HERTFORDSHIRE COUNTY COUNCIL

ACTIVE TRAVEL STRATEGY

April 2013

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Executive Summary

What is the Active Travel Strategy?

Hertfordshire's Active Travel Strategy sets out how the County Council and its partners will identify, deliver and promote interventions to increase the numbers of people walking and cycling in Hertfordshire.

The publication of this strategy is timed to coincide with the County Council taking on responsibilities for Public Health in April 2013, and also to exploit the current high profile of active travel, particularly cycling, following the success of Great British athletes at the 2012 London Olympics.

The Strategy is a daughter document of Hertfordshire's Local Transport Plan (LTP3), merging and updating the existing Walking Strategy (2011) and the Cycling Strategy (2007) to provide a joined-up approach to ensuring active travel modes are planned together to help reduce congestion, improving health and reducing pollutant emissions.

European, national and local bidding opportunities for Active Travel funding often arise at short notice, requiring clear objectives and a well evidenced strategy backed up by local support to secure funding. The development of this strategy will put Hertfordshire in a strong position to capitalise on any future Active Travel funding opportunities that arise.

Why do we need the strategy and what will it achieve?

Hertfordshire is the '*County of Opportunity*'. Through its Corporate Plan, the County has outlined how it would like to help people make their lives better.

Active Travel can play a key role in improving the wellbeing of Hertfordshire residents, by helping them to walk and cycle where possible to help address the following policy objectives:

- Enhancing economic growth: The costs of traffic congestion in Hertfordshire are rising - the cost of congestion occurring in Hertfordshire region is set to double to over £0.4 billion per annum by 2021. Rising petrol and diesel prices¹ have a detrimental effect on personal finances; individuals can save money by walking or cycling.
- Improving public health: Physical inactivity is a contributory cause of many serious illnesses and rising obesity levels in the County and nationally;
- **Improving quality of life**: Air pollutants, particularly nitrous oxides from vehicle emissions on Hertfordshire's local roads, are one of the causes of respiratory diseases for Hertfordshire's residents.

¹ House of Commons Library (Jan 2013) Petrol and Diesel Prices. SN/SG/4712. www.parliament.uk

• **Reducing carbon emissions**: Carbon emissions from vehicular transport represent approximately 33% of all emissions.

The Active Travel Strategy therefore sets out the following over-arching aim for Hertfordshire:

To increase the proportion of journeys made by walking or cycling to improve individual health, quality of life, the environment and the economy

The Local Transport Plan (2011-2031) set out long term targets for walking and cycling in Hertfordshire, which will be adopted by this strategy as its core success indicators:

Hertfordshire LTP3 Indicator	LTP3 Baseline level (2011)	LTP3 2015/16 target	LTP3 2030/31 target
Percentage of all journeys under 1 mile in length by walking	58.9%	64%	77%
Percentage of all journeys under 3 miles in length by cycling	2.7%	3%	11%

This strategy sets out how the County Council and its partners will seek to achieve this objective and targets.

What is the Active Travel Strategy approach?

The strategy provides an analysis of the national and local policy context and associated evidence, to identify the key challenges and issues that people living and working in Hertfordshire are faced with when making decisions to replace car journeys, or generate new trips, through more walking and cycling.

Whilst the strategy will seek to address Active Travel across the whole county, the evidence has demonstrated that there are some specific areas where Active Travel should target in particular:

- **Short journeys:** With over 56%² of all trips in Hertfordshire under five miles or less, there is a significant amount of journeys in Hertfordshire that currently take place by private car which could be undertaken by cycling or walking.
- **Urban congestion**: Congestion is a significant issue in urban areas, with Watford, St Albans, Hemel Hempstead and Stevenage having the greatest urban delays in 2011. Traffic forecasts are expected to increase by 20.9% by 2031, based on 2011 levels, justifying the need to target packages in areas of worst congestion³.

² Hertfordshire County Traffic and Transport and Data Report (TTDR) 2011

³ Hertfordshire County Traffic and Transport and Data Report (TTDR) 2011

- Active Travel for Schools: Whilst 51% of children walk to nursery or primary school, and 47% walk to secondary school, cycling only accounts for 3% of secondary school trips. Furthermore, in some parts of Hertfordshire, over 23% of children are classified as obese.
- **Poor health 'hotspots':** Hertfordshire has several key settlements where health indicators are particularly concerning and could be improved through Active Travel.

In order to increase participation in Active Travel, we need to address existing barriers that our residents face. The Strategy identifies four main barriers to walking and cycling which have been identified through the evidence base. These are as follows:

"Active Travel is not perceived to be viable due to **safety and security** factors";

"Active Travel is not perceived to be viable due to **lack of physical** infrastructure to support it";

"Active Travel is not perceived to be possible due to **lack of knowledge, awareness, training or education";**

"Active Travel is not perceived to be possible or desirable due to **social** and cultural attitudes".

The strategy subsequently identifies schemes (i.e. physical and non-physical measures) that could be implemented to help people overcome these barriers.

Key areas of action that the strategy has identified to address these barriers include: cycle training; speed management measures; road and personal safety measures; safer routes to school; and the maintenance and development of pedestrian and cycling networks.

What types of interventions does the strategy seek to deliver?

A list of possible interventions (i.e. deliverable schemes or measures) has been identified to help deliver the strategy by overcoming the barriers. These interventions are considered by the Council and its partners to achieve and maintain the necessary behavioural change, encouraging and empowering more residents to walk and cycle for shorter journeys, instead of driving or when making new trips.

These interventions are numerous, however key interventions include: traffic calming; speed limits; reallocation of road space; implementation of road user hierarchies; use of Intelligent Transport Systems; pedestrian crossings; footway maintenance; designing out crime; improved signage; urban realm improvements; cycle hire/purchase schemes and personalised travel planning and promotion.

How will the strategy be delivered?

An Action Plan has been developed to identify the schemes that will be implemented. This Action Plan will be updated on a regular basis.

Recognising that Active Travel interventions often work best when delivered in conjunction with other complementary measures, the strategy advocates a *package approach* to delivery of Active Travel in Hertfordshire. Physical infrastructure and education, promotion and information provision go hand-inhand to ensure people can overcome all their barriers to walking and cycling.

This *package approach* requires the co-ordination and support of a range of public bodies, transport providers, businesses and local communities, all of which have been identified within the strategy as key delivery partners.

Individual delivery partners are then responsible for delivering specific interventions:

- Active Travel infrastructure will be primarily delivered by the County's Highways service, through the County Council's Integrated Transport Programme. Active Travel schemes in this category must fulfil LTP criteria and undergo a two year programme of feasibility, design and delivery.
- Rights of Way (RoW) Active Travel infrastructure is delivered by the County's RoW Service across the RoW network as set out in the RoW Improvement Plan (RoWIP). Hertfordshire's Countryside Management Service (CMS) works with District, Borough and Parish Councils and volunteers to support delivery of infrastructure in the countryside.
- Provision of education, promotion, incentives and information complements the physical measures and is primarily led in Hertfordshire by the County Council's Transport Access and Safety Unit (TAS), in partnership with a range of other bodies. This includes supporting employers, business sites, school, stations and other bodies to deliver site-specific travel plans.
- Home to School Transport Strategy, Eligibility and School Travel Planning interventions are delivered by the Council's Children Services and TAS. Information about the priorities set for the medium term is set out in Hertfordshire's Sustainable Modes of Travel Strategy (SMoTS) for schools and colleges.
- The incorporation of Public Health into the County Council's responsibilities provides an opportunity for greater collaboration in the delivery and promotion of Active Travel for health benefits.

Funding for active travel is derived from a variety of external and internal sources which include central Government funding, County Capital and Revenue streams, grants, Community Infrastructure Levy (CIL), developer contributions and Member locality budgets.

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CHAPTER 1: INTRODUCTION AND OBJECTIVES

1.1 Purpose of the Strategy

The purpose of this strategy is to:

- Explain why Active Travel is an important component of Hertfordshire's Local Transport Plan and wider public health agenda;
- Identify how Active Travel helps to addresses international, national and local challenges;
- Examine the evidence and subsequently identify areas of action and a toolbox (list) of Active Travel interventions for Hertfordshire;
- Set out the County Council's approach to delivering Active Travel in Hertfordshire;
- Identify partners and future funding sources for Active Travel in Hertfordshire.
- Provide a 'living' Action Plan for Active Travel Delivery

The strategy combines and updates the county's Local Transport Plan (LTP) Walking and Cycling strategies, to form a daughter document of Hertfordshire's third LTP 2011-2031.

The strategy specifically addresses the following aim for Hertfordshire:

To increase the proportion of journeys made by walking or cycling to benefit individual health, quality of life, the environment and the economy

The two core LTP indicators which this strategy will specifically address are outlined in Table 1.1:

Hertfordshire LTP3 Indicator	LTP3 Baseline level (2011)	LTP3 2015/16 target	LTP3 2030/31 target
Percentage of all journeys under 1 mile in length by walking	58.9%	64%	77%
Percentage of all journeys under 3 miles in length by cycling	2.7%	3%	11%

Table 1.1: Core LTP Active Travel indicators

In additional to walking and cycling, the strategy also recognising the increasing use of 'kick-scooters', particularly amongst children, and seeks to support the use of 'kick-scooters where appropriate.

1.2 What is Active Travel and why is it beneficial?

For the purpose of this strategy, Active Travel refers to walking and cycling. The active travel network is a term which defines a variety of routes including on-road and off-road cycle routes, footways, footpaths, bridleways, restricted byways and byways open to all traffic. Active Travel can be particularly beneficial for the individual, the environment and the economy in a number of ways:

- Active Travel is economically beneficial for the individual and society as a whole, through reducing congestion, reducing health related costs, saving money and increasing accessibility to employment and training;
- Increased Active Travel participation can result in a lower risk of acquiring certain life threatening diseases;
- Active Travel reduces stress and improves mental wellbeing;
- Active Travel does not generate any carbon emissions at point of source from fossil fuels which contribute to climate change;
- Active Travel does not generate any vehicle air pollutants;
- Active Travel can be an additional option for travelling to work, education, shopping and all other services as well as being for leisure purposes.

1.3 How Hertfordshire's Local Transport Plan 2011-2031 supports Active Travel

Figure 1.1 outlines how the Active Travel Strategy takes the key principles from the Corporate Plan, LTP and the emerging 'health and well-being agenda', and, alongside other daughter documents, guides the delivery of Active Travel in Hertfordshire.

Other forms of sustainable transport will be referred to within this document; however each is covered in more detail in other daughter documents and policies, specifically: the *Bus Strategy*, *Sustainable Modes of Travel Strategy* for schools and colleges, *Intalink Strategy* and the *Rail Strategy*⁴.

Hertfordshire's LTP promotes the increased implementation of sustainable transport interventions that will change travel behaviour. The Active Travel Strategy is a daughter document to the Hertfordshire LTP, and will directly address the following LTP goals:

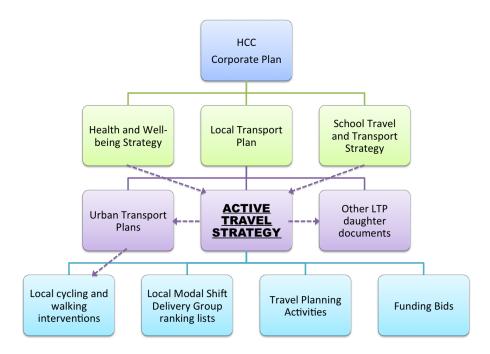
- Support economic development and planned dwelling growth;
- Improve transport opportunities for all and achieve behavioural change in mode choice;
- Enhance the quality of life, health and the natural, built and historic environment of all Hertfordshire residents;
- Improve the safety and security of residents;
- Reduce transport's contribution to greenhouse gas emissions and improve its resilience.

In addition the strategy will address the following County Council goal:

Promote access to education, learning and training

⁴ Documents can be seen at <u>www.hertsdirect.org/ltp</u>.

Figure 1.1: Role of the Active Travel Strategy



See Appendix 1 for a breakdown of key LTP Active Travel challenges and issues.

1.4 Links to other Hertfordshire plans, strategies and policies

The Active Travel Strategy is strategic document to support the delivery of a wide range of County initiatives and strategies. The key linkages are outlined in Figure 1.1.

The key county strategies of relevance to Active Travel and the issues they address are tabulated in the matrix in Table 1.2 (See Appendix 2 for further details and web links to the latest versions).

 Table 1.2: Local plans, strategies and guidance documents which could be supported by increased Active Travel in Hertfordshire

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	Objectives supported by Active Travel		
HCC or Partner Strategy	Air quality/ carbon emissions	Congestion & Economy	Physical Inactivity / Obesity/Health/ Safety
Bus Strategy/ Intalink Strategy	✓ <i>✓</i>	1	 Image: A set of the set of the
A Climate Change Strategic Framework for Hertfordshire;	1		
The Health and Wellbeing Strategy for Hertfordshire 2012-15;			✓
Hertfordshire Physical Activity Framework			✓
HCC's Corporate Plan 2013/17	✓	~	✓
Home to School Transport Review;	✓	~	 Image: A set of the set of the
Joint Strategic Needs Assessment;			✓
District Air Quality Action Plans ⁵			
District and Borough Local Plans;	1	~	
Rural Transport Strategy	1	~	✓
Rights of Way Improvement Plan (RoWIP);	✓	1	 Image: A set of the set of the
Road Safety Strategy;			1
Roads in Hertfordshire – Highway Design Guide;		1	1
Hertfordshire's Sustainable Modes of Travel Strategy (SMoTS) for schools and colleges;	✓	✓	1
Urban Transport Plans.	1	1	\checkmark

⁵ Where districts have nitrous oxide exceeding EU levels on local roads, they are legally required to develop such plans in conjunction with HCC transport planners.

CHAPTER 2: POLICY CONTEXT AND EVIDENCE

Summary of key points:

Environmental Challenges

- The domestic transport sector emissions accounted for 24% of total CO₂ emissions in the UK in 2007 (on a source basis);
- However, in the East of England, 2007 data shows that road transport carbon emissions accounted for **32.7% of local CO₂ emissions**;
- Carbon emissions from transport are forecast to **increase by 35%** between now and 2031 in the East of England and will come primarily from the growing use of cars;
- By 2013, there will be **14 locations** on local roads in Hertfordshire where nitrous oxides officially exceed the EU limit; known as air quality management areas which are regularly monitored by districts.

Economic growth and congestion challenges

- The *Eddington Study* stated that congestion would continue to have a deleterious effect on the UK economy unless solutions were found;
- The costs of congestion and overcrowding on the Hertfordshire's transport networks will double between 2003 (£0.2bn / annum) and 2021 (£0.4bn / annum);
- The 2011 Hertfordshire Business Survey, reports that **81% of business** regard congestion as a disadvantage to being in Hertfordshire.

Public Health Challenges

- From April 2013, the responsibility for improving public health in Hertfordshire lies with the County Council under the *Health and Social Care Act 2012;*
- Nationally 65% of men and 76% of women are insufficiently active to meet the recommendations for regular physical activity. Physical inactivity is a contributory cause of a number of life threatening illnesses;
- In Hertfordshire obesity annually costs the NHS approx £48.8 million (2007). There are areas in Hertfordshire where obese year 6 children represent more than 23% of their year group.

Active Travel in Hertfordshire

- 56% of all journeys are less than 5 miles;
- Although 43% of adults own a bike only around 2% of trips were made by cycle;
- There is significant scope for greater participation in Active Travel in Hertfordshire.

2.1 Local and National Policy and Evidence - Introduction

A number of relevant international and national studies and strategies identifying the benefits of promoting Active Travel have been developed in recent years.

The aims and objectives of these strategies encompass contributing to economic growth, reducing fossil fuel usage, reducing carbon emissions, improving air quality and improving health outcomes for all sectors of society.

This chapter provides a review of the existing policy context and evidence base for Active Travel to identify the key issues that need to be taken into account in Hertfordshire.

Each of the policy sections seen in section 2.2 cannot be taken in isolation as they are all interconnected.

2.2. Climate Change

2.2.1 National Policy Context (Climate Change)

- The definition of a greenhouse gas (GHG) is any atmospheric gas which absorbs thermal radiation emitted by the Earth's surface. Water vapour, carbon dioxide, nitrous oxide, methane and ozone are the primary greenhouse gases in the Earth's atmosphere.
- The *Kyoto Protocol* (1997) is the current legal agreement for tackling global climate change. The Protocol's commitment period expired in 2012.
- The 2009 *Copenhagen Accord* marked a step forward with over 100 countries accounting for over 80% global emissions associating with the Accord.
- The 2006 Stern's *Review on the Economics of Climate Change* lead to a simple conclusion: the benefits of strong, early action to tackle the causes of climate change considerably outweigh the costs; an endorsement that Active Travel should be built into everyday physical activity now rather than later.
- The UK Government has committed to taking its share of responsibility for reducing global carbon emissions through the *Climate Change Act* 2008 which established a long-term legislative framework and legally binding target to reduce the UK's greenhouse gas emissions by at least 80% relative to 1990 levels by 2050. The Act, lays down statutory obligations to monitor and reduce greenhouse gases including carbon dioxide emitted by road transport.
- The Government's 2011 Local Transport White paper *Creating growth, cutting carbon making sustainable local transport happen*, provided a steer towards a low carbon transport system to help reduce carbon

emissions whilst at the same time reducing congestion and its costs to the UK economy.

 Hertfordshire as the Local Highway Authority and the ten districts/boroughs in the county (Local Planning Authorities) follow guidance in the National Planning Policy Framework (NPPF) published in March 2012. Former transport guidance document PPG13 has been superseded by Section 4 of the framework 'promoting sustainable transport'. Priority should be given, where practical, to sustainable transport modes that support reductions in greenhouse gas emissions, reduce congestion and promote economic growth.

2.2.2 Key Evidence: National

- In 2011, transport accounted for 21%⁶ of the UK's domestic greenhouse gas emissions excluding international shipping and aviation emissions.
- Transport demand in the UK increased steadily between 1990 and 2007 and domestic transport sector emissions increased 11% over this period and accounted for over 131 MtCO₂ / annum⁷
- Active Travel could play a key role in reducing carbon emissions. Road vehicle trips of less than 10 miles account for 40% of the United Kingdom's domestic transport emissions. Trips in the '2 to 5 mile' category contributes 40% of carbon emissions of these emissions ⁸.

2.2.3 Key Evidence: Local (Hertfordshire)

- In the East of England, emission modelling data shows that road transport carbon emissions accounted for 32.7% of local CO₂ emissions in 2007 - this proportion is higher than for the UK as a whole.
- The Transport and Carbon Study⁹ indicate that carbon emissions from transport in the East of England are forecast to increase by 35% by 2031 and will be primarily from the growing use of cars.
- Recent publication of 2010 carbon emissions data from the Department of Energy and Climate Change (see Fig 2.1) shows the breakdown of carbon dioxide emissions from vehicles on local roads in Hertfordshire.
- Six of the districts have higher emissions on minor roads than they do on A roads. By encouraging more people to walk and cycle for shorter

 ⁶ 2011 UK Greenhouse Gas Emissions, final figures.
 <u>www.gov.uk/government/publications/final-uk-emissions-estimates</u>.
 ⁷ EEDA (2009) East of England Transport and Carbon Study.

⁸ DfT (2011) *Creating Growth, Cutting Carbon – making sustainable local transport happen.* Section 2.16.

⁹ EEDA (2009) East of England Transport and Carbon Study,

journeys particularly on minor roads, there could be reductions in traffic and therefore carbon emissions.

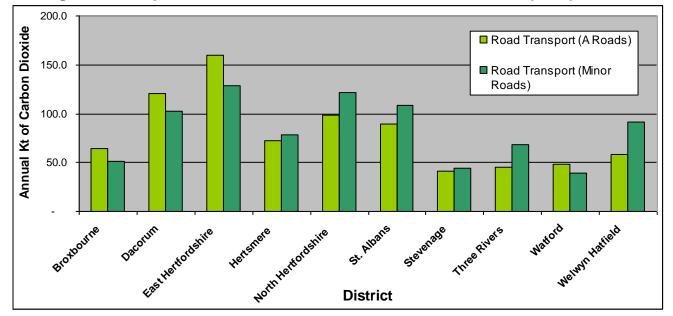


Fig 2.1: Transport CO₂ emissions - local roads in Hertfordshire (2010)

2.2.4. Commentary and Implications for Hertfordshire's Active Travel Strategy.

Carbon emissions from road transport are a significant contributor to the gases that are causing climate change. By seeking to increase the number of journeys undertaken by walking and cycling, particularly for shorter urban journeys, the growth in transport-related carbon emissions can be partly addressed, thus helping Hertfordshire and the UK meet their legal commitments.

Figure 2.1 above shows carbon dioxide emissions per district/borough for all transport using local roads in Hertfordshire. Carbon dioxide levels from transport in more sparsely populated areas such as East Hertfordshire and North Hertfordshire are higher due to their rural nature, larger size and greater population. As a result, residents of these areas are likely to more reliant on their car, hence producing more CO₂ per person than in urban areas such as Watford and Stevenage where trips are shorter, public transport is more economically viable and active travel is more achievable.

Conclusion: Carbon emissions from transport are projected to increase in Hertfordshire. A local policy imperative exists to reduce carbon emissions from transport where possible, including through Active Travel

2.3 Air Quality

2.3.1 National Policy Context

 The 2008 EC Directive for ambient air quality assessment and management sets legally binding limits for concentrations in outdoor air of major air pollutants that impact on public health such as particulate matter (PM_{10} and $PM_{2.5}$) and nitrogen dioxide (NO_2).

- The Environment Act 1995 requires local authorities in the UK to review air quality in their area and designate air quality management areas (AQMAs) if improvements are necessary. In these areas, Air Quality Action Plans are produced by Districts authorities, with input from HCC, to improve air quality problems.
- In March 2010, Defra published *Air Pollution: Action in a Changing Climate,* which highlights the additional health benefits that can be achieved through closer integration of air quality and climate change policies in future.
- The Parliamentary Select Committee published its Parliamentary Environmental Audit Committee (EAC Report) on air quality in the UK in March 2010 with recommendations for government to do more to raise awareness of the health and environmental impacts of air pollution and to work with local authorities to improve air quality.

2.3.2 Key Evidence: National

- Poor air quality contributes to heart and lung conditions, and reduces life expectancy. Defra suggests air pollution from man-made fine particulate matter is estimated to cut life expectancy by 6 months on average across the United Kingdom population.¹⁰
- Based on 2008 figures, this equates to health costs of as high as £19 billion per year..¹¹ Children are more susceptible to environmental hazards than adults. Health impacts are not distributed evenly and are felt disproportionately in urban areas.

2.3.3 Key Evidence: Local

- As of 2013, Hertfordshire County Council has 14 designated local AQMA sites where local road transport emissions exceed EU values for nitrous oxides (NOx).
- In addition, there are 14 sites exceeding limits that are adjacent to trunk roads which are the responsibility of the Highways Agency.
- Figure 2.2 outlines the location of existing AQMAs. District action plans have been developed to help reduce the air quality values to within the EU limit by 2015.

¹⁰ DEFRA – *EU air quality policies* http://www.defra.gov.uk/environment/quality/air/airquality/eu/

¹¹ DEFRA – *EU air quality policies* http://www.defra.gov.uk/environment/quality/air/airquality/eu/

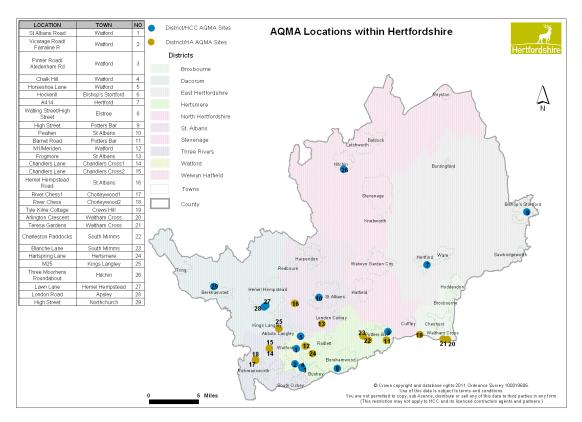


Fig 2.2: Existing Air Quality Management Areas in Herts

See Appendix 3 for the table of AQMA sites in Hertfordshire including those with Highways Agency responsibility.

2.3.4. Commentary and Implications for Hertfordshire's Active Travel Strategy.

The Government has agreed with the Environmental Audit Committee that there needs to be better communication of the health impacts of air pollution and how individuals can reduce their contribution through changing travel behaviour and energy use. More walking and cycling for short journeys have benefits for individuals' health, and there are also benefits for communities from the resulting better air quality.

Measures particularly need to be focussed in areas where air quality improvements are most needed, including in the areas surrounding the AQMAs listed above where reducing car journeys through the location would reduce the emissions.

Conclusion: European and national legislation requires local authorities to address Air Quality problems. A large number of Air Quality Management Areas currently exist in Hertfordshire. Active Travel should contribute to improved Air Quality where possible.

2.4 Economic Growth and Congestion

2.4.1 National Policy Context

- In 2006, *The Eddington transport study* identified that transport is key to facilitating economic growth and strongly advised the Government to urgently tackle congestion and poor connectivity to avoid negative impacts on the UK economy. Eddington advised on using solutions that provide the highest financial returns such as small-scale projects with a high benefit / lower cost ratio.
- The second report of the Industry Taskforce on Peak Oil & Energy Security (ITPOES)¹² provides a stark picture of future rising oil prices, through depleted oil reserves which become more expensive to extract and satisfy a global increase in demand for oil. Unfortunately this leads to the vulnerability of the UK transport sector which has important knock-on effects throughout the UK economy. As well as other fiscal and promotional measures the Taskforce recommends coordination of a package of measures to deliver behavioral change and secure modal shift from cars to sustainable transport.
- A House of Commons 2013 report has shown that rising petrol and diesel prices have a detrimental effect on personal finances; individuals can save money by walking or cycling.¹³
- 2.4.2 Key Evidence: National
 - The Eddington Study identified that:
 - A 5 per cent reduction in travel time for all business and freight travel on the roads could generate around £2.5 billion of cost savings – some 0.2 per cent of GDP.
 - Delays and unreliability on the network have direct costs to people and businesses, increasing business costs and affecting productivity and innovation.
 - Eliminating existing congestion on the road network would be worth some £7-8 billion of GDP per annum.
- 2.4.3 Key Evidence: Local
 - Hertfordshire's economy accounts for 2% of the entire UK economy.

¹² (ITPOES) Industry Task force on Peak Oil & Energy Security (2010) *The Oil Crunch A wake-up call for the UK economy. 2nd report of the UK Industry Taskforce on Peak Oil & Energy Security.*

¹³ House of Commons Library (Jan 2013) Petrol and Diesel Prices. SN/SG/4712. www.parliament.uk

- Hertfordshire has the fifth largest economy in the UK outside of London. Hertfordshire's Local Enterprise Partnership (LEP) has a stated an ambition to be in the top three.
- Hertfordshire's Gross Value Added (GVA)¹⁴ reached 21.8% above that of the UK by the year 2000. However although its economy still outperforms much of the UK, in 2008 GVA had dropped to 6.8% above UK average.
- Population growth is set to increase in Hertfordshire by 24.1% from 2010 to 2035 (JSNA¹⁵) to over 1.36 million, whilst traffic flows in the county are forecast to grow by around 11% between 2010 and 2031¹⁶. This will cause serious congestion for many roads in the county.
- The Transport Economic Evidence Study (TEES) estimated that the economic cost of congestion in Hertfordshire in 2003 was about £0.2 billion and that despite planned and committed investment, and allowing for projected growth in development and travel, this figure would rise to £0.44 billion in 2021.
- Research amongst Hertfordshire's business leaders demonstrated that traffic congestion is the main economic issue of concern to businesses. The 2011 Hertfordshire Business Survey reported the following issues:
 - Level of congestion on the roads 72% of businesses thought that this was important and 81% though that being in Hertfordshire was disadvantageous in this respect.
 - Transport Costs 88% thought they were important and 37% thought that being in Hertfordshire was disadvantageous in this respect.
- Car ownership is high; the number of households without a car has decreased from 18% (2001 census data) to 10% (County Travel Survey). (Please note that the CTS is based on a much smaller sample size than the census).

2.4.4 Commentary and Implications for Hertfordshire's Active Travel Strategy.

Hertfordshire's economy is currently disadvantaged due to levels of congestion across the county. This is due partly to the county having:

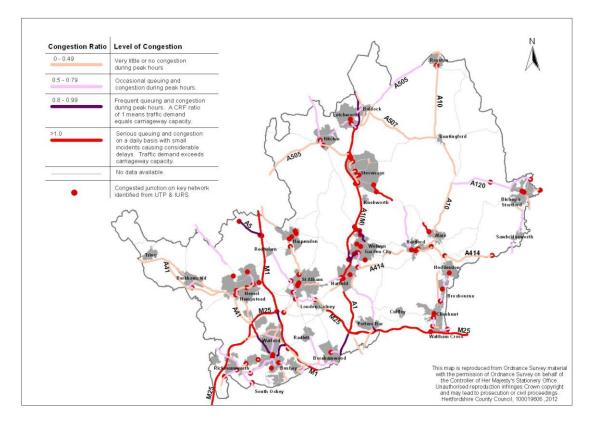
- Poor East West connectivity by public transport;
- High car ownership;
- Polycentric settlement patterns;
- High flow of traffic passing through the county.

 ¹⁴ GVA = measure in economics of the value of goods / services produced in an area
 ¹⁵ Joint Strategic Needs Assessment – see http://www.hertsdirect.org/your-

council/hcc/healthcomservices/stratplanconsult/jsna/

¹⁶ Hertfordshire County Council Transport and Traffic Data Report (TTDR) (2011)

Fig 2.3: Hertfordshire Congestion Map showing areas with highest traffic flow¹⁷



One of the solutions to tackle growing congestion is to encourage people not to use their cars if other sustainable attractive modes of transport present themselves - including walking and cycling.

As 19% of journeys to work in Hertfordshire are less than 3 miles¹⁸ it is feasible that more people could cycle or walk at least part of the shorter journeys to work. Furthermore, 56% of all journeys are less than 5 miles, which may be too far for many residents to cycle or walk, but for some it will be possible - potentially in conjunction with public transport - to relieve congestion on the roads.

Conclusion: Congestion currently generates significant economic costs for businesses in Hertfordshire. Greater levels of Active Travel would help to resolve congestion, thus creating a more conducive environment for businesses to thrive and people to get to work and education.

¹⁷ Hertfordshire County Council Transport and Traffic Data Report (TTDR) 2011

¹⁸ Hertfordshire County Council Transport and Traffic Data Report (TTDR) 2011

2.5 Health and physical activity

2.5.1 National Policy Context

- In 2012 the British Medical Association highlighted the link between transport and health through its policy paper entitled *Healthy Transport* = *Healthy Lives*¹⁹ which asked the government to do more to promote Active Travel, such as investing in appropriate infrastructure.
- The report states that the health of people and the built environment are closely linked. *Healthy Transport = Healthy Lives* emphasises planning for 'accessibility', not mobility (i.e. build facilities that can be reached sustainably rather than out of town which are not often near enough to reach by walking or cycling).
- The responsibility for improving public health lies with local government (from April 2013) under the *Health and Social Care Act 2012*. Government emphasis is veering toward the prevention of chronic health problems through health improvement; we have an ageing society and NHS costs will be unsustainable unless there are policy changes for early interventions.
- In 2010, the Marmot Review²⁰ gave evidence that those living in poor housing conditions and on lower incomes were more likely to suffer ill health. Marmot identified a lack of attention paid to health in the planning system, and recommended integrating planning, transport housing, environmental and health policies.
- The Town and Country Planning Association²¹ guidance recommends that planning officers liaise with public health professionals when working to the National Planning Policy Framework, to ensure that plans incorporate Active Travel opportunities for health benefits for all.
- The National Institute for Health and Clinical Excellence (NICE), the independent organisation responsible for providing national guidance on the promotion of good health and the prevention and treatment of ill health, advises planners on best practice through its *Guidance on the promotion and creation of physical environments that support increased levels of physical activity.*
- A further substantial NICE guidance document was published in late 2012 NICE, it provides advice on walking and cycling measures and is aimed at many professionals including transport planners.²²

¹⁹ BMA (July 2012) *Healthy Transport = Healthy Lives.*

²⁰ Michael Marmot. (2010) Fair society, healthy lives : the Marmot Review : strategic review of health inequalities in England post-2010.

²¹ Town and Country Planning Association ((2012) *Reuniting health with planning – healthier homes, healthier communities.*

²² National Institute for Health and Clinical Excellence (2012) *Walking and cycling: local measures to promote walking and cycling as forms of travel or recreation.* PH41.

2.5.2 Key Evidence: National

- The Department of Health's 2011 Public Health White Paper states that 65% of men and 76% of women are insufficiently active to meet recommendations for regular physical activity.
- If adults undertake at least 30 minutes moderate intensity physical activity such as walking or cycling at least 5 days a week this regime would help prevent and manage over 20 chronic conditions, including coronary heart disease, stroke, type 2 diabetes, cancer, obesity, mental health problems and musculoskeletal conditions²³.
- Children are also at risk and need to be more physically active from birth. The Chief Medical Officers recommend '*Children of pre-school age who are capable of walking unaided should be physically active daily for at least 180 minutes (3 hours), spread throughout the day*²⁴.
- The Start Active, Stay Active²⁵ report on physical activity for health from the four home countries' Chief Medical Officers set out guidelines to help professionals to provide people with information on the type and amount of physical activity that they should undertake to benefit their health, in particular to prevent disease. The full guidelines for each age group are outlined in Appendix 5.
- Obesity is one of the most significant health challenges facing our society; almost two-thirds of adults are overweight or obese. Current trends suggest that more than half of adults could be classified as obese by 2050²⁶.
- There is well evidenced and quantifiable potential benefit to be gained from encouraging the 61% who are physically inactive/moderately inactive to start cycling or cycle more²⁷.
- The estimated direct cost of physical *in*activity to the UK National Health Service is £1.06 billion²⁸.
- Physical inactivity costs the English economy £5.5b per year in sickness costs²⁹.
- The relationship between physical activity and health outcomes is clearly defined in Table 2.1.

²³ World Health Organization (2010) *Global Recommendations on Physical Activity for Health*

²⁴ DH (2011) Start Active, Stay Active.

²⁵ DH (2011) Start Active, Stay Active

²⁶ Government Office for Science. (2007) *Foresight: tackling obesities*

²⁷ Cavill and Buckland (2012) *Investigating the potential health benefits of increasing cycling in the Cycling City and Towns.* Commissioned research for DfT.

²⁸ DH (2011) Start Active, Stay Active

²⁹ DH (2011) Start Active, Stay Active

Table 2.1: Headline linkages between physical activity & health outcomes³⁰.

Health Issue	Estimated risk reduction if regularly physically active (note risk reduction varies with intensity of activity).
All cause mortality	30% risk reduction when comparing most active with least active.
Cardiovascular disease, coronary heart disease and stroke	20-35% lower risk
Metabolic syndrome and type 2 diabetes	30-40% lower risk
Depression	Effect as good as pharmacological treatments for moderate depression
Older adults – falls	30% lower risk
Older adults – colon cancer	30% lower risk
Older adults – breast cancer	20% lower risk

2.5.3 Key Evidence: Local: Health

- It is estimated that in 2007 in Hertfordshire obesity cost the NHS £48.8 million. Hertfordshire's wider economy costs in 2007 were £335 million.
- Broxbourne District has the highest prevalence of obesity in children aged 4-5 (12.63%) and children aged 10-11 (22.89%).
- The percentage of people participating in regular exercise compared to the overall percentage for England is higher for St Albans and East Hertfordshire areas and lower in Stevenage, Welwyn, Hatfield and Broxbourne. (See Table 2.2).
- In August 2012, the Department for Transport and Sport England started to publish walking and cycling statistics for England based on data from the Active People's survey. Distribution of figures across the 10 districts shows a variation across the County.

Table 2.2: Proportion of Hertfordshire residents who walk or cycle for at least 30 minutes at least once per month for utility purposes (³¹)

	Walk %	Cycle %	Walk or Cycle %
Hertfordshire (total)	36	2	37
Broxbourne	39	1	40
Dacorum	37	1	38
East Herts	37	1	37
Hertsmere	35	1	36
North Herts	35	2	35

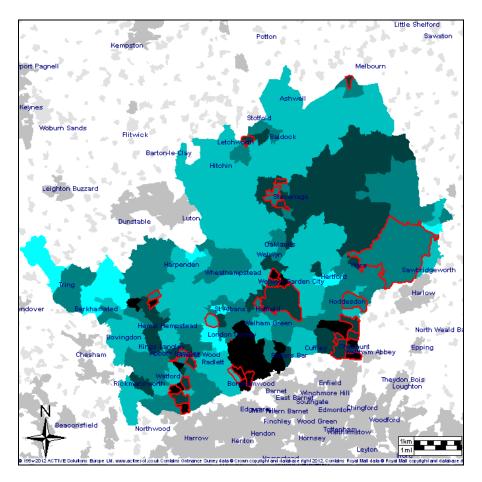
³⁰ Adapted from Table 1 in DH (2011). *Start active, stay active.*

³¹ DfT (2012) Local area walking and cycling in England, 2010/11.

	Walk %	Cycle %	Walk or Cycle %
St Albans	36	4	37
Stevenage	35	1	35
Three Rivers	34	2	35
Watford	41	3	42
Welwyn / Hatfield	34	4	36

• Obesity, deprivation and lack of regular exercise are linked as can be seen in Figure 2.4.

Figure 2.4: 2010-11 Percentage of Year 6 children obese (Key areas of deprivation outlined in red)



Key	% obese
	3 to 7.9%
	8 to 12.9%
	13 to 17.9%
	18 to 22.9%
	23% and over

- Reports show that obesity is closely linked to deprivation³². The measure of deprivation for children is based on the Index of Multiple Deprivation score of the child's area of residence. Most areas where child obesity is said to be higher than the County average, have higher deprivation scores than the rest of the County;
- Although physical inactivity is one of a number of contributory causes of obesity, targeted Active Travel in the deprived wards would help to address high obesity levels;

Conclusion: The majority of people within Hertfordshire are not sufficiently active, potentially leading to higher incidences of health problems. Active Travel is a tool which could be used to help increase participation in physical activity.

2.6 Local Active Travel in Hertfordshire

2.6.1 Headline Evidence

Headline statistics from Hertfordshire's Traffic and Transport Data Report 2011 (TTDR) and the County Travel Survey 2009 (CTS) reveal that:

- Average mode share of all journeys in Hertfordshire is 69% travel by car and 15% walk or cycle;
- Average mode share of journeys to work in Hertfordshire is 63% travel by car - 11% walk or cycle;
- Average mode share of journeys to shops in Hertfordshire is 74% travel by car – (with an average trip distance of 2.7 miles for shopping purposes).

2.6.2 Journeys to school

- Overall 17% of households in the County Travel Survey 2009 had at least one child attending nursery or school;
- 51% of children walk to nursery or primary school, whilst 47% walk to secondary school and 46% sixth form;
- There is an LTP3 indicator called NI 198 (Mode share of sustainable school journeys) which is monitored and reported annually;
- Cycling accounts for 3% of secondary school trips.
- 2.6.3 Distance of Journey

³² Rowlingson, Karen (2011) *Does income inequality cause health and social problems?*. Joseph Rowntree Foundation.

- 19% of journey to work trips by Hertfordshire residents are less than 3 miles in length;
- Overall 56% of all trips were less than 5 miles in length.

2.6.4 Walking

- Walking accounts for around 8% of usual journeys to work, 11% of food shopping trips and 50% of school journeys;
- Overall, 13% of all trips in 2011 were by walking (up 5% since 2002). Levels of walking were highest among females and the younger 17-24 group;
- Walking levels were highest within St Albans (17% mode share). Both East Hertfordshire and Watford have a 15% mode share;
- 7% of respondents had difficulty walking more than half a mile;
- Walking (50%) and travel by car/taxi (31%) are the most popular modes of transport to school for Hertfordshire pupils.

2.6.5 Cycling

- Although 43% of adults own a bike only around 2% of trips were made by cycle and even at distances of less than 3 miles, cycling only accounts for 3-4% of the mode share;
- More males are likely to own a bicycle (55%) than women (45%);
- People aged between 25-39 and 40-64 are more likely to own a bicycle whether they regularly use it or not. Bicycle ownership is notably lower amongst 18-24 year olds (12%) as well as older age groups;
- According to the European Comparison, bicycles are used for around 2% of journeys in Britain – compared to about 26% in the Netherlands, 19% in Denmark and 5% in France³³.

2.6.6 Commentary and Implications for Hertfordshire's Active Travel Strategy

Hertfordshire currently has a high number of people using cars for journeys that could be replaced by Active Travel modes. Statistics reveal that a proportion of people are unable to walk or cycle far because of ill health or mobility impairment.

However despite this, there is also a large proportion who would find a change in travel behaviour beneficial for their physical and mental health.

³³(Ministry of Transport, Public Works and Water Management 2009.

Conclusion: Whilst 15% of all journeys in Hertfordshire are by cycling and walking there is significant scope for improvement, particularly for shorter journeys, through the delivery of an Active Travel Strategy.

2.7 Conclusion: Key Factors influencing Active Travel in Hertfordshire

This chapter has identified a number of key factors that influence participation in Active Travel in Hertfordshire, and analysis of this leads to the identification of a number of recommendations which should be exploited to increase levels of walking and cycling. These are as follows:

- **Targeting short journeys:** With over 56% of all trips in Hertfordshire under 5 miles or less, there is a significant amount of journeys in Hertfordshire that currently take place by private car which could be undertaken by cycling or walking.
- Focus on packages in urban areas: Congestion is a significant issue in urban areas, with Watford, St Albans, Hemel Hempstead and Stevenage having the greatest urban delays in the 2011 TTDR. Figure 2.3 identified specific hotspots in urban area. Traffic forecasts are expected to increase by 20.9% by 2031, based on 2011 levels, justifying the need to target package in areas of worst congestion.
- **Target Active Travel for Schools:** Whilst 51% of children walk to nursery or primary school, and 47% walk to secondary school, cycling only accounts for 3% of secondary school trips. Furthermore, in some parts of Hertfordshire, over 23% of children are classified as obese.
- **Target health 'hotspots':** Hertfordshire has several key settlements where health indicators could be improved through Active Travel. Figure 2.4 outlines where these are located.

CHAPTER 3: ACTIVE TRAVEL - SUMMARY OF KEY POLICY OBJECTIVES

The preceding analysis in Chapter 2 of the national and local policy context, and associated transport evidence, has identified a number of challenges and issues that this Active Travel Strategy will need to address in Hertfordshire.

As a result, the four over-arching Policy Objectives for the Active Travel Strategy have been identified:

Policy Objective 1

To ensure Active Travel contributes fully to **addressing environmental challenges** in Hertfordshire. Specific challenges that need to be addressed by this strategy are as follows:

- Improving air quality by reducing nitrous oxide emissions from the transport sector, particularly in the locations that are currently designated Air Quality Management Areas.
- Reducing the growth in carbon emissions from the transport sector by increasing the proportion of trips taken by walking and cycling.
- Improving the natural and built environment in Hertfordshire.

Policy Objective 2

To ensure Active Travel contributes fully to **enhancing economic growth** in Hertfordshire. Specific challenges that need to be addressed by this strategy are as follows:

- Reducing economic costs associated with transport, through reducing congestion, and increasing productivity.
- Reducing the economic costs associated with lack of exercise, including employee absenteeism and NHS costs.
- Improving accessibility to the labour market and reducing unemployment through increased availability of alternative transport options.
- Improving the desirability of facilities and services through enhanced transport facilities and pedestrian environments.

Policy Objective 3

To ensure Active Travel contributes fully to **improving public health** in Hertfordshire. Specific challenges that need to be addressed by this strategy are as follows:

- Increasing physical activity levels (and associated reduction in private car usage) to help prevent and manage a number of health conditions including: obesity, heart disease, cancer, diabetes, poor mental health, asthma and other illness.
- levels of road casualties should not increase.

Policy Objective 4

To ensure Active Travel contributes fully to **improving quality of life** for Hertfordshire communities. Specific challenges that need to be addressed by this strategy are as follows:

- To increase levels of community cohesion through Active Travel.
- To improve community safety.
- To improve equality of opportunity for Hertfordshire residents.
- To improve physical access to education by Active Travel.

Chapter 4 identifies how the key factors identified in Chapter 2 and the need to address these four policy objectives has led to the development of a toolbox of interventions designed to address the specific barriers to Active Travel faced by people living and working in Hertfordshire.

Each intervention may address one or more of the policy objectives above.

CHAPTER 4: ACTIVE TRAVEL DELIVERY TOOLKIT

This chapter identifies a toolkit (i.e. a list of potential schemes) for Active Travel, by identifying the barriers that individual's face to walking and cycling and subsequently presenting the schemes that could be implemented to support people in overcoming these barriers.

The interventions have been identified from similar interventions already employed in Hertfordshire (including those within the previous Walking and Cycling Strategies), as well as best practise elsewhere.

Appendix 4 provides a diagrammatical representation of the logic process of identifying interventions from existing barriers to achieving policy objectives.

4.1 Barriers to Active Travel in Hertfordshire

The key barriers to people participating in Active Travel in Hertfordshire are outlined in Table 4.1:

Over-arching Barriers	Examples of preventative perceptions
Active Travel not perceived to be viable due to safety and security factors	 Traffic is too dangerous / busy / fast/ noisy (e.g. presence of HGVs etc). Personal security would be poor on walking / cycling routes. Unsafe for children to go alone. Vandalism / theft of cycle and equipment. Air quality is too poor to walk / cycle.
Active Travel not perceived to be viable due to lack of physical infrastructure to support it	 No facilities to park cycle / shower / store gear. Don't own a cycle / suitable equipment. Mobility impairment prevents Active Travel. Unpleasant walking or cycling environment. Physical barriers including guard rails, street clutter, parked cars etc. Lack of direct walking / cycling routes.
Active Travel not perceived to be possible due to lack of knowledge, awareness, training or education	 Lack of route information. People don't know how to cycle properly / lack confidence. Too expensive to buy cycles and equipment.
Active Travel not perceived to be possible or desirable due to social and cultural attitudes	 Can't walk or cycle that far / too hilly. People will get sweaty before work. Can't cycle in work-clothes / shoes. Too much equipment to carry. Have to transport other people as well. Unpleasant weather. Not fit / healthy enough to cycle. "People like me don't walk or cycle". Need to drive children to school. Too inconvenient / time consuming.

Table 4.1: Summary of Key Barriers to Active Travel in Hertfordshire

Further analysis of the barriers outlined above has enabled us to quantify and their real importance, and hence prioritise interventions required for delivery.

4.2 Enabling Active Travel – A Toolkit of interventions

This Active Transport Strategy will only be successful if it can address the barriers and perceptions held by transport users outlined in Table 4.1.

The following toolkit (list of schemes) outlines the interventions that would be required to help overcome the barriers identified (based on evidence). It should be noted that more than one barrier may contribute to an individual's reluctance to participate in Active Travel.

This toolkit provides an overview of the key types of interventions that are required. The specific attributes of the measures, including detailed design and the routes on which they will be applied are set out in 'Roads In Hertfordshire'³⁴ and the Route User Hierarchy Policy in the Local Transport Plan Policy Document³⁵.

The hierarchy of measures as a core principle in cycle infrastructure provision are detailed in Roads in Hertfordshire following current DfT guidelines. The aim of which is to promote on road cycling as the first choice. Details of the treatments that may be appropriate are set out in Roads in Hertfordshire, (see Figure 4.1)

Fig 4.1: Road User Hierarchy

Consider First	 Traffic volume reduction Traffic speed reduction
п	 Junction treatment, hazard site treatment, traffic management
イト	 Reallocation of carriageway space
~	 Cycle tracks away from roads
Consider Last	 Conversion of footways/footpaths to shared use for pedestrians and cyclists

 ³⁴ Hertfordshire County Council, (2011) *Roads In Hertfordshire Highway Design Guide*,
 ³⁵ *Route User Hierarchy*, Local Transport Plan Volume 2: Policy Document, 2011, http://www.hertsdirect.org/docs/pdf/l/ltp3vol2policydoc.pdf

4.2.1 Safety and Security

Key Barrier: Active travel is not perceived to be viable due to a lack of safety and security on the transport network

The Evidence

The *Herts Roads Casualty Facts* for 2011³⁶ demonstrated that:

- Pedestrians account for just under 10% of all casualties, and there is a predominance in the 10 – 19 age range (accounting for 26% of total pedestrian casualties).
- Nearly 8% of total casualties were cyclists. Just over 25% of cyclist casualties were aged 10 to 19 yrs, and there is another peak in the 40–49 year old range.
- The percentage of pedestrian casualties that were Killed or Seriously Injured is 20%, compared to 10% for all road users.

Key areas of action

Based on this evidence, the Active Travel Strategy therefore supports the following areas of action to overcome this barrier (in conjunction with the Speed Management Strategy³⁷ where appropriate):

- Ensure children and adults have access to training that will teach them to walk and cycle more safely.
- Deter inappropriate speeds of other vehicles on routes for Active Travel.
- Develop urban transport plans to identify the pedestrian and cycling priority routes to encourage Active Travel.
- Provide secure cycle parking at key destinations e.g. Rail Stations, Town Centres, Schools.
- Identify and develop Active Travel routes for children to travel safely to and from schools (as part of Safer Routes to School).
- Develop easily accessible information for the public on Active Travel in the County to encourage including information for employers to encourage Active Travel in their workforce.

 ³⁶ Hertfordshire County Council (2012) *Hertfordshire Road Casualty Facts 2011*, <u>http://www.hertsdirect.org/docs/pdf/t/HTAF2011.pdf</u>
 ³⁷ HCC (2012) *Speed Management Strategy*.

³³

• Ensure that the needs of cyclists and pedestrians are considered in new developments and when changes are made to the highway network to encourage Active Travel.

Key Toolkit Interventions (i.e. a list of potential schemes that could be considered to overcome the barrier)

The following specific interventions will be considered by the County Council and its partners to achieve these key areas of action:

- Traffic Calming, speed limits and enforcement (as set out in the Speed Management Strategy and design guide set out in Roads in Hertfordshire);
- Enforcement of verge parking.
- Bikeability cycle training programme for children and adults (including addressing safety issues such as cycling with headphones and cycling on the pavement);
- Continue to offer and increase the number of drivers attending speed awareness training courses in liaison with the police authority. This includes awareness of more vulnerable road users.
- Provision of school crossing patrols, where appropriate, to encourage parents to allow their children to walk to school;
- Develop a cycle network in urban areas following national and local guidance;
- Incorporate Active Travel into Air Quality Management Plans within urban areas;
- Implementation of the Hertfordshire road user hierarchy through traffic management, including routing of HGVs to suitable routes;
- Investigate running further 'Greenways Type' projects (similar to those being developed by Transport for London and the developing Green Ring in St Albans).
- Utilisation of Intelligent Transport Systems to manage traffic on routes where Active Travel could be promoted;
- Engagement with Sat Nav providers to route HGVs away from core Active Travel routes;
- Implementation of CCTV and other security measures;
- Provision of improved crossing facilities (traffic island, zebra, pelican, puffin or Toucan) on priority routes and at sites where they are justified;
- Following the guidance set out in Roads in Hertfordshire, give full consideration to the needs of pedestrians & cyclists when designing new highways, reallocating road space for active travel, or designing highway improvement schemes (for example, to ensure that all new footways are built to the width and design standards set out in *Roads in Hertfordshire*);
- Maintain footways to an acceptable standard and ensure that the priority routes are generally free from vegetation, snow, ice and other natural obstructions;
- Design out opportunities for crime at the inception of a scheme.³⁸

³⁸ See Building Futures toolkit at: http://www.hertslink.org/buildingfutures/

- Ensure that transport schemes give high priority to pedestrian and cycle access and signing;
- Discourage cycling on the footway by means of both encouragement and enforcement (working with Police);
- Consider 20mph zones where deemed applicable.





A new footway has been installed in Kings Langley. This provides a safe route through the bridge for pedestrians, where previously there was no pedestrian provision. Traffic movements have been altered by installing a set of traffic lights which restricts vehicle flow to one direction at a time through the narrowed section. This scheme has created a safe pedestrian route serving the local community and a small industrial estate.

Before the footway opened there was no safe pedestrian route in the location to get from one side of the railway to the other, results recorded after the opening show that the new footway under the bridge is well used with 91 and 99 pedestrians recorded using the crossing on average per day during the am and pm peaks.

Average vehicle speeds in the area have decreased from 34.25 mph before the scheme to 31.95 mph after the new footway has been put in place, making the road safer for all users.

HERTS CASE STUDY: Cheshunt Cycle Bridge



Hertfordshire County Council and Broxbourne Borough Council have been working in partnership with Sustrans to improve the Walking and Cycling access to local schools in the Waltham Cross.

The Paul Cully Bridge was delivered by Broxbourne Borough Council to provide a link across the A10 to the relocated St Mary's School. In the time between April 2011 and March 2012 nearly 9,000 cycle trips were made over the bridge, a much safer alternative to crossing the A10 at ground level.

4.2.2 Physical Infrastructure

Key Barrier: Active travel not perceived to be viable due to lack of physical infrastructure to support it

The Evidence

The evidence suggests that physical barriers to walking and cycling do exist, specifically the following issues which need to be addressed:

- In the DfT's national cycling demonstration town project, the presence of on-road cycle lanes was one of the top features identified by cyclists through the promotional campaign.
- A Cycling England report³⁹ identifies that significant benefits arise through the development of Active Travel Networks. Links to schools can have a benefit: cost ratio of over 2:1, and the London cycle network investment was demonstrated to have a benefit cost ratio of nearly 4:1.

Key areas of action

Based on this evidence, the Active Travel Strategy supports the following areas of action to overcome this barrier:

- Maintain, manage and develop the cycle and pedestrian network in a manner that encourages use, (*For example where feasible design direct routes*).
- Develop a network of Active Travel routes, including Rights of Way, that encourage cycling and walking as a utility and recreational activity to improve health and reduce the carbon emission from transport.
- Support the implementation of the Rights of Way Improvement Plan
- Ensure that all railway stations, key employment sites and key services in towns, particularly those associated with high levels of commuting or limited car parking, have convenient cycle and pedestrian access arrangements, high quality, covered and secure cycle parking and links to local cycling and walking networks.
- Ensure the availability of cycle parking at schools and create safe cycling and walking environments around schools and in residential areas where feasible.
- Ensure that cycling and pedestrian routes are 'fit for purpose' and resilient to climate change effects, for example able to withstand flooding incidents and hot weather (see *Roads in Hertfordshire*. Section 1, paragraph 6.3.1)

³⁹ Valuing the benefits of cycling, Cycling England

Key Toolkit Interventions (i.e. a list of potential schemes that could be considered to overcome the barrier)

The following interventions will be considered by the County Council and its partners to achieve the key areas of action:

- Developing a cycle network that directly links key destinations in urban areas (in conjunction with the National Cycle network being developed by Sustrans);
- Provide easily accessible information to the public on existing walking and cycling infrastructure and alternative routes. This should preferably be self service online;
- Develop and promote use of off road recreation/parkland routes;
- Encourage promotion of canal paths for Active Travel;
- Provide cycle hire facilities where they are likely to be used;
- Remove street clutter to improve the public realm, removing physical barriers to Active Travel;
- Incorporation of anti-vandalism measures into the design of new infrastructure;
- Designs to address the needs of less mobile and visually impaired people, including dropped kerbs and removing unnecessary street furniture that impedes access;
- Clear, accurate and robust route signage for walking and cycle routes (Signings with timings to access by walking/cycling maps);
- Secure and accessible public cycle parking;
- Installation of facilities for cycle storage, including showers, lockers and secure covered storage areas at employers, schools and key public destinations;
- Work closely with rail operators to permit bicycles on trains where appropriate, or ensure appropriate provision for secure cycle parking where this is not possible;
- Secure lockers and visible storage at stations;
- Maintenance of existing Active Travel network, in-line with existing County Council policy on maintenance of the vegetation and kerbs alongside the Highway.

HERTS CASE STUDY: Royston Cycle Links and Underpass



The new £3.8m crossing provides cycle and pedestrian links across north Royston, connecting areas previously separated by the railway line.

The Intervention has been funded jointly by HCC and Sustrans working with Groundwork Hertfordshire, North Herts District Council and North Herts Homes.

4.2.3 Education and Information

Key Barrier: Active travel not perceived to be possible due to lack of knowledge, awareness, training or education

Key Evidence

The evidence suggests that a lack of information, awareness or education does create a barrier to walking and cycling, which if overcome could provide significant benefits:

- In the DfT's Sustainable Travel Towns pilot project, TravelSmart data has shown that for all three participating Towns, poor perceptions of relative travel time form the most significant barrier against walking and cycling instead of local car trips⁴⁰.
- Analysis of the journey times recorded in the travel behaviour surveys shows that between a quarter and half of car trips within the Towns were within range of the average cycling trip, and that going by car for these trips offers little or no time benefit over cycling.

Key areas of action

The Active Travel Strategy supports the following areas of action to overcome this barrier:

⁴⁰ Sustrans. *Travel Behaviour Research Baseline Survey 2004. Sustainable Travel Demonstration Towns.*

- Provide information on Active Travel so that individuals can make informed choices on walking and cycling.
- Encourage adults and children to use Active Travel safely with tuition if necessary
- Promotion of walking and cycling opportunities through awareness raising and promotional campaigns;

Key Toolkit Interventions (i.e. a list of potential schemes that could be considered to overcome the barrier)

The following interventions will be considered by the County Council and its partners to achieve the key areas of action:

- Production of up-to-date route and network maps of the cycling and walking network for each town and wider networks which will be widely available as physical maps, on online media;
- Promote travel planning to Schools, Businesses, Employment Areas and Stations;
- Promotion through media (websites, smartphone apps, press publicity and other promotional activities);
- Agreements with outdoor and cycling retailers for discounts on goods and maintenance that will encourage more walking and cycling;
- Bicycle loan, purchase, maintenance and recycling schemes;
- Targeted provision of information through personalised journey planning;
- Educating drivers to be aware of cyclists on the roads;
- Improving signing;
- Independent travel training including support for learners with learning difficulties and disabilities (for example a travel buddy pilot scheme is underway at North Herts College).
- Supporting national publicity events such as Bike Week, 'Bike 2 Work' and Bike to School Week;
- Include cycling issues within regular market research activities;
- Dissemination of research identifying the benefits of Journey Planning, Climate Change, Energy Saving, Health and Physical activity, air quality and health issues;
- A programme of kick-scooter safety training for schools.

HERTS CASE STUDY: TravelSmart Broxbourne and Croxley Green

TravelSmart aims to reduce car use in Hertfordshire by offering free personalised information and support to enable people to walk, cycle and use public transport more often. Two projects took place in Hertfordshire in 2010 delivered by Sustrans and Socialdata.



The projects were delivered with funding from Defra's Greener Living Fund (Broxbourne) and the Lottery Fund (Croxley) and support from Hertfordshire County Council, District Councils and other local partners. The Project team contacted around 8,000 households in Broxbourne Borough, and 2,600 households in Croxley Green, offering free personalised travel information and maps to encourage them to walk, cycle and use public transport more often.

The two projects have achieved reductions in car trips of 10 per cent or more, accompanied by increases in levels of walking, cycling and public transport use, contributing to the congestion reduction, better health, better air quality and reduced growth of carbon emissions.

4.2.4 Changing Attitudes

Key Barrier: Active travel not perceived to be possible / desirable due to social and cultural attitudes

Key Evidence

Evidence suggests that social and cultural attitudes do create a barrier to walking and cycling, particularly with respect to the 'Active' nature of the mode:

• In Hertfordshire, the Sport England Active People survey (self-report results) has shown that only a quarter of adults meet guidelines on physical activity levels and around a half of adults are not taking part in sport or active recreation⁴¹.

⁴¹ Active People Survey, Sport England, Year: 2005/06 - 2010/11

- However, the above levels are self reported levels by adults. When measured using an accelerometer (a hip mounted motion sensor) it was found that only 6% of men and 4% of women met these guidelines.
- The survey shows that certain social or cultural groups have been shown to have lower activity levels:
 - Physical activity levels decline with age.
 - Minority ethic groups have lower levels of activity.
 - People from lower socio-economic groups report lower activity levels.
 - People with disabilities are far less likely to be physically active than people without disabilities.

Key areas of action

The Active Travel Strategy supports the following areas of action to overcome this barrier:

- Target activities towards groups where Active Travel participation could be higher but is currently low (For example, areas with high levels of self-containment [journeys made within town], flat terrain, existing higher levels of cycling, and higher levels of no-car or one-car households).
- Disproportionately concentrate efforts on these groups to help ensure health inequalities are not widened further.
- Encourage the use of existing infrastructure within the county to facilitate Active Travel. As well as for transport, environmental and economic benefits encourage people to use the transport network as a place to "get fit".

Key Toolkit Interventions (i.e. a list of potential schemes that could be considered to overcome the barrier)

The following interventions will be considered by the County Council and its partners to achieve the key areas of action:

- Community / guided Cycle Rides and Walks (including 'Skyrides' and Health Walks);
- Identification of local role models;
- Publication of local positive experiences including the social benefits to be gained from walking and cycling with others.
- Promotion of Active Travel through 'Olympic success' legacy;
- Cycling and walking promotional events (including events for mobility impaired);
- Advertise the availability of electric bikes;' which would be particularly advantageous for hilly areas;

- Develop campaigns aimed at improving the behaviour and attitudes of other road users towards cyclists and making them aware of their safety requirements;
- Provision of incentives for walking and cycling;
- Removal of street clutter on pavements;
- Provide benches where appropriate to enable those who are less mobile to rest.

