

Appendix P: Health and Quality of Life in Staffordshire

Introduction

Transport can impact on people's health and quality of life in both positive and negative ways. There are significant inequalities in the impact of transport on the health of individuals and communities. These inequalities can be manifested geographically, socially and across different population groups.

A Health Impact Assessment (Appendix E) has examined the potential impact of Staffordshire's third Local Transport Plan (LTP) on health. The largest impacts - all positive - are described below, along with some of the negative impacts of the existing transport network on health.

The positive impacts of the LTP on health and quality of life

Accessing healthy foods, healthcare services, and leisure and social facilities

Improving access to healthy foods, healthcare services, and leisure and social facilities is vital if the county is to see an overall improvement in the health of its population. Staffordshire has previously been identified as an area where some people have difficulty accessing healthy diets¹, healthcare services², leisure and social facilities³. Information about how we plan to improve access to these key services is contained in Chapter 3 'Making the Transport System Easier to use and Places Easier to Get to'.

Mobility and access to goods, services (including healthcare) and jobs

Good access to education, training and employment can significantly improve quality of life. Good access is in fact vital to reducing social exclusion, with transport required to be available at the right times, connected to the right places, affordable, accessible, safe and secure, with accurate and easy to understand information. Further information regarding accessibility can be found in Chapter 3 'Making the Transport System Easier to use and Places Easier to Get to' and Appendix J (Accessibility Levels in Staffordshire).

Community Cohesion

The concept of community cohesion refers to the quantity and quality of interactions among people in a community, as indicated by the degree to which residents know and care about their neighbours. Whilst community cohesion is, to some degree, a matter of individual preference, transport decisions can affect community cohesion by influencing the location of activities and the quality of the public realm and therefore the ease with which neighbours meet and build positive relationships. Increased mobility and electronic communication have reduced the value of 'community' by allowing more dispersed or virtual friendships. Whilst on an individual level this has helped increase levels of social interaction, on a community level, people are more likely not to know their neighbour.

A national study carried out in 2010 found that 70% of people did not know their neighbours' names and would not even know their faces if they passed them in the street⁴. At a local level, the Feeling the Difference Survey (2009/10) found that 95% of Staffordshire's residents are satisfied with their local area as a place to live and 90% strongly feel that they belong to their immediate neighbourhood. For information about how we plan to maintain community cohesion, please see Chapter 3 'Making the Transport System Easier to use and Places Easier to Get to', Chapter 4 'Improving Safety and Security' and Appendix J (Accessibility Levels in Staffordshire).

Access to the Built Environment and Open Spaces

The quality of the public realm (i.e. areas to which the public has open access) is vital in creating environments that people want to live and work in. This is particularly the case for areas of deprivation or decline, where investment, proper maintenance, ongoing stewardship and restoration of civic pride are needed to raise standards. Noisy, traffic-dominated streets, ugly buildings, unusable spaces and barriers to movement are all indicators of a poor public realm.

Staffordshire's 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 greener⁵. For information about how the LTP can make a positive impact on access to the built environment and open spaces, please see Chapter 7 'Respecting the Environment', Chapter 2 'Maintaining the Highway Network' and Chapter 3 'Making the Transport System Easier to use and Places Easier to Get to'.

Road Traffic Collisions

In 2009 there were 45 people killed on roads in Staffordshire, with a further 216 seriously injured and 3,145 slightly injured. In addition, 21 children were killed or seriously injured. The County Council and its partners have made significant progress over the period of the first two LTPs in reducing the number and severity of collisions. Chapter 4 'Improving Safety and Security' describes the scale of the problem and how the County Council (in partnership with other agencies) plans to improve upon its excellent road safety record.

Physical Inactivity

Regular physical activity of moderate intensity, such as brisk walking, can bring about major health benefits as well as significant cost savings for the National Health Service (NHS). Increasing levels of physical activity will contribute to achieving reductions in coronary heart disease and obesity, hypertension, depression and anxiety. Even relatively small increases in physical activity⁷ are associated with some protection against chronic disease and improved quality of life⁶.

In Staffordshire less than one-quarter of adults achieve the recommended level of physical activity⁷, and 1 in 4 adults and 1 in 5 children in Year 6 (10 and 11 year-olds) are obese⁸. Also:

- 9.9% of school children in Reception are obese (aged 4 to 5 years-old).
- Mortality rate from all circulatory diseases (under 75 years of age) is 71.6 per 100,000 of the population.
- Circulatory diseases make up 34% of all deaths and 27% of premature deaths (i.e. those occurring before the age of 75 years of age).
- Coronary heart disease makes up 18% of all deaths and 16% of premature deaths.
- Between 17.7% and 26.3% of men and 13.1% and 23.3% of women reported achieving the physical activity recommendations for adults.

A large contributory factor for inactivity in Staffordshire is car dependency. Eighty percent of households in the county have at least one car, compared to 73.3% nationally. Easy access to a car (and a lack of adequate alternatives) makes it difficult to persuade people to leave their cars at home even for short journeys. For example, the 2001 Census showed that of the people living in Staffordshire who travel less than 2km to work, 53% make this journey by car, rising to 80% for journeys between 2km and 5km. The distance considered acceptable for walking and cycling varies according to the individual, the topography and the journey purpose. However, the Institute of Highways and Transportation suggests that the preferred maximum commuting walking distance is 2km, and the European Cyclists' Federation suggests that most cycle journeys within urban environments are less than 5km.

Obesity has substantial costs and serious health consequences. It has been estimated that the cost of obesity to the NHS is £1bn a year, with an additional £2.3bn to £2.6bn per year to the UK economy as a whole. It is predicted that without action, obesity-related diseases could cost an extra £49.9bn per year⁹. Chapter 6 'Improving Health and Quality of Life' details how the LTP can improve health and quality of life through measures to encourage active travel. Please also see the Staffordshire Cycling Strategy (Appendix M) and the Staffordshire Walking Strategy (Appendix N).

The positive impacts of the LTP on the health of different population groups

The following account summarises the population groups where the LTP can make the biggest difference to health and quality of life. The LTP can also make a positive difference to other population groups. Please see the Health Impact Assessment (Appendix E) for more information on these.

Older People

Barriers to travel encountered by the elderly include functional impairment (e.g. motion of limbs, anthropometrics, co-ordination and dexterity), vision, hearing, language and speech, intellectual/psychological, allergies, living in a rural area, lack of accessible information, cost and concern over personal safety. In 2008 Staffordshire's elderly population (60 years-old or above) was estimated to have been 203,485 (24.4% of the total). Chapter 3 'Making the Transport System Easier to use and Places Easier to Get to' and the Equality Impact Assessment (Appendix F) details how the LTP can help older people.

Children

In 2008 it was estimated that around 20.6% of Staffordshire's population were aged 0 to 17 years old. During 2008/09 walking was the most frequent mode of transport used to get to and from primary and secondary schools, followed by the private car for primary school children and public transport for secondary age children. Anecdotal evidence suggests that whilst actual numbers of children cycling to schools are low (0.4% to primary and 2.6% to secondary schools), many more would like to cycle to school because of the independence it gives them. Further information about the scale of the challenge can be found in the

Health Impact Assessment (Appendix E) and the Equality Impact Assessment (Appendix F).

For information on how the LTP can benefit children, please see Chapter 4 'Improving Safety and Security', Chapter 3 'Making the Transport System Easier to use and Places Easier to Get to', and Chapter 6 'Improving Health and Quality of Life'.

People with Disabilities

It is estimated that there are approximately 120,000 people in Staffordshire with either a physical and/or sensory disability. Over 50,000 people in the county are registered as blue badge holders and over 4,000 people are registered as being partially sighted or blind. The 2001 Census showed that 18.3% of people suffer from a limiting long-term illness¹⁰. Individuals with physical impairments often use mobility aids such as crutches, canes, wheelchairs and artificial limbs to obtain mobility, and these can create additional problems when attempting to make journeys. Chapter 3 'Making the Transport System Easier to use and Places Easier to Get to' and the Equality Impact Assessment (Appendix F) detail how the LTP can help people with disabilities.

People on Low-Incomes

The report, 'Making the Connections: Final Report on Transport and Social Exclusion' published by the Social Exclusion Unit in 2003, identified a range of transport barriers that people living in deprived areas experience. These include low availability of public transport, fear of crime, cost, availability of public transport and the inability to access public transport information.

Average earnings (2009) of Staffordshire's residents stands at £24,695, which is higher than the regional average but lower than the national average. Residents of Cannock Chase District earn the least (£22,723) and residents of Lichfield District Council earn the most (£28,083).

In Staffordshire, only 6 of the 525 Lower Super Output Areas (LSOAs) are in the top 10% most deprived areas in England (2007) for multiple deprivation. This equates to just over 8,000 people. However, a further 60,000+ (8.5% of the population) people live within the 40 LSOAs which fall in the next most deprived group (10%-20% most deprived areas). This is less than the national average of 19.9%.

Lower income families are less likely to have access to a car and rely more on other modes of transport such as buses, taxis and lifts from family and friends and journeys on foot. Barriers to travel may include one or more of the following:

- Availability and physical accessibility.
- Safety and security.
- Cost.
- Limited travel horizons.
- Location of services.

Chapter 3 'Making the Transport System Easier to use and Places Easier to Get to' and the Equality Impact Assessment (Appendix F) detail how the LTP can help people on low-incomes.

The negative impacts of transport on health and quality of life

Traffic Noise

Motorised transport is a common source of noise pollution, with road traffic being the most common. Other sources of transport noise such as rail and air traffic are less common in terms of people affected but may be regarded as a serious cause of noise pollution for those living or working near a rail or air network. Traffic noise contributes to stress-related health problems such as hypertension and minor psychiatric illness. It can also cause loss of sleep and may interfere with concentration. The noise, although often temporary, from maintenance works can also impact on quality of life.

Noise maps produced by the Department for Environment, Food and Rural Affairs show that there are 103 locations in Staffordshire that are affected by noise from road activity and 13 locations that are affected by rail activity. These locations are of varying sizes and lie on both the local and strategic transport networks. The noise maps are intended to inform the production of Noise Action Plans, which are designed to manage noise issues and effects including any necessary noise reduction measures.

The Cannock Chase AONB Peace and Tranquillity Study 2010 mapped peace and tranquillity within the AONB area. The least tranquil areas include the areas between Milford and Brocton, the area around Shooting Butts Centre, west of Rugeley and the Visitor Centre at Brindley

Heath. The reasons for their being the least tranquil are noise, traffic and above all, other people.

Further consideration of noise and these locations can be found in Chapter 6 'Improving Health and Quality of Life', Chapter 7 'Respecting the Environment', the Strategic Environmental Assessment Statement (Appendix G) and the Health Impact Assessment (Appendix E).

Traffic Emissions

Exposure to vehicle emissions, which contain carcinogenic substances, are known to be related to respiratory and cardiovascular diseases¹¹. The Government estimates that up to 24,000 people in Britain die prematurely every year as a result of exposure to air pollution. Air pollution also contributes to climate change.

In Staffordshire, air pollution tends to be worse where traffic flow is high and slow moving or queuing traffic is common. There are eight sites that have been declared Air Quality Management Areas as a result of exceedences in certain pollutants as a result of road transport. There locations are:

- South Staffordshire (4 locations).
- Cannock Chase District (1 location).
- East Staffordshire (2 locations).
- Lichfield District (1 location).

Further information regarding air quality can be found in Chapter 5 'Reducing Road Transport Emissions and Their Effects on the Highway Network', the Strategic Environmental Assessment Statement (Appendix G) and in Appendix O (Overview of Air Quality in Staffordshire).

Highway Lighting and Light from Vehicles

Artificial light that is allowed to illuminate areas not intended to be lit can contribute to stress-related health problems such as hypertension and minor psychiatric illness, and loss of sleep. It can take many forms, including urban sky glow, direct glare and light trespass. Other issues relating to lighting that impact on quality of life include shining where it is neither needed nor wanted, inefficient lighting sources and lighting designs, and security (i.e. crime prevention). No data is currently available on light pollution arising from Staffordshire's highways. For information on how the LTP can help with this, please see Chapter 2 'Maintaining the Highway Network' and Chapter 7 'Respecting the Environment'.

Reducing Community Severance and Improving Safety and Security

Community severance can take a number of forms, ranging from a busy road or railway dissecting a neighbourhood making it difficult to cross from one side to the other; to the perceived fear of crime or threat to personal safety whilst using a particular route. No data is currently available on the scale of community severance in the county. For information about how the LTP can help reduce community severance and improve safety and security, please see Chapter 4 'Improving Safety and Security'.

Freight Movements

Freight movements can have a significant impact on health, yet in Staffordshire these impacts are disproportionately distributed between communities.

The transport sector accounts for 21% of total domestic greenhouse gas emissions, of which carbon dioxide is the most significant. Heavy goods vehicles (HGVs) and light delivery vehicles account for 20% and 11% respectively of the carbon dioxide emissions in the transport sector.

Freight movement can also be a contributor to both road and rail congestion. However, the most serious problems in Staffordshire can be localised, sporadic and unpredictable.

A survey undertaken of parish councils in the county showed concern about HGV traffic using the rural network inappropriately. Concerns that affect health include:

- "rat running" through rural areas to avoid congestion or to take a more direct route.
- Noise and impact on the tranquillity of the rural area.
- The size and speed of vehicles and an increase in perception of vulnerability for pedestrians, cyclists and horse riders.
- Difficulties in crossing roads and dangers to children playing in rural communities where there is a regular flow of HGV traffic.
- Dust pollution.

For information about how the LTP can tackle these problems, please see the Staffordshire Freight Strategy (Appendix L).

1 *The ability of the county's population to access food and a healthy diet was investigated in some depth in a study which we conducted in partnership with the National Consumer Council in 2005. Findings of the study are published in 'Putting Food Access on the Radar: How to Target and Prioritise Communities at Risk'. (National Consumer Council).*

2 *Inadequate public transport is by far the most frequently mentioned transport problem identified by people who have difficulty getting to healthcare facilities such as GP surgeries and hospitals.*

3 *The Children's and Young People's Plan for Staffordshire highlights a significant need for young people to access high quality leisure, cultural and sport experiences.*

4 *Next Door Strangers, Legal and General (2010), www.legalandgeneralmediacentre.com/Resource-Library/Next-Door-Strangers-Report-1d4.aspx*

5 *Analysing the Place Survey 2008/09, Staffordshire Observatory (May 2010).*

6 *'Be active, be healthy: a plan for getting the nation moving', Department of Health in partnership with other Government Departments (February 2009).*

7 *Active People Survey (2007/08), Sport England.*

8 *Health Survey for England (2005) and the Health and Social Care Information Centre (2007/08).*

9 *The Foresight: Tackling Obesities: Future Choices project (October 2007).*

10 *The question relating to long-term illness in the Census involves a self assessment by the respondent to a question that asks whether a person has any long-term illness, health problem or handicap which limits his/her daily activities or work.*

11 *Haines A, McMichael T, Anderson R, Houghton J. Fossil fuels, transport, and public health. BMJ 2000; 321:1168-9.*