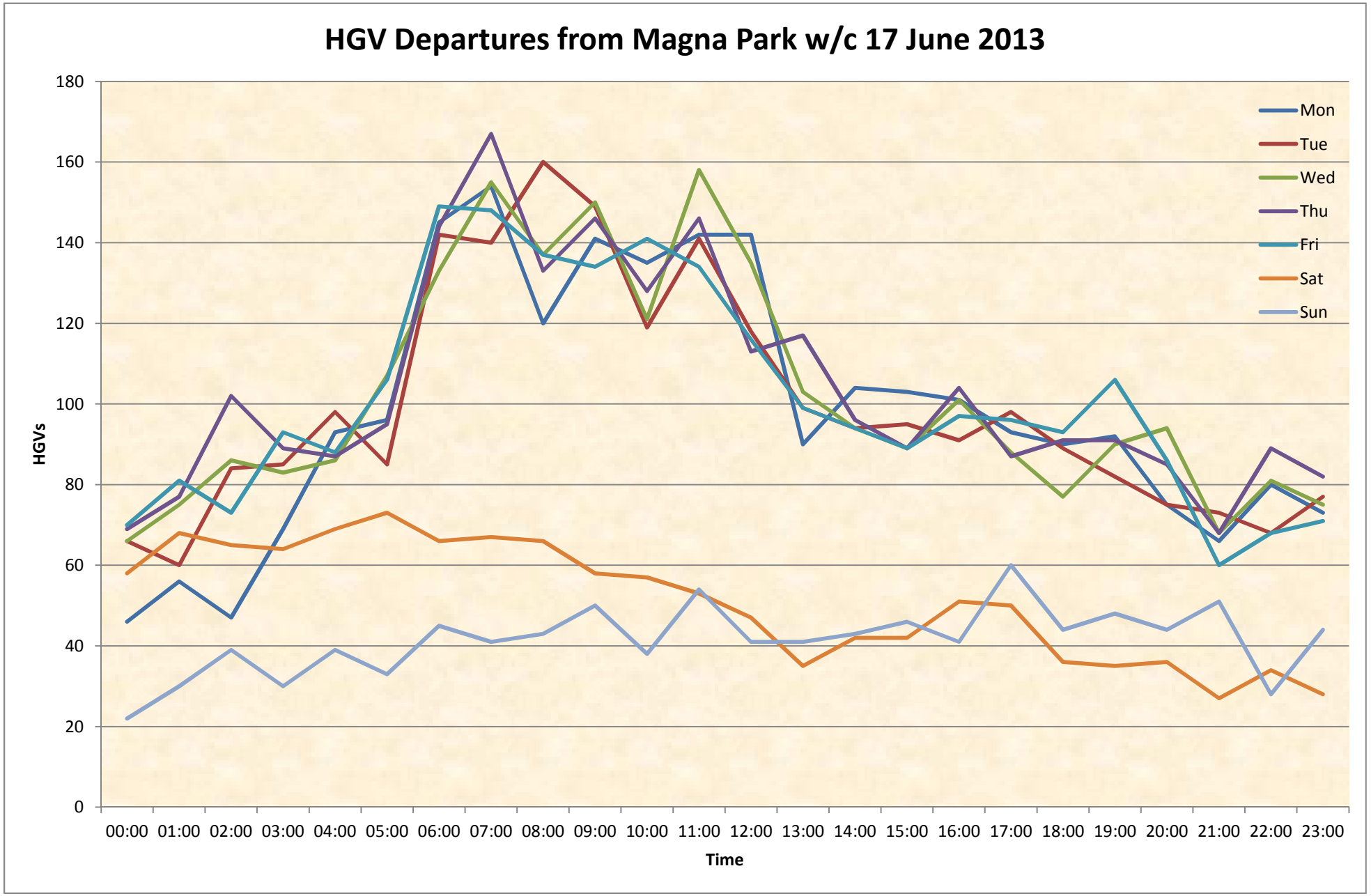
HGV Departures from Magna Park w/c 17 June 2013
HGVs
180
160
140
120
100
80
60
40
20
0
00:00
01:00
02:00
03:00
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Time
Mon
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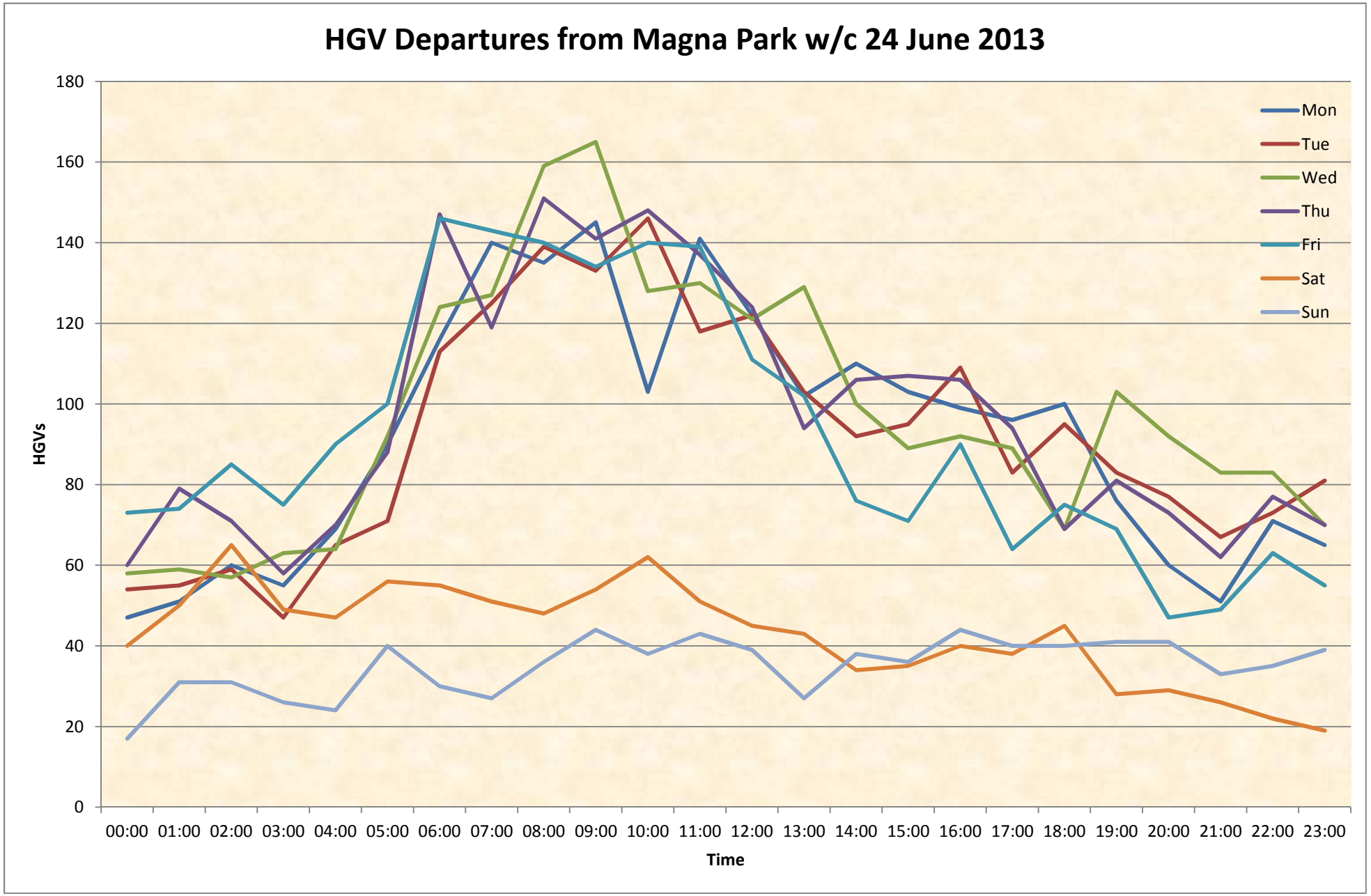
Fri
Sat
Sun


