



Sustainability Appraisal of the Harborough Core Strategy

Baseline Data

October 2010





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Baseline Data

Client:	Harborough District Council			
Report No.:	UE-0047_SA Baseline_2_141010NCB			
Status:	Version to accompany Pre-Submission			
Date:	October 2010			
Author:	NACB			
Checked:	HJD			
Approved:	NJD			

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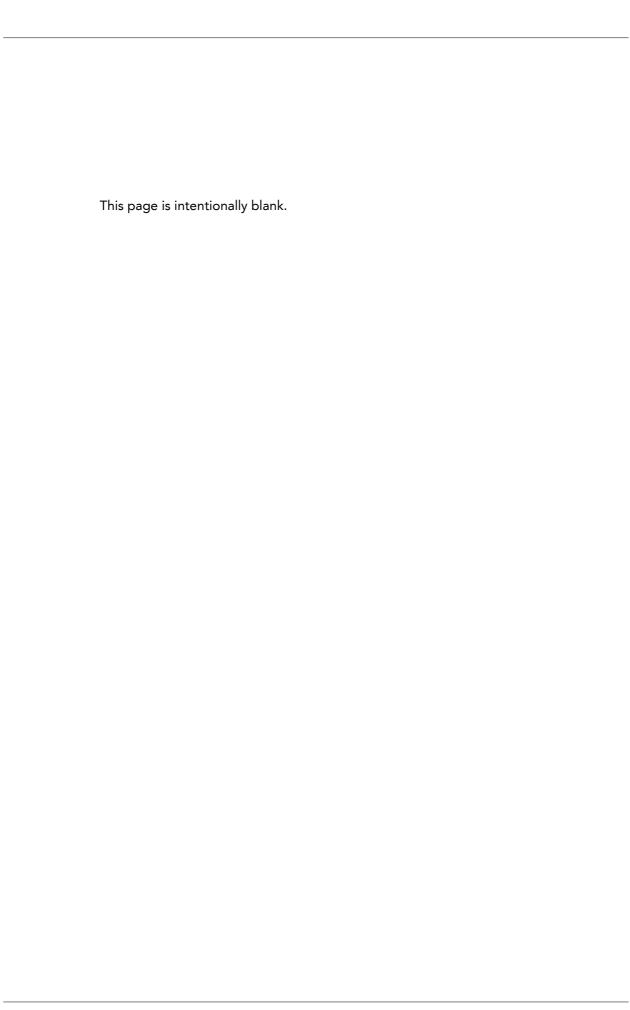
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Abbreviations

AMR	Annual Monitoring Report	LWS	Local Wildlife Site
AQMA	Air Quality Management Area	MYE	Mid-year Estimate
BAP	Biodiversity Action Plan	NO ₂	Nitrogen Dioxide
BME	Black and Minority Ethnic [Groups]	NVQ	National Vocational Qualification
CAMS	Catchment Abstraction Management	ODPM	Office of the Deputy Prime Minister
	Strategy		
CO ₂	Carbon dioxide	ONS	Office of National Statistics
DCLG	Department of Communities and	PM ₁₀	Particulates
	Local Government		
Defra	Department of the Environment, Food	PPS	Policy Planning Statement
	and Rural Affairs		
EU	European Union	SEA	Strategic Environmental Assessment
EU GIS	European Union Geographical Information Systems	SEA SFRA	Strategic Environmental Assessment Strategic Flood Risk Assessment
	·		G
GIS	Geographical Information Systems	SFRA	Strategic Flood Risk Assessment
GIS	Geographical Information Systems	SFRA	Strategic Flood Risk Assessment Site of Importance for Nature
GIS HDC	Geographical Information Systems Harborough District Council	SFRA SINC	Strategic Flood Risk Assessment Site of Importance for Nature Conservation
GIS HDC HGV	Geographical Information Systems Harborough District Council Heavy Goods Vehicle	SFRA SINC SOA	Strategic Flood Risk Assessment Site of Importance for Nature Conservation Super Output Area
GIS HDC HGV IMD	Geographical Information Systems Harborough District Council Heavy Goods Vehicle Indices of Multiple Deprivation	SFRA SINC SOA SPD	Strategic Flood Risk Assessment Site of Importance for Nature Conservation Super Output Area Supplementary Planning Document
GIS HDC HGV IMD LDF	Geographical Information Systems Harborough District Council Heavy Goods Vehicle Indices of Multiple Deprivation Local Development Framework	SFRA SINC SOA SPD SPZ	Strategic Flood Risk Assessment Site of Importance for Nature Conservation Super Output Area Supplementary Planning Document Source Protection Zone
GIS HDC HGV IMD LDF LLTI	Geographical Information Systems Harborough District Council Heavy Goods Vehicle Indices of Multiple Deprivation Local Development Framework Limiting long-term illness	SFRA SINC SOA SPD SPZ SSSI	Strategic Flood Risk Assessment Site of Importance for Nature Conservation Super Output Area Supplementary Planning Document Source Protection Zone Site of Special Scientific Interest



Introduction

This updated baseline data review provides a summary of baseline conditions in Harborough District to accompany the Pre-Submission SA Report for the Harborough Core Strategy.

The baseline review has been updated from the version included with the SA Scoping Report which was released for consultation in November 2008. This is both (i) to reflect recent availability of data, and (ii) to address consultation comments received on the SA Scoping Report from stakeholders.

The data included in this baseline review has informed the appraisal of the Core Strategy policies and provided a basis for the assessment. The baseline review has been presented by the sustainability themes discussed in Table 1.5 of the main body of the Pre-Submission SA Report.

The Pre-Submission SA Report, with which this document accompanies, can be accessed at the following weblink:

http://www.harborough.gov.uk/site/scripts/documents.php?categoryID=856.

Chapter I: Accessibility and Transport

Harborough's position at the geographical centre of England provides it with excellent regional and national transport links by road and motorway. With the M1 present in the district, providing a north-south link, and the M6/A14 located to the south of the district, providing a link to the West Midlands and East Anglia, road links to the rest of the country are good (although the M6/A14 route in particular suffers from congestion). The district's other main routes include the A6, the A47 and the A508, which link the main settlements of the district with the nearby city and towns of Leicester, Northampton, Kettering and Corby.

The district is also has good links to the national rail network, with Market Harborough being located on the East Midlands Trains route, with frequent links to London, Leicester, Nottingham, Derby and Sheffield. The Cross-Country Cambridge to Birmingham line is also accessible via Oakham, Melton Mowbray and Leicester outside of the district. Harborough also has proximity to regional airports: both Birmingham Airport and Nottingham East Midlands Airport are approximately 45 miles away from Market Harborough.

These good road, rail and air links however mask significant accessibility issues in the district. Rural accessibility is an issue in Harborough, resulting from the disparate nature of settlements and the difficulty of providing frequent and economical public transport networks. Whilst both Lutterworth and Market Harborough both have frequent bus services, including between each other, and to surrounding towns such as Leicester and Hinckley, buses elsewhere in the district are often infrequent, and many smaller settlements are reliant on community transport services. This has reduced accessibility, especially for those without access to a car. This is reflected by the district's Index for Multiple Deprivation scores for the category "Barriers to Housing and Services." This has been discussed further in the Deprivation section of this baseline summary.

Due partly to the district's relative affluence, and due to its rural nature, car ownership in Harborough is higher than regional and national averages – 84% of households in Harborough have access to a car or van, compared to 76% for the East Midlands and 73% for England (2001 census data). This is reflected by travel to work data, where a higher proportion of the population travel by car to work than regional and national averages, and a lower proportion of people travel by public transport or walking. A large proportion of the working population (**Figure 2.1**) also travel to destinations outside of the district for work, highlighting a significant trend of out-commuting in Harborough.

Table 1.1: Car ownership and travel to work in Harborough.

CAR OWNER	RSHIP and TRAVEL TO	WORK in Harboro	ıgh		
Feature	Indicator	Quantified data	Regional / National Comparator	Trends	Source
Car Ownership	Percentage of households with access to a car or van	2001 Harborough: 83.75	2001 East Midlands: 75.75 England: 73.16	No data available	National Statistics Online. 2001 Census Data [online]. Available from: http://www.statistics.go v.uk [Accessed: 22 October 2008]
Travel to Work	Percentage of people aged 16-74 who usually travel to work by train	2001 Harborough: 1.28	2001 East Midlands: 0.98 England: 4.23	No data available	National Statistics Online. 2001 Census Data [online]. Available from: http://www.statistics.go v.uk [Accessed: 22 October 2008]
	Percentage of people aged 16-74 who usually travel to work by bus, mini bus or coach	2001 Harborough: 2.14	2001 East Midlands: 6.98 England: 7.51	No data available	National Statistics Online. 2001 Census Data [online]. Available from: http://www.statistics.go v.uk [Accessed: 22 October 2008]
	Percentage of people aged 16-74 who usually travel to work by driving a car or van	2001 Harborough: 65.76	2001 East Midlands: 60.38 England: 54.92	No data available	National Statistics Online. 2001 Census Data [online]. Available from: http://www.statistics.go v.uk [Accessed: 22 October 2008]
	Percentage of people aged 16-74 who usually travel to work on foot	2001 Harborough: 9.41	2001 East Midlands: 10.49 England: 9.99	No data available	National Statistics Online. 2001 Census Data [online]. Available from: http://www.statistics.go v.uk [Accessed: 22 October 2008]

CAR OWNER	CAR OWNERSHIP and TRAVEL TO WORK in Harborough					
Feature	Indicator	Quantified data	Regional / National Comparator	Trends	Source	
	Average distance (km) travelled to fixed place of work	2001 Harborough: 16.5	2001 East Midlands: 13.21 England: 13.31	No data available	National Statistics Online. 2001 Census Data [online]. Available from: http://www.statistics.go v.uk [Accessed: 22 October 2008]	

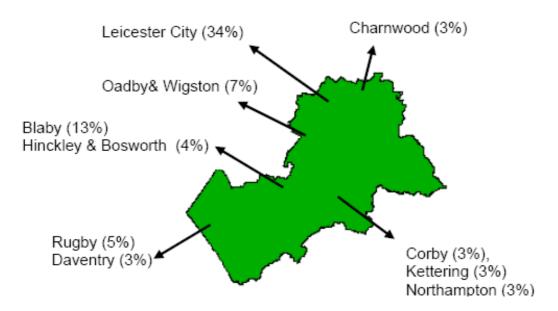


Figure 1.1: Journey destination for work, 2001 (source: Harborough Annual Monitoring Report 2007)

Whilst data was available at a county level for the Local Transport Plan Annual Progress Report indicators "Percentage of rural households within 800m of an hourly or better bus Service" or the "Number of bus passenger journeys" no data could be found specifically for Harborough. It is therefore unclear as to whether improvements since 2001 related to these indicators in Leicestershire have been reflected at a district level.¹

¹ The 2005 LTP Annual Progress Report can be found at: http://www.leics.gov.uk/ltp apr05 proforma b.pdf

Chapter II: Air Quality

Air quality across much of Harborough is generally good. However air quality is worse near the M1 corridor and Lutterworth, areas of the district in close proximity to Leicester and in Market Harborough (see Figures 2.1 and 2.2).

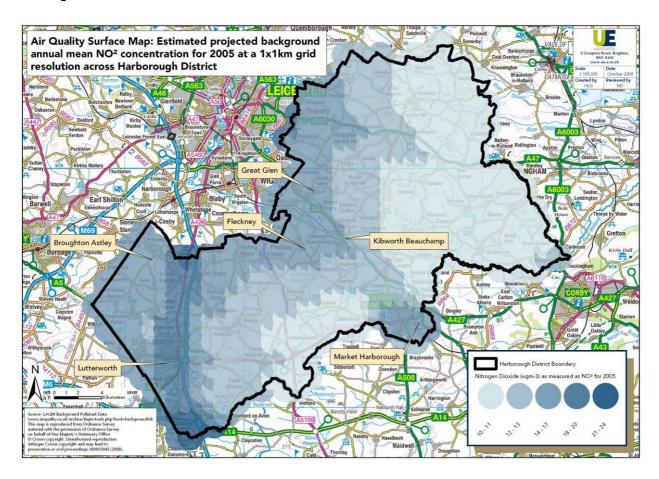


Figure 2.1: Air quality in Harborough: NO₂ (nitrogen dioxide)

Following the publishing of the National Air Quality Strategy in 1997, an initial assessment of Harborough's air quality was made, which suggested that potentially elevated levels of carbon monoxide, lead, particulate matter and nitrogen dioxide (NO₂) might be present. A more detailed review was then carried out on these pollutants, which concluded that all of the pollutants except NO₂ was likely to meet the National Air Quality Objective. Subsequently, in July 2001, an Air Quality Management Area (AQMA) was declared for NO₂ in the Market Street area of Lutterworth Town Centre.

