

Sustainability Appraisal Technical Appendices



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Introducing the baseline data 1

1 Introducing the baseline data

1.1 Baseline data provides the basis for prediction and monitoring environmental and other sustainability effects, and helps to identify problems and alternative ways of dealing with issues.

1.2 The aim of collecting and using baseline data for the Sustainability Appraisal and Strategic Environmental Assessment requirements is to ensure that spatial planning within the new Local Plan proceeds in the right direction and in the right places, with the correct safeguards and benefits to mitigate and compensate for environmental losses.

1.3 The SEA Directive states that the SEA should provide information on:

1.4 ‘relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme’ and ‘the environmental characteristics of the areas likely to be significantly affected’ (Annex I (b), (c))

1.5 and

1.6 ‘any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC’. (Annex I (c)).

1.7 As the SEA Directive is incorporated into the wider SA context, this baseline report will not only include information on the current state of the environment and environmental issues relevant to the plan, but also information that will give a detailed profile and outline of social and economic trends. This evidence base means that the potential effects of the plan can be assessed on their significant social, economic and environmental effects.

Collecting the Baseline Data

1.8 Stafford Borough Council has collected substantial amounts of data about the current and likely future state of the environment together with the Borough’s social and economic profile to allow the effects of the new Local Plan to be adequately predicted.

1.9 An initial scoping exercise of issues that could be affected by the plan was undertaken. This took account of the requirements outlined in the SEA Directive (for example: population and human health; biodiversity, flora and fauna and climatic effects) and the Governments Sustainability Appraisal guidance. Where possible, data has been updated as a result of consultation feedback and the completion of evidence base documents.

1.10 The baseline data provided as part of this report provides the basis for prediction and monitoring of environmental or other sustainability effects.

2 Social

2 Social

Social Exclusion

2.1 The Prime Minister referred to social exclusion as "a short hand label for what can happen when individuals or areas suffer from a combination of linked problems such as unemployment, poor skills, low income, poor housing, high crime environments, bad health and family breakdown" (DFT, 2004). Lack of key services, affordable housing and poor public transport in rural areas contribute to social exclusion and can have a negative effect on quality of life.

Index of Multiple Deprivation

2.2 The Index of Multiple Deprivation (IMD) provides an insight into the social characteristics of the Borough. Multiple deprivation measures were developed by the former Government Department of the Environment, Transport and the Regions to assist in the targeting of regeneration policies to the most deprived areas. There are six domain indices at ward level; these relate to income, employment, health deprivation and disability, education skills and training, housing and geographical access to services. These six domains have 32 separate indicators, which together make up the overall Indices of Multiple Deprivation.

2.3 Stafford is not considered to be a deprived Borough in comparison with some parts of the country. However, there are significant levels of poverty and isolation in some parts of Stafford, and some wards are among the poorest in Staffordshire.

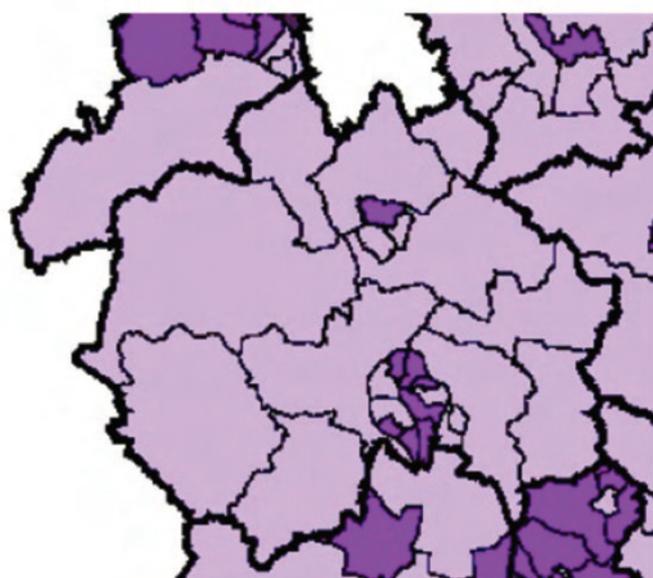
2.4 Stafford Borough has a relatively low level of deprivation, apart from a number of wards in the north and south west of Stafford town.

The opportunity of a decent home

2.5 One of the Government's aims is to give everyone the opportunity of a decent home, and to promote social cohesion, well-being and self-dependence. It is important that housing is available to serve the needs of those groups within the community not met by providers operating solely according to market principles or available from existing housing stock for rent or purchase. If levels of homelessness are to be permanently reduced, there is a need for a wide range of support and other preventive services for homeless people. For these reasons many services, for example health, social and other community services, in addition to housing providers, must be involved in successful homelessness strategies.

Indicator	Quantified data	Comparators and Targets	Trend	Problems / Constraints
Affordable / Special needs housing	83 affordable dwellings built in 2011/2012	100 built in 2008/2009 42 built in 2007/2008 46 affordable dwellings built in 2009/2010	Completions vary considerably with no clear trend	Delivery of affordable has not been consistent over the last few years. Appropriate policy required and associated monitoring target
Homelessness	52 homeless households in Stafford Borough in 2004 (Source: DCLG)	2,206 homeless households in West Midlands	Slight increase in previous years	Need to reduce the number of homeless households.

Social 2



*% of Household that are overcrowded
(Staffordshire Research Unit,
(Monitoring Social Exclusion in
Staffordshire, July 2003)*

% of Households that are Overcrowded

- Below 3.6% (Staffordshire Average)
- 3.6% to 7.1% (Between Staffordshire & England Average)
- Above 7.1% (England Average)

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Rank	Geography	Affordability Score (GB=100) 2010	Average house prices (annual) (£) Dec 2010	Affordability index (GB = 100)	Affordability Change % Dec 2010
1	Cannock Chase	125.76	134434.59	122.14	25.16
2	East Staffordshire	109.19	170906.62	106.53	45.86
3	Lichfield	78.13	232476.24	86.45	40.88
4	Newcastle-under-Lyme	104.44	146844.07	133.62	44.45
5	South Staffordshire	79.39	213489.21	89.06	41.23
6	Stafford	100.15	180062.29	103.19	35.33
7	Staffordshire Moorlands	108.57	154466.48	119.48	47.35
8	Tamworth	114.70	149458.30	112.71	38.49

Evidence Base

Evidence Based Report	Key Recommendations / Comments
Affordable Housing Viability Study (2011)	The affordable housing viability study specifies that at least 30% affordable housing is viable throughout the borough with 40% viable in ST18 9 and ST21 postcodes.
Gypsy and Traveller Accommodation Needs Assessment (GTAA) (2012)	The GTAA identifies a shortfall of 44 pitches to be completed to 2031
Housing Market Area Assessment (2012)	The housing market assessment specifies that 210 affordable dwellings are required over the plan period.