HGV Departures from Magna Park w/c 24 June 2013
HGVs
180
160
140
120
100
80
60
40
20
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03:00
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Time
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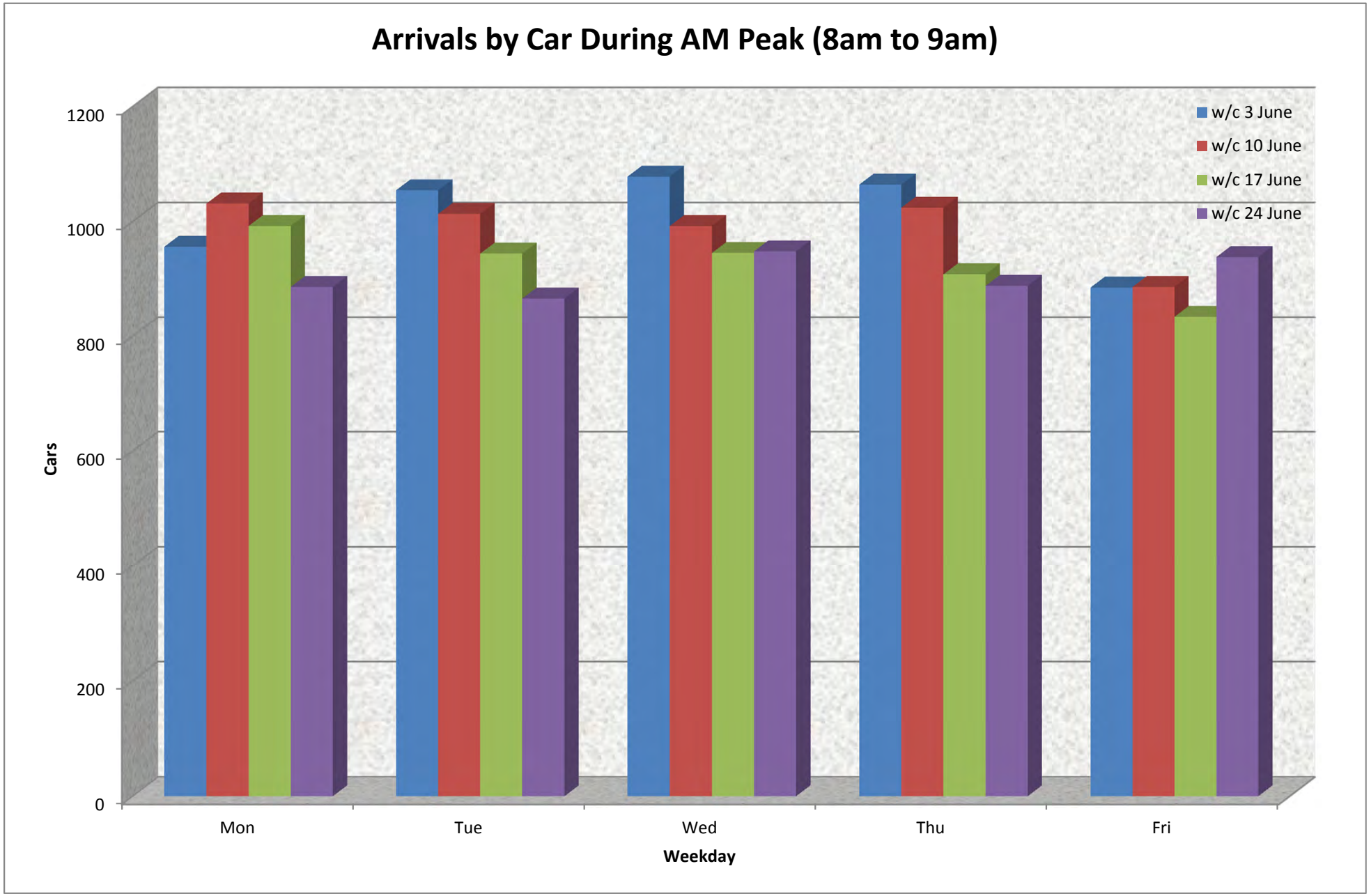
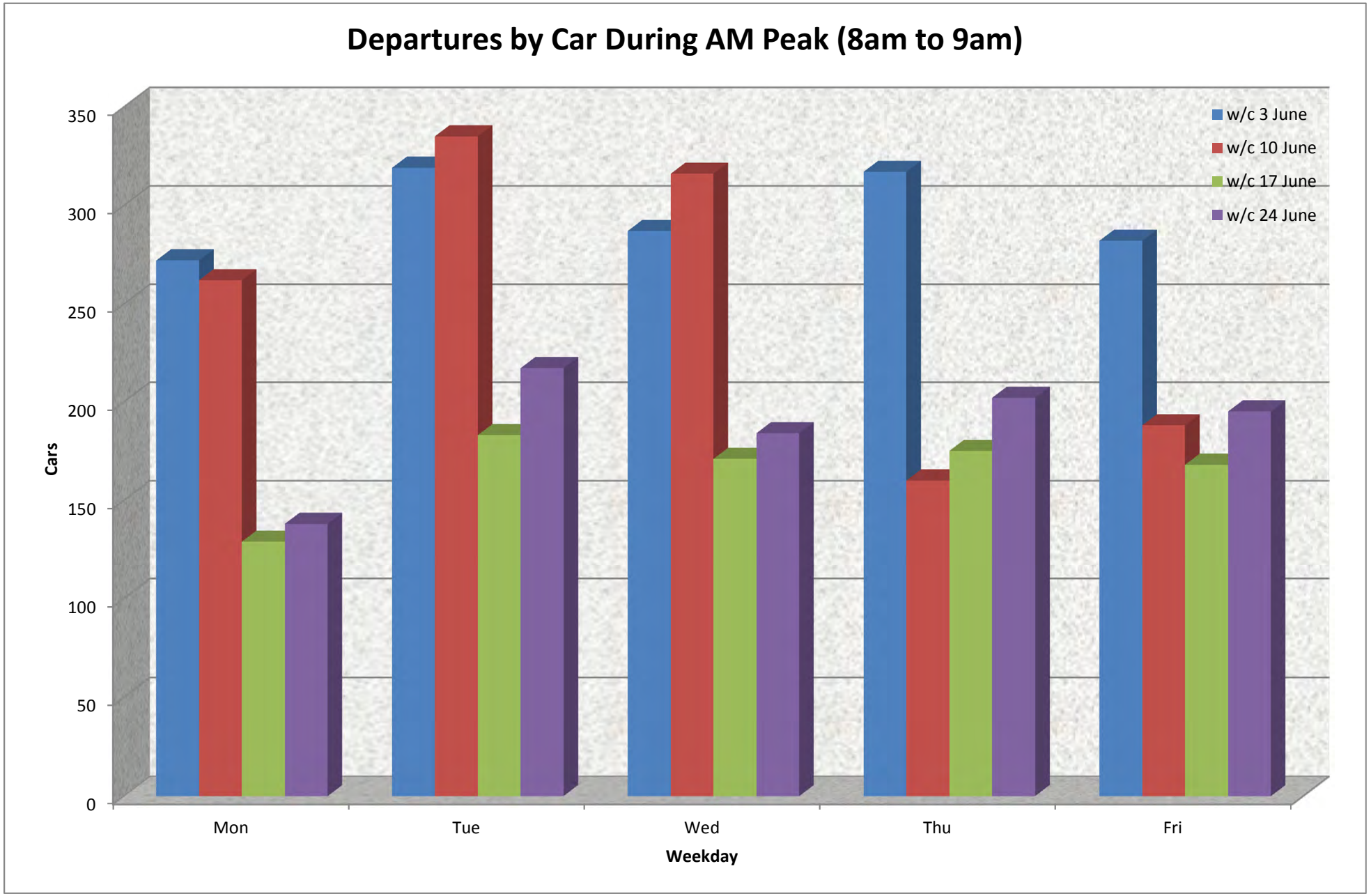
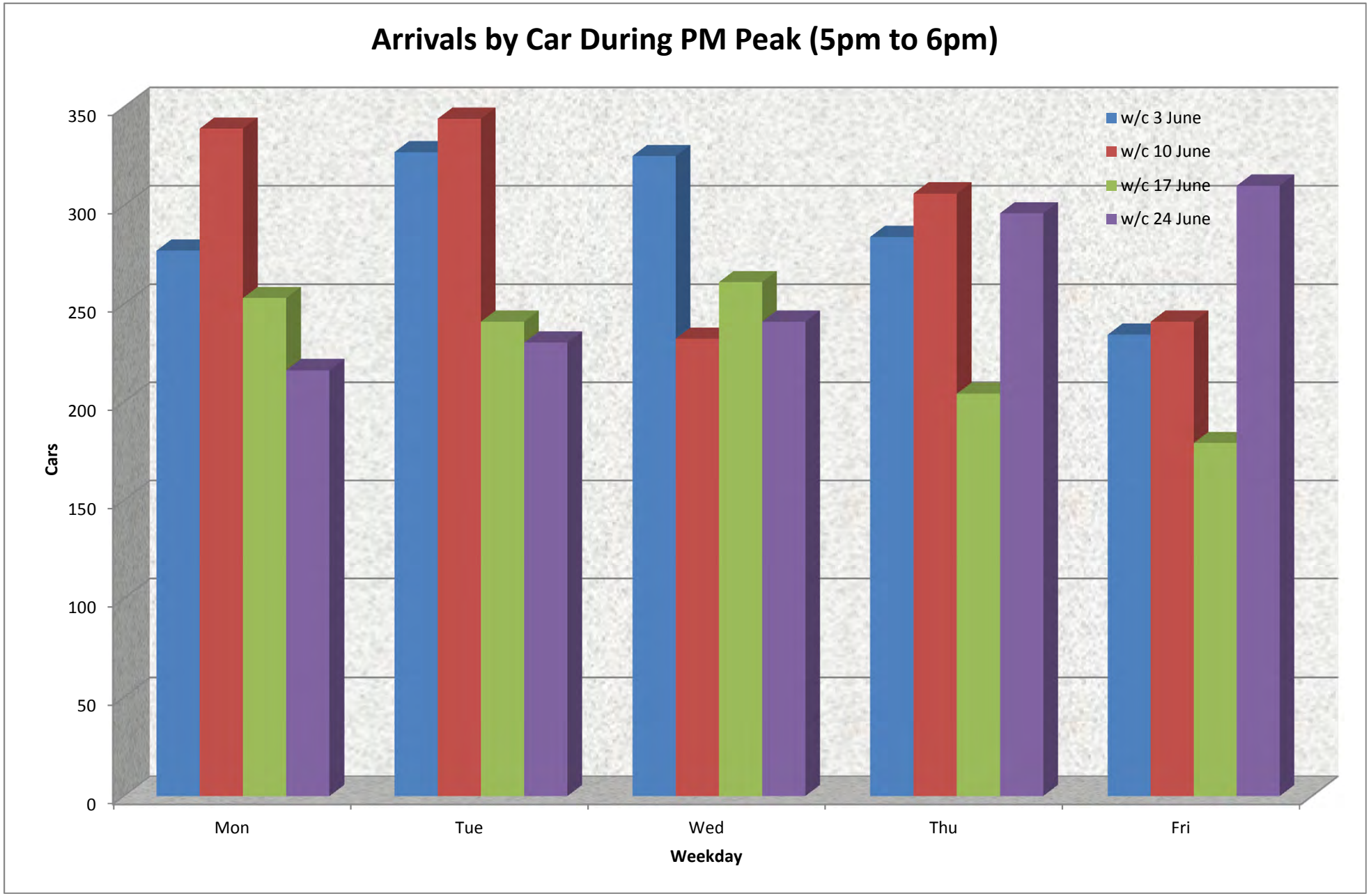
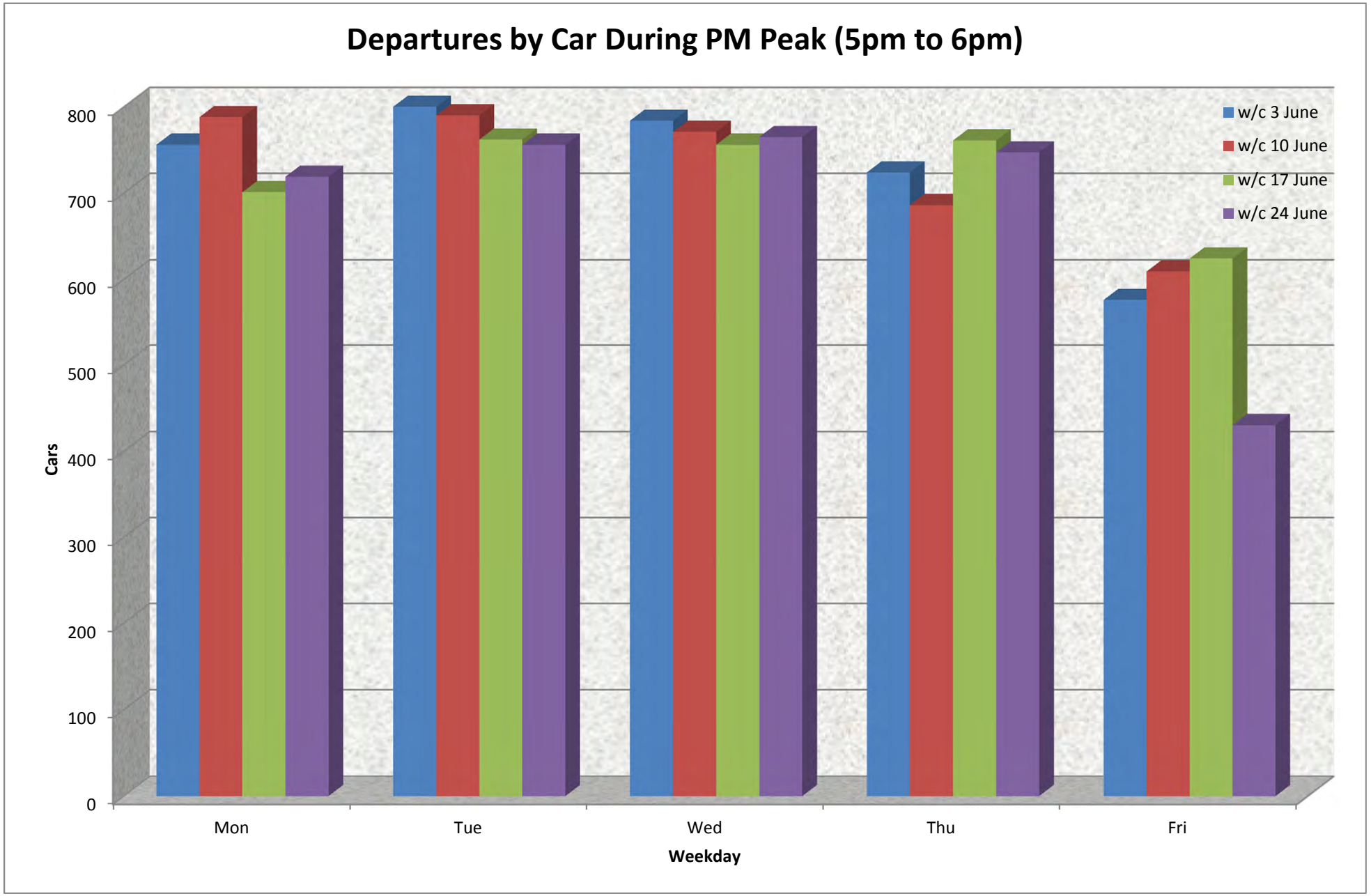
Sat
Sun

Peak Hour Activity - Cars

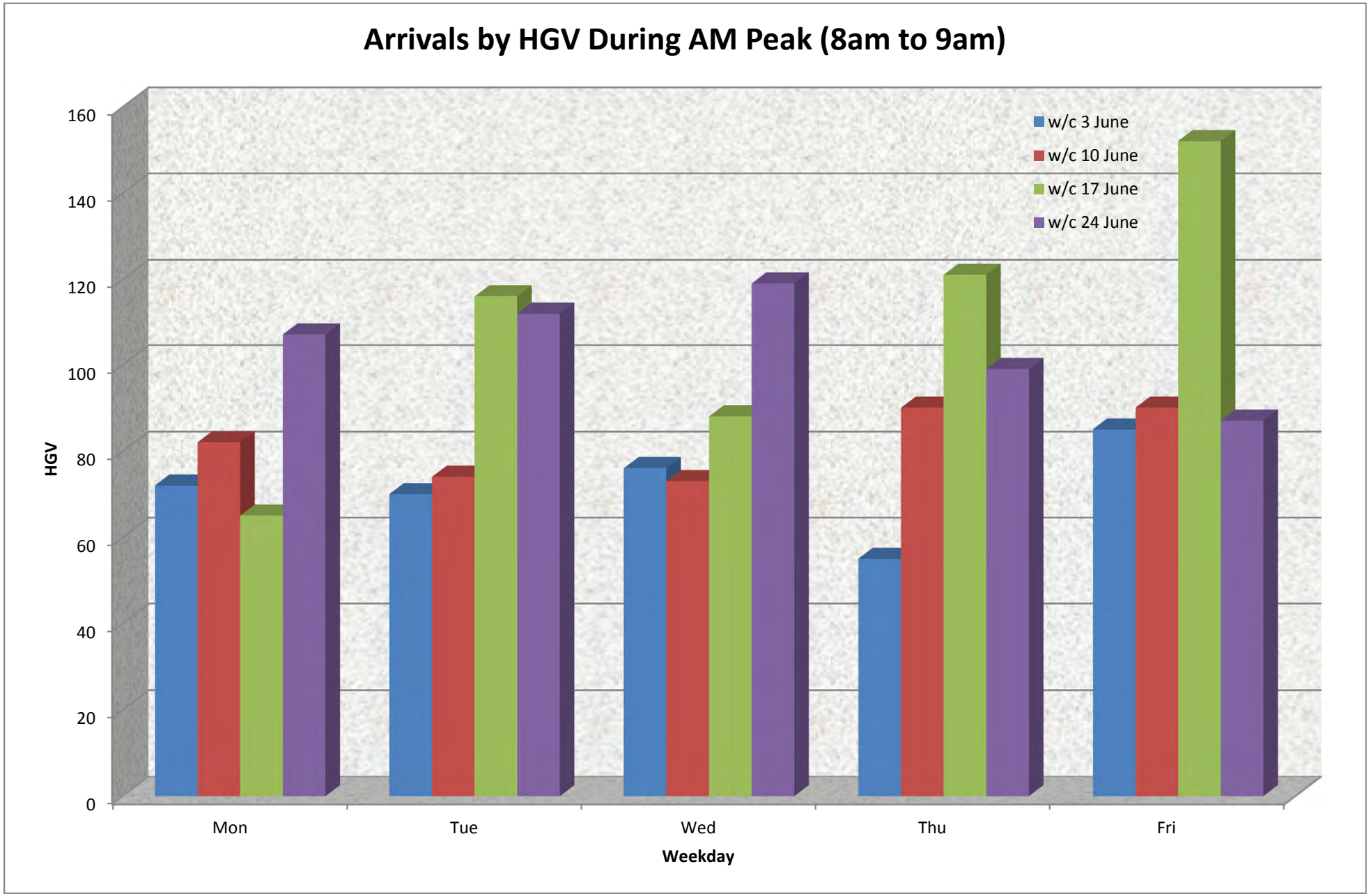

Arrivals by Car During AM Peak (8am to 9am)
1200
1000
800
600
400
200
0
Cars
Mon
Tue
Wed
Thu
Fri
Weekday
w/c 3 June
w/c 10 June
w/c 17 June
w/c 24 June

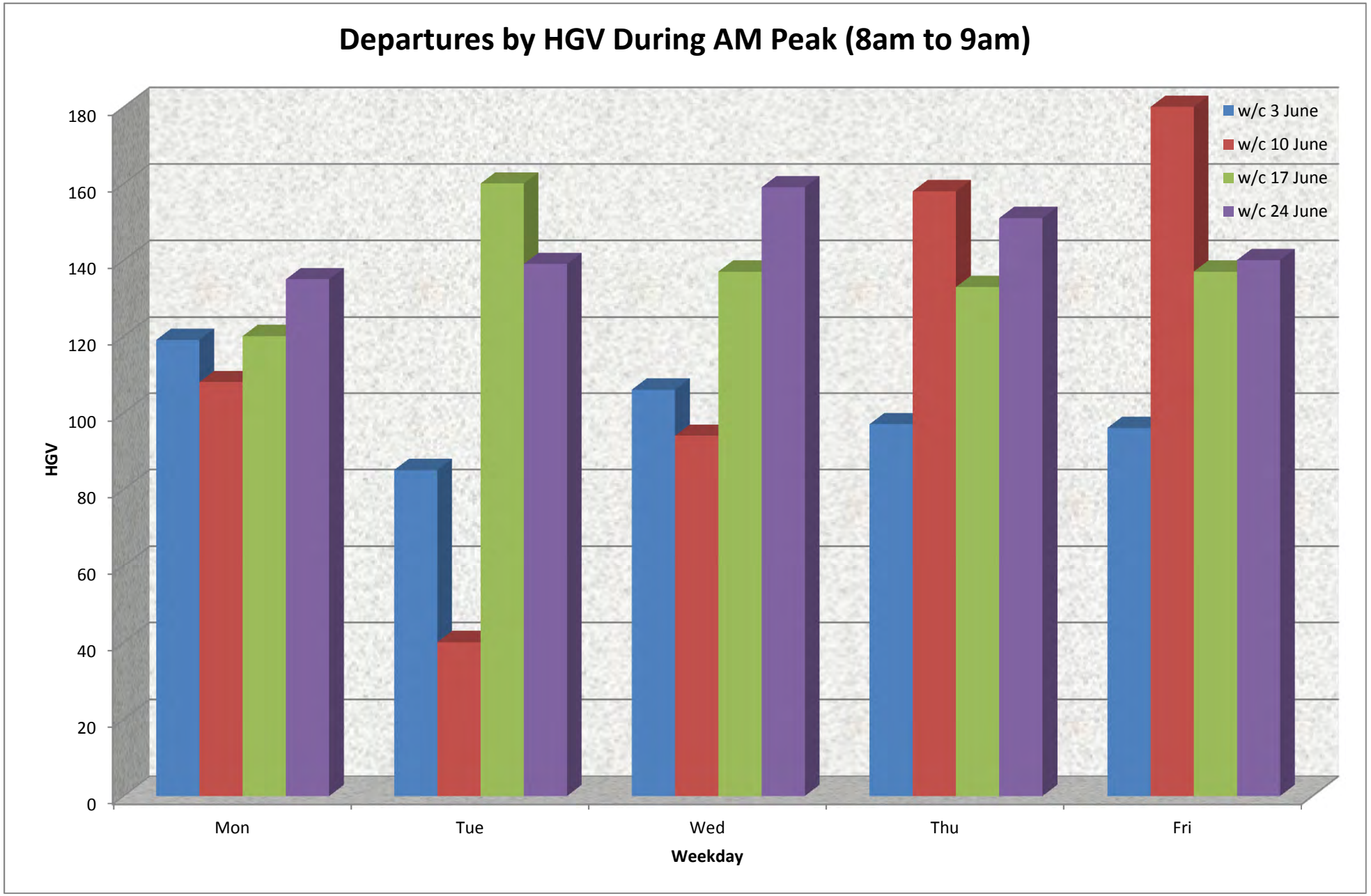

Departures by Car During AM Peak (8am to 9am)
350
300
250
200
150
100
50
0
Cars
Mon
Tue
Wed
Thu
Fri
Weekday
w/c 3 June
w/c 10 June
w/c 17 June
w/c 24 June