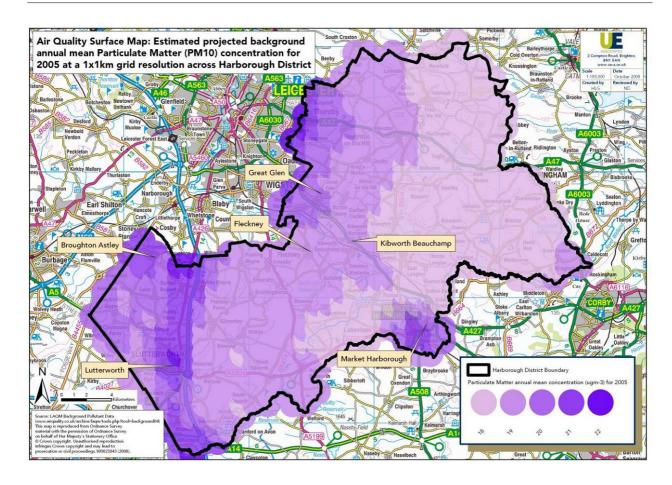


Figure 2.2: Air quality in Harborough: PM₁₀ (particulates)

Traffic emissions have been found to be the predominant cause of air pollution in parts of Harborough, with 44.3% of NO_2 emissions in Lutterworth originating from vehicles.² Monitoring in 2003^3 revealed two hot-spots in Lutterworth where the annual mean NO_2 objective of $40\mu g/m^3$ was exceeded – near the Service Shop on the A426 Market Street (53.4 $\mu g/m^3$) and at Regent Court just to the west of the High Street (60.5 $\mu g/m^3$). The latter location is not currently within the designated AQMA, and hence the Stage 4 Review and Assessment document recommended an extension to the AQMA, as shown in Figure 2.3 below.

As part of the AQMA designation, continuous monitoring 4 is undertaken in Lutterworth, at the Air Quality Monitoring Station on the A426 Market Street. This has highlighted that the town still exceeds the National Objective for NO $_2$, with the average mean NO $_2$ level at this monitoring station in 2007 being 50.8 μ g/m 3 . The road on which the Monitoring Station lies is a link road to Junction 20 of the M1 motorway, and hence is particularly busy during morning and evening rush hour. Whilst the most

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² Harborough DC (2004). Air Quality Review and Assessment: Stage 4 Review and Assessment Consultation Draft (online). Available from: http://www.harborough.gov.uk/downloads/2004-Stage-4-Air Quality Review and assessment.pdf. Accessed 16 September 2010.

³ Harborough DC (2004). Air Quality Review and Assessment: Stage 4 Review and Assessment Consultation Draft (online). Available from: http://www.harborough.gov.uk/downloads/2004 Stage 4 Air Quality Review and assessment.pdf. Accessed 16 September 2010.

⁴ Casella ETi (2008). Harborough DC – Lutterworth: Station Status Screen (online). Available from: http://www.air-quality.net/stationStatus.php?stationNo=34. Accessed 21 October 2008.

common traffic in this part of Lutterworth is cars (76%), it is recognised that buses and HGVs emit substantially more NO_2 per km.

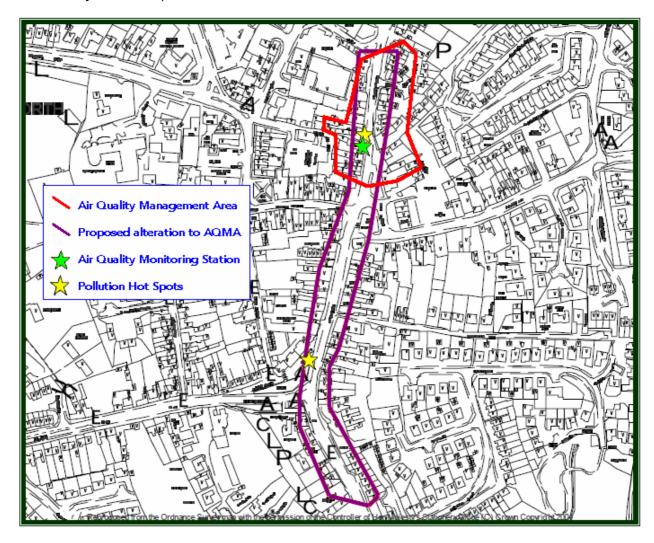


Figure 2.3: Air Pollution in Lutterworth, Harborough (Source: adapted from Harborough DC, 2004).

Chapter III: Biodiversity and Geodiversity

Biodiversity

Leicestershire is one of the poorest counties in the UK in terms of the biodiversity it contains⁵, and like much of the rest of the country is experiencing further biodiversity loss. Though a largely rural area, Harborough is no exception, and only a small proportion of the land area is protected under nature conservation designations. The district does not have any sites designated at the European level, or any National Nature Reserves; but there are 14 Sites of Special Scientific Interest (SSSI) falling either wholly or partially within the district boundary. These SSSIs (listed below) cover 718ha (or 1.21%) of Harborough's total land area and are designated for their nationally important wildlife and/or geology assets:

- Allexton Wood;
- Cave's Inn Pits;
- Chater Valley;
- Eyebrook Reservoir;
- Eyebrook Valley Woods;
- Great Bowden Borrowpit;
- Kirby-Foxton Canal;
- Launde Big Wood;
- Leighfield Forest;
- Misterton Marshes;
- Owston Woods:
- Saddington Reservoir;
- Stanford Park; and
- Tilton Cutting (designated for geological assets).

At the local level, Harborough District is home to two Local Nature Reserves (LNR), Scraptoft and North Kilworth, as well as numerous non-statutory nature conservation designations (which are relevant for both biodiversity and geodiversity), known as Local Wildlife Sites (LWS). These local sites consist of a range of different habitat types, including woodland, grassland, hedgerows, meadows, marshland, quarries, railway corridors, roadside verges, and ponds, as well as individual ash and oak trees. In total the Local Wildlife Sites make up 248.5ha (representing 0.42% of the total land area in Harborough District), whilst the LNRs, which consist primarily of grassland, scrub and bogs, total just 16.32ha. In addition to the above-mentioned designated biodiversity sites, the network of river/stream corridors, gardens and allotments provide good wildlife corridors, whilst brownfield sites and underutilised buildings can also often be important habitats for flora and fauna.

Harborough's nature conservation assets can be seen in Figure 3.1 and Table 3.1 below.

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⁵ Harborough DC CMIS (2003). *Issues paper 3 – The Natural Environment (online)*. Available from: http://cmispublic.harborough.gov.uk/CMISWebPublic/Binary.ashx?Document=8488. Accessed 16 September 2010.

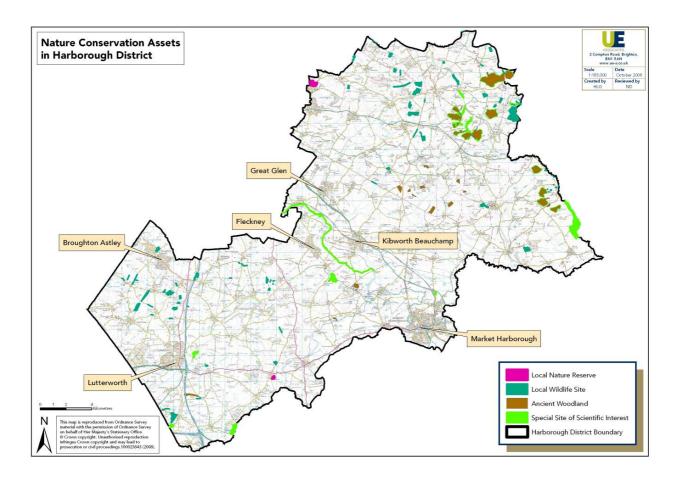


Figure 3.1: Nature Conservation Assets in Harborough

The Draft Natural Environment Issues Paper (2003) suggested a need to encourage the designation of Local Nature Reserves and Sites of Importance for Nature Conservation (SINCs), whilst the lack of woodland in the District has been noted as a particular problem⁶. The 2007 Annual Monitoring Report (AMR) revealed a decline in broadleaved woodland to 27.15ha down from 32.01ha the previous year; and similarly a decline in mixed woodland from 8.53ha to 6.64ha. However, there have been significant positive changes in the populations of a number of Harborough's species of biodiversity importance.

Recently, particularly during 2006-07, there has been an improved recording effort which has lead to a large increase in records for a number of species within the District, particularly bird species. The Biodiversity Action Plan (BAP) for Leicester, Leicestershire and Rutland represents a framework for biodiversity initiatives in the area, and contains the following Habitat and Species Action Plans:

- Calcareous grassland;
- Eutrophic standing waters;
- Fast-flowing streams;
- Field margins;
- Field ponds;
- Floodplain wetland;

⁶ Harborough DC CMIS (2003). Issues paper 3 – The Natural Environment (online). Available from: http://cmispublic.harborough.gov.uk/CMISWebPublic/Binary.ashx?Document=8488. Accessed 16 September 2010.

- Heath-grassland;
- Hedgerows;
- Lowland wood-pasture and parkland;
- Mature trees;
- Mesotrophic lakes;
- Neutral grassland;
- Reedbed;
- Roadside verges;
- Rocks and built structures;
- Sessile oakwood;
- Sphagnum ponds;
- Springs and flushes;
- Wet woodland;
- Otter;
- Dormouse;
- Water Vole;
- Bats;
- Barn Owl;
- Redstart;
- Nightingale;
- Sand Martin;
- Black Hairstreak; and
- White-clawed Crayfish.

This framework is important when considering land use planning issues and biodiversity in the LDF.

Table 3.1: Biodiversity, flora and fauna in Harborough

BIODIVERS	BIODIVERSITY, FLORA AND FAUNA in Harborough					
Feature	Indicator	Quantified data	Comparator	Trends	Source	
SSSIs (Sites of Special Scientific Interest)	Hectares	2007-08: 718ha	2006-07: 718ha	No change since 2005-06.	Harborough DC (2008). GIS Data Harborough DC (2006 and 2007). Annual Monitoring Report 2005- 06 and 2006-07	
	Condition	2007-08: 27.29% of area favourable 37.08% of area unfavourable	2006-07: 34.44% of area favourable 36.02% of area unfavourable	Condition of SSSIs has remained stable over the period 2005-06 to 2007- 08 except Leighford Forest	Nature on the Map (2008). Sites of Special Scientific Interest (online). Available from: http://www.natureonthemap.org.uk/map. Accessed 24 October 2008.	

BIODIVERS	BIODIVERSITY, FLORA AND FAUNA in Harborough					
Feature	Indicator	Quantified data	Comparator	Trends	Source	
		recovering 10.04% of area unfavourable no change 25.59% of area unfavourable declining	recovering 11.09% of area unfavourable no change 18.45% of area unfavourable declining	which has improved each year, and Stanford Park which was declassified in 2007-08 from favourable to unfavourable recovering.	Harborough DC (2006 and 2007). Annual Monitoring Report 2005- 06 and 2006-07	
LNRs (Local Nature Reserves)	Hectares	2007-08: 16.32ha	2006-07: 16.32ha	Total area increased by 2ha in 2006 when second LNR (North Kilworth) was designated.	Nature on the Map (2008). Nature Reserves (online). Available from: http://www.natureonthemap.org.uk. Accessed 24 October 2008.	
LWSs (Local Wildlife Sites)	Hectares	2007-08: 248.5ha	2006-07: 40.2ha	After a decrease from 53.1ha in 2005-06, there has been a significant increase in LWS designations following review in 2007/8.	Harborough DC GIS Data (2008) Harborough DC (2006 and 2007). Annual Monitoring Report 2005- 06 and 2006-07	

Geodiversity

The geodiversity of Harborough is an important asset for the district. Geodiversity is the collective term describing the geological variety of the Earth's rocks, fossils, minerals, soils and landscapes together with the natural process which form and shape them. Geodiversity underpins biodiversity by providing diversity of habitat and the ecosystem, with the soil being the link between them. It also embraces the built environment by providing the basis for neighbourhood character and local distinctiveness through building stone and material.

Figure 3.2 highlights the geology of Harborough and surrounding areas. The geodiversity of the district is dominated by Quaternary period, where during in the ice age large quantities of sediment (including clays and shale) were deposited over the land surface by the movement of glaciers and ice sheets. In the north and east of the district, older Jurassic rocks occur, the erosion of which has given rise to a ridge and valley landscape, where clays exist in the valleys and harder limestones form the tops of hills and valley sides.

Whilst the County of Leicestershire contains extensive mineral resources, and is one of the principal producers of minerals in the country, due to the geology of Harborough, the district itself is not comparatively a large minerals producer. Within Harborough there are three minerals sites: Husbands Bosworth Quarry; Shawell Quarry and Slip Inn Quarry. These all produce sand and gravel. Whilst there

are no Regionally Important Geodiversity Sites in the district, there is one Geological SSSI, Tilton Railway Cutting SSSI, which is a 750m section of disused railway cutting providing exposures of sediments which were deposited during the Lower Jurassic Period, between 189 and 186 million years ago.

