

CHAPTER 9—TRANSPORT AND HIGHWAYS

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Included in this section

- Travel in Staffordshire
- Staffordshire's Transport Priorities
- Better Accessibility
- Effective and Efficient Highway Maintenance
- Reducing the Impact of Traffic
- Improving Air Quality

Further reading

The Future of Transport-A Network for 2030 (DfT, 2004)

West Midlands Regional Spatial Strategy (WMRA, 2008)

Staffordshire Local Transport Plan 2006-2011 (SCC, 2006)

North Staffordshire Local Transport Plan 2006-2011 (SoTCC, 2006)

Future reading

Staffordshire Local Transport Plan Progress Report 2008 (October 2008)

North Staffordshire Local Transport Plan Progress Report 2008 (October 2008)

Key Findings

- Every day, almost everybody in Staffordshire uses part of the highway network.
- Staffordshire's highway network comprises approximately 6,000km of road, 1,100 road bridges, 270 pedestrian and traffic control facilities, 260km of cycle lane, and over 100,000 road lighting units and illuminated signs.
- 81% of Staffordshire's households own at least one car and around three-quarters of the population travel to work in their car.
- 87% of the urban population lives within 350m of a bus stop with a half hourly or better bus service to a major centre.
- 58% of the rural population lives within 800m of a bus stop with an hourly or better bus service to a major centre.
- In Staffordshire, 31% of the gases that cause climate change originate from road transport.

9.1 Travel in Staffordshire

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 around three-quarters (73%) of the population in employment travelling to work by this model. Around one-in-six people (17%) travel to work by public transport, bicycle or on foot, and the remaining 10% use other modes or work at home.

Over half (53%) of all journeys to work in Staffordshire are made within the district of origin. In total, around two-thirds (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 Conurbation. Stoke-on-Trent exerts a similar pull on Newcastle-under-Lyme Borough (31%) and, to a lesser extent, Staffordshire Moorlands (22%). Only 7% of people in Staffordshire travel more than 30km to work and 38% travel less than 5km.

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.

Staffordshire's Transport Priorities

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. (Road safety is covered in Chapter 7—see page 48.)

9.2 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 tend to 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.

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 are 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.

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% of the urban population lives within 350m of a bus stop with a half hourly or better bus service to a major centre, and 58% of the rural population lives within 800m of a bus stop with an hourly or better bus service to a major centre.

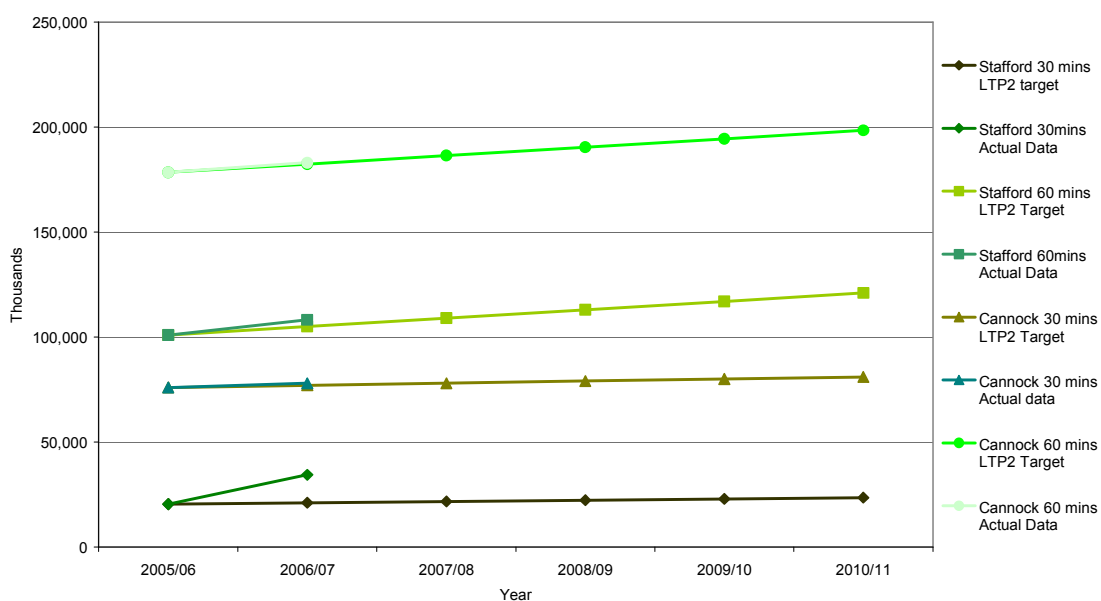
- **Hospitals:** travelling to outpatient appointments and visiting patients in hospital are concerns for many residents. This is a countywide issue and is not specific to any one hospital. This is because many of Staffordshire’s hospitals are in non-town centre locations and often require the need to change bus services. This discourages some people. 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 LTP’s local accessibility indicator as well as one of the indicators selected by the Staffordshire Local Area Agreement. 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 9.1 and progress towards meeting these is shown in Figure 9.1 (both below).

Table 9.1—LTPI Local Accessibility Baseline and Targets

	Baseline (2005/06)	Target (2008/09)	Target (2009/10)	Target (2010/11)
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 9.1—Access to Staffordshire General and Cannock Chase Hospitals by Public Transport



Source: National Indicator 175—Access to services and facilities by public transport, walking and cycling (Staffordshire Local Area agreement, 2008 to 2011)

- **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.

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:** countywide almost 70,000 people live in areas that are in the 20% most deprived nationally. 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. Staffordshire’s population of older people is projected to increase significantly over the next decade. Currently, 21% of the county’s population is over 60 and by 2021 this will increase by approximately 27%.

9.3 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 as shown in Table 9.2 (below). It is acknowledged that there is a backlog of highway maintenance schemes, which represents a major challenge for the County Council that must be addressed over the next few years. The Staffordshire County BVPI 2006 Survey found that 28% of residents considered road and pavement repairs to be the issue most in need of improvement in their local area.

Table 9.2—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	7	10	better than average
224a	Percentage of non-principal classified roads where structural maintenance should be considered	10	14	better than average
224b	Percentage of unclassified roads where structural maintenance should be considered	15	15	Average
187	Percentage of surface footways where structural maintenance should be considered	9	17	better than average

Source: Staffordshire County Council Best Value Performance Plan

9.4 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.

9.5 Improving air quality

Areas of poor air quality in the county are not widespread. Currently, 7 sites have been declared as having Nitrogen Dioxide levels (caused by road traffic emissions), which exceed recommended maximum levels. All of these are located in the south of the county; 3 are located on the local road network and 4 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 seven sites of poor air quality, together with the responsible highway authority, are shown in Table 9.3 (below).

Table 9.3—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, 31% 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 CO₂. 56% of all road transport emissions were from cars.

9.6 Barriers to housing and services (IMD 2007)

In the Indices of Deprivation 2007 there are two domains which relate directly to this chapter. The first of these two domains measures deprivation in terms of the barriers to housing and services. The purpose of this domain is to measure barriers to housing and key local services. The indicators are structured into two sub-domains: ‘geographical barriers’, and ‘wider barriers’ which includes issues relating to access to housing, such as affordability.

In Staffordshire there are around 46,310 people (17,851 households) who fall into the 10% most deprived nationally for this domain, and a further 38 Lower Super Output Areas—LSOAs—(57,448 people; 22,959 households) fall into the 10%-20% most deprived nationally.

In the main [Staffordshire County](#) and [District IMD reports](#) there are maps to highlight those areas which are deprived for all the domains. The most strikingly different domain for deprivation is the Barriers to Housing and Services domain which highlights large areas of the county as being deprived. For this domain the most deprived areas are rural SOAs which cover a geographically larger area and therefore create a more striking map.

The top ten most deprived LSOAs in Staffordshire County for the Barriers to Housing and Services domain can be seen in Table 9.4 (next page).

Table 9.4—Top ten most deprived LSOAs in Staffordshire for barriers to housing and services

District	Ward	LSOA	Population ¹	Households ¹
Staffordshire Moorlands	Dane	E01029797	1,607	611
Stafford	Eccleshall	E01029696	1,424	565
East Staffordshire	Abbey	E01029405	1,574	564
Staffordshire Moorlands	Manifold	E01029817	1,863	740
Stafford	Milwich	E01029733	1,772	665
South Staffordshire	Wheaton Aston, Bishopswood and Lapley	E01029670	1,344	546
Stafford	Milford	E01029732	1,703	475
East Staffordshire	Bagots	E01029411	1,171	477
Staffordshire Moorlands	Hamps Valley	E01029801	1,682	678
Lichfield	Bourne Vale	E01029488	1,996	659

Source: The English Indices of Deprivation 2007, Communities and Local Government
<http://www.communities.gov.uk/publications/communities/indicesdeprivation07>

9.7 Deprivation and the living environment (IMD 2007)

This domain focuses on deprivation with respect to the characteristics of the living environment. It comprises of two sub-domains: the ‘indoors’ living environment which measures the quality of housing, and the ‘outdoors’ living environment which contains two measures about air quality and road traffic accidents. Whilst the living environment is not a factor which can lead to deprivation itself, it can have a contributory role. Research has also identified a close link between areas of deprivation and areas of poor environmental quality.⁴

In Staffordshire there are 18 SOAs (27,481 people; 12,126 households) falling into the most 10% deprived nationally and a further 11 SOAs (17,601 people; 7,803 households) falling into the most 10%-20% deprived nationally. This represents 5.6% of the population living in the most 20% living environment deprived nationally.

For the living environment deprivation domain, there is a clustering of the 10% most deprived LSOAs in Burton-Upon-Trent (East Staffordshire) in the wards of Eton Park, Shobnall and Anglesey. In this area there are 14 out of the 18 most deprived SOAs across the county. The top ten most deprived LSOAs in Staffordshire County for Living Environment Deprivation can be seen in Table 9.5 below.

Table 9.5—Top ten most deprived LSOAs in Staffordshire for living environment deprivation

District	Ward	LSOA	Population ¹	Households ¹
East Staffordshire	Eton Park	E01029427	1,497	630
East Staffordshire	Shobnall	E01029447	1,403	465
East Staffordshire	Eton Park	E01029426	1,463	624
East Staffordshire	Shobnall	E01029445	1,498	621
East Staffordshire	Anglesey	E01029408	1,457	576
East Staffordshire	Shobnall	E01029448	1,632	719
East Staffordshire	Anglesey	E01029407	1,429	533
East Staffordshire	Eton Park	E01029429	1,384	478
East Staffordshire	Anglesey	E01029409	1,539	622
East Staffordshire	Anglesey	E01029410	1,418	536

Source: The English Indices of Deprivation 2007, Communities and Local Government
<http://www.communities.gov.uk/publications/communities/indicesdeprivation07>

Implications for Service Delivery

The LTP highlights several implications for service delivery, including:

- Partnership working with organisations from the public, private and voluntary sectors is crucial in order to deliver the LTP.
- In order to deliver 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.
- A 'carrot and stick' approach must be adopted if Staffordshire's transport priorities are to be met. 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. This will have greatest impact on encouraging modal shift.
- 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, which include areas within some of Staffordshire's main towns such as Newcastle-under-Lyme and Burton upon Trent.
- 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.
- Transport and highways are areas where adding value to delivery is easier to achieve than other areas.
- Taking steps to encourage more people to walk and cycle, which are arguably more hazardous than other modes of transport, may have a negative impact on accident levels.

Government Priorities

The Department for Transport and the Local Government Association have agreed that the national transport priorities are:

- tackling congestion
- delivering accessibility to essential services
- ensuring safer roads
- better air quality

Public Service Agreements (PSAs) set out the key priority outcomes the Government wants to achieve between 2008 and 2011. PSA Delivery Agreement 5 is to 'deliver reliable and efficient transport networks that support economic growth'. Indicators that will be used to measure progress towards this PSA are:

1. Journey time on main roads into urban areas (ten largest urban areas only)
2. Journey time reliability on the strategic road network, as measured by the average delay experienced in the worst 10 per cent of journeys for each monitored route
3. Level of capacity and crowding on the rail network
4. Average benefit cost ratio of investments approved over the Comprehensive Spending Review 2007 period

Other PSA Delivery Agreements relevant to transport and highways include:

- PSA Delivery Agreement 13: Improve children and young people's safety
- PSA Delivery Agreement 23: Make communities safer
- PSA Delivery Agreement 27: Lead the global effort to avoid dangerous climate change

For further details see: http://www.hm-treasury.gov.uk/pbr_csr/psa/pbr_csr07_psaindex.cfm

Indicators in the Staffordshire LAA relevant to this area

- NI 186: Per capita CO₂ emissions in the LA area
 - NI 175: Access to services and facilities by public transport, walking and cycling
-