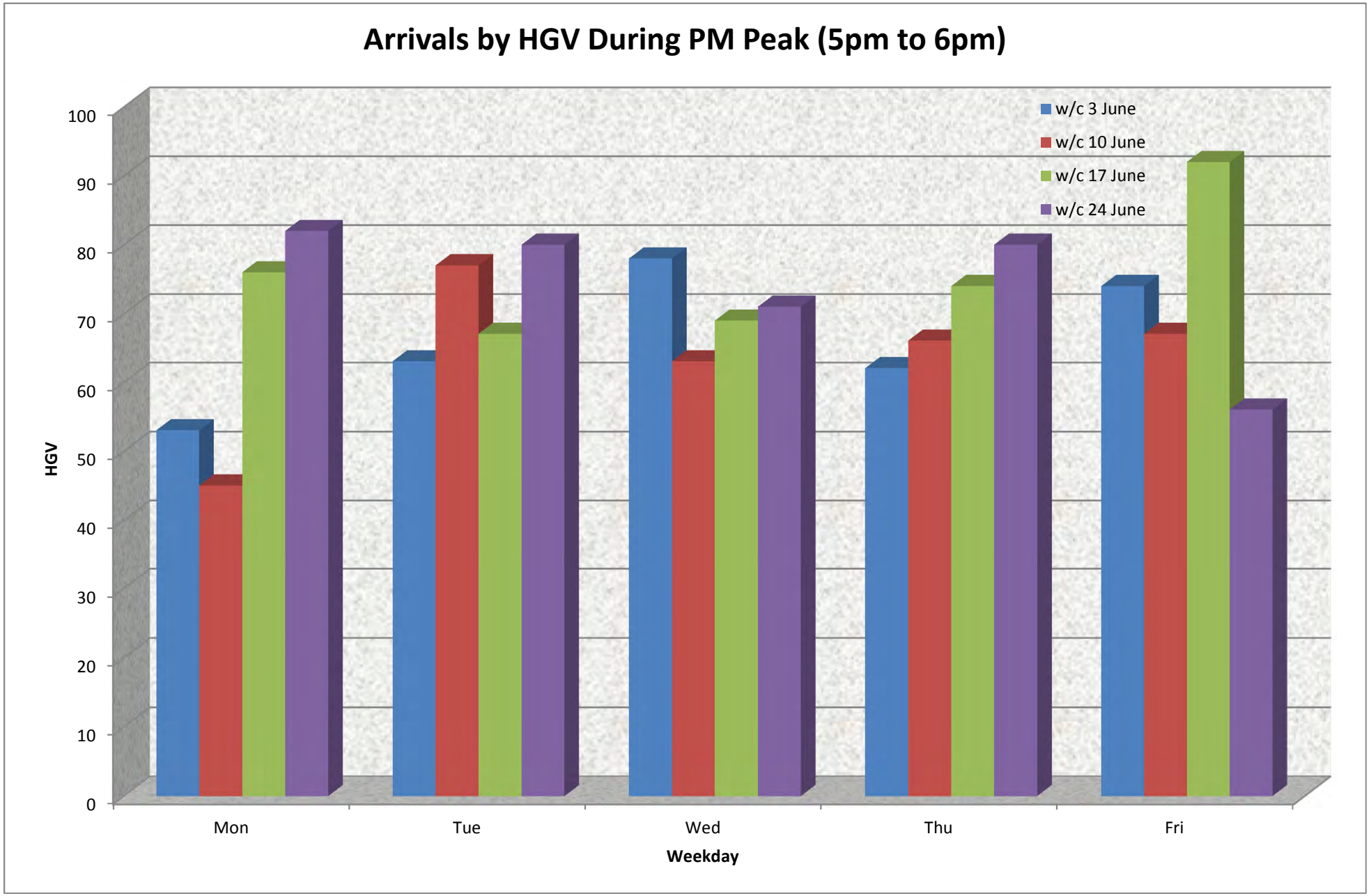

Arrivals by Car During PM Peak (5pm to 6pm)
350
300
250
200
150
100
50
0
Cars
w/c 3 June
w/c 10 June
w/c 17 June
w/c 24 June
Mon
Tue
Wed
Thu
Fri
Weekday

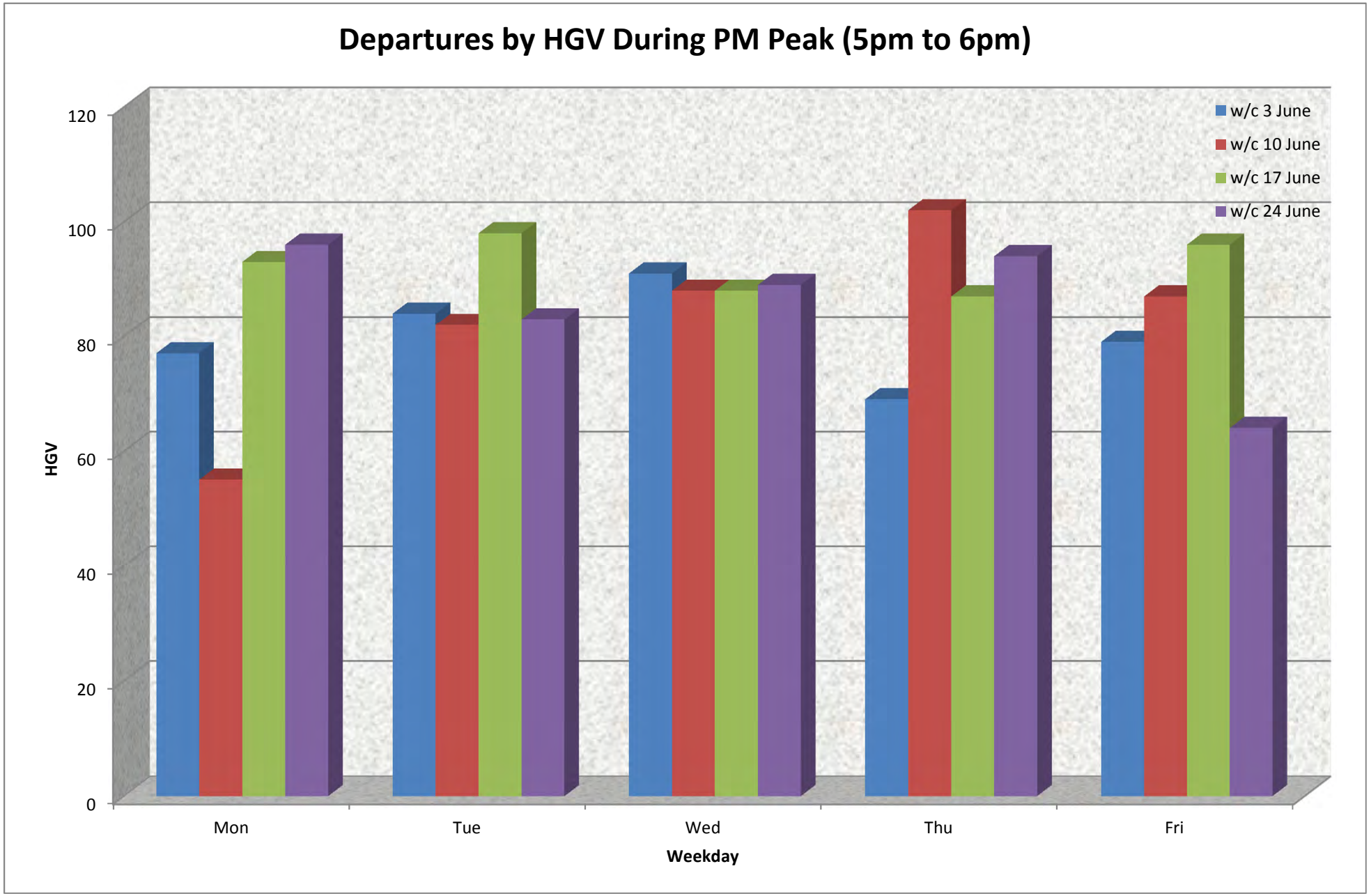

Departures by Car During PM Peak (5pm to 6pm)
800
700
600
500
400
300
200
100
0
Cars
Mon
Tue
Wed
Thu
Fri
Weekday
w/c 3 June
w/c 10 June
w/c 17 June
w/c 24 June

Peak Hour Activity - HGV


Arrivals by HGV During AM Peak (8am to 9am)
160
140
120
100
80
60
40
20
0
HGV
w/c 3 June
w/c 10 June
w/c 17 June
w/c 24 June
Mon
Tue
Wed
Thu
Fri
Weekday


Departures by HGV During AM Peak (8am to 9am)
HGV
180
160
140
120
100
80
60
40
20
0
Mon
Tue
Wed
Thu
Fri
Weekday
w/c 3 June
w/c 10 June
w/c 17 June
w/c 24 June


Arrivals by HGV During PM Peak (5pm to 6pm)
HGV
100
90
80
70
60
50
40
30
20
10
0
Mon
Tue
Wed
Thu
Fri
Weekday
w/c 3 June
w/c 10 June
w/c 17 June
w/c 24 June


Departures by HGV During PM Peak (5pm to 6pm)
120
100
80
60
40
20
0
HGV
Mon
Tue
Wed
Thu
Fri
Weekday
w/c 3 June
w/c 10 June
w/c 17 June
w/c 24 June

Appendix E – Trip Rate Calculation & Summary

Light Vehicle Arrivals

	AM Peak	Off Peak	PM Peak	12 hour day	12 Hour night	16 Hour	18 Hour	24 Hour
Tues (w/c 3 June)	1054	700	327	6002	4736	7754	8418	10738
Weds (w/c 3 June)	1078	709	325	6486	4527	8159	8878	11013
Thurs (w/c 3 June)	1064	672	284	6251	5010	8093	8813	11261
Tues (w/c 10 June)	1013	688	344	6279	4559	7979	8667	10838
Weds (w/c 10 June)	992	641	232	5835	4289	7479	8095	10124
Thurs (w/c 10 June)	1024	627	306	5875	4483	7594	8270	10358
Tues (w/c 17 June)	944	584	241	5388	3913	6844	7311	9301
Weds (w/c 17 June)	945	576	261	5148	3408	6431	6834	8556
Thurs (w/c 17 June)	908	594	204	4821	3062	6071	6469	7883
Tues (w/c 24 June)	866	575	230	4936	3506	6218	6695	8442
Weds (w/c 24 June)	948	603	241	5179	3501	6619	7225	8680
Thurs (w/c 24 June)	888	657	296	5690	4280	7312	7946	9970
Average	977	636	274	5658	4106	7213	7802	9764
85th Percentile	1058	692	326	6261	4621	8019	8718	10899
Floor Space	757018	sq.m.						
Trip Rates	Light arrivals							
Average	**0.129**	**0.084**	**0.036**	**0.747**	**0.542**	**0.953**	**1.031**	**1.290**
85th Percentile	**0.140**	**0.091**	**0.043**	**0.827**	**0.610**	**1.059**	**1.152**	**1.440**

Light Vehicle Departures

	AM Peak	Off Peak	PM Peak	12 hour day	12 Hour night	16 Hour	18 Hour	24 Hour
Tues (w/c 3 June)	319	378	800	5624	3073	6731	7440	8697
Weds (w/c 3 June)	287	395	784	5922	3025	7004	7853	8947
Thurs (w/c 3 June)	317	359	724	5801	3346	6934	7821	9147
Tues (w/c 10 June)	335	412	790	5643	2868	6582	7251	8511
Weds (w/c 10 June)	316	418	771	5545	2970	6480	7144	8515
Thurs (w/c 10 June)	160	402	686	5096	2164	6004	6637	7260
Tues (w/c 17 June)	183	356	762	5073	2054	5930	6525	7127
Weds (w/c 17 June)	171	383	756	5180	2175	6025	6721	7355
Thurs (w/c 17 June)	175	380	761	5121	2214	6054	6715	7335
Tues (w/c 24 June)	217	408	756	5256	2557	6216	6888	7813
Weds (w/c 24 June)	184	388	765	5098	2418	6043	6724	7516
Thurs (w/c 24 June)	202	394	747	5247	2612	6231	6974	7859
Average	239	389	759	5384	2623	6353	7058	8007
85th Percentile	318	409	786	5698	3042	6802	7573	8785
Floor Space	757018	sq.m.						
Trip Rates	Light deps							
Average	**0.032**	**0.051**	**0.100**	**0.711**	**0.346**	**0.839**	**0.932**	**1.058**
85th Percentile	**0.042**	**0.054**	**0.104**	**0.753**	**0.402**	**0.899**	**1.000**	**1.160**

HGV Arrivals

	AM Peak	Off Peak	PM Peak	12 hour day	12 Hour night	16 Hour	18 Hour	24 Hour
Tues (w/c 3 June)	70	91	63	948	377	1104	1169	1325
Weds (w/c 3 June)	76	93	78	830	361	986	1026	1191
Thurs (w/c 3 June)	55	95	62	908	378	1075	1140	1286
Tues (w/c 10 June)	74	85	77	895	374	1073	1137	1269
Weds (w/c 10 June)	73	79	63	953	492	1154	1253	1445
Thurs (w/c 10 June)	90	84	66	978	563	1210	1289	1541
Tues (w/c 17 June)	116	91	67	1066	610	1320	1430	1676
Weds (w/c 17 June)	88	89	69	1149	808	1496	1645	1957
Thurs (w/c 17 June)	121	93	74	1315	1001	1686	1850	2316
Tues (w/c 24 June)	112	81	80	1215	746	1523	1665	1961
Weds (w/c 24 June)	119	98	71	1227	834	1556	1666	2061
Thurs (w/c 24 June)	99	98	80	1094	661	1393	1491	1755
Average	91	90	71	1048	600	1298	1397	1649
85th Percentile	117	96	79	1219	817	1535	1665	1996
Floor Space	757018	sq.m.						
Trip Rates	HGV arrivals							
Average	**0.012**	**0.012**	**0.009**	**0.138**	**0.079**	**0.171**	**0.185**	**0.218**
85th Percentile	**0.015**	**0.013**	**0.010**	**0.161**	**0.108**	**0.203**	**0.220**	**0.264**