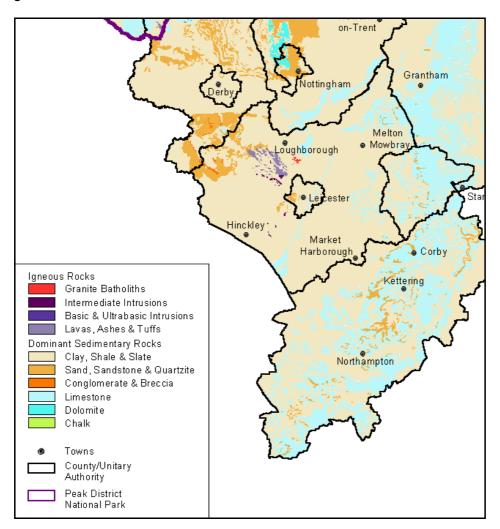


Figure 3.2: Geology of Leicestershire and the surrounding area (Source: Defra)

Chapter IV: Climate Change

Climatic and anthropogenic-induced climate change are increasing sustainability concerns for the district. Locally defined levels of emissions are seen as contributing to national and international changes in climate with implications for a range of environmental and socio-economic receptors.

As highlighted by the report produced by the East Midlands Round Table for Sustainable Development, *The Potential Impact Of Climate Change In The East Midlands* (2000, and updated in 2004),⁷ the likely effects of climate change for Harborough's climate by 2080 are as follows:

- ▶ An annual average temperature increase of about 3.2oC;
- ▶ An average winter temperature increase of about 3.6oC;
- An average summer temperature increase of about 2.6oC;
- An average annual increase in rainfall of about 8%;
- An average winter increase in rainfall of about 11%;
- An average summer decrease in rainfall of about 4%;
- More intensive rainfall during winter months;
- An increase in the number of storms; and
- A significant decrease in the occurrence of frost and snow.

Resulting from these changes, the same report highlights a variety of risks for the East Midlands, and relevant for Harborough. These include:

- Increased incidence of heat related illnesses and deaths during the summer;
- Increase incidence of illnesses and deaths related to exposure to sunlight (e.g. skin cancer, cataracts);
- Increased incidence of pathogen related diseases (e.g. legionella and salmonella);
- Increase in health problems related to rise in local ozone levels during summer;
- Increased risk of injuries and deaths due to increased number of storm events;
- Effects on the region's water resources from climate change;
- Reduction in availability of surface water in reservoirs and rivers for abstraction in summer;
- Adverse effect on water quality from low river levels and turbulent rivers flow after heavy rain and a reduction of water flow;
- Increased risk of flooding, including increased vulnerability to 1:100 year floods;
- Changes in insurance provisions for flood damage;
- A need to increase the capacity of wastewater treatment plants and sewers;
- A need to upgrade flood defences;

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⁷ East Midlands Sustainability Round Table: The Potential Impacts of Climate Change in the East Midlands (2000, updated 2004) http://www.emra.gov.uk/files/potential-impact-climate-change-010404.pdf

- Increased likelihood of summer droughts and soil and water deficits, leading to demand for increased irrigation;
- Heat stress on livestock;
- Soil erosion due to flash flooding;
- New crop pests;
- Loss of species that are at the edge of their southerly distribution;
- > Spread of species at the northern edge of their distribution;
- Impact on the amount of grassland from a reduction in summer rainfall;
- Limitation on the use of water for chemical and food services & & drinks industry;
- Deterioration in working conditions due to increased temperatures;
- Changes to global supply chain;
- Increased difficulty of food preparation, handling and storage more difficult due to higher temperatures;
- An increased move by the insurance industry towards a more risk-based approach to insurance underwriting, leading to higher cost premiums for business;
- Increased demand for air-conditioning;
- Increased drought and flood related problems such as soil shrinkages and subsidence;
- Impacts from an increased number of tourists due to warmer weather;
- Risk of rail tracks buckling due to increased temperature and road surfaces melting more frequently; and
- Flooding of roads and railways

As **Table 4.1** below highlights, in relation to CO_2 emissions by end user, road transport is by far the biggest contributor in Harborough, contributing to almost half- or 45% of the district's total emissions. This is in contrast to regionally and nationally, in which road transport contributes to 28% and 25% of total emissions respectively.

Whilst this in part reflects the lack of industry in the district and the transport of goods (including from the logistics and distribution centre at Magna Park near Lutterworth), the figure for road transport is high, and reflects the relative affluence of Harborough, the rural nature of the district and high car dependence (see accessibility and transportation).

Overall the district produces more carbon dioxide emissions per capita than regionally and nationally. This is particularly significant considering the lack of industry and power generation in the district.

Therefore, as the effects of climate change become increasingly apparent, both mitigation (measures taken to reduce adverse effects) and adaptation (changing the way in which we live to better cope with climate change) will become progressively more important considerations for Harborough.

Table 4.1: Climate change in Harborough⁸.

Feature	Indicator	Quantified data	Regional/ national comparator	Trends	Source
	End user estimates of carbon dioxide emissions – total (kilotonnes)	2006 (ktCO ₂) Harborough: 867	2006 (ktCO ₂) East Midlands: 40,800 UK: 531,736	2005 (ktCO ₂) Harborough: 872 E Midlands: 40,584 UK: 532,373	Defra, September 2008. e-Digest Statistics about: Climate Change Emissions of carbon dioxide for local authority areas
	End user estimates of carbon dioxide emissions - Industry and Commercial per capita (kilotonnes (% of total))	2006 (ktCO ₂) Harborough: 238 (27%)	2006 (ktCO ₂) East Midlands: 18,350 (45%) UK: 245,076 (46%)	2005 (ktCO ₂) Harborough: 235 E Midlands: 18,114 UK: 246,088	Available from: http://www.defra.gov.uk /Environment/statistics/ globatmos/galocalghg.h tm [Accessed 21 October 2008].
Carbon dioxide emissions	End user estimates of carbon dioxide emissions - Domestic per capita (kilotonnes (% of total))	2006 (ktCO ₂) Harborough: 215 (25%)	2006 (ktCO ₂) East Midlands: 10,738 (26%) UK: 153,605 (29%)	2005 (ktCO ₂) Harborough: 211 E Midlands: 10,620 UK: 151,278	
	End user estimates of carbon dioxide emissions - Road Transport per capita (kilotonnes (% of total))	2006 (ktCO ₂) Harborough: 393 (45%)	2006 (ktCO ₂) East Midlands: 11,305 (28%) UK: 135,007 (25%)	2005 (ktCO ₂) Harborough: 405 E Midlands: 11,419 UK: 137,044	
	Per capita carbon dioxide emissions	2006 (ktCO ₂) Harborough: 10.66	2006 (ktCO ₂) East Midlands: 9.35 UK: 8.78	2005 (ktCO ₂) Harborough: 10.85 E Midlands: 9.38 UK: 8.84	

 $^{^{\}rm 8}$ Also see Material Asset s (Section 1.12) for renewable energy provision.

Chapter V: Economic Factors

Harborough has a highly skilled population. A significantly higher proportion of the district's working age population is qualified to NVQ4 level (35.7%) than regional (25.5%) and national (28.6%) averages, and the proportion of the working age population with no qualifications (9.3%) is significantly less than for the East Midlands (13.5%) and England (13.1%). Improvements in skills levels in the district have broadly been similar to that at the regional and national level.

Reflecting this, a higher proportion of the district's working population are in managerial/senior, professional or associate professional and technical occupations (55.4%) when compared to regionally (39.5%) and nationally (42.9%). Alongside, the proportion of employment in knowledge based industries in the district is 44%. Overall unemployment in the district is low compared to regional and national levels (see **Figure 5.1** below).

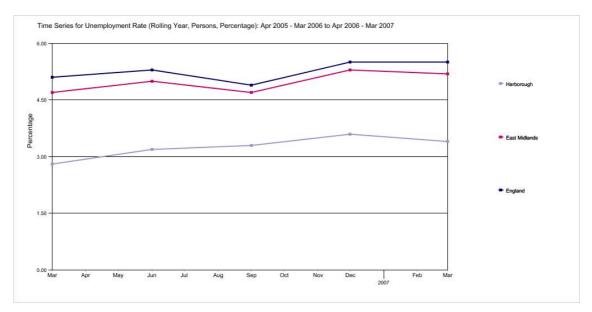


Figure 5.1: Unemployment in Harborough in comparison to regional and national averages (source: www.neighbourhood.statistics.gov.uk)

Whilst skills levels are high in the district, and unemployment is low, in many respects the district is underperforming in economic terms. For example VAT registrations in Harborough are slightly less than regional and national averages, and de-registrations are similar. Alongside, the district has seen a disparity between the scale of employment growth and that of housing. Reflecting this, increasing levels of commuting out of the area for employment purposes has been taking place over the last decade (due in part to the proximity of larger centres, good transport links and the desirability of the district as a place to live). Poor public transport provision & reliance on private transport to access employment and training possibilities has also reduced access to opportunities for some.

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 $^{^{\}rm 9}$ Occupations in Soc 2000 group 1-3: source http://www.nomisweb.co.uk

¹⁰ Harborough District Council: Harborough Economic Development Strategy 2008-2013 (2008)

There is also scope to improve the visitor economy in Harborough, utilising the district's high quality environment and distinctive cultural heritage features, by increasing visitor spend and increasing the number of overnight stays. This has the potential to support the rural economy of the district.

Table 5.1: Economic factors in Harborough.

ECONOMIC FA	ACTORS in Harb	orough			
Feature	Indicator	Quantified data	Regional/ national comparator	Trends	Source
Enterprise	VAT registrations	2006 Harborough: 365 (9% proportion of stock)	2006 East Midlands: 12,320 (9.2%) GB: 177,765 (9.4%)	Harborough: 2005: 330 2004: 380 2003: 355 2002: 340 2001: 330	ONS, 2008. Official Labour Market Statistics: Local Authority Profiles [online]. Available from: http://www.nomisweb.co.uk [Accessed: 22 October 2008]
Business survival rates	VAT deregistrat- ions	2006 Harborough: 290 (7.2% proportion of stock)	2006 East Midlands: 9,180 (6.8%) GB: 139,205 (7.4%)	Harborough: 2005: 270 2004: 290 2003: 325 2002: 320 2001: 325	ONS, 2008. Official Labour Market Statistics: Local Authority Profiles [online]. Available from: http://www.nomisweb.co.uk [Accessed: 22 October 2008]
Unemploy- ment	Percentage of working aged population unemployed	2006 Harborough: 4.3	2006 East Midlands: 5.2 England: 5.5	2004 Harborough : 2.8 East Midlands: 4.7 England: 5.1	Neighbourhood Statistics: www.neighbourhood.statisti cs.gov.uk [Accessed 22 October 2008]
Skills	Percentage of the working age population with no qualifica- tions	2007 Harborough: 9.3	2007 East Midlands: 13.5 Great Britain: 13.1	2001 Harborough : 15.7 East Midlands: 18.6 Great Britain: 16.5	ONS, 2008. Official Labour Market Statistics: Local Authority Profiles [online]. Available from: http://www.nomisweb.co.uk [Accessed: 22 October 2008]
	Percentage of the working age population qualified to NVQ2 level	2007 Harborough: 70.4	2007 East Midlands: 62.6 Great Britain: 64.5	2001 Harborough : 63.3 East Midlands: 56.0	ONS, 2008. Official Labour Market Statistics: Local Authority Profiles [online]. Available from: http://www.nomisweb.co.uk [Accessed: 22 October

Feature	Indicator	Quantified data	Regional/ national comparator	Trends	Source
	and above			Great Britain: 59.5	2008]
	Percentage of the working age population qualified to NVQ4 level and above	2007 Harborough: 35.7	2007 East Midlands: 25.5 Great Britain: 28.6	2001 Harborough : 26.9 East Midlands: 19.3 Great Britain: 23.6	ONS, 2008. Official Labour Market Statistics: Local Authority Profiles [online]. Available from: http://www.nomisweb.co.uk [Accessed: 22 October 2008]
	Percentage of 15-16 year olds achieving 5+A*-C GCSEs	2007 Harborough: 67.7	2007 East Midlands: 57.9 England: 62.0	1997 Harborough : 50.7 East Midlands: 41.5 England: 45.1	DfES: GCSE and equivalent results [online]. Available from: http://www.dfes.gov.uk/inyourarea/statics/las_lea_336_4 .shtml [Accessed: 22 October 2008]
Income	Gross weekly pay for working age population employed full time (£)	2007 Harborough: 458	2007 East Midlands: 430 Great Britain: 459	2002 Harborough : 429 East Midlands: 370 Great Britain: 393	ONS, 2008. Official Labour Market Statistics: Local Authority Profiles [online]. Available from: http://www.nomisweb.co.uk [Accessed: 22 October 2008]
Visitor economy	Day visitors per annum	2006/7 Harborough: 2,206,2600	No data available	No data available	Harborough Economic Development Strategy 2008-2013
	Average spend per visitor (£)	2006/7 Harborough: 84.02	No data available	No data available	Harborough Economic Development Strategy 2008-2013

Chapter VI: Health

Health service provision in Harborough reflects the rural nature of the district, and health facilities are limited to the main towns and villages, as shown in **Figure 6.1**. The limited scope of healthcare facilities within the district means reliance for hospital provision is focused on Leicester and Kettering, outside of Harborough.¹¹ However, for residents in Market Harborough, the main centre of health provision in the district, there are approximately 900 people per doctor; which is far lower than the regional average of 1,808 people per doctor.¹²

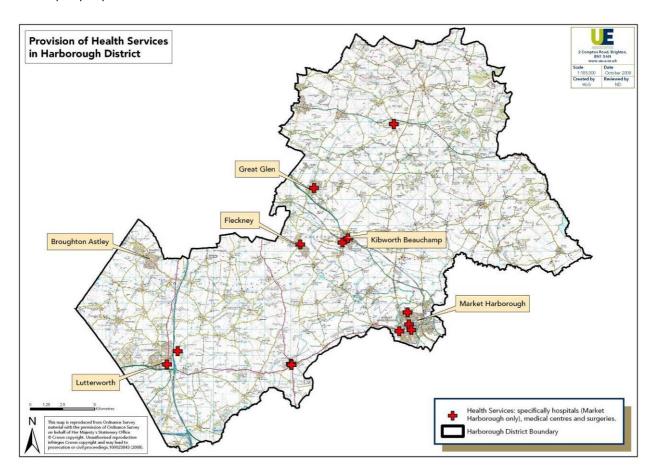


Figure 6.1: Health services in Harborough

In the 2001 Census, 73% of people reported that they were in 'good health', with 6.3% reporting that they were of 'not good health'. **Table 6.1** indicates that Harborough has similar levels of 'not good' health in comparison to regional and national trends. The 2001 Census also reported that 14% of people in Harborough had a limiting long-term illness (LLTI); this varies only slightly from Leicestershire and England averages.

¹¹ Harborough District Local Strategic Partnership (2008) Draft Sustainable Community Strategy [online]. Available from: http://www.leics.gov.uk/harborough.sc.strategy.2008.pdf [Accessed: 16 September 2010).

¹² East Midlands Health Profile 2003

Table 6.1: Limiting long-term illness and 'not good' health within Harborough (Census 2001)

	% of people with a limiting long-term illness	% of people with 'not good' health
Harborough	14%	6%
Leicestershire	15%	7%
England	18%	9%

Females have the highest rates of LLTI in Harborough¹³. The majority of people with either a LLTI or in 'not good' health live in rented accommodation from the council, and/or are unemployed. Market Harborough-Welland ward has the highest proportion of people with a LLTI, as well the highest proportion of people with 'not good' health (8.7% of people) - more than double the proportion of the ward with the lowest level (Broughton Astely-Astley). Market-Harborough-Welland ward has a particularly high LLTI rate for the 45 to 65 age groups, as demonstrated in **Figure 6.2**:

Despite a low availability of health care services in many areas of the district, Harborough fares well in many categories of health issues. Infant deaths and low birthweights are lower than regional and national averages; the district has a lower proportion of people providing unpaid care (10%) than in Leicestershire (11%), and England (10.2%); and less than a quarter of people in the District smoke.¹⁴

Life expectancy for both males and females is higher in Harborough than the national average¹⁵ and life expectancy is rising in the District; 2.4 years for men and 1.5 years for women between the 1991 and 2001 Census. Within Harborough, there are notable differences between life expectancy; female life expectancy is highest in Glen ward (86.5 years) and lowest in Broughton Astley-Sutton wards (76.4 years), whilst male life expectancy is highest in Lutterworth Brookfield ward (83.2 years) and lowest in Broughton Astley-Sutton ward (74.5 years).

The number of under-18 conceptions in Harborough is far lower than the regional and national average; per 1,000 females, the rate of under 18 conceptions in 2005 was 17.0 in Harborough. This compares to a regional average of 40.2, and a national average of 41.3.16

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¹³ Leicestershire County Council, Harborough Community Profile (2005) [online]. Available from: http://www.leics.gov.uk/harboroughweb_ch2_demographic.pdf [Accessed: 16 September 2010]

¹⁴ Harborough District Local Strategic Partnership (2008) Draft Sustainable Community Strategy [online]. Available from: http://www.leics.gov.uk/harborough-sc-strategy-2008.pdf [Accessed: 16 September 2010).

¹⁵ ONS Key Figures for Health and Care, [online]. Available from:

 $[\]frac{\text{http://www.neighbourhood.statistics.gov.uk/dissemination/LeadKeyFigures.do?a=3\&b=277031\&c=harborough\&d=13\&e=6\&g=465794\&i=1001x1003x1004\&m=0\&r=1\&s=1224781355626\&enc=1$

¹⁶ ONS Key Figures for Health and Care (2005), [online]. Available from:

 $[\]frac{\text{http://www.neighbourhood.statistics.gov.uk/dissemination/LeadKeyFigures.do?a=3\&b=277031\&c=harborough\&d=13\&e=6\&g=465794\&i=1001x1003x1004\&m=0\&r=1\&s=1224781355626\&enc=1}{\text{http://www.neighbourhood.statistics.gov.uk/dissemination/LeadKeyFigures.do?a=3\&b=277031\&c=harborough\&d=13\&e=6\&g=465794\&i=1001x1003x1004\&m=0\&r=1\&s=1224781355626\&enc=1}{\text{http://www.neighbourhood.statistics.gov.uk/dissemination/LeadKeyFigures.do?a=3&b=277031\&c=harborough\&d=13\&e=6\&g=465794\&i=1001x1003x1004\&m=0\&r=1\&s=1224781355626\&enc=1}{\text{http://www.neighbourhood.statistics.gov.uk/dissemination/LeadKeyFigures.do?a=3&b=277031&c=harborough\&d=13\&e=6\&g=465794\&i=1001x1003x1004\&m=0\&r=1\&s=1224781355626\&enc=1}{\text{http://www.neighbourhood.statistics.gov.uk/dissemination/LeadKeyFigures.do?a=3&b=277031&c=harborough\&d=13\&e=6\&g=465794\&i=1001x1003x1004\&m=0\&r=1\&s=1224781355626\&enc=1}{\text{http://www.neighbourhood.statistics.gov.uk/dissemination/LeadKeyFigures.do?a=3\&b=277031\&c=harborough\&d=13\&e=6\&g=465794\&i=1001x1003x1004\&i=1001x1004\&i$

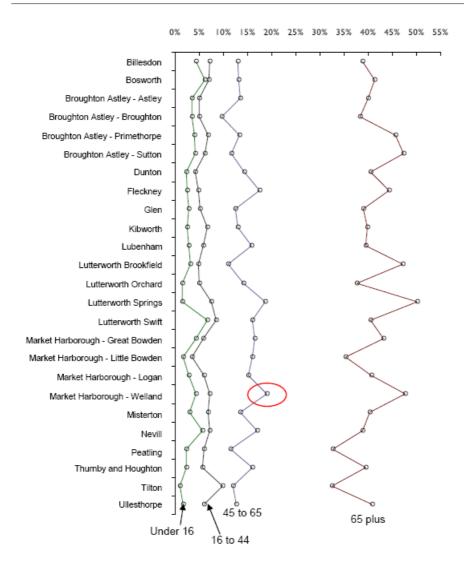


Figure 6.2: Limiting Long Term Illness By Age in Harborough Wards (2001)¹⁷

The NHS has produced a Health Poverty Index, as part of the NHS Plan (2000). For each indicator, a score of zero indicates the best situation in terms of health poverty and a score of 1 the worst situation. For Harborough, the index scores the district as having poor levels of quality of preventative healthcare and social care resourcing. In contrast the index has better scores for income, recreation facilities, home environment, work and local environment, psychological morbidity, premature morbidity and premature mortality.

¹⁷ Leicestershire County Council, Harborough Community Profile (2005) [online]. Available from: http://www.leics.gov.uk/harboroughweb_ch2_demographic.pdf [Accessed: 16 September 2010]

Table 6.2: Health in Harborough

HEALIH IN	HEALTH in Harborough					
Feature	Indicator	Quantified data	Regional / National Comparator	Trends	Source	
Life Expect- ancy	Life expectancy at birth - Males	2003-05 H'borough: 79.8	2004-06 E. Mids: 77.3 England: 77.32	2001-03 East Midlands: 76.3 England: 76.23	Department of Health, 2006. Choosing Health: Health Profiles 2006. and Department of Health, 2007. Choosing Health: Health Profiles 2007.	
	Life expectancy at birth - Females	2003-05 H'borough: 82.3	2004-06 E. Mids: 81.3 England: 81.55	2001-03 East Midlands: 80.5 England: 80.7		
Infant Mortality	The number of infant deaths (deaths under 1 year) per 1,000 live births	2003-05 H'borough: 3.1	2002-04 E. Mids: 5.2 England: 5.0	2002-04 W'hampton: 8.0 East Midlands: 5.2 England: 5.1	ONS Key Figures for Health and Care, [online]. Available from: http://www.neighbou rhood.statistics.gov.u k/ [Accessed: 22 October 2008]	
Coronary Heart Disease	Directly age standardised mortality rates per 100,000 population for coronary heart disease and stroke related conditions (circulatory disease) at all ages under 75 years	2001-02 Harborough : 63.12	2001-02 East Midlands: 64.83 England: 90.5	No data available	Department of Health, 2008. Choosing Health: Health Profiles 2007.	
Doctor provision	Number of people per doctor	Market Harborough (2001): 900 people per doctor	2001: East Midlands: 1808 England: 1742	No data available	2003 East Midlands Health Profile	

HEALTH in Harborough					
Feature	Indicator	Quantified data	Regional / National Comparator	Trends	Source
Good health	% of population that consider themselves to have good or fairly good health	Harborough (2003): 73.2% good 20.6% fairly good	2003: East Midlands: 68% good 23% fairly good England: 68.6% good 22.2% fairly good	No data available	Census 2001, ONS
Low Birth- weight	Percentage of babies of a low birthweight (live births)	(2003-5) H'borough: 6.3	(2003-5) East Midlands: 5.2 England: 5.1	No data available	ONS Key Figures for Health and Care, [online]. Available from: http://www.neighbou rhood.statistics.gov.u k/ [Accessed: 22 October 2008]

Chapter VII: Historic Environment & Landscape

The historic environment of Harborough, which gives the district its sense of place and identity, is defined both by its individual heritage assets, designated and non-designated, and the setting of these assets through the district's historic landscapes and townscapes. The historic growth of Harborough was determined by the development of the area as an important and prosperous agricultural area, the development of Market Harborough and Lutterworth as significant regional market towns and the growth of transport networks such as the Grand Union Canal.

Reflecting this development, in addition to built up areas, many of Harborough's landscapes are of historic significance, through for example containing woodlands and hedgerows which are evidence of management by farmers and landowners over many centuries. The district of is made up of five broad landscape character areas (as determined by the Harborough District Historic Landscape Character Assessment); the Laughton Hills, the Lutterworth Lowlands, the Welland Valley, High Leicestershire and the Upper Soar. In addition to these there are five main rivers (Swift, Avon, Welland, Sence and Eyebrook) and three reservoirs (Saddington, Stanford and Eyebrook). The landscape of Harborough is of high quality, especially in the east of the country, which is characterised by deep valleys and hilltops, as recognised by the existing Harborough Local Plan:

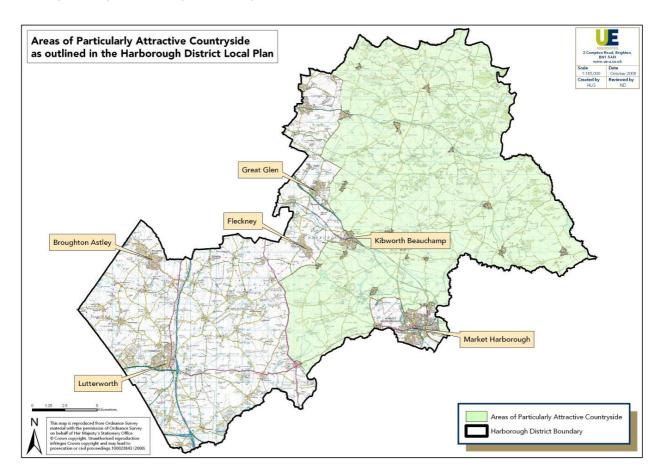


Figure 7.1: Area of Particularly Attractive Countryside, as determined by the Harborough Local Plan

A number of important features and areas for the historic environment in Harborough, such as Listed Buildings, Conservation Areas, Scheduled Ancient Monuments and Registered Parks and Gardens, are protected by statutory designations. Any alterations to scheduled monuments, as well as some listed buildings, which would harm their historic character and special features must have consent from English Heritage to proceed. In addition to statutory protection, many valuable features of the historic environment are protected through the planning system via conditions imposed on developers. The locations of listed buildings and conservation areas within the district can be seen in **Figure 7.4**.



