MAGNA PARK Extension

HYBRID APPLICATION:

15/01531/OUT

Traffic Survey Report

21 April 2016

IDI Gazeley

Brookfield Logistics Properties

www.brookfieldlogisticsproperties.com

Magna Park, Lutterworth

Traffic Survey Report

April 2016

Revision Schedule

Rev	Date	Details	Prepared by	Reviewed by	Approved by
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1. INTRODUCTION

1.1 General

1.1.1 IDI Gazeley has commissioned AECOM to undertake Automatic Traffic Counts (ATC) at a variety of locations surrounding Magna Park near Lutterworth. The primary purpose of the surveys is to establish whether an increase in traffic volumes on roads that pass through some local villages, particularly those situated to the north of Magna Park coincides with the main shift changeovers at Magna Park. Residents of Ullesthorpe, Bitteswell and Ashby Parva are especially concerned about the impact of Magna Park and there is a local perception that large numbers of employees cut through these villages to avoid travelling through Lutterworth and on the A4303 as part of their journey to and from work.

1.1.2 There is also a perception that large numbers of heavy goods vehicles (HGVs) use the minor road network to the north of Magna Park and that the majority have either an origin or destination at the Park. To investigate this perception further, IDI Gazeley has committed to undertaking Automatic Number Plate Recognition (ANPR) surveys during April 2016. The ANPR survey, which will last for one complete week, will identify if HGVs that are related to Magna Park are using roads that are prohibited through the Magna Park Routing Agreement. The results of this survey will be reported in a separate report that will be prepared following completion of the ANPR survey at the end of April.

1.1.3 To provide an indication if routes prohibited by the routing agreement are being used by significant numbers of HGVs, the ATC data was classified by vehicle type to allow the number of HGVs to be identified. Although this will not provide a direct link to Magna Park, it will highlight any routes where there are higher than expected volumes of HGVs which could be an indication of the breach of the agreement.

1.1.4 Magna Park is one of the largest dedicated distribution developments in Europe. It occupies some 200 hectares and provides over 8.3 million sq.ft. (771,155m^2) of distribution floorspace. The site has been established for some 28 years, comprises over 30 units and provides in the region of 9,300 jobs.

1.1.5 In January 2016 a planning application to expand Magna Park to the north of Mere Lane received a resolution to grant by Harborough District Council (HDC). This will deliver over one million sq.ft. of B8 floorspace and is expected to provide up to 1,200 additional jobs. IDI Gazeley has lodged a second application with HDC to expand onto a further 200 hectares to the north of Mere Lane and onto a second smaller site of almost seven hectares to the south of the A4303.

1.1.6 To establish whether the shift patterns at Magna Park result in a corresponding increase in traffic flows through neighbouring villages, a number of ATCs have been commissioned. These were located in strategic locations within Ullesthorpe, Bitteswell and Ashby Parva and on other minor roads to the north of Magna Park. ATCs were also located on Lutterworth High Street and on Coal Pit Lane between the A5 and the village of Willey.

1.1.7 When a similar exercise was undertaken in 2013, traffic flows at two sites to the east of the M1 in the village of South Kilworth were also recorded on the basis that they are far enough away from Magna Park not to be significantly influenced by the shift changeover. It was considered that traffic flows through the village of South Kilworth provided 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. For comparative purposes the results of the 2013 surveys for the two sites in South Kilworth have been included in this report.

1.1.8 The results of an ATC undertaken on the A4303 in 2015 between Shackleton Way and Coventry Road have also been included. The A4303 is the main route serving Magna Park from the east and as such should highlight the influence of the main shift changeovers at 6am, 2pm and 10pm. The pattern of traffic flows recorded on the A4303 can then be compared with the pattern recorded through the villages to the north of Magna Park to establish if there are any similarities.

1.2 Layout of Report

1.2.1 Following this introduction, Section 2 provides a brief description of the existing conditions at Magna Park.

1.2.2 Section 3 summarises the ATC data to establish if the shift changeover at Magna Park influences traffic flows on the minor road network to the north of the Park. The ATC data is assessed further to see if there are any areas that experience higher than expected flows of HGVs.

1.2.3 The conclusions of this study are set out in Section 4.

2. MAGNA PARK

2.1 Existing Site

2.1.1 IDI 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 28 years the site has developed to become Europe's largest dedicated distribution park and currently provides over 8 million sq.ft. of floorspace and employs around 9,300 people.

2.1.2 There are currently almost 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 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 original Section 106 Agreement and are provided to all occupiers of 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.

2.1.6 Magna Park has 24 hour unrestricted operation with most occupiers operating standard continental shift patterns where shift changes occur at 6am, 2pm and 10pm. However some companies change shifts an hour later than the standard model at 7am, 3pm and 11pm primarily to avoid peak loadings on the highway network in and around the Park.

2.1.7 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 Shackleton Way. This is a single carriageway and forms a left in/ left out junction with the A4303.

2.1.8 The southern arm of the main access roundabout provides access to the new Headquarters for George Clothing and to a separate unit occupied by Culina.

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, ATCs were commissioned at eight sites during March 2016. The plan below shows the approximate location of the ATCs and also shows the two sites in South Kilworth that were surveyed in 2013 (denoted by purple circles) and the site on the A4303 where data was collected in 2015 (denoted by a blue circle).

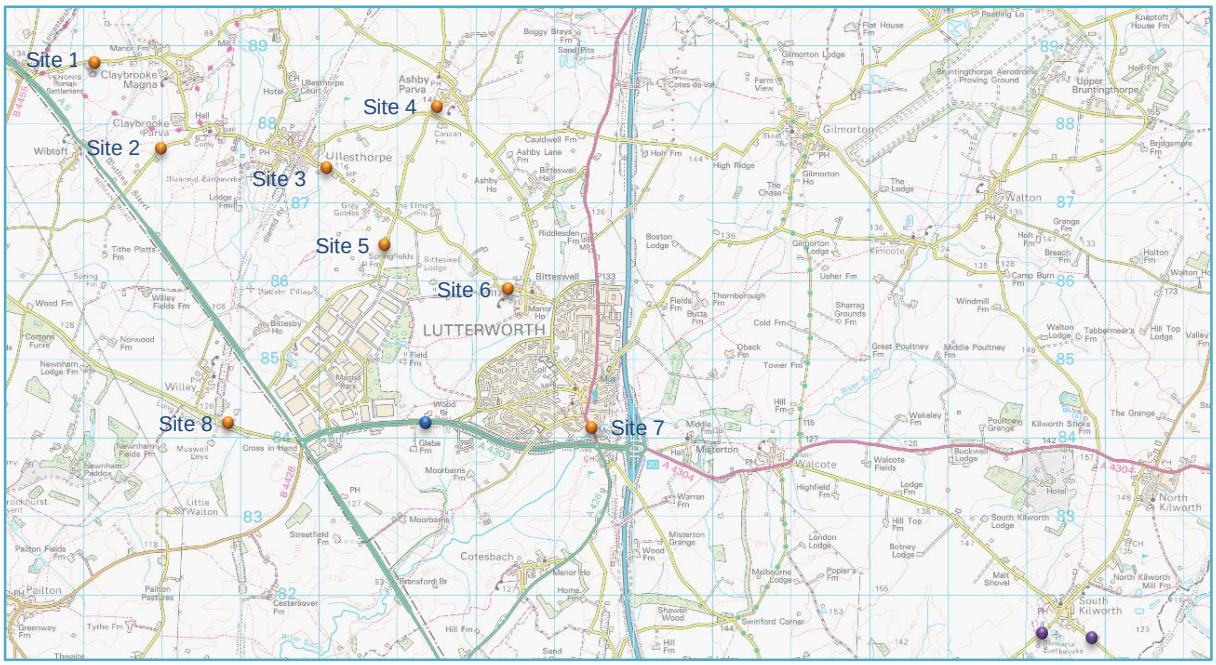


Figure 2: Location of ATCs

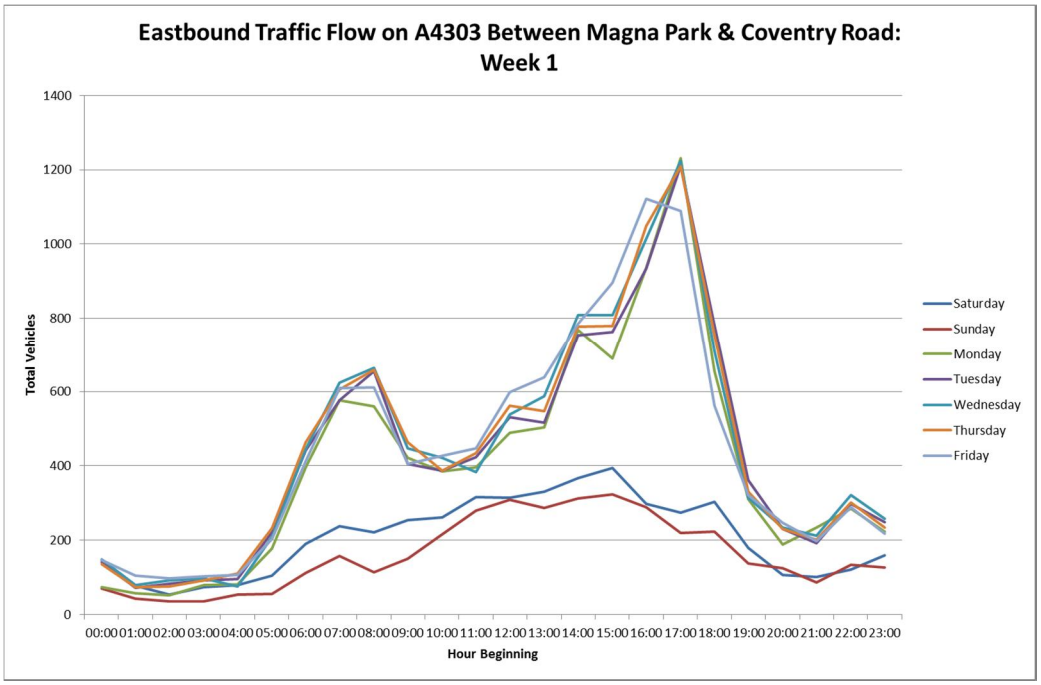
3.1.2 The ATCs at sites 1 to 8 were in place between Wednesday 2 March and Tuesday 15 March 2016 providing 24 hour data for a continuous two week period. Vehicles were classified based on axle length although for the purposes of analysing traffic patterns during the shift changeover vehicle types have been combined to show the general trend for all vehicles.

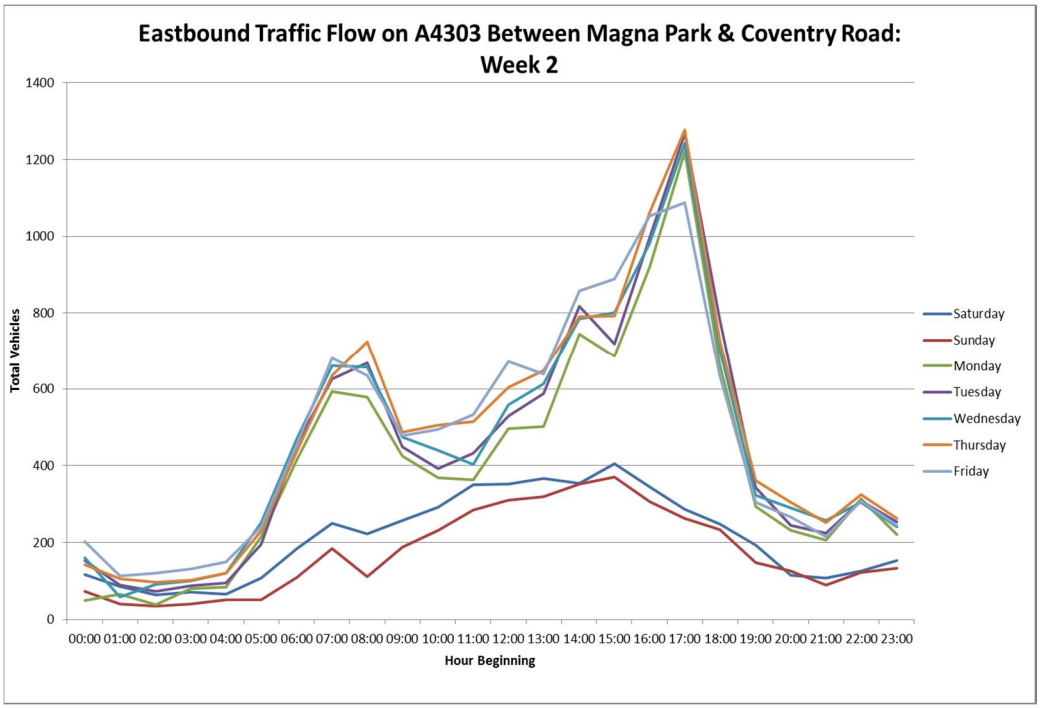
3.2 Summary of ATC Results

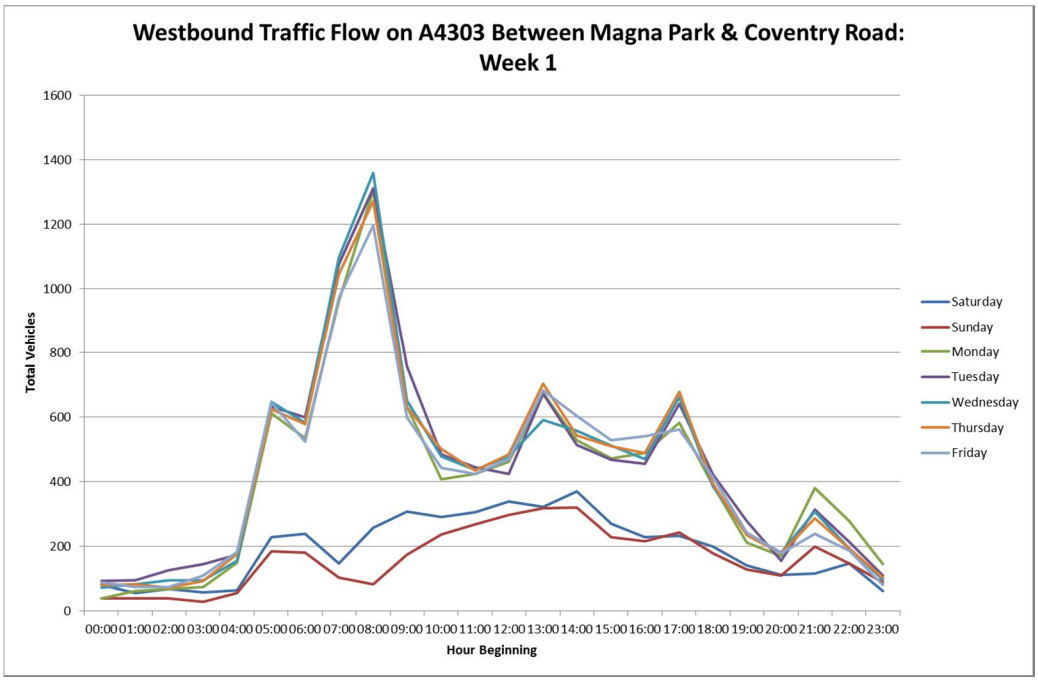
3.2.1 The ATC data has been summarised in a sequence of Excel charts that are presented below followed by a brief commentary of the results.