HGV Departures

	AM Peak	Off Peak	PM Peak	12 hour day	12 Hour night	16 Hour	18 Hour	24 Hour
Tues (w/c 3 June)	85	114	84	1301	614	1566	1694	1915
Weds (w/c 3 June)	106	103	91	1155	734	1474	1577	1889
Thurs (w/c 3 June)	97	109	69	1209	673	1503	1607	1882
Tues (w/c 10 June)	40	128	82	1269	717	1600	1752	1986
Weds (w/c 10 June)	94	123	88	1333	741	1643	1803	2074
Thurs (w/c 10 June)	158	124	102	1455	1112	1865	2028	2567
Tues (w/c 17 June)	160	99	98	1393	995	1765	1910	2388
Weds (w/c 17 June)	137	103	88	1408	1044	1793	1949	2452
Thurs (w/c 17 June)	133	117	87	1417	1078	1805	1976	2495
Tues (w/c 24 June)	139	103	83	1360	845	1700	1854	2205
Weds (w/c 24 June)	159	129	89	1398	948	1800	1953	2346
Thurs (w/c 24 June)	151	94	94	1396	936	1759	1906	2332
Average	122	112	88	1341	870	1689	1834	2211
85th Percentile	158	125	95	1411	1056	1802	1961	2467
Floor Space	757018	sq.m.						
Trip Rates	HGV deps							
Average	**0.016**	**0.015**	**0.012**	**0.177**	**0.115**	**0.223**	**0.242**	**0.292**
85th Percentile	**0.021**	**0.017**	**0.013**	**0.186**	**0.139**	**0.238**	**0.259**	**0.326**

Magna Park Trip Rates

Average Trip Rates

	AM Peak (8am - 9am)		PM Peak (5pm - 6pm)		Off Peak (1pm - 2pm)	
	Arrivals	Deps	Arrivals	Deps	Arrivals	Deps
Light Vehicles	0.129	0.032	0.036	0.100	0.084	0.051
HGV	0.012	0.016	0.009	0.012	0.012	0.015
Total	**0.141**	**0.048**	**0.046**	**0.112**	**0.096**	**0.066**

	16 hour (6am - 10pm)		18 hour (6am - midnight)		24 hour	
	Arrivals	Deps	Arrivals	Deps	Arrivals	Deps
Light Vehicles	0.953	0.839	1.031	0.932	1.290	1.058
HGV	0.171	0.223	0.185	0.242	0.218	0.292
Total	**1.124**	**1.062**	**1.215**	**1.175**	**1.508**	**1.350**

	12 hour (7am - 7pm)		12 hour (7pm - 7am)	
	Arrivals	Deps	Arrivals	Deps
Light Vehicles	0.747	0.711	0.542	0.346
HGV	0.138	0.177	0.079	0.115
Total	**0.886**	**0.888**	**0.622**	**0.461**

85th Percentile

	AM Peak (8am - 9am)		PM Peak (5pm - 6pm)		Off Peak (1pm - 2pm)	
	Arrivals	Deps	Arrivals	Deps	Arrivals	Deps
Light Vehicles	0.140	0.042	0.043	0.104	0.091	0.054
HGV	0.015	0.021	0.010	0.013	0.013	0.017
Total	**0.155**	**0.063**	**0.053**	**0.116**	**0.104**	**0.071**

	16 hour (6am - 10pm)		18 hour (6am - midnight)		24 hour	
	Arrivals	Deps	Arrivals	Deps	Arrivals	Deps
Light Vehicles	1.059	0.899	1.152	1.000	1.440	1.160
HGV	0.203	0.238	0.220	0.259	0.264	0.326
Total	**1.262**	**1.137**	**1.372**	**1.259**	**1.703**	**1.486**

	12 hour (7am - 7pm)		12 hour (7pm - 7am)	
	Arrivals	Deps	Arrivals	Deps
Light Vehicles	0.827	0.753	0.610	0.402
HGV	0.161	0.186	0.108	0.139
Total	**0.988**	**0.939**	**0.718**	**0.541**

Magna Park Extension: Hybrid Application
Transport Assessment

Appendix U – LLITM Trip Distribution Data

Zone 5807 All Vehicles AM Arrivals

SATURN

Atkins Ltd /
DVV / ITS

950_84807_DF
_2021_AM.UFS

Scale 21740

Link Annot:

SELECT LINK

28- 7-14

LEICESTERSHI

SATURN

Atkins Ltd /
DVV / ITS

950_84807_DF
_2021_AM.UFS

Scale 76880

Link Annot:

SELECT LINK

28- 7-14

LEICESTERSHI

SATURN

Atkins Ltd /
DVV / ITS

950_84807_DF
_2021_AM.UFS

Scale 81144

Link Annot:

SELECT LINK

28- 7-14

LEICESTERSHI

Zone 5807 All Vehicles AM Departures

SATURN

Atkins Ltd /
DVV / ITS

807_29950_DF
_2021_AM.UFS

Scale 21902

Link Annot:

SELECT LINK

28- 7-14

LEICESTERSHI

SATURN

Atkins Ltd /
DVV / ITS

807_29950_DF
_2021_AM.UFS

Scale 86004

Link Annot:

SELECT LINK

28- 7-14

LEICESTERSHI

2021_sp_Core - AM Peak LLITM Highway Network v5.0 28- 7-14

JATURN

Atkins Ltd /

DVV / ITS

807_29950_DF

_2021_AM.UFS

Scale 123166

Link Annot:

SELECT LINK

28- 7-14

LEICESTERSHI

Zone 5807 All Vehicles PM Arrivals

JATURN

Atkins Ltd /
DVV / ITS

950_84807_DF
_2021_PM.UFS

Scale 22749

Link Annot:

SELECT LINK

28- 7-14

LEICESTERSHI

2021_sp_Core - PM Peak LLITM Highway Network v5.0 28- 7-14

SATURN

Atkins Ltd /
DVV / ITS

950_84807_DF
_2021_PM.UFS

Scale 76200

Link Annot:

SELECT LINK

28- 7-14

LEICESTERSHI

JATURN

Atkins Ltd /

DVV / ITS

950_84807_DF

_2021_PM.UFS

Scale 74613

Link Annot:

SELECT LINK

28- 7-14

LEICESTERSHI

Zone 5807 All Vehicles PM Departures

SATURN

Atkins Ltd /
DVV / ITS

807_29950_DF
_2021_PM.UFS

Scale 23895

Link Annot:

SELECT LINK

28- 7-14

LEICESTERSHI

SATURN

Atkins Ltd /
DVV / ITS

807_29950_DF
_2021_PM.UFS

Scale 70467

Link Annot:

SELECT LINK

28- 7-14

LEICESTERSHI

SATURN

Atkins Ltd /
DVV / ITS

807_29950_DF
_2021_PM.UFS

Scale 74732

Link Annot:

SELECT LINK

28- 7-14

LEICESTERSHI

Zone 5807 HGV AM Arrivals

SATURN

Atkins Ltd /

DVV / ITS

84807_DF_UC1

_2021_AM.UFS

Scale 21363

Link Annot:

SELECT LINK

29- 7-14

LEICESTERSHI

2021_sp_Core - AM Peak LLITM Highway Network v5.0 29- 7-14

SATURN

Atkins Ltd /
DVV / ITS

84807_DF_UC1
_2021_AM.UFS

Scale 65441

Link Annot:

SELECT LINK

29- 7-14

LEICESTERSHI

2021_sp_Core - AM Peak LLITM Highway Network v5.0 29- 7-14

SATURN

Atkins Ltd /

DVV / ITS

84807_DF_UC1

_2021_AM.UFS

Scale 91426

Link Annot:

SELECT LINK

29- 7-14

LEICESTERSHI

Zone 5807 HGV AM Departures

SATURN

Atkins Ltd /
DVV / ITS

29950_DF_UC1
_2021_AM.UFS

Scale 20486

Link Annot:

SELECT LINK

29- 7-14

LEICESTERSHI

SATURN

Atkins Ltd /
DVV / ITS

29950_DF_UC1
_2021_AM.UFS

Scale 71812

Link Annot:

SELECT LINK

29- 7-14

LEICESTERSHI

2021_sp_Core - AM Peak LLITM Highway Network v5.0 29- 7-14

SATURN

Atkins Ltd /
DVV / ITS

29950_DF_UC1
_2021_AM.UFS

Scale 91794

Link Annot:

SELECT LINK

29- 7-14
LEICESTERSHI

Zone 5807 HGV PM Arrivals

SATURN

Atkins Ltd /

DVV / ITS

84807_DF_UC1

_2021_PM.UFS

Scale 20093

Link Annot:

SELECT LINK

29- 7-14

LEICESTERSHI

SATURN

Atkins Ltd /

DVV / ITS

84807_DF_UC1

_2021_PM.UFS

Scale 74904

Link Annot:

SELECT LINK

29- 7-14

LEICESTERSHI

SATURN

Atkins Ltd /
DVV / ITS

84807_DF_UC1
_2021_PM.UFS

Scale 71834

Link Annot:

SELECT LINK

29- 7-14

LEICESTERSHI

Zone 5807 HGV PM Departures

SATURN

Atkins Ltd /
DVV / ITS

29950_DF_UC1
_2021_PM.UFS

Scale 20235

Link Annot:

SELECT LINK

29- 7-14

LEICESTERSHI

SATURN

Atkins Ltd /
DVV / ITS

29950_DF_UC1
_2021_PM.UFS

Scale 79984

Link Annot:

SELECT LINK

29- 7-14

LEICESTERSHI

SATURN

Atkins Ltd /
DVV / ITS

29950_DF_UC1
_2021_PM.UFS

Scale 77650

Link Annot:

SELECT LINK

29- 7-14

LEICESTERSHI

Zone 5808 All Vehicles AM Arrivals

SATURN

Atkins Ltd /
DVV / ITS

951_84808_DF
_2021_AM.UFS

Scale 21587

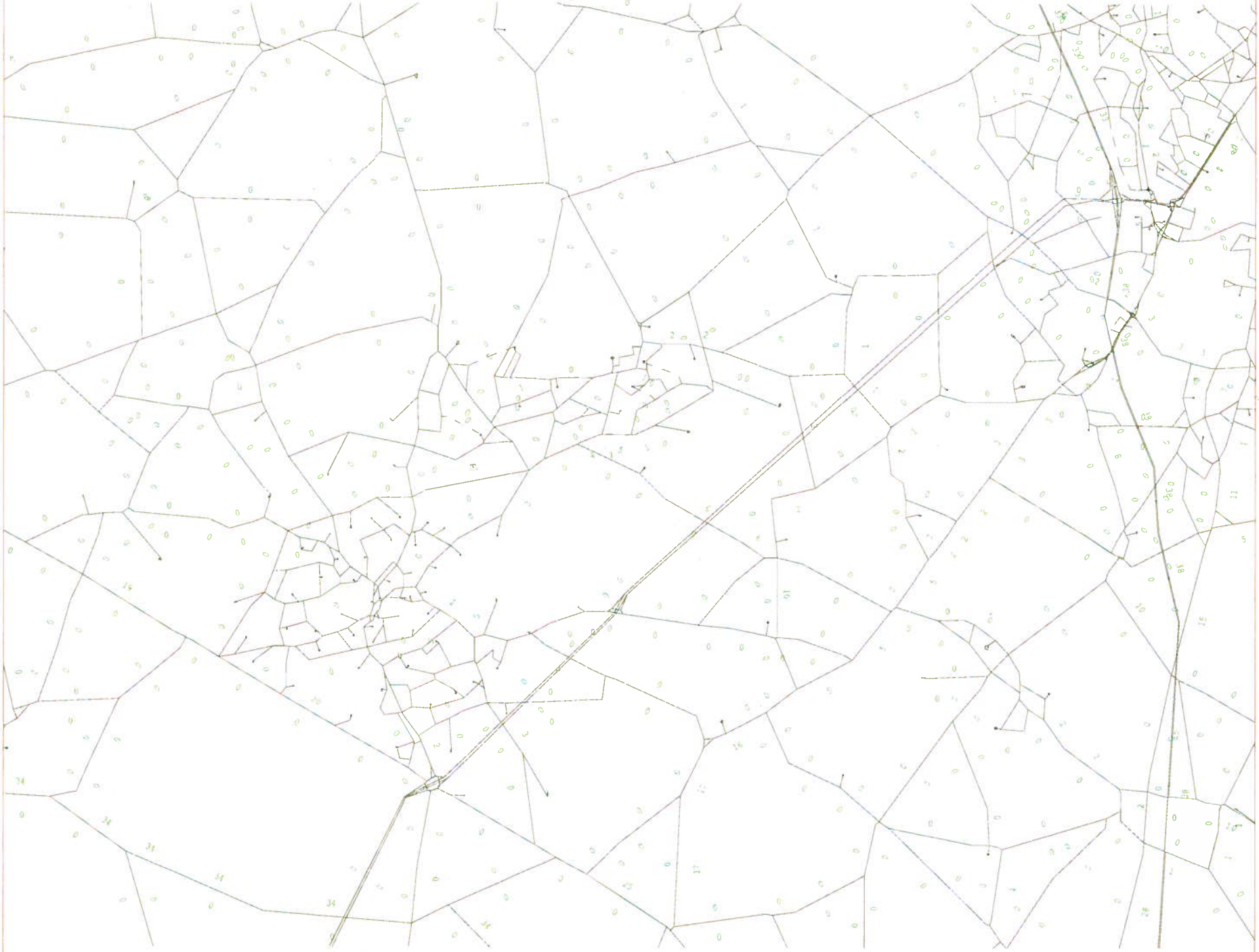
Link Annot:

SELECT LINK

29- 7-14

LEICESTERSHI

2021_sp_Core - AM Peak LLITM Highway Network v5.0 29- 7-14



SATURN

Atkins Ltd /
DVV / ITS

951_84808_DF
_2021_AM.UFS

Scale 80610

Link Annot:

SELECT LINK

29- 7-14

LEICESTERSHI

SATURN

Atkins Ltd /
DVV / ITS

951_84808_DF
_2021_AM.UFS

Scale 74466

Link Annot:

SELECT LINK

29- 7-14

LEICESTERSHI

Zone 5808 All Vehicles AM Departures

JATURN

Atkins Ltd /

DVV / ITS

808_29951_DF

_2021_AM.UFS

Scale 22738

Link Annot:

SELECT LINK

29- 7-14

LEICESTERSHI

SATURN

Atkins Ltd /

DVV / ITS

808_29951_DF

_2021_AM.UFS

Scale 72658

Link Annot:

SELECT LINK

29- 7-14

LEICESTERSHI

SATURN

Atkins Ltd /
DVV / ITS

808_29951_DF
_2021_AM.UFS

Scale 79604

Link Annot:

SELECT LINK

29- 7-14

LEICESTERSHI

2021_sp_Core - AM Peak LLITM Highway Network v5.0 29- 7-14

Zone 5808 All Vehicles PM Arrivals

SATURN

Atkins Ltd /
DVV / ITS

951_84808_DF
_2021_PM.UFS

Scale 20771

Link Annot:

SELECT LINK

29- 7-14

LEICESTERSHI

SATURN

Atkins Ltd /
DVV / ITS

951_84808_DF
_2021_PM.UFS

Scale 88315

Link Annot:

SELECT LINK

29- 7-14
LEICESTERSHI

SATURN

Atkins Ltd /
DVV / ITS

951_84808_DF
_2021_PM.UFS

Scale 91016

Link Annot:

SELECT LINK

29- 7-14

LEICESTERSHI

2021_sp_Core - PM Peak LLITM Highway Network v5.0 29- 7-14

Zone 5808 All Vehicles PM Departures

JATURN

Atkins Ltd /
DVV / ITS

808_29951_DF
_2021_PM.UFS

Scale 21944

Link Annot:

SELECT LINK

29- 7-14

LEICESTERSHI

SATURN

Atkins Ltd /
DVV / ITS

808_29951_DF
_2021_PM.UFS

Scale 77381

Link Annot:

SELECT LINK

29- 7-14

LEICESTERSHI

SATURN

Atkins Ltd /
DVV / ITS

808_29951_DF
_2021_PM.UFS

Scale 86569

Link Annot:

SELECT LINK

29- 7-14

LEICESTERSHI

Zone 5808 HGV AM Arrivals

SATURN

Atkins Ltd /
DVV / ITS

84808_DF_UC1
_2021_AM.UFS

Scale 21187

Link Annot:

SELECT LINK

SATURN

Atkins Ltd /
DVV / ITS

84808_DF_UC1
_2021_AM.UFS

Scale 71929

Link Annot:

SELECT LINK

30- 7-14

LEICESTERSHI

SATURN

Atkins Ltd /
DVV / ITS

84808_DF_UC1
_2021_AM.UFS

Scale 84059

Link Annot:

SELECT LINK

30- 7-14

LEICESTERSHI

Zone 5808 HGV AM Departures

SATURN

Atkins Ltd /
DVV / ITS

29951_DF_UC1
_2021_AM.UFS

Scale 21845

Link Annot:

SELECT LINK

30- 7-14
LEICESTERSHI

SATURN

Atkins Ltd /
DVV / ITS

29951_DF_UC1
_2021_AM.UFS

Scale 67623

Link Annot:

SELECT LINK

30- 7-14

LEICESTERSHI

2021_sp_Core - AM Peak LLITM Highway Network v5.0 30- 7-14

SATURN

Atkins Ltd /
DVV / ITS

29951_DF_UC1
_2021_AM.UFS

Scale 73937

Link Annot:

SELECT LINK

30- 7-14
LEICESTERSHI

Zone 5808 HGV PM Arrivals

SATURN

Atkins Ltd /
DVV / ITS

84808_DF_UC1
_2021_PM.UFS

Scale 23922

Link Annot:

SELECT LINK

30- 7-14

LEICESTERSHI

2021_sp_Core - PM Peak LLITM Highway Network v5.0 30- 7-14

SATURN

Atkins Ltd /
DVV / ITS

84808_DF_UC1
_2021_PM.UFS

Scale 70867

Link Annot:

SELECT LINK

30- 7-14

LEICESTERSHI

2021_sp_Core - PM Peak LLITM Highway Network v5.0 30- 7-14

SATURN

Atkins Ltd /
DVV / ITS

84808_DF_UC1
_2021_PM.UFS

Scale 76906

Link Annot:

SELECT LINK

Zone 5808 HGV PM Departures

JATURN

Atkins Ltd /
DVV / ITS

29951_DF_UC1
_2021_PM.UFS

Scale 23485

Link Annot:

SELECT LINK

30- 7-14

LEICESTERSHI

SATURN

Atkins Ltd /
DVV / ITS

29951_DF_UC1
_2021_PM.UFS

Scale 70943

Link Annot:

SELECT LINK

30- 7-14

LEICESTERSHI

2021_sp_Core - PM Peak LLITM Highway Network v5.0 30- 7-14

SATURN

Atkins Ltd /
DVV / ITS

29951_DF_UC1
_2021_PM.UFS

Scale 86377

Link Annot:

SELECT LINK

30- 7-14

LEICESTERSHI

Magna Park Extension: Hybrid Application
Transport Assessment

Appendix V – B1 Trip Rates for Innovation Centre

Calculation Reference: AUDIT-211601-150720-0707

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : A - OFFICE
VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	1 days
	SC	SURREY	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	WY	WEST YORKSHIRE	1 days
08	NORTH WEST		
	LC	LANCASHIRE	1 days
09	NORTH		
	DH	DURHAM	1 days
	TW	TYNE & WEAR	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
Actual Range: 186 to 3372 (units: sqm)
Range Selected by User: 186 to 5000 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/07 to 27/02/14

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Tuesday	3 days
Wednesday	1 days
Thursday	1 days
Friday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	6 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	6

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Commercial Zone	1
Residential Zone	4
Built-Up Zone	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

B1	6 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	2 days
10,001 to 15,000	1 days
20,001 to 25,000	1 days
25,001 to 50,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

75,001 to 100,000	2 days
125,001 to 250,000	2 days
250,001 to 500,000	1 days
500,001 or More	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	3 days
1.1 to 1.5	2 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	6 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1 DH-02-A-01 RPMI OFFICES DURHAM
BRINKBURN ROAD

DARLINGTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 3372 sqm
Survey date: FRIDAY 05/11/10 Survey Type: MANUAL

2 ES-02-A-09 HOUSING COMPANY EAST SUSSEX
THE SIDINGS
ORE VALLEY
HASTINGS
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 186 sqm
Survey date: WEDNESDAY 19/12/12 Survey Type: MANUAL

3 LC-02-A-09 OFFICES LANCASHIRE
FURTHERGATE

BLACKBURN
Suburban Area (PPS6 Out of Centre)
Built-Up Zone
Total Gross floor area: 2600 sqm
Survey date: TUESDAY 04/06/13 Survey Type: MANUAL

4 SC-02-A-15 ACCOUNTANTS SURREY
BOXGROVE ROAD

GUILDFORD
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 1896 sqm
Survey date: TUESDAY 05/10/10 Survey Type: MANUAL

5 TW-02-A-05 TELEVISION CO. TYNE & WEAR
DELTA BANK ROAD
METRO RIVERSIDE PARK
GATESHEAD
Suburban Area (PPS6 Out of Centre)
Commercial Zone
Total Gross floor area: 1500 sqm
Survey date: TUESDAY 29/09/09 Survey Type: MANUAL

6 WY-02-A-03 OFFICE WEST YORKSHIRE
VICTORIA ROAD
HEADINGLEY
LEEDS
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 2696 sqm
Survey date: THURSDAY 17/06/10 Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	6	2042	0.245	6	2042	0.024	6	2042	0.269
07:30 - 08:00	6	2042	0.588	6	2042	0.057	6	2042	0.645
08:00 - 08:30	6	2042	1.086	6	2042	0.188	6	2042	1.274
08:30 - 09:00	6	2042	1.216	6	2042	0.212	6	2042	1.428
09:00 - 09:30	6	2042	0.759	6	2042	0.220	6	2042	0.979
09:30 - 10:00	6	2042	0.449	6	2042	0.229	6	2042	0.678
10:00 - 10:30	6	2042	0.253	6	2042	0.188	6	2042	0.441
10:30 - 11:00	6	2042	0.147	6	2042	0.180	6	2042	0.327
11:00 - 11:30	6	2042	0.180	6	2042	0.188	6	2042	0.368
11:30 - 12:00	6	2042	0.131	6	2042	0.147	6	2042	0.278
12:00 - 12:30	6	2042	0.204	6	2042	0.359	6	2042	0.563
12:30 - 13:00	6	2042	0.433	6	2042	0.433	6	2042	0.866
13:00 - 13:30	6	2042	0.343	6	2042	0.335	6	2042	0.678
13:30 - 14:00	6	2042	0.433	6	2042	0.245	6	2042	0.678
14:00 - 14:30	6	2042	0.237	6	2042	0.229	6	2042	0.466
14:30 - 15:00	6	2042	0.188	6	2042	0.245	6	2042	0.433
15:00 - 15:30	6	2042	0.131	6	2042	0.139	6	2042	0.270
15:30 - 16:00	6	2042	0.082	6	2042	0.204	6	2042	0.286
16:00 - 16:30	6	2042	0.163	6	2042	0.710	6	2042	0.873
16:30 - 17:00	6	2042	0.196	6	2042	0.686	6	2042	0.882
17:00 - 17:30	6	2042	0.139	6	2042	1.200	6	2042	1.339
17:30 - 18:00	6	2042	0.065	6	2042	0.596	6	2042	0.661
18:00 - 18:30	6	2042	0.033	6	2042	0.359	6	2042	0.392
18:30 - 19:00	6	2042	0.024	6	2042	0.335	6	2042	0.359
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			7.725			7.708			15.433

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	186 - 3372 (units: sqm)
Survey date date range:	01/01/07 - 27/02/14
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	6	2042	0.008	6	2042	0.008	6	2042	0.016
07:30 - 08:00	6	2042	0.033	6	2042	0.033	6	2042	0.066
08:00 - 08:30	6	2042	0.024	6	2042	0.024	6	2042	0.048
08:30 - 09:00	6	2042	0.016	6	2042	0.016	6	2042	0.032
09:00 - 09:30	6	2042	0.024	6	2042	0.033	6	2042	0.057
09:30 - 10:00	6	2042	0.016	6	2042	0.008	6	2042	0.024
10:00 - 10:30	6	2042	0.000	6	2042	0.008	6	2042	0.008
10:30 - 11:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
11:00 - 11:30	6	2042	0.008	6	2042	0.008	6	2042	0.016
11:30 - 12:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
12:00 - 12:30	6	2042	0.008	6	2042	0.008	6	2042	0.016
12:30 - 13:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
13:00 - 13:30	6	2042	0.024	6	2042	0.024	6	2042	0.048
13:30 - 14:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
14:00 - 14:30	6	2042	0.000	6	2042	0.000	6	2042	0.000
14:30 - 15:00	6	2042	0.008	6	2042	0.000	6	2042	0.008
15:00 - 15:30	6	2042	0.008	6	2042	0.016	6	2042	0.024
15:30 - 16:00	6	2042	0.008	6	2042	0.000	6	2042	0.008
16:00 - 16:30	6	2042	0.008	6	2042	0.016	6	2042	0.024
16:30 - 17:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
17:00 - 17:30	6	2042	0.033	6	2042	0.024	6	2042	0.057
17:30 - 18:00	6	2042	0.008	6	2042	0.016	6	2042	0.024
18:00 - 18:30	6	2042	0.008	6	2042	0.008	6	2042	0.016
18:30 - 19:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.242			0.250			0.492

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	186 - 3372 (units: sqm)
Survey date date range:	01/01/07 - 27/02/14
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	6	2042	0.000	6	2042	0.000	6	2042	0.000
07:30 - 08:00	6	2042	0.008	6	2042	0.000	6	2042	0.008
08:00 - 08:30	6	2042	0.000	6	2042	0.008	6	2042	0.008
08:30 - 09:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
09:00 - 09:30	6	2042	0.008	6	2042	0.008	6	2042	0.016
09:30 - 10:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
10:00 - 10:30	6	2042	0.024	6	2042	0.024	6	2042	0.048
10:30 - 11:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
11:00 - 11:30	6	2042	0.033	6	2042	0.016	6	2042	0.049
11:30 - 12:00	6	2042	0.000	6	2042	0.008	6	2042	0.008
12:00 - 12:30	6	2042	0.000	6	2042	0.008	6	2042	0.008
12:30 - 13:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
13:00 - 13:30	6	2042	0.008	6	2042	0.008	6	2042	0.016
13:30 - 14:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
14:00 - 14:30	6	2042	0.008	6	2042	0.008	6	2042	0.016
14:30 - 15:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
15:00 - 15:30	6	2042	0.000	6	2042	0.000	6	2042	0.000
15:30 - 16:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
16:00 - 16:30	6	2042	0.000	6	2042	0.000	6	2042	0.000
16:30 - 17:00	6	2042	0.008	6	2042	0.008	6	2042	0.016
17:00 - 17:30	6	2042	0.000	6	2042	0.000	6	2042	0.000
17:30 - 18:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
18:00 - 18:30	6	2042	0.000	6	2042	0.000	6	2042	0.000
18:30 - 19:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.097			0.096			0.193

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	186 - 3372 (units: sqm)
Survey date date range:	01/01/07 - 27/02/14
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
PSVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	6	2042	0.000	6	2042	0.000	6	2042	0.000
07:30 - 08:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
08:00 - 08:30	6	2042	0.008	6	2042	0.000	6	2042	0.008
08:30 - 09:00	6	2042	0.016	6	2042	0.000	6	2042	0.016
09:00 - 09:30	6	2042	0.000	6	2042	0.000	6	2042	0.000
09:30 - 10:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
10:00 - 10:30	6	2042	0.000	6	2042	0.000	6	2042	0.000
10:30 - 11:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
11:00 - 11:30	6	2042	0.000	6	2042	0.000	6	2042	0.000
11:30 - 12:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
12:00 - 12:30	6	2042	0.000	6	2042	0.000	6	2042	0.000
12:30 - 13:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
13:00 - 13:30	6	2042	0.000	6	2042	0.000	6	2042	0.000
13:30 - 14:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
14:00 - 14:30	6	2042	0.000	6	2042	0.000	6	2042	0.000
14:30 - 15:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
15:00 - 15:30	6	2042	0.000	6	2042	0.000	6	2042	0.000
15:30 - 16:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
16:00 - 16:30	6	2042	0.000	6	2042	0.000	6	2042	0.000
16:30 - 17:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
17:00 - 17:30	6	2042	0.000	6	2042	0.008	6	2042	0.008
17:30 - 18:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
18:00 - 18:30	6	2042	0.000	6	2042	0.000	6	2042	0.000
18:30 - 19:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.024			0.008			0.032

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	186 - 3372 (units: sqm)
Survey date date range:	01/01/07 - 27/02/14
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	6	2042	0.000	6	2042	0.000	6	2042	0.000
07:30 - 08:00	6	2042	0.008	6	2042	0.000	6	2042	0.008
08:00 - 08:30	6	2042	0.000	6	2042	0.000	6	2042	0.000
08:30 - 09:00	6	2042	0.041	6	2042	0.000	6	2042	0.041
09:00 - 09:30	6	2042	0.008	6	2042	0.000	6	2042	0.008
09:30 - 10:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
10:00 - 10:30	6	2042	0.000	6	2042	0.000	6	2042	0.000
10:30 - 11:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
11:00 - 11:30	6	2042	0.000	6	2042	0.000	6	2042	0.000
11:30 - 12:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
12:00 - 12:30	6	2042	0.000	6	2042	0.000	6	2042	0.000
12:30 - 13:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
13:00 - 13:30	6	2042	0.000	6	2042	0.000	6	2042	0.000
13:30 - 14:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
14:00 - 14:30	6	2042	0.000	6	2042	0.000	6	2042	0.000
14:30 - 15:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
15:00 - 15:30	6	2042	0.000	6	2042	0.000	6	2042	0.000
15:30 - 16:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
16:00 - 16:30	6	2042	0.008	6	2042	0.008	6	2042	0.016
16:30 - 17:00	6	2042	0.000	6	2042	0.033	6	2042	0.033
17:00 - 17:30	6	2042	0.000	6	2042	0.016	6	2042	0.016
17:30 - 18:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
18:00 - 18:30	6	2042	0.000	6	2042	0.008	6	2042	0.008
18:30 - 19:00	6	2042	0.000	6	2042	0.000	6	2042	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.065			0.065			0.130