2 Social

Access to Services

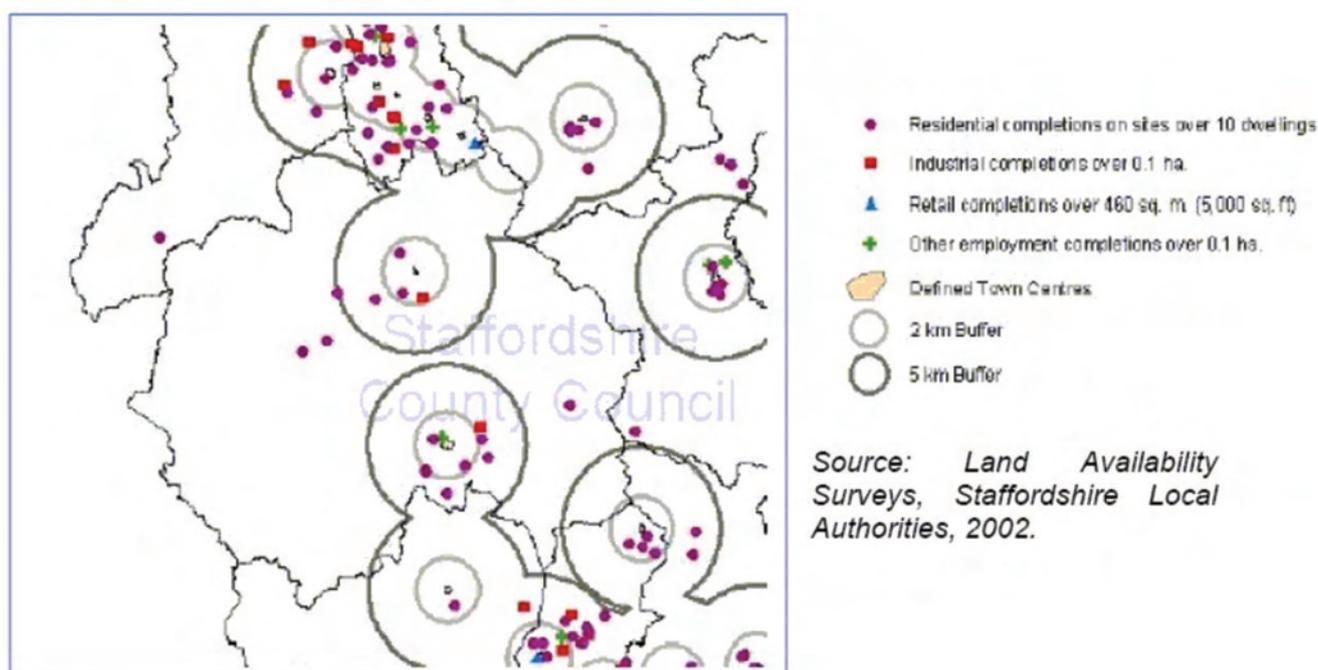
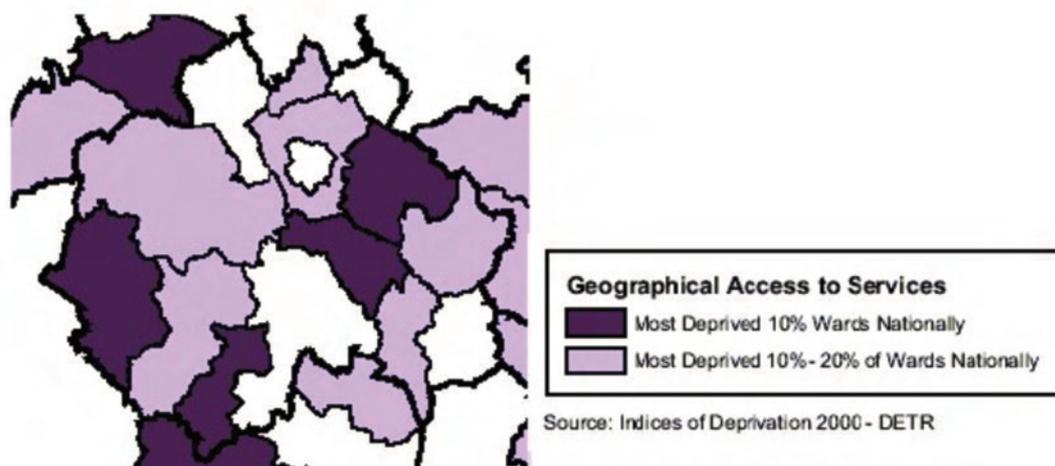
2.6 Lifestyles and leisure behaviours are changing more rapidly than ever before, often driven by advances in information and communications technologies. Most people, wherever they live, want greater mobility and greater choice. Accessibility to healthcare, education, justice, youth services and retail services are placed at a premium. The Countryside Agency have produced detailed information regarding access to services in the rural areas.

2.7 A lack of mobility can cause real hardship. As well as reducing employment and educational opportunities, a lack of transport can have an impact more widely on people's health and quality of life – by reducing access to healthcare facilities and social and leisure activities. This is especially apparent in the more rural areas of Stafford Borough.

2.8 The concept of accessibility to all goes far wider than improving access to a range of jobs, services and facilities. It should include ensuring that everyone has the opportunity to use the full range of transport services, buildings and opens spaces that make up the places in which we live. Accessibility benefits everyone, including people travelling with children, those with temporary or permanent disabilities or simply encumbered with heavy luggage or shopping.

Indicator	Quantified data	Comparators and Targets	Trend	Problems / Constraints
Disabled access	None as yet.	Requirements of the Disability Discrimination Act 1995	No suitable data available in order to define a trend.	Access audit to be completed by October on all of the County's public buildings by end of 2003 (Staffordshire County Council)
Development within walking distance of a frequent bus service.	<p>Within the settlement of Stafford 100% of dwellings were within 350m of a 30-minute bus route.</p> <p>Within smaller settlements 67% of dwellings were within 350m of a 30-minute bus route, 12% were within 350m of a 60-minute bus route and 21% were not within 350m of a frequent bus route.</p> <p>(Source: ArcGIS)</p>	<p>In 2001, 63% of housing completions in the West Midlands were within 200m of a bus stop and 91% within 400m of a bus stop.</p> <p>(Source: RPG Monitoring Report 2002/2003)</p>	No suitable data available in order to define a trend.	

Geographical Access to Services



2.9 This following table shows access to services for authorities in Staffordshire. The indicator is a composite based on the indexes of the following: primary schools; secondary schools; banks and building societies; principle GP surgeries; all GP surgeries; post offices; convenience stores; supermarkets; petrol stations; dentists; Jobcentres; hospitals and cashpoints. The higher the figure, the higher the service provision in comparison to other areas

Access to services (2008)

Filtered by Sub Region : Staffordshire

Rank.	District	Region	GB=100	Nat. Rank
1	Stoke-on-Trent City	West Midlands	108.59	97
2	Tamworth	West Midlands	108.55	102
3	Cannock Chase	West Midlands	106.48	165
4	Newcastle-under-Lyme	West Midlands	105.11	184
5	South Staffordshire	West Midlands	101.9	216
6	Lichfield	West Midlands	98.6	235
7	East Staffordshire	West Midlands	97.62	244

2 Social

Access to services (2008)

8	Stafford	West Midlands	94.84	260
9	Staffordshire Moorlands	West Midlands	92.18	273
England : 100				

Source: Local Knowledge; Rural Services Survey

Health

2.10 The conditions in which people live and work, their access to facilities and services, their lifestyles, and their ability to develop strong social networks are all influenced by the plans, policies and initiatives of urban planners and related professions. At the same time these are the key issues, which determine the health, well being and quality of life of people in cities. In the 2001 Census 69.6% of people within Stafford Borough described their health over the preceding 12 months as 'good'.

Indicator	Quantified data	Comparators and Targets	Trend	Problems / Constraints
Areas of Open Space / Outdoor recreation	131.98 ha of outdoor sport provision (equivalent to 1.1 ha per 1000 population) (Source: Stafford BC Playing Pitch Assessment)	National Playing Fields Association (NPFA) recommends 2.43 ha of open space per 1000 population 1.6 - 1.8 ha should be for outdoor sport 0.6 – 0.8 ha should be children's playing space	No suitable data available in order to define a trend.	Need to increase the amount of formal outdoor sports provision available. Need to collect more data regarding children's play space and informal open space.
Length of cycle ways	163.5 miles of cycle route in Staffordshire (Source: Staffordshire Council)	Intensity of use? Length created elsewhere	5,353 metres better than the year before	Ensure that cycle routes provided are effective and useful. Ensure that provision remains high.
Proportion of footpaths and rights of way that are easy to use by the public	Staffordshire 8.47 % in 2005/2006	Rank 5th out of 6 counties in West Midlands	No suitable data to define a trend	Ensure that public footpaths are accessible
Standardised Mortality Ratio	103 in 2002 and 98 in 2008 (Source: Local Futures)	100	Fluctuating around the 100 mark previously at 97.	

NI 8 Adult participation in sport and active recreation (2007/08)

Rank.	District	%	Nat. Rank
1	Newcastle-under-Lyme	23.7	103

Social 2

NI 8 Adult participation in sport and active recreation (2007/08)

2	Stafford	23.14	120
3	East Staffordshire	22.99	130
4	South Staffordshire	22.66	149
5	Lichfield	21.9	188
6	Cannock Chase	20.25	246
7	Staffordshire Moorlands	18.08	315
8	Tamworth	15.76	340
9	Stoke-on-Trent City	14.69	348
England : 21%			

Evidence Base

Evidence Based Report	Key Recommendations / Comments
Planning Policy Guidance Note 17 (PPG17) 'Planning for Open Space, Sport and Recreation' Assessment (2009)	<p>The PPG 17 Assessment assesses and maps sports and recreation facilities and identifies to guide the future provision and management of existing resources through:</p> <ul style="list-style-type: none"> Analysing and assessing the current level of public, private and voluntary sport and recreational provision within the Borough with regard to quantity, quality and accessibility; Identifying and evaluating strategic options for enhancing community sporting and leisure provision throughout the Borough; Providing information and making clear recommendations to enable informed decisions to be made to assist in determining future development proposals in the Borough.