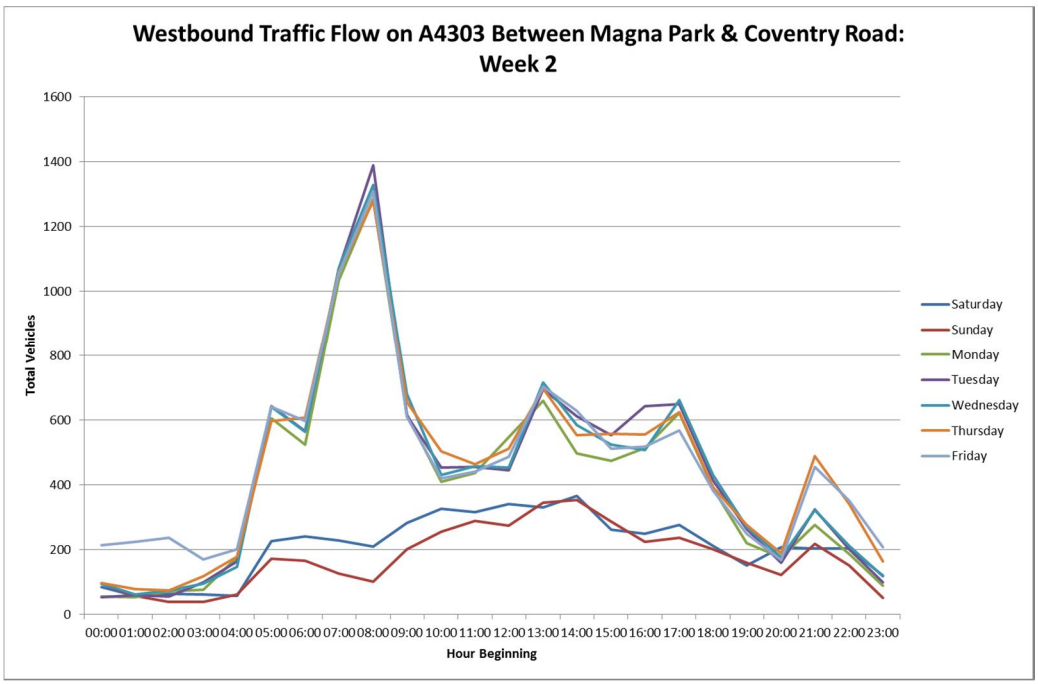
A4303 between Magna Park and Coventry Road

3.2.2 This site is located on the A4303 between Magna Park and Coventry Road. The A4303 provides a link between the M1 at Junction 20 and the A5 and is also the main route serving Magna Park to the east. It would therefore be expected to carry high volumes of traffic particularly during the traditional commuter peaks and during the main shift changeovers at Magna Park.









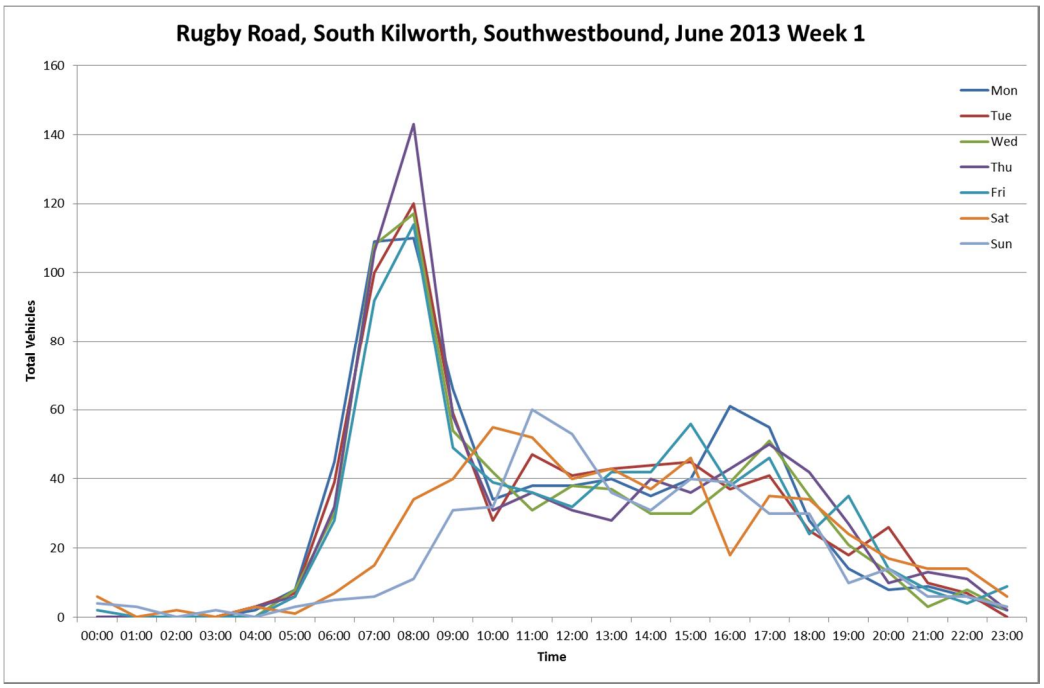
3.2.3 Referring to the charts showing the eastbound flow it can be seen that the busiest period is the evening peak when typically during the week there are around 1,200 vehicles per hour on the A4303. The flow during the morning peak is typically between 600 and 700 vehicles per hour. The influence of the shift changeover at Magna Park can also be seen particularly at 2pm and 10pm when there are distinct spikes in demand. At the weekend flows are much lower remaining below 400 vehicles per hour throughout the day. However even at the weekend the influence of Magna Park is apparent with small increases in traffic flows at the shift changeover.

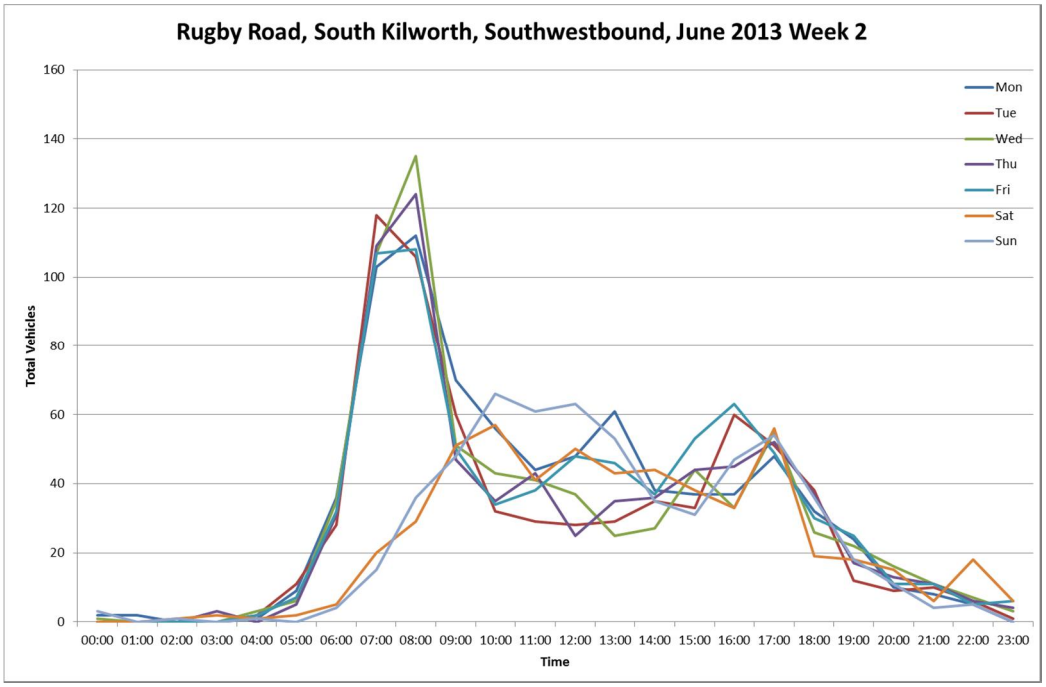
3.2.4 In a westbound direction the pattern is reversed with around 1,300 vehicles per hour in the morning peak and around 650 vehicles per hour during the evening peak. The influence of the shift changeover at Magna Park is even more noticeable in a westbound direction with distinct spikes at

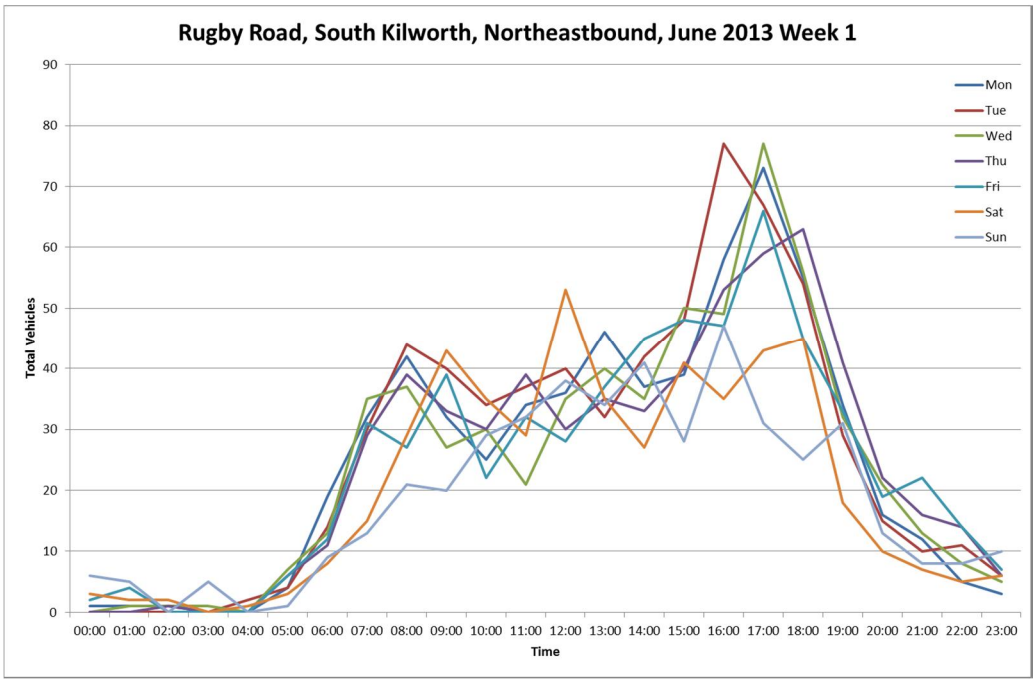
6am, 2pm and 10pm. As above flows at the weekend are much lower remaining below 400 vehicles per hour throughout the day. As above the influence of Magna Park is noticeable at the shift changeover.

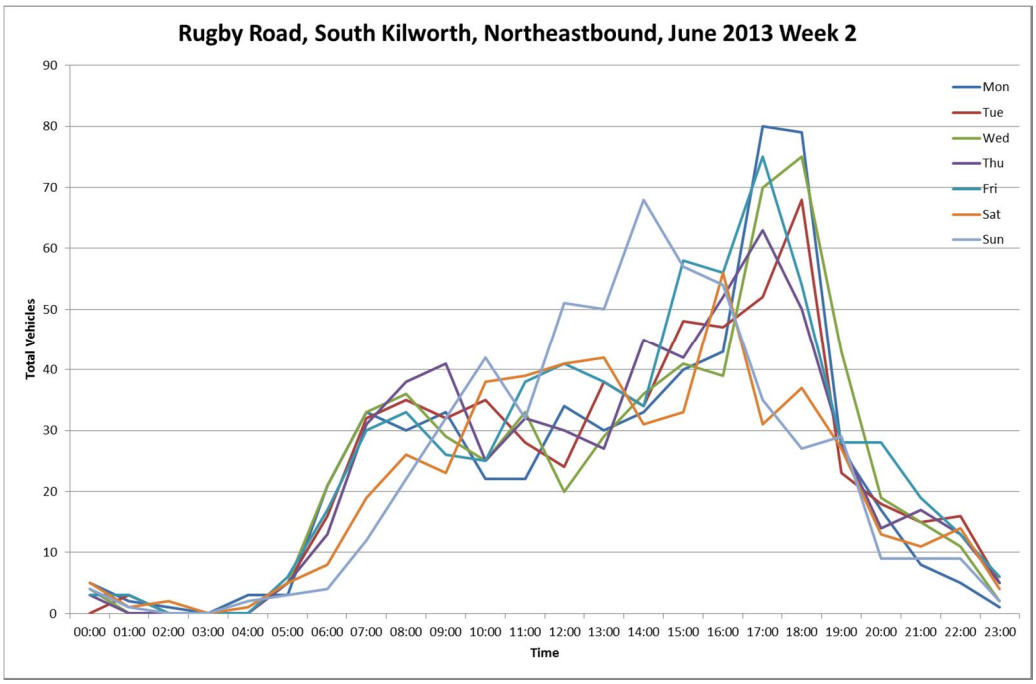
Rugby Road, South Kilworth

3.2.5 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 for traffic flows not to be influenced by the shift changeover.