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

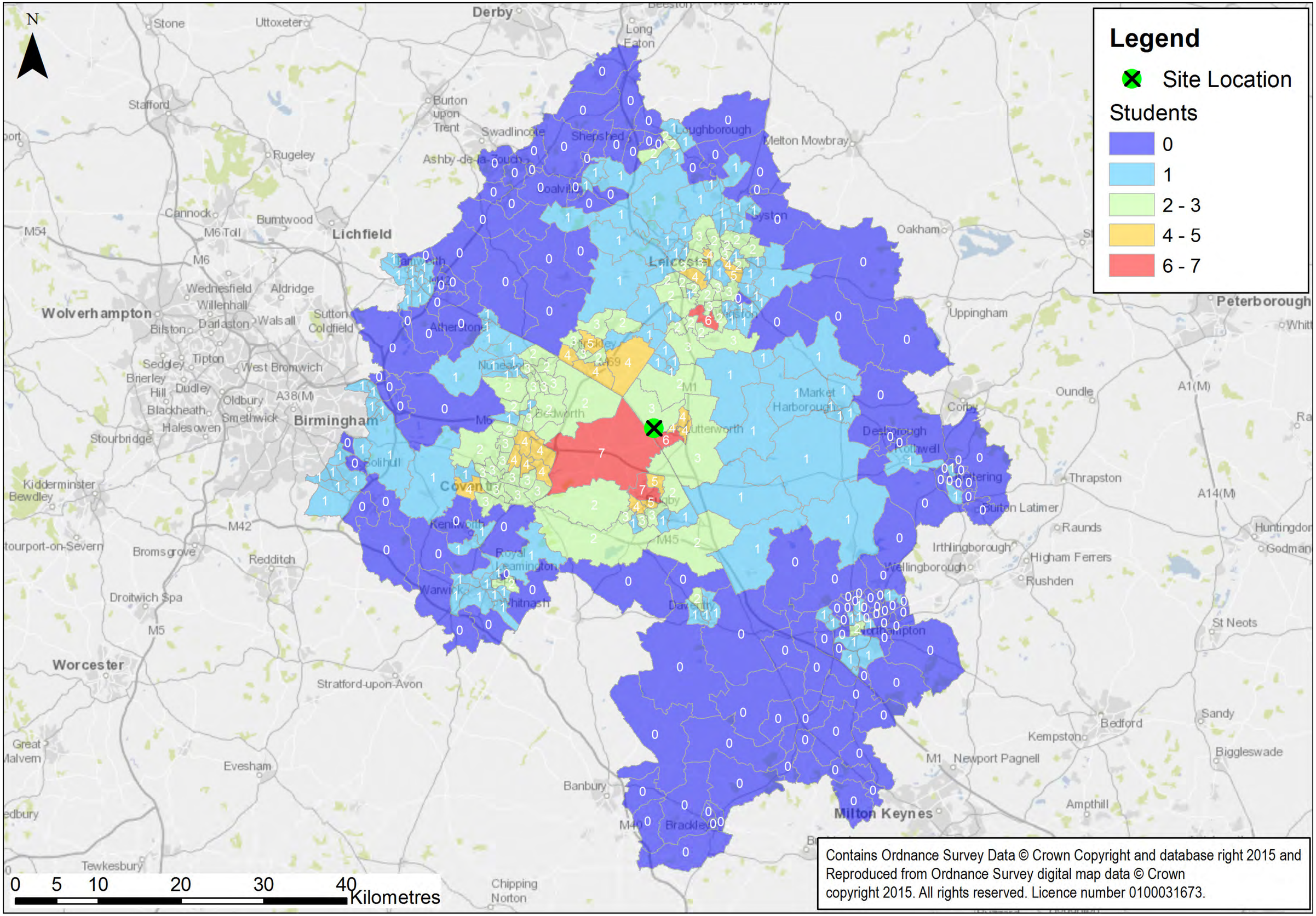
Parameter summary

Trip rate parameter range selected:	186 - 3372 (units: sqm)
Survey date date range:	01/01/07 - 27/02/14
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Magna Park Extension: Hybrid Application
Transport Assessment

Appendix W – The Gravity Model



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Magna Park Logistics Institute of Technology - Gravity Model

Council	Ward	No. of People in Age Range	Km	Mins	Gravity Model Factor (GMF)	GMF as % of ΣGMF	Students	Proportion of Students from Potential Catchment	Dir'n
Harborough	Broughton Astley-Broughton	204	12.7	15	0.908	0.33%	1	0.5%	P
	Broughton Astley-Primethrope	100	11.3	14	0.518	0.19%	1	1.0%	P
	Broughton Astley-Sutton	139	9.1	13	0.901	0.33%	1	0.7%	P
	Broughton Astley-Astley	152	7.7	15	0.943	0.34%	1	0.7%	P
	Billesdon	104	34.5	36	0.087	0.03%	0	0.0%	D
	Bosworth	129	13.7	13	0.611	0.22%	1	0.8%	D
	Dunton	122	6.7	8	1.490	0.54%	2	1.6%	Q
	Fleckney	346	23.4	24	0.600	0.22%	1	0.3%	D
	Glen	243	32.2	30	0.256	0.09%	0	0.0%	D
	Kibworth	417	26.3	26	0.604	0.22%	1	0.2%	D
	Lubenham	157	20.9	21	0.340	0.12%	1	0.6%	D
	Lutterworth Orchard	147	3.9	4	4.189	1.52%	6	4.1%	A
	Lutterworth Swift	195	5.8	8	2.618	0.95%	4	2.1%	A
	Lutterworth Springs	148	5.7	6	2.525	0.92%	4	2.7%	B
	Lutterworth Brookfield	132	4.5	5	2.987	1.08%	4	3.0%	A
	Market Harborough - Little Bowden	270	26.2	28	0.367	0.13%	1	0.4%	D
	Market Harborough - Logan	264	24.9	26	0.401	0.15%	1	0.4%	D
	Market Harborough - Great Bowden & Arden	509	25.8	27	0.724	0.26%	1	0.2%	D
	Market Harborough Welland	388	25.6	26	0.576	0.21%	1	0.3%	D
	Misterton	128	5.5	6	2.228	0.81%	3	2.4%	D
	Nevill	97	34.8	38	0.076	0.03%	0	0.0%	D
	Peatling	155	11.8	13	0.828	0.30%	1	0.6%	A
	Thurnby & Houghton	420	35.9	33	0.366	0.13%	1	0.2%	C
	Tilton	106	40.8	41	0.067	0.02%	0	0.0%	D
	Ullesthorpe	119	5.3	6	2.122	0.77%	3	2.5%	P
Blaby	Blaby South	310	10.8	18	1.289	0.47%	2	0.6%	A
	Cosby with South Whetstone	325	9.2	16	1.693	0.61%	3	0.9%	A
	Countesthorpe	415	10.5	18	1.759	0.64%	3	0.7%	A
	Croft Hill	124	11.2	17	0.533	0.19%	1	0.8%	P
	Ellis	319	19.6	23	0.669	0.24%	1	0.3%	C
	Enderby & St. John's	314	15	17	1.090	0.40%	2	0.6%	C
	Fairestone	253	19.5	23	0.532	0.19%	1	0.4%	C
	Forest	465	17.8	22	1.101	0.40%	2	0.4%	C
	Millfield	150	15.2	19	0.464	0.17%	1	0.7%	C
	Muxloe	229	18.6	22	0.524	0.19%	1	0.4%	C
	Narborough & Littlethorpe	348	11.5	16	1.568	0.57%	2	0.6%	P
	Normanton	202	16	26	0.435	0.16%	1	0.5%	N
	North Whetstone	357	11	18	1.467	0.53%	2	0.6%	A
	Pastures	356	16.2	26	0.759	0.28%	1	0.3%	N
	Ravenhurst & Fosse	524	15.3	19	1.613	0.59%	2	0.4%	C
	Saxondale	985	11	18	4.052	1.47%	6	0.6%	A
	Stanton & Flamville	415	8.3	13	2.855	1.04%	4	1.0%	P
	Winstanley	455	16.4	22	1.149	0.42%	2	0.4%	C
Rugby	Admirals and Cawston	483	13.5	16	1.931	0.70%	3	0.6%	G
	Benn	540	10.5	12	3.394	1.23%	5	0.9%	G
	Bilton	235	14	17	0.863	0.31%	1	0.4%	G
	Clifton, Churchover and Newton	100	7	8	1.184	0.43%	2	2.0%	G
	Coton and Boughton	386	8.4	9	3.656	1.33%	5	1.3%	G
	Dunsmore	411	15.9	19	1.227	0.45%	2	0.5%	G
	Eastlands	372	11.7	13	2.007	0.73%	3	0.8%	G
	Hillmorton	296	15.2	19	0.917	0.33%	1	0.3%	G
	Leam Valley	90	18.6	22	0.206	0.07%	0	0.0%	G
	New Bilton	526	11.3	13	2.915	1.06%	4	0.8%	G
	Newbold and Brownsover	562	9.2	10	4.562	1.66%	7	1.2%	G
	Paddox	228	14.4	16	0.864	0.31%	1	0.4%	G
	Revel and Binley Woods	396	7.4	8	4.527	1.64%	7	1.8%	H
	Rokeby and Overslade	524	12.9	15	2.301	0.84%	3	0.6%	G
	Wolston and the Lawfords	372	15.7	18	1.182	0.43%	2	0.5%	H
	Wolvey and Shilton	216	12.5	12	1.181	0.43%	2	0.9%	I
Oadby and Wigston	Oadby St. Peters	282	31.1	29	0.316	0.11%	0	0.0%	C
	Oadby Grange	464	32.3	29	0.502	0.18%	1	0.2%	C
	Oadby Uplands	377	31.3	28	0.434	0.16%	1	0.3%	C
	Oadby Woodlands	377	31.2	29	0.421	0.15%	1	0.3%	C
	Oadby Brocks Hill	308	31	28	0.357	0.13%	1	0.3%	C
	Wigston St. Wolstans	441	28.9	24	0.625	0.23%	1	0.2%	C
	Wigston Meadowcourt	382	29.9	26	0.490	0.18%	1	0.3%	C
	Wigston All Saints	374	29	24	0.529	0.19%	1	0.3%	C
	Wigston Fields	503	28.4	23	0.752	0.27%	1	0.2%	C
	South Wigston	515	21.2	23	1.012	0.37%	2	0.4%	A

Magna Park Logistics Institute of Technology - Gravity Model

Council	Ward	No. of People in Age Range	Km	Mins	Gravity Model Factor (GMF)	GMF as % of ΣGMF	Students	Proportion of Students from Potential Catchment	Dir'n
Nuneaton and Bedworth	Abbey	707	19.1	19	1.810	0.66%	3	0.4%	K
	Arbury	456	18.9	19	1.179	0.43%	2	0.4%	K
	Attleborough	581	16.2	16	1.996	0.72%	3	0.5%	I
	Bar Pool	591	22.1	26	0.997	0.36%	1	0.2%	I
	Bede	501	28.7	22	0.768	0.28%	1	0.2%	F
	Bulkington	328	14.7	14	1.372	0.50%	2	0.6%	I
	Camp Hill	553	21.3	25	0.999	0.36%	1	0.2%	I
	Exhall	543	24.4	16	1.252	0.45%	2	0.4%	F
	Galley Common	632	23	27	0.994	0.36%	1	0.2%	I
	Heath	480	26.9	19	0.882	0.32%	1	0.2%	F
	Kingswood	492	21.4	25	0.886	0.32%	1	0.2%	I
	Poplar	533	17.2	16	1.736	0.63%	3	0.6%	I
	Slough	502	18.7	20	1.249	0.45%	2	0.4%	I
	St Nicolas	501	17.3	17	1.543	0.56%	2	0.4%	I
	Weddington	505	19.6	20	1.208	0.44%	2	0.4%	K
	Wem Brook	643	17.7	18	1.847	0.67%	3	0.5%	I
	Whitestone	465	14.5	13	2.092	0.76%	3	0.6%	I
North Warwickshire	Arley and Whitacre	371	28	32	0.418	0.15%	1	0.3%	I
	Atherstone Central	281	24.8	24	0.462	0.17%	1	0.4%	K
	Atherstone North	235	25	24	0.383	0.14%	1	0.4%	K
	Atherstone South and Mancetter	231	23	21	0.457	0.17%	1	0.4%	K
	Baddesley Ensor and Grendon	244	29.5	28	0.297	0.11%	0	0.0%	K
	Coleshill North	238	43.3	28	0.194	0.07%	0	0.0%	F
	Coleshill South	199	40.4	25	0.191	0.07%	0	0.0%	F
	Curdworth	196	47.6	31	0.133	0.05%	0	0.0%	F
	Dordon	228	30.6	29	0.259	0.09%	0	0.0%	K
	Fillongley	183	34	27	0.199	0.07%	0	0.0%	F
	Hartshill	270	22.2	25	0.471	0.17%	1	0.4%	I
	Hurley and Wood End	274	32.7	32	0.268	0.10%	0	0.0%	K
	Kingsbury	246	50.8	35	0.142	0.05%	0	0.0%	F
	Newton Regis and Warton	242	37.9	37	0.180	0.07%	0	0.0%	K
	Polesworth East	230	33	34	0.211	0.08%	0	0.0%	K
	Polesworth West	226	32.3	31	0.231	0.08%	0	0.0%	K
	Water Orton	254	45.5	32	0.178	0.06%	0	0.0%	F
North West Leicestershire	Appleby	138	37.4	35	0.109	0.04%	0	0.0%	K
	Ashby Castle	185	43.4	41	0.110	0.04%	0	0.0%	K
	Ashby Holywell	321	50.5	39	0.171	0.06%	0	0.0%	C
	Ashby Ivanhoe	279	50.3	38	0.152	0.06%	0	0.0%	C
	Bardon	204	38.7	27	0.194	0.07%	0	0.0%	C
	Breedon	113	58.5	40	0.050	0.02%	0	0.0%	C
	Castle Donington	404	57.6	40	0.182	0.07%	0	0.0%	C
	Coalville	491	41.6	30	0.398	0.14%	1	0.2%	C
	Greenhill	503	40.8	29	0.427	0.16%	1	0.2%	C
	Hugglescote	305	41.3	29	0.256	0.09%	0	0.0%	C
	Ibstock and Heather	452	32	32	0.451	0.16%	1	0.2%	L
	Kegworth and Whatton	422	53.3	33	0.241	0.09%	0	0.0%	C
	Measham	355	39.3	37	0.256	0.09%	0	0.0%	K
	Moira	320	44.8	42	0.181	0.07%	0	0.0%	K
	Oakthorpe and Donisthorpe	160	42.1	39	0.103	0.04%	0	0.0%	K
	Ravenstone and Packington	127	43.6	33	0.091	0.03%	0	0.0%	C
	Snibston	370	42.4	32	0.279	0.10%	0	0.0%	C
	Thringstone	268	49.5	35	0.159	0.06%	0	0.0%	C
	Valley	273	33.3	36	0.235	0.09%	0	0.0%	L
	Whitwick	449	43.2	30	0.349	0.13%	1	0.2%	C