Crime and safety

2.11 The relationship of the physical environment and its influences on the levels of crime, anti-social behaviour and fear of crime are well documented. Therefore, creating a better connected environment that is inclusive and accessible will enhance the sense of safety and security within a development and out to surrounding areas. People generally feel safer on active streets and in places with natural or other surveillance. A poor environment (graffiti, vandalism and disrepair) signals neglect and lack of control and can enhance a sense of vulnerability.

Indicator	Quantified data	Comparators and Targets	Trend	Problems / Constraints
Fear of crime	No data at present	<p>National figures for 2003.</p> <p>14% had high levels of worry about burglary.</p> <p>16% had high levels of worry about car crime.</p> <p>20% had high levels of worry about violent crime.</p> <p>(Source: British Crime Survey: June 2003)</p>	No data available.	

2 Social

Indicator	Quantified data	Comparators and Targets	Trend	Problems / Constraints
Crime Score (Total offences per 1,000 population)	For the year 2011/2012 Stafford Borough 52	GB average = 100 Stafford Borough ranked 6th sub-regionally and 216 nationally	No trend identified at present	Below national and sub-regional average.
Number of traffic accidents	4839 casualties on all roads in Staffordshire in 1999 – 47 of them fatal. 3,494 in 2010 - 48 of them casualties	28,924 casualties in the West Midlands in 2001. (Source: RPG Monitoring Report 2002/2003)	No data available.	Need to collect / find data relating to traffic accidents in Stafford. Need to ensure that number remains as low as possible.

3 Economic

Economic Development

3.1 Gross Domestic Product (GDP) is a measure of wealth that can be used to analyse the overall prosperity of the Borough compared with the region or the country as a whole. In 1998 GDP in Staffordshire was £10,310, in the West Midlands GDP was £11,455 whilst in the UK as a whole it was £12,548⁰

3.2 Productivity is measured by Gross Value Added (GVA). GVA gives an indication of the value of the economic activity generated within an area. High levels of GVA and economic prosperity are generally closely related. Overall, the manufacturing GVA in the Borough is in line with the Southern Staffordshire average with the exception of East Staffordshire. However, for the whole economy GVA Stafford Borough is the lowest among the other districts and this low figure would mainly be related to the lack of higher quality service activities. In terms of activity in the private sector, Wholesale / Retail, Transport / Storage / Communication and Real Estate / Business Activities have particularly low GVA per person employed.

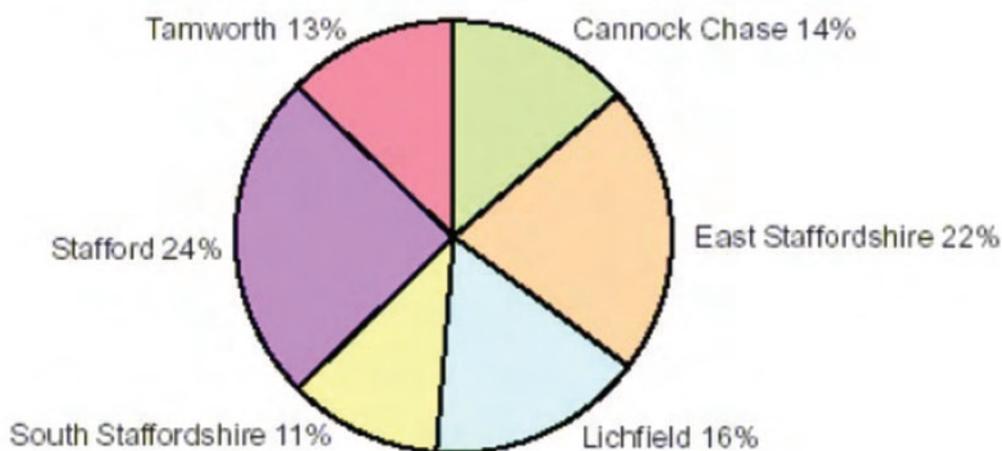
3.3 The majority of the Borough's area is rural in character and therefore supports agricultural and forestry activities. A range of settlements varying from suburban areas on the fringes of the Potteries conurbation, to large free-standing villages and more isolated settlements are also contained within the Borough sustaining economic and residential land use activities.

3.4 The largest proportion of land is used for agriculture, second is residential followed by industrial uses. Industrial uses vary from large international manufacturing sites such as the Alstom and Evode sites in Stafford to the small - medium size uses to be found on the Borough's industrial estates. Mineral extraction is only on a small scale with one sand and gravel quarry. The Borough is home MoD Stafford.

3.5 The 2001 Census states that approximately 63% of the population is in employment, with a further 15% being retired and 4% being permanently sick or disabled. Less than 3% of the population are economically inactive. Therefore, Stafford is home to an economically active population of 97% in comparison to a Great Britain average of 94.9% (Source: National Statistics Labour Force Survey, May 2002).

3.6 A healthy and adequately sized local jobs base is fundamental to the area's sustainability, providing work opportunities close to home and resources for investment. The primary source of workplace based employment data is the 2001 Annual Business Inquiry from ONS and includes employees only. There are some 240,000 employee jobs in the Southern Staffordshire area (a little over 10% of the Regional total) with the larger concentrations to be found in East Staffordshire and Stafford Borough. The figure below shows the distribution within the area. This figure of 240,000 compares to a resident economically active population of some 300,000.

3 Economic

Employee Jobs by Local Authority in Southern Staffordshire

Source : 2001 ABI, ONS

3.7 It has always been an important source of job growth to the local area, assisted by good location, site availability, labour skills and costs. The table below shows inward investment levels for 2002 to 2003 with at least some 1,300 jobs being created by 26 companies. Just over a quarter of these were foreign owned with their employment accounting for around a tenth of the total jobs.

3.8 As a shopping centre, Stafford Town Centre ranks 147th, which is above the 2007 ranking of 177th but below the 2005 ranking of 145th (Stafford Town Centre Capacity Assessment).

3.9 Tourism is an important part of the Stafford economy. Tourism and its related sectors account for around 7.9% of all employment in Stafford (ONS). There have been a number of recent developments in the tourism sector, primarily through the provision of new accommodation such as the Premier Lodge & Brewers Fayre near M6 junction 14, which provides over 50 beds and created more than 70 jobs and the £1.4 million facelift of the Swan Hotel, which created 27 bedrooms and further facilities.

3.10 To achieve stable and sustainable growth Stafford Borough needs a well educated, well equipped and adaptable labour force, whilst learning also promotes active citizenship and helps to combat social exclusion. The Borough as a whole has 47 primary schools and 6 high schools, and has one of the highest levels of educational attainment in the County. In 2001, 76% of people at age 19 in England had level 2 qualifications.

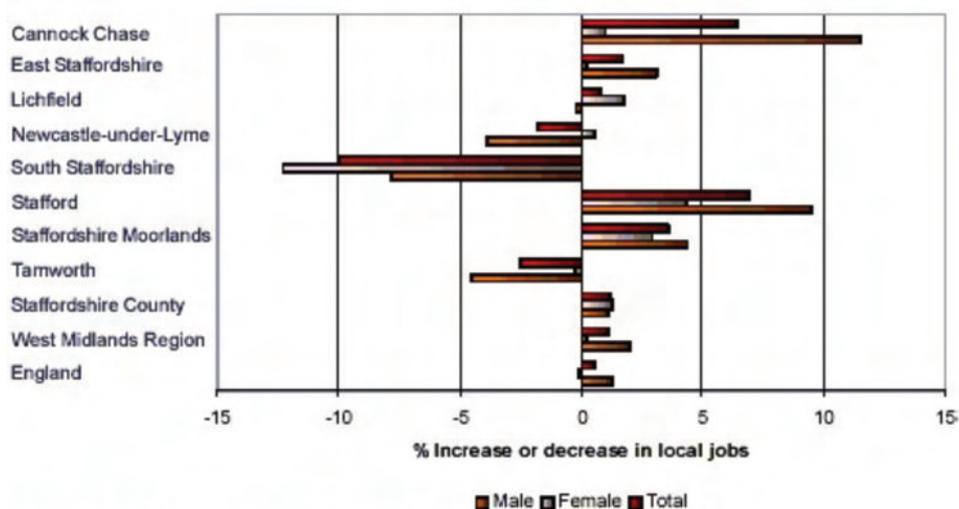
Indicator	Quantified data	Comparators and Targets	Trend	Problems / Constraints
Employment Land Availability	Position at 31 st March 2012 105.8 ha of new land available for industrial development (Source: Stafford Borough 2011/12 AMR)	The Structure Plan allocation for Stafford is 150 ha. 38.7% of employment land (sites over 0.4ha) in the West Midlands was readily available. 63% of employment land was Brownfield.	No suitable data available in order to define a trend.	

