Hertfordshire’s Local Transport Plan
Rural Transport Strategy July 2019 - 2031

www.hertfordshire.gov.uk/ltp
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CHAPTER 1
INTRODUCTION

1.1 Purpose of the Rural Transport Strategy

The purpose of this strategy is to help deliver policies of Hertfordshire’s Local Transport Plan 4 (LTP4) which relate to rural transport and support any other LTP4 policies which may have some significance to rural areas.

The LTP4 does not include a specific rural transport policy however, the plan’s vision including its themes, objectives and principles are relevant to the Rural Transport Strategy as explained in chapter 2. The LTP acknowledges that those who live in rural areas often struggle to access key services because alternatives to the private car are currently not realistic, affordable or convenient and a purpose to this strategy is to address these issues and challenges.

A characteristic of Hertfordshire is its settlement pattern which is varied, comprising a diversity of towns and metropolitan centres where the backdrop to these towns is a largely rural environment dotted by villages and hamlets. These have notable physical features including the Chiltern Hills and the Lea and Colne river valleys which attract people to the county. An additional purpose of this strategy is to support the LTP with its challenge to accommodate for projected growth and increased travel in the county, whilst also ensuring that the quality of the environment is not impacted.

This is in particular for rural areas where features could actually be enhanced to attract people to the county.

1.2 Background

Rural areas in Hertfordshire are attractive places to live, work and visit, however rural residents can experience poor access to services, and many suffer from transport-related problems.

People living in rural areas generally travel greater distances to access services than their urban counterparts, and for the majority of rural residents in Hertfordshire, the car is the dominant transport mode, and is increasingly used to travel further to key services such as shops, workplaces and schools. This contributes significantly to congestion in urban areas, leading to economic, social and environmental problems.

Accessible and affordable transport is a lifeline for many rural residents. It connects people to opportunities for socialising, working, learning and healthcare. Effective transport networks enable rural communities to contribute to economic growth and support diverse and thriving populations however, travel in rural areas can be problematic to those who do not have access to a private vehicle, or where households have access to single vehicles but have multiple occupants who require separate forms of transport. The challenge is compounded by limited opportunities to use alternative or sustainable transport modes. The low population density in rural areas of Hertfordshire has always made providing practical and affordable public transport difficult and cuts to public funding are
making it more challenging to sustain current transport services such as rural bus services which have been reduced or removed entirely. Hopefully there will not be further cuts as this may add further pressure on accessible and affordable transport which can act as lifeline for many rural residents and reduce connectivity for people to opportunities for socialising, working, learning and healthcare. Given the cost and practicalities of car ownership, the lack of choice disproportionately affects more vulnerable groups of society such as the old and the young, the poor and the less able. With 12% of Hertfordshire residents living in a rural area the direct and indirect costs of poor mobility both to individuals and society are substantial.

The LTP4 consultation held in October 2017 raised some key issues and emerging requests for policy and scheme amendments. This included rural transport needs where responses from the consultation indicated an under-representation of rural transport needs in the LTP4. The Strategic Environmental Assessment also recommended the need for a rural transport strategy.

The County Council currently hold a Rural Transport Strategy which was adopted in 2012 however; this was not included in the proposed list of LTP4 supporting documents. Therefore, it was recommended that a new rural transport strategy be developed given the prominence currently placed on urban transport and given the loss of public transport in rural areas which creates the potential for isolation especially of the elderly.

Following this, the County Council made a commitment to produce a Rural Transport Strategy as a Supporting Document to the Local Transport Plan 4 (2018-2031) and to sit alongside the suite of Supporting Documents (detailed in chapter 2) which seek to address transport issues in Hertfordshire. This Strategy covers additional areas of Hertfordshire not covered by the suite of Growth and Transport Plans (GTPs) Supporting Documents (explained in chapter 2) and explores how transport can contribute towards addressing the economic, social and environmental challenges in rural Hertfordshire.

### 1.3 Rural Transport Statement

*The County Council, through its Local Transport Plan 4 policies will seek to ensure that transport services in rural areas enable people to access important destinations and services and contribute to reducing the dominance of the car as the favoured mode of transport.*

*The County Council will support innovative sustainable transport solutions such as shared mobility initiatives, hub and spoke schemes, and demand responsive transport which will benefit residents living in rural areas. The County Council will also encourage new developments which provide facilities for charging points and shared mobility options to both encourage the use of ultra-low emission vehicles and a reduction in car use.*
CHAPTER 2
RURAL
CHARACTERISATION

2.1
Rural Areas and Rural Transport Network

The Department for Food & Rural Affairs (Defra) defines urban areas as those settlements with a population above 10,000, whilst rural areas are those with a population below 10,000 or areas of open countryside.

An urban rural classification of Local Authority Districts has also been created, where the resident population is either urban or rural. Table 1 below shows how Hertfordshire’s districts are classified by identifying Dacorum, East Hertfordshire and North Hertfordshire as having significant rural areas. (Source: Hertfordshire County Council’s Traffic Transport and Data Report, 2018)

<table>
<thead>
<tr>
<th>District</th>
<th>Classification</th>
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<tbody>
<tr>
<td>Broxbourne</td>
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<tr>
<td>Dacorum</td>
<td>Urban with Significant Rural (rural including hub towns 26-49%)</td>
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<tr>
<td>East Hertfordshire</td>
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<td>Hertsmere</td>
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<td>North Hertfordshire</td>
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<td>St Albans</td>
<td>Urban with City and Town</td>
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<td>Urban with Major Conurbation</td>
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<tr>
<td>Welwyn Hatfield</td>
<td>Urban with City and Town</td>
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Table 1: Hertfordshire’s District Urban Rural Classification

2.2
Geography

Geographically, rural areas are predominantly located in north and east of the county in the East Herts and North Herts Districts as shown in figure 1 below. The map also shows clusters of rural areas to the north-west and south west areas Hertfordshire in the St Albans, Hertsmere and Welwyn Hatfield Districts. The north-west and south-west clusters are relatively well serviced by the road network; however, the wards in the north and east of the county have less road connections.
2.3 Settlement

Regarding specific rural settlements in Hertfordshire, these have been categorised into ‘Important Rural Settlements’ and ‘Other Rural Settlements’ as depicted in Figure 2. Important Rural Settlements have a population of 4,000 to 10,000 with any settlement above this classed as a Main Urban Town or Primary Urban Destination. Other Rural Settlements have a population of below 4,000.

Important Rural Settlements include; Bricket Wood, Bovingdon, Buntingford, Chorleywood, Cuffley, Kings Langley, Knebworth, Radlett, Redbourn, Sawbridgeworth, and Wheathampstead. It is also expected that with the planned development in Codicote, that the population will increase to above 4000 people and therefore, might be considered in future as an ‘important rural settlement’.
2.4 The Local Transport Plan

The Rural Transport Strategy is a supporting document to Hertfordshire’s fourth Local Transport Plan 2018-31, which has the following vision for transport over its 13-year period:

“We want Hertfordshire to continue to be a county where people have the opportunity to live healthy, fulfilling lives in thriving, prosperous communities.”

The Rural Transport Strategy will aim to build upon the following themes in LTP4:

Prosperity, Place and People in particular for Place and People by stating the following;

**Place**

*Preserve the character and quality of the Hertfordshire environment*

- Transport negatively impacts on the rural character of the county, such as from land take for infrastructure, noise, light pollution and visual intrusion.*
People

Improve access and enable participation in everyday life through transport

- Risk of social exclusion for people who have limited or no access to a car or passenger transport and live in areas remote from services, notably rural areas.

The LTP strategy also acknowledges that those who live in rural areas, people who have a disability or other mobility impairment, or people who do not have access to a car often struggle to access key services, because alternatives to the private car are currently not realistic, affordable or convenient. The strategy recognises the challenge of the dominance of the Green Belt and protected environmental status in Hertfordshire which both limits growth opportunities and attracts people to live in the county. Environmental conservation is a priority in rural areas.

The Rural Transport Strategy and the LTP aims to:

Support Growth and Transport Plans and Integrated Transport Programme (ITP) Schemes:
- With the support of partners, work with Parishes and Villages to develop and deliver schemes.
- Support a stronger role for local communities in identifying local needs in rural areas and deciding how these needs can be met.

Help Deliver the Rights of Way Improvement Plan and Intalink Bus Strategy:
- Facilitate cycling and walking and seek to increase the use of the Rights of Way Network for journeys to work, school, facilities and services through the Rights of Way Improvement Plan (ROWIP).

Improve the quality of Rural Passenger Transport:
- Seek to make passenger transport responsive to people’s real needs, being flexible, well marketed, well integrated, stable and reliable, in accordance with Hertfordshire’s Intalink Bus Strategy.
- Co-ordinate services to make best use of what is available. Working with bus and train operators and where necessary investing with the community and voluntary transport sector in the provision of services in areas not adequately served by scheduled bus services.
- Work with partners to investigate the provision of more demand responsive passenger transport, improved information and passenger transport facilities and co-ordinate service provision.

Improve Rural Accessibility:
- Work with partners to promote bus services as an option for work and school journeys and promote and publicise the passenger transport network through a variety of media.
- Seek the provision where feasible, of locally accessible services that people can reach thus reducing the need to travel.
- Integrate transport modes across the network with the provision of relevant user-friendly route and service information.
- Address rural access issues which occur across the boundaries of different Districts/Boroughs and other Counties.
- Seek opportunities for Green Tourism and Leisure in Rural Hertfordshire that can play a supporting role for the rural economy and contribute to providing healthy exercise.

As well as the themes and objectives of the LTP, the LTP also includes many policies which cover the transport issues and challenges faced by rural areas. Chapter 4 has content related to the context and challenges of transport in rural areas and following each section, relevant LTP policies which seek to address these challenges are highlighted. As well as this, the full set of LTP policies and how they relate to rural transport can be found in the appendix.
CHAPTER 3: LINKS TO EXTERNAL PLANS AND STRATEGIES

3.1 The Intalink Bus Strategy

Bus services in Hertfordshire operate in a “de-regulated” environment, meaning that the vast majority of services are run for profit by private companies such as Arriva, Uno and Centrebus. The bus operators determine where and when to run services according to the level of usage and income they are expected to generate. These services are regulated by the Traffic Commissioners for Great Britain, and the county council has little influence over how they operate.

These services tend to operate most successfully in towns and on inter-urban corridors. In some areas it is not possible to operate commercially viable bus services, with factors such as low population density and high car ownership making it particularly difficult in rural areas.

A small proportion of services (around five percent) are therefore run by companies under contract to the county council. The county council has a duty to consider socially important transport links and how it will provide for these, under the Transport Act (1985).

The county council allocates a fixed portion of its budget for these services (around £1.8m per year) and prioritises this according to criteria set out in its Intalink Bus Strategy. These were first adopted in 2015, following public consultation. To make best use of this funding, contract services do not run after 7.30pm or on Sundays (unless they serve a hospital) and there are eight Value for Money criteria used to determine which services are supported. These consider likely costs and usage, the impact on elderly and disabled passengers and alternative options.

Other sources of funding towards enhanced bus services come from central government, neighbouring local authorities, district and parish councils, and from developer contributions.

The county council is also working closely with bus operators through the Intalink Partnership to strengthen the operation of commercial bus services (for example through infrastructure, provision of information and technology), and making use of new legislation under the Bus Services Act (2017). The county council also pays around £12m per year to operators for journeys made using elderly and disabled concessionary passes and manages a SaverCard travel scheme for young people.
3.2
The Rights of Way Improvement Plan

The Rights of Way Improvement Plan (RoWIP) sets out the overall strategy for improvements to the rights of way network across the county, however it is not intended as a detailed programme of work. Despite this, it does set out a number of key issues and a number of core actions to address these. These are extremely relevant to the Rural Transport Strategy as much of the Rights of Way network is located within the rural wards of Hertfordshire.

There are over 200 promoted rights of way routes in Hertfordshire covering approximately 1125 miles (1,800km) of the network. These are promoted by many different organisations, via leaflets, guide-books, the internet etc. Their purposes include; health improvement, routes from train stations, walks starting from rural enterprises such as pubs, cafés and visitor attractions, and routes for cyclists and horse riders.

The key issues, relevant to the Rural Transport Strategy are:

1. Difficulties in getting to the countryside without the use of a car
2. Insufficient off-road routes linking communities & services
3. People have to use or cross busy roads to link up section of network
4. The network does not adequately provide for cycling, horse riding and horse-carriage drivers
5. Insufficient circular routes starting from settlements or other suitable locations
6. Information provided about the off-road network is neither adequate nor well enough co-ordinated or targeted
7. There are too many barriers and structures
8. The off-road network does not meet the needs of many potential users

The following core actions from the ROWIP are proposed to meet needs and demands;

- Develop routes that cater for the needs of people with limited mobility and visual impairments accessing the countryside.
- Develop the network from public transport connections
- Reduce the number of physical barriers on the network.
- Promote ROW and the health benefits of physical activity in the natural environment.
- Develop links into the countryside from towns.
- Create off-road routes linking communities with places of work, schools and other local facilities
- Extend the network for cyclists, horse-riders and horse & carriage drivers.
- Develop a range of circular off-road routes which support health and wellbeing.
- Ensure the off-road network is protected, extended and enhanced through development proposals.
• Work to improve the safety and attractiveness of the network affected by busy transport routes.

The actions contained within the RoWIP are therefore relevant to this strategy and will be incorporated into the strategy as appropriate. The Definitive Map of public Rights of Way in Hertfordshire is based on information which was correct in December 2015. Please visit for updated versions of the map www.hertfordshire.gov.uk/rowmap.

3.3 Network Management

The overarching purpose for the Network Management Strategy is:

“To Manage Hertfordshire’s roads effectively to provide a safe and reliable network, for all users allowing it to provide its primary purpose, the movement of people and goods. It will do this by reducing the adverse effects of congestion where possible, improving journey reliability and minimising disruption through the effective coordination of all works, activities and events affecting the use of the highway network”

With travel demand increasing in the short and medium term, the continued reliance on high levels of private vehicle use will lead to worsening congestion and poor journey time reliability. Both of these are constraints on economic growth and the wellbeing of the public which disrupts the quality of the urban, rural and natural environment.

Regarding the rural transport network, there are wide disparities in the ‘Local Road Network’ (LRN) throughout England and there is not a single standard for selecting the different classes across the country. Thus, classification and hierarchy must be set in a way that reflects the network in the local area. The LRN in Hertfordshire is the responsibility of HCC and is subdivided into a rural network and an urban network.

The rural network (Non-Major Interurban Category) contains rural main distributors, secondary distributors, local distributors and access roads.

Rural main distributors connect ‘Main Towns’ and ‘Primary Destinations’ with the Primary Route Network. These parts of the network connect with ‘Main Towns’ through them however, they can pass through ‘Important rural settlements’. Rural main distributors consist of ‘A roads’ which do not form part of the PRN and are identified by white backed signs. HCC will look to promote and support strategies that:

• Discourage through traffic from using them wherever possible.
• Not allow new access except where special circumstances can be demonstrated.
• Restrict parking where required, enabling the expeditious movement of traffic.
• Where appropriate implement bus priority measures.

Rural secondary distributors also pass through ‘important rural settlements’ and they connect to rural main distributors.
They are the main access routes to rural areas and are classified as ‘B roads. HCC will look to promote and support strategies that:

- Encourage the functions of the village street to take precedence over providing for moving traffic in villages with particular emphasis being placed on reducing the speed of traffic.

Rural local distributors and access roads are generally ‘Classified unnumbered’ and ‘unclassified roads’ which give access to adjacent land. Developments on rural local distributors and access roads which would generate a change in the amount or type of traffic will be resisted in the following circumstances:

- Developments that would generate an unacceptable change in the amount or type of traffic or where increased traffic would have an adverse effect on the local environment.
- Where the network is poor in terms of width, alignment and/or structural condition.
- Where there is an increased risk of accidents.

HCC will look to promote and support strategies that:

- Deter through traffic including rat running from using these parts of the network.

3.4 Speed Management Strategy

Speed Limits

The Speed Management Strategy is also a supporting document to the Local Transport Plan 4 and sets out the role of the Police and County Council as a Highways Authority in regard to speed management. It also determines; how speed management schemes are selected and funded, sets speed limits based on functions and the nature of routes, sets a consistent approach for speed management calming measures, sets the key criteria for the selection of safety camera sites, and sets out education and publicity programme. These purposes all directly relate to rural areas of the county and set. Further details can be found in the Speed management Strategy.

3.5 Place and Movement Assessment

HCC are developing an approach to categorising road types based on their function in terms of ‘Place’ and ‘Movement’, tailoring an original approach used by TfL. The Place and Movement Assessment output is not meant to replace existing hierarchies and categorisations but could be a useful tool for the authority to use alongside other data sources to better understand, manage and improve its networks.

The assessment places roads in one of nine categories, from which we can infer a general hierarchy of modes (all motor
vehicle; road-based passenger transport; active). It could help to inform what level of priority should be given to different road users, and types of interventions that may be appropriate to that road. It can also usefully highlight parts of the highway network where there is likely to be a particular conflict in terms of the function of the road and the needs of different user groups.

One of the nine categories for roads are rural lanes with the current characteristics described as, ‘a minor road within rural setting (within countryside or within a hamlet or small village). Rural lanes are effectively shared-surface roads, with the carriageway used by pedestrians, cyclists and motor vehicles. Rural lanes are generally national speed limit, with large variation in speed by user, time of day and as alignment affects visibility.

In the Place and Movement assessment, rural lanes are considered to be low in movement and low in regard to a place to spend time as shown in the place and movement matrix below (figure 3).

![Place and Movement Matrix](image)

**Figure 3: Place and Movement Matrix**

The Place and Movement assessment had initially been devised to support the A414 Corridor Strategy to help clarify the different functions of roads within the corridor and to inform strategies for reprioritising the network and confirming the appropriateness of interventions however, it is recognised that there are limitations and it is not possible to fully reflect the complexity of how streets
function both in the current context and how they could/should function in line with policy goals. Therefore, the Place and Movement assessment concept is currently under development in regard to its application to rural lanes and in Hertfordshire as a county. Further information will become available in the future as the concept develops.

3.6 Sustainable Travel Towns

Sustainable Travel Towns (STT) are included as a Major Scheme intervention in the LTP. STTs will consist of a package of measures that will achieve a significant switch to walking, cycling and public transport. Packages could feature improved cycling, walking and passenger transport infrastructure and service levels, in combination with initiatives such as travel planning and marketing.

The LTP4 consultation gave rise to additional requests for STTs. Given the likely availability of resources, there will need to be a clear prioritisation for the programme and/or clear criteria for rejecting additional requests. Due to this, and the need for HCC to work with other local organisations, an application pack has been developed for organisations to submit proposals for inclusion into the STT programme.

Sustainable Travel Towns will be based around schemes which have the greatest potential for delivering a shift to enhanced walking and cycling. This means that the focus will be on journeys within the urban area rather than journeys between towns. However, rural areas will benefit from the scheme as journeys between towns will be considered during the development process as these will affect the level of provision required to support bus and train journeys, and to ensure that the needs of the strategic highway network are met. Such issues will be considered through other Hertfordshire County Council programmes, principally the Growth & Transport Plans.

3.7 Other Supporting Documents

Whilst the Intalink Bus Strategy and Rights of Way Improvement Plan are the principal LTP4 supporting Plan are the principal LTP4 supporting documents that will impact on rural areas, other documents provide initiatives and strategies to be delivered in rural areas. These include:

- Accessibility Strategy (due in 2019)
- Road Safety Strategy
- Speed Management Strategy
- Active Travel Strategy
- Rail Strategy

3.8 Neighbourhood planning

Under Chapter 3 of The Localism Act 2011, local communities have rights and powers to prepare neighbourhood plans. These may be particularly relevant for rural areas and may include transport components.
Neighbourhood planning gives communities direct power to develop a shared vision for their neighbourhood and shape the development and growth of their local area. They are able to choose where they want new homes, shops and offices to be built, have their say on what those new buildings should look like and what infrastructure should be provided, and grant planning permission for the new buildings they want to see go ahead.

Neighbourhood planning provides a powerful set of tools for local people to ensure that they get the right types of development for their community where the ambition of the neighbourhood is aligned with the strategic needs and priorities of the wider local area.

3.9 National Planning Policy Framework

Rural areas and Sustainable transport - The NPPF is clear that delivering sustainable development means development has to be in a “sustainable” location. Sustainable transport is defined in the NPPF glossary as: ‘Any efficient, safe and accessible means of transport with overall low impact on the environment, including walking and cycling, low and ultra-low emission vehicles, car sharing and public transport.’

The NPFF planning policies and decisions should enable:
- the sustainable growth and expansion of all types of business in rural areas, both through conversion of existing buildings and well-designed new buildings;
- the development and diversification of agricultural and other land-based rural businesses;
- sustainable rural tourism and leisure developments which respect the character of the countryside; and
- Section 9 of the NPPF implies that significant new development in rural areas should not rely on the car as the only mode of travel:

The NPPF’s measures to promote a prosperous rural economy include the policy that, “Local and neighbourhood plans should support sustainable rural tourism and leisure developments that benefit businesses in rural areas, communities and visitors, and which respect the character of the countryside.”

Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes.
CHAPTER 4: CONTEXT AND CHALLENGES

Summary

This chapter outlines the types of transport issues that people living and working in the rural areas of Hertfordshire experience. The chapter aims to analyse and identify challenges and barriers which rural areas of Hertfordshire face. In addition to this analysis, the most recent travel patterns, taken from the 2015 Hertfordshire County Travel Survey (HCTS) have been analysed to provide some indication as to the travel patterns people in rural areas undertake as part of their daily lives. The LTP states that disadvantaged groups considered a priority in previous plans for Hertfordshire are:

- Elderly and physically disabled
- People with learning disabilities
- People, including young people, on low incomes
- Residents living in rural parts of Hertfordshire without access to a car

These disadvantaged groups of people will be considered a priority in this rural transport strategy and identify rural accessibility issues and barriers to transport.

The LTP includes many policies which cover the transport issues and challenges faced in rural areas. The context and challenges of transport in rural areas is followed in each section by relevant LTP policies, and how they seek to address the challenges are highlighted. The full set of LTP policies and how they relate to rural transport can be found in the appendix.

4.1 Strategic Road and Rail Network

The Department for Transport defines ‘Urban’ roads to be those within a settlement of 10,000 people or more. This is consistent with the Rural and Urban Area Classification 2004. All other roads are defined as ‘Rural’. Hertfordshire has adopted this same methodology in line with the Department for Transport however it is recognised that other definitions of ‘rural’ exist.

The Trunk Roads (Motorways and Principal A Roads) in Hertfordshire mainly run north-south through the county forming part of the Strategic Road Network (SRN) as well as linking London to the rest of the country. The SRN continues to be the responsibility of Highways England (HE).

Hertfordshire County Council manages the Primary Road Network (PRN) to primary destinations (Stevenage, Hemel Hempstead, Watford, St Albans and Hertford) as well as Non-Primary A roads or ‘Main Distributor Roads’ as shown in figure 1.

Many of the Trunk roads and other Primary and Main Distributor Roads pass
through or around the Important Rural Settlements as shown in figure 4 which details the geographical locations of the rural areas in Hertfordshire and the main road network.

The transport network in Hertfordshire reflects the county’s location immediately to the north of London. In particular, the railways in Hertfordshire mainly run north-south through the county as part of the national transport system. The routes are predominantly arranged to serve London, and therefore lack east west connections. As a result, many of the rural wards in North Herts and East Herts are not directly served by the railway network making it difficult for rural residents to access rail services in Hertfordshire.

Figure 4: Road and Rail Network

4.2 Population

The Office of National Statistics (ONS) Rural Urban Classification 2011 defines areas forming settlements with populations of over 10,000 as urban and the remainder as rural. Using this ONS data, the total number of rural areas in Hertfordshire cover a total population of approximately 128,584.
people, around 12% of Hertfordshire’s total.

**Predicted Population Growth**
Hertfordshire is expecting a rise in total population higher than national projections which could place additional pressure on access to services and transport. Some of the highest population increases can be seen for the most rural districts, with Dacorum projected a rise in population by 16% by 2041, East Hertfordshire 19% and North Hertfordshire 16% as shown in figure 5.

![Projected percentage population change across Hertfordshire Districts with comparison to Hertfordshire, East of England and England](image)

**Aging Population**
Regarding the younger and elderly population;

- A total of 24% of residents in rural areas are aged 18 or under
- A total of 18% of residents in rural areas are aged 65 or above

- Using NOMIS age data by rural urban classification, the district with greatest percentage of people aged 19 and below is Hertsmere at 26%.
- Using NOMIS age data by rural urban classification, the district with greatest percentage of people
aged 65 and above is Broxbourne at 35%.

The projected population increase is compounded by the projection that Hertfordshire percentage projected population change by 2041 by age indicates mainly increases in the younger population and, a sharp increase aged 65+ as shown in figure 6 below.

Currently, the total population of younger people aged 19 or below in rural district areas ranges quite evenly from 18% to 26% (as shown in table 3 below) and is similar to the county total of 24%.

However, the number of elderly residents aged 65 and above in rural areas significantly varies, ranging from 17% in Three Rivers to 35% in Broxbourne with 18% being the average across the county.
<table>
<thead>
<tr>
<th>Age</th>
<th>Hertfordshire</th>
<th>Broxbourne</th>
<th>Dacorum</th>
<th>East Hertfordshire</th>
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<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
<td>2.4</td>
<td>2.1</td>
</tr>
<tr>
<td>Age 10 to 14</td>
<td>6.6</td>
<td>5.2</td>
<td>6.1</td>
<td>7.0</td>
<td>7.2</td>
<td>6.4</td>
<td>6.3</td>
<td>6.0</td>
<td>6.5</td>
</tr>
<tr>
<td>Age 15</td>
<td>1.4</td>
<td>1.3</td>
<td>1.2</td>
<td>1.6</td>
<td>1.4</td>
<td>1.3</td>
<td>1.2</td>
<td>1.4</td>
<td>1.6</td>
</tr>
<tr>
<td>Age 16 to 17</td>
<td>2.8</td>
<td>0.0</td>
<td>2.4</td>
<td>3.3</td>
<td>3.0</td>
<td>2.4</td>
<td>2.5</td>
<td>2.3</td>
<td>3.0</td>
</tr>
<tr>
<td>Age 18 to 19</td>
<td>1.9</td>
<td>1.9</td>
<td>1.7</td>
<td>2.1</td>
<td>1.8</td>
<td>1.8</td>
<td>1.4</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>Age 20 to 24</td>
<td>4.4</td>
<td>4.5</td>
<td>4.7</td>
<td>4.2</td>
<td>4.6</td>
<td>3.9</td>
<td>3.6</td>
<td>4.6</td>
<td>5.5</td>
</tr>
<tr>
<td>Age 25 to 29</td>
<td>4.1</td>
<td>2.6</td>
<td>4.3</td>
<td>3.6</td>
<td>4.4</td>
<td>3.8</td>
<td>3.8</td>
<td>5.5</td>
<td>5.3</td>
</tr>
<tr>
<td>Age 30 to 44</td>
<td>19.1</td>
<td>13.6</td>
<td>20.4</td>
<td>19.1</td>
<td>19.7</td>
<td>18.5</td>
<td>19.9</td>
<td>20.3</td>
<td>16.4</td>
</tr>
<tr>
<td>Age 45 to 59</td>
<td>22.9</td>
<td>18.2</td>
<td>23.2</td>
<td>23.4</td>
<td>22.1</td>
<td>23.8</td>
<td>21.3</td>
<td>22.2</td>
<td></td>
</tr>
<tr>
<td>Age 60 to 64</td>
<td>7.1</td>
<td>8.4</td>
<td>6.9</td>
<td>7.4</td>
<td>6.3</td>
<td>7.5</td>
<td>6.8</td>
<td>7.0</td>
<td>7.3</td>
</tr>
<tr>
<td>Age 65 to 74</td>
<td>9.8</td>
<td>18.8</td>
<td>9.5</td>
<td>9.6</td>
<td>8.3</td>
<td>10.4</td>
<td>9.6</td>
<td>10.9</td>
<td></td>
</tr>
<tr>
<td>Age 75 to 84</td>
<td>6.0</td>
<td>14.9</td>
<td>6.2</td>
<td>5.4</td>
<td>5.9</td>
<td>5.8</td>
<td>6.5</td>
<td>6.0</td>
<td>7.1</td>
</tr>
<tr>
<td>Age 85 to 89</td>
<td>1.5</td>
<td>0.6</td>
<td>1.5</td>
<td>1.3</td>
<td>1.8</td>
<td>1.6</td>
<td>1.8</td>
<td>1.3</td>
<td>1.6</td>
</tr>
<tr>
<td>Age 90 and over</td>
<td>0.7</td>
<td>0.6</td>
<td>0.7</td>
<td>0.6</td>
<td>0.9</td>
<td>0.9</td>
<td>0.8</td>
<td>0.5</td>
<td>0.7</td>
</tr>
<tr>
<td>Total aged 19 and below</td>
<td>24.4</td>
<td>17.5</td>
<td>22.7</td>
<td>25.4</td>
<td>26.1</td>
<td>23.7</td>
<td>25.0</td>
<td>23.0</td>
<td>22.9</td>
</tr>
<tr>
<td>Total aged 65 and above</td>
<td>18.0</td>
<td>34.9</td>
<td>17.9</td>
<td>16.9</td>
<td>16.9</td>
<td>18.7</td>
<td>19.1</td>
<td>17.6</td>
<td>20.3</td>
</tr>
</tbody>
</table>

*Stevenage and Watford excluded from table as there are no truly rural areas below a population of 10,000 in these districts/boroughs

Table 3: Age Structure in Rural Areas by Districts/Boroughs in Hertfordshire

With the number of over 65s and under 19s in the county’s rural areas alone totalling over 54,500 people, this is a sizeable proportion of the local population. These projected increases in population and the specific age groups, adds to the challenge of the need to prioritise and supports elderly and young people as identified by the LTP
Population Challenge

Population increases will add extra strain to the transport network. This is compounded by and aging population and increase in a younger population in rural areas. Rural residents, the elderly and young are who are considered disadvantaged groups and classed as a priority.

LTP4 Policy 1: Transport User Hierarchy

Despite the dominance of the car in the county, there are sections of society which have difficulty accessing services and employment, either because they do not have access to a car, are elderly or mobility impaired or cannot afford the fares. This is exacerbated in rural areas where access to services for those without access to a car is limited. The Transport User Hierarchy seeks to increase the use of sustainable transport which may lead to better accessibility for rural areas.

Improving transport for vulnerable road users may provide better opportunities for young people in rural areas to access employment or training opportunities and at a more affordable cost.

LTP4 Policy 7 and 8 – Active Travel

Encourages and improves the provision for walking and cycling which will benefit the health of younger and older residents in rural areas.

Encourages an affordable form of transport which could benefit younger people access services from rural areas.

4.3 Index of Multiple Deprivation

The Index of Multiple Deprivation is a tool which calculates local measures of deprivation in England and is an overall measure of multiple deprivations experienced by people living in an area. The lower the score the less deprived an area is.

The Indices of Deprivation 2015 provide a set of relative measures of deprivation for small areas (Lower-layer Super Output Areas or LSOAs) across England, based on seven different domains of deprivation:

- Income Deprivation
- Employment Deprivation
- Health Deprivation and Disability
- Education, Skills and Training Deprivation
- Barriers to Housing and Services
- Crime
- Living Environment Deprivation

Combining information from the seven domains produces an overall relative measure of deprivation, the Index of Multiple Deprivation (IMD). Nationally, Hertfordshire has a low deprivation score with only two LSOA’s being in the 10% of the most deprived areas nationally. Hertfordshire also has no rural wards within the 10% most deprived areas in
England. Rural areas generate a significantly less score than that for Hertfordshire as a county with table 4 below detailing the scores by district and showing the most rural districts of Dacorum, East Herts and North Herts having no LSOAs in the 10% most deprived LSOA areas nationally.

<table>
<thead>
<tr>
<th>District</th>
<th>Total LSOAs</th>
<th>10% Most Deprived</th>
<th>10-20% Most Deprived</th>
<th>20-50% Most Deprived</th>
<th>% More Deprived Than England Average 2015</th>
<th>% Change since 2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broxbourne</td>
<td>56</td>
<td>0</td>
<td>2</td>
<td>23</td>
<td>44.6%</td>
<td>10.7%</td>
</tr>
<tr>
<td>Dacorum</td>
<td>94</td>
<td>0</td>
<td>1</td>
<td>22</td>
<td>24.5%</td>
<td>8.4%</td>
</tr>
<tr>
<td>East Herts</td>
<td>84</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>6.0%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Hertsmere</td>
<td>62</td>
<td>1</td>
<td>0</td>
<td>17</td>
<td>29.0%</td>
<td>6.5%</td>
</tr>
<tr>
<td>North Herts</td>
<td>82</td>
<td>0</td>
<td>1</td>
<td>16</td>
<td>20.7%</td>
<td>4.3%</td>
</tr>
<tr>
<td>St. Albans</td>
<td>87</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>9.2%</td>
<td>-0.1%</td>
</tr>
<tr>
<td>Stevenage</td>
<td>52</td>
<td>0</td>
<td>2</td>
<td>27</td>
<td>55.8%</td>
<td>13.5%</td>
</tr>
<tr>
<td>Three Rivers</td>
<td>53</td>
<td>1</td>
<td>0</td>
<td>8</td>
<td>17.0%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Watford</td>
<td>53</td>
<td>0</td>
<td>1</td>
<td>19</td>
<td>37.7%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Welwyn Hatfield</td>
<td>67</td>
<td>0</td>
<td>0</td>
<td>15</td>
<td>22.4%</td>
<td>-5.7%</td>
</tr>
<tr>
<td>Hertfordshire</td>
<td>690</td>
<td>2</td>
<td>7</td>
<td>160</td>
<td>24.5%</td>
<td>3.9%</td>
</tr>
</tbody>
</table>

Table 4: Index of Multiple Deprivation in Hertfordshire Districts/Boroughs

Figure 7 highlights the indices of deprivation in Hertfordshire and how they vary across the county. The darker areas are the most deprived and the lightest shading represents the least deprived.

Deprivation is evident across the whole county with ten of the most deprived areas in Hertfordshire spread across seven of the ten districts. The most deprived areas can often be found right next to the very least deprived and, the largest urban areas.

Around 10% of the county’s population is living in its most deprived areas. That includes 15,400 older people (aged 65 years and over), 28,100 children (aged 17 years and under) and 70,000 working age adults (18-64 years).
As viewed in figure 7 above, there is deprivation in rural areas such as in rural Hertsmere and rural East Hertfordshire south west of Bishops Stortford, however, LSOAs with the highest deprivation scores tend to rest within urban areas such as Watford, Stevenage and Broxbourne and Hemel Hempstead. None of the important rural settlements are in the first decile of deprived areas in Hertfordshire.

**Multiple Deprivation Challenge**

Whilst Hertfordshire generally has a low deprivation score compared with nationally and no rural wards within the 10% most deprived areas in England, deprivation is still evident in rural areas across the county.

**LTP4 Policy 1: Transport User Hierarchy**

An increase in realistic passenger transport options serving rural areas could result in a reduction in the amount of rural car journeys made, which would in turn reduce congestion in the urban areas, lowering the county’s carbon footprint and lessening the instances of rural transport deprivation.
### 4.4 Car Ownership

Car ownership in the County is very high and is by far the preferred mode choice for accessing key services. Average household car ownership in Hertfordshire is 9% higher than the national average.

Having access to or owning a vehicle in rural areas is arguably different to those in urban areas because of the alternatives often available to them. For example, if a household in a rural ward has one vehicle, it might be used by one person in the household during the day for commuting, therefore leaving the remainder of the household without a vehicle. If there are fewer alternative transport opportunities within the wards where these households are located, then some people will find it difficult to travel.

There still remain some areas where a number of households do not own a car and specifically, an average of 8% of rural households who do not own a car across the county. However, this is significantly less than those in urban areas of Hertfordshire where no car ownership averages at 18%. Similarly, households with two or more cars are 11% higher in rural areas compared to urban areas and, 5% higher for three cars in a household (details in table 5 below).

<table>
<thead>
<tr>
<th>District</th>
<th>No cars or vans in household</th>
<th>1 car or van in household</th>
<th>2 cars or vans in household</th>
<th>3 cars or vans in household</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broxbourne</td>
<td>17.6</td>
<td>8.5</td>
<td>42.2</td>
<td>33.3</td>
</tr>
<tr>
<td>Dacorum</td>
<td>17.6</td>
<td>3.0</td>
<td>42.2</td>
<td>36.2</td>
</tr>
<tr>
<td>East Hertfordshire</td>
<td>14.7</td>
<td>8.0</td>
<td>43.9</td>
<td>32.9</td>
</tr>
<tr>
<td>Hertsmere</td>
<td>18.3</td>
<td>8.0</td>
<td>42.7</td>
<td>35.4</td>
</tr>
<tr>
<td>North Hertfordshire</td>
<td>18.3</td>
<td>9.3</td>
<td>44.8</td>
<td>34.0</td>
</tr>
<tr>
<td>St Albans</td>
<td>13.9</td>
<td>9.0</td>
<td>43.6</td>
<td>36.8</td>
</tr>
<tr>
<td>Stevenage</td>
<td>22.8</td>
<td>10.0</td>
<td>43.7</td>
<td>-</td>
</tr>
<tr>
<td>Three Rivers</td>
<td>14.4</td>
<td>-</td>
<td>40.1</td>
<td>36.3</td>
</tr>
<tr>
<td>Watford</td>
<td>22.2</td>
<td>9.6</td>
<td>45.3</td>
<td>-</td>
</tr>
<tr>
<td>Welwyn Hatfield</td>
<td>22.0</td>
<td>-</td>
<td>42.5</td>
<td>33.6</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>18.2</strong></td>
<td><strong>8.2</strong></td>
<td><strong>43.1</strong></td>
<td><strong>34.8</strong></td>
</tr>
</tbody>
</table>

Table 5 - Car or Vans in Urban/Rural Households
**Car Ownership Challenge**

While car ownership is high in rural areas of the county which presents issues of congestion etc. the challenge identified in this section is for those who live in rural areas without access to a car and the accessibility issues this presents.

**LTP4 Policy 1: Transport User Hierarchy**

Congestion remains a major issue in the county both for residents and for the economy and in particular, for rural areas where no alternative modes of transport to the private motor vehicle is available and adds to total congestion. There are large rural areas of the county where travel other than by car is difficult. This can be addressed in a variety of ways in particular by implementing the Transport User Hierarchy to reduce the need for car travel and consider alternative modes.

Despite the dominance of the car in the county, there are sections of society which have difficulty accessing services and employment, either because they do not have access to a car, are elderly or mobility impaired or cannot afford the fares. This is exacerbated in rural areas where access to services for those without access to a car is limited. The Transport User Hierarchy seeks to increase the use of sustainable transport which may lead to better accessibility for rural areas.

Increased passenger transport services can provide alternative transport in rural areas for those who already own a car.

**LTP4 Policy 5: Development Management**

Rural areas might benefit from new developments which provide facilities for charging points and shared mobility solutions. This will encourage the use of ultra-low vehicles and a reduction in car ownership and use.

**LTP4 Policy 6: Accessibility**

The policy covers residents who are at risk of social exclusion as they may have limited or no access to a car or passenger transport and live in areas remote from services, notably rural areas.

The policy seeks to encouraging car sharing in rural areas.

**LTP4 Policy 9: Buses**

Buses are important to provide access to facilities for those without a car in both urban and rural areas. In addition they provide a viable alternative for those who have a car already.
4.5 Rural Travel Patterns

Number of Trips by Population Density
Table 6 shows the number of trips per day by population density. The trips rates between urban and town areas are very similar (2.28 and 2.29 respectively), but the more rural areas in villages, hamlets, and isolated dwellings have a much lower trip rate (1.91), as well as having a significantly higher number of residents (43.2%) who do not go out on a travel day. (Hertfordshire Travel Survey 2018 Report)

<table>
<thead>
<tr>
<th>Number of Trips by Urban Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban &gt; 10K</td>
</tr>
<tr>
<td>%</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>9</td>
</tr>
<tr>
<td>10+</td>
</tr>
<tr>
<td>Mean no. of trips</td>
</tr>
</tbody>
</table>

Table 6: Number of Trips by Urban Category

Having no cars in the household has a significant impact on the number of trips with those who live in households with no cars, 45.7% made no trips, and the average trip rate was 1.53. In households with two cars, the number of people who made zero trips fell to 25.8%, with a trip rate of 2.47. (HCTS 2019)

Modes Used
The modes used by population density of home location are shown in Table 7 below. Cycles are used significantly less in town and fringe areas than elsewhere (1.0% of all modes). Higher proportions walk in urban (33.6%) and town and fringe areas (29.2%) relative to village areas (19.8%), while car use as the driver increases as population density decreases i.e. for rural areas. (HCTS 2015)
**Modes used by urban classification**

<table>
<thead>
<tr>
<th>All Modes</th>
<th>Urban &gt; 10k</th>
<th>Town and Fringe</th>
<th>Village, Hamlet &amp; Isolated Dwellings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Walk</td>
<td>33.6</td>
<td>29.2</td>
<td>19.8</td>
</tr>
<tr>
<td>Cycle</td>
<td>2.4</td>
<td>1.0</td>
<td>2.1</td>
</tr>
<tr>
<td>Motorcycle</td>
<td>0.2</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>Bus</td>
<td>4.4</td>
<td>4.3</td>
<td>5.2</td>
</tr>
<tr>
<td>Train</td>
<td>5.8</td>
<td>6.3</td>
<td>4.9</td>
</tr>
<tr>
<td>Car Driver</td>
<td>46.6</td>
<td>51.3</td>
<td>60.1</td>
</tr>
<tr>
<td>Car Passenger</td>
<td>17.7</td>
<td>22.3</td>
<td>18.2</td>
</tr>
<tr>
<td>Tube</td>
<td>2.7</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>Other</td>
<td>0.8</td>
<td>0.2</td>
<td>0.7</td>
</tr>
</tbody>
</table>

**Table 7: Modes used by urban classification**

---

**Travel Patterns Challenge**

Like car ownership, those in rural areas without access to a car make significantly less trips which indicates reduced accessibility. A solution to this is to reduce journeys required and improve accessibility through alternative modes of transport.

**LTP4 Policy 1: Transport User Hierarchy**

An increase in realistic passenger transport options serving rural areas could result in a reduction in the amount of rural car journeys made, which would in turn reduce congestion in the urban areas, lowering the county’s carbon footprint and lessening the instances of rural transport deprivation.

**LTP4 Policy 3: Travel Plans and Behaviour Change**

The encouragement of travel plans and smarter travel choices could reduce congestion and improve the environment in rural areas such as by reducing car travel to employment, businesses and other organisations from rural areas.

**LTP4 Policy 6: Accessibility**

The policy seeks to encouraging car sharing in rural areas.

**LTP4 Policy 7 and 8: Active Travel – Walking and Cycling**

Policy will deliver infrastructure to encourage walking and cycling and improve access to key services from rural areas.

Supports the implementation of the Rights of Way Improvement plan which aims to improve rural rights of way and improve access to employment and other services.

**LTP4 Policy 9: Buses**

Buses are important to provide access to facilities for those without a car in rural areas. In addition, they provide a viable alternative for those who have a car already.
4.6
Access to Key Services

Accessibility is defined as people being able to access key services at a reasonable cost, in reasonable time and with reasonable ease.

Typically, key services include employment, education and health. Users may be unable to access the key services because of a lack of passenger transport, or because they have mobility problems, a lack of private transport or are unable to afford the costs of travel. People living in rural areas are particularly disadvantaged as commercial bus services tend not to operate where passenger numbers are low, and a bus service is financially unviable. A number of accession maps were produced to show the accessibility of Hertfordshire residents. For this rural transport strategy, urban areas have been covered by grey shading to visibly show time bands of how long it takes to get to their nearest service by passenger transport, specifically bus services in rural areas. The categories studied and the results are outlined below:

4.6.1 Hospitals

Hospitals provide key medical services required by many residents in the county however, due to hospitals mainly being located in urban areas; residents living in rural areas may find difficulties accessing this key service. Accessing hospitals for rural residents without a car is generally difficult via public transport, because of lack of or infrequent bus services which do not coordinate well with appointment times.

Figure 8 displays accessibility by bus to hospitals from rural areas. It clearly depicts that there is a significant issue for rural areas accessing hospitals with the majority of areas taking 46-60 minutes by bus (and the areas in white over 60 minutes). However, continued collaboration between the County Council and Clinical Commissioning Groups jointly fund a range of community-based transport schemes which provide a flexible range of local door to door transport options to help rural residents to attend timed hospital appointments.

The aim is to make it easy for patients to access healthcare with partnership work continuing to develop as local health services are reconfigured and as the NHS is reconfigured nationally.
4.6.2 General Practitioners

General Practitioners (GPs) now offer a wide range of medical services which were previously often only available at hospitals, such as blood tests and diabetes care. There are more GP surgeries than there are hospitals, which mean that for some rural residents it is possible to access a surgery by buses. As shown, in figure 9 travel times by bus to GP surgeries is generally quite good with mainly only North Hertfordshire experiencing travel times of over 45-60 minutes.

Walking is also an option for residents in rural areas to GP surgeries however, as shown in figure 10, for the majority of rural areas, walking can take up to 46 minutes and above. If a patient is unable to walk far and bus service options are not available, community transport may be the only option of travelling.
Figure 9: Bus Accessibility to GPs

Figure 10: Walking Accessibility to GPs
4.6.3 Schools

Access to primary schools is currently good in rural areas, as a large number of primary schools are located within close proximity of most rural residents. This means primary school pupils in rural areas have decent access to schools by walking as shown below in figure 11 where most walking journeys take between 15 and 45 minutes.

Unlike primary schools however, there are fewer secondary schools in the county and parents have more choice as to where to send their children to school. The software used to calculate accessibility to secondary schools automatically calculates the time/distance to the nearest school using general bus timetable information, therefore this must be considered when analysing the maps.

Also, school transport either organised privately or through the local authority is available in certain circumstances which are not considered in the accessibility mapping.

Young people living in rural areas may have difficulty reaching a secondary school by walking or within 30 minutes as shown in figure 12 below, especially if...
there are no or inconvenient bus services. This is a particular issue in the north and east of the county. In the rural areas that border other counties, it may be more convenient for pupils to travel to the adjacent county for their education.

Figure 12: Walking Accessibility to Primary Schools

4.6.4 Employment

People living in rural areas in the county are more likely to work at or closer to home. They also travel longer distances to get to work. Some of the largest employment centres in the county are remote from transport interchanges which could connect to rural areas and so do not optimise access to passenger transport. This increases reliance on the car and reduces the labour market catchment for rural areas.

As a result, car use is higher for work journeys in rural areas compared with urban areas in the County overall. Levels of train use, bus use, walking and cycling to work are minimal in rural areas however; there are a significantly high proportion of residents who live in villages that working from home, 43.1%, relative to other locations (HCTS, 2018).
4.6.5 Shopping

Access to town centres and large food shops by walking, cycling or passenger transport can be a problem for rural residents without a car. Ideally, return bus journeys from rural areas should provide frequent and reliable services allowing scope for adequate shopping time in towns centres and food shops.

While internet shopping is an option for those residents in rural areas and is becoming more common practice, internet shopping is only an option for people if they have access to a broadband connection. This is covered further in the future and technology chapter (chapter 5).

4.6.6 Rail Stations

The results from the Hertfordshire County Travel Survey (2015) stipulate that people living in rural areas are less likely to use the train to travel to work than in urban areas, and the main mode of travel is by car. There are 50 railways stations in Hertfordshire, many of which are located beyond the boundaries of the rural areas as shown in figure 13 below.

The routes are predominantly arranged to serve London, and therefore lack east west connections. As a result, many of the rural wards in North Herts and East Herts are not directly served by the railway network making it difficult for rural residents to access rail services in Hertfordshire by public transport.

Figure 13: Bus Accessibility to Rail Stations in Rural Areas
Accessibility Challenge

Accessibility in rural areas presents some challenges when accessing key services at a reasonable cost, in reasonable time and with reasonable ease. In particular there are issues accessing hospitals, secondary schools, and employment and rail stations from rural locations. Users may be unable to access the key services because of a lack of passenger transport, or because they have mobility problems, a lack of private transport or are unable to afford the costs of travel. People living in rural areas are particularly disadvantaged as commercial bus services tend not to operate where passenger numbers are low and a bus service is financially unviable.

LTP4 Policy 6: Accessibility

The accessibility policy directly targets disadvantaged groups who have difficulty accessing services which includes residents in rural areas.

The policy covers residents who are at risk of social exclusion as they may have limited or no access to a car or passenger transport and live in areas remote from services, notably rural areas.

People living in rural areas are particularly disadvantaged as commercial bus services tend not to operate where passenger numbers are low and a bus service is financially unviable. This policy seeks to increase bus service provision to these areas and in particular, encourage voluntary transport provisions and demand responsive transport which can offer door-to-door transport.

The policy seeks to encouraging car sharing in rural areas which can improve accessibility.

LTP4 Policy 3: Travel Plans and Behaviour Change

Supports school travel plans, and working closely with parents, pupils, teachers and local residents to deliver a network of more sustainable transport links to school.

4.7 Equestrians

Equestrianism is an extremely popular and healthy activity for people of all ages. There are over 14,000 equines in Hertfordshire and £44m generated from related services (BHS, 2019) The British Horse Society (BHS, 2015) has reported that the estimated GB horse population, including both private and professional ownership, is just below one million horses (944,000) and that there are an estimated 446,000 horse-owning households in the country. The economic value of the equestrian sector stands at £4.3 billion (2015) of consumer spending across a wide range of goods and services each year. This has increased from £3.8 billion in 2011. Riding for pleasure, at 96%, was the most popular equestrian activity, with 59% of riders taking part in non-affiliated competitions. Horse riding offers employment to significant numbers of people often in a rural community however opportunities are reducing.

http://www.beta-uk.org/pages/industry-information/market-information.php
There are over 200 promoted rights of way routes in Hertfordshire covering approximately 1125 miles (1,800km) of the network and their purposes includes routes for horse riders however, the network does not adequately provide for cycling, horse riding and horse-carriage drivers.

Due to a lack of connections in the network, horse riders use highway roads which pose a safety risk not just to horses and their riders but to motorised vehicle and other users.

The LTP4’s Transport User Hierarchy policy will try to address this by providing an opportunity to improve rural rights of way which will benefit equestrians by providing safer, more sustainable routes and better facilities. The Rights of Way Strategy also this as a key issue the following core action from the ROWIP are proposed to meet needs and demands of horse riders:

- Promote ROW and the health benefits of physical activity in the natural environment.
- Develop links into the countryside from towns.
- Create off-road routes linking communities with places of work, schools and other local facilities.
- Extend the network for cyclists, horse-riders and horse & carriage drivers.
- Develop a range of circular off-road routes which support health and wellbeing.
- Ensure the off-road network is protected, extended and enhanced through development proposals.
- Work to improve the safety and attractiveness of the network affected by busy transport routes.

### Equestrian Challenge

Although horse riding is popular in Hertfordshire, particularly in rural areas, the network has a lack of adequate and safe routes.

**Policy 1: Transport User Hierarchy**

The Transport User Hierarchy provides an opportunity to improve rural rights of way which will benefit equestrians by providing safer, more sustainable routes and better facilities.

**LTP4 Policy 7 and 8: Active Travel – Walking and Cycling**

Whilst this policy generally supports active travel modes of walking and cycling, it also supports the implementation of the Rights of Way Improvement which also provides access for horse riders.

**LTP4 Policy 5: Development Management**

Resists development that would either severely affect the rural or residential character of a road or other right of way, or which would severely affect safety on rural roads, local roads and rights of way especially for vulnerable road users such as horse riders.

**LTP4 Policy 15: Speed Management**

Policy applies to the whole of the county, including rural areas with an aim to achieve appropriate speeds in the interest of safety and other road users such as horse riders.
4.8 Carbon Emissions

Carbon emissions from road transport are a significant contributor to the gases that are causing climate change. In general, rural Hertfordshire is a pleasant place to live and work. However, not unlike other parts of the country, it does experience some specific environmental issues with carbon emissions (CO2). The LTP4 acknowledges carbon emissions (CO2) as an issue in the county and in particular, East Hertfordshire and North Hertfordshire suffer from some of the highest transport-related CO2 emissions in the country.

Figure 14 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 population, which indicates an issue between rural locations and carbon emissions. Residents of these areas are likely to be 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.

![Hertfordshire 2016 CO2 emissions estimates](image-url)
Carbon Emissions Challenge

Carbon emissions from road transport are a significant contributor to the gases that are causing climate change and rural areas experience environmental issues with carbon emissions (CO2).

Policy 1: Transport User Hierarchy
An increase in realistic passenger transport options serving rural areas could result in a reduction in the amount of rural car journeys made, which would in turn reduce congestion in the urban areas, lowering the county’s carbon footprint.

LTP4 Policy 2: Influencing land use planning
New developments which are planned to be served by sustainable transport may reduce traffic congestion, lower carbon and improve air quality in rural areas.

LTP4 Policy 5: Development Management
Developments which are planned to be served by sustainable transport may reduce traffic congestion, lower carbon and improve air quality in rural areas.

LTP4 Policy 19: Emissions reduction
Greater car use in rural areas increases carbon emissions and so promoting modal shift to more sustainable modes will benefit rural areas.

4.9 Air Quality

Poor air quality contributes to heart and lung conditions, and reduces life expectancy and therefore, roadside air quality is monitored across the county. Whilst the annual mean average levels of roadside nitrogen dioxide for Hertfordshire is below the government’s threshold, there still remains a number of Air Quality Management Areas (AQMAs) in Hertfordshire as declared by the County Council and the Highways Agency (HA) as a result of respectively maintained roads.

AQMAs are monitored and acted upon accordingly to address issues of poor air quality. Most of the AQMAs are located to the south of the county with several declared AQMAs falling around the borders of the rural areas mainly as the result of the Highways Authority (HA) maintained roads. It is primarily the responsibility of the District and Boroughs in partnership with HCC to devise an action plan to mitigate the effects of the AQMA to the most appropriate and where possible to address it altogether. Nevertheless, no matter where the responsibility lies, the declarations still require the appropriate action to alleviate the consequences of AQMAs.

It should be noted that although people living in rural areas are not as exposed to elevated levels of air pollution compared to urban areas, they do contribute to the exposure of those living in areas of...
elevated air pollution. This occurs through traveling to or through locations exposed to air pollution and by receiving goods and services that originate from or move through those locations.

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 and therefore, a new Air Quality Strategy is currently under development and will seek to reduce the impact of poor air quality on human health; the issues associated with emissions from road traffic being a major contributor to air quality problems, and explore the issues surrounding air quality and rural areas and where reducing car journeys through the locations would reduce the emissions.

Further information on AQMAs and locations can be found by visiting https://uk-air.defra.gov.uk/aqma/maps.

<table>
<thead>
<tr>
<th>Air Quality Challenge</th>
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<tbody>
<tr>
<td>Although AQMAs are located in mainly urban areas, they can also be found on the borders of rural areas and have a negative impact. Air quality is a continuing issue for both urban and rural areas.</td>
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<table>
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<tr>
<th>LTP4 Policy 20: Air Quality</th>
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<tr>
<td>The policy seeks to reduce the impact of poor air quality to human health by Investigating the use of Clean Air Zones. Also, HCC aim to continue to monitor and assess air pollution levels in rural and urban areas.</td>
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<tr>
<td>Rural areas will be taken into consideration when implementing, monitoring and reviewing the county council’s Air Quality Strategic Plan.</td>
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4.10 Bus Services

Buses provide an important social function, increasing access to vital services including education, healthcare and shopping. In a county with levels of car ownership well above the national average, there are 8% of rural households where no car is available, and therefore to whom the bus can provide a vital lifeline to access services.

An extensive commercial bus network operates in the county (see Figure 15). In addition to this the county council supports a relatively small proportion (around 6% by patronage) of local bus services in Hertfordshire. The county council only supports those journeys that the commercial sector would not provide, and in the absence of which would be unlikely to operate at all, or at a sufficient level to meet need. This is particularly relevant for bus services in rural areas where routes cannot be accommodated commercially. The county council and national government (through the Bus
Service Operators Grant) contribute to the funding available to support such routes.

In light of financial pressures on the public sector, in recent years budgets for contracted bus routes have seen reductions, particularly revenue spending for bus subsidies. Other sources of funding for contracted bus services in the county will be explored, which include developer contributions and bids to specific national government grants.

Hertfordshire has a long-standing form of collaboration between local authorities and bus companies called the Intalink Quality Partnership which provides a forum for councils and operators to work together in a proactive, structured and co-ordinated fashion to enhance the network and improve the service to passengers.

Government has recently passed the Bus Services Act 2017, which has a number of implications for the way in which bus services are delivered in the UK. The Act provides additional powers to local authorities for stronger partnership working, franchise control of bus services and open data, and the implications for Hertfordshire are currently under consideration. Hertfordshire County Council’s assessment of the new powers enabled by the Act, suggests:
• Franchising could provide benefits for passengers, by using income from profit-making routes to offset the costs of services which are not commercially viable. It does, however, carry large financial risks and entail resources not currently available to the county council, and without a Directly Elected Mayor is only available with the consent of the Secretary of State.

• Enhanced Partnerships provide a framework for collaboration with Bus Operators with stronger leverage than voluntary partnership working, allowing a wide range of agreed facilities, measures and service requirements to be statutory. There is also potential for bus registration powers to be devolved from the Traffic Commissioners.

• Advanced Quality Partnerships would allow a more limited range of commitments to be secured on a voluntary basis and would in effect be a roll-forward of best practice already delivered in the county. It would therefore be the lowest risk of the three options but enable most restricted progress.

The Act strengthens the existing bus operator and local authority partnership arrangements, establishing Advanced Quality Partnerships and Enhanced Partnerships. These two forms of partnership can enhance bus services in rural areas by offering mechanisms to agree and enforce standards and requirements relating to bus service marketing and promotion, fares, participation in ticketing schemes, passenger information, vehicles and emissions. Working with this wide range of partners through the Intalink Quality Partnership and the implications of the Bus Services Act it is anticipated that there can be continued improvements in bus facilities and services in rural areas.

A revised Bus Strategy is being developed as a supporting document to LTP4 and will bring together the Intalink Strategy and the Bus Strategy adopted under the previous Local Transport Plan. This will provide greater focus for the county council to work in partnership with operators to support the commercial bus network, in addition to its wider responsibilities of supporting socially necessary services such as in rural areas, and concessionary travel.

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<tr>
<th>Bus Service Challenge</th>
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<tr>
<td>Financial pressures on bus service budgets means that only support a small amount of localised bus services can be contracted to serve rural areas which reduce accessibility for rural residents who rely on bus services.</td>
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<thead>
<tr>
<th>Policy 1: Transport User Hierarchy</th>
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<tbody>
<tr>
<td>Provides opportunities to increase accessibility in rural areas by better provision of bus transport. These alternative modes of transport could be more affordable and provide transport for all.</td>
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| LTP4 Policy 6: Accessibility |
This policy seeks to increase bus service provision to rural areas by working with bus operators and providing resources for bus transport.

**LTP4 Policy 9: Buses**

- Supports the delivery of improved bus services in rural areas which can reduce social exclusion by improving access to transport and key services.
- Utilises new powers for the local authority through the bus services act to improve bus services in rural areas.
- Work more closely with the Intalink Partnership to improve bus services in rural areas.
- Work in partnership with Borough/District councils, other local authorities, health authorities, statutory agencies, commercial bus and train operators, and the voluntary sector to develop and co-ordinate transport provision in rural areas where passenger transport provision is poor.
- Improve school bus journeys in rural areas improving access and availability of schools in line with the home to school transport policy.
- Limited East West connectivity by rail means bus services are vital in rural areas to ensure residents have access to key services and serve towns.
- The development of appropriate passenger fares and smart ticketing might benefit residents in rural areas by making tickets and travel more affordable.
- Buses are important to provide access to facilities for those without a car in both urban and rural areas. In addition, they provide a viable alternative for those who have a car already.
- Improved passenger information such as real time information will benefit residents living in rural areas, enabling them to see real bus timings at bus stops and on smart phones.

### 4.11 Community and Demand Responsive Transport

Demand Responsive Transport may provide opportunities to more efficiently serve rural areas with little or variable passenger demand. It can also provide direct, almost door-to-door travel where existing journeys are complex, using mobile phone app to book and automatically plan routes.

There are various forms of demand responsive transport that can assist in providing access to rural areas without regular commercial passenger transport. This is transport that can be requested by clients often on demand for a fee.

The county council along with other stakeholders supports a range of door to door transport services, including:

- Dial a Ride, a pre booked, accessible transport service enabling elderly and disabled residents to retain their independence and access local services.
- Community and voluntary car schemes which link volunteers using their own vehicles, with
residents who require some assistance, are less mobile and who cannot get to or onto a bus.

• Enabling disabled residents to retain their independence and access local services via private car ownership.
• Minibus schemes which operate minibuses that can be hired by community groups for group trips.
• Health transport which is provided by non-emergency patient transport to patients who have a medical need for transport to their hospital appointments.

The County Council provides a Dial-a-Ride service through its own fleet. This provides one vehicle per district area and allows each district or borough to top up provision through either additional dial-a-ride vehicles or other community schemes. The County Council is committed to retaining this service on a consistent basis to meet needs for individuals with mobility problems but will continue to look at the best way of delivering this at local level.

The County Council supports and jointly funds with Clinical Commissioning Groups community-based transport schemes which are flexible enough to provide transport to urban, market town & rural populations and can cover a wide range of mobility, providing residents with a range of local door to door transport options;

• timed GP/ hospital appointments - voluntary car or Shuttle scheme
• shopping trips - shopper service Shopmobility
• rural services - scheduled rural services
• social/group trips - minibus scheme
• visit friends/family - voluntary car service

The following website https://communitytransportherts.org/ provides further detail of community transport in Hertfordshire. It is designed to help residents find local Herts community transport services which is particularly beneficial for residents who live in rural areas to check what transport is available in their areas.

In determining which rural transport projects will be supported and implemented in the future, the County Council will take account of;

• Whether the scheme complements the main passenger transport network by providing access to areas where conventional service provision is not cost effective or meets needs which would be difficult or impossible by the main network;
• Supporting strategies that deliver on a district wide basis and involve the whole community;
• Whether the scheme provides value for money and is likely to be sustainable and deliverable, including taking into consideration the likely availability of volunteers;
• The County Council budget and the access of the scheme to other funding sources such as developer funding.
• It should be noted that due to an increasingly constrained funding
environment for passenger transport, the resulting network is likely to be more volatile than in previous years and not wholly within the County Council’s control.

In the future, technology may support demand responsive transport to play a greater role in delivering more flexible services particularly in rural areas. Technology can enhance the efficiency and customer interface of demand responsive services, reducing their cost and making them much more user friendly and responsive.

Demands responsive transport projects are encouraged to being piloted by operators in the country, and the County Council will work with partners to continue develop such initiatives. Future opportunities exist to expand demand responsive transport and multi-modal travel, may support the emergence of Mobility as a Service. This will develop with facilitation of smart phones, smart ticketing and increased data sharing and processing.

### Community Transport Challenge

People living in rural areas are particularly disadvantaged as commercial bus services tend not to operate where passenger numbers are low and a bus service is financially unviable. There is currently decent provision of community transport in the county which serves rural areas however constrained funding might reduce service provision in the future. Future technology can help make community transport more efficient and have the potential to enhance on demand services.

<table>
<thead>
<tr>
<th><strong>Policy 1: Transport User Hierarchy</strong></th>
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<tbody>
<tr>
<td>Provide opportunities to increase accessibility in rural areas by better provision of passenger transport. These alternative modes of transport could be more affordable and provide transport for all in particular the use of community transport services and voluntary transport.</td>
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<tr>
<th><strong>LTP4 Policy 6: Accessibility</strong></th>
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<tbody>
<tr>
<td>This policy aims to work in partnership with key stakeholders such as community transport operators, the voluntary sector and public service providers to enhance services in the county including rural areas.</td>
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| This policy seeks to improve transport service provision to rural areas, in particular, encourage voluntary transport provisions and demand responsive transport which can offer door-to-door transport to the benefit of rural areas. |
4.12

Shared Mobility

Shared mobility options will also play a vital role in improving accessibility in rural areas. Shared mobility can be in the form of:

- Lift share schemes
- Car clubs
- Ride sharing via taxis and other private hire services
- Buses or community services on demand

For successful transport and mobility services in rural areas solutions should be devised for the rural population and especially the disadvantaged. Technologies should be considered which can provide and enable more efficient planning of journeys, provide real time information, include multimodal travel planners and consider in future, autonomous vehicles.

Transport solutions at bus/train stations can provide for door to door transport and for last mile connectivity whilst incorporating active modes such as sharing of bikes and e-bikes.

Good Governance is key to enabling sustainable rural mobility where new shared mobility concepts and solutions should be financially viable involving, good marketing campaigns, decent system reliability, and attractive fares for passengers.

Feasibility studies and best practise case studies should be explored to establish where shared mobility services could be best focused and engagement with the market must be undertaken to understand appetite for deploying services locally, and potentially use developer funding to support services being established.

The LTP identified a number of activities the county council could investigate to support shared mobility and the Accessibility Strategy and other LTP supporting documents will consider these given their potential to support delivery of a number of LTP policy areas.

<table>
<thead>
<tr>
<th>Shared Mobility Opportunity</th>
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<tr>
<td>Shared Mobility does not currently present any challenges for rural areas but is an opportunity to improve transport provision and provide for door-to-door transport.</td>
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<tr>
<th>LTP4 Policy 5: Development Management</th>
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<tr>
<td>Rural areas might benefit from new developments which provide facilities for shared mobility solutions. This will encourage the use of sharing vehicles and a reduction in car ownership and use.</td>
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<tr>
<th>LTP4 Policy 6: Accessibility</th>
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<tbody>
<tr>
<td>Supports improving travel choices and options, including support for the provision of shared mobility initiatives.</td>
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</table>
4.13 Mobility-as-a-Service (MaaS)

Developments in technology with initiatives such as mobile phone apps and smart ticketing, along with combinations of packaging together community transport, demand responsive transport, shared mobility and bus transport can help deliver Mobility as a Service, which is an innovative mobility concept combining multiple transport modes with technology and data to facilitate integrated journey planning, booking and payment.

Rural areas have challenges in organising mobility services due to long distances travelled, as well as reduction in budgets for bus and community services. The emergence of MaaS technology, as well as autonomous “driverless” vehicles, can radically change the face of rural travel in the county, providing many more opportunities and access to services. MaaS can provide rural areas the opportunity to potentially organise transport services more efficiently with the collaboration of various stakeholders in the business and public sector and by taking into account the unique characteristics of rural areas.

### Mobility-as-a-Service Opportunity

Mobility as a service is an opportunity for rural areas rather than a challenge. The LTP recognises its importance but there is not a specific policy which covers the concept. However, through shared mobility and better technology and data sharing, the concept of MaaS has been gaining momentum.

4.14 Freight

A key aspect of managing traffic on the network is managing the movement of freight and logistics vehicles. Effective freight and logistics operations are important to local and national economy; therefore, the aim should be to support these operations but in a way that does not compromise the natural environment and quality of life for rural residents.

The primary route network (PRN) designates roads between places of traffic importance across the UK, with the aim of providing easily identifiable routes to access the whole of the country. The PRN is designed to cater for high flows of HGVs and LGVs however; access to the final destination via local roads can have major impacts on the environment and on congestion in rural areas.

Encouraging freight to use the primary route network will reduce the number of HGVs and LGVs using local rural roads which can have major impacts on congestion and the environment in rural areas. This can be achieved by using effective signing and expanded use of Intelligent Transport Systems. Details of the primary routes and how the network will be managed can be found in the Network Management Strategy.
Close working with local planning authorities regarding freight and logistics movements from developments will also play a key role in managing the movement of goods. Also, the establishment and formation of Freight Quality Partnerships as well as solutions such as freight aggregation, quiet technology initiatives, time limited deliveries and delivery collection hubs will have an important role in reducing the impacts on rural areas, in particular to first /last mile of journeys which deviate from the PRN, which could become increasingly necessary with further growth in online shopping.

### Freight Challenge

Freight can compromise the natural environment and quality of life for rural residents.

### LTP4 Policy 16: Freight and Logistics

Encouraging freight to use the primary route network will reduce the number of HGVs and LGVs using local rural roads which can have major impacts on congestion and the environment in rural areas.
CHAPTER 5
TECHNOLOGY

There is rapid change in technology in areas such as autonomous vehicles and data sharing. These technological changes are altering the way we offer transport services and will all affect the volume and form of future rural transport demand and accessibility needs. Whilst these changes may offer more transport choices for rural users, this future of technological change is difficult to predict and so the requirements for the types of infrastructure required in rural areas are unpredictable. This presents a significant level of uncertainty as to which direction the public and private sector will and should take for the supply and demand for different transport modes, technologies and systems. There is also an issue of older people in rural areas may find it difficult in regard to the uptake of new technology.

5.1 Digital Connectivity

Rural accessibility is more than about transport provision, with the potential for technology to enable services to be accessed without the need to travel. The Internet and advances in mobile communication have meant that more people are accessing and receiving services in new ways minimising the need to travel. However, this potentially creates new issues and a divide between those who have access to and can use new technology, and those that do not have access or cannot use the technology.

Technology opens up many opportunities such as online shopping and possibly virtual health appointments. Other opportunities will no doubt follow as broadband becomes more widely available, technology becomes more sophisticated and people become more familiar with how to use it.

The smartphone and digital revolution can radically transform traditional transport models so that passengers can choose from a wider range of affordable and accessible mobility options than ever before. There is a sense that autonomous vehicles will solve the everyday problems of rural transport and accessibility however, digitally-enabled innovation in rural areas can and have already made many positive impacts to rural transport networks. For example, increased access to real time data from a variety of networks, products and services, and advances in data analytics offers the potential to obtain a better understanding of travel behaviour and provision and make more efficient use of resources.

5.2 Internet and Broadband

In the county, coverage of superfast broadband is currently very respectable at 97.3% of however, there are continuing aspirations to achieve a target of between 98% and 98.5% by the end of 2019 and there are plans to explore further funding options to extend the coverage even further. This evidently bodes well for
internet coverage in rural areas and HCC are continuing to review funding options moving forwards, including national funding pots. Further information regarding superfast broadband coverage can be obtained from the Connected Counties website [https://www.connectedcounties.org/](https://www.connectedcounties.org/).

On a national level, commercial investment in full fibre networks is gaining momentum with major investments by established and alternative network operators. Over a million premises now have a fibre connection not just in urban areas, but also in rural areas as well. The Future Telecoms Infrastructure Review (Department for Digital, Culture, Media & Sport, 2018) recognises that the roll out of full fibre connectivity might be unviable commercially for rural areas and so additional funding will be required as rural areas should not be forced to wait until the rest of the country has connectivity.

There are strong economic and social reasons for national coverage of world class connectivity in broadband. Fast, reliable fibre networks will offer significant benefits for rural areas. Fast, reliable connectivity can deliver economic, social and well-being benefits for both rural businesses and residents. Easier access to learning resources helps with schoolwork; improved video-calling to distant family reduces loneliness; and reliable access to national and local government services increases fairness. The longer-term impact of greater connectivity in rural areas can reduce travel and create greater innovation in rural businesses. This has the potential to reduce pollution and improve productivity while also helping to retain and attract young, talented people and families to rural areas, and reinvigorate rural societies and economies.

Therefore, it is important that support and funding from the local authority and central Government continues for rural areas where the commercial market might find it too costly to deliver such as due to low population densities or topography.

### Internet and Broadband Opportunity

The internet and broadband provision in the county as a whole are good. While there are still a small percentage of areas which are not covered by superfast broadband, these are looking to be addressed through the Connected Counties Programme. There are opportunities to support the continued the roll out of better-quality broadband such as fibre connections in rural areas which will enhance transport provision however, policies may be included in other HCC non-transport related strategies.

### 5.3 Mobile Internet Networks

Mobile phone coverage is currently being market driven in the county and although coverage is generally good, there are still some black spots which will require new masts to improve mobile phone coverage and reliability. Whilst HCC is not directly involved in mobile data networks and coverage, the Government’s strategic
priority is to promote investment and innovation in 5G to ensure services and applications are widely available to the benefit of consumers and the UK economy. The Future Telecoms Infrastructure Review encourages new solutions to connectivity challenges, in particular to expand rural coverage. There is a clear role for national policy to support investment and innovation in 5G and the Review has identified improving rural coverage as a priority area.

Mobile Internet Networks Opportunity

The mobile internet coverage in the county as a whole is good. While there are still a small percentage of areas or ‘black spots’ with poor coverage the county council are encouraging commercial mobile network providers to address these. There are opportunities for the county council to support the roll out of 5G networks across the county and ensure it covers rural areas.

5.4 Ultra-Low Emission Vehicles (ULEV)

The county council is supporting the take-up of ULEV throughout the county and will work closely with the districts and borough councils to facilitate the installation of charging infrastructure on a cost neutral basis. Initiatives that will be considered include working with stakeholders to facilitate Electric Vehicle (EV) car club provision.

Whilst the LTP supports the uptake and installation of ULEV vehicles and infrastructure, it does not emphasise the implications for rural areas of Hertfordshire which are important given the private motor vehicle is the primary form of transport, the need to reduce emissions, and protect rural areas unique environmental characteristics.

Some of the key barriers to uptake of ULEV in rural areas include cost, range, and the shortage of charging points. However, these barriers are reducing due to recent technological developments, and the barrier is possibly consumer perception.

Infrastructure enhancements should be encouraged in rural areas however, further work should also be made to market and educate residents in rural areas of the benefits of ULEV vehicles such as financially through the reduced use of expensive fossil fuels and, the reduced environmental impact through lower vehicle emissions. Advice should also be offered for home charging infrastructure and how charging points can be fitted at home.

Policies and strategy for ULEVs will also include bus transport where the council will work with bus operators, particularly for the passenger transport contracts on which the council has influence, to accelerate adoption of low emission technology. This will be covered further in the Intalink Bus Strategy and further developments made following decisions made regarding the Bus Services Act 2017.
**ULEV Opportunity**

ULEVs are an opportunity for the county as a whole to adopt and understand the benefits of, in particular for rural areas where there are unique environmental characteristics which should be protected. Opportunities exist to understand the current barriers to uptake which may differ from urban to rural areas where infrastructure is not readily available and where funding may not be focussed.

**LTP4 Policy 19: Emissions reduction**

The policy looks to address barriers to ULEV uptake particularly where this can positively affect areas with identified poor air quality. The supporting for the uptake of ULEV vehicles is countywide and so includes rural areas.

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**5.5 Autonomous ‘Driverless’ Vehicles (AV)**

The emergence of autonomous “driverless” vehicles has the potential to radically change the face of rural travel in the county. They offer the potential to significantly improve access to key services for those in rural areas who are unable to drive or who do not have access to a privately-owned car.

Further developments in the automated technology could help in the demand responsive, shared mobility and MaaS initiatives, where operating on-demand services could help to significantly bolster the accessibility of rural areas, as well as improving economic activity such as through improving access to commuting to work or education where it is quite limited in rural areas due to a lack of bus service provision.

While it should be noted that the development of autonomous vehicles on rural roads will face technical challenges such alignment and visibility on narrow rural lanes, driverless vehicle technology is developing at a rapid pace with trials already taking place on UK roads. There is uncertainty over when highly or fully autonomous vehicles will represent a certain proportion of the fleet, but there are high levels of private sector investment in this area and the national government is taking a positive stance to facilitating the technology.

**Autonomous Vehicle Opportunity**

Autonomous vehicles offer an opportunity to significantly improve access for rural areas. The LTP does not specifically mention AVs in its policy wording however, the strategy itself includes a driver of change and future case scenario section (chapter 4 LTP, 2018) where the potential for AVs is recognised, and the LTP strategy remains flexible and adaptable to ensure that any advancements with AVs can be included in the county’s transport plans as the technology develops.
CHAPTER 6
GROWTH AND TRANSPORT PLANS

Growth and Transport Plans are a new joined up approach to sub-county transport planning which is more in alignment with planned future housing and employment growth and have replaced the Urban Transport Plans. Hertfordshire has been split into five new strategic spatial transport plan sub-areas (traditionally Urban Transport Plans would only cover one urban area), which cover a wider geographic area including both urban and rural areas as shown in figure 16 below.

Figure 16: Growth and Transport Plans Sub-Areas

GTPs identify the interventions which will be needed to support and help facilitate sustainable development and set out packages of recommended short, medium- and long-term interventions which will address the key challenges and support planned growth. The
GTPs cover predominantly urban areas, but some schemes are inter-urban or include rural villages around the edges of urban areas. North and Eastern Hertfordshire are more rural in nature therefore more schemes are proposed that will benefit rural areas.

CHAPTER 7
OVERALL APPROACH

7.1 General Work Programmes

Implementation of transport interventions in rural areas is undertaken in accordance with the principles, objectives and policies set out in the Local Transport Plan. It is guided by implementation procedures set out in the suite of LTP supporting documents and on a needs basis is supported by Highways intervention programmes and schemes which include maintenance and road safety interventions which are delivered across the county including rural areas.

The County Council funded highway infrastructure schemes in rural areas are implemented and funded through the County Council’s ITP schemes. This includes highway infrastructure for walking, cycling and road vehicles including highways maintenance and road safety.

The ITP is delivered primarily by Hertfordshire Highways throughout the County. It forms part of the plans delivered through the County Council’s Integrated Works Programme (IWP) for highways. Funding and implementation of rural transport schemes through the ITP is dependent on prospective schemes and interventions.
7.2 Growth and Transport Plans

As mentioned in chapter 6, some GTPs include rural areas such as villages around the edges of urban areas and will recognise the challenges faced in these areas. It will also identify interventions through packages of schemes which will support and help facilitate sustainable transport in these areas.

In areas not covered by GTPs, the County Council will support and encourage measures to ensure that transport services in rural areas enable people to access important destinations and services and contribute to reducing the dominance of the car as the favoured mode of transport. It will also support innovative sustainable transport solutions such as shared mobility initiatives, hub and spoke schemes, and demand responsive transport which will benefit residents living in rural areas. The County Council will also encourage new developments which provide facilities for charging points and shared mobility options both to encourage the use of ultra-low emission vehicles and a reduction in car use.

In its role of helping to facilitate the above, the County Council will explore the potential to exploit new funding approaches, as appropriate, alongside developer contributions and other traditional mechanisms.

CHAPTER 8 MONITORING AND PERFORMANCE INDICATORS

The Rural Transport Strategy highlights how the LTP seeks to address the issues and challenges faced in rural areas in the county and so does not include any specific indicators. However, it will follow the monitoring framework for the LTP Strategy which comprises performance indicators outlined on page 111 of the LTP document. This is in addition to outcome indicators that may be developed as part of the LTP supporting documents which may include specific indicators for rural areas.

The LTP monitoring data will be used to produce progress reports and communicate with a range of stakeholders. This will include an annual LTP progress report submission to the county council’s Environment, Planning and Transport Cabinet Panel. As well as providing updated monitoring information the report will also be able to provide updates on any notable amendments to the policy context or service delivery. This will support effective oversight of LTP delivery.

As well as the LTP monitoring data and performance indicators, the County Council will continue to monitor ongoing transport patterns in rural parts of the county and identify and monitor the impact of work programmes and interventions completed in rural areas as part of the ITP.
CHAPTER 9  
FUNDING

Transport interventions in rural areas as a result from Growth and Transport Plans and other highways maintenance and improvement schemes can be funded from various sources. Funding for rural transport activity can either be classed as revenue or capital funding, with government restricting what types of interventions each can be spent on. Capital is any spending to acquire or improve an asset that will have a life of many years and typically relates to spending on infrastructure. Revenue spending is spent on day-to-day items to run services (staff costs, bus subsidy and marketing activity for example), or carry out routine maintenance. The LTP discusses the funding constraints for transport, particularly with regards to revenue funding. Many sources are also unpredictable, such as local growth funding and some government funding pots, often requiring some form of bidding exercise in competition with other locations or local priorities. Effective delivery of local transport improvements will require consideration of other funding sources, which can both increase local transport investment and provide greater certainty of delivery. HCC will seek to obtain significant levels of external funding to deliver the objectives of this plan.

There is potential locally to capture more transport funding from CIL and Section 106 planning obligations. The county council is working with the district and borough councils in the county to maximise this potential. However, improvements in this area will still be insufficient to address the county’s transport and infrastructure funding challenges. The county council will therefore explore innovative funding mechanisms with partners. This will require joint working and agreement on governance arrangements, infrastructure planning and prioritisation, and the mechanisms to apply. The county council will also press government for more powers and freedoms to both fund and forward fund transport improvements, so they can be implemented in advance of the occupation of new development.

Ultimately a combination of funding sources will be required, mixing established and innovative new sources bringing together the county council, district, borough and parish councils. Potential funding sources that should be considered for the transport improvements are outlined in the LTP. Liaise
CHAPTER 10
ENVIRONMENTAL ASSESSMENTS

10.1 STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA)

The Strategic Environmental Assessment (SEA) EU Directive requires that all new Local Transport Plans and their strategies are assessed for their effect on the environment. As required under this directive a Strategic Environmental Assessment was undertaken on The Local Transport Plan (LTP4) before its publication in May 2018.

LTP4 consultation responses commented on an under-representation of rural transport in the LTP4 document (LTP4 does not include a specific rural transport policy, but its vision, themes, objectives and principles do encompass rural issues). Therefore, the new Rural Transport Strategy has been developed which covers additional areas of Hertfordshire not covered by the suite of Growth and Transport Plans (GTPs) and explores how transport can contribute towards addressing the economic, social and environmental challenges in rural Hertfordshire.

This new Rural Strategy has been screened to determine if a SEA Assessment is required (for example does the document contain information that has not already been covered by assessing corresponding policy or intervention packages). The new Rural Strategy will not require a SEA Assessment as it only sets out the rural characteristics of Hertfordshire, challenges for rural areas, technological opportunities, and how other plans and strategies will also deliver improvements to rural areas. The Rural Strategy does not suggest any changes to policy, or new policy, or any significant service delivery, and therefore will be covered by the overarching Strategic Environmental Assessment for LTP4.

10.2 EQUALITY IMPACT ASSESSMENT (EQIA)

An EQIA determines how the delivery of the local transport plan will affect different groups of people, encompassing race, gender, disability, age, religion/belief and sexual orientation. An EQIA has been completed for this RTS and minimal equality impacts have been identified. There are several ways that positive actions can lead to an improvement in services to rural residents which can be found in the full EQIA.

10.3 HABITATS REGULATION ASSESSMENT (HRA)

An HRA has been conducted to assess the likely impacts of the LTP on the integrity of nature protection areas (Natura 2000 sites). As the RTS does not include new schemes or policies different to the LTP, there will be no adverse impacts to habitats in the rural areas mentioned in this strategy and therefore, a separate HRA analysis has not been conducted.
CHAPTER 11: APPENDIX

Policy 1: Transport User Hierarchy

To support the creation of built environments that encourage greater and safer use of sustainable transport modes, the county council will in the design of any scheme and development of any transport strategy consider in the following order:

- Opportunities to reduce travel demand and the need to travel
- Vulnerable road user needs (such as pedestrians and cyclists)
- Passenger transport user needs
- Powered two wheeler (mopeds and motorbikes) user needs
- Other motor vehicle user needs

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<tr>
<th>Link to Rural Transport Strategy</th>
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<tbody>
<tr>
<td>• Provide opportunities to increase accessibility in rural areas by better provision of passenger transport. These alternative modes of transport could be more affordable and provide transport for all in particular the use of community transport services and voluntary transport.</td>
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<tr>
<td>• Congestion remains a major issue in the county both for residents and for the economy and in particular, for rural areas where no alternative modes of transport to the private motor vehicle is available and adds to total congestion. There are large rural areas of the county where travel other than by car is difficult. This can be addressed in a variety of ways in particular by implementing the Transport User Hierarchy to reduce the need for car travel and consider alternative modes.</td>
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<tr>
<td>• Despite the dominance of the car in the county, there are sections of society which have difficulty accessing services and employment, either because they do not have access to a car, are elderly or mobility impaired or cannot afford the fares. This is exacerbated in rural areas where access to services for those without access to a car is limited. The Transport User Hierarchy seeks to increase the use of sustainable transport which may lead to better accessibility for rural areas.</td>
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<tr>
<td>• The Transport User Hierarchy provides an opportunity to reduce traffic levels and inappropriate speeds which can make rural areas less attractive and affect the local economy.</td>
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<tr>
<td>• Improving transport for vulnerable road users may provide better opportunities for young people in rural areas to access employment or training opportunities and at a more affordable cost.</td>
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<td>• Increased passenger transport services can provide alternative transport in rural areas for those who already own a car.</td>
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<tr>
<td>• An increase in realistic passenger transport options serving rural areas could result in a reduction in the amount of rural car journeys made, which would in turn</td>
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reduce congestion in the urban areas, lowering the county’s carbon footprint and lessening the instances of rural transport deprivation.

- Improving facilities and safety for pedestrians and cyclists in rural areas
- The Transport User Hierarchy provides an opportunity to improve rural rights of way which will benefit equestrians by providing safer, more sustainable routes and better facilities.

**LTP4 Policy 2: Influencing land use planning**

The county council will encourage the location of new development in areas served by or with the potential to be served by, high quality passenger transport facilities so they can form a real alternative to the car, and where key services can be accessed by walking and cycling.

**Link to Rural Transport Strategy**

- New development which is served by sustainable transport could increase access to services and increase opportunities for residents in rural areas.
- New developments which are planned to be served by sustainable transport may enhance the rural environment and improve the rural residential character.
- New developments which are planned to be served by sustainable transport may reduce traffic congestion, lower carbon and improve air quality in rural areas.

**LTP4 Policy 3: Travel Plans and Behaviour Change**

The county council will encourage the widespread adoption of travel plans through:

a) Working in partnership with large employers, businesses and other organisations to develop travel plans and implement Smarter Choices measures.

b) Seeking the development, implementation and monitoring of travel plans as part of the planning process for new developments.

c) Supporting school travel plans, and working closely with parents, pupils, teachers and local residents to deliver a network of more sustainable transport links to school.

The application of personalised travel planning techniques, marketing and other behavioural change initiatives will be considered when delivering physical transport improvements to maximise the potential to achieve modal shift.

**Link to Rural Transport Strategy**

- The encouragement of travel plans and smarter travel choices could reduce congestion and improve the environment in rural areas such as by reducing car travel to employment, businesses and other organisations from rural areas.
- More sustainable transport links to school will help reduce traffic and parking issues in rural areas. It may also improve access to schools from rural areas and provide more school choice and variability.
LTP4 Policy 5: Development Management

The county council will work with development promoters and the district and borough councils to:

a) Ensure the location and design of proposals reflect the LTP Transport User Hierarchy and encourage movement by sustainable transport modes and reduced travel demand.
b) Ensure access arrangements are safe, suitable for all people, built to an adequate standard and adhere to the county council’s Highway Design Standards.
c) Consider the adoption of access roads and internal road layouts where they comply with the appropriate adoption requirements and will offer demonstrable utility to the wider public. Where internal roads are not adopted the county council will expect suitable private management arrangements to be in place.
d) Secure developer mitigation measures to limit the impacts of development on the transport network, and resist development where the residual cumulative impact of development is considered to be severe.
e) Require a travel plan for developments according to the requirements of ‘Hertfordshire’s Travel Plan Guidance’.
f) Only consider new accesses onto primary and main distributor roads where special circumstances can be demonstrated in favour of the proposals.
g) Resist development that would either severely affect the rural or residential character of a road or other right of way, or which would severely affect safety on rural roads, local roads and rights of way especially for vulnerable road users.
h) Ensure new developments provide facilities for charging plug-in and other Ultra Low Emission vehicles, as well as shared mobility solutions such as car clubs.

Link to Rural Transport Strategy

- Rural areas will benefit from ensuring access arrangements in developments are made safe and suitable for all. Access arrangements will be built into the Highways Design Guidance for rural areas so not to affect the rural character of a road.
- Development which is served by sustainable transport could increase access to services and increase opportunities for residents in rural areas.
- Developments which are planned to be served by sustainable transport may enhance the rural environment and improve the rural residential character.
- Developments which are planned to be served by sustainable transport may reduce traffic congestion, lower carbon and improve air quality in rural areas.
- Access primarily to primary or main distributor roads may discourage through traffic on rural distributor roads and encourage a reduction in traffic speeds.
- Rural areas might benefit from new developments which provide facilities for charging points and shared mobility solutions. This will encourage the use of ultra-low vehicles and a reduction in car ownership and use.
### LTP4 Policy 6: Accessibility

The county council will seek to increase the ease with which people, particularly disadvantaged groups, can access key services, by:

- a) Working in partnership with key stakeholders such as bus and rail operators, community transport operators, the voluntary sector and public service providers.
- b) Supporting transport services which could include providing resource for bus and other transport services.
- c) Addressing the barriers to accessibility particularly regarding active modes and for people with impaired mobility.
- d) Promoting travel options and facilitating accessible travel information provision, including open data initiatives.
- e) Improving travel choices and options, including support for the provision of shared mobility initiatives.

#### Link to Rural Transport Strategy

- The accessibility policy directly targets disadvantaged groups who have difficulty accessing services which includes residents in rural areas.
- The policy covers residents who are at risk of social exclusion as they may have limited or no access to a car or passenger transport and live in areas remote from services, notably rural areas.
- People living in rural areas are particularly disadvantaged as commercial bus services tend not to operate where passenger numbers are low and a bus service is financially unviable. This policy seeks to increase bus service provision to these areas and in particular, encourage voluntary transport provisions and demand responsive transport which can offer door-to-door transport.
- The policy seeks to encouraging car sharing in rural areas.

### LTP4 Policy 7: Active Travel – Walking

The county council will seek to encourage and promote walking by:

- a) Implementing measures to increase the priority of pedestrians relative to motor vehicles, especially in town centres, and creating walking friendly town and neighbourhood centres.
- b) Delivering infrastructure to provide safer access to key services, and pedestrian facilities to enable and encourage walking.
- c) Identifying and promoting networks of pedestrian priority routes.
- d) Promoting walking as a mode of travel and for recreational enjoyment.
- e) Supporting the implementation of the Rights of Way Improvement Plan.

#### Link to Rural Transport Strategy

- Policy will deliver infrastructure to encourage walking and cycling and in particular improve access to key services from rural areas.
LTP4 Policy 8. Active Travel - Cycling

The county council aims to deliver a step change in cycling, through:

- Infrastructure improvements, especially within major urban areas to enable and encourage more cycling.
- Implementing measures to increase the priority of cyclists relative to motor vehicles.
- Improved safety for users including delivery of formal and informal cycle training schemes.
- Supporting promotion campaigns to inform, educate, reassure and encourage cycling provision and education, such as Bikeability.
- Facilitating provision of secure cycle parking.

Link to Rural Transport Strategy

- Policy will deliver infrastructure to encourage walking and cycling and in particular improve access to key services from rural areas.
- Supports infrastructure improvements which can encourage cycling and improve access to employment and other services.
- Encourages and improves the provision for walking and cycling which will benefit the health of younger and older residents in rural areas.
- Encourages an affordable form of transport which could benefit younger people access services from rural areas.

LTP4 Policy 9: Buses

The county council will promote and support bus services to encourage reduced car use by:

- Supports the implementation of the Rights of Way Improvement plan which aims to improve rural rights of way and improve access to employment and other services.
- Supports the implementation of the Rights of Way Improvement which provides access for horse riders.
- Encourages and improves the provision for walking and cycling which will benefit the health of younger and older residents in rural areas.
a) Supporting the delivery of infrastructure including bus priority measures, focussed on a core bus network, and by minimising bus service disruption from road congestion and the effects of road works.

b) Providing and maintaining all bus stops, and other bus related highway infrastructure, to a consistent quality and standard across the county.

c) Utilising new powers afforded to local authorities through the Bus Services Act 2017 as appropriate.

d) Procuring and supporting cost effective and efficient bus services to improve accessibility and respond to existing and potential passenger needs.

e) Working with a wide range of partners through the Intalink Quality Partnership to achieve improvements in facilities and services to improve multi-modal interchange, accessibility and the journey experience.

f) Working with partners to develop appropriate passenger fares, encourage the development of smart ticketing and to improve the provision and accuracy of passenger information.

g) Working with partners to promote bus services as an option for work and school journeys, and promote and publicise the passenger transport network through a variety of media.

**Link to Rural Transport Strategy**

- Supports the delivery of improved bus services in rural areas which can reduce social exclusion by improving access to transport and key services where significant accessibility issues exist.
- Utilises new powers for the local authority through the bus services act to improve bus services in rural areas.
- Work more closely with the Intalink Partnership to improve bus services in rural areas.
- Work in partnership with Borough/District councils, other local authorities, health authorities, statutory agencies, commercial bus and train operators, and the voluntary sector to develop and co-ordinate transport provision in rural areas where passenger transport provision is poor.
- Improve school bus journeys in rural areas improving access and availability of schools.
- Limited East West connectivity by rail means bus services are vital in rural areas to ensure residents have access to key services and serve towns.
- The development of appropriate passenger fares and smart ticketing might benefit residents in local areas by making tickets and travel more affordable.
- Buses are important to provide access to facilities for those without a car in both urban and rural areas. In addition they provide a viable alternative for those who have a car already. This policy must ensure rural areas are taken into account in the most cost effective way.
- Improved passenger information such as real time information will benefit residents living in rural areas, enabling them to see real bus timings at bus stops and on smart phones.

### LTP4 Policy 12: Network Management

**As part of its Network Management Duty the county council will seek to manage, and where feasible reduce traffic congestion, prioritising strategic routes. Activity will focus on making more efficient use of highway network capacity via:**

- a) Use of Intelligent Transport Systems and small scale traffic management interventions.
- b) Maintaining a Network Management Strategy which will include the county council’s road network hierarchy and associated policies.
- c) Reducing levels of single occupancy car use and encouraging travel by walking, cycling and passenger transport.
- d) Sharing data (open data) and supporting the use of technology to provide up to date and accessible information for all network users.
- e) Control of on-street vehicle parking in line with the Network Management strategy.
- f) Managing street works and minimising network disruption.

### Link to Rural Transport Strategy

- Congestion remains a major issue in the county both for residents and for the economy and in particular, for rural areas where no alternative modes of transport to the private motor vehicle is available and adds to total congestion. There are large rural areas of the county where travel other than by car is difficult. This can be addressed in a variety of ways in particular by ensuring an efficient use of the highway network capacity.

### LTP4 Policy 15: Speed Management

**The county council through its Speed Management Strategy, a joint working strategy with the Police, will seek to manage the network to achieve appropriate speeds in the interests of safety, other road users, and the environment.**

### Link to Rural Transport Strategy

- Policy refers to the whole of the county which includes rural areas

### LTP4 Policy 16: Freight and Logistics

**The county council will seek to manage freight and logistics traffic, by:**

- a) Encouraging HGV’s to use the primary route network.
- b) Providing clear advice to local planning authorities in respect of highways and freight implications of new development proposals.
c) Encouraging a shift from road-borne freight to less environmentally damaging modes, including rail, water and pipelines.

d) Supporting the formation of Quality Partnerships between interested parties.

e) Monitoring changes in HGV and LGV activity to inform possible solutions which reconcile the need of access for goods and services with local environment and social concerns.

f) Supporting improvements in HGV provision in the county, including overnight parking, in appropriate locations.

g) Utilising traffic management powers, where appropriate to do so, to manage access and egress from specific locations.

Encouraging freight to use the primary route network will reduce the number of HGVs and LGVs using local rural roads which can have major impacts on congestion and the environment in rural areas.

**LTP4 Policy 17: Road Safety**

The county council will seek to continually improve safety on the county’s roads, working towards an ultimate vision of zero fatalities and serious injuries, by:

a) Working with partners, in particular through the Hertfordshire Road Safety Partnership to deliver targeted, effective and appropriate road safety measures.

b) The development of a ‘Safe Systems’ approach that seeks to co-ordinate a mix of safer roads, safer speeds, safer vehicles, safer road users and post-collision response with a focus on casualty reduction.

c) Using latest data analysis and intelligence led techniques to target and evaluate measures.

**LTP4 Policy 18: Transport Safety and Security**

The county council will seek to improve the perception of safety and security on Hertfordshire’s transport system where this could deter people from travelling, particularly by active modes and passenger transport. This includes ensuring the county’s transport system is resilient and prepared for instances of major alert.

**LTP4 Policy 19: Emissions reduction**

The county council will reduce levels of harmful emissions by:
a) Promoting a change in people’s travel behaviour to encourage a modal shift in journeys from cars to walking, cycling and passenger transport.
b) Addressing any barriers to and supporting the uptake of ULEVs in the county, particularly where this can positively affect areas with identified poor air quality.
c) Reducing emissions from its operations.

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<tbody>
<tr>
<td>• Greater car use in rural areas increases carbon emissions and so promoting modal shift to more sustainable modes will benefit rural areas.</td>
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<tr>
<td>• Supporting the uptake of ULEV vehicles is countywide and so will include rural areas.</td>
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LTP4 Policy 20: Air Quality

The county council will seek to reduce the impact of poor Air Quality on human health, by:

a) Investigating the use of Clean Air Zones.
b) Working with district/borough councils to monitor and assess air pollution levels, and working in partnership with them to deliver any declared AQMA joint action plans.
c) Implementing, monitoring and reviewing the county council’s Air Quality Strategic Plan.

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<tr>
<td>• Most AQMAs are located outside of rural areas however, for those which are located at rural areas, this policy applies and appropriate action to alleviate the consequences of AQMAs will be considered.</td>
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</table>

LTP4 Policy 21: Environment

The county council will seek to:

a) Ensure the impacts of traffic and transport infrastructure on the natural, built and historic environment are minimised.
b) Protect and enhance the quality of public spaces both in urban and rural areas.
c) Minimise the visual intrusion of highway signage and number of signs in order to reduce clutter.
d) Minimise light pollution and conserve energy from street lighting and signage illumination.
e) Minimise noise issues arising from transport where practical to do so.

Where highway improvements are being undertaken the county council will:
f) Minimise and or mitigate the adverse physical impact on the landscape and environment and will try to secure significant and demonstrable environmental gains.

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<tr>
<td>• This policy specifically seeks to enhance the quality of spaces in rural areas.</td>
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<tr>
<td>• All other aspects of the policy also apply to rural areas</td>
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</table>
LTP4 Policy 22: Asset Management

The county council will:

a) Ensure the Highway Infrastructure Asset Management Plan fully considers how it can support delivery of the LTP objectives & policies, such as with regard to safety, accessibility, active travel and environmental impact.
b) Identify and apply industry-leading good practice to the management of all transport assets.
c) Maximise the opportunity for investment to maintain and improve the condition of the transport network.
d) Seek value for money for all transport assets and minimise future maintenance liabilities as far as possible.

Link to Rural Transport Strategy

• Maintain footways, cycleways and the general transport network in rural areas to an acceptable standard.

LTP4 Policy 23: Growth and Transport Plans

The county council will produce and maintain a series of Growth and Transport Plans (GTPs) covering different sub areas of Hertfordshire. Each plan will consider current and future challenges and identify interventions aligned to LTP objectives. The GTPs will also be informed by and in turn help to inform Local Plans and Infrastructure Delivery Plans which are prepared by the district/borough authorities in Hertfordshire.

Link to Rural Transport Strategy

Growth and Transport Plans are a new joined up approach to sub-county transport planning which is more in alignment with planned future housing and employment growth, and have replaced the Urban Transport Plans. Hertfordshire has been split into 5 new strategic spatial transport plan sub-areas (traditionally Urban Transport Plans would only cover one urban area), which cover a wider geographic area including both urban and rural areas. GTPs identify the interventions which will be needed to support and help facilitate sustainable development and set out packages of recommended short, medium and long term interventions which will address the key challenges and support planned growth. The GTPs cover predominantly urban areas, but some schemes are inter-urban or include rural villages around the edges of urban areas. North and Eastern Hertfordshire are more rural in nature therefore more schemes are proposed in these areas that will benefit rural areas. Typical schemes that will provide transport improvements for rural areas in the GTPs include:
- Interurban movements between 2 urban areas but passing through and providing benefits to rural areas of the county, for example: on road and off road cycleways, and bus priority measures;
- Rural travel hubs serving as interchanges close to existing transport corridors where residents in rural areas can walk, cycle or drive to and continue an onward journey using a sustainable mode;
- Speed limit reductions on rural roads to support active travel;
- Junction improvements on rural roads to improve congestion, capacity and reliability;
- Wayfinding for cycle users;
- Quietways, convert existing country lanes for cyclists and pedestrians (limited access for vehicles);
- Enhancements/upgrades for existing rural cycle infrastructure (re-surfacing, crossings, maintenance);
- Rural railway station accessibility by sustainable modes;
- Green corridors, connecting principal towns, forming safe, direct, and convenient local and inter-urban networks.