HERTS CASE STUDY: Hertfordshire Health Walks

The Countryside Management Service (CMS) coordinates the Hertfordshire Health Walks - a countywide programme of free, led walks. It aims to help promote walking and encourage more people (all ages, backgrounds and abilities) to get outdoors and get more active.



Hertfordshire Health Walks has around 180 volunteers leading over 35 walks a week in

six main areas: Dacorum, Watford & Three Rivers, St Albans including Harpenden & Villages, Hitchin & Letchworth, Bishop's Stortford and Hertsmere.

The walks are delivered in partnership with Public Health Authorities, as well as a variety of organisations throughout the county. In addition, the walks form part of the national campaign, Walking for Health (WfH).

For information: www.hertslink.org/cms/healthwalks

CHAPTER 5: ACTIVE TRAVEL DELIVERY

5.1 Delivery Overview

The implementation of the Active Travel Strategy is the responsibility of a range of partners from across Hertfordshire.

It is necessary to deliver Active Travel as a **package** - that is by the provision of **physical infrastructure** to overcome the physical barriers to Active Travel, alongside **education**, **promotion and information provision** to ensure people that live and work in Hertfordshire are fully aware and motivated to identify and exploit Active Travel opportunities for themselves.

Implementation of Active Travel interventions in Hertfordshire should be undertaken in accordance with the principles set out in the Local Transport Plan and guided by the implementation procedures set out in the suite of County Council LTP daughter documents and programme entry guidance for transport schemes.

Following consultation on the draft strategy, an Action Plan will be developed by the County Council outlining a programme of implementation.

Active Travel interventions can be broadly categorised into the following types:

- **Physical Measures** Highways / Maintenance / Rights of Way (i.e. new walking and cycling routes, small scale infrastructure, traffic management, cycle parking etc).
- Education, Promotion, Incentives and Information Travel planning, education and behavioural change interventions for schools, employers and the general public to encourage an increase in participation.

5.2 Implementation of Physical Measures

5.2.1 Active Travel Infrastructure on Highways

County Council funded highway infrastructure schemes for walking and cycling (and also including road safety, speed compliance and intelligent transport systems infrastructure schemes) are implemented and funded by the Highways service through the County Council's Integrated Transport Programme (ITP).

The Council develops urban transport plans as a strategic document for each major urban area identifying the current and future transport needs in partnership with local stakeholders. These documents will identify the key infrastructure deficits to walking and cycling and suggested improvements. An inter-urban route strategy has also been developed to identify the key strategic infrastructure between settlements. Schemes in areas outside of

urban transport plans can be considered via the traffic and environmental programme if it meets the LTP requirements.

Funding and implementation of Active Travel schemes through the ITP is dependent on schemes and interventions being able to demonstrate how they fulfil the Local Transport Plan criteria. Ranking lists for schemes have been developed to ensure funds are spent as effectively as possible and will be developed further based on this strategy. These lists are for cycling schemes, accessibility (walking) and the safer routes to school programme. Each year a budget is allocated by the Council to fund a number of projects in each programme. Funding will also be sought from developer contributions and external sources.

Alongside the Active Travel Strategy, the following relevant strategies and guidance documents have been, or are being developed to guide this process for specific scheme types⁴²:

- Road Safety Strategy;
- Speed Management Strategy;
- Highways Programme Entry Guidance (project selection criteria, development and funding);
- Roads in Hertfordshire (Highway Design Guide);
- Transport Asset Management Plan (sets out how transport infrastructure is maintained in all parts of Hertfordshire).

The Major Projects unit has a role to play in the promotion of Active Travel in Hertfordshire, in delivering larger infrastructure schemes in Hertfordshire that directly deliver walking and cycling routes, for example, the Royston Rail crossing. In addition, where there are major schemes being delivered by the County Council (e.g. such as Croxley or a future rail interchange scheme like Hatfield, or major highway infrastructure schemes), walking and cycling should be considered, for example through cycle parking at the new sites where appropriate, appropriate pedestrian and cyclist access to stations, and cycle lanes / facilities where appropriate.

5.2.2 Active Travel Infrastructure on Rights of Way

The Rights of Way Improvement Plan (RoWIP) sets out the overall strategy for Active Travel improvements across Hertfordshire's Rights of Way network. The RoWIP can be viewed at: http://www.hertsdirect.org/docs/pdf/r/LTP3rowip.pdf

The actual implementation of the RoWIP is set out in the twelve RoWIP Area Implementation Plans which between them cover all of Hertfordshire. The Implementation plans contain lists of prioritised projects which on further assessment feed into annual programmes of work.

⁴² The LTP daughter document strategies can all be viewed at the LTP website at hertsdirect.org/ltp

5.2.3 Active Travel Infrastructure in the Countryside

Hertfordshire's Countryside Management Service (CMS) works with Hertfordshire's District, Borough and Parish Councils to support the development and delivery of projects that:

- Enhance access to Hertfordshire's green spaces of wildlife importance (including Local Nature Reserves). This includes provision of off site signage, access point enhancement, provision of in site routes, interpretation and the creation and promotion of easy access routes (EAR).
- Fulfil the objectives set out in their Green Infrastructure Plans. These Plans form part of the evidence base for the Local Development Framework. By delivering the objectives in these plans CMS is providing easier and affordable access to Hertfordshire's green spaces and countryside.

5.3 Implementation of Education, Promotion, Incentives and Information

Activities including travel planning, information provision and education can complement the delivery of physical interventions by removing the attitudinal, knowledge and cultural barriers to usage of alternative transport modes (such as lack of information, poor awareness of safety issues or lack of incentives).

Provision of Education, Promotion, Incentives and Information is primarily led in Hertfordshire through the County Council's *Transport, Access and Safety* (*TAS*) Unit, in partnership with a range of other bodies including district authorities, specialist providers (e.g. Sustrans), local businesses, schools and community groups.

Home to School Transport and School Travel Planning interventions are also delivered by the County Council's Children's Services and TAS. The guidelines for implementation of travel planning for schools and colleges are currently set out in *Hertfordshire's Sustainable Modes of Travel Strategy (SMoTS) for schools and colleges.*

The County Council has established a set of guiding principles to support the school transport and travel strategy, these include preparing pupils to become independent, self reliant travellers, and enabling families to make choices in their travel arrangements and the contributions they make in supporting the reduction of CO_2 emissions.

Implementation of other Active Travel educational and promotional measures are programmed on a flexible basis, in order to maximise effectiveness of delivery and respond to external funding sources and implementation of complementary physical infrastructure.

5.4 Ensuring a 'package' approach to delivery

To ensure Active Travel interventions work 'on the ground', it is advantageous to deliver individual measures as part of an co-ordinated package of measures.

Evidence has shown that delivering Active Travel measures through a package approach has additional economic and environmental benefits, when compared to implementation by themselves.

A package approach should be achieved through co-ordination of delivery at strategic, local and site-specific levels, with the support of a range of partners (as listed in Table 5.2).

Strategic level - County Programme Packages

Through the County Council's LTP delivery process, Active Travel infrastructure schemes are ranked and prioritised according their potential to create more cycling or walking journeys. The ranking of schemes will also assess their ability to be joined as part of a package to complement other interventions, and demonstrate how additional value for money can be achieved when complementary interventions are delivered simultaneously.

This prioritisation process should also consider ongoing programmes of education and behavioural change activities, to identify where a package approach to delivery will have particular benefits in terms of congestion reduction, environmental improvements, and health benefits.

Local Level - Urban Transport Plan Packages

At a local level, Urban Transport Plans (UTPs) identify the key transport challenges in each of the urban areas of Hertfordshire, and subsequently set out agreed list of schemes and interventions required to address these challenges.

UTPs follow the principles set out in the LTP, and subsequently promote the implementation of a wide range of Active Travel measures (as identified in the toolkit). The UTPs should identify where interventions could be implemented as a package in urban areas to maximise efficiency. It is proposed that future UTPs will seek to identify opportunities where packages of Active Travel schemes can be implemented to maximise efficiency and value for money in key urban areas.

The Rural Transport Strategy sets out the process for identifying schemes in rural areas.

Site-specific level – Employer, Station, Residential and School Travel Plans

In order to identify, co-ordinate and deliver the Active Travel interventions listed above at a site-specific level, it is necessary for local partners to

develop, implement and monitor Travel Plans at key locations, sites and local areas.

Travel Plans set out the key local travel issues, and identify a package of sustainable interventions to be implemented to resolve these local issues, as well as contributing to the strategic goals of the Local Transport Plan.

Travel Plans can be implemented at employment sites, residential areas, stations, public areas and local communities.



BIGHERTS**BIG**IDEAS provides an example of a packaged approach to Active Travel delivery in Hertfordshire.

The package comprises a range of Active Travel (and other) interventions for Watford, Hemel Hempstead and St Albans. The measures in the package were devised through identification of the key transport issues across the local area (including congestion, carbon emissions, access to employment, poor air quality) and the subsequent identification of interventions to alleviate these issues through sustainable transport.

Physical package interventions (including new cycle routes, urban realm improvements, walking signage and cycle parking) were drawn from a variety of sources, including Urban Transport Plans and District Strategies, and complemented by tailor-made educational, promotional and information activities designed to both maximise the public, business and school usage of these measures, and promote Active Travel in its own right.

The funding for the package was based on a partnership approach, primarily utilising the opportunity providing through the Department for Transport's Local Sustainable Transport Fund (£11.7m over four years), and supplementing this with local partner contributions (£3.5m over four years), including the County Council, District Councils and Transport Operators such as station owners.

It is expected that the package will deliver £116m economic benefits over a 30 year period (a cost:benefit ratio of 5.7:1), as well as saving 18,000 tonnes of carbon emissions.

5.5 Active Travel Funding Sources

5.5.1 Funding Overview

Funding to implement Active Transport interventions in the County comes from a variety of sources. There are two broad categories of funding available, namely External (outside the County Council) and Internal (County Council). Both categories contain a number of specific funding sources. These are set out in Table 5.1.

It is acknowledged that the implementation of all the interventions set out in the strategy is not affordable through existing funding sources, however the strategy provides a guide and justification for the types of interventions that should be considered when additional external funding opportunities arise (for example through any new competitive Central Government funds).

Funding	Source
External to HCC	Government Local Transport Plan Capital Funding
	(Direct Grant and / or Supported Borrowing)
	Special Government Funding (e.g. Local
	Sustainable Transport Fund)
	Grants (e.g. Sustrans, Lottery Funding, Public
	Health)
	Community Infrastructure Levy
	Contributions from third parties (e.g. external
	partners, landfill tax, public transport operators,
	sponsors etc)
HCC internal	County Capital
	County Revenue
	Developer Contributions (Section 106)
	Locality Budget

Table 5.1: Potential Funding Sources for Active Travel in Hertfordshire

5.5.2 External Funding

Central Government Capital and Revenue Funding

Capital and Revenue Funding is allocated annually to the County Council from the Government (e.g. Department for Transport, Department for Education, etc) and is traditionally the main source of funding for transport schemes. The amount allocated to the County Council from Government is based on a formula.

Special Projects Government Funding

Funding for Active Travel is sometimes provided to the County Council (or its partners) by Government departments to meet special Government challenges. Recent examples of such funding are the Community Infrastructure Fund and the Local Sustainable Transport Fund. This funding is often secured through a bidding process and the timescale for submitting bids

are often short and required to be linked to specific government challenges such as housing growth, economic growth or carbon reduction.

Grants

Grants from funding organisations and agencies are sometimes available to deliver Active Travel interventions. The County Council is active in identifying and submitting bids for opportunities which will support in delivering Active Travel. Key agencies which the County Council has worked with in the past to secure grant funding include Sustrans and the National Lottery.

Grants are often subject to specific criteria being met and match funding and partnership working.

Community Infrastructure Levy

The Community Infrastructure Levy (CIL) was introduced in the 2008 Planning Act and came into force in April 2010. It allows local authorities in England and Wales to raise funds from developers undertaking new building projects in their area, by charging a levy on additional new floor space.

The Planning Act 2008 provides a wide definition of the infrastructure which can be funded by the levy, including Active Travel infrastructure.

The charging authority (District Councils in Hertfordshire) will have to demonstrate that charging CIL is justified in terms of infrastructure needs and that their level of CIL is reasonable and will not undermine development viability in the majority of cases. They will also have to set out a list of the infrastructure that CIL will be used for. The big difference with CIL is that the infrastructure provided does not need to be directly related to the development that funds it.

Contributions from third parties

Contributions from third parties (external partners) can often be utilised to support the delivery of Active Travel. This includes partners and bodies such as district councils, sub-regional bodies, health authorities, businesses, the European Commission, sponsors and other agencies.

5.5.3 County Council Internal Funding

County Capital and Revenue

There are two types of funding directly available from the County Council, namely Capital and Revenue.

The availability of County Revenue is related to the scale of council tax income and therefore sensitive to council tax rates and prioritisation.

Developer Contributions (Section 106)

Developer Contributions are monies secured through Section 106 legal agreements to mitigate the impact of new developments. This impact can be on both existing infrastructure and facilities. As such the County Council negotiates developer contributions for a number of its functions (including education, libraries and highways). Each Section 106 contribution is specific on what it can be can be spent on and the County Council publishes a list of contributions in each area.

Locality Budget Scheme

Through the locality budget scheme, Members now have allocated budgets for their local areas. Active Travel interventions are eligible for this funding, however, the decision on the spending of funds remains with the local County Councillor.

5.6 Active Travel Delivery Partners

The implementation of Active Travel in Hertfordshire requires the support and engagement of a wide range of delivery partners within the County. Table 5.2 outlines the key delivery partners and their potential role.

Active Travel Delivery Partner	Role
Hertfordshire County Council	Lead partner on Active Travel delivery in Hertfordshire.
Central Government (e.g. DfT) and agencies (e.g. Highways Agency, Natural England)	Strategic guidance and funding support.
District Councils, Neighbouring Authorities and Lea Valley Regional Park Authority.	Local support for intervention delivery and connectivity of routes.
Public Health authorities	Strategic support and expertise in promoting health aspects of Active Travel.
Hertfordshire Police Authority	Strategic support and expertise in delivery of the ATS.
Schools (parents, pupils, teachers, governors)	Support/delivery of Active Travel interventions in schools.
Hertfordshire Local Enterprise Partnership (LEP)	Strategic overview of transport to promote economic growth.
Employers and travel plan co- ordinators	Support / delivery of Active Travel interventions at workplaces.
Passenger Transport Operators	Delivery and promotion of Active Travel facilities at rail stations, bus stops and other public transport interchanges.
Town and Parish Councils, residents associations, local community groups and societies including volunteer groups	Local identification of interventions and promotion of local Active Travel interventions, (potentially through neighbourhood plans).
Academic Institutions (e.g. University of Hertfordshire)	Promotion and implementation of Active Travel, and undertaking of academic research in Active Travel.

Table 5.2: Active Travel Delivery Partners for Hertfordshire

Active Travel Delivery Partner	Role
Transport network providers (e.g. Network Rail, Canal and River Trust, Sustrans etc)	Provision and promotion of Active Travel facilities on transport networks, including where Active Travel interfaces with other modes of travel.
Developers and Landowners	Delivery of Active Travel infrastructure and supporting measures in accordance with the active travel strategy, local plan and UTP recommendations.
Special Interest Groups (e.g. Hertfordshire Cycle Forum, Local Access Forum, Ramblers Association, Friends of the Earth, Groundwork,)	Identification of potential schemes, and promotion and lobbying of Active Travel interventions.
Cycling and walking shops.	Encouragement of cycling and walking.

It will be vital to identify and work with those partners, such as public transport operators and employers, who have the potential to enhance the delivery of interventions through their own expertise.

The County Council will work pro-actively with the full range of stakeholders to promote its Active Travel strategy, by:

- Maintaining the existing twice yearly county-wide County Cycle Forum to address strategic issues and develop further the Forum concept further to include all Active Travel;
- Involving stakeholders in the development of local cycling and walking networks in urban transport plans and the design of individual schemes;
- Involving stakeholders in the development and delivery of a range of marketing and promotional activities for example through their programme of communications.

The County Council will encourage all relevant agencies with a potential impact on cycling and walking to support the Active Travel Strategy through their own policies and actions. In particular, the Council will ensure that the needs of cyclists and pedestrians are fully considered, and cycling and walking actively supported, in terms of promotion, funding and infrastructure development in the programmes of:

- Workplace travel plans;
- School travel plans and safe routes to school;
- Road safety;

- Partnerships with other health organisations;
- Partnerships with public transport operators, in particular the rail operating companies;
- Any other relevant partnership work.

5.7 Monitoring and evaluation

As identified in the evidence section, the County Council monitors the ongoing participation in Active Travel in Hertfordshire. The County Council will use data from a range of sources to monitor the impact of Active Travel measures.

Hertfordshire's third Local Transport Plan (2011-2031) contains 24 indicators and associated targets. A short-list of the LTP3 indicators directly relevant to the Active Strategy is produced in Table 5.3. The County Council proposes to evaluate the success of the Active Travel Strategy against these targets.

Hertfordshire LTP3 Indicator	LTP3 Baseline level	LTP3 2015/16 target	Data source
Primary Indicators for the	Active Travel St	rategy	
Percentage of all journeys under 1 mile in length by walking	58.9%	64%	Hertfordshire County Council - County Travel Survey
Percentage of all journeys under 3 miles in length by cycling	2.7%	3%	Hertfordshire County Council - County Travel Survey
Secondary Indicators for the	ne Active Travel	Strategy	
Transport CO ₂ emissions (annual tonnes per capita)	1.73 tonnes	1.35 tonnes	Department of Energy and Climate Change, supplemented by local data where available
Average Congestion (minutes / per mile)	2.87mins/mile	2.80m/mile	Department for Transport
% of category 1, 1a and 2 Footway network where structural maintenance should be considered	26%	26%	Hertfordshire County Council
ROW - % of the total length of footpaths and other rights of way that were easy to use by members of the public	78%	70%	Hertfordshire County Council
Accessibility – Percentage of people who find it easy to travel to key services	89%	91%	Hertfordshire County Council - annual surveys of residents regarding their ease of access to various facilities
Air Quality- Mean roadside Nitrogen Dioxide levels across the county	33 ug/m3	25 ug/m3	District Councils
People Killed and Seriously Injured	413	No more than 413	(Stats 19) Herts and Beds Police
Speed limit compliance - % compliance with speed limits (30 - 70mph)	81%	82%	Hertfordshire County Council

Table 5.3: Success indicators for the Active Travel Strategy

5.8 Strategic Environmental Impact and Equalities Impact Assessments

The Strategic Environmental Assessment (SEA) directive requires that all new strategies are assessed for their effect on the environment. Therefore this Active Travel Strategy has undergone an appraisal to assess its effects on all SEA receptors (e.g. air and noise pollution, social exclusion, economic growth, climatic change factors).

To summarise, the results of the appraisal show that by enabling and encouraging more Active Travel there will be many beneficial effects on the environment and on people's quality of life, it has no significant or potentially negative effects.

For more details of the assessment please refer to the Strategic Environmental Assessment in Appendix 6.

It is the county council's policy to impact assess its policies in relation to equalities to ensure that we do not disadvantage residents in any way as a result of disability, gender, race or ethnicity, religion or belief, sexual orientation or age and also identify where we might fulfil our duty to better promote equality of opportunity. With this in mind this Active Travel Strategy has undergone an Equality Impact Assessment, which can be seen in Appendix 6. The overall analysis showed there was no need for major change of the strategy:

No major change	
required	Officers have sought to include interventions in the Active Travel Strategy that will allow
The evidence shows no potential for discrimination and you have taken appropriate opportunities to advance equality and foster good relations.	disadvantaged groups to walk and cycle more. For example dropped kerbs, benches, independent travel training, wider pavements, removal of street clutter, electric bicycles, pedestrian and cyclists' priority in the road user hierarchy where appropriate. (see Roads in Hertfordshire Guidance for more detail.)

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APPENDICES

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- **Appendix 2: Key County Strategies**
- Appendix 3: Table of Air Quality Management Areas in Hertfordshire
- Appendix 4: Diagram of Policy Objectives, Barriers and Potential Solutions
- Appendix 5: Key Activity Recommendations for Age-Groups
- Appendix 6: Strategic Environmental Assessment of the Active Travel Strategy
- Appendix 7: Equalities Impact Assessment of the Active Travel Strategy