Economic 3

Indicator	Quantified data	Comparators and Targets	Trend	Problems / Constraints
		(Source: RPG Monitoring Report 2002/2003)		
Business start ups	Stafford Borough has an enterprise rate of 40.2%	Staffordshire has an enterprise rate of 38.2% whilst the regional rate is 40.4% (Source: Staffordshire County Council Business Start-ups Discussion Paper)	See below for comparative trends	
Inward investment	2002/2003 9 companies located in Stafford with resultant job creation of 185.	West Midlands attracted 13% of Foreign Direct Investment Projects into the UK in 2001/2. Of which Stafford obtained 0.	No suitable data available in order to define a trend.	
Vacancy Rate	8% units vacant within Stafford Town (Data Source: Experian Goad)	14% GB average.	Below GB average but higher than other southern Staffordshire rates	
Shopping Floorspace Sq /ft / 1,000 population	12,3000 square feet per 1,000 of the population	Tamworth has 16,100 but ranks 197 on the National ranking compared to 132 for Stafford.	No suitable data available in order to define a trend.	

3 Economic

Change in Local Jobs



* NB. Figure for South Staffordshire is affected by postcode error issues.
 Source: Annual Business Inquiry (from NOMIS), Crown Copyright Reserved.

(Monitoring Social Exclusion in Staffordshire, July 2003)

Evidence Base

Evidence Based Report	Key Recommendations / Comments
Employment Land Review (2012)	The 2012 Employment land review identifies key employment sites that the Borough wants to retain to provide for future economic growth over the period to 2031.
Town Centre Capacity Assessment (Retail, Office and Leisure) and appendices (2011)	The Study has found that there will be a need for new supermarket provision in both Stafford and Stone at 2015 as well as increased comparison goods floorspace over the plan period but there was sufficient office capacity to meet future requirements. The study considers that Kingsmead car park could be a potentially suitable location for an additional supermarket to serve Stafford town whilst the Westbridge park could be a suitable location for an additional supermarket to serve Stone town.

Transport Links

3.11 The Borough is well served by a comprehensive network of road and rail links. The M6 runs through the Borough and provides easy access from the north and south of the country. In fact half of the country's population live within a two hour drive of Staffordshire, and 90% within a four hour drive. Within Staffordshire and the surrounding areas there are over 60,000 people within 10 minutes drive time of Stafford Town Centre and almost 1,500,000 within 30 minutes.

3.12 The West Coast main line runs through the Borough with a main station at Stafford, services run to London and Birmingham to the south and Manchester, Liverpool and Glasgow to the north

Economic 3

Evidence Based Report	Key Recommendations / Comments
Local Transport Plan (LTP) (2011)	<p>The LTP sets out the transport provision within Staffordshire county covering modes of transport (including walking, cycling, public transport, car based travel and freight), together with the management and maintenance of local roads and footways. The plans main objectives are:</p> <ul style="list-style-type: none"> • Supporting growth and regeneration. • Maintaining the highway network. • Making transport easier to use and places easier to get to. • Improving safety and security. • Reducing road transport emissions and their effects on the highway network. • Improving health and quality of life. • Respecting the environment.
Draft Stafford Borough Transport Strategy (2011)	<p>The draft Stafford Borough transport strategy identifies key transport that will arise over the period 2011-2026 and the key infrastructure that will be required to overcome the challenge of accommodating the significant growth at the major towns of Stafford and Stone. Stafford town, as a growth point and the main focus of development, will be the principal focus new infrastructure provision. The suite of local improvements to the town will involve the construction of the Western Access Improvement Scheme on a phased basis, a new road along the Eastern corridor of the town, as well as traffic management and highway capacity improvements.</p>

4 Environmental

4 Environmental

Biodiversity, Flora and Fauna

4.1 In biodiversity terms the Borough is rich and varied with designated areas having the highest level of planning policy protection including 17 Sites of Special Scientific Interest (SSSIs), 3 internationally designated sites under the Convention on Wetlands of International Importance (Ramsar sites) (5), 4 Special Areas of Conservation (SACs) and 2 National Nature Reserves (NNRs). In addition there are more than 100 sites identified locally as Sites of Biological importance (SBIs).

4.2 2.19 The four Special Areas of Conservation (SAC) in Stafford Borough are Cannock Chase, Chartley Moss, Motte Meadows and Pasturefields Salt Marsh, although some parts of Cannock Chase SAC extend into other local authority areas and only a very small part of Motte Meadows falls within the boundary of the Borough.

4.3 The two National Nature Reserves are Chartley Moss, which is a floating bog and Aqualate Mere, the largest of the natural meres that can be found throughout Shropshire, Cheshire and Staffordshire. Aqualate Mere, Chartley Moss and Cop Mere are also Ramsar sites.

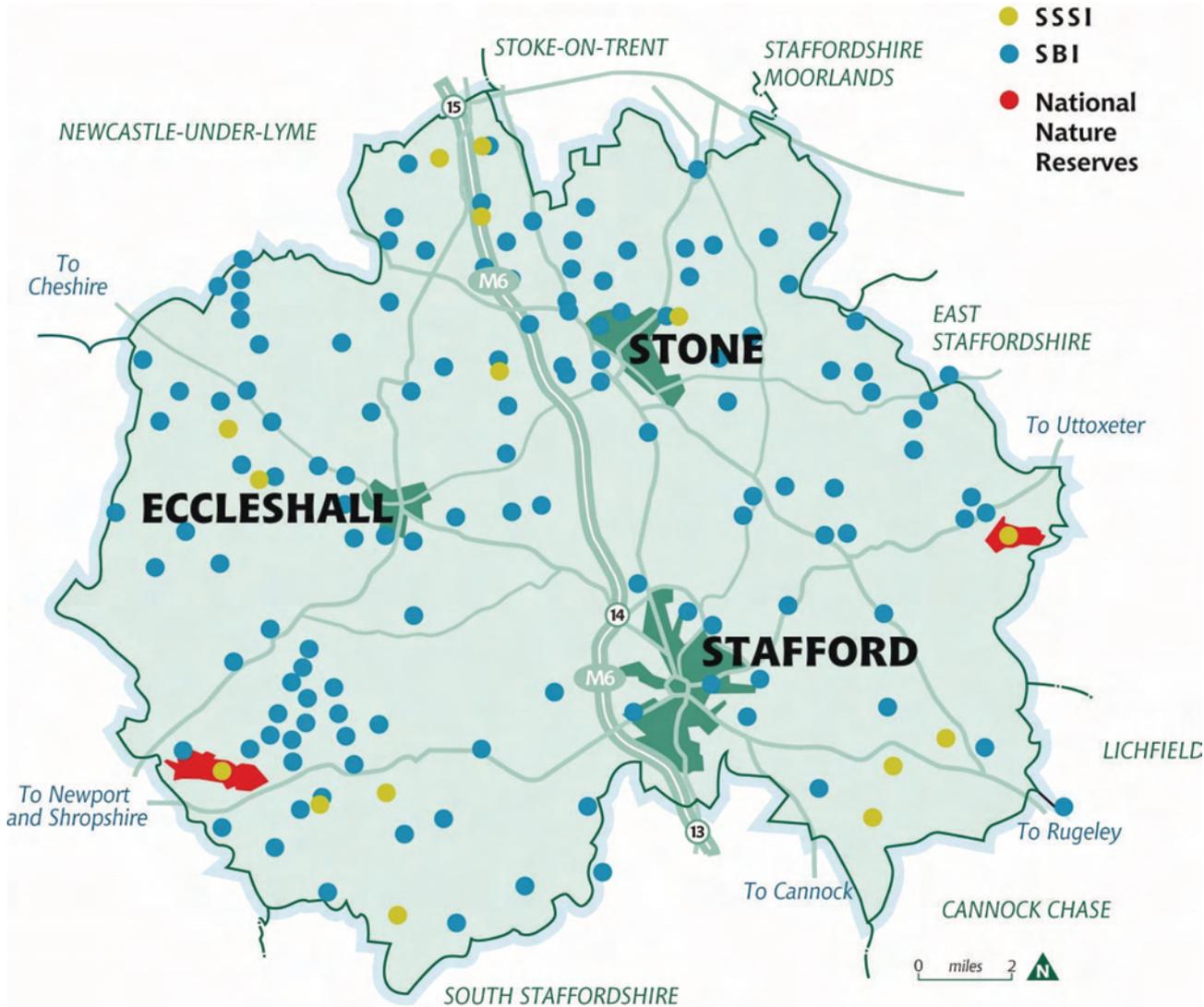
4.4 Habitats that are particularly important for wildlife within the Borough include ancient (veteran) trees, old semi-natural woodlands, various types of wetland such as Doxey and Tillington Marshes, lowland heath on Cannock Chase and Rough Close Common and a few remaining flower-rich meadows on neutral grassland.