Figure 7.2: Grade I listed building: Stanford Hall, south east of Lutterworth

The Leicester Line of the Grand Union Canal is a particularly important cultural heritage asset for the district. Constructed in the early 1800s, and the original part of the Grand Union Canal, the waterway was constructed to transport heavy goods including coal from the Derbyshire and Nottingham coalfields, and was part of the network which would later connect Birmingham to London. A prominent feature of the canal in the district is the Grade II* listed Foxton Locks, which allows boats to travel up a 75ft hill using an inclined plane and a series of lock gates. This site is also a Scheduled Ancient Monument, and has been recently subject to conservation works, including improved access and interpretation.

With the passing of the Civic Amenities Act in 1967, local authorities were able to protect groups of buildings in villages and towns through the designation of Conservation Areas. Harborough's first designation was made in 1969, and the district now has 62 such areas (a relatively large number), including older cores of settlements, whole villages, small group of buildings, rural areas relating to large estates or a features such as canals. Conservation areas contain buildings, structures and other features of historic or architectural importance which, together with the open spaces between them, interact to create areas of special quality and interest. The location of conservation areas in Harborough are shown in **Figure 7.4**.



Figure 7.3: Conservation area: Lowesby Village

It should be noted that not all of Harborough's historic environment resource is subject to statutory designations, and non-designated features comprise a large part of what people have contact with as part of daily life – whether at home, work or leisure. For example, although not listed, many buildings and areas are of historic interest, and which are seen as important by local communities. An example of this in Harborough include a number of parks in the district.

The district's cultural heritage designations are set out below:

Table 7.1: Designated cultural heritage assets in Harborough¹⁸.

DESIGNATED CULTURAL HERITAGE ASSETS in Harborough				
Feature	Number and Sites	Source		
Listed Buildings	2008 Harborough: 1,265	English Heritage, 2008. Heritage Counts – The State of the East Midlands Historic Environment [online]. Available from: http://hc.english- heritage.org.uk/upload/pdf/EM_Data_Re port_2008.pdf?1285242639 [Accessed: 17 September 2010].		

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¹⁸ It should be noted that the English Heritage BAR Register only counts grade I and II* buildings and Scheduled Monuments at risk - there are likely to be many more Grade II buildings at risk in Harborough.

DESIGNATED CULTURAL HERITAGE ASSETS in Harborough					
Feature	Number and Sites	Source			
Buildings at Risk	2010 Harborough: 2 - Withcote Hall - Scraptoft Hall	English Heritage, 2010. Heritage at Risk Register [online]. Available from: http://risk.english-heritage.org.uk/2010.aspx?rs=1&rt=1&p n=1&st=a&di=Harborough&ctype=all&cr it= [Accessed: 17 September 2010]			
Scheduled Ancient Monuments	2008 Harborough: 60	Harborough DC - Scheduled Ancient Monuments [online]. Available from: http://www.harborough.gov.uk/dotGov/h ome.do?crumb=Scheduled%20Ancient% 20Monuments&&page_css=xDefault&vie w_schema=service&view_name=07HDC- Imported%20Service%20ID%20245&hom epage_name=07HDC- Imported%20Service%20ID%20245&pag e_name=details [Accessed 22 October 2008].			
Registered Parks and Gardens	2008 Harborough: 6 Including: Baggrave Hall; Langton Hall; Lowesby Hall; Quenby Hall; Nevill Holt; and Stanford Hall.	Harborough DC - Registered Parks and Gardens [online]. Available from: http://www.harborough.gov.uk/pp/gold/viewGold.asp?IDType=Page&ID=2426 [Accessed 22 October 2008].			
Conservation Areas	2008 Harborough: 62	Harborough DC - Conservation areas [online]. Available from: http://www.marketharboroughonline.co.u k/pp/gold/viewGold.asp?IDType=Page&I D=7670 [Accessed 22 October 2008].			

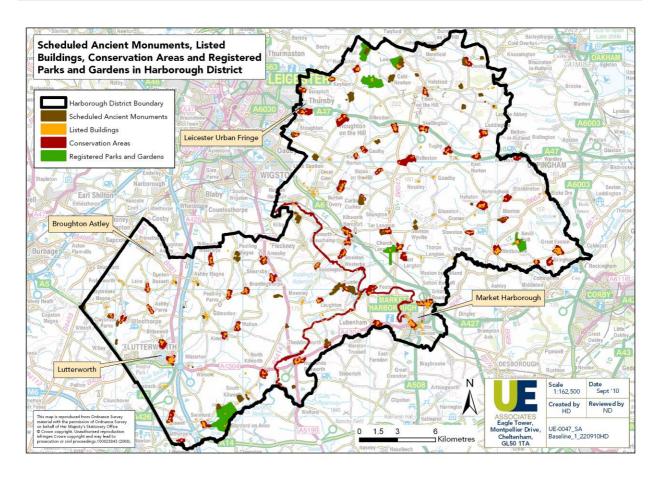


Figure 7.4: Scheduled Ancient Monuments, Listed Buildings, Conservation Areas and Registered Parks and Gardens in Harborough.

Chapter VIII: Housing

Average house prices in Harborough are the highest in Leicestershire and are significantly higher than East Midlands averages. Affordability of housing is a major issue in Harborough, and, as highlighted by the Economic Development Strategy 2008-2013, the Housing affordability ratio (between average house prices and average salaries) is 9.4. This large gap between house prices and earnings is a particular problem for people living in rural areas of the district.

To help address this issue, the Affordable Housing SPD (2006) now requires a minimum of 30% of housing developments of 5 or more dwellings to be affordable and a total of 54 affordable units were built in the district during 2006/07. This represents an increase of 28 on the previous study year; however this increase does not meet the corporate target of 80 per annum¹⁹- an issue made more pertinent by the suggestion by the 2007 update to the Housing Needs Study that 279 affordable dwellings need to be built per year to meet district shortfalls. This shortage of affordable housing is reflected by the number of Households on the Local Authority Housing Register increasing from 770 to 1,254 between 2001 and 2005.

The majority of the District's 33,455 dwellings are privately owned (92%) while the remaining 8% are owned by Harborough District Council or Registered Social Landlords. Homelessness has been decreasing in the district since 2001 and is lower than regional and national averages.

Table 8.1: Housing in Harborough

HOUSING in Harborough					
Feature	Indicator	Quantified data	Regional/ National Comparator	Trends	Source
House Prices	Average house price	April-June 2008 Harborough: £232,628	April-June 2008 East Midlands: £164,886 England: £219,262	Data not available	UK Land Registry (through BBC website). http://news.bbc.co.uk/1/share d/spl/hi/in_depth/uk_house_pri ces/regions/html/regions.stm [Accessed: 22 October 2008]
Affordable Housing	Annual shortfall of affordable housing per year	2007 Harborough: 144	No data available	No data available	Harborough Annual Monitoring Report 2007

¹⁹ Harborough District Council: Harborough Annual Monitoring Report 2007 (December 2007)

HOUSING in	HOUSING in Harborough								
Feature	Indicator	Quantified data	Regional/ National Comparator	Trends	Source				
Housing affordability ratio	Ratio between average house prices and average salaries	9.4	No data available	The affordability ratio has been increasing over the last 10 years.	Harborough Economic Development Strategy 2008- 2013				
Home- lessness	Percentage of households accepted as homeless	April 2004-05 Harborough: 3.3	April 2004-05 East Midlands: 6.6 England 7.8	April 2000- 01 Harborough: 9.0 East Midlands: 7.8 England :11.1	ONS. Neighbourhood Statistics [online]. Available from: http://neighbourhood.statistics .gov.uk/ [Accessed: 22 October 2008]				
Households on the Local Authority Housing Register	Number of households	April 2005-06 Harborough: 1,355	East Midlands: 133,823 England: 1,634,301	Harborough: 04/05: 1,254 03/04: 1,038 02/03: 1,172 01/02: 770	ONS. Neighbourhood Statistics [online]. Available from: http://neighbourhood.statistics .gov.uk/ [Accessed: 22 October 2008]				

Chapter IX: Material Assets

Renewable energy

There are two installations in Harborough which produce significant renewable energy: Two Photovoltaic Sunflowers providing 600 kwhs at a site in Magna Park; and 24 Photovoltaic modules providing 3000Wp above a shop (One Stop) in Lutterworth.²⁰

Waste

In comparison with national and regional averages, recycling rates in Harborough are extremely favourable; the district recycles 49% of its household waste in comparison to 36% regionally and 31% nationally.²¹ This was the tenth best household recycling and composting rate of local authorities in England. Data on the proportion of municipal waste going to landfill or being incinerated was not available at the district level (although is available from Defra for Leicestershire).

Table 9.1: Waste Arisings and Recycling Rates in Harborough.

WASTE ARISINGS AND RECYCLING RATES in Harborough*							
Feature	Indicator	Quantified data	Regional/ National Comparator	Trends	Source		
Waste Arisings	Household waste arisings per head (tonnes)	2006/7 Harborough: 0.23	2006/7 East Midlands: 0.52	2005/6 data not available for Harborough	Defra, 2007. Municipal waste statistics 2006/7 [online], Available from: http://www.defra.gov.uk/environmen t/statistics/wastats/bulletin07.htm [Accessed: 23 October 2008]		
	Household waste arisings (tonnes)	2005/6 Harborough: 37,207	2005/6 East Midlands: 2,847,000	2004/5 data not available for Harborough	Defra, 2007. Municipal waste statistics 2006/7 [online], Available from: http://www.defra.gov.uk/environmen t/statistics/wastats/bulletin07.htm [Accessed: 23 October 2008]		
	Municipal waste arisings (tonnes)	2005/6 Harborough: 41,234	2005/6 East Midlands 2,428,000	2004/5 data not available for Harborough	Defra, 2007. Municipal waste statistics 2006/7 [online], Available from: http://www.defra.gov.uk/environmen		

²⁰ Harborough Annual Monitoring Report 2007

²¹ Defra, 2007. *Municipal waste statistics 2006*/7 [online], Available from: http://www.defra.gov.uk/environment/statistics/wastats/bulletin07.htm.

WASTE A	WASTE ARISINGS AND RECYCLING RATES in Harborough*							
					t/statistics/wastats/bulletin07.htm [Accessed: 23 October 2008]			
Local Auth- ority Recy- cling Rates	Household recycling & composting rate (%)	2006/7 Harborough: 48.6	2006/7 East Midlands: 35.6 England: 30.9	2005/6: Harborough 42.5 East Midlands: 31.8 England: 26.7	Defra, 2007. Municipal waste statistics 2006/7 [online], Available from: http://www.defra.gov.uk/environmen t/statistics/wastats/bulletin07.htm [Accessed: 23 October 2008]			
	Municipal recycling rate (%)	2005/6 Harborough: 38.6	2005/6 East Midlands: England: 27.1	2004/5 data not available for Harborough	Defra, 2006. Municipal waste statistics 2005/6 [online]. [Accessed: 23 October 2008] (data not available for 2006/7)			

^{*}Data at the district level are not yet available for 2006/7- only at the County level.

Brownfield Land

In relation to the reuse of brownfield land, completions of housing on previously developed land has been steadily increasing in the district since 2001. More recent figures, (since 2004) are very high, especially when seen in the context of the rural nature of much of Harborough.

Table 9.2: Housing completions on brownfield sites (Source: Harborough Annual Monitoring Report 2007)

Year	Percent of development on brownfield sites
2001/02	33%
2002/03	25%
2003/04	38%
2004/05	61%
2005/06	64%
2006/07	84%

Chapter X: Population and Quality of Life

Population

Mid-year estimates from the Office of National Statistics (ONS) placed the population of Harborough at 82,300 in 2007.²² Harborough has a population density of 1.29 people per hectare, the second least densely populated area within Leicestershire²³. Approximately 49% of the district's population is male; with 51% female.

The largest proportion of the population live in the larger settlements of Market Harborough (18,600 people), Broughton Astley (8,680 people) and Lutterworth (8,350 people). **Figure 10.1** demonstrates population variation across the district.

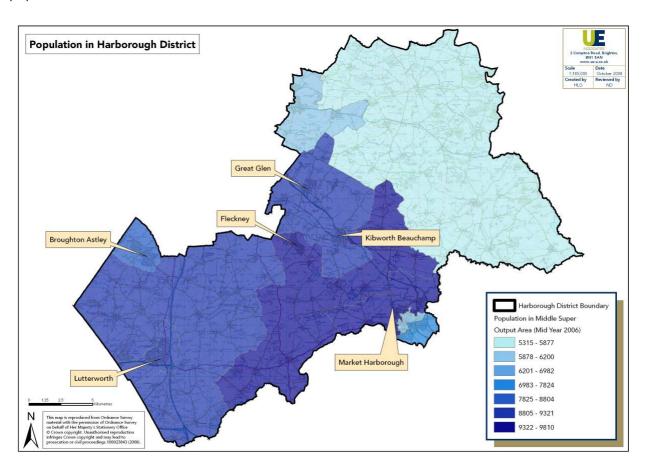
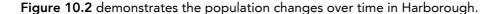


Figure 10.1: Population density in Harborough (ONS, 2006)

²²Neighbourhood Statistics – Resident Population, All Persons, Mid Year Estimates 2007 [online]. Available from: http://www.neighbourhood.statistics.gov.uk/dissemination/LeadTableView.do?adminCompAndTimeld=26629%3A280&a=3&b=277 031&c=harborough&d=13&r=1&e=13&f=26484&o=322&g=465794&i=1001x1003x1004x1005&l=1813&m=0&s=1285148777347&enc =1 [Accessed: 16 September 2010].

²³ Neighbourhood Statistics – Census 2001 Population Density [online] Available from: http://neighbourhood.statistics.gov.uk/dissemination/viewFullDataset.do?instanceSelection=03267&productId=789&\$ph=60_61_62 &datasetInstanceId=3267&startColumn=1&numberOfColumns=8&containerAreald=276693 [Accessed: 16 September 2010].

Harborough saw an increase in the annual number of births from 791 to 812 (3%) from 1997 to 2002.²⁴ In general, the district saw a steady population increase of 6.9% (5,741 people) between the 2001 Census and 2007²⁵ and the population is set to continue to rise by 19% by 2016 (compared to the 2001 census figure) due to natural population increase and a rise in migration into Harborough.²⁶ Market Harborough has seen the largest rise in population in the district (39.5%).²⁷



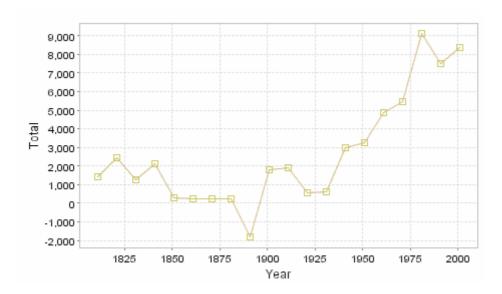


Figure 10.2: Harborough District population changes since 1800 (Source: www.visionofbritain.org.uk)²⁸

There are a number of variations from national population trends within Harborough's age structure. For example, based on Census 2001 figures, there are less people within the 15-29 age band compared to the UK average. This is particularly prominent in rural villages. and a large proportion of young people in the district are concentrated in the two market towns²⁹. In contrast there are higher than average numbers of people aged 35-59 living in Harborough. In total, 62.5% of the Harborough population are of working age, 18.9% of the population are aged under 16 years and 18.6% are of pension age³⁰. The decreasing number of children in lower age groups is likely to be compounded by low numbers in the main child-bearing age groups (20 to 34 years). The population pyramid in **Figure 10.3** shows the age profile of the district's population.

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²⁴ Leicestershire County Council, Harborough Community Profile (2005) [online]. Available from: http://www.leics.gov.uk/harboroughweb-ch2 demographic.pdf [Accessed: 16 September 2010].

²⁵ Neighbourhood Statistics – Census 2001 Population [online]. Available from:

 $[\]frac{\text{http://www.neighbourhood.statistics.gov.uk/dissemination/LeadTableView.do?a=3\&b=277031\&c=harborough\&d=13\&e=16\&g=465}{794\&i=1001x1003x1004\&m=0\&r=1\&s=1285148977346\&enc=1\&dsFamilyld=75} \ [Accessed: 16 September 2010].$

²⁶Harborough District Local Strategic Partnership (2008) Draft Sustainable Community Strategy [online]. Available from:

http://www.leics.gov.uk/harborough sc strategy 2008.pdf [Accessed: 16 September 2010).

²⁷ Leicestershire County Council, Harborough Community Profile (2005) [online]. Available from:

http://www.leics.gov.uk/harboroughweb_ch2_demographic.pdf [Accessed: 16 September 2010].

²⁸ Neighbourhood Statistics – Census 2001 Population Pyramid [online]. Available from:

http://www.statistics.gov.uk/census2001/pyramids/pages/31ud.asp [Accessed: 16 September 2010].

²⁹ Vision of Britain Through Time [online]. Available from:

http://www.visionofbritain.org.uk/data_rate_page.jsp?u_id=10056690&c_id=10168582&data_theme=T_POP&id=0 [Accessed: 16 September 2010].

³⁰ Leicestershire Statistics and Research Online [online]. Available from: http://www.lsr-online.org/stats/areas/31UD/D [Accessed: 16 September 2010].

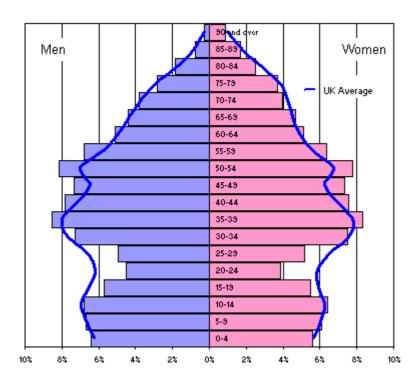


Figure 10.3: Harborough Population Pyramid against the UK average (Source: ONS, 2001 Census)31.

The number of people in Harborough aged over 75 increased from 6.48% in 1991 to 7.25% in 2001; an ageing population pattern also seen regionally. There has also been a rise in life expectancy of 2.4 years for men and 1.5 years for women between the 1991 and 2001 Census, highlighting the importance of sufficient community services in Harborough to provide for an ageing population.

The population in Harborough is predominately white in ethnic origin (97.87% in 2001)³². Harborough's Black or Minority Ethnic background (BME) population is approximately 4.2% (3,257 people). This percentage is considerably lower than the East Midlands figure of 8.7%, the Leicestershire County figure of 7.3% and the national figure of 9.1%³³. The largest BME groups are Other White (1,131 people), Indian (631 people) and Irish (488 people)³⁴. In 2001, 96.2% of people living in Harborough were born in the UK, 1.4% were born in the EU, and 2.4% were born from outside the EU³⁵. Harborough's Asian or Asian British population is focused within the urban fringe areas of Leicester within the district, including Scraptoft, Thurnby, Stoughton and Great Glen³⁶.

³¹ Neighbourhood Statistics – Census 2001 Population Pyramid [online]. Available from: http://www.statistics.gov.uk/census2001/pyramids/pages/31ud.asp [Accessed: 16 September 2010].

³² Harborough District Council, Annual Monitoring Report (2006-2007)

³³ Leicestershire County Council, Harborough Community Profile (2005) [online]. Available from: http://www.leics.gov.uk/harboroughweb_ch2_demographic.pdf [Accessed: 16 September 2010].

³⁴ Leicestershire County Council, Harborough Community Profile (2005) [online]. Available from: http://www.leics.gov.uk/harboroughweb_ch2_demographic.pdf [Accessed: 16 September 2010].

³⁵ Leicestershire Statistics and Research Online [online]. Available from: http://www.lsr-online.org/stats/areas/31UD/D [Accessed: 16 September 2010].

³⁶ Harborough District Council, Annual Monitoring Report (2006-2007)

Linked to its limited ethnic diversity, Harborough has a comparatively low level of religious diversity (**Table 10.1**) 78% of residents were of Christian religion, 0.1% stated they were Jewish and 0.2% Muslim.³⁷

Table 10.1: Religious groups in Harborough District (Source: ONS)38:

	Number of people in Harborough District	Percentage of Harborough District	Rank (out of 375 local authorities in England and Wales; a high rank indicates a high proportion of the indicator)	Rank (out of 48 regional local authorities)
Christian	59,700	77.95%	109	17
Buddhist	107	0.14%	255	19
Hindu	358	0.47%	116	12
Jewish	103	0.13%	142	7
Muslim	177	0.23%	269	22
Sikh	232	0.30%	80	13
Other	109	0.14%	342	40
No religion	10,747		216	25
Religion not stated	5,026	20.60%	325	32

³⁷ Heritage Counts Report (2004)

³⁸ Neighbourhood Statistics – Census 2001 Ethnicity and Religion: Harborough [online]. Available from: http://www.statistics.gov.uk/census2001/profiles/31ud.asp#ethnic [Accessed: 16 September 2010].

Table 10.2: Population and ethnicity in Harborough

POPULATIO	POPULATION AND ETHNICITY in Harborough							
Feature	Indicator	Quantified data	Regional/ National Comparator	Trends	Source			
Pop. Size	Population estimates (millions)	2007 Harborough: 82,300	2007 (millions) Leicestershire: 0.6 East Midlands: 4.1 England: 58.78	2001: 76,800 2007: 82,300 2011: 84,500 2016: 90,400	Leicestershire County Council, Harborough Community Profile (2005) [online]. Available from: http://www.leics.gov.uk/harboroug hweb_ch2_demographic.pdf [Accessed: 23 October 2008] and Neighbourhood Statistics – Census 2001 Population [online] Available from: http://neighbourhood.statistics.go v.uk/ [Accessed:23 October 2008]			
Pop. Density	Population Density (number of persons usually resident per hectare)	2001 Harborough: 1.29	2001 E. Mids: 2.67 England: 3.77	No data available	Neighbourhood Statistics – Census 2001 Population Denisty [online] Available from: http://neighbourhood.statistics.go v.uk/ [Accessed:23 October 2008]			
Age Profile	Population in age band (%)	2001 Harborough 0-14: 19.0 15-29: 14.9 30-44: 23.6 45-59: 21.9 60-74: 13.5 75+: 7.2	2006 England: 0-14: 18.8 15-29: 19.9 30-44: 22.6 45-59: 18.8 60-74: 18.0 75+: 7.5	1991 Harborough 0-14: 19.3 15-29: 19.2 30-44: 23.3 45-59: 18.6 60-74: 13.0 75+: 6.6	ONS. Neighbourhood Statistics 1991-2001 [online]. Available from: http://neighbourhood.statistics.go v.uk/ [Accessed: 23 October 2008]			

POPULATIO	POPULATION AND ETHNICITY in Harborough							
Feature	Indicator	Quantified data	Regional/ National Comparator	Trends	Source			
Ethnicity	Ethnic groups as a percentage of total population	2001 Harborough: White: 97.87 Mixed: 0.64 Asian: 1.01 Black: 0.2 Chinese & Other: 0.26	2001 Leicester-shire: White: 94.71 Mixed: 0.75 Asian: 3.7 Black: 2.3 Chinese & Other: 0.32	No data available	ONS. Neighbourhood Statistics [online]. Available from: http://neighbourhood.statistics.go v.uk/ [Accessed: 23 October 2008]			

Deprivation

In general, deprivation in Harborough is low. Based on the Indices of Multiple Deprivation (IMD), the district is ranked as the 10th least deprived out of 354 Local Authority areas in England and is the least deprived in Leicestershire. Overall, the majority of the 47 Super Output Areas (SOAs)³⁹ in Harborough are ranked within the least deprived 50% in England (ranked 16,241 to 32,482), with only one SOA ranked within the 50% most deprived in England- part of Market Harborough-Welland ward.⁴⁰

The ten most deprived Super Output Areas in the district, and the ward in which they are located are as follows:

- ▶ E01025806: Market Harborough Welland;
- ▶ E01025796: Market Harborough Great Bowden and Arden;
- ▶ E01025784: Kibworth;
- ▶ E01025788: Lubenham; and
- ▶ E01025801: Market Harborough Logan.

As highlighted by the map below (Figure 10.4), which is shaded according to the SOA rankings for

³⁹ Super Output Areas (SOAs) are a geographic hierarchy designed to improve the reporting of small area statistics in England and Wales, with the aim of developing a range of areas that would be of consistent size and whose boundaries would not change. These were built from groups of the Output Areas (OAs) used for the 2001 Census.

⁴⁰ Research and Information Team Leicestershire County Council: Harborough Community Profile 2005 (2005)

IMD, deprivation in Harborough is evenly distributed, with the slightly more deprived areas existing in the district mostly being located in Market Harborough. Overall however, as the map outlines, when compared to surrounding areas including in Leicester and Corby, deprivation is extremely low across the district.

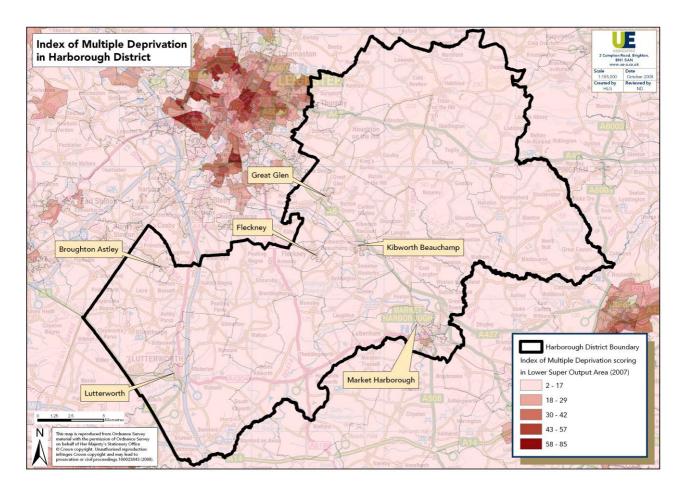


Figure 10.4: Index of Multiple Deprivation in Harborough: overall scores

It should be noted however that, of the deprivation which does exist in Harborough, the district experiences the most significant levels of deprivation within the "Barriers to Housing and Services" domain, which includes the following:

- Household overcrowding;
- Homeless households applications;
- Difficulty of access to owner occupation;
- Road distance to GP premises;
- Road distance to a supermarket or convenience store;
- Road distance to a primary school; and
- Road distance to a Post Office.

There are six SOAs which are ranked within the 10% most deprived in England for this category, and four of the five most deprived SOAs in Leicestershire for this category are located within the district. The most severe deprivation is experienced in Tilton ward (the SOA covers the entire ward), and this

area is ranked as the 394th most deprived in England (out of 32,482 similar areas). Figure 11.5 highlights the extent of deprivation for the Barriers to Housing and Services domain in the district.

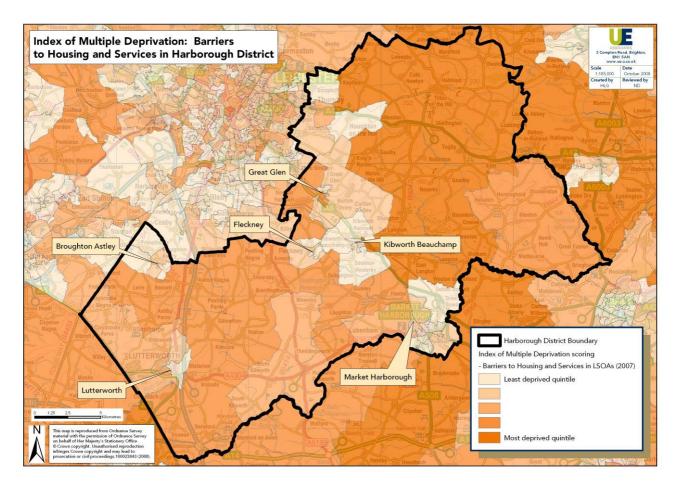


Figure 10.5: Index of Multiple Deprivation in Harborough: Barriers to Housing and Services category

Therefore, whilst (as highlighted by **Table 10.3**) the district enjoys high average incomes, high employment, low levels of crime and a good quality of life overall in comparison to regional and national averages, accessibility and affordable housing remain key issues for the district. For example some sectors of the population find it difficult to access suitable housing: although a total of 54 affordable units were built during 2006/07, representing an increase of 28 on the previous study year; this provision did not meet the Harborough corporate target of 80 per annum or the perceived requirement (according to the 2007 housing needs update Housing Market and Needs Assessment) for 279 dwellings per year.⁴¹ Alongside, due to the rural nature of the district, and infrequent public transport links many people also have difficulties in accessing services. These issues have been discussed further in the Accessibility and Transport and the Housing sections of this baseline summary.

⁴¹ Harborough District Council: Harborough Annual Monitoring Report 2007 (December 2007) and Affordable Housing SPD (2006)

Table 10.3: Deprivation in Harborough.

DEPRIVATION	DEPRIVATION in Harborough								
Feature	Indicator	Quantified data	Regional / National Comparator	Trends	Source				
Indices of Multiple Deprivation (IMD)	Rank of average score	2007 Harborough: 344 (out of 354)	No data available	No data available	DCLG, 2007. English Indices of Deprivation 2007 [online]. Available from: http://www.communities.go v.uk/communities/neighbou rhoodrenewal/deprivation/d eprivation07/ (accessed 23 rd October 2008)				
	Wards within 50% most deprived in England	Market Harborough- Welland	No data available	No data available	DCLG, 2007. English Indices of Deprivation 2007 [online]. Available from: http://www.communities.go v.uk/communities/neighbou rhoodrenewal/deprivation/d eprivation07/ (accessed 22 October 2008)				
Affordable Housing	Annual shortfall of affordable housing per year	2007 Harborough: 225	No data available	No data available	Harborough Annual Monitoring Report 2007				
Home- lessness	Percentage of households accepted as homeless	April 2004-05 Harborough: 3.3	April 2004-05 East Midlands: 6.6 England 7.8	April 2000-01 Harborough: 9.0 East Midlands: 7.8 England :11.1	ONS. Neighbourhood Statistics [online]. Available from: http://neighbourhood.statis tics.gov.uk/ [Accessed: 22 October 2008]				
Crime	Recorded offences per 1,000 population	April 2006-07 Harborough: 28	April 2006-07 Leicestershire: 58 England & Wales: 61	Decreasing nationally, regionally and for Harborough	Crime in England and Wales 2006/2007, Home Office http://www.homeoffice.gov. uk/rds/pdfs07/laa1.xls [Accessed: 22 October 2008]				

DEPRIVATION	DEPRIVATION in Harborough								
Feature	Indicator	Quantified data	Regional / National Comparator	Trends	Source				
Unemploy- ment	Percentage of working aged population unemployed	2006 Harborough: 4.3	2006 East Midlands: 5.2 England: 5.5	2004 Harborough: 2.8 East Midlands: 4.7 England: 5.1	Neighbourhood Statistics: www.neighbourhood.statisti cs.gov.uk [Accessed 22 October 2008]				
Income	Gross weekly pay for working age population employed full time (£)	2007 Harborough: 458	2007 East Midlands: 430 Great Britain: 459	2002 Harborough: 429 East Midlands: 370 Great Britain: 393	ONS, 2008. Official Labour Market Statistics: Local Authority Profiles [online]. Available from: http://www.nomisweb.co.uk [Accessed: 22 October 2008]				

Green Infrastructure

Green infrastructure is the network of multi-functional open spaces, including formal parks, gardens, woodlands, green corridors, waterways, street trees and open countryside of green spaces and natural elements that intersperse and connect cities, towns and villages.⁴²

Natural England's Urban Green Space Standards⁴³ recommend that everyone should have access to natural green space within 300 metres from their home, whilst the National Playing Fields Association recommends 2.4 ha of open space per 1,000 head of population. As a predominantly rural district with low population density, Harborough has a wide diversity of open space (including parks and gardens, local wildlife sites, allotments, sports/play areas and golf courses) as well as high quality and accessible open countryside. There are ten parks and recreation grounds in the district and over 120 smaller recognised open spaces,⁴⁴ with one park in the district, Welland Park, meeting Green Flag standards. According to the ONS 2005 Land Use Database⁴⁵, green space in Harborough makes up 93.7% of the total land area, compared to 89.8% in the East Midlands and 84.5% across the whole of England.

⁴² Definition provided by the online Green Infrastructure Planning Guide http://www.greeninfrastructure.eu/

⁴³ Natural England Board - Scope of Natural England's Health Policy [online]. Available from: http://www.naturalengland.org.uk/lmages/healthpolicy0721final_tcm6-3801.pdf [Accessed: 16 September 2010].

⁴⁴ http://www.harborough.gov.uk/pp/gold/viewgold.asp?ID=493

⁴⁵ ONS. Neighbourhood Statistics [online]. Available from: http://neighbourhood.statistics.gov.uk/ [Accessed: 16 September 2010]

The waterway network of Harborough is a key part of the district's Green Infrastructure network. Including the River Welland and the Grand Union Canal Leicester Line, these corridors provide multifunctional opportunities for recreation, improved biodiversity linkages and natural resource management. Reflecting this, part of National Cycleway No.6 follows the route of the Grand Union Canal Leicester Line, and the Millenium Mile follows the River Welland and links areas of open space in Market Harborough.

Chapter XI: Water and Soil

Rivers, Streams and Waterways

The water environment of Harborough consists of a number of rivers, including the Welland, the Sense Avon, Chater, Eye Brook, Gwash, Swift, part of the Grand Union Canal network and three reservoirs. The majority of the south eastern part of Harborough is drained by the River Welland, and the Rivers Chater and Gwash, and Eye Brook drain the north eastern part of the district. The south west of Harborough is drained by the River Avon and River Swift, and the north western part of the district is drained by the River Sence and its tributaries, which carry water to the north west of the district towards the River Soar and the River Trent.

Water Resources

Harborough District is served by two water companies. Severn Trent Water (STW) provides potable water distribution for the Harborough administrative area and wastewater collection for the urban centres of Broughton Astley and Lutterworth. Anglian Water provides wastewater collection and management for the south and western region of the Harborough administrative area including the main population centre, Market Harborough⁴⁶.

STW's Water Resources Management Plan (WRMP) states that water is not freely available in the East Midlands Water Resource Zone, and that it is forecast to go into deficit by 2020 due to climate change⁴⁷. The Welland Catchment Abstraction Management Strategy (CAMS)⁴⁸ suggests that there is 'no water available' for additional abstraction on the River Welland or its tributaries at low flows, with the area within Water Resource Management Unit 3 (including much of the eastern part of Harborough District) currently being over-abstracted 75% of the time. In addition, there is deemed to be 'no water available' for further licensing from the groundwater source at Market Harborough. The western part of the District is covered by the Sour Catchment Abstraction Management Strategy⁴⁹, where water is deemed to be 'available' for further abstraction.

Water Quality

The vulnerability of groundwater to pollution is determined by the physical, chemical and biological properties of the soil and rocks, which control the ease with which an unprotected hazard can affect groundwater. Groundwater Source Protection Zones (SPZs) indicate the risk to groundwater supplies from potentially polluting activities and accidental releases of pollutants. Designed to protect individual groundwater sources, these zones show the risk of contamination from any activities that might cause

⁴⁶ Harborough DC: Level 1 Strategic Flood Risk Assessment. Final Report, April 2009.

⁴⁷ Severn Trent Water: water resources Management Plan. Final Version, June 2010.

⁴⁸ Environment Agency: The Welland Catchment Abstraction Management Strategy, April 2007.

⁴⁹ Environment Agency: The Sour Catchment Abstraction Management Strategy, July 2006

pollution in the area. In this context they are used to inform pollution prevention measures in areas which are at a higher risk, and to monitor the activities of potential polluting activities nearby.

The Environment Agency has graded SPZs into four zones, as follows:

Box 1: Categories of groundwater Source Protection Zones (source Environment Agency⁵⁰

Zone 1 (Inner protection zone): Any pollution that can travel to the borehole within 50 days from any point within the zone is classified as being inside zone 1. This applies at and below the water table. This zone also has a minimum 50 metre protection radius around the borehole. These criteria are designed to protect against the transmission of toxic chemicals and water-borne disease.

Zone 2 (Outer protection zone): The outer zone covers pollution that takes up to 400 days to travel to the borehole, or 25% of the total catchment area – whichever area is the biggest. This travel time is the minimum amount of time that it has been established pollutants need to be diluted, reduced in strength or delayed by the time they reach the borehole.

Zone 3 (Total catchment): The total catchment is the total area needed to support removal of water from the borehole, and to support any discharge from the borehole.

Zone 4 (of special interest): Where local conditions mean that industrial sites and other polluters could affect the groundwater source even though they are outside the normal catchment area.

As highlighted in **Figure 11.1** below, there are three groundwater SPZs in Harborough, close to the southern boundary, between the parishes of North Kilworth, Husbands Bosworth and Sulby.

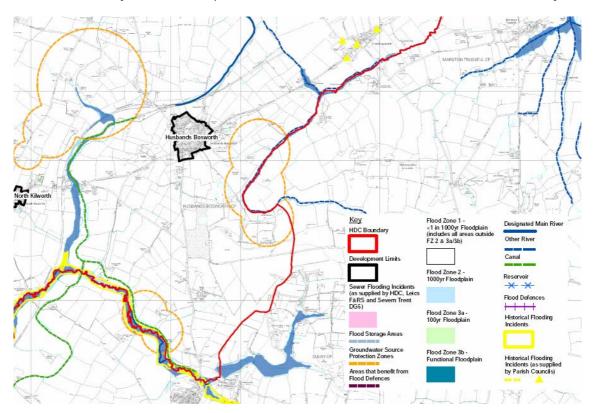


Figure 11.1: Groundwater Source Protection Zones in Harborough (Source: Harborough DC⁵¹).

⁵⁰ Environment Agency website: http://www.environment-agency.gov.uk/homeandleisure/37805.aspx

⁵¹ Harborough DC: Level 1 Strategic Flood Risk Assessment. Final Report, April 2009 [online]. Available from: http://www.harborough.gov.uk/downloads/A9RD626.tmp Part2.pdf [Accessed 17 September 2010].

In common with much of rural Leicestershire, chemical water quality in Harborough is fairly good and has seen considerable improvement since the 1990s.⁵² Only 1% of rivers have been classed as of 'poor' chemical quality, with over two thirds being of 'good' quality (similar levels to water quality throughout the East Midlands and England). Harborough's biological water quality is excellent, and has steadily improved since 2000 to 82% of rivers being classed as good quality in 2006, and none as poor or bad. This is significantly better than elsewhere in Leicestershire, the East Midlands or England, where rivers determined to be of 'good' biological quality only represent 56%, 61% and 65% of the total respectively.

Table 11.1: Chemical Water Quality in Harborough.

CHEMICAL WATER QUALITY in Harborough							
		Watercourse Quality					
Year	Type of water quality assessed	GOOD %	FAIR %	POOR %	BAD %		
1990	Chemical	17	78	4	1		
1995	Chemical	38	39	23	0		
2000	Chemical	57	42	1	0		
2002	Chemical	60	39	1	0		
2003	Chemical	57	42	1	0		
2004	Chemical	63	36	1	0		
2005	Chemical	68	31	1	0		
2006	Chemical	68	31	1	0		
Average for Le	eicestershire						
2006	Chemical	63	30	7	0		
Average for East Midlands							
2006	Chemical	62	32	6	0		
Average for England							
2006	Chemical	62	29	8	1		

⁵² River Water Quality database for regional and local authority areas in England and Wales [online]. Available from: http://www.defra.gov.uk/environment/statistics/inlwater/iwriverquality.htm [Accessed 20 October 2008].

Table 11.2: Biological Water Quality in Harborough.

BIOLOGICAL WATER QUALITY in Harborough								
		Watercourse Quality						
Year	Type of water quality assessed	GOOD %	FAIR %	POOR %	BAD %			
1990	Biological	49	51	0	0			
1995	Biological	66	34	0	0			
2000	Biological	51	49	0	0			
2002	Biological	54	46	0	0			
2003	Biological	60	40	0	0			
2004	Biological	71	29	0	0			
2005	Biological	79	21	0	0			
2006	Biological	82	18	0	0			
Average for Le	eicestershire							
2006	Biological	56	43	1	0			
Average for East Midlands								
2006	Biological	61	35	4	0			
Average for E	Average for England							
2006	Biological	65	29	5	1			

Whilst improvements are still required to meet the target of all watercourses to reach 'good' water quality status by 2015 (as required by the Water Framework Directive⁵³), especially in terms of chemical quality, Harborough District's 2006-07 Annual Monitoring Report highlighted that over the past two years, no consents were granted which would have adverse implications on watercourses or which were contrary to the advice of the Environment Agency on either water quality or flood defence grounds.

Flooding

A number of watercourses in Harborough are prone to flooding during extreme weather conditions. The River Welland, which flows through the centre of Market Harborough is particularly vulnerable; according to the Environment Agency the section of the river which flows through Market Harborough has a significant risk of flooding (a greater than 1.3% chance each year). During the heavy rains in July 2002, the town was subject to extreme flash floods, with water reaching two feet deep in places⁵⁴. This

⁵³ The Water Framework Directive, which came into force in December 2000, requires all inland and coastal water bodies to reach at least "good status" by 2015. More information on the WFD can be found on: http://www.defra.gov.uk/environment/water/wfd/index.htm

⁵⁴ James, P. (2002). Flash Flooding Harborough District (online). Available from http://cmispublic.harborough.gov.uk/CMISWebPublic/Binary.ashx?Document=7762. Accessed 16 September 2010.

was deemed to be a result of insufficient drainage systems in the town. This indicates that the risk of flash flooding here is likely to be exacerbated by climate change if drainage is not improved in the town.

Localised flooding also occurred in the north of the District during 2002, with the villages of Billesdon, Burton Overy, Great Glen, Kibworth, Newton Harcourt and Thurnby most affected.

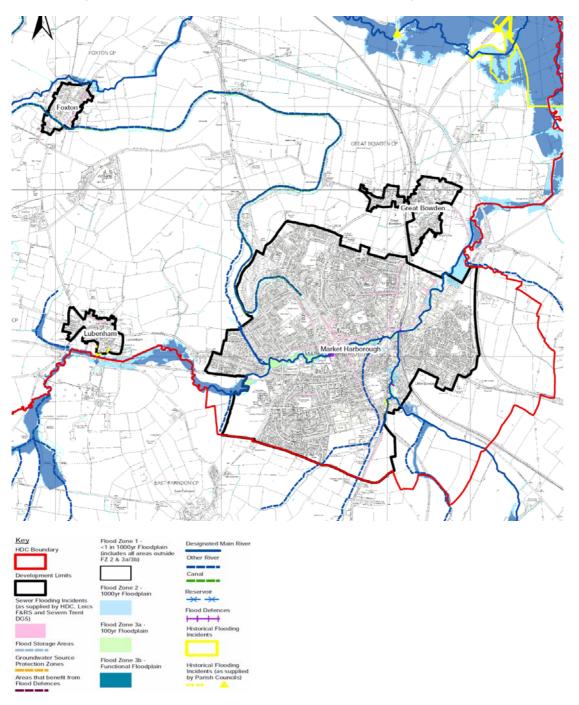


Figure 11.2: Flood risk in Market Harborough (Source: Harborough SFRA⁵⁵).

⁵⁵ Scott Wilson and Harborough DC: Level 1 Strategic Flood Risk Assessment. Final Report, April 2009.

PPS25, Development and Flood Risk, provides a Sequential Test to enable Local Planning Authorities to apply a risk-based approach to site allocations within their authority boundary. The test classifies sites into one of four flood risk zones based on the annual probability of flooding. These zones are as follows:

- **Zone 1, Low Probability:** This zone comprises land assessed as having a less than 1 in 1000 annual probability of river or sea flooding in any year (<0.1%).
- ▶ Zone 2, Medium Probability: This zone comprises land assessed as having between a 1 in 100 and 1 in 1000 annual probability of river flooding (1% 0.1%) or between a 1 in 200 and 1 in 1000 annual probability of sea flooding (0.5% 0.1%) in any year.
- **Zone 3a, High Probability:** This zone comprises land assessed as having a 1 in 100 or greater annual probability of river flooding (>1%) or a 1 in 200 or greater annual probability of flooding from the sea (>0.5%) in any year.
- **Zone 3b, The Functional Floodplain:** This zone comprises land where water has to flow or be stored in times of flood. This is land assessed as having a 1 in 20 (5%) or greater annual probability of river flooding in any year or is designed to flood in an extreme (0.1%) flood, or at another probability to be agreed between the Local Planning Authority and the Environment Agency.

Harborough's Strategic Flood Risk Assessment (Scott Wilson, 2009)⁵⁶ states that less than 10% of the district falls within Flood Zone 3, with the majority of flood zones falling in rural areas. However, urban locations that are potentially affected by flooding include Market Harborough (part of which falls within Zone 3a), Broughton Astley and the Leicester Urban Fringe, whilst there are numerous other settlements that have smaller areas at risk of fluvial flooding, particularly the southeast part of Lutterworth (which also falls within Zone 3a).

Surface water flooding has been identified from Parish Council records. The records show numerous localised flood events with the main sources of flooding recorded as fluvial, surface water run-off and overland flow. The main areas affected by surface water flooding are Kibworth Beauchamp, North Kilworth, and Dunton Bassett. The SFRA found no records of groundwater flooding, however, following periods of sustained rainfall, there may be potential for groundwater flooding to occur, which should be considered in the planning process of any new developments within the district.

⁵⁶ Scott Wilson and Harborough DC: Level 1 Strategic Flood Risk Assessment. Final Report, April 2009.

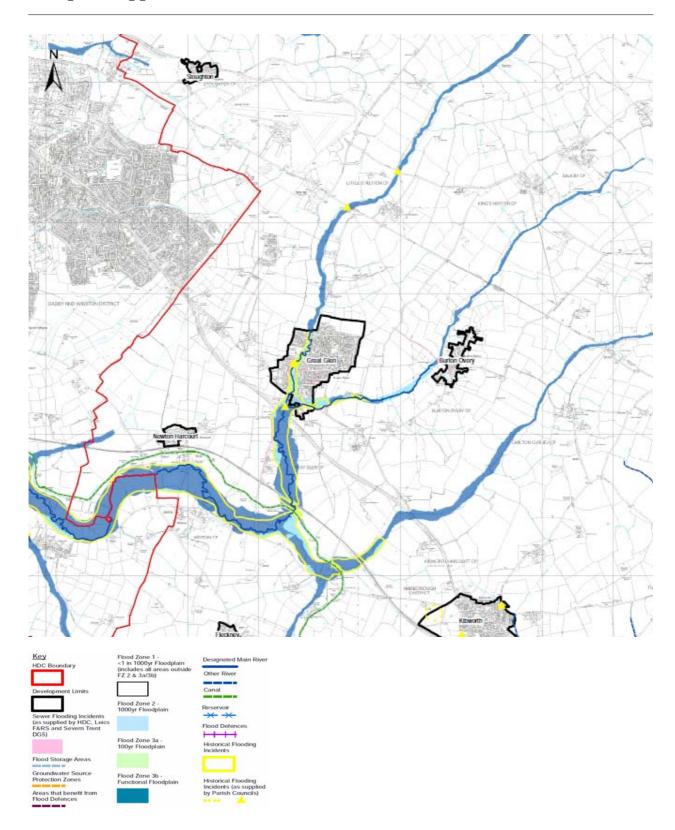


Figure 11.3: Flood risk in the north of Harborough District (Source: Harborough SFRA⁵⁷).

 $^{^{57}}$ Scott Wilson and Harborough DC: Level 1 Strategic Flood Risk Assessment. Final Report, April 2009.

Soil

As highlighted by the Soil Strategy for England⁵⁸, soil is a vital natural resource, with a range of key functions. These include:

- Support of food, fuel and fibre production;
- Environmental interaction functions (e.g. regulating the flow of and filtering substances from water, emitting and removing atmospheric gases, storing carbon);
- Support of habitats and biodiversity;
- Protection of cultural heritage and archaeology;
- Providing a platform for construction; and
- Providing raw materials.

Soil quality has a strong influence on the quality of agricultural land. The Agricultural Land Classification system provides a method for assessing the quality of farmland to enable informed choices to be made about its future use within the planning system. The Agricultural Land Classification system classifies land into five grades, with Grade 3 subdivided into sub-grades 3a and 3b. The best and most versatile land is defined as Grades 1, 2 and 3a, which is deemed to be the land which is most flexible, productive and efficient in response to inputs and which can best deliver future crops for food and non food uses such as biomass, fibres and pharmaceuticals⁵⁹.

As shown in **Figure 11.4**, the soils resource of Harborough is largely comprised of Grade 3 agricultural land, with a small proportion of both Grade 2 and Grade 4 land. In common with elsewhere in the UK, the location of sub-grades 3a and 3b has not been established at a district-wide level for Harborough due to the detailed level of survey required. In this context the location of sub-grades 3a and 3b in the district can only be determined through very in depth and localised studies of soil quality.

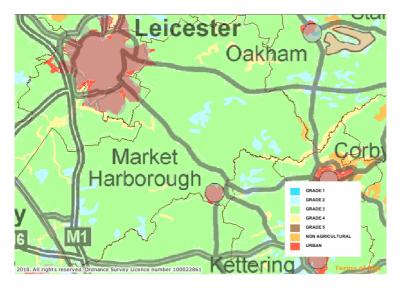


Figure 11.4: Agricultural Land Classification (Source: MAGIC⁶⁰).

⁵⁸ Defra (2009) Soil Strategy for England: http://www.defra.gov.uk/environment/quality/land/soil/sap/

⁵⁹ ODPM (2004) Planning Policy Statement 7: http://www.communities.gov.uk/documents/planningandbuilding/pdf/147402.pdf

MAGIC (2010). http://www.magic.gov.uk/website/magic/viewer.htm?startTopic=magicall&activelayer=nuts1gbIndex&query=NAME%20%3d%20%22EAST%20MIDLANDS%22&chosenLayers=alcIndex%2Clau1Index%2CsoilscapeIndex.

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