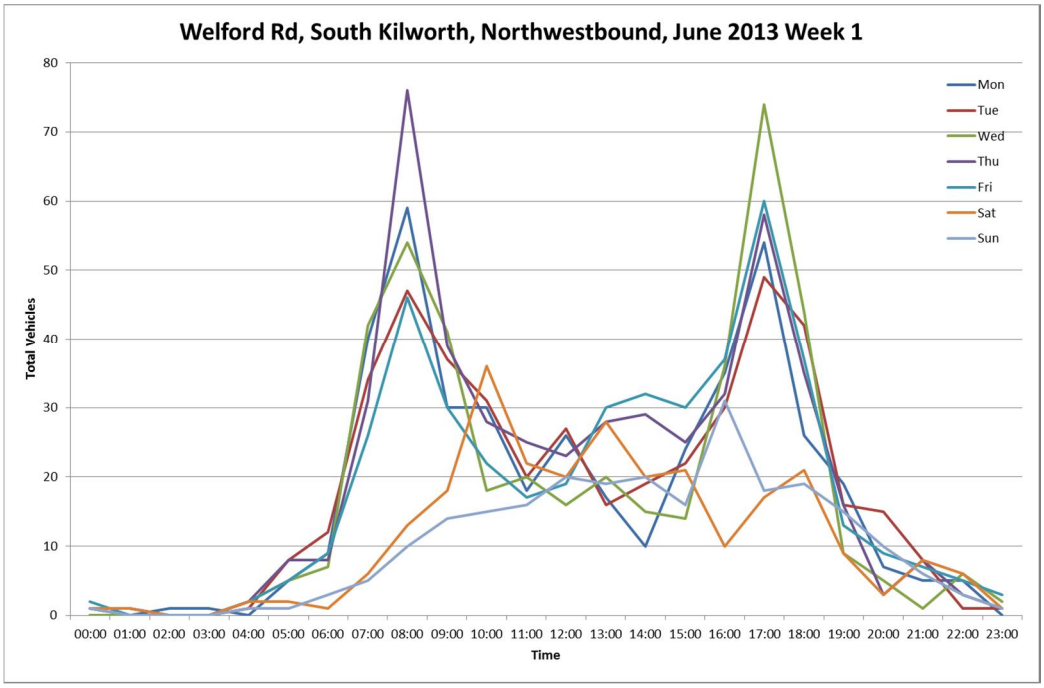


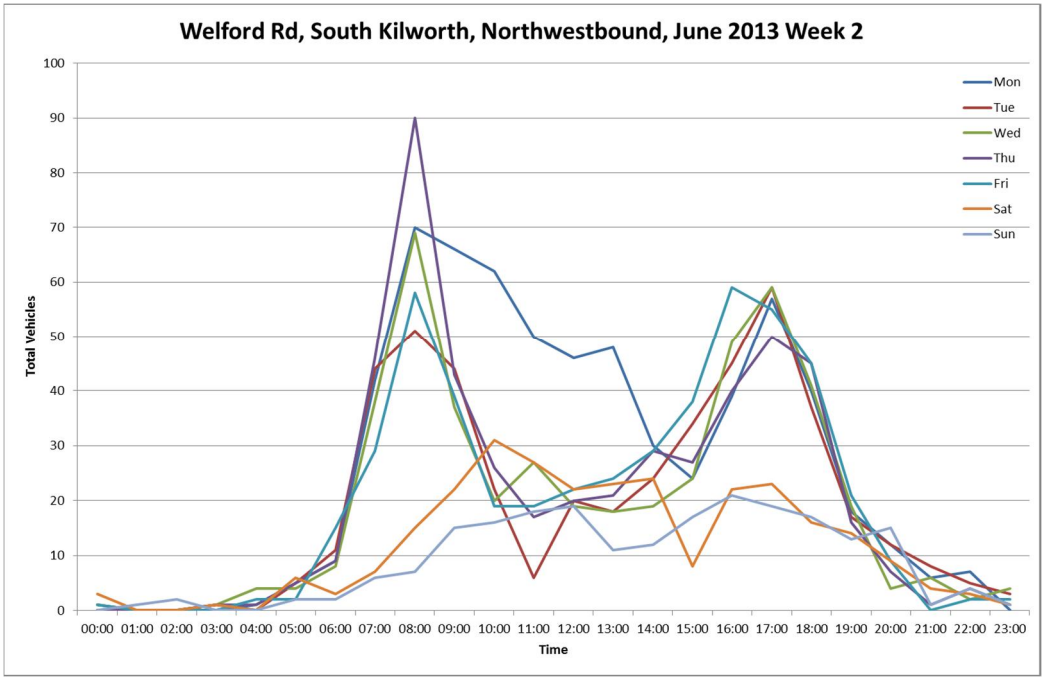
3.2.6 Referring to the charts above it can be seen that flows on this road are tidal with a distinct peak in the morning in a south westerly direction and a distinct peak in the evening in a north easterly direction. The morning peak is the busier of the two with generally between 120 and 140 vehicles per hour compared with between 70 and 80 vehicles per hour during the evening peak. The daytime off peak flow generally fluctuates between 40 and 60 vehicles per hour.

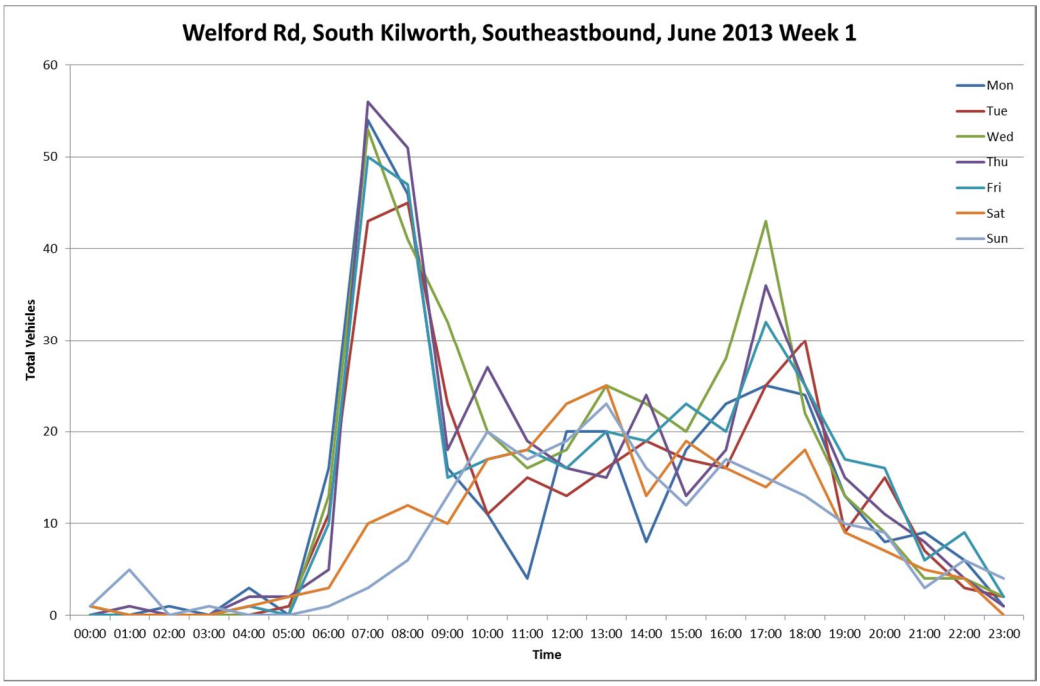
3.2.7 It is clear that there is no evidence of any increase in traffic to coincide with the shift changeover at Magna Park.

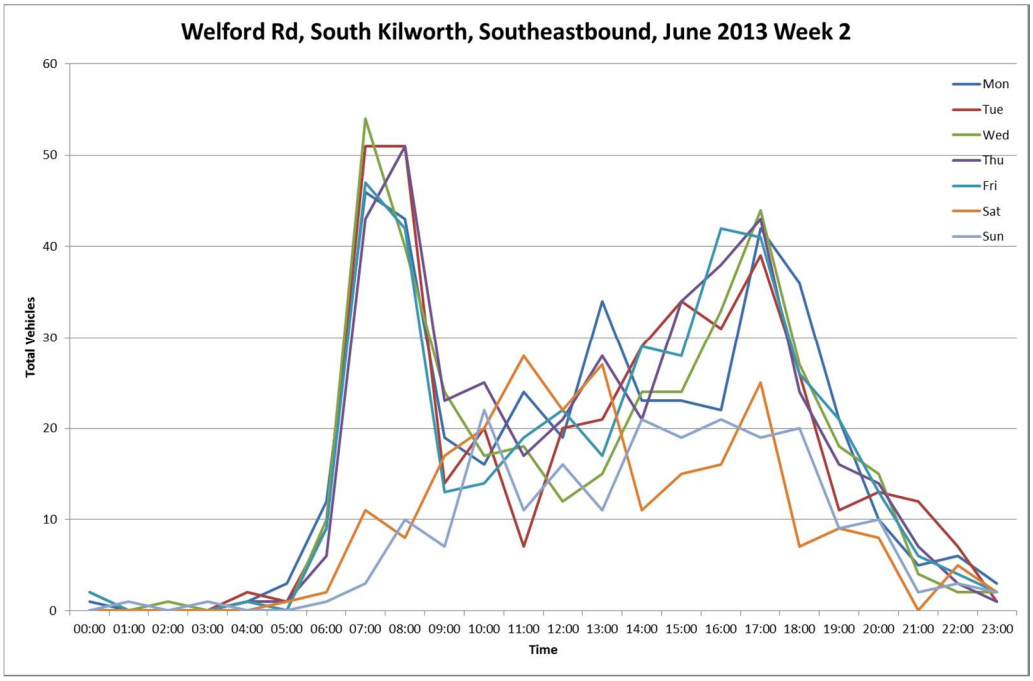
Welford Road, South Kilworth

3.2.8 This site is situated on Welford Road to the south east of the village of South Kilworth.







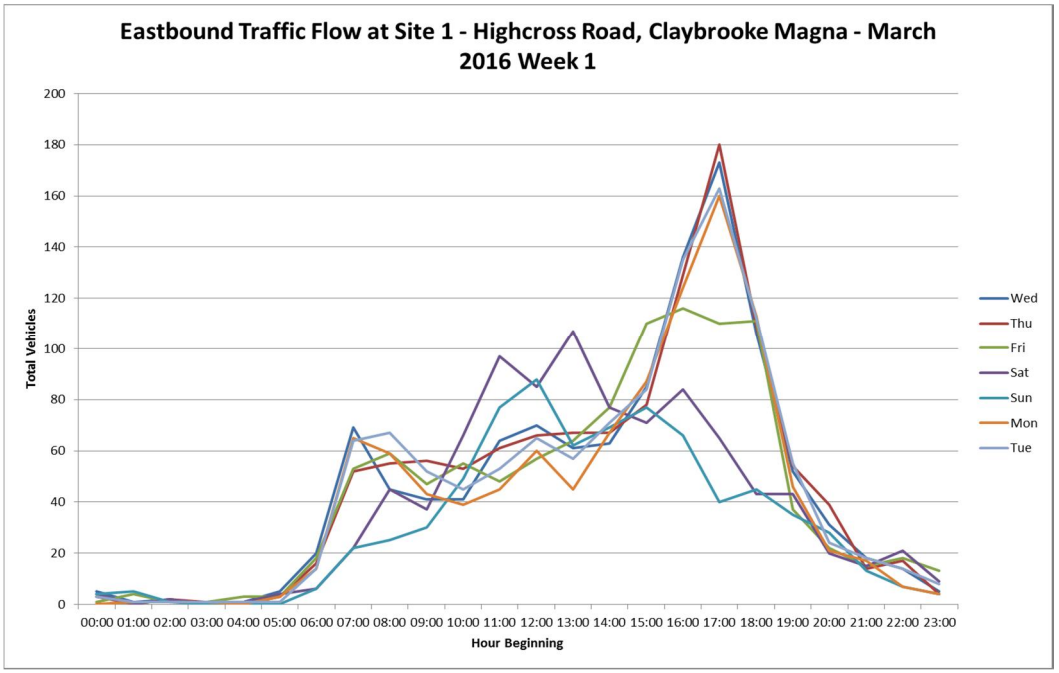


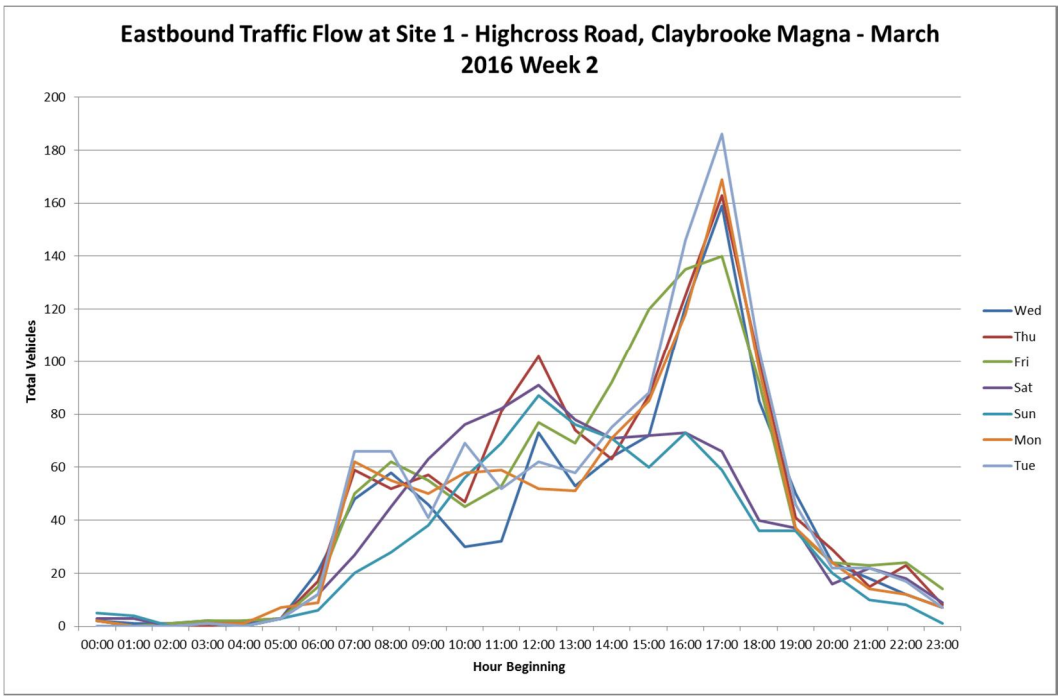
3.2.9 Referring to the charts above it can be seen that there was less evidence of peak hour tidality at this site than at the other site in South Kilworth particularly in a north westerly direction where there were generally between 50 and 80 vehicles per hour during both peaks. In a south easterly 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 daytime off peak flows were generally between 20 and 30 vehicles per hour in both directions.

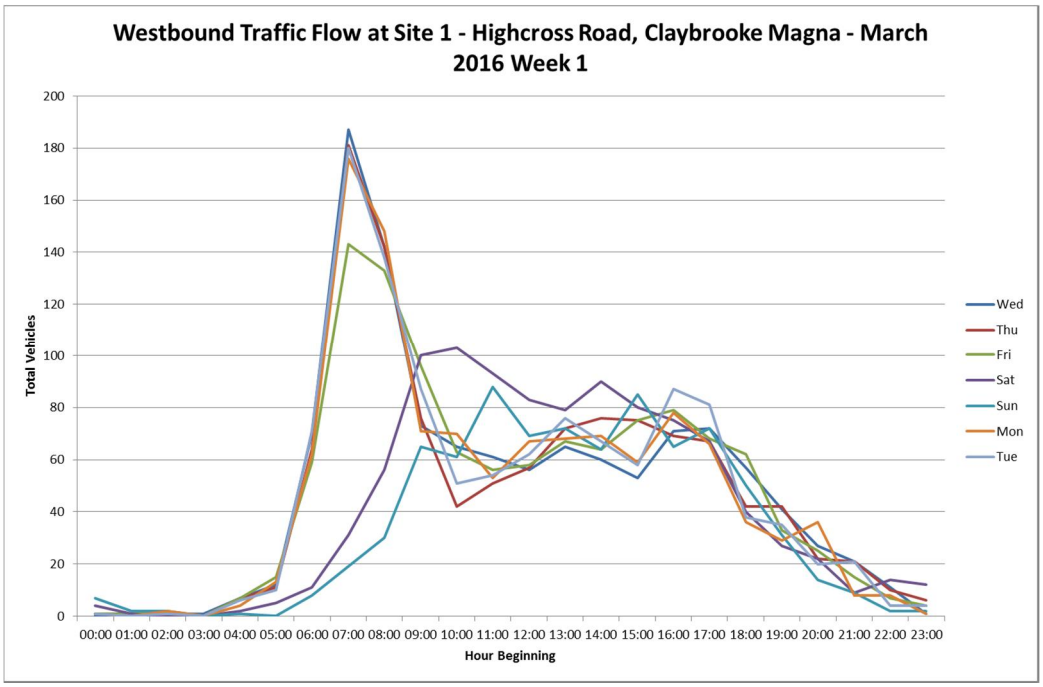
3.2.10 In common with the other site in South Kilworth there is no evidence of any influence from the shift changeover at Magna Park.

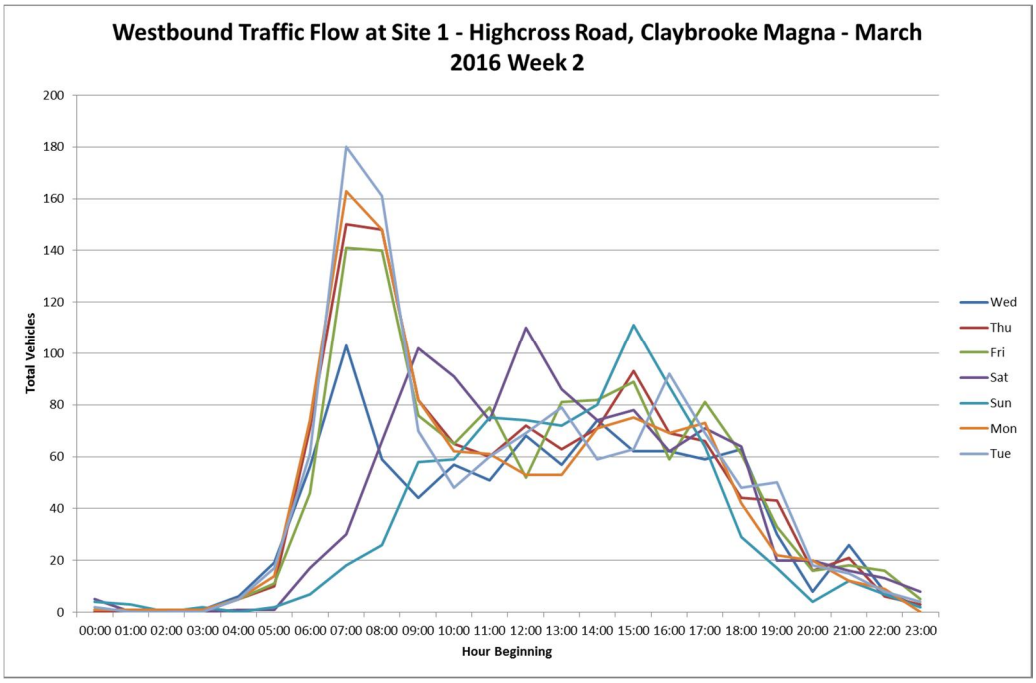
Site 1 – Highcross Road, Claybrooke Magna

3.2.11 This site is located on Highcross Road between the village of Claybrooke Magna and the A5.





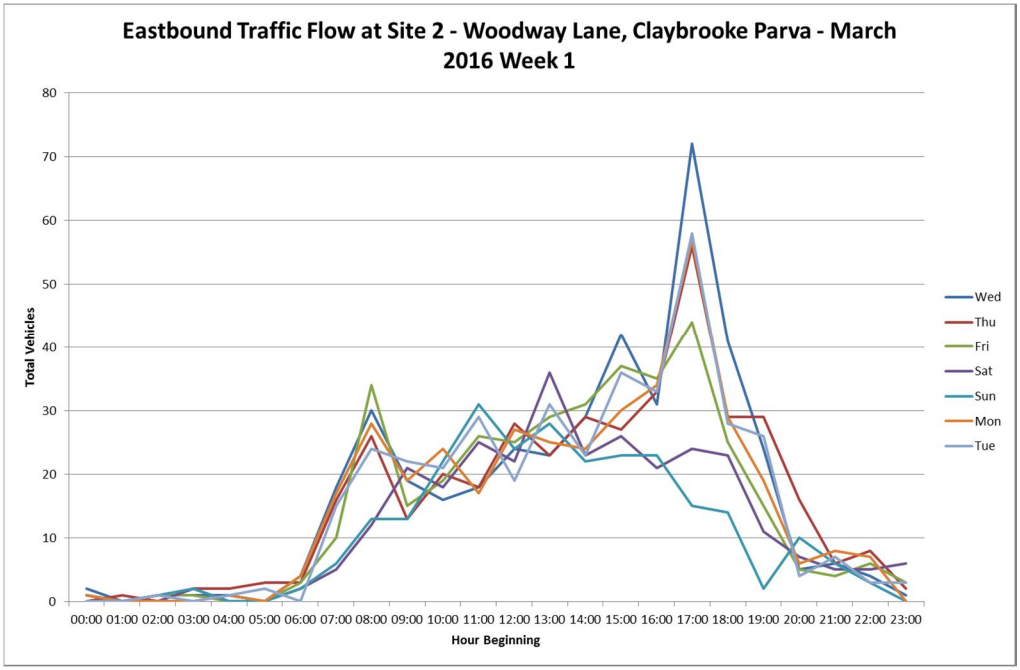


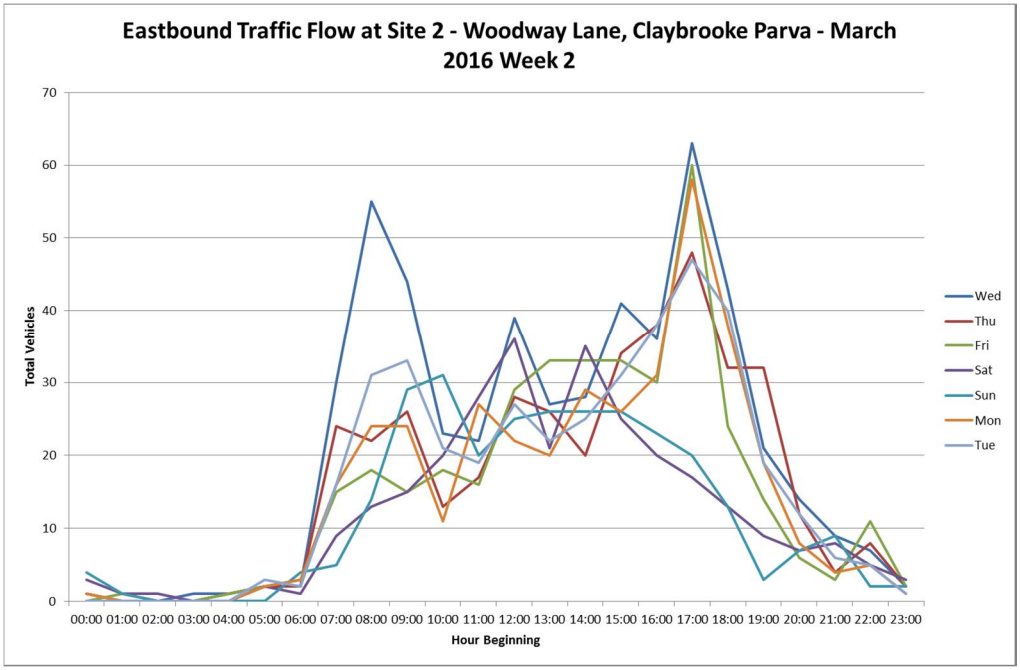


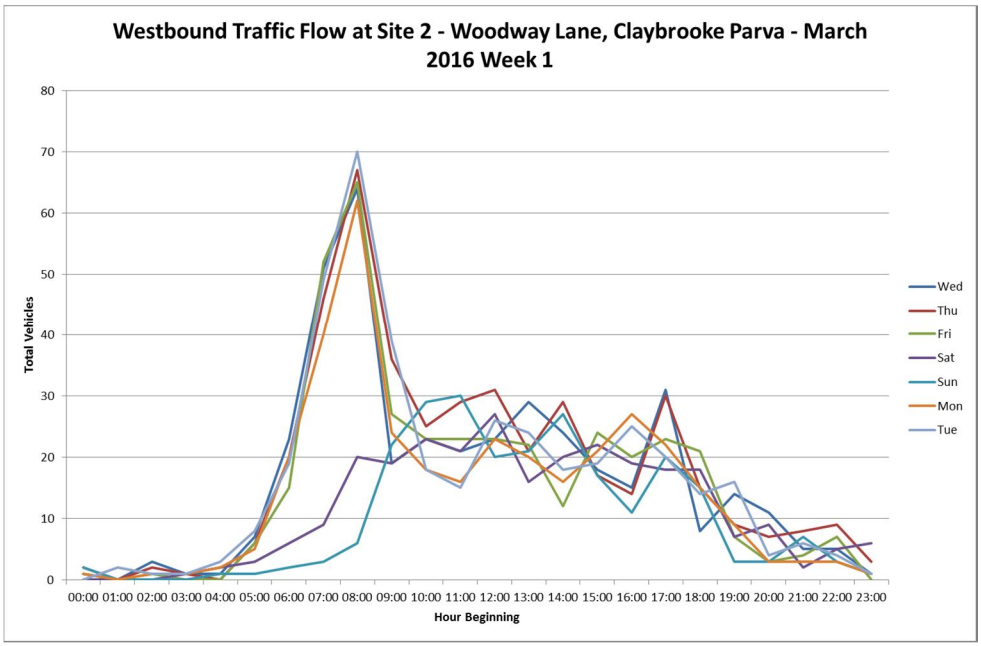
3.2.12 Referring to the charts above it can be seen that there is no evidence of a significant increase in traffic flows on Highcross Road to coincide with the shift changeovers at Magna Park. There is however evidence of peak hour tidality with a dominant flow of between 140 and 180 vehicles per hour in a westbound direction during the morning peak and a similar flow in an eastbound direction during the evening peak. The daytime off peak flows are generally between 50 and 80 vehicles per hour.

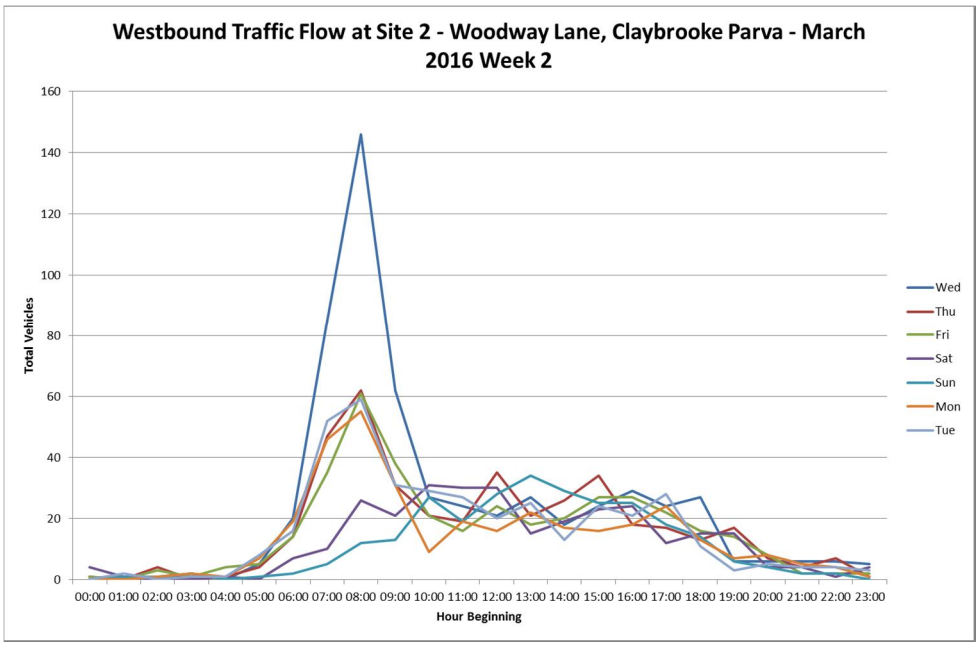
Site 2 – Woodway Lane, Claybrooke Parva

3.2.13 This site is located on Woodway Lane between the A5 and the villages of Claybrooke Parva and Ullesthorpe.









3.2.14 Referring to the charts above it can be seen that there is no evidence of a significant increase in traffic flows on Woodway Lane to coincide with the shift changeover at Magna Park. The charts also confirm that the flows on Woodway Lane are very low with less than 40 vehicles per hour in both directions outside the peak commuter hours.

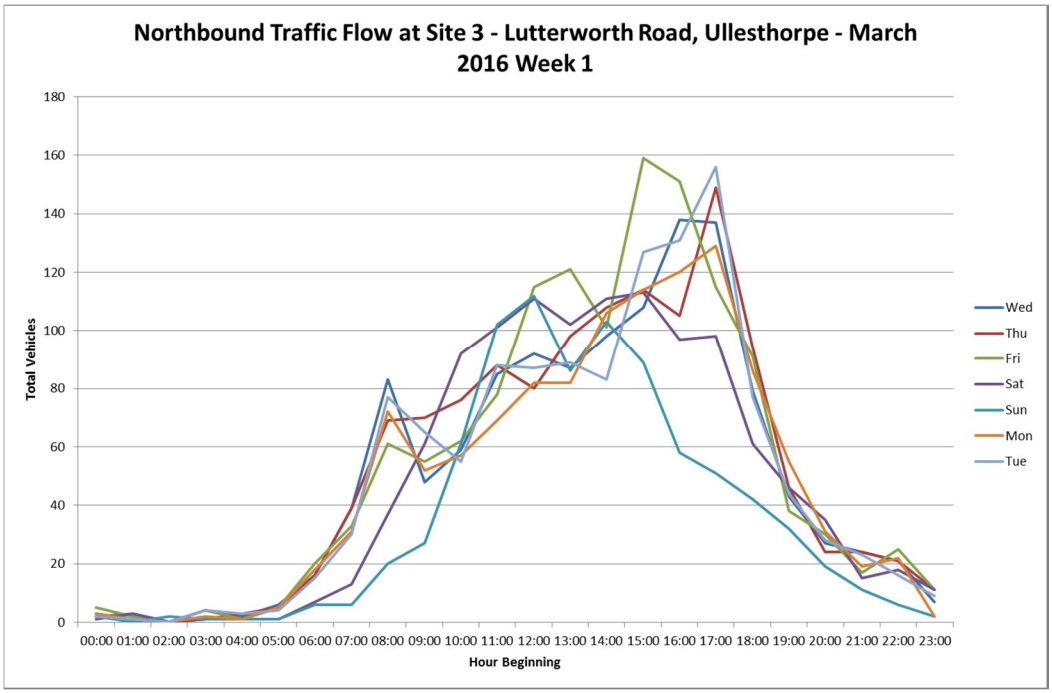
3.2.15 There is evidence of peak hour tidality in the westbound flow during the morning peak and in the eastbound flow during the evening peak when the flows generally increased to around 60 vehicles per hour.