4.5 These habitats often occur in isolated patches in urban locations or between larger areas of intensively farmed land, which makes them very susceptible to degradation or loss.

4.6 Several species have already become extinct from Stafford Borough including the red squirrel, marsh helleborine and *Cryptocephalus decemmaculatus*, a very rare and distinctive leaf beetle of wetlands.

Environmental 4

Map of designated sites



Indicator	Quantified data	Comparators and Targets	Trends	Problems / Constraints
Quality of SSSI's	15% of SSSI's in Stafford are in a favourable position in 2011, with a total of 95.23 in a favourable or favourable recovering position. 35.56% of those in Staffordshire are in a favourable position with 93.52% in a favourable or favourable/recovering position. (Source: Natural England)	34.98% of SSSI's in the West Midlands are in a favourable position in 2011.	48% of SSSI's in Staffordshire were in a favourable or recovering position in 1999.	The trend has been that the condition of SSSI's is improving. It is important that this is maintained.

4 Environmental

Indicator	Quantified data	Comparators and Targets	Trends	Problems / Constraints
Achieving national / regional / local conservation objectives	None available	To meet 100% of the targets set out in the Stafford Biodiversity Strategy and Staffordshire Biodiversity Action Plan.	Significant decrease in wet grassland, and a decrease in species including water vole, brown hare and skylark. However there has been some improvement in otter and nightjar populations.	Need to improve biodiversity habitats and increase the population numbers of the species which are targeted by the Staffordshire Biodiversity Action Plan.

Evidence base

Evidence Based Report	Key Recommendations / Comments
Staffordshire Biodiversity Action Plan (2011)	Staffordshire Wildlife Trust have prepared a number of Ecosystem Action Plans (EAPs) that work at a landscape level. These ecosystem action plans integrate biodiversity objectives with other environmental, social and economic needs. Stafford Borough is covered with 6 EAPs, each with their own set of objectives for habitats and species and an associated management plan, to deliver the targets set out in each EAP.
Green Infrastructure Strategy (2009)	The Green Infrastructure Strategy sets key spatial and thematic priorities for the delivery of green infrastructure in the Borough. The key thematic recommendations of the study were the creation of biodiversity intervention zones, wildlife corridors, movement corridors, strategic open spaces and landscape quality areas. The implementation of local strategic frameworks at the Penk and Sow Parklands, Stafford Common Community Park, and Stone canal and Riverside Park are also identified.
Landscape and Countryside Character Assessment (2001)	The landscape and countryside character assessment analyses, describes and classifies the landscape through identification of features or combinations of elements that contribute to the character of the landscape. The assessment divides Staffordshire into 9 regional character areas. These are in turn broken down into landscape character types, within which are details of the landscapes visual character, and of the features that contribute to the landscapes local distinctiveness that should be conserved whenever possible. In addition, the study also specifies any mitigation and compensation measures that may be required to reduce the impacts on sensitive landscapes.
Cannock Chase AONB Management Plan 2009	The management Plan provides for the strategic direction for the conservation and enhancement of the AONB. The plan, which is produced every five years, provides a number high level objectives, from which are developed key issues for each of the overarching themes of landscape, people, economy, recreation and support.

Environmental 4

Evidence Based Report	Key Recommendations / Comments
	For each theme actions are developed, along with a monitoring framework to manage the delivery of the overall vision for the AONB.
Stafford Borough Local Development Framework Ecological Desk Study (2008)	The study undertook to identify key development locations in Stafford Borough. Each site was examined for protected species, priority habitats and geological features to provide for an overview of each area surveyed, as well as initial mitigation and management of any adverse impacts of developing the sites.

Air

4.7 The quality of the air that we breathe is of growing national and international concern. The air quality in the UK today is much improved over that of 50 years ago where industrial smogs caused acute health effects for the public.

4.8 In recent years however there has been a growing body of evidence to suggest that poor air quality may have a cumulative effect, which may be chronic for sensitive individuals. When air pollution is present in high concentrations it can cause various health effects ranging from irritation of the eyes, nose and throat to the worsening of lung and heart diseases.

4.9 In addition to impacts on human health, annual levels of nitrogen oxides (mainly from traffic) and sulphur dioxide (mainly from industry) could impact on the protection of vegetation and ecosystems. Air pollutants can also lead to the soiling and corrosion of buildings.

4.10 One of the most significant contributors of air pollution in Stafford is traffic from the M6 and A34 road corridor, which bisects the Borough north-south. It is important to note that most of the recent improvements and likely future improvements in air quality will occur in the transport sector.

4.11 In some cases air pollutants emitted in the Stafford Borough will have impacts outside the Borough without having a significant impact within the region, and vice versa.

4.12 Power generation and other industries contribute to 90% of the total mass release of sulphur dioxide. Rugeley Power Station has been identified as being one of the most important possible local sources of industrial sulphur dioxide in the air. However, these emissions are controlled by Environment Agency conditions ensuring that they comply with air quality standards at all times.

4.13 Nevertheless, the air quality within the Borough is satisfactory at present with none of the Borough designated as requiring an Air Quality Management Scheme.

Indicator	Quantified data	Comparators and Targets	Trends	Problems / Constraints
Air Quality Management Area	0% of Stafford requiring an Air Quality Management Scheme (Source: Air Quality Review and Assessment by SBC, 2010)		0% of Stafford requiring an Air Quality Management Scheme since 2000	

4 Environmental

Indicator	Quantified data	Comparators and Targets	Trends	Problems / Constraints
Modal split	2001 Stafford Travel to work 11% - Walk 4% - Bicycle 79% - Private vehicle 6% - Public Transport (Source: ONS 2001 Census)	1999/2001 England Trips per person per year by mode of transport 25% - Walk 2% - Bicycle 64% - Private vehicle 9% - Public Transport 1999/2001 England Distance per person per year by mode of transport 3% - Walk 1% - Bicycle 84% - Private vehicle 12% - Public Transport (Source: West Midlands RPG Monitoring Report)	1991 Stafford Travel to work 13% - Walk 4% - Bicycle 70% - Private Vehicle 6% - Public Transport 7% - Other (Source: ONS 1991 Census) Therefore there has been an increase in private vehicle use and a decrease in the number of people walking to work over the ten year period.	Need to encourage use of more sustainable forms of transport; currently use of private vehicles is still very high within the Borough.

Climatic Factors

4.14 It is important to recognise that climate change is not a new phenomenon - it has been happening for millions of years. However the rate of present global warming is causing concern and it is widely accepted that human behaviour is inducing this rapid rate of change.

4.15 In the last 100 years or so, the Earth's surface and lowest part of the atmosphere have warmed up on average by about 0.6oC. During this period, the amount of greenhouse gases in the atmosphere has increased, largely as a result of the burning of fossil fuels for energy and transportation, and land use changes, for food by mankind. In the last 20 years, concern has grown that these two phenomena are, at least in part, associated with each other. Global warming is now considered most probably to be due to the man-made increases in greenhouse gas emissions. Whilst other natural causes of climate change, including changes in the amount of energy coming from the Sun and shifting patterns of ocean circulation, can cause global climate to change over similar periods of time, the balance of evidence now indicates that there is a discernible human influence on the global climate.

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4.16 At the Earth Summit in Rio de Janeiro (1992) the countries of the world agreed a Climate Change Convention which highlighted the need to tackle unsuitable trends in energy. Both energy conservation measures as well as increased energy generation from renewable sources will be required to bring about a significant change in the amount of carbon dioxide and other greenhouse gases from entering the atmosphere and causing climate change.

4.17 The market for energy crops across the UK is now developing in response to Government targets to generate 10% of the nations electricity from renewable sources by 2010. Stafford's Biomass Farming Project aims to examine the viability of developing renewable energy in the Stafford area and in particular power generation from energy crops as a means of farm diversification, resulting in a fully operational heat to energy plant producing electricity from locally grown energy crops.

4.18 Stafford are already beginning to improve in terms of domestic conservation of energy and energy efficiency, including providing free and independent advice relating to energy efficiency in the home.

4.19 The Woodland Trust document 'Space for People: Targeting action for woodlands access' provides specific information about Stafford Borough as set out below. The regional figure of the West Midlands region is in brackets as a comparator:

- % of population requiring new woodland access to a 2+ hectare wood within 500 metres – 70.75 (67.39)
- % of population requiring new woodland for access to a 20+ hectare wood within 4 kilometres – 17.8 (19.52)
- Minimum area of new woodland required for 2+ hectare woods within 500 metres (hectares) – 210 (4,834)
- Minimum area of new woodland required for 20+ hectare woods within 4 kilometres (hectares) – 60 (914)
- % of population with access to 2+ hectare wood within 500 metres – 2.19 (9.42)
- % of population with access to 20+ hectare wood within 4 kilometres – 37.29 (54.66)
- % of extra population with access to a 2+ hectare wood within 500 metres if existing woods opened – 27.05 (23.19)
- % of extra population with access to a 20+ hectare wood within 4 kilometres if existing woods opened – 45.62 (25.82)

Indicator	Quantified data	Comparators and Targets	Trends	Problems / Constraints
Renewable energy	2.085 MW completed installed capacity during 2011/12	10% of electricity from renewable sources by 2010 (Renewables Obligation DTI)	0.011mw completed installed capacity during 2010/11	Increase in installed renewable energy capacity has increased in last couple years It will be necessary to encourage renewable energy usage in order to achieve the target.
Conservation of Energy	2.1% improvement in energy efficiency in 2002/2003	30% improvement in energy efficiency over 15 year period from 1996	Fluctuations but overall a general Improvement about 9% improvement in efficiency to date since 1996.	Conservation of Energy

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Evidence Base

Evidence Based Report	Key Recommendations / Comments
Renewable Energy Study (2010)	The Camco report into renewable energy highlights that Stafford Borough has significant resource potential for both wind and biomass
Water Cycle Study and Surface Water Management Plan (2010)	The Water Cycle Study indicates that the vast majority of the watercourses in Stafford Borough have been improving their water quality over the past 20 years, with many achieving good or very good status.
The Strategic flood-risk assessment (SFRA) Prepared jointly alongside Lichfield District Council, Staffordshire Moorlands District Council and Tamworth Borough Council (2008)	The flood risk assessment identifies areas of risk of flood, and assesses and maps all forms of flood risk taking account of future climate change predictions. It also sets out a flood risk classification and associated compatibility matrix for the most appropriate land uses in the most appropriate zones.

Water and Soil

4.20 The Water Framework Directive (WFD) has highlighted the growing need to explore the interconnectivity between land use planning, water pollution and flooding. It aims to improve and control the quality of water by identifying, progressively reducing, and ultimately eliminating hazardous substances, and therefore securing the future water supply. This section of the Sustainability Appraisal is important in terms of appraising the plan on achieving the WFD objective of “good ecological status” for surface water quality.

4.21 Rivers are an important part of the Borough’s environment. They support amphibians, fish and many plant species as well as a variety of invertebrates, which are fundamental in food chains. Rivers can also form important links between otherwise fragmented habitats acting as wildlife corridors.

4.22 Rivers are also a source of water for drinking, domestic, agricultural and industrial use. They can also provide an important recreational resource.

4.23 River quality testing allows the quality of one river to be compared to another. Testing also helps to set conditions on licences provided to industry and commerce for their discharges of water into rivers, and is used in decisions to protect rivers and canals from the impacts of the use of land for agriculture, leisure and housing. River quality in Stafford Borough is generally assessed as being fair however, for more detailed results and trends see the table below.

4.24 The principal rivers in Stafford Borough are the River Sow and the River Penk. Much of Stafford town is located in its floodplain. Flooding of land adjacent to rivers is a natural process and, in the right place can be a desirable process. However, it can have far reaching effects on people and property who may be effected by it, including considerable damage and costs.

4.25 Flooding is affected not only by the changing weather conditions but also by urbanisation, for example water quickly runs off hard surfaces and is more likely to cause flooding. One of the easiest ways to minimise flood risk to new buildings is to locate them away from areas likely to flood. Other alternatives include developing Sustainable Urban Drainage Systems (SUDS), which control water as near to the source as possible, and create and enhance environmental corridors.

4.26 Water quality in the Borough is also relatively good, with 98% of inland waterways being judged to be of good or fair biological quality and 96% determined to be good or fair chemical quality, by the Government Department for Environment Food and Rural Affairs (DEFRA) in 2000.

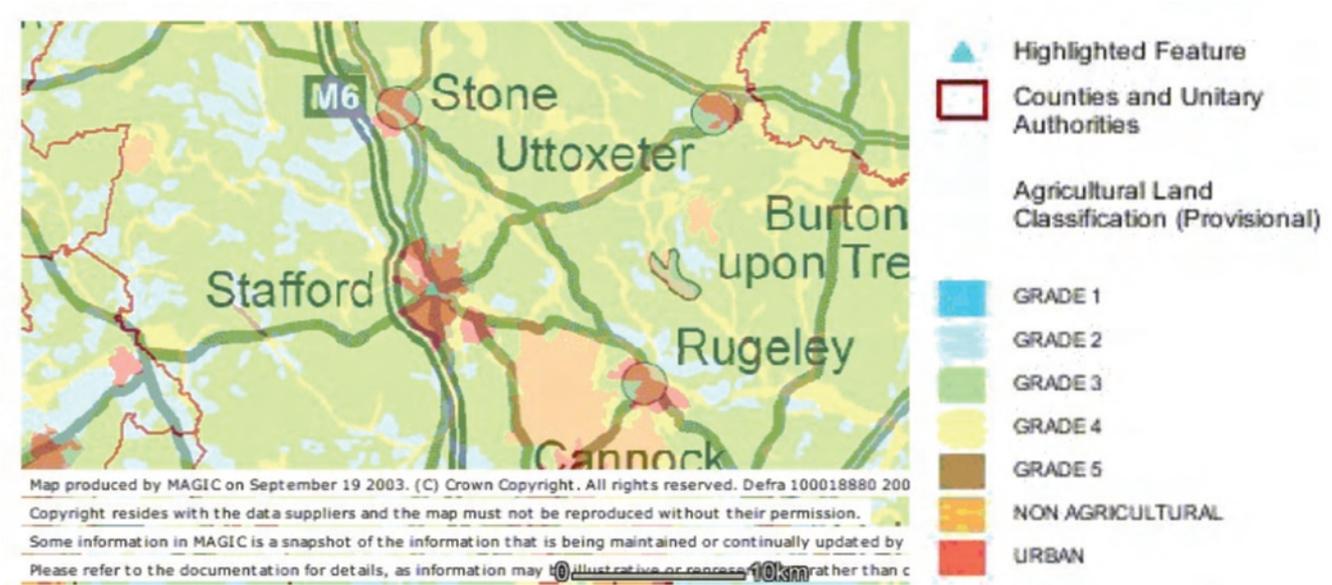
4.27 The recent Water Cycle Study (2010) indicates that the vast majority of the watercourses in Stafford Borough have been improving their water quality over the past 20 years, with many achieving good or very good status in the 2006 review.

Environmental 4

4.28 The Council is currently investigating the level of contaminated land within the Borough. At present no contaminated land, as defined by the Environmental Protection Act 1990, has been identified. Further information can be found at the Department for Environment, Food and Rural Affairs (DEFRA) [website](#) or the Environment Agency [website](#)

4.29 The quality of the land and of the soils need to be protected and restored, to enable them to be used beneficially and safely, so that they do not lead to the pollution of other natural resources such as air or water.

4.30 Soil is central to the environment. It stores and recycles nutrients and water, and provides the medium for crop growth; but it also acts as a buffer between the atmosphere and aquatic ecosystems. This can only be maintained if damage to soil is limited; once damaged or contaminated soil can be very difficult, if not impossible to repair and, soils themselves can become sources of pollutants.



4.31 Historic land contamination is often caused as a result of the previous industrial use of the land. The level of contamination in terms of the physical and chemical condition of the land is often linked to the sites previous usage. The Borough has been home to a variety of industries for example heavy engineering making locomotives, the manufacturing of large transformers and the manufacturing of consumer goods such as shoes.

4.32 One of the principal means of preventing new contamination and securing remediation of historic land contamination is through the planning system, where contamination is a material consideration and the development of Brownfield land is encouraged.

Indicator	Quantified data	Comparators and Targets	Trends	Problems / Constraints
Permitted planning applications granted against Environmental Agency Advice	None in 2011/12		None since 2009	Ensure trend continues

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Indicator	Quantified data	Comparators and Targets	Trends	Problems / Constraints
Contaminated land	No contaminated land, as defined by the Environmental Planning Act 1990, has been identified.	No data at present.	No data at present.	Need to ensure that in future data is collected and analysed. Contaminated land when found, or created should be remediated in order for the land to be suitable for re-use.
% of development on previously developed land (PDL)	59% - 2011/12	60% of new dwellings on PDL	Fluctuating 76% - 2008/09 87% - 2009/10 76% - 2010/11	Need to maintain consistency to meet target
Number (and percentage) of Empty Homes	212 Housing Association 1,401 Private Landlord empty homes at 2006 (of which 923 empty for more than 6 months) Total of 2.96% of housing stock is empty (Source: EHA)	3.60% of homes in the West Midlands are empty	Slight increase from 2002	Need to ensure data is collected fully. Need to reduce the number of empty homes.

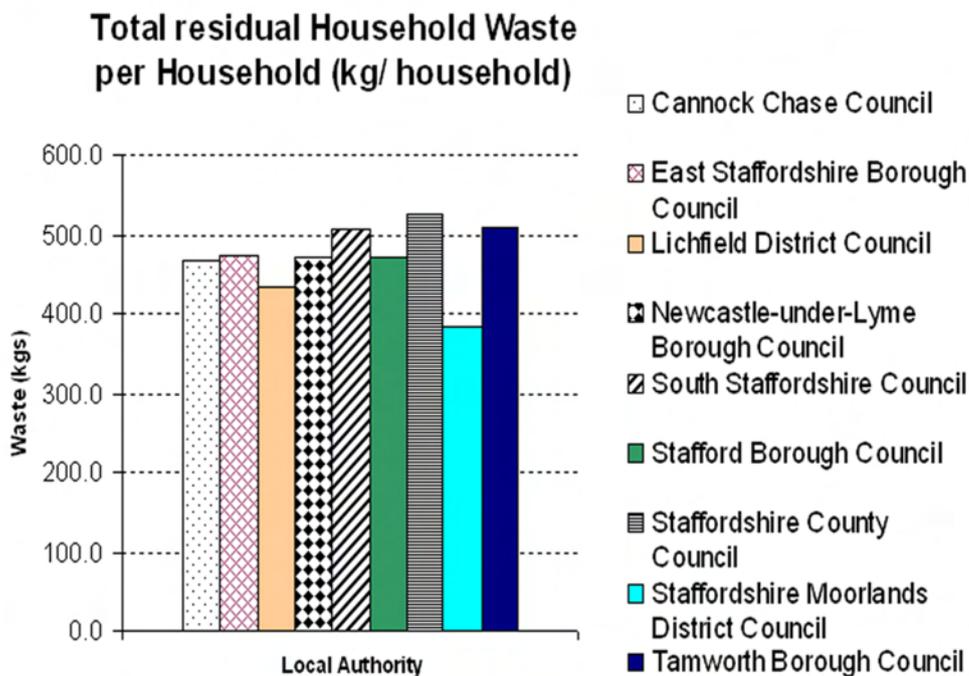
Evidence Base

Evidence Based Report	Key Recommendations / Comments
Land for new homes (2012)	Land for new homes has identified 425 dwellings completed in the monitoring year 2011/ 12 with 59% on PDL.
NLUD (2012)	The National Land Use Database (NLUD) identifies brownfield land within the Borough with redevelopment potential.
Water Cycle Study and Surface Water Management Plan (2010)	The Water Cycle Study indicates that the vast majority of the watercourses in Stafford Borough have been improving their water quality over the past 20 years, with many achieving good or very good status.

Waste

4.33 Whilst the amount of household waste going to landfill has reduced over the years, the following graphs show that Stafford Borough, still has a relatively high amount of residual household waste and lower recycling and composting rates compared to other Staffordshire authorities.

Environmental 4



Source: Staffordshire County Council 2011

Cultural Heritage and Landscape

4.34 The modern countryside has come about through a long process of interaction between people and the basic elements of the land: the rocks and soils, the hills, slopes and valleys, the streams and rivers that drain them, and the plants and animals that are native to the area, or that have been introduced to it. Physical influences such as geology and landform are often the key determinants of landscape character, but in places the overlying pattern of settlement, land use, or field enclosure may be more significant.

4.35 Stafford Borough has one of Britain's best rural landscapes including Cannock Chase Area of Outstanding Natural Beauty (AONB). AONB are designated on the basis of the quality and character of their landscapes in the national context. The primary objective of designation is to conserve the natural beauty of these open and wooded landscapes. Cannock Chase is characterised by a heathland landscape, supporting priority habitats and species, and existing extensive areas of forest. Further detailed work has been carried out by Staffordshire County Council to prepare the 'Planning for Landscape Change: Supplementary Planning Guidance for the Staffordshire and Stoke-on-Trent Structure Plan 1996-2011' which looks at the wider character of the rural areas. An update to this work is currently being undertaken as part of the evidence base for the LDF. When completed, information and actions will be referred to in subsequent SA work.

4.36 Green Belts are designated in order to check urban sprawl, safeguard the surrounding countryside, prevent neighbouring settlements from merging, preserve the setting and special character of historic towns, and assist urban regeneration. There are 2 areas of Green Belt designated within Stafford Borough, they surround the North Staffordshire and West Midlands conurbations and continue into both the northern and south eastern parts of the Borough, their locations can be seen below. Within the plan area the most extensive area of Green Belt and the one subject to the most development pressure is the North Staffordshire Green Belt.

Historic Environment

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4.37 The term 'Historic Environment' is used throughout this document to include scheduled monuments and other archaeological remains; historic buildings, both statutorily listed and those of more local importance; conservation areas; historic landscapes, including registered parks and gardens, cemeteries and registered battlefields; and historic elements of the wider public realm, including publicly-owned and managed spaces and recreational parks.

4.38 The historic environment is a precious and irreplaceable asset which must be conserved for future generations. Stafford Borough is steeped in history, from its Stone Age origins, through Roman and medieval times to modern industrial life. Its network of towns and villages with picturesque churches, castles and stately homes reflects the unique identity of this part of the North Midlands. Buildings such as the Ancient High House, the largest timber framed town house in England, and Shugborough, home to the Earls of Lichfield, attract visitors from across the world.

4.39 Within Stafford Borough there are 819 listed buildings of which 22 are Grade I, 72 are Grade II* and 735 are Grade II. Whilst the majority of the listed buildings in the Borough are in good or reasonable repair, a number of buildings are in severe disrepair threatening loss of historic detail and fabric.

4.40 Six of these buildings are Buildings at Risk as registered by English Heritage (6). To supplement the national Buildings at Risk register, Stafford Borough maintains a local Grade 2 Buildings at Risk register.

4.41 The Borough has four designated Historic Parks and Gardens these being Trentham Gardens, Sandon Park, Shugborough Park and the German Military Cemetery at Cannock Chase. Other designed landscapes contribute to the character of the local historic environment, such as village greens, public parks and country estates. Furthermore there is one Historic Battlefield called Hopton Heath.

4.42 There are 43 Scheduled Ancient Monuments in the Borough including Bury Bank Hillfort, bowl barrows in Swynnerton, and moated sites and fishponds at Hilderstone Hall, Hextall and Norbury Manor. Scheduled Ancient Monuments are of national importance and are subject to an enhanced level of protection. However not all important remains that merit preservation are necessarily scheduled. Archaeological sites of national, regional or local importance are registered on the County's Historic Environment Record (HER) (formerly known as the Sites and Monuments Record (SMR)). The HER is continually updated to record new information as it becomes available.

4.43 The Borough has 30 Conservation Areas with a review programme currently taking place by developing two Conservation Area Appraisals and Management Plans for Stafford and Stone town centres. In the future further Conservation Area Appraisals will take place, prioritised to areas with the greatest development pressure.

Indicator	Quantified data	Comparators and Targets	Trend	Problems / Constraints
Listed building and proportion at risk	22 – Grade I 72 – Grade II* 735 – Grade II Buildings at Risk – 6 buildings on English Heritage 'At Risk' Register (The Register only records grades I & II*)	For the West Midlands 4.9% of Grade I and II* were at risk. West Midlands has seen an increase in Listed Buildings (2007 Heritage Counts Report)	2000 position 18 – Grade I 57 – Grade II* 713 – Grade II 23 – Other (Source: Images of England)	Relatively favourable - slight increase in Listed Buildings and decrease. However Buildings at Risk calculated to be 5.4%, slightly higher than the West Midlands average.
Conservation Areas	2012 position 30 Conservation Areas		1 new conservation area was designated in 2008	

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Indicator	Quantified data	Comparators and Targets	Trend	Problems / Constraints
Archaeological sites	The County's Historic Environment Record (HER) contains information on over 1166 entries of archaeological interest, 45 are Scheduled Ancient Monuments		No suitable data available in order to define a trend.	
Historic Battlefields	There is one Historic Battlefield within Stafford Borough called Hopton Heath.	There are 6 Registered Historic Battlefields in the West Midlands	No suitable data available in order to define a trend	Lack of information on the condition of the site
Areas designated for their national or local landscape value	Cannock Chase AONB - 68km ²		No suitable data available in order to define a trend.	
Areas with characterisation study / area appraisals	Eccleshall, Stafford and Stone and Bradley have conservation area appraisals. Historic Environment Character Assessments for Stafford, Stone, Haywoods, Gnosall and Eccleshall.		No suitable data available in order to define a trend.	Need to increase areas covered with area appraisal or characterisation studies.
Green Belts	5 planning applications were received in 2010/11 for Greenbelt developments of greater than 5 dwellings or greater than 500sqm floorspace. (Source: AMR)	4% of dwellings nationally were built on Green Belt land (of those 61% were on PDL) (Source: ODPM)	No suitable data available in order to define a trend.	Need to protect Green Belt from new (non-agricultural development)

Evidence Base

Evidence Based Report	Key Recommendations / Comments
Historic Environment Character Assessment for Stafford Town (April 2009)	The Historic Environment Character Assessment identified seven Historic Environment Character Areas (HECAs) in the Stafford town area. The results indicate that there are 7 HECAs within the Stafford Historic Environment Area (HEA). The HECAs are sub-divided into areas prefixed 5 and 14. HECAs prefixed 14 are located along the Penk and Sow river valleys and lands lying out of the valleys. Within each prefixed

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Evidence Based Report	Key Recommendations / Comments
	14 HECA, a further breakdown of the historic character is given by Stafford Historic Environment Zones (STHECZ)
Historic Environment Character Assessment for Stone (July 2009)	The Historic Environment Character Assessment identified four Historic Environment Character Areas (HECAs) in the Stone area. A more detailed assessment was then undertaken that divided each of the HECAs into smaller areas called Historic Environment Character Zones (HECZ).
Historic Environment Character Assessment for Haywoods (July 2009)	<p>The Historic Environment Character Assessment undertaken by Staffordshire County Council as part of the Stafford Borough Evidence Base identified two Historic Environment Character Areas (HECAs) in Great Haywood.</p> <ul style="list-style-type: none"> • The 2 Historic Environment Character Areas (HECAs) within the Great Haywood Historic Environment Area (HEA) are 14c and 13g. HECA 14c is located within the eastern portion of Staffordshire and has monuments dating from the Neolithic onwards. Within HECA 14c there may also be potential for paleolithic sites to survive. • The single HECA within the Little Haywood Historic Environment Area (HEA) is HECA 13g. HECA 13g is located within the eastern portion of Staffordshire and has monuments dating from the Neolithic onwards. Within HECA 13g there may also be evidence of paleolithic sites that have survived.
Historic Environment Character Assessment for Eccleshall (August 2009)	The 3 Historic Environment Character Areas (HECAs) within the Eccleshall Historic Environment Area (HEA). These are 5a, 5f and 5g. HECA 5a is dominated by 20th century historic landscape character mainly represented by field systems. HECA 5f comprises general well preserved field system of late medieval / post medieval origin with historic villages and farmsteads. HECA 5g is dominated by 20th century historic landscape character and is represented by the subdivision HECZ 1. Each HECA is further broken down into Historic Environment Zones (STHECZ).
Historic Environment Character Assessment for Gnosall (August 2009)	The Historic Environment Character Assessment identified three Historic Environment Character Areas (HECAs) in the Gnosall area. The areas to the west of Gnosall are designated HECA 5e and HECA 33 and the eastern portion of Gnosall is within HECA 5c. Each of these HECA is broken up into smaller areas called Historic Environment Character Zones (HECZ) for assessment.
Stafford Conservation Area Appraisal (2011)	<p>The Stafford Conservation Area encompasses the town centre, with two early medieval churches, public houses, shops and civic buildings including the Shire Hall and Victoria Park. The conservation area comprises a variety of different activities and uses:</p> <ul style="list-style-type: none"> • The central part of the Conservation Area is the town centre, with two churches, a variety of nationwide chains and other independent local shops, offices, banks and several public houses/restaurants; • The western section of the Conservation Area includes Victoria Park, a large green open space that stretches along the banks of the River Sow and includes a bowling green, aviary and children's play areas; • Eastern section includes some smaller shops and businesses;

Environmental 4

Evidence Based Report	Key Recommendations / Comments
	<ul style="list-style-type: none"> • Large civic buildings mark the settlement's status as the County Town of Staffordshire. Some of these buildings form important groups of historic buildings in the Conservation Area as well as providing important resources for the local population; • Southern section of the Conservation Area is mainly commercial and civic and extends beyond the River Sow into the Parish of Forebridge and the neighbouring area which has a more suburban residential character; • Residential properties are largely found on the outskirts of the Conservation Area although some mainly mixed use new blocks have been built along the banks of the river opposite Victoria Park.
Stone Conservation Area Appraisal (2008)	<p>The Stone Conservation Area was designated in 1967 by Staffordshire County Council. The boundary was reviewed and amended in 1987 and again in 1996 in which year an Article 4 Direction was served on residential properties in the northern quarter of the area. The Conservation Area derives from a number of architectural, historical and environmental factors including;</p> <ul style="list-style-type: none"> • Historic market town (market charter granted in 1251) which still retains much of its 18th and 19th century character; • The architectural and historic quality of the area's historic buildings, 62 of which are listed and many others make a positive contribution to historic character and appearance; • Notable places of worship, Anglican, Catholic and Non-Conformist: St Michael's and St Wulfrud's Church (1753-8); Catholic Chapel of St Anne (1844) and Catholic Church of the • Immaculate Conception and St Dominic (1852); Church of St John (1870) and Christchurch (1887); • Well preserved 19th century western residential area, mainly terraced, including railway station, school, church and former co-op stores and whose residential properties have the added protection of an Article 4 Direction; • Individual trees and groups of trees notably those in the churchyards of Christchurch and St Michael's and mature street trees (e.g. Kings Avenue, Station Road); • Small historic items such as milestones, historic brick paving, ornate gateposts, iron street name signs, and lamp snuffer.
Bradley Conservation Area Appraisal (2012)	<p>The Bradley Conservation Area was first designated by Stafford Borough Council in 1969 has been updated in 2012 to take account of changes that have taken place within the area over time and amend the previous boundary.</p>