

# CHAPTER 6—A PROTECTED, ENHANCED & RESPECTED ENVIRONMENT

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## Included in this section

- Biodiversity in Staffordshire
- Cleaner and greener
- Managing waste in ways to reduce environmental impact
- Improving access to everyday facilities for all our communities
- Creating safer roads
- Effective and efficient highway maintenance
- Reducing the impact of traffic
- Improving air quality
- Responding to the threat of climate change

## Further reading

The Staffordshire Biodiversity Action Plan <http://www.sbap.org.uk/>  
ENCAMS Local Environmental Quality Survey Reports <http://www.keepbritaintidy.org/Expertise/Surveys/Default.aspx>  
Waste Strategy 2007 (DEFRA document); Staffordshire and Stoke Municipal Waste Management Strategy- Zero Waste to Landfill by 2020  
Staffordshire Local Transport Plan 2006-2011, Staffordshire County Council 2006  
North Staffordshire Local Transport Plan 2006-2011, Stoke-on-Trent City Council, 2006  
Staffordshire Local Transport Plan Progress Report 2008, Staffordshire County Council 2008  
Our County, Our Climate, Our Choice – Staffordshire Website can be accessed at: <http://www.staffsoc3.org.uk>  
UKCIP09 climate scenarios, which can be viewed at: <http://www.ukcip.org.uk>

## Key Findings

- 30.2% of Local Wildlife Sites (of County importance) are in positive management, against a 2008/9 target of 29.9%. A 5% per year improvement is targeted for 2009-11.
- SSSIs and Local Wildlife Sites cover only about 8% of the County. For biodiversity to be able to adapt to climate change we need to improve habitats outside of these designated sites and create a network that allows species to move through the landscape.
- Staffordshire residents have identified 'clean streets' as one of the top three factors that make somewhere a good place to live. Clean streets also ranks as the fifth most important issue for improvement in Staffordshire.
- Two thirds of residents agree that local public services are working to make Staffordshire cleaner and greener.
- Staffordshire continues to increase the amount of waste recycled and composted and the percentage of Staffordshire's household waste sent to landfill continues to reduce.
- 87.6% of the urban population lives within 350m of a bus stop with a half hourly or better bus service to a major centre. 62.7% of the rural population lives within 800m of a bus stop with an hourly or better bus service to a major centre.
- The Place Survey 2008/09 for Staffordshire identified road and pavement repairs and traffic congestion as priority areas for improvement.
- In 2007, 33.8% of all Staffordshire's CO<sub>2</sub> emissions came from road transport.
- It is confidently predicted that Staffordshire will experience higher summer and winter temperatures, lower summer rainfall, higher, more intense winter rainfall, earlier springs and later autumns, and disruptive extreme weather events as a result of climate change.
- Public expectation is for the Council to take a strong lead in tackling climate change.

## 6.1 Biodiversity in Staffordshire

Staffordshire's position in the centre of the country means that a unique feature of the County's biodiversity is its wide range and variety, forming a transition between upland and lowland. The County's heathlands, particularly those on Cannock Chase, are nationally significant as are some of the ancient woodlands such as those in the Churnet Valley. There are 13 sites of international importance in the County, 65 Sites of Special Scientific Interest (SSSIs) and over 800 Sites of Biological Importance (SBIs). As well as important habitats, these designated sites support rare and endangered species such as nightjars, adders, dormice, and wild daffodils.

Protected sites represent isolated fragments of habitats that were once more widespread. For example, since the late 18th century, Staffordshire has lost 90% of its lowland heathland. This means conserving their habitat quality is essential for maintenance of biodiversity. The Staffordshire Biodiversity Action Plan identifies the County's most important habitats and species and sets out targets for their conservation and enhancement.

Virtually all of the wildlife habitats in the UK have developed along with people. Without the right management these habitats decline and so does their ability to support the rarer of our species. Putting in place suitable management for these sites is therefore a priority to conserve biodiversity. Landowners have a statutory duty to keep SSSIs in good condition and Natural England monitoring shows that in Staffordshire 89.4% are now in favourable condition or have the management in place to allow recovery, slightly above the national figure of 88.4%.

SSSIs and SBIs cover only about 8% of the County. The wider countryside is also important for a network of habitat features such as small woods, hedgerow networks, field margins and ponds and supports a range of threatened and declining species such as farmland birds, bats, butterflies and moths. Biodiversity Enhancement Areas identify where the best habitat networks could be improved to allow for adaptation to climate change. The impacts of climate change on wildlife species can be mitigated by protecting the diversity of their habitats and connecting them together to allow movement in response to changing conditions.

Local wildlife sites are essential for the maintenance of biodiversity and meeting UK Biodiversity Action Plan targets. Staffordshire's local sites, Sites of Biological Importance (SBIs), do not have statutory protection. A monitoring report prepared by Staffordshire Wildlife Trust in 2002 showed that 30% of SBI habitat was either destroyed or lowered in value between 1979 and 2000. Neglect or agricultural change were the most common reasons for loss of value.

As most SBIs are in private ownership and there are no legal duties involved, support of the SBI Partnership, which works with farmers and landowners to get management schemes in place, is essential if the targets for NII 97—Improved local biodiversity, proportion of Local Sites where active conservation management is being achieved—are to be met. The 2008-11 LAA target is to increase the SBIs in positive management by 5% per year from a baseline of 24.8%. Against a target of 43, 45 SBIs were brought into positive management in 2008/9, meaning 30.2% are now in positive management.

## 6.2 Cleaner and greener

Green spaces contribute to the economic, social and environmental well-being of both residents and places. Some of the benefits of green spaces include the promotion of healthy living, combating disadvantage, encouraging social inclusion and helping to regenerate areas. Clean streets has been identified by residents of Staffordshire as one of the top three factors that make somewhere a good place to live (49% of respondents to the 2008/09 Place Survey). It also ranks as the fifth most important issue for improvement in Staffordshire (28% of respondents to the 2008/09 Place Survey), with residents from Tamworth ranking clean streets as the second most important issue for improvement.

The Place Survey 2008/09 asked residents for perceptions on green spaces in Staffordshire. Two thirds of respondents (66%) agreed that local public services are working to make Staffordshire cleaner and greener. Over half of respondents (56%) were satisfied that Staffordshire County Council is keeping public land clear. However only 37% of respondents from Tamworth were satisfied, compared to 72% in East Staffordshire.

A slightly higher percentage of respondents (62%) were satisfied with parks and open spaces, although this has decreased since 2006/07 (69%). However, over three quarters of respondents (78%) think that parks and open spaces in Staffordshire have stayed the same over the last three years. Respondents from Stafford district were the most satisfied with parks and open spaces (69%) compared to less than half (47%) of respondents from Staffordshire Moorlands.

Usage of parks and open spaces by Staffordshire residents is high. 85% of respondents to the 2008/09 Place Survey had used parks and open spaces in the last year, with over half of respondents (59%) using parks and open spaces at least once a month. Staffordshire County Council manages Country Parks covering approximately 2,500 hectares. Visitor surveys have found that 99% of visitors rate them as Good or Very Good. The County Council also manages approximately 4,000 kilometres of public rights of way, 80% of which were found to be "easy to use" in a condition survey carried out in 2008/9. Across the County, local authorities and Staffordshire Wildlife Trust manage over 4,000 hectares of nature reserves, provide extensive programmes of guided walks and events, and lead 16,000 conservation volunteer days per year giving local people healthy exercise, work experience and quality of life benefits.

Annually ENCAMS undertakes the Local Environmental Quality Survey of England (LEQSE). This is the biggest survey of its kind and looks at almost 19,000 sites in a representative sample of local authorities across England. Local authorities are assessed on a range of environmental problems including litter, fly-posting, graffiti, staining and weed growth. In 2007/08, 26% of the sites surveyed in Staffordshire were rated as 'good', in line with the national rate of 28%. Only 5% of sites were rated as 'poor', the same as the national picture. Specific areas for improvement highlighted by the report include bus stops, litter bins, cleansing standards and highways infrastructure.

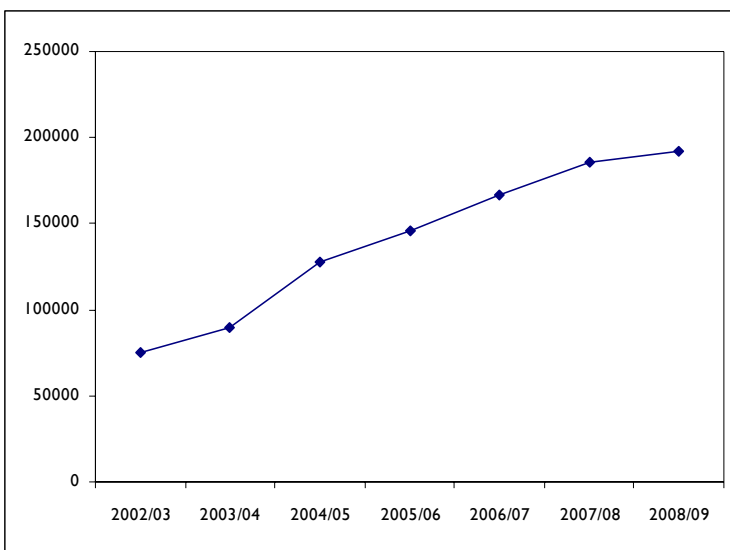
During 2008/09, there were 3,944 incidents of fly-tipping recorded across Staffordshire, which represents a decrease of 1.3% (53 fewer incidents) when compared with the number recorded in 2007/08. In the West Midlands there was a decrease of 10% over the same period. Fly-tipping incidents are reducing in Lichfield, South Staffordshire, Stafford Borough and Tamworth. The highest reported levels are in Tamworth (655 incidents), Newcastle-under-Lyme (596 incidents) and Cannock Chase (588 incidents). NI 196 is designed to help local authorities tackle the problem of fly-tipping. The indicator compares each local authority's incident data and enforcement information with the previous year. In 2008/09 only South Staffordshire was scored as 'Very Effective', whereas Cannock Chase and Newcastle-under-Lyme were rated as 'Not Effective' and Tamworth was rated as 'Poor'.

### 6.3 Managing waste in ways to reduce environmental impact

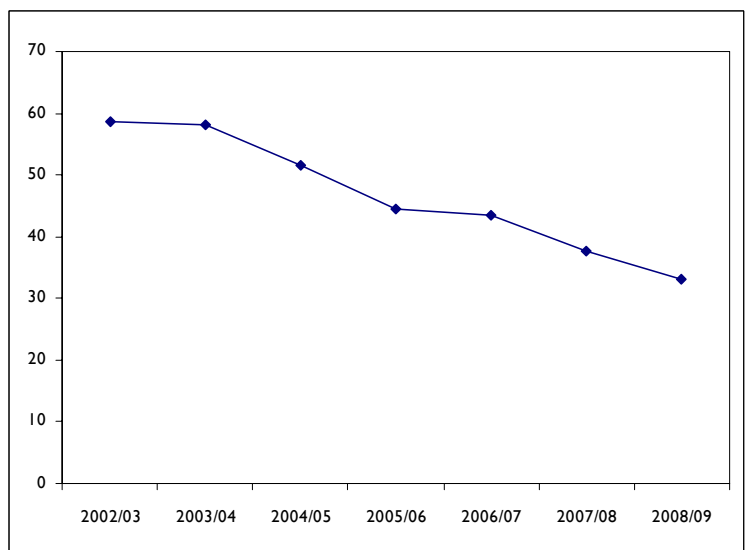
The eight district and borough councils in their statutory function as the Waste Collection Authorities in Staffordshire, along with Staffordshire County Council as the Waste Disposal Authority, provide kerbside collections, civic amenity drop off facilities (Household Waste Recycling Centres) and energy from waste treatment facilities.

The collection and disposal services are generally recognised as high performing in a number of areas, including high recycling rates, reducing tonnages of non-recyclable waste arisings and, in many instances, providing value for money. Figure 6.1 and 6.2 illustrate how recycling and composting in Staffordshire have increased over recent years and the percentage of waste sent to landfill has decreased.

**Figure 6.1—Tonnes recycled and composted 2002/03-2008/09**



**Figure 6.2—Percentage waste to landfill 2002/03-2008/09**



Source: Best Value Performance Indicators and Staffordshire County Council's Performance Management Information System

In 2007/08 the Waste Disposal Authority was in the lowest quartile for waste disposal costs under the previous Best Value regime (BVPI86 – Cost of waste disposal per tonne of municipal waste) and came top in the recent Pricewaterhouse Cooper's report on value for money in waste disposal.

The Place Survey 2008/09 for Staffordshire asked for residents' perceptions on waste services. Generally residents were satisfied with the waste services provided in Staffordshire. Residents from Tamworth were least satisfied with their waste services. Over three quarters of respondents (77%) were satisfied with refuse collection in Staffordshire. A similar percentage of respondents (75%) were satisfied with their doorstep recycling service. Just over two thirds of respondents (68%) were satisfied with local tips/household waste recycling centres, although this has decreased from 86% in 2006/07.

A key development in striving towards zero waste to landfill is the development of the Project Waste to Resource -W2R. This will insulate Staffordshire residents against the rising costs of waste disposal and reduce methane emissions from landfill to mitigate against climate change.

## 6.4 Improving access to everyday facilities for all our communities

Staffordshire has high levels of car ownership, with 81% of households owning at least one car - well above the national average at 73%. Data shows that the car is the main mode of travel with 73% of the population in employment travelling to work by this mode, whilst 17% travel to work by public transport, bicycle or on foot, and the remaining 10% use other modes or work at home.

Only 7% of people in Staffordshire travel more than 30km to work and 38% travel less than 5km. 53% of all journeys to work in Staffordshire are made within the district of origin. In total, 65% of people remain within the county when travelling to work and 27% travel out of the County. South Staffordshire has the highest percentage of journeys out of the County (55.7%). This has been a long-established trend as many people commute into the West Midlands. Stoke-on-Trent exerts a similar pull on Newcastle-under-Lyme (31%) and to a lesser extent, Staffordshire Moorlands (22%).

The mode of travel to work changes as the distance travelled increases. Journeys of less than 5km are short enough for sustainable modes such as walking and cycling to become viable options. However, of the people travelling less than 2km to work, 53% make the journey by car. This increases sharply to 80% for journeys between 2km and 5km. This represents a significant potential to increase the use of sustainable modes of transport for shorter journeys.

The county's transport priorities, as described in the Staffordshire Local Transport Plan (LTP) 2006-2011 are accessibility, road safety and highway maintenance. Two further issues also identified in the LTP, and which need addressing in order to prevent them from becoming future problems, are traffic levels and air quality. The Place Survey 2008/09 for Staffordshire identified that road and pavement repairs (40% of respondents, up from 28% in 2006/07) and the level of traffic congestion (30% of respondents, down from 35% in 2006/07) were in the top three issues for improvement in Staffordshire.

### **Better Accessibility**

The ability of an individual to access employment and key services can significantly improve their quality of life, as well as their life chances. Good access increases levels of social inclusion, reduces health and social care inequalities, increases attendance and attainment in education, and facilitates the transfer from welfare to work.

Access to essential services is a problem for a significant proportion of Staffordshire's population. 19% of households in the county do not own a car and rely on other modes, including lifts from family and friends, buses, cycling, walking, taxis and community transport.

In Staffordshire, areas of low car ownership tend to be urban and therefore have a good bus network provided on a commercial basis. Rural areas, whilst having high car ownership levels, do have small pockets of deprivation where accessibility problems exist, exacerbated in some cases by a poor bus network. The challenge in rural areas is to meet the lower levels of public transport demand, often dispersed over large areas, in the most effective and sustainable way. Public transport provision in urban areas presents other challenges. In some areas, bus services may not be accessible for a number of reasons, including cost, fear of crime, inconvenient bus times, or lack of choice in destinations.

The Place Survey 2008/09 for Staffordshire asked residents for their perceptions of public transport in Staffordshire. Less than half of respondents (46%) were satisfied with local bus services, a decrease from the 2006/07 result of 55%. Satisfaction with local bus services was highest in Newcastle-under-Lyme (59%) and lowest in Staffordshire Moorlands (39%). This is expected due to the urban nature of

Newcastle-under-Lyme and Staffordshire Moorlands being a predominantly rural district. Just over half of respondents (56%) had used local bus services within the last year with less than a third of respondents (32%) having used local bus services within the last month.

Despite the issues regarding public transport provision, for most people without access to a car, buses provide the main mode of transport. Approximately 80% of Staffordshire’s bus network operates on a commercial basis. This means that routes, timetables, and fares are determined entirely by the operator. Whilst the County Council does not have direct powers to determine what services are provided commercially, it can influence the provision of services through partnership working and the management of the highway network. Approximately 20% of the bus network in Staffordshire is determined directly by the County Council through the provision of subsidised services. These tend to be a mix of rural, urban-fringe, evening and Sunday services.

Rising costs in the bus industry have put increased pressure on the Council’s ability to replace withdrawn commercial services and extend the bus network. Operators are tending to concentrate their commercial activities on core urban and inter-urban routes, leaving the Council to secure bus services for most rural and many urban-fringe areas.

Exacerbating the issue of rising costs within the bus industry is the current economic downturn. Whilst it is still too early to draw accurate conclusions, it is looking like the demand for public transport has decreased and this may result in the number of bus services and/or bus frequencies being reduced.

The main destinations that people without access to a car have difficulty reaching are:

**Town centres:** a number of key services are located in town centres and therefore a variety of needs can be satisfied in a single trip. Currently, 87.6% of the urban population lives within 350m of a bus stop with a half hourly or better bus service to a major centre, and 62.7% of the rural population lives within 800m of a bus stop with an hourly or better bus service to a major centre.

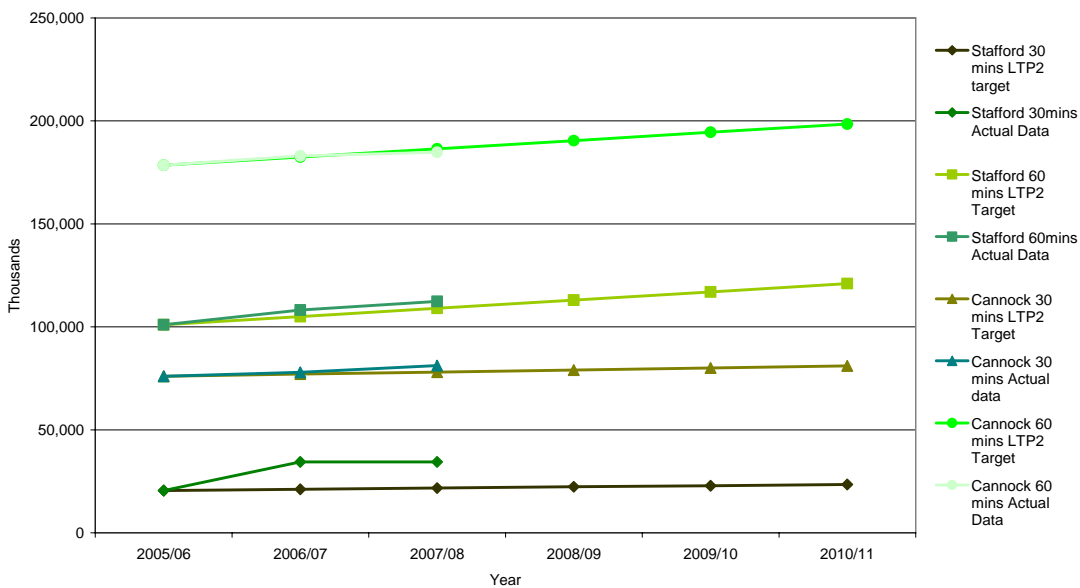
**Hospitals:** travelling to outpatient appointments and visiting patients in hospital are concerns for many residents. This is a countywide issue and is not specific to any one hospital. This is because many of Staffordshire’s hospitals are in non-town centre locations and some medical services are only provided at certain hospitals, meaning that referrals are not always to the nearest hospital.

Access to two of Staffordshire’s hospitals is the indicator selected to measure the progress of the Staffordshire Local Area Agreement towards National Indicator 175 - access to services and facilities by public transport, walking and cycling. The indicator relates to the percentage of people within 30 and 60 minutes of Staffordshire General and Cannock Chase Hospitals by public transport. Baselines and annual trajectories are shown in table 6.1 and progress towards meeting these is shown in figure 6.2.

**Table 6.1 – LTPI and LAA Local Accessibility Baseline and Targets**

|          | <b>Baseline<br/>(2005/06)</b> | <b>Target<br/>(2008/09)</b> | <b>Target<br/>(2009/10)</b> | <b>Target<br/>(2010/11)</b> |
|----------|-------------------------------|-----------------------------|-----------------------------|-----------------------------|
| Stafford | 20,480 (30mins)               | 22,292 (30mins)             | 22,896 (30mins)             | 23,500 (30mins)             |
|          | 100,995 (60mins)              | 112,995 (60mins)            | 116,995 (60mins)            | 120,995 (60mins)            |
| Cannock  | 76,025(30mins)                | 78,025 (30mins)             | 80,025 (30mins)             | 81,025 (30mins)             |
|          | 178,454 (60mins)              | 186,454 (60mins)            | 194,454 (60mins)            | 198,454 (60mins)            |

**Figure 6.2 – Access to Staffordshire General and Cannock Chase Hospitals by Public Transport**



**Employment sites:** out-of-town employment sites can often be difficult to access because they are not necessarily near to main bus routes. This is compounded by the fact that such sites can employ large numbers of people.

**Food shops:** a proportion of Staffordshire’s residents have problems accessing food stores and healthy diets. This finding is supported by the National Consumer Council. For further details see: [www.ncc.org.uk/nccpdf/poldocs/NCC087rr\\_access\\_radar](http://www.ncc.org.uk/nccpdf/poldocs/NCC087rr_access_radar).

In addition to the above destinations that people without access to a car have difficulty reaching, there are a number of socio-economic factors that increase the likelihood of an individual having poor access to essential services. These include:

**Living in an area of deprivation:** Residents in these areas are much more likely to experience difficulties in accessing key services than residents in less deprived areas. A range of accessibility barriers and issues are likely to be present in these deprived areas, including low car ownership, lower incomes, higher crime rates, poor health, and higher rates of unemployment.

**Being aged over 60 years:** research by the Office of National Statistics in 2001 found that the older a person gets the more they use public transport, community transport and taxis.

## 6.5 Creating safer roads

Over recent years, good progress has been made in reducing the number and severity of road accidents in Staffordshire. Despite a reduction in the number and severity of road accidents in Staffordshire, too many people are still killed or seriously injured. In 2008, 286 people were killed or seriously injured and 3,266 people suffered slight injuries.

Resources to reduce the number and severity of road accidents have focused on the 3 ‘E’s (Education, Engineering and Enforcement) and the main highway user groups that are most at risk of being involved in a road accident—speeding car drivers, children, young adults and motorcyclists.

## 6.6 Effective and efficient highway maintenance

Highway maintenance underpins the whole transport network because it improves conditions for all highway users; it makes roads safer, improves people’s accessibility and enhances their quality of life.

Staffordshire County Council has a legal duty to maintain and repair the highway network which comprises approximately 6,000km of road, 1,100 road bridges, 2,560 footbridges and bridleway bridges, 270 pedestrian and traffic control facilities, 260km of cycle lane/track, 200km of retaining wall, and over 100,000 road lighting units and illuminated signs.

Statistics show that the overall condition of Staffordshire’s highway network is above the national average, which is illustrated in table 6.2. However the Staffordshire Place Survey 2008/09 highlighted that just under half of respondents (43%) felt that road and pavement repairs had got worse over the last three years.

**Table 6.2 – Condition of Staffordshire’s Highway Network (2006/07)**

| BVPI | Indicator  | Staffordshire % | National Average % | Rating        |
|------|--|-----------------|--------------------|---------------|
| 223  | Percentage of principal roads where structural maintenance should be considered                | 4.6             | 5.4                | Above Average |
| 224a | Percentage of non-principal classified roads where structural maintenance should be considered | 6               | 7.7                | Above Average |
| 224b | Percentage of unclassified roads where structural maintenance should be considered             | 12              | 13.9               | Above Average |
| 187  | Percentage of surface footways where structural maintenance should be considered               | 12              | 22.4               | Above Average |

## 6.7 Reducing the impact of traffic

In Staffordshire traffic congestion is only an issue in certain urban areas and on some inter-urban routes during AM and PM peak travel periods. For example, traffic data shows that slow and queuing traffic is an issue during peak travel periods in Stafford and Burton upon Trent. However, for the majority of Staffordshire’s residents, the main traffic issue relates to the high volumes of traffic, especially Heavy Commercial Vehicles, passing through their communities and affecting their quality of life. Over half of respondents to the Place Survey 2008/09 (59%) felt that traffic congestion in Staffordshire has got worse over the last three years.

## 6.8 Improving air quality

Areas of poor air quality in the County are not widespread. Currently, 8 sites have been declared as having Nitrogen Dioxide levels (caused by road traffic emissions), which exceed recommended maximum levels, and these are known as Air Quality Management Areas (AQMAs). All of these are located in the south of the County; 3 are located on the local road network and 5 are located on the strategic road network.

As transport authorities, Staffordshire County Council and the Highways Agency are required to work with the relevant district councils to implement transport and highway measures to improve the air quality at sites where traffic emissions are the main contributor to the poor air quality. The locations

of the AQMAs, together with the responsible highway authority, are shown in table 6.3.

**Table 6.3—The Location of Staffordshire’s Air Quality Management Areas (AQMAs) and the Responsible Highway Authority**

| AQMA Location  | Responsible Highway Authority |
|--|-------------------------------|
| Woodbank, adjacent to the M6 near Penkridge          | Highways Agency               |
| Bursnips, adjacent to the M6 at junction with M54    | Highways Agency               |
| Oak Farm, A5   | Highways Agency               |
| Wedges Mills, A4601                                  | Staffordshire County Council  |
| A5, Cannock, between Churchbridge & Longford Islands | Highways Agency               |
| Derby Rd / Derby St, Burton upon Trent               | Staffordshire County Council  |
| St Peters Bridge, Burton upon Trent                  | Staffordshire County Council  |

In Staffordshire, 32.3% of the gases that cause climate change originate from road transport. In 2003, motorists in Staffordshire used 555 million litres of fuel and emitted over 1 million tonnes of CO<sub>2</sub>. 56% of all road transport emissions were from cars.

## 6.9 Responding to the threat of climate change

### *Climate change and CO<sub>2</sub> emissions*

Carbon dioxide is one of a number of greenhouse gases that contribute to global warming and subsequent climate change. Because it occurs at much higher concentrations than other greenhouse gases (such as methane and nitrous oxide), policy measures to mitigate climate change tend to concentrate on carbon dioxide, global concentrations of which have increased from 280ppm in 1750 to over 375ppm today. This is higher than any previous levels that can be reliably measured (i.e. in the last 420,000 years).

Global average temperatures have risen nearly 0.8 °C since the late 19th century, and rising at about 0.2 °C/decade over the past 25 years. In central England the temperature rise over the twentieth century has been in excess of 1.0 centigrade degrees (Parker et al., 1992). The Intergovernmental Panel on Climate Change (IPCC) Fourth Synthesis Report projected that average global surface temperatures will continue to increase to between 1.4 centigrade degrees and 5.8 centigrade degrees above 1990 levels, by 2100 (IPCC, 2007).

### *The implications of climate change*

The UK Climate Impacts Programme (UKCIP) provides information on likely future climate scenarios in this country. The UK Climate Projections (UKCP09) scenarios identify a series of changes that may take place over the century. Of these, five are confidently predicted as likely to have an impact on Staffordshire. They are, in no specific order:

- Higher summer temperatures
- Higher winter temperatures
- Lower summer rainfall
- Higher, more intense winter rainfall
- Earlier springs and later autumns

Other trends, such as more frequent gales and reduced cloud cover in summer are predicted in some models but not others, so they cannot be treated with the same degree of confidence. The likely impacts, in particular those resulting from extreme weather events, cannot be ignored on the basis of their

uncertainty, and the difficulty of predicting future weather is of itself a factor that must be considered in planning for the future.

### ***Staffordshire public opinion on climate change in Staffordshire***

In 2006 Staffordshire County Council led the partnership in developing a web portal on climate change that was specifically focused on Staffordshire. Consultation was undertaken through a series of focus groups across the county, supported by an online questionnaire.

Many participants believe that the Council should take a lead on tackling climate change, and that strong political commitment in developing the right policies and guidance was important. One of the ways they felt it could do this was by ensuring the proper design of infrastructure to allow them to live lower carbon lives. This included design of new buildings to be as efficient as possible. It was widely agreed that education was still required. Some participants felt that, although they wanted to take some personal responsibility for tackling the issue they did not know what action to take.

As with the consultation completed by Step Beyond in 2005, many people felt that, although they understood the problem on a global scale, Staffordshire would be little affected. The issue of transport featured again and again, with most people agreeing that improving public transport (issues raised including frequency, cleanliness, personal safety and cost) would encourage them to leave their cars at home. Concern for future generations and educating children in low carbon lifestyles was also a recurring theme.

### ***The response to the climate change challenge***

There are three principal aspects to any climate change response strategy for Staffordshire. They are:

- the reduction of carbon emissions from the activities of public sector organisations;
- adapting to the impacts of climate change that are now inevitable; and
- providing leadership to persuade our communities and businesses to take similar measures.

The corporate climate change strategy, A Hard Rain, was refreshed in 2006, and is slightly ahead of its target of an 80% reduction from a 1990 baseline. It is expected that any reductions made in 2008/09 and 2009/10 will be cancelled out by the change in the conversion factor for electricity, which has increased from .34kg CO<sub>2</sub>/Kwh to .537kg CO<sub>2</sub>/Kwh. This happens regularly because of changes to the proportions of fuels used in our power stations.

National Indicator NI 186, 'per capita reduction in CO<sub>2</sub> emissions in the LA area' has been selected as one of the 35 priority indicators under the 'refreshed' Local Area Agreement. A comprehensive delivery plan for this indicator has been submitted, with contributions from across the LAA partnership.

The delivery plan includes within it National Indicator 185 'reduction in local authorities own emissions', on the basis that we (the LAA climate change partnership) can only influence emissions across the county if we first put our own houses in order. It also includes a comprehensive communications plan.

Following on from the attendance of the Honorary Consul for Tuvalu at the Staffordshire Declaration signing ceremony in 2008, a formal partnership has now been established between Staffordshire and Tuvalu. The partnership hopes to raise awareness of Tuvalu's plight (Tuvalu is likely to be the first nation to disappear due to sea level rise) countywide but particularly in schools, through on line peer to peer communication.

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## Implications for service delivery

- Local authorities have a key role in achieving Biodiversity Action Plan and NI 197 targets.
- The effects of climate change on the County's biodiversity need to be addressed by enhancing habitat connectivity and quality to improve ecological resilience; this requires strategic planning.
- In order to deliver transport value for money, it is necessary to focus resources on Staffordshire's strategic centres – Stafford, Cannock, Burton upon Trent, Newcastle-under-Lyme, Tamworth, and Lichfield.
- Clean streets are important to the residents of Staffordshire, therefore work must continue to prevent and detect environmental crime, and improve and maintain cleanliness.
- For Staffordshire's transport priorities to be met, measures will have to be introduced to encourage residents to use public transport and more sustainable forms of transportation. For example, measures to improve a town's bus services could be introduced at the same time as reducing the number of town centre car parking spaces and/or increasing the price of parking.
- Areas of Staffordshire and groups within the population that have greatest need will have the highest priority, so long as the County's transport priorities are met. For example, groups within the population that will have greatest need will be those that are socially excluded, which include people who do not have access to a car or public transport, the mobility impaired, and the elderly. Areas within Staffordshire that will have greatest need will primarily be areas of multiple-deprivation.
- The impact of the current economic downturn on transport demand is still uncertain. However, we predict that it will lead to a reduction in demand, leading to a possible reduction in the number of bus services and/or their frequencies.
- Measures to improve transport and the highway network must contribute positively to an individual's quality of life. Where measures are likely to have a negative impact, this must be minimised or removed.
- A certain amount of climate change is now inevitable, regardless of mitigation measures, and all organisations should be preparing adaptation plans to ensure continuity of service delivery in a changing climate, and adequate preparations to deal with weather-related emergencies.
- Although we lack adequate baseline information, an annual saving of about 98,000 tonnes of carbon dioxide across Staffordshire, attributable to actions under the LAA climate change delivery plan, will be required in order to meet the target of NI 186. This is equivalent to an annual saving of about 0.12 tonnes per capita.

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## Indicators in the Staffordshire LAA relevant to this area

- NI 175: Access to services and facilities by public transport, walking and cycling
  - NI 186: Per capita CO<sub>2</sub> emissions in the local authority area
  - NI 197: Improved local biodiversity – proportion of local sites where positive conservation management has been or is being implemented
  - NI 191: Residual household waste per household
-