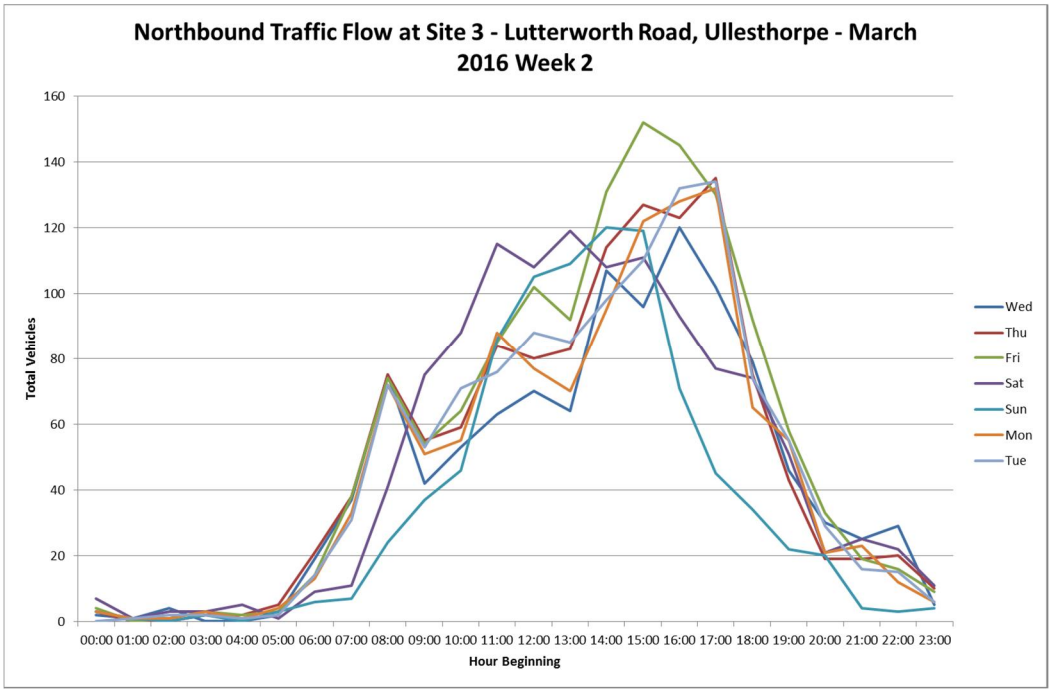
3.2.16 During the Wednesday of the second week of the survey there was a significant increase in the flow on Woodway Lane during the morning peak. The increase was most notable in a westbound direction when the flow increased from a typical daily average of around 60 vehicles per hour to over 140 vehicles per hour. The increase in an eastbound direction was from a typical daily average of

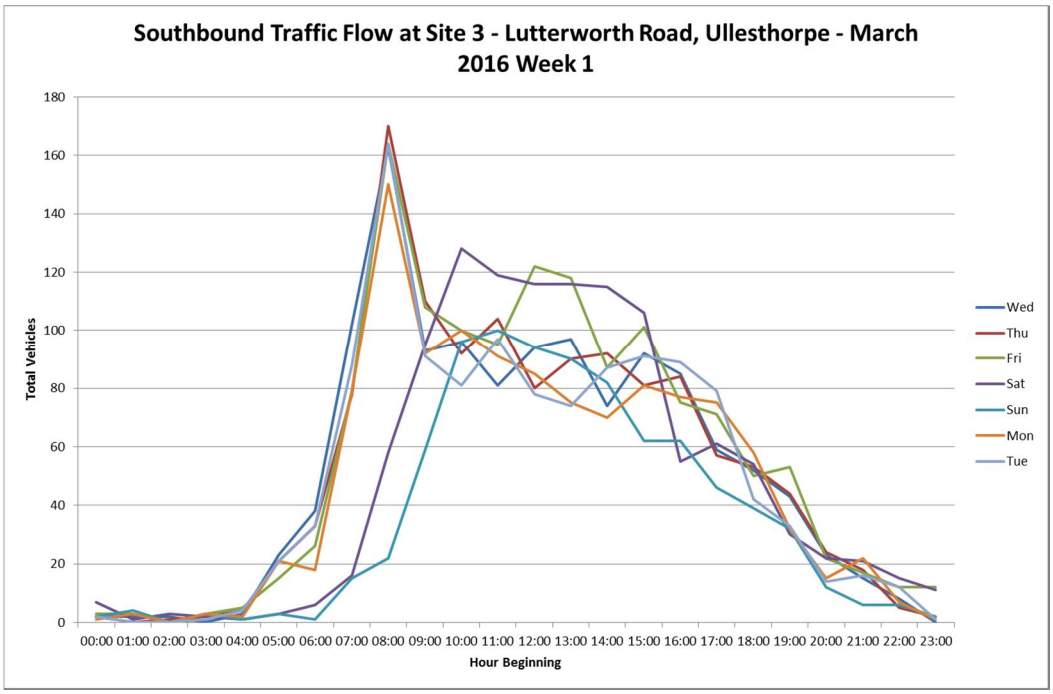
between 20 to 30 vehicles per hour to over 50 vehicles per hour. The reason for this sudden increase in traffic is not known but could be related to an incident on the A5 causing vehicles to divert.

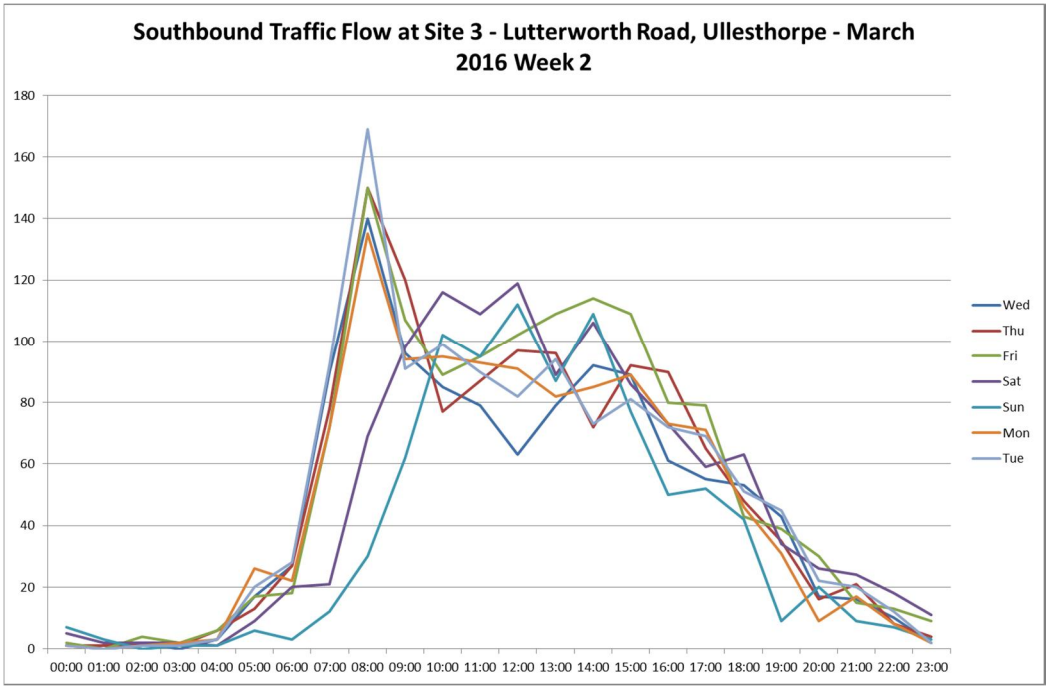
Site 3 – Lutterworth Road, Ullesthorpe

3.2.17 This site is located on Lutterworth Road to the south east of the village of Ullesthorpe. Given its proximity to Magna Park, Lutterworth Road 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.







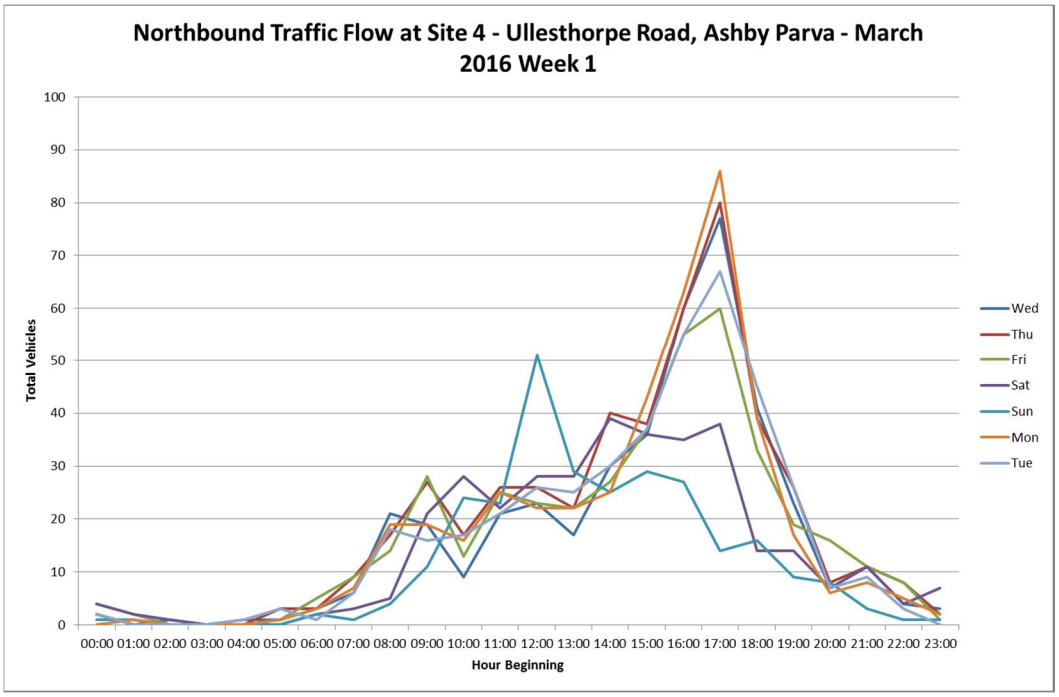


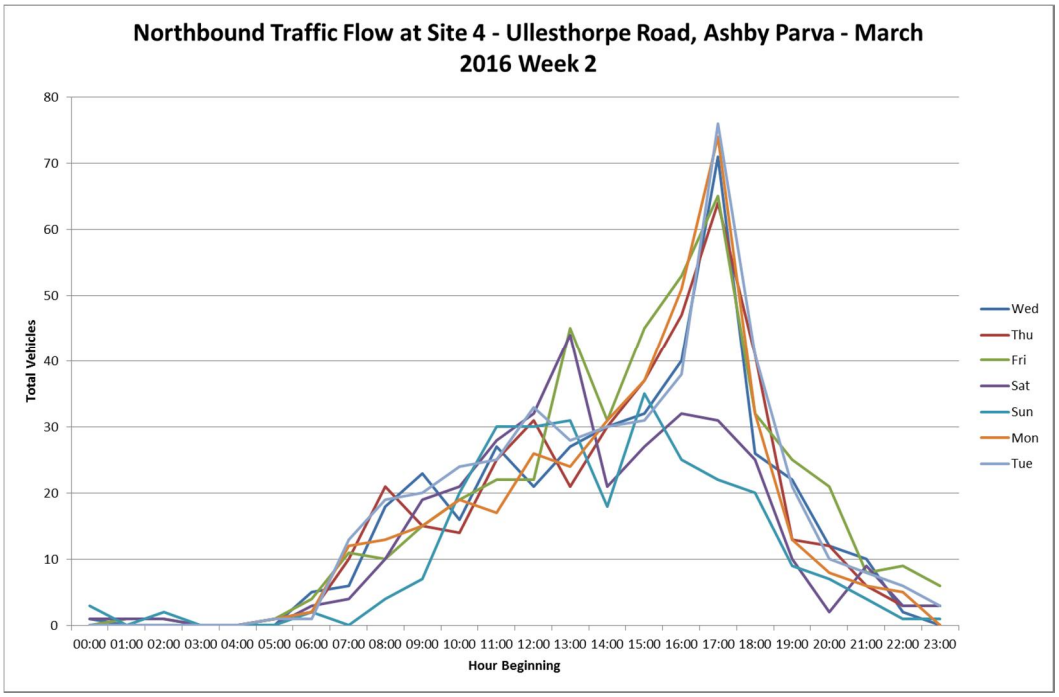
3.2.18 Referring to the charts above it can be seen that there is no evidence of a significant increase in traffic flows on Lutterworth Road to coincide with the shift changeover at Magna Park. The charts also confirm that the flows on Lutterworth Road are low with between 60 and 120 vehicles per hour in both directions outside the peak commuter hours.

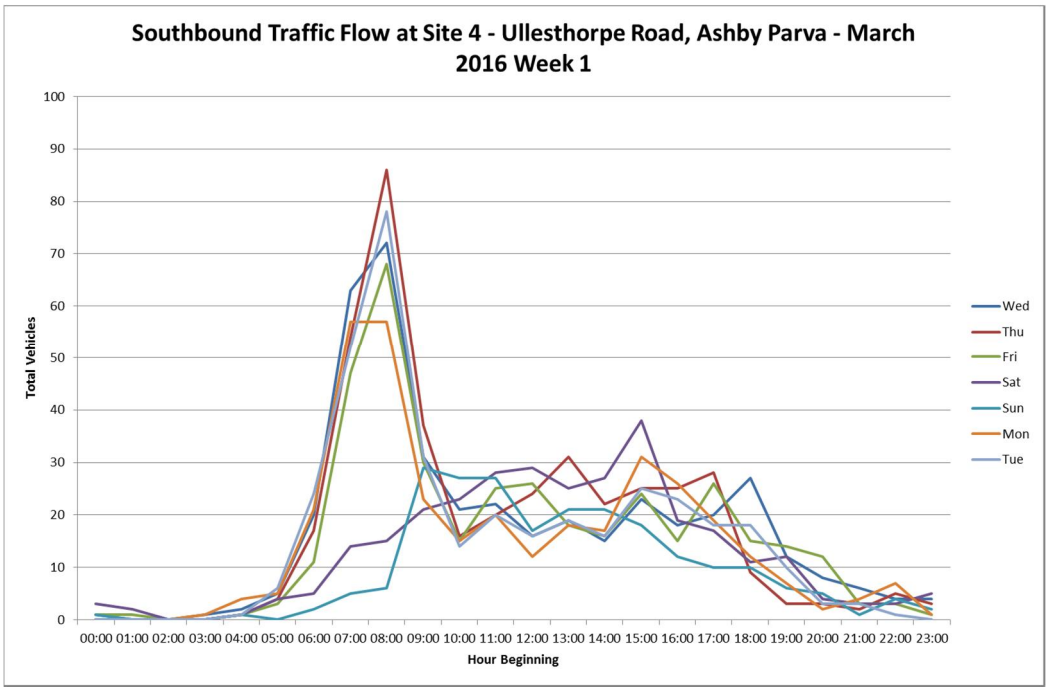
3.2.19 There is evidence of peak hour tidality in the southbound flow during the morning peak and in the northbound flow during the evening peak when the flows generally increased to between 130 and 160 vehicles per hour.

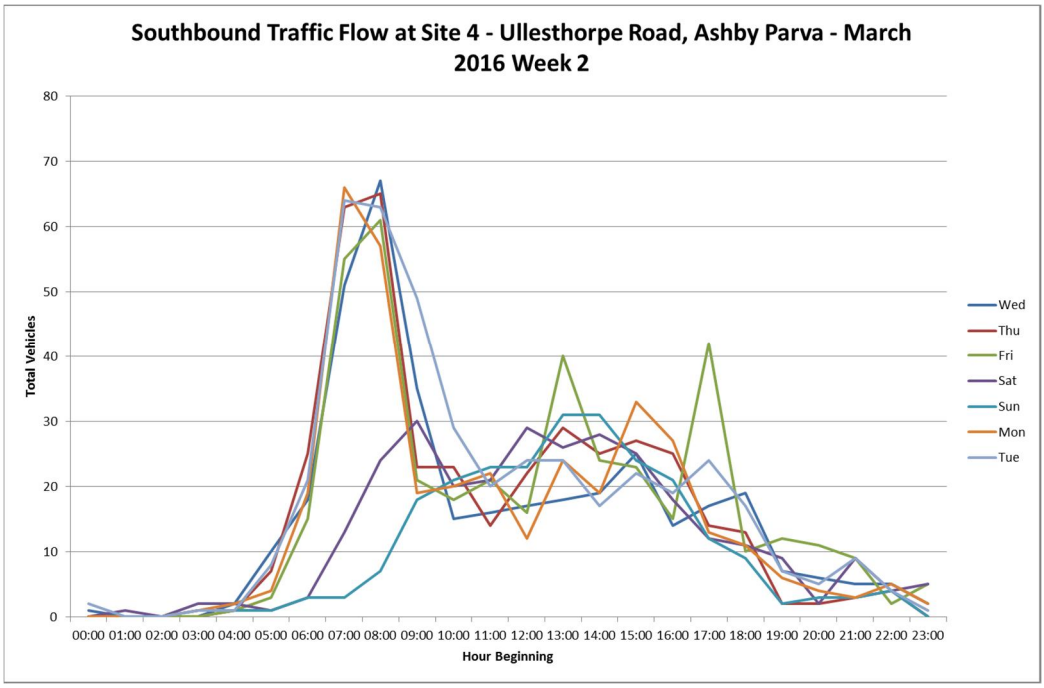
Site 4 - Ullesthorpe Road, Ashby Parva

3.2.20 This site is located on Ullesthorpe Road just to the south of the village of Ashby Parva and in common with site 3 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.







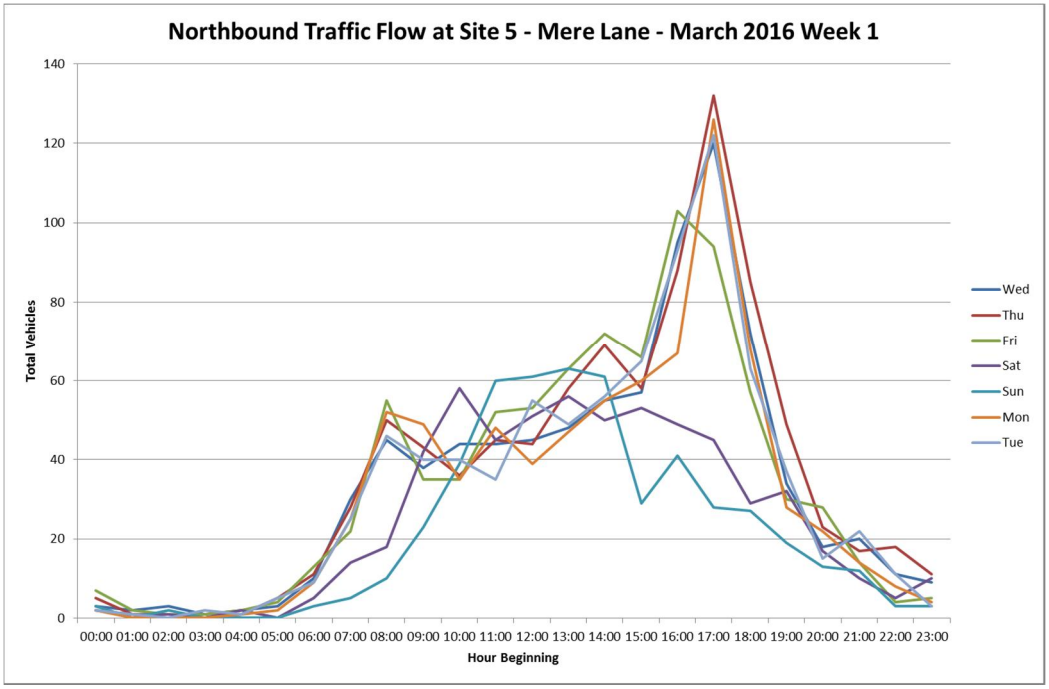


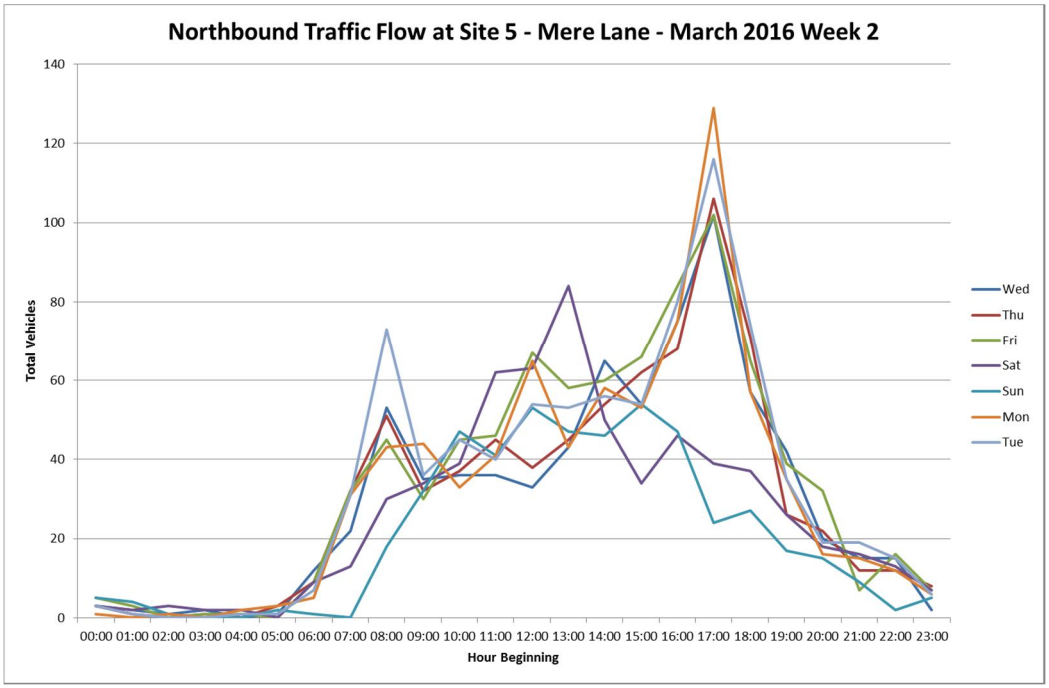
3.2.21 Referring to the charts above it can be seen that there is no evidence of a significant increase in traffic flows on Ullesthorpe Road to coincide with the shift changeover at Magna Park. The charts also confirm that the flows on Ullesthorpe Road are very low with generally less than 40 vehicles per hour in both directions outside the peak commuter hours.

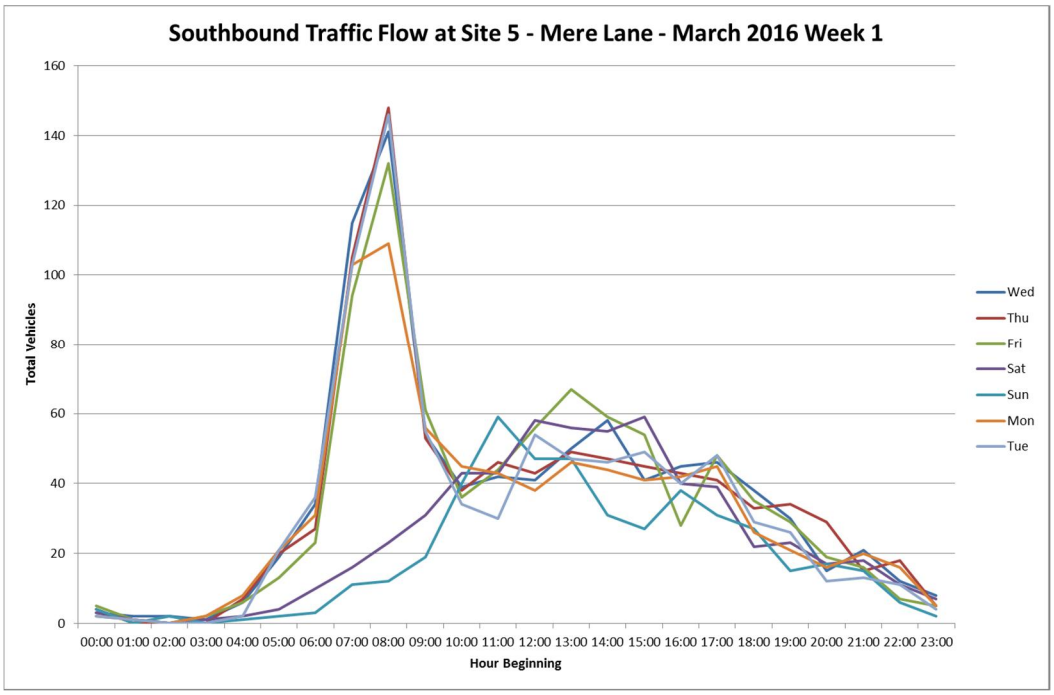
3.2.22 There is evidence of peak hour tidality in the southbound flow during the morning peak and in the northbound flow during the evening peak when the flows generally increased to between 70 and 80 vehicles per hour.

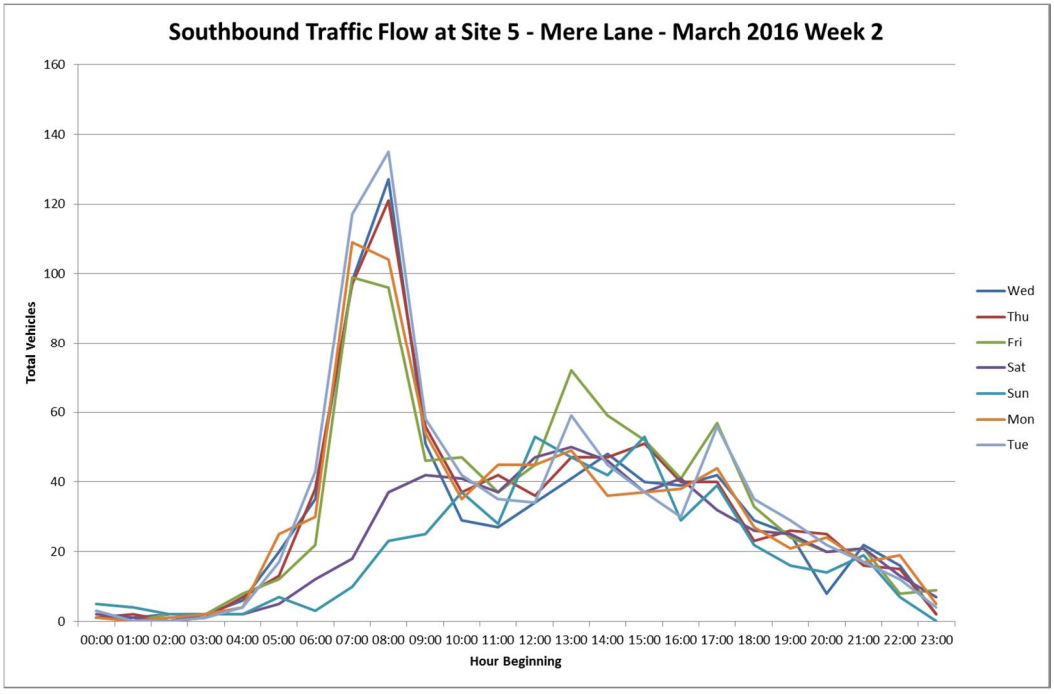
Site 5 – Mere Lane, Ullesthorpe

3.2.23 This site is located on Mere Lane immediately to the north of Magna Park and locally it is perceived to be used by large numbers of Magna Park employees for the journey to and from work.







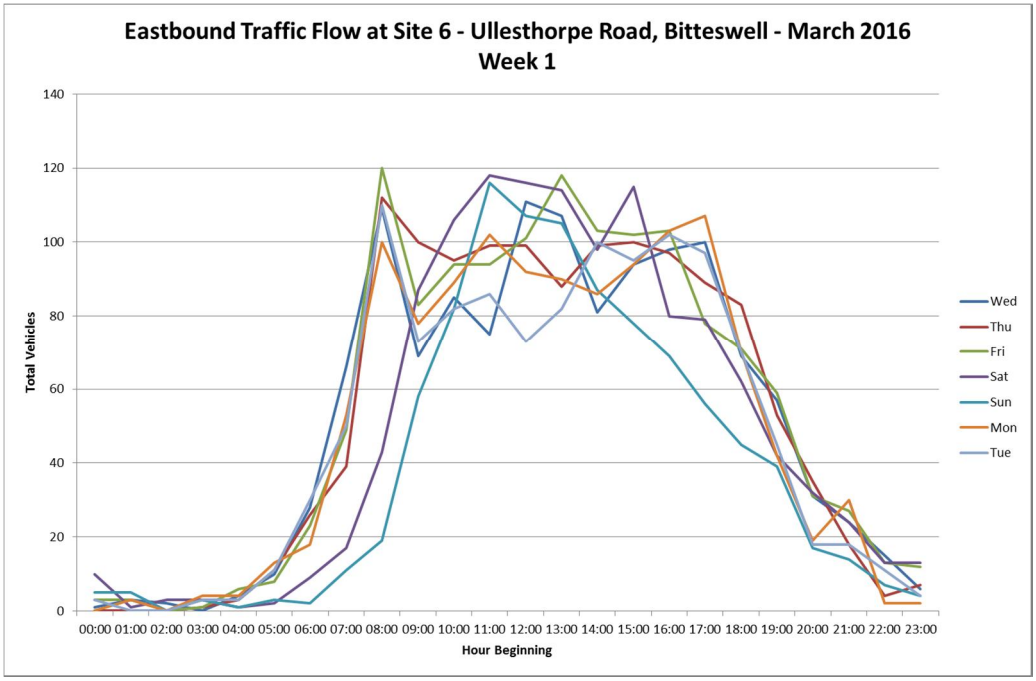


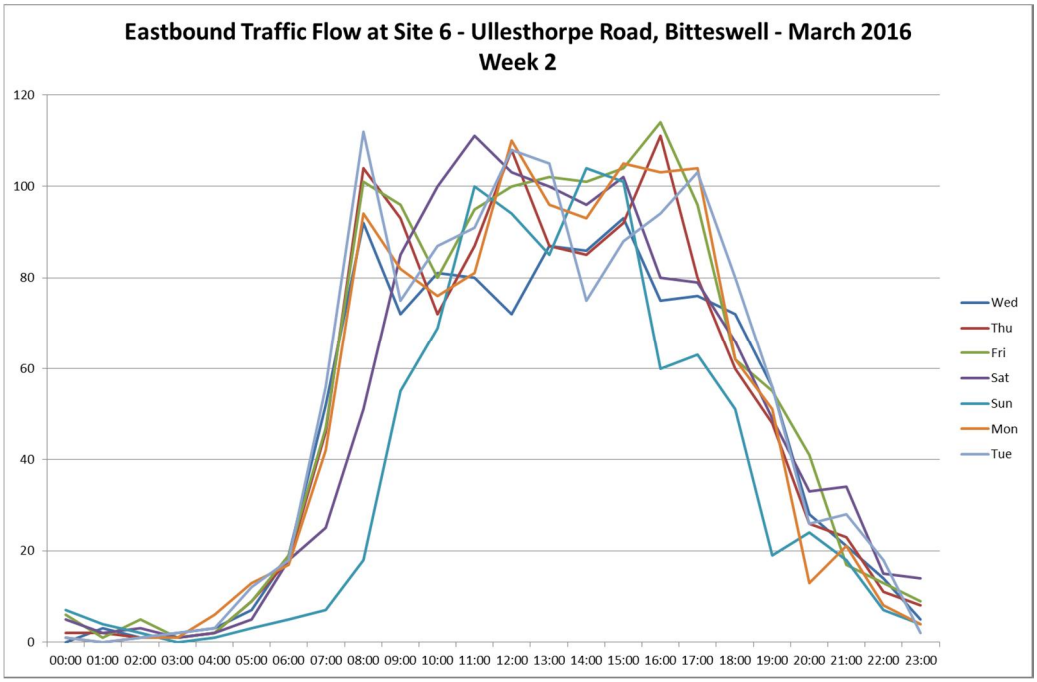
3.2.24 Referring to the charts above it can be seen that there is no evidence of a significant increase in traffic flows on Mere Lane to coincide with the shift changeovers at Magna Park. The charts also confirm that the flows on Mere Lane are very low with generally between 40 and 60 vehicles per hour in both directions during the inter peak periods.

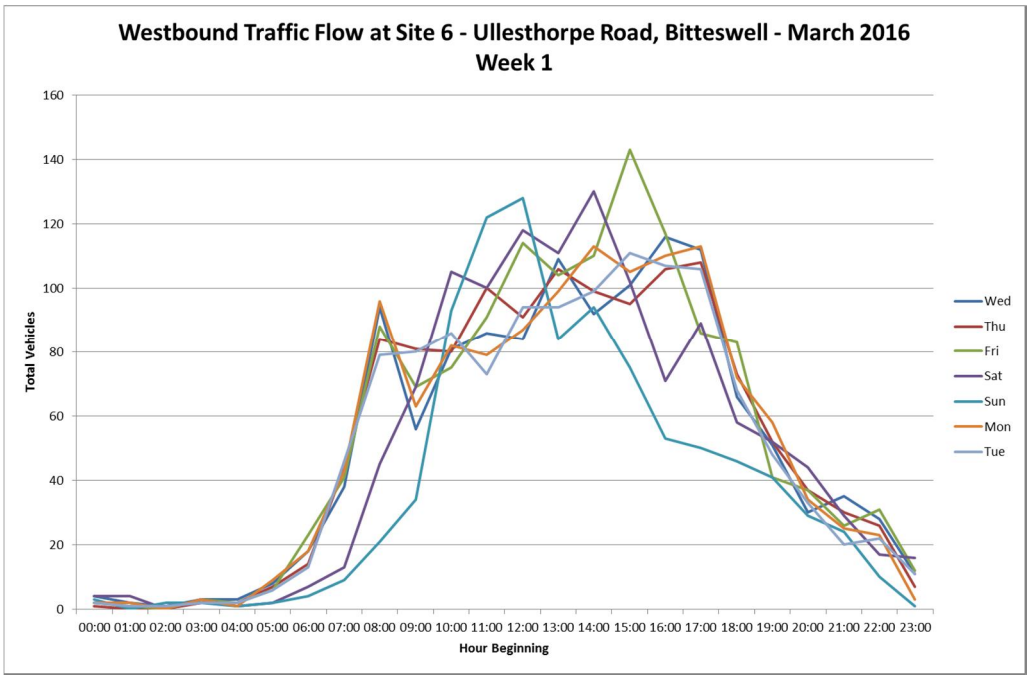
3.2.25 There is evidence of peak hour tidality in the southbound flow during the morning peak and in the northbound flow during the evening peak when the flows increased to between 100 and 140 vehicles per hour.

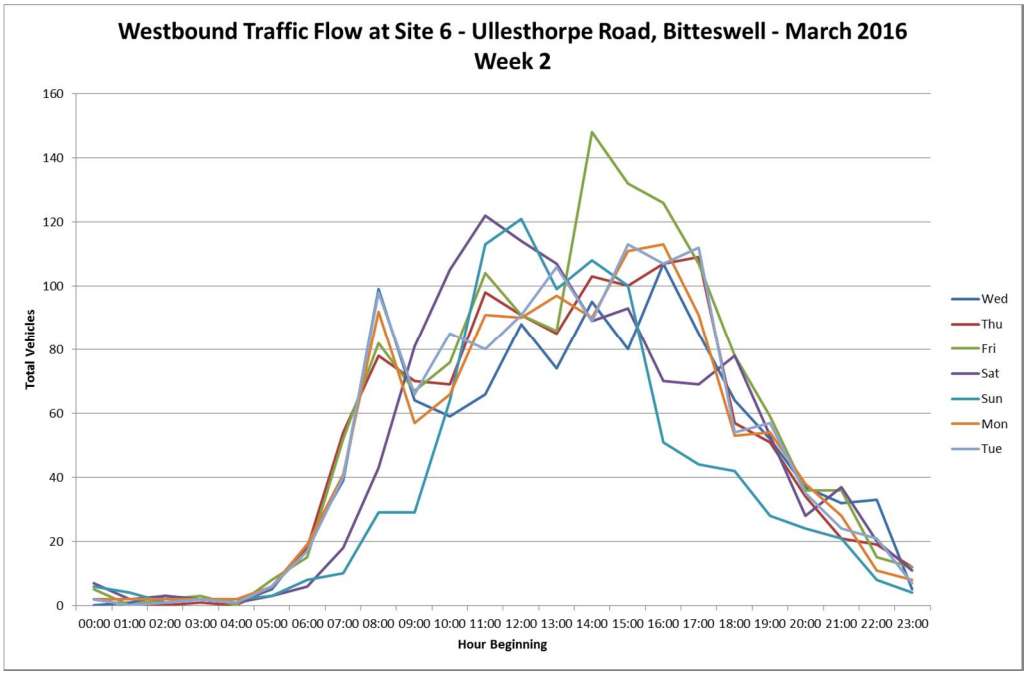
Site 6 – Ullesthorpe Road, Bitteswell

3.2.26 This site is located on Ullesthorpe Road at the western end of the village of Bitteswell just before its junction with Woodby Lane.





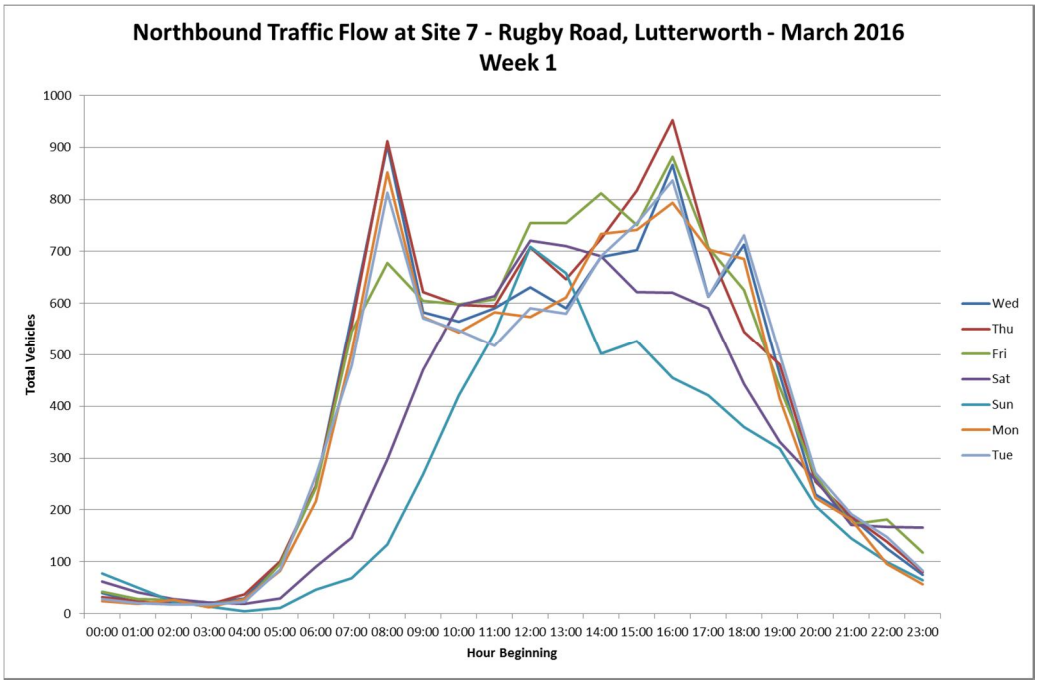


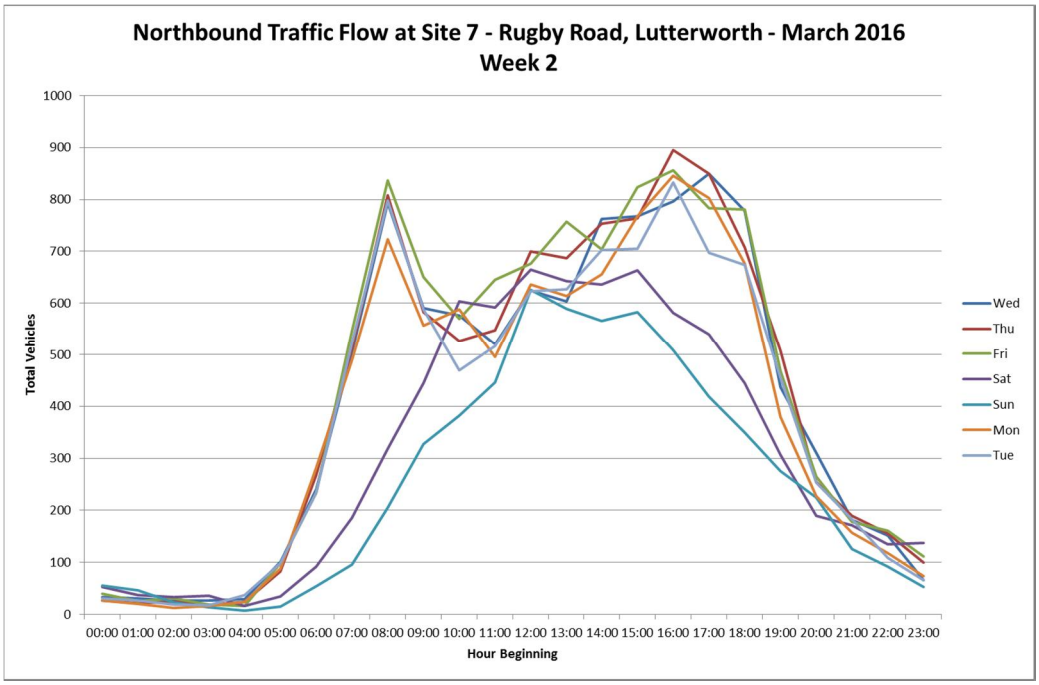


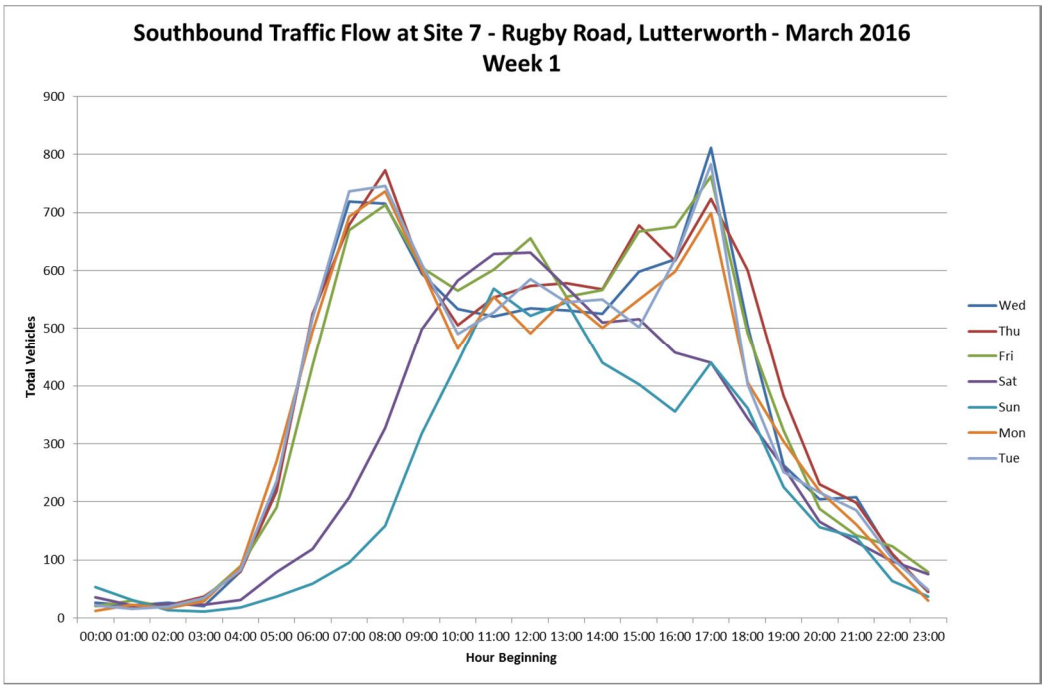
3.2.27 Referring to the charts above it can be seen that the flows on Ullesthorpe Road remained reasonably constant throughout the day with between 80 and 120 vehicles per hour between 8am and 6pm. There is no evidence of a significant increase in traffic during the traditional commuter peaks or that the shift changeover at Magna Park affects the volume of traffic through this part of the village.

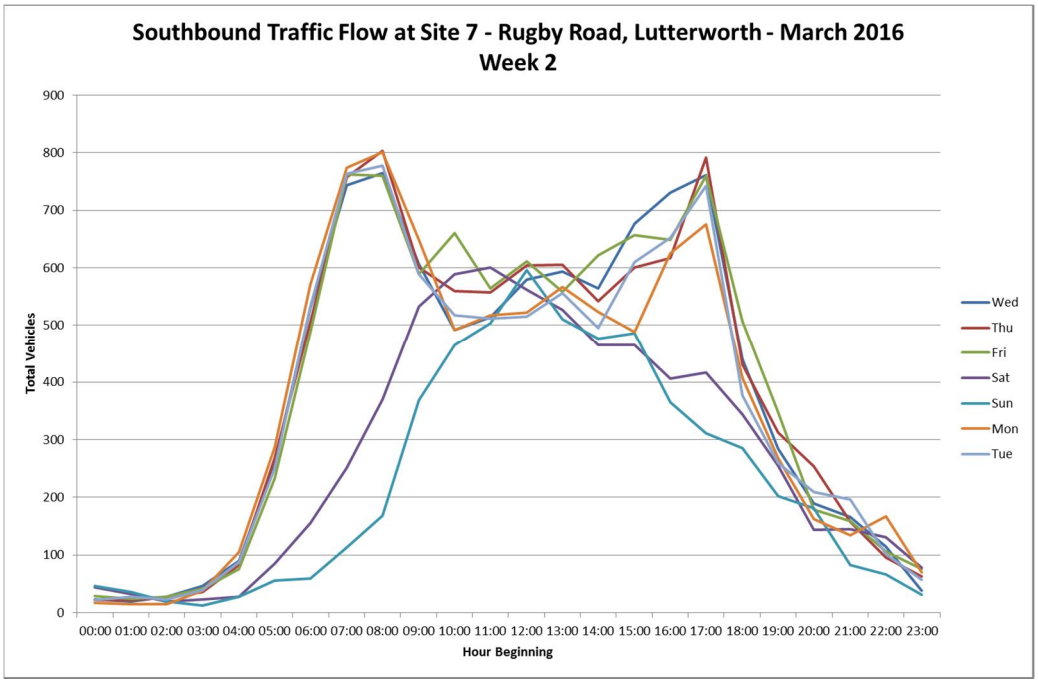
Site 7 – Rugby Road, Lutterworth

3.2.28 This site is located on the A426 (Rugby Road) between Lutterworth town centre and the A4303. As a primary county route passing through Lutterworth town centre it would be expected to carry high volumes of traffic particularly during the traditional commuter peaks.





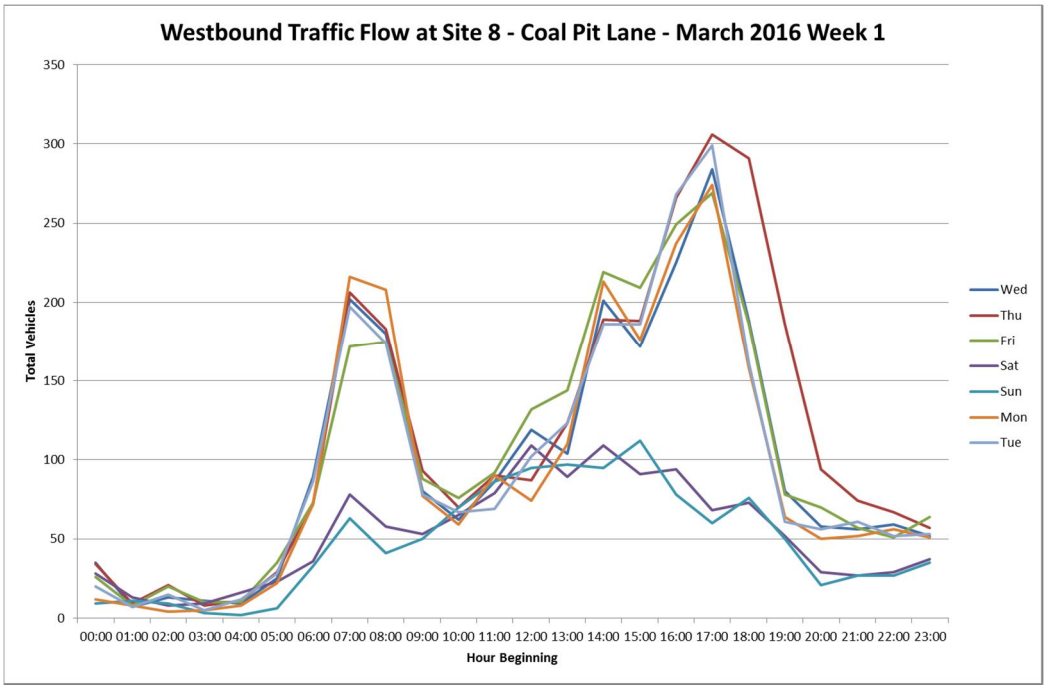


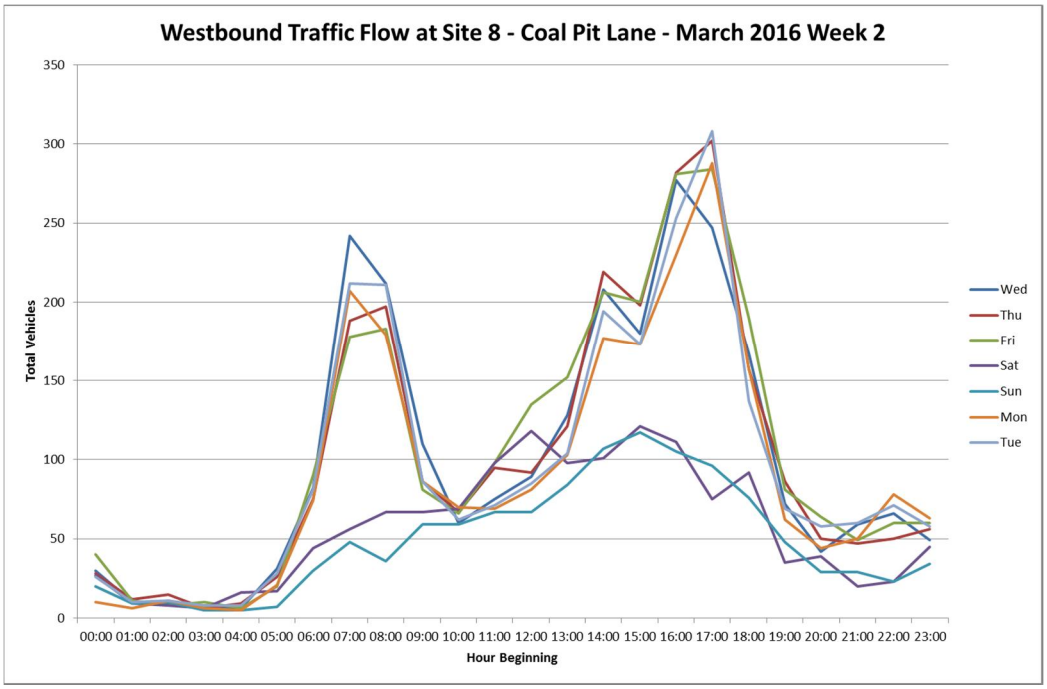


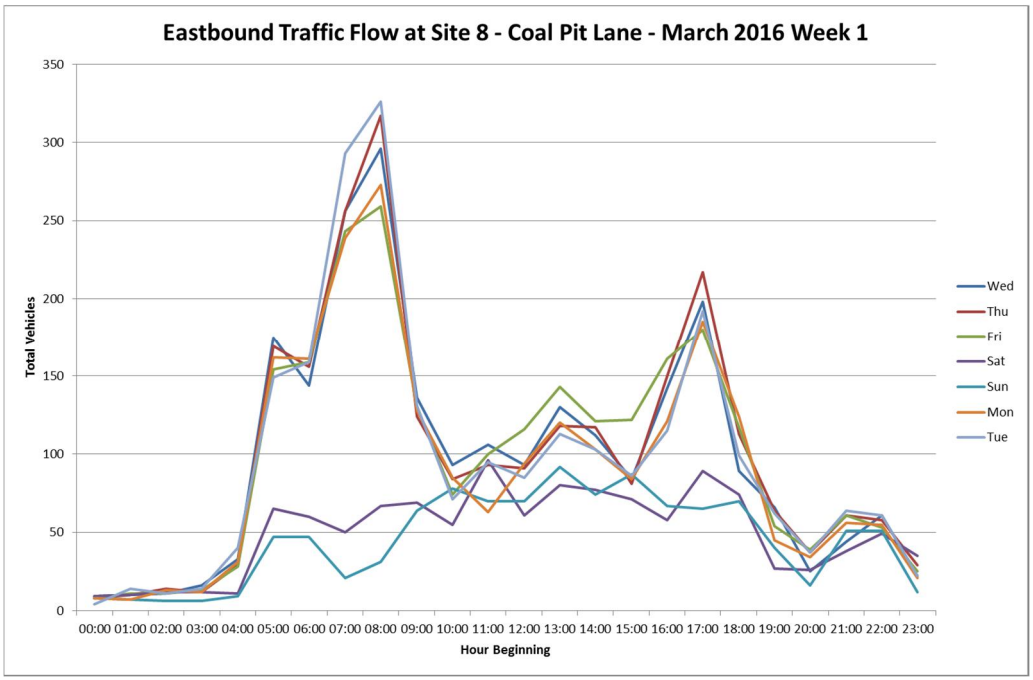
3.2.29 Referring to the charts above it can be seen that Rugby Road does carry high volumes of traffic throughout the day with discernable peaks from 7am to 9am and 4pm to 6pm and at lunchtime. In a northbound direction peak hour flows are generally between 800 and 900 vehicles per hour while during the inter peak they fall to between 500 and 800 vehicles per hour. In a southbound direction flows are slightly lower with between 700 and 800 vehicles per hour during the peaks falling to between 500 and 650 vehicles per hour during the inter peak.

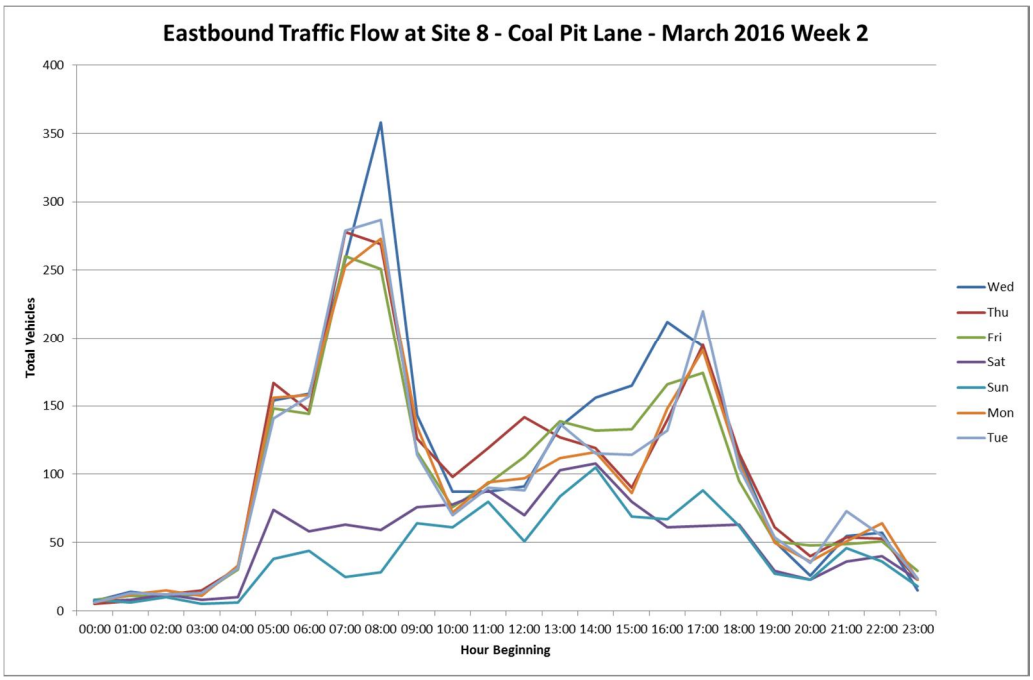
Site 8 – Coal Pit Lane Willey

3.2.30 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.









3.2.31 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 changeover 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 250 vehicles per hour.

3.2.32 In an eastbound direction the pattern is reversed with between 250 and 350 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 changeover 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.

3.3 Analysis of HGV Flows

3.3.1 At the eight sites surveyed in March 2016, the ATC data was classified by vehicle type to allow the number of HGVs to be identified. Although this will not provide a direct link to Magna Park, it will highlight any routes where there are higher than expected volumes of HGVs. The table below shows the percentage of HGVs over the two week survey period at each site. Weekdays and weekends are shown separately and percentages are based on two-way flows.

Table 3.1: Percentage of HGVs at ATC Sites

ATC Site	Weekday	Weekend
Site 1 – Highcross Road, Claybrooke Magna	2.27%	1.21%
Site 2 – Woodway Lane, Claybrooke Parva	1.39%	0.92%
Site 3 – Lutterworth Road, Ullesthorpe	1.54%	0.46%
Site 4 – Ullesthorpe Road, Ashby Parva	1.29%	0.68%
Site 5 – Mere Lane, Ullesthorpe	2.23%	0.72%
Site 6 – Ullesthorpe Road, Bitteswell	1.07%	0.43%
Site 7 – A426 Rugby Road, Lutterworth	4.08%	1.73%
Site 8 – Coal Pit Lane, Willey	2.61%	1.29%

3.3.2 Referring to Table 3.1 it can be seen that the percentage of HGVs recorded at each site was low. It was especially low at sites 1 to 6, which could be considered to be the most sensitive as the ATCs were all located on minor roads in close proximity to small villages. The slightly higher percentage recorded at site 7 is not unexpected as the A426 is a primary county road passing through Lutterworth town centre.

3.3.3 As suggested in the introduction there is no way of relating the HGVs recorded as part of this survey to Magna Park. This will be investigated further by ANPR surveys that are scheduled for the end of April 2016. It is however reasonable to assume that the vast majority of HGVs recorded by the ATCs will not have had a trip purpose that involved a visit to Magna Park. This assumption is made on the basis that the majority of the very small number of HGVs that were recorded probably had a legitimate reason to be using the minor road network to the north of Magna Park delivering products to local businesses, farms and private properties.

4. CONCLUSIONS

4.1.1 The primary purpose of this analysis was to establish whether an increase in traffic volumes on roads that pass through some local villages, particularly those situated to the north of Magna Park coincides with the main shift changeovers at Magna Park. Residents of Ullesthorpe, Bitteswell and Ashby Parva are especially concerned about the impact of Magna Park and there is a local perception that large numbers of Magna Park employees cut through these villages to avoid travelling on the major routes.

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 automatic traffic counts (ATCs) were commissioned. To increase the validity of the surveys data was collected over a continuous two week period at eight sites.

4.1.3 Data collected on the A4303 just to the east of Magna Park clearly identifies spikes in demand at 6am, 2pm and 10pm confirming that flows on roads immediately adjacent to the Park are influenced by the shift changeover.

4.1.4 However at all sites to the north of Magna Park including at sites close to the villages of Ullesthorpe, Bitteswell and Ashby Parva there was no evidence of a significant increase in traffic to coincide with the shift changeovers at Magna Park. This indicates that Magna Park employees are not routinely using the minor roads to the north of the Park to travel to and from work.

4.1.5 The ATC data also allowed the number of HGVs to be identified and it is clear that there are very few HGVs using the minor road network to the north of Magna Park. The expectation is that the vast majority of the very few HGVs that were recorded were not related to Magna Park and would have had a legitimate reason to be using these roads.

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