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Council	Ward	No. of People in Age Range	Km	Mins	Gravity Model Factor (GMF)	GMF as % of ΣGMF	Students	Proportion of Students from Potential Catchment	Dir'n
Charnwood	Anstey	401	32.2	22	0.544	0.20%	1	0.2%	C
	Barrow & Sileby West	409	43.4	29	0.325	0.12%	0	0.0%	C
	Birstall Wanlip	412	37.4	25	0.432	0.16%	1	0.2%	C
	Birstall Watermead	513	38.2	26	0.510	0.19%	1	0.2%	C
	East Goscote	201	43.6	29	0.159	0.06%	0	0.0%	C
	Forest Bradgate	471	35.8	28	0.473	0.17%	1	0.2%	C
	Loughborough Ashby	343	47.9	33	0.221	0.08%	0	0.0%	C
	Loughborough Dishley & Hathern	368	47.8	34	0.232	0.08%	0	0.0%	C
	Loughborough Garendon	486	47.5	32	0.324	0.12%	0	0.0%	C
	Loughborough Hastings	502	46.8	32	0.340	0.12%	1	0.2%	C
	Loughborough Lemyngton	707	47.3	36	0.431	0.16%	1	0.1%	C
	Loughborough Nanpantan	1788	44.5	28	1.416	0.51%	2	0.1%	C
	Loughborough Outwoods	587	48.4	35	0.357	0.13%	1	0.2%	C
	Loughborough Shelthorpe	588	46.8	31	0.408	0.15%	1	0.2%	C
	Loughborough Southfields	2181	47.8	34	1.377	0.50%	2	0.1%	C
	Loughborough Storer	1965	48	34	1.235	0.45%	2	0.1%	C
	Mountsorrel	467	41.2	28	0.403	0.15%	1	0.2%	C
	Queniborough	200	43.8	30	0.153	0.06%	0	0.0%	C
	Quorn & Mountsorrel Castle	369	44.4	30	0.278	0.10%	0	0.0%	C
	Rothley & Thurcaston	377	35.3	26	0.408	0.15%	1	0.3%	C
	Shepshed East	411	44.2	29	0.320	0.12%	0	0.0%	C
	Shepshed West	455	45.4	31	0.326	0.12%	0	0.0%	C
	Sileby	532	43.4	29	0.422	0.15%	1	0.2%	C
	Syston East	463	41.1	29	0.391	0.14%	1	0.2%	C
	Syston West	476	39.7	27	0.440	0.16%	1	0.2%	C
	The Wolds	157	43.1	30	0.122	0.04%	0	0.0%	C
	Thurmaston	715	42.5	30	0.566	0.21%	1	0.1%	C
	Wreake Villages	213	41.3	30	0.174	0.06%	0	0.0%	C
Kettering	All Saints	616	43.7	32	0.450	0.16%	1	0.2%	E
	Avondale Grange	449	44.2	33	0.316	0.11%	0	0.0%	E
	Barton	322	45.3	36	0.205	0.07%	0	0.0%	E
	Brambleside	286	43.4	32	0.210	0.08%	0	0.0%	E
	Burton Latimer	530	48.5	36	0.315	0.11%	0	0.0%	E
	Desborough Loatland	343	41.3	30	0.280	0.10%	0	0.0%	E
	Desborough St. Giles	318	39.9	30	0.269	0.10%	0	0.0%	E
	Ise Lodge	440	45.5	37	0.273	0.10%	0	0.0%	E
	Northfield	163	41.7	30	0.131	0.05%	0	0.0%	E
	Pipers Hill	352	43.7	35	0.239	0.09%	0	0.0%	E
	Queen Eleanor and Buccleuch	157	46.4	34	0.102	0.04%	0	0.0%	E
	Rothwell	553	36.9	26	0.571	0.21%	1	0.2%	E
	Slade	315	47.2	35	0.197	0.07%	0	0.0%	E
	St. Michaels and Wicksteed	516	44.6	36	0.335	0.12%	1	0.2%	E
	St. Peters	259	43	32	0.192	0.07%	0	0.0%	E
	Welland	116	41.1	32	0.090	0.03%	0	0.0%	E
	William Knibb	397	43.2	33	0.286	0.10%	0	0.0%	E
Daventry	Abbey North	726	23.9	22	1.333	0.48%	2	0.3%	E
	Abbey South	188	23.8	22	0.346	0.13%	1	0.5%	E
	Brixworth	468	37.3	29	0.438	0.16%	1	0.2%	D
	Drayton	449	23.6	24	0.772	0.28%	1	0.2%	E
	Hill	439	23.5	24	0.757	0.27%	1	0.2%	E
	Long Buckby	275	26.3	25	0.413	0.15%	1	0.4%	E
	Moulton	360	40.8	38	0.244	0.09%	0	0.0%	E
	Spratton	100	30.2	25	0.131	0.05%	0	0.0%	E
	Weedon	175	28.7	25	0.242	0.09%	0	0.0%	E
	Welford	107	16.3	17	0.347	0.13%	1	0.9%	D
	Woodford	234	39	38	0.166	0.06%	0	0.0%	E
	Yelvertoft	132	14	13	0.613	0.22%	1	0.8%	E
	Barby and Kilsby	277	15.7	14	1.093	0.40%	2	0.7%	E
	Braunston and Welton	119	28.1	25	0.167	0.06%	0	0.0%	E
	Ravensthorpe	85	27.5	25	0.122	0.04%	0	0.0%	E
	Walgrave	123	39.2	32	0.100	0.04%	0	0.0%	E

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Northampton	Abington	821	40.7	38	0.558	0.20%	1	0.1%	E
	Billing	631	52.1	39	0.325	0.12%	0	0.0%	E
	Boothville	290	41.8	39	0.187	0.07%	0	0.0%	E
	Brookside	437	44.5	42	0.248	0.09%	0	0.0%	E
	Castle	1424	40	35	1.058	0.38%	2	0.1%	E
	Delapre & Briar Hill	1034	41.7	34	0.755	0.27%	1	0.1%	E
	East Hunsbury	686	43	34	0.485	0.18%	1	0.1%	E
	Eastfield	379	40.7	38	0.257	0.09%	0	0.0%	D
	Headlands	357	40.8	38	0.242	0.09%	0	0.0%	D
	Kings Heath	369	37.6	37	0.277	0.10%	0	0.0%	E
	Kingsley	448	40.5	37	0.313	0.11%	0	0.0%	E
	Kingsthorpe	264	39.1	36	0.196	0.07%	0	0.0%	E
	Nene Valley	697	47.9	37	0.410	0.15%	1	0.1%	E
	New Duston	585	34.2	33	0.534	0.19%	1	0.2%	E
	Obelisk	240	39.3	36	0.177	0.06%	0	0.0%	E
	Old Duston	408	37.9	32	0.346	0.13%	1	0.2%	E
	Park	244	49.4	39	0.133	0.05%	0	0.0%	E
	Parklands	263	40.1	37	0.186	0.07%	0	0.0%	D
	Phippsville	340	40.4	37	0.238	0.09%	0	0.0%	E
	Rectory Farm	423	49.3	42	0.217	0.08%	0	0.0%	E
	Riverside	293	50.5	38	0.159	0.06%	0	0.0%	E
	Rushmills	348	49.4	37	0.198	0.07%	0	0.0%	E
	Semilong	772	42	36	0.533	0.19%	1	0.1%	E
	Spencer	446	41.8	35	0.317	0.11%	0	0.0%	E
	Spring Park	270	38.7	34	0.212	0.08%	0	0.0%	E
	St James	378	41.1	33	0.287	0.10%	0	0.0%	E
	St. Davids	549	39.5	39	0.374	0.14%	1	0.2%	E
	Sunnyside	459	45.9	35	0.296	0.11%	0	0.0%	E
	Talavera	942	43.5	39	0.585	0.21%	1	0.1%	E
	Trinity	639	39.4	35	0.482	0.18%	1	0.2%	E
	Upton	280	36.3	31	0.255	0.09%	0	0.0%	E
	West Hunsbury	289	38.7	30	0.253	0.09%	0	0.0%	E
	Westone	242	51.7	40	0.123	0.04%	0	0.0%	E
South Northamptonshire	Astwell	113	58.8	48	0.043	0.02%	0	0.0%	E
	Blakesley and Cote	158	48	43	0.081	0.03%	0	0.0%	E
	Blisworth and Roade	277	47.9	37	0.163	0.06%	0	0.0%	E
	Brackley East	278	66.5	49	0.000	0.00%	0	0.0%	E
	Brackley South	305	68.2	50	0.000	0.00%	0	0.0%	E
	Brackley West	282	66.6	49	0.000	0.00%	0	0.0%	E
	Brafield and Yardley	213	56.6	43	0.093	0.03%	0	0.0%	E
	Cosgrove and Grafton	114	58.4	46	0.045	0.02%	0	0.0%	E
	Danvers and Wardoun	189	45	46	0.098	0.04%	0	0.0%	G
	Deanshanger	255	58.6	49	0.096	0.03%	0	0.0%	E
	Grange Park	224	44.6	34	0.152	0.06%	0	0.0%	E
	Hackleton	129	51.3	41	0.065	0.02%	0	0.0%	E
	Harpole and Grange	281	35.4	29	0.277	0.10%	0	0.0%	E
	Heyfords and Bugbrooke	336	35.4	31	0.313	0.11%	0	0.0%	E
	Kings Sutton	118	60.8	57	0.000	0.00%	0	0.0%	G
	Kingthorn	85	51.7	40	0.043	0.02%	0	0.0%	E
	Little Brook	128	68.1	66	0.000	0.00%	0	0.0%	G
	Middleton Cheney	247	55	53	0.092	0.03%	0	0.0%	E
	Old Stratford	112	55.8	45	0.047	0.02%	0	0.0%	E
	Salcey	143	51.7	42	0.070	0.03%	0	0.0%	E
	Silverstone	123	57.4	43	0.052	0.02%	0	0.0%	E
	Steane	104	71.7	52	0.000	0.00%	0	0.0%	E
	Tove	79	54.7	45	0.034	0.01%	0	0.0%	E
	Towcester Brook	408	46	43	0.220	0.08%	0	0.0%	E
	Towcester Mill	213	41.7	38	0.141	0.05%	0	0.0%	E
	Washington	78	47.9	45	0.038	0.01%	0	0.0%	E
	Whittlewood	114	55.4	44	0.050	0.02%	0	0.0%	E
Warwick	Bishop's Tachbrook	144	37.3	37	0.109	0.04%	0	0.0%	H
	Budbrooke	307	46	34	0.202	0.07%	0	0.0%	J
	Cubbington	318	27.9	29	0.395	0.14%	1	0.3%	H
	Abbey	387	40.4	31	0.315	0.11%	0	0.0%	J
	Park Hill	474	36.9	29	0.448	0.16%	1	0.2%	J
	St John's	418	38.4	28	0.390	0.14%	1	0.2%	J
	Lapworth	153	60.4	41	0.000	0.00%	0	0.0%	F
	Brunswick	933	32.8	36	0.815	0.30%	1	0.1%	H
	Clarendon	1034	31.2	32	1.057	0.38%	2	0.2%	H
	Crown	442	37.4	40	0.310	0.11%	0	0.0%	G
	Manor	510	43.3	32	0.376	0.14%	1	0.2%	J
	Milverton	876	32.5	33	0.838	0.30%	1	0.1%	H
	Willes	553	31.9	33	0.539	0.20%	1	0.2%	H
	Leek Wootton	125	41.3	29	0.104	0.04%	0	0.0%	J
	Radford Semele	153	29.5	30	0.174	0.06%	0	0.0%	H
	Stoneleigh	169	33.8	27	0.185	0.07%	0	0.0%	J
	Warwick North	482	42.7	31	0.370	0.13%	1	0.2%	H
	Warwick South	611	46	34	0.402	0.15%	1	0.2%	H
	Warwick West	643	44.7	32	0.458	0.17%	1	0.2%	H
	Whitnash	577	34	38	0.463	0.17%	1	0.2%	H

Magna Park Logistics Institute of Technology - Gravity Model

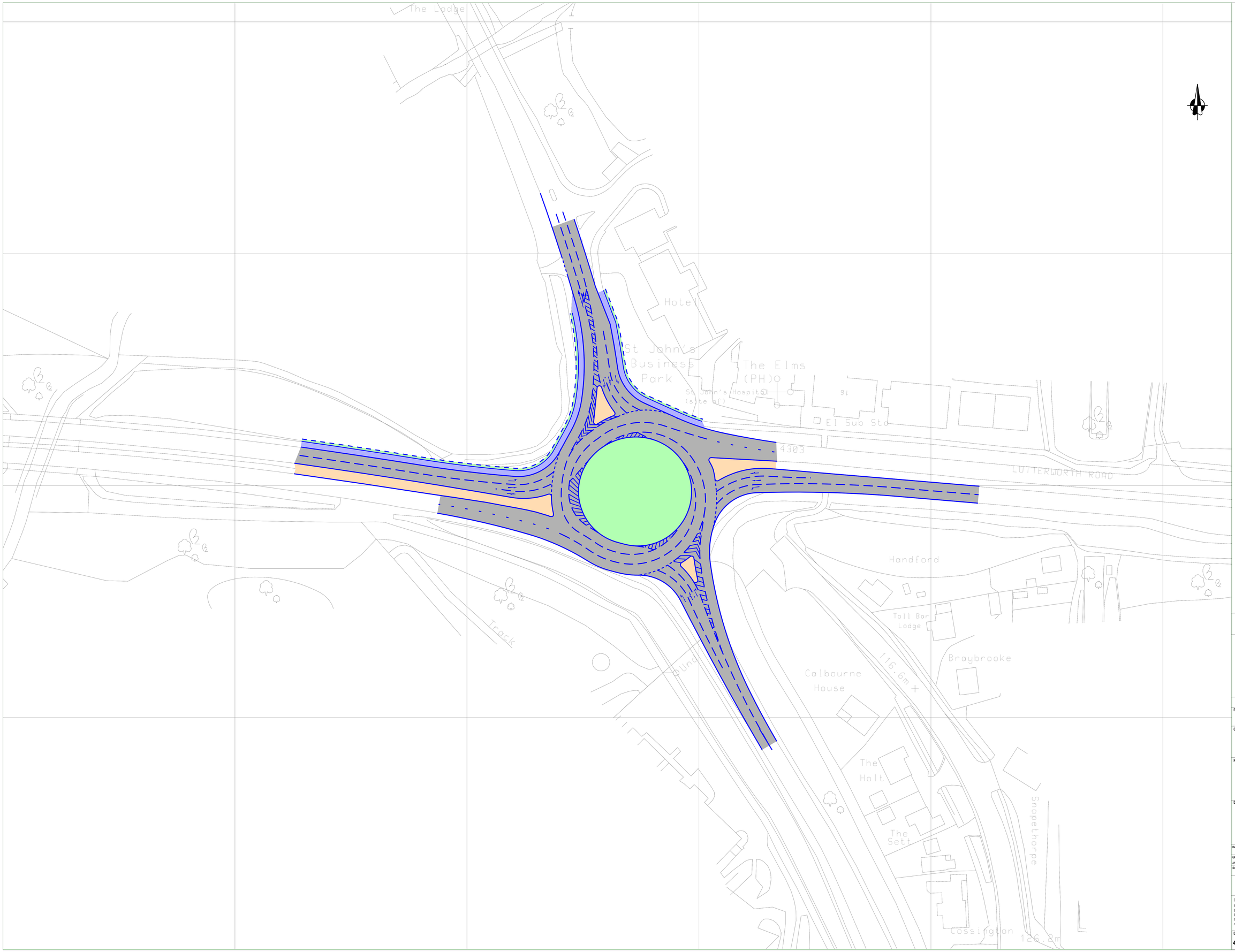
Council	Ward	No. of People in Age Range	Km	Mins	Gravity Model Factor (GMF)	GMF as % of ΣGMF	Students	Proportion of Students from Potential Catchment	Dir'n
Hinckley and Bosworth	Ambien	212	25.4	26	0.316	0.11%	0	0.0%	K
	Barlestone, Nailstone & Osbaston	215	26.4	27	0.299	0.11%	0	0.0%	L
	Barwell	667	17.1	18	1.972	0.72%	3	0.5%	N
	Burbage Sketchley & Stretton	503	13	11	2.846	1.03%	4	0.8%	K
	Burbage St Catherines & Lash Hill	300	12.3	12	1.663	0.60%	2	0.7%	N
	Cadeby, Carlton Market Bosworth with Shackerstone	176	32.9	34	0.162	0.06%	0	0.0%	K
	Earl Shilton	671	20.1	23	1.380	0.50%	2	0.3%	N
	Groby	495	31.8	22	0.681	0.25%	1	0.2%	C
	Hinckley Castle	423	13.3	14	1.929	0.70%	3	0.7%	L
	Hinckley Clarendon	527	13	12	2.783	1.01%	4	0.8%	L
	Hinckley De Montfort	638	13.3	12	3.306	1.20%	5	0.8%	L
	Hinckley Trinity	423	13.6	13	2.016	0.73%	3	0.7%	L
	Markfield, Stanton & Field Head	327	37.8	25	0.338	0.12%	1	0.3%	C
	Newbold Verdon with Desford & Peckleton	484	25.1	26	0.732	0.27%	1	0.2%	L
	Ratby, Bagworth & Thornton	415	39.9	28	0.372	0.13%	1	0.2%	C
	Twycross & Witherley with Sheepy	146	32.4	29	0.157	0.06%	0	0.0%	K
Tamworth	Amington	645	36.7	36	0.508	0.18%	1	0.2%	K
	Belgrave	623	35.2	32	0.568	0.21%	1	0.2%	K
	Bolehall	533	36.9	35	0.428	0.16%	1	0.2%	K
	Castle	455	38.8	36	0.340	0.12%	1	0.2%	K
	Glascote	610	35.8	33	0.532	0.19%	1	0.2%	K
	Mercian	425	35.7	34	0.362	0.13%	1	0.2%	K
	Spital	461	38.9	37	0.335	0.12%	0	0.0%	K
	Stonydelph	649	33.6	32	0.619	0.22%	1	0.2%	K
	Trinity (Dosthill)	487	35.1	33	0.433	0.16%	1	0.2%	K
	Wilnecote	704	34.7	34	0.617	0.22%	1	0.1%	K
Leicester	Abbey	1281	35.8	26	1.366	0.50%	2	0.2%	C
	Aylestone	760	26.1	20	1.384	0.50%	2	0.3%	C
	Beaumont Leys	1380	33.5	23	1.736	0.63%	3	0.2%	C
	Belgrave	1096	36.6	27	1.108	0.40%	2	0.2%	C
	Braunstone Park & Rowley Fields	1656	27.1	20	2.903	1.05%	4	0.2%	C
	Castle	634	28.1	24	0.925	0.34%	1	0.2%	C
	Charnwood	1130	42.3	27	0.973	0.35%	1	0.1%	C
	Coleman	1232	33.3	30	1.257	0.46%	2	0.2%	C
	Evington	740	33.5	30	0.750	0.27%	1	0.1%	C
	Eyres Monsell	925	26.1	20	1.685	0.61%	3	0.3%	C
	Fosse	1131	23.4	17	2.610	0.95%	4	0.4%	C
	Freeman	1529	29.4	27	1.929	0.70%	3	0.2%	C
	Humberstone & Hamilton	1339	41.4	32	1.036	0.38%	2	0.1%	C
	Knighton	1299	28.3	23	1.950	0.71%	3	0.2%	C
	Latimer	1065	24.1	19	2.190	0.80%	3	0.3%	C
	New Parks	1401	28.4	21	2.252	0.82%	3	0.2%	C
	Rushey Mead	1125	38.1	21	1.302	0.47%	2	0.2%	C
	Spinney Hills	2434	31.7	31	2.526	0.92%	4	0.2%	C
	Stoneygate	3100	31.3	28	3.567	1.29%	5	0.2%	C
	Thurncourt	804	42.4	34	0.577	0.21%	1	0.1%	C
	Westcotes	454	27.1	22	0.738	0.27%	1	0.2%	C
	Western Park	1026	27.5	21	1.706	0.62%	3	0.3%	C
Solihull	Bickenhill	895	45.92	32	0.619	0.22%	1	0.1%	F
	Blythe	797	52.8	38	0.413	0.15%	1	0.1%	F
	Castle Bromwich	912	51.52	37	0.496	0.18%	1	0.1%	F
	Chelmsley Wood	1096	43.68	32	0.801	0.29%	1	0.1%	F
	Dorridge and Hockley Heath	664	56.8	41	0.299	0.11%	0	0.0%	F
	Elmdon	760	48.96	36	0.447	0.16%	1	0.1%	F
	Kingshurst and Fordbridge	1158	45.44	34	0.773	0.28%	1	0.1%	F
	Knowle	572	52.16	38	0.301	0.11%	0	0.0%	F
	Lyndon	951	69.44	48	0.000	0.00%	0	0.0%	F
	Meriden	705	47.84	35	0.434	0.16%	1	0.1%	F
	Olton	769	55.52	42	0.348	0.13%	1	0.1%	F
	Shirley East	846	55.2	43	0.378	0.14%	1	0.1%	F
	Shirley South	852	55.36	44	0.372	0.14%	1	0.1%	F
	Shirley West	839	55.52	45	0.358	0.13%	1	0.1%	F
	Silhill	689	54.24	42	0.320	0.12%	0	0.0%	F
	Smith's Wood	1177	52.32	40	0.591	0.21%	1	0.1%	F
	St Alphege	949	52	37	0.511	0.19%	1	0.1%	F

Magna Park Logistics Institute of Technology - Gravity Model

Council	Ward	No. of People in Age Range	Km	Mins	Gravity Model Factor (GMF)	GMF as % of ΣGMF	Students	Proportion of Students from Potential Catchment	Dir'n
Coventry	Bablake	1101	28.7	26	1.470	0.53%	2	0.2%	J
	Binley and Willenhall	1314	28.3	22	2.044	0.74%	3	0.2%	J
	Cheylesmore	1082	21.3	24	2.035	0.74%	3	0.3%	H
	Earlsdon	1370	29.8	27	1.707	0.62%	3	0.2%	J
	Foleshill	1759	28.4	20	2.935	1.07%	4	0.2%	F
	Henley	1390	24	19	2.869	1.04%	4	0.3%	J
	Holbrook	1392	29.1	21	2.182	0.79%	3	0.2%	F
	Longford	1462	26.3	18	2.862	1.04%	4	0.3%	F
	Lower Stoke	1704	28.7	26	2.274	0.83%	3	0.2%	J
	Radford	1684	31.5	25	2.118	0.77%	3	0.2%	F
	Sherbourne	1748	32.9	29	1.858	0.67%	3	0.2%	F
	St Michael's	996	24.7	19	1.997	0.72%	3	0.3%	J
	Upper Stoke	1694	30.6	22	2.429	0.88%	4	0.2%	F
	Wainbody	1265	24.9	28	1.795	0.65%	3	0.2%	H
	Westwood	2348	29.2	33	2.473	0.90%	4	0.2%	H
	Whoberley	1900	30.7	30	2.094	0.76%	3	0.2%	F
	Woodlands	1186	37.4	33	0.993	0.36%	1	0.1%	F
	Wyken	1191	22.8	18	2.700	0.98%	4	0.3%	F

Magna Park Extension: Hybrid Application
Transport Assessment

Appendix X – Proposed Improvements at A4303/A426 Roundabout



NOTES

This drawing is for preliminary purposes only and is subject to amendment during design development. UNDER NO CIRCUMSTANCES MUST THIS DRAWING BE USED FOR CONSTRUCTION PURPOSES

Revision Details	By / Check	Date	Suffix

Purpose of issue

For Information

Client

IDI Gazeley
Brookfield Logistics Properties™

Project Title

MAGNA PARK EXTENSION HYBRID APPLICATION

Drawing Title

Proposed Roundabout Improvements

Designed	Drawn	Checked	Approved	Date
SDW	SDW	JRA	SCPF	April 15

URS Internal Project No.	Suitability
47066811	
Scale @ A0 1:500	Zone / Mileage

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URS Infrastructure & Environment UK Limited
URS House
Horne Lane
Bedford
MK40 1TS
www.ursglobal.com

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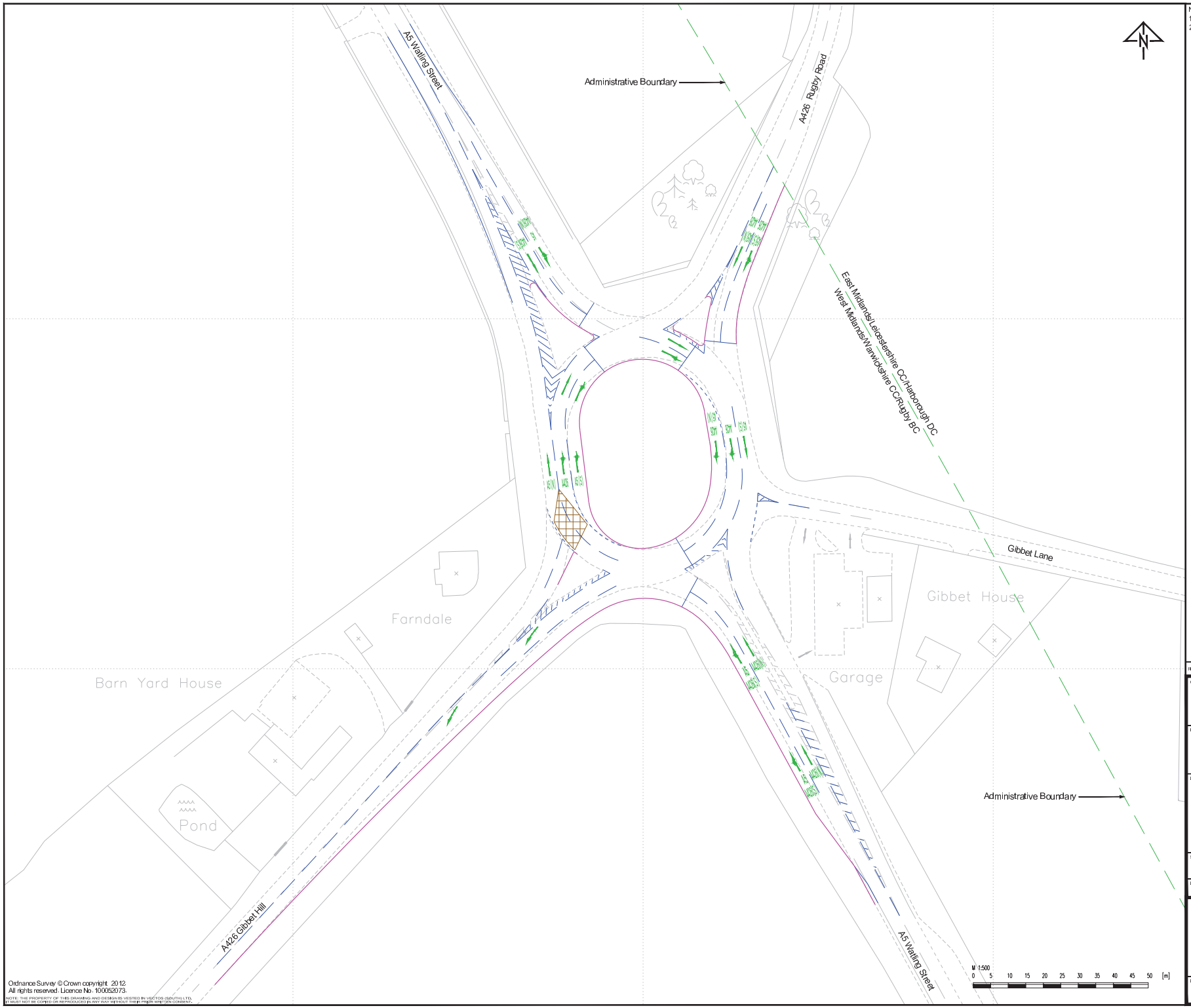
Drawing Number	Rev
47066811/A008/SK14	

Magna Park Extension: Hybrid Application
Transport Assessment

Appendix Y – Improvement Scheme at Gibbet Hill Roundabout as Part of DIRFT III



Notes:
1. For associated red line, see Doc, No. 2.4A.
2. The proposed works are shown in colour.

REV.	DETAILS	DRAWN	CHECKED	DATE
D	Minor amendments, Administrative boundary added. Notes revised.	DSN	AT	14.12.2012
C	Minor amendments, Frame to A1 from A3.	JM	AT	22.8.2012
B	Amendments Following Comments 26.03.12.	AH	AT	1.5.2012
A	Central island revised. A5(S) approach amended to include existing extended splitter island. Yellow box marking added.	DSN	AT	19.3.2012

CLIENT:
Rugby Radio Station Ltd Partnership

PROJECT:
The Daventry International Rail Freight Interchange Expansion (DIRFT III) Order [20...]

DRAWING TITLE:
Reg. 5(2)(o) Doc No. 2.13A
Gibbet Roundabout
Proposed Junction Improvements
General Arrangement

SCALES:
1:500 @ A1

DRAWN	CHECKED	DATE
DSN	AT	14.3.2012

vectos transport planning specialists
Network Building, 97 Tottenham Court Road, London W1T 4TP
t: 020 7580 7373 e: enquiries@vectos.co.uk

DRAWING NUMBER: 110041/PD/8
REVISION: D

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