Uttlesford District Council Local Plan

Transport Evidence Topic Paper

July 2024

Produced to support the 'Publication' version (Regulation 19) Local Plan

Contents

1 Introduction

1.1.1 This Transport Evidence Topic Paper summarises the breadth of transport evidence that has been commissioned by Uttlesford District Council to support and inform the Local Plan policies and proposals contained in the 'Publication' version Regulation 19 Local Plan (subsequently referred to as the 'Local Plan' for conciseness).

1.1.2 Full details of the supporting evidence documents produced are listed in **Table 1** below and will be available as part of the Local Plan Evidence Base together with a number of supporting technical documents.

Table 1: List of Evidence Documents

Evidence Area	Document Name	Author
Sustainable Transport	Local Plan Sustainable Transport	ITP
Sustainable Transport	Local Cycling and Walking Infrastructure Plan	PJA
Sustainable Transport	A120 Corridor Study	Essex Highways
Sustainable Transport	Shared Transport in New Developments	CoMoUK
Assessment & Modelling	Model Outputs: Saffron Walden	Tetra Tech
Assessment & Modelling	Model Outputs: A120 Corridor	Tetra Tech
Assessment & Modelling	Stump Cross Assessment	Tetra Tech

1.2 Purpose and Structure of this Topic Paper

1.2.1 This Topic Paper highlights the evidence that has been commissioned which examines how sustainable transport can be delivered to support the growth in Uttlesford together with the technical assessments of impacts of growth proposals on the highway network.

1.2.2 Uttlesford will require a transport network that addresses not only the needs of the existing and future residential and working population but will also need to address the impact that transport has on emissions and climate change.

1.2.3 This Topic Paper does not repeat the evidence in detail, instead it highlights and summarises the key conclusions of the evidence. For an in-depth examination of the transport issues in Uttlesford, the detailed evidence reports and documents should be examined.

1.3 Spatial Strategy

1.3.1 The Spatial Strategy set out in the Local Plan identifies the appropriate locations for development, the level of housing to plan for, the amount of employment land to meet our needs to maintain and develop our local economy and to provide a range of services, as well as the facilities and infrastructure we need to support planned growth. It also aims to address the challenges of climate change, enhanced biodiversity net gain, achieve sustainable development and protect the environment.

1.3.2 The spatial strategy and overarching vision and objectives determine that the delivery of sustainable development and sustainable transport are key components of the strategic objectives of the Local Plan.

1.3.3 The spatial strategy leads to a need for stronger sustainable transport planning and policies. It requires that a proactive and progressive approach to transport is taken which is called the 'Decide and Provide Approach': deciding on a preferred transport future and then providing the means to help deliver that future. Further explanation of the approach is detailed in **Section 4**.

1.4 Transport Policies in the Local Plan

1.4.1 The polices and proposals in the Local Plan will aim to make all forms of sustainable transport more accessible to all users and promote the use of cleaner modes of travel including public transport. There are direct health benefits of delivering walking and cycling infrastructure and making sure the design of new places prioritises journeys on foot or cycle. As a large rural area, Uttlesford has a fragmented network of cycle and walking routes, that will need to be improved to provide connections between existing communities and to key services and strengthen local and strategic networks.

1.4.2 The Local Plan evidence recognises the strategic role that the key transport routes and infrastructure play regionally and nationally, including the M11, West Anglia Mainline railway and London Stansted Airport. It takes the position that planned growth across Uttlesford should not unduly impact on the capacity and the performance of the Strategic Road Network (SRN) and the local road network.

1.4.3 The Local Plan has transport planning policies that should be applied to development proposals across the whole district. There are also more specific policies for the North Uttlesford and South Uttlesford growth strategy areas. The district-wide core transport policies which are assessed against national and local policy in **Table 3 in Section 4**.

2 Transport in Uttlesford

2.1 Uttlesford Context

2.1.1 Uttlesford District is located in the north-west of the county of Essex. It is a rural, non-metropolitan district with a population of 91,341[1], with a relatively low population density of 143 persons per square kilometre[2].

2.1.2 Saffron Walden is the administrative town of the district with a population of 16,600. The other two principal service centres in the settlement hierarchy are Great Dunmow and Stansted Mountfitchet followed by 'rural centres' such as Elsenham, Great Chesterford, Hatfield Heath, Newport, Takeley and Thaxted. Other than Thaxted, these communities are situated close to the two main road routes through the district, the M11running north to south from Cambridge to the M25, and the A120 running east-west to east between Junction 8 on the M11 near London Stansted Airport to Braintree just outside the district, eastwards to Colchester.

2.1.3 The neighbouring districts are Braintree, Chelmsford and Epping Forest in Essex, and East Hertfordshire, North Hertfordshire and South Cambridgeshire. London Stansted Airport, the UK fourth-busiest airport[3], is located in the southwest of Uttlesford and as the largest employer in the district is of regional significance as a travel and commercial destination, set to expand activities significantly during the Local Plan period.

2.1.4 The airport has a major impact on travel patterns and a key aim of the Local Plan is to work with the Airport authority, Manchester Airport Group (MAG), to build on the existing public transport opportunities to promote the airport as a local destination as a multi-modal transport interchange.

2.2 Strategic Road Network

2.2.1 The Strategic Road Network provides Uttlesford with good regional accessibility and comprises the M11, the A120 and the A11 on the northern edge of the authority:

- The M11 forms a nationally important north-south link between London and Cambridge. There are two junctions in Uttlesford. Junction 8 provides access to Stansted Airport and connects onto the A120, whilst Junction 9 is a limited access junction, only allowing movement to/from the A11.
- The A120 links the M11 and Bishop's Stortford in the west with Stansted Airport, Great Dunmow and Braintree in the east before heading on to Colchester and the east coast ports.
- The A11 links the M11 with Norwich in the north-east at the Stump Cross junction north of Great Chesterford.

[1] *2021 Census Profile for areas in England and Wales - Nomis (nomisweb.co.uk)*
[2] *Population density - Census Maps, ONS*
[3] *UK airport data 2024 | Civil Aviation Authority (caa.co.uk)*

2.3 Local Road Network

2.3.1 Most of the road network across Uttlesford is managed by Essex County Council as the 'local road network'. It is characterised by single carriageway B roads and minor roads or country lanes. Locally important links include:

- B1383 in the west which runs parallel to the M11 and links Saffron Walden in the north with Newport and Stansted Mountfitchet. It is a busy commuter route at peak times.
- B1256 which is the historic east-west route running south of and parallel to the A120 linking Braintree with Bishop's Stortford via Great Dunmow and Takeley. It accommodates significant HGV usage because of the large quarry on the western edge of Great Dunmow as well as high peak hour private car journeys arising from the recent growth of new developments around Woodside Way and the western side of Great Dunmow accessing the motorway.
- B184 which links Great Chesterford in the north through Saffron Walden, Thaxted and Great Dunmow in the south and on towards Chelmsford. In the main towns of Saffron Walden, Great Dunmow and Stansted Mountfitchet, the network is often constrained by the historic street patterns that characterise the centres, not designed for the volume of traffic they now accommodate.

2.4 Rail Services in Uttlesford

2.4.1 There are six rail stations served by trains operating on the West Anglian Mainline between London and Cambridge, and Stansted Airport. Greater Anglia is the train operating company (TOC) holding the franchise since February 2012 as the service provider until October 2025.

2.4.2 In addition, Uttlesford residents can access stations across the border of the district in Bishop's Stortford, Braintree and Whittlesford. It is also understood that a number of residents travel southwards towards Epping to access the TFL network for direct access into London on the Central line.

2.5 Bus Services

2.5.1 Although parts of the district are well served with regular and well-connected services, especially around the airport, bus service provision and supporting infrastructure, and the ability to interchange between services and other modes of travel are not readily available across much of the rest of Uttlesford.

2.5.2 Away from the airport, the main service centres of Saffron Walden, Great Dunmow and Stansted Mountfitchet are connected to larger centres in neighbouring authorities by bus such as to Cambridge, Braintree and Bishop's Stortford.

2.5.3 The rural nature of the district, lack of large centres of population to act as a destination focus for services, dispersed employment provision and high levels of car ownership all contribute towards a difficult economic environment for bus companies to be able to offer an attractive, frequent and viable service. The Local Plan's transport policies have a strong focus on requiring the provision of different tools to assist this such as subsidised bus passes, requiring travel plan and creating mobility hubs.

2.6 The Cycling and Walking Network

2.6.1 Two routes on the National Cycle Network (NCN) run through Uttlesford, the north-south NCN Route 11, which will connect Harlow with Kings Lynn, and NCN Route 16, an east-west link between Bishop's Stortford and Braintree along the Flitch Way.

2.6.2 NCN11 is on-road provision on quiet rural roads to the west of the M11 and links to a traffic free route into Cambridge. It currently terminates to the west of Audley End and other on-road routes which do not form part of the NCN provide onwards connections to Saffron Walden to the east and Stansted Mountfitchet in the south.

2.6.3 The Flitch Way, forming part of NCN16, provides a connection between Bishop's Stortford and Braintree. Most of the route is traffic-free, using the former railway line, excluding a small section where the route passes through Great Dunmow and cyclists are required to cycle on carriageway.

2.6.4 Figure 3 below shows the NCN as it passes through Uttlesford, however, there is relatively low connectivity between the National Cycle Network routes in the district.

2.7 Local Cycling and Walking Infrastructure Plan (LCWIP)

2.7.1 The Uttlesford LCWIP was prepared between 2023 and 2024. It focuses on opportunities for delivering a new strategic cycle network, setting out the quality of current provision and priorities for future investment in Uttlesford and has two more settlement-based plans for Saffron Walden and Great Dunmow.

2.7.2 The LCWIP audit describes a general picture across Uttlesford of a lack of dedicated off road provision in the main four settlements. The only exception is in Saffron Walden, where a connection between the town and Audley End Station has been improved with a contra-flow cycle lane along Wenden Road, although it remains largely unlit and lacks physical segregation from the main carriageway.

3 Transport Policy and Guidance

3.1 National Planning Policy Framework (NPPF)

3.1.1 The National Planning Policy Framework (NPPF) update issued in December 2023 sets out how the government's planning policies should be applied through local plans and the development process. Section 9 (paragraphs 108-113) considers the promotion of sustainable development and notes that 'transport issues should be considered from the earliest stages of plan-making and development proposals.'

3.1.2 It highlights that the "planning system should actively manage patterns of growth' and that '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. This can help to reduce congestion and emissions and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making. "

3.1.3 Paragraph 110 states that planning policies should 'support an appropriate mix of uses across an area…and to minimise the number and length of journeys needed….'. It continues stating that planning policies should also 'provide for attractive and well-designed walking and cycling networks with supporting facilities…'

3.1.4 With regard to the assessment of development proposals paragraphs 114-117 state that these should ensure 'appropriate opportunities to promote sustainable transport modes have been taken up', 'safe and suitable access can be achieved for all', the design of all transport elements reflect relevant and current government guidance, and that any 'any significant impacts on the transport network…can be cost effectivity mitigated to an acceptable degree'

3.2 Planning Practice Guidance (PPG)

The PPG 15 on 'Transport Evidence Bases In Plan Making And Decision Taking 2015' defines why a planning authority should establish a transport evidence base for a Local Plan (para 002): "It is important for local planning authorities to undertake an assessment of the transport implications in developing or reviewing their Local Plan so that a robust transport evidence base may be developed to support the preparation and/or review of that Plan. A robust transport evidence base can facilitate approval of the Local Plan and reduce costs and delays to the delivery of new development, thus reducing the burden on the public purse and private sector."

3.3 DfT Circular 01/22 – Strategic Road Network and the Delivery of Sustainable Development

3.3.1 DfT Circular 01/2022[4] is a policy paper which explains how National Highways engages with the planning system and fulfils its remit of a delivery partner for sustainable economic growth whilst maintaining the strategic road network.

3.3.2 Paragraphs 11-17 set out the principles of sustainable development stating that 'New development should be facilitating a reduction in the need to travel by private car and focused on locations that are or can be made sustainable'. It highlights the impact of where developments are located on people's mode of travel for short journeys.

3.3.3 As part of the NPPF expectations of a clear evidence base to support local plans and spatial development strategies, National Highways expect this process to explore options to reduce reliance on the Strategic Road Network (SRN) for local journeys, maximising opportunities for walking, wheeling, cycling and public transport use. Development plans should only promote locations that are or can be made sustainable. The Council commissioned a separate study to evaluate and recommend on opportunities for sustainable transport (see section 5.2) specifically to address this expectation.

[4] *Strategic road network and the delivery of sustainable development - GOV.UK (www.gov.uk)*

4 Evidence Led Policy Approach

4.1.1 The Local Plan transport evidence considers how best to address the transport challenges in Uttlesford and particularly how policies can reduce the need to travel or promote the use of sustainable transport, which in turn, support the district-wide carbon reduction targets[5]. The evidence led policy approach intends to ensure the sustainable transport opportunities in the towns and villages have been prioritised when locating new development to encourage a shift in behaviour to sustainable transport modes, including the prioritisation of sustainable transport choices in the strategic allocations.

4.2 The 'Decide and Provide' Approach

4.2.1 As stated in the introduction, the Spatial Strategy and Spatial Vision and Objectives determine that the delivery of sustainable development and sustainable transport are key components of the strategic objectives of the Local Plan and are the focus for the delivery of transport proposals within the Local Plan.

4.2.2 Trends regarding how people travel have been changing in recent times, albeit with a continued dependency on car use. Transport patters will continue to change over the Local Plan period with a range of known and unknown factors influencing how people travel or seek out services. Technology-based transport innovations such as (but not exclusively) electric vehicles (including cycles and scooters) and autonomous vehicles will continue to change the transport environment. The dramatic upturn in home deliveries (including food) over the past 10 years has changed shopping habits and had an impact on High Streets and reduced the need to travel for some day-to-day shopping. The Covid-19 pandemic demonstrated how a significant, unpredictable, event can have a long-term impact on travel and transport with an immediate and drastic reduction in travel patterns and the acceleration of a shift towards more flexible and home working. With this ongoing change, there is always going to be potential uncertainty regarding what the future of transport looks like and should be provided.

4.2.3 The traditional approach of 'Predict and Provide' reflects demand-led supply: i.e. predict future demand for travel and provide appropriate transport supply or capacity to meet that demand. This approach often maintains the status quo by building more highway capacity and generally perpetuates dependency on cars. This approach cannot plan for, or react to, uncertainty.

4.2.4 The Chartered Institution of Highways & Transportation (CIHT) identifies the "scourge" of 'Predict and provide' and associated "outdated assessment methodologies" as a barrier to better planning[6].

4.2.5 The alternative: 'Decide and Provide' approach selects a preferred vision and then provides the means to work towards that, while also "accommodating the uncertainty of the future". The 'Decide and Provide' approach offers the opportunity for more positive and integrated transport and land use planning making sustainable modes central to achieving the vision for the site/development.

[5] *NNDC Achieving net-zero carbon status by 2030: https://www.uttlesford.gov.uk/article/6788/Achieving-net-zero-carbon-status-by-2030*
[6] *https://www.ciht.org.uk/knowledge-resource-centre/resources/better-planning-better-transport-better-places/*

Table 2: Differences in approaches

Predict and Provide	Decide and Provide
▪ Forecast a most likely mobility future ▪ Demand-led supply ▪ Does not account for uncertainty and change ▪ Re-active	▪ Decide on a preferred transport future ▪ Supply-led demand ▪ Accounts for uncertainty ▪ Pro-active

Source: TRICS Decide and Provide Guidance Summary https://www.trics.org/img/trics_dp_guidance_summary.pdf

4.2.6 The policies in the Local Plan support the spatial strategy and, in turn, follow the 'Decide and Provide' approach that will enable the improvement of connectivity and sustainable transport modes, and choices, for new and existing residents and businesses. Furthermore, and importantly, the Uttlesford Local Plan transport policies align with national, regional, and local policies and strategies as appraised in **Table 3** below.

Table 3: Draft Local Plan Policy alignment with National, Regional and Local Policies and Strategies

Draft Local Plan Policy	National Policy Alignment	Regional Policy Alignment	Local Policy Alignment
Core Policy 26: Providing for Sustainable Transport and Connectivity	NPPF ▪ Promotes sustainable transport with priority to active travel.	Transport East Transport Strategy ▪ Promoting active travel will aid decarbonisation. ▪ Will aid connecting growing towns.	Essex Local Transport Plan ▪ Promote sustainable transport. ▪ Promotes connectivity to services and communities within Uttlesford by sustainable transport. ▪ Promotion of sustainable transport will reduction carbon create by transport.
	DfT Circular 01/22 – Strategic road network and the delivery of sustainable development ▪ Promotes walking, cycling and public transport. Provides sustainable transport alternatives to the motor car. ▪ Promotes make locations more sustainable.		Essex Cycling Strategy ▪ Promotes cycling to reduce the environmental impact of travel. ▪ Promotion of cycling will aid connectivity and provide health benefits. ▪ Will improve the cycle network within Uttlesford and hence Esses. ▪ Promotes well designed cycling infrastructure.
	Gear Change: A bold vision for cycling and walking ▪ Promotes walking and cycling and states that they should have priority. ▪ Reduce the conflict with motor vehicles.		Transport Strategy for Saffron Walden ▪ Will aid promotion and the delivery of sustainable transport measures within the strategy.
	Bus Back Better		

Draft Local Plan Policy	National Policy Alignment	Regional Policy Alignment	Local Policy Alignment
	▪ Policy promotes bus use by incorporation of bus infrastructure and enhancing existing services.		
Core Policy 27: Assessing the impact of Development on Transport Infrastructure	NPPF ▪ The impacts of developments will be assessed and that they will mitigated. ▪ Sustainable transport will be promoted.		Essex Local Transport Plan ▪ Promote sustainable transport. ▪ Provides alternative modes to the private car and the opportunity to reduce car journeys. ▪ Promotes travel planning to for greater use of sustainable transport and reduce the transport impact on the environment.
	DfT Circular 01/22 – Strategic road network and the delivery of sustainable development ▪ Promotes walking, cycling and public transport. Provides sustainable transport alternatives to the motor car and has the potential to reduce the impact on the strategic road network. ▪ Promotes make locations more sustainable.		
Core Policy 28: Active Travel - Walking and Cycling	NPPF ▪ Active travel will be promoted with greater priority. ▪ Providing an improved environment for cyclists and pedestrians.	Transport East Transport Strategy ▪ Promoting active travel will aid decarbonisation. ▪ Will aid connecting growing towns.	Essex Local Transport Plan ▪ Promote active travel and will aid reducing the number and length of trips made by private cars.

Draft Local Plan Policy	National Policy Alignment	Regional Policy Alignment	Local Policy Alignment
	▪ Promotes attractive and well-designed walking and cycling routes with supporting facilities.		
	DfT Circular 01/22 – Strategic road network and the delivery of sustainable development ▪ Promotes walking and cycling which provides opportunities for more trips by those modes rather than the private car. ▪ Promotes make locations more sustainable.		Essex Cycling Strategy ▪ Promotes cycling to reduce the environmental impact of travel. ▪ Promotion of cycling will aid connectivity and provide health benefits. ▪ Will improve the cycle network within Uttlesford and hence Esses. ▪ Promotes well designed cycling infrastructure.
	Gear Change: A bold vision for cycling and walking ▪ Promotes walking and cycling and states that they should have priority. ▪ Reduce the conflict with motor vehicles.		
Core Policy 29: Electric and Low Emission Vehicles	NPPF ▪ Providing EV infrastructure will enable a wider choice of modes with an alternative to fossil fuels and reduced emissions.	Transport East Transport Strategy ▪ Promoting active travel will aid decarbonisation.	Essex Local Transport Plan ▪ Will provide opportunities to reduce the carbon impact of transport by promoting EV and low emission vehicles.
Core Policy 30: Public Rights of Way	NPPF ▪ Provides for alternative modes of transport. ▪ Promotes walking and cycling.	Transport East Transport Strategy ▪ Promoting active travel will aid decarbonisation. ▪ Will aid connecting growing towns.	Essex Local Transport Plan ▪ Promote active travel and will aid reducing the number and length of trips made by private cars.

Draft Local Plan Policy	National Policy Alignment	Regional Policy Alignment	Local Policy Alignment
	▪ Improve quality of walking and cycling network.		
	DfT Circular 01/22 – Strategic road network and the delivery of sustainable development ▪ Promotes walking and cycling which provides opportunities for more trips by those modes rather than the private car. ▪ Promotes make locations more sustainable.		
	Gear Change: A bold vision for cycling and walking ▪ Promotes walking and cycling and states that they should have priority. ▪ Reduce the conflict with motor vehicles.		
Core Policy 31: Parking Standards	NPPF ▪ Providing cycle parking to aid cycling and create a well designed network with supporting facilities. ▪ Provides cycle parking and EV charging to provide alternative modes of transport with zero and reduced emissions.	Transport East Transport Strategy ▪ Will help promote active travel which will aid decarbonisation.	Essex Local Transport Plan ▪ Promote active travel and will aid reducing the environmental impact of transport.
	Gear Change: A bold vision for cycling and walking ▪ Promotes walking and cycling by providing cycle parking.		

Draft Local Plan Policy	National Policy Alignment	Regional Policy Alignment	Local Policy Alignment
Core Policy 32: The movement and management of Freight	NPPF ▪ Promotes local delivery hubs and provision of freight management strategies to reduce transport impact. ▪ Promotes low or zero emission modes of transport.	Transport East Transport Strategy ▪ Promoting active travel will aid decarbonisation.	Essex Local Transport Plan ▪ Promotes low or zero emission modes of transport which will reduce the impact of transport on the environment.
Core Policy 7: Delivery of Transport Schemes within the North Uttlesford Area	NPPF ▪ Promotes walking and cycling through the provision of new infrastructure and connectivity. ▪ Promotes alternative modes of transport through provision of EV car clubs, bike share and e-cargo bikes. ▪ Promotes a well-designed walking and cycling network with supporting facilities.	Transport East Transport Strategy ▪ Promoting active travel will aid decarbonisation. ▪ Will aid connecting growing towns.	Essex Local Transport Plan ▪ Promote sustainable transport. ▪ Promotes connectivity to services and communities within Uttlesford by sustainable transport. ▪ Promotion of sustainable transport will reduction carbon create by transport.
	DfT Circular 01/22 – Strategic road network and the delivery of sustainable development ▪ Promotes sustainable transport and the potential to reduce journeys by private car. ▪ Promotes make locations more sustainable.		Essex Cycling Strategy ▪ Promotes cycling to reduce the environmental impact of travel. ▪ Promotion of cycling will aid connectivity and provide health benefits. ▪ Will improve the cycle network within Uttlesford and hence Esses. ▪ Promotes well designed cycling infrastructure.
	Gear Change: A bold vision for cycling and walking		Transport Strategy for Saffron Walden

Draft Local Plan Policy	National Policy Alignment	Regional Policy Alignment	Local Policy Alignment
	▪ Promotes walking and cycling and states that they should have priority. ▪ Reduce the conflict with motor vehicles.		▪ Will aid promotion and the delivery of sustainable transport measures within the strategy.
Core Policy 13: Delivery of Transport Schemes within the South Uttlesford Area	NPPF ▪ Provides new and enhanced bus services which will promote bus us and alternative modes of transport to the private car. ▪ Promotes walking and cycling through the provision of new infrastructure and connectivity. ▪ Promotes alternative modes of transport through provision of EV car clubs, bike share and e-cargo bikes. ▪ Promotes a well-designed walking and cycling network with supporting facilities	Transport East Transport Strategy ▪ Promoting active travel will aid decarbonisation. ▪ Will aid connecting growing towns.	Essex Local Transport Plan ▪ Promote sustainable transport. ▪ Promotes connectivity to services and communities within Uttlesford by sustainable transport. ▪ Promotion of sustainable transport will reduction carbon create by transport.
	DfT Circular 01/22 – Strategic road network and the delivery of sustainable development ▪ Promotes sustainable transport and the potential to reduce journeys by private car. ▪ Promotes make locations more sustainable		Essex Cycling Strategy ▪ Promotes cycling to reduce the environmental impact of travel. ▪ Promotion of cycling will aid connectivity and provide health benefits. ▪ Will improve the cycle network within Uttlesford and hence Esses. ▪ Promotes well designed cycling infrastructure.

Draft Local Plan Policy	National Policy Alignment	Regional Policy Alignment	Local Policy Alignment
	Gear Change: A bold vision for cycling and walking ▪ Promotes walking and cycling and states that they should have priority. ▪ Reduce the conflict with motor vehicles.		
	Bus Back Better ▪ Policy promotes bus use by incorporation of bus infrastructure and enhancing existing services.		
Core Policy 17: Delivery of Transport Infrastructure within the Stansted and Elsenham Area	NPPF ▪ Provides new and enhanced bus services which will promote bus us and alternative modes of transport to the private car. Improvements to bus stops and rail stations will improve the public transport and hence the sustainable transport offer. ▪ Promotes walking and cycling through the provision of new infrastructure and connectivity. ▪ Promotes alternative modes of transport through provision of EV car clubs, bike share and e-cargo bikes. ▪ Promotes a well-designed walking and cycling network with supporting facilities	Transport East Transport Strategy ▪ Promoting active travel will aid decarbonisation. ▪ Will aid connecting growing towns.	Essex Local Transport Plan ▪ Promote sustainable transport. ▪ Promotes connectivity to services and communities within Uttlesford by sustainable transport. ▪ Promotion of sustainable transport will reduction carbon create by transport.

Draft Local Plan Policy	National Policy Alignment	Regional Policy Alignment	Local Policy Alignment
	DfT Circular 01/22 – Strategic road network and the delivery of sustainable development ▪ Promotes sustainable transport and the potential to reduce journeys by private car. ▪ Promotes make locations more sustainable		Essex Cycling Strategy ▪ Promotes cycling to reduce the environmental impact of travel. ▪ Promotion of cycling will aid connectivity and provide health benefits. ▪ Will improve the cycle network within Uttlesford and hence Esses. ▪ Promotes well designed cycling infrastructure.
	Gear Change: A bold vision for cycling and walking ▪ Promotes walking and cycling and states that they should have priority. ▪ Reduce the conflict with motor vehicles.		
	Bus Back Better ▪ Policy promotes bus use by incorporation of bus infrastructure and enhancing existing services.		

5 Sustainable Transport Evidence

5.1.1 This section details the four main pieces of sustainable transport evidence that have been used to inform the development of the Local Plan and have informed this Topic Paper and includes:

- Local Plan Sustainable Transport Study. July 2024. Produced by ITP
- Local Cycling and Walking Infrastructure Plan. July 2024. Produced by PJA
- A120 Corridor Study. May 2024 Produced by Essex Highways / Jacobs
- Shared Transport in New Developments. April 2024 Produced by CoMoUK

5.1.2 This evidence base further supports the 'Decide and Provide' approach that is reflected in the polices that promote sustainable transport in the Local Plan. Full details of this Local Plan Transport evidence is available and can be examined in detail.

5.2 Local Plan Sustainable Transport Report

5.2.1 The ITP report provides a detailed and robust sustainable transport evidence base and strategy which substantially informs this Topic Paper. Several of the outputs relating to the Policy Assessment (**Section 4** of this paper) and the Area Profiles And Strategies (**Section 6** of this paper) are taken from the ITP work.

5.3 Uttlesford Local Cycling and Walking Infrastructure Plan

5.3.1 Local Cycling and Walking Infrastructure Plans (LCWIP) identify and prioritise investment in new infrastructure to encourage a greater number of people to make journeys on foot or by cycle. They identify infrastructure interventions over short, medium, and long-term terms that meet the identified transport and movement objectives of Uttlesford but are not a comprehensive audit of all walking and cycling routes within the District.

5.3.2 The LCWIP was produced by with the support of Essex County Council (ECC) and local stakeholders.

5.3.3 The development of an LCWIP for Uttlesford is a key step in increasing active travel in the district. It helps to improve healthy exercise as part of daily activity, to reduce car use, improve air quality, reduce social exclusion and to work towards the commitment to achieving net-zero carbon status by 2030.

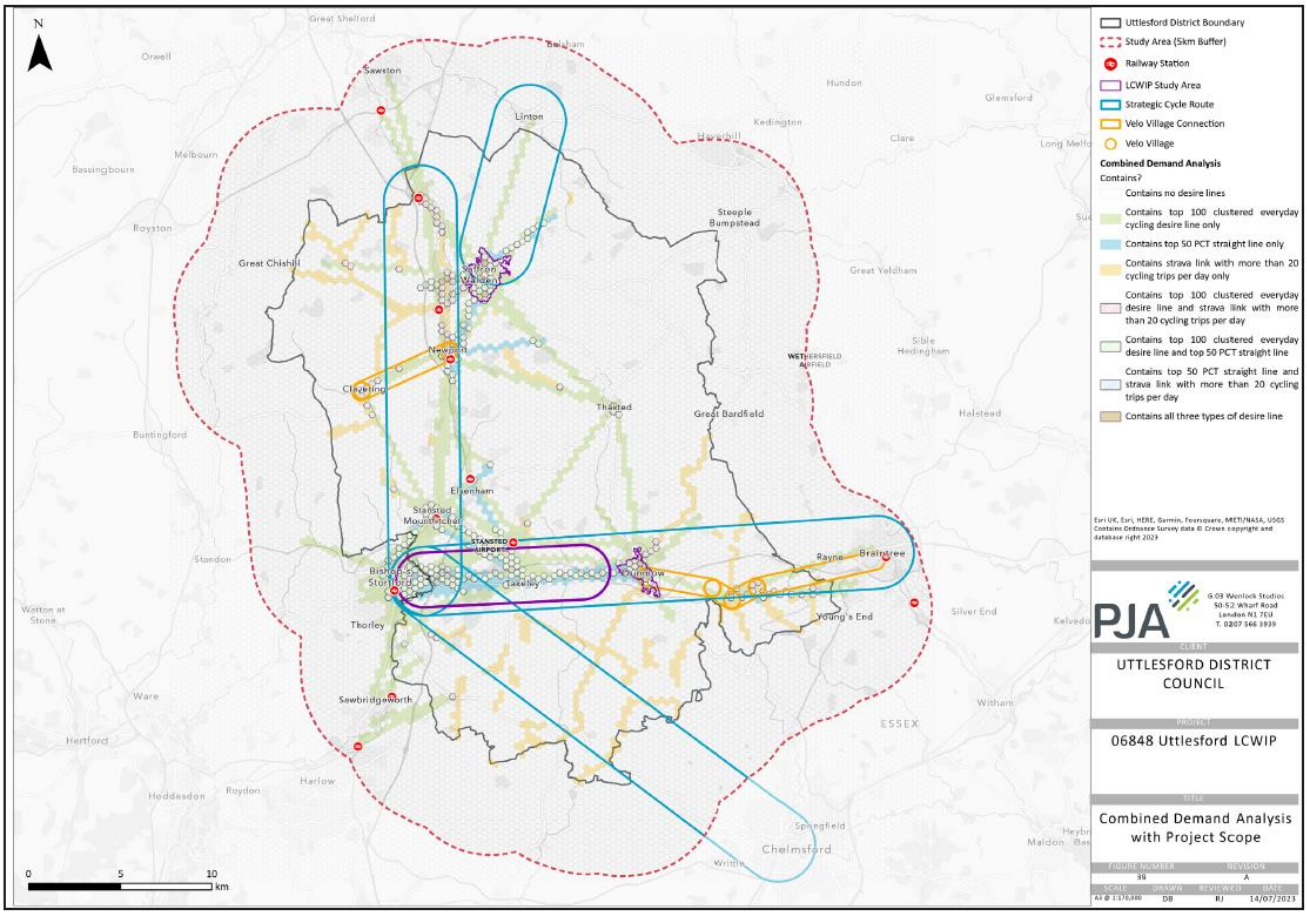
5.3.4 Understanding existing and potential future travel patterns is an important step in developing the LCWIP network to ensure it reflects local demand. The analysis of travel patterns includes both commuter and non-commuter travel patterns.

5.3.5 **Figure 2** shows the areas of demand to travel by walking and cycling across the study area. The results demonstrate that commuting demand is mostly contained within Saffron Walden and between Takeley and parts of Bishop's Stortford. The desire lines originating in or terminating in Takeley are related to demand generated by Stansted Airport.

5.3.6 From Saffron Walden there are some longer-distance desire lines extending to nearby towns further out, notably to Newport with other desire lines with lower levels of demand are found between Takeley and Stansted Mountfitchet and Dunmow, and between Dunmow and Takeley.

5.3.7 The plan demonstrates that there is commuting cycling demand in each of the three LCWIP study areas as shown on **Figure 1** below. The LCWIP conclusions for each area are explained more detail in the Area Strategies in **Section 6**.

Figure 1: Areas of demand to travel by cycling and walking.

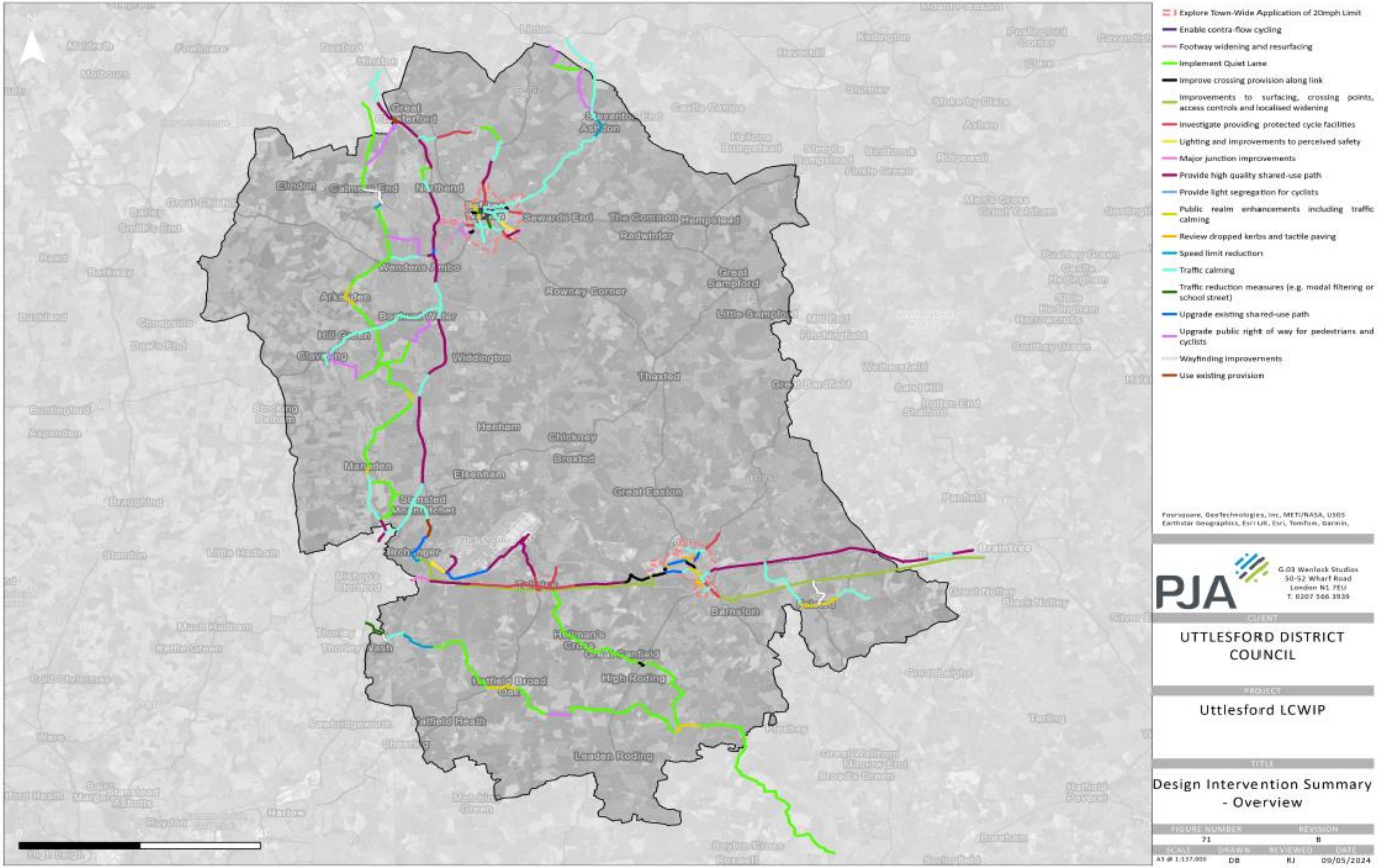


5.3.8 To help improve cross-district cycle connections and link up key destinations, it is necessary to increase the availability of routes between the District's main settlements.

5.3.9 **Figure 2** below demonstrates possibilities for a comprehensive district-wide network. This would provide connections within and between key settlements and enable regular everyday trips to be made by cycling, as well as routes for leisure journeys by all users.

5.3.10 Within the key settlements, the LCWIP methodology has developed a series of interventions to improve conditions for walking and cycling within these towns.

Figure 2: The District-wide LCWIP cycle routes



5.4 Shared Transport Study: CoMoUK

5.4.1 Uttlesford District Council commissioned CoMoUK, the national charity for shared transport, to examine the current evidence of the benefits of shared transport and to provide a set of recommendations to help inform the specification for the roll out of a shared mobility scheme across new developments in Uttlesford.

5.4.2 CoMoUK highlighted the acknowledged need for reliable high quality sustainable transport modes in order to reduce the dominance of the private car. They provided an independent view on the best approach to deliver shared transport both at the Strategic Allocations and the settlements in which they are to be based.

5.4.3 The Local Plan responds to this evidence by promoting the delivery of e-bike hire schemes, cargo kikes and car clubs in the strategic allocations in Saffron Walden, Great Dunmow and Takeley (including the employment allocation at Little Canfield).

5.4.4 The role of behaviour change in persuading people to use alternative and sustainable means of travel is significant and the provision of information and support is crucial. For example, there may be a need for incentives to use bus services or information on cycle routes and cycle training. For residents moving to a new home this can be an ideal time to trigger changes in travel behaviour. readily available on moving in. Importantly, all sustainable and shared transport services and infrastructure need to be in place for the first residents' arrival and made available through the marketing materials and welcome packs along with the promotion of community-led rides.

5.4.5 Local Plan policies include the delivery of a range of behaviour change interventions including the promotion of public transport incentives and policies to promote travel planning.

5.5 Essex Highways: Public Transport in the A120 Corridor

5.5.1 Uttlesford District Council (UDC) and Essex County Council (ECC) jointly commissioned a multi-modal viability study for the A120 corridor in Uttlesford in 2022. This was produced by Essex Highways/Jacobs.

5.5.2 When the previous draft Local Plan was withdrawn the Inspectors advised that further detail and analysis around the viability of what at the time was being considered as 'rapid transit' along the A120 corridor. This led to the A120 study to consider the most viable public transport service enhancements that would be viable with the level, type and location of development planned. It recommended several public transport enhancements options.

5.5.3 The study determined that a rapid transit public transport scheme along the A120 corridor is not viable with the level of growth proposed.

5.5.4 Two options for improvements to the existing services have been explored:

(i) diversion of existing bus services would not be possible without reducing provision from existing bus stops and was discounted.

(ii) Three new bus services and three re-routed bus routes have been proposed across Takeley and Great Dunmow which would allow connection with existing services and also improve their viability.

5.5.5 The proposed enhanced and new services are detailed on Figures 3, 4 and 5 below.

Figure 3: existing and proposed new bus routes in Takeley

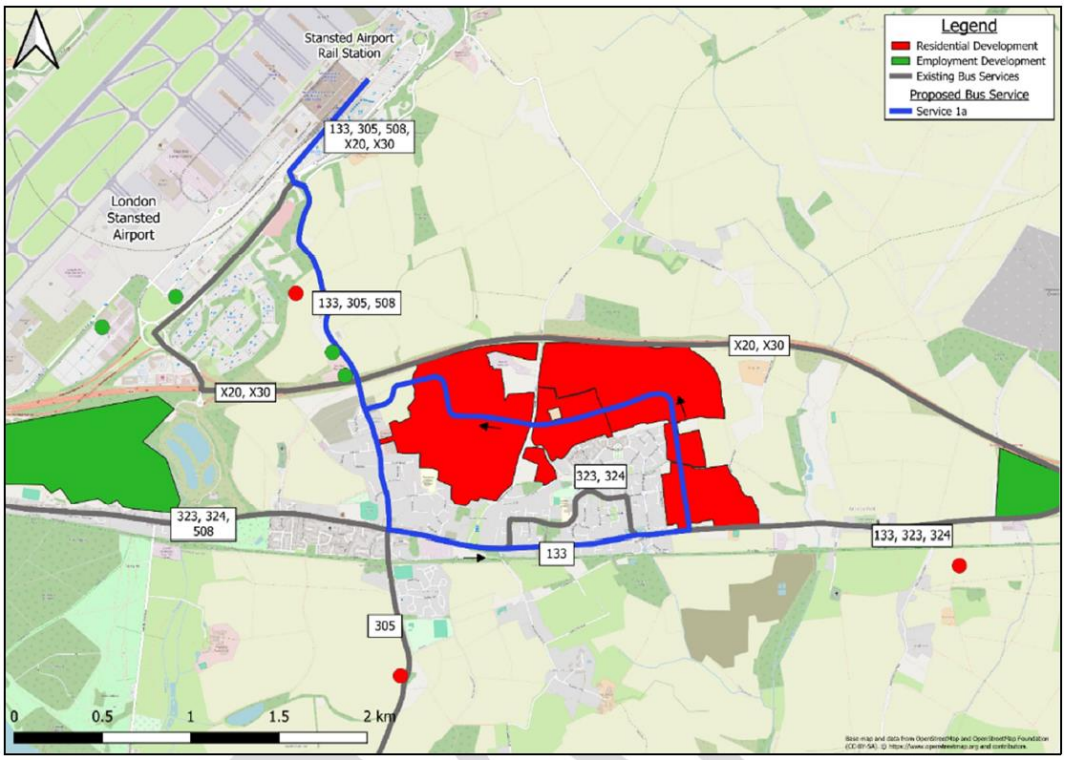


Figure 4: existing and new bus routes in Great Dunmow

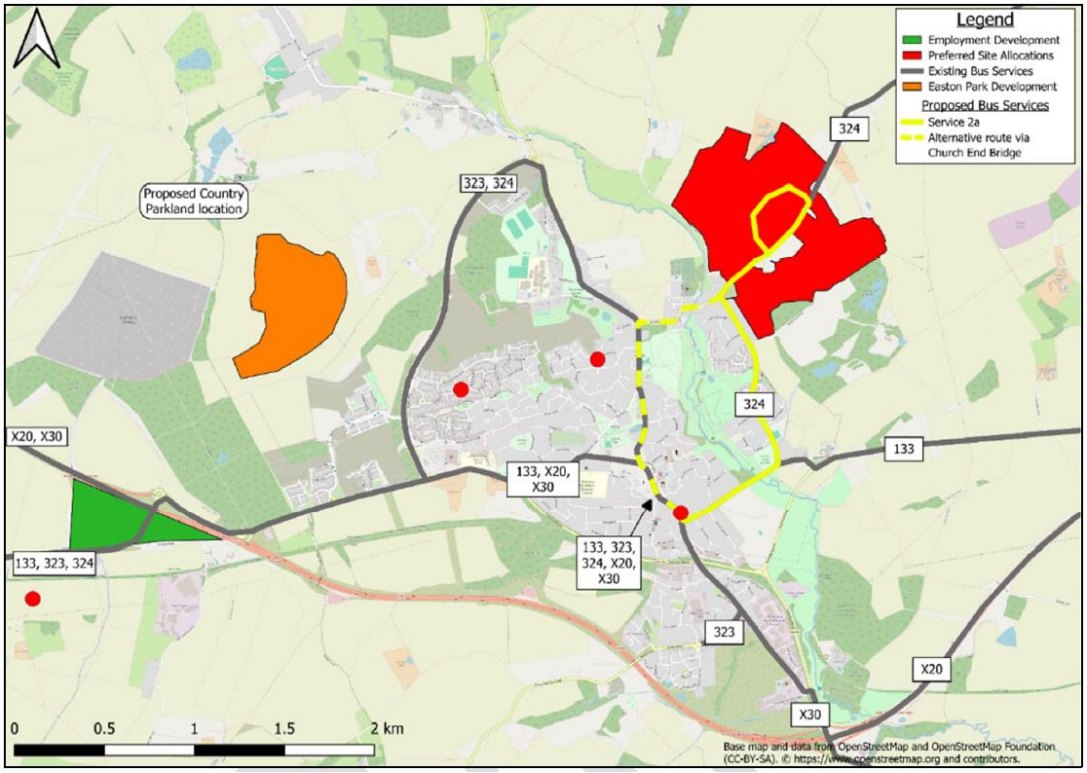
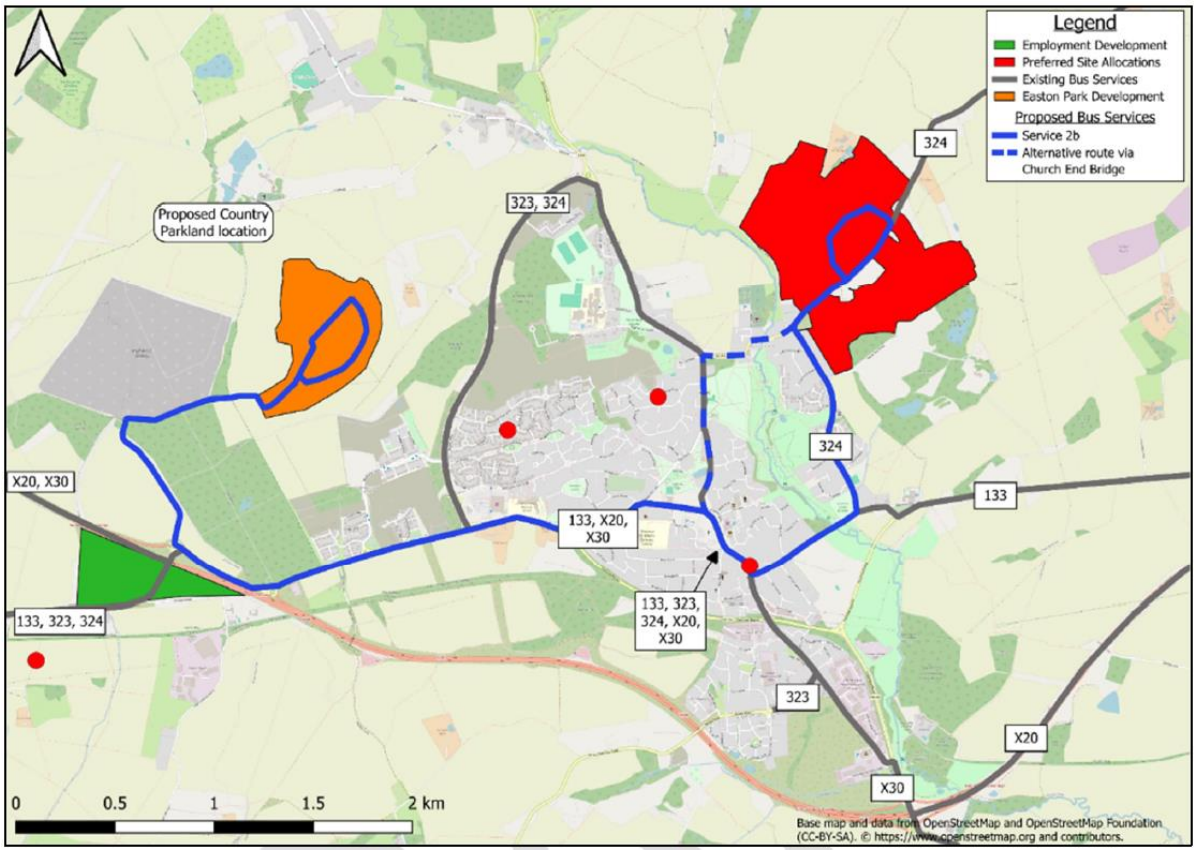


Figure 5: existing and new bus routes in Great Dunmow and 'Easton Park'



5.6 Mobility Hubs along the A120 corridor

5.6.1 The Study considered that mobility hubs would be feasible to support sustainable movement along the A120 corridor, particularly within Takeley connecting to Stansted Airport, and Great Dunmow Linking to the airport would strengthen the role and use of the mobility hubs. Active travel routes between each hub-node would align with the hub principles of being safe, inclusive and attractive. This is essential to maximising hub usage as an interchange point for active and public transport travel.

5.6.2 This study supports the conclusions and recommendations of the CoMoUK work (above) which re-enforces the benefits of delivering local transport hubs in Takeley and Great Dunmow.

5.6.3 Essex County Council is also developing an evidence base and design guidance on the value of transport hubs. It will set out difference scale of transport hub interventions– dependent on location and the scale of growth (or size of settlement proposed). This guidance is not yet available at the time of publication of this Topic Paper.

6 Sustainable Transport: Area Profiles and Sustainable Transport Strategies

6.1.1 This section summarises the Area Profiles which are contained in the sustainable transport evidence[7] by ITP. The strategies focus on the areas where development is proposed and makes proposals for how sustainable transport can be maximised, following an assessment of the existing sustainable transport conditions.

6.1.2 There is a need to improve sustainable mobility and the six broad themes for good practice identified will aid the development of the Area Strategies. Those themes are:

- Placemaking and land use planning
- Walking and cycling infrastructure
- Public transport
- Parking and traffic management
- Behavioural change
- Governance, policy and funding

6.1.3 Accessibility mapping has been undertaken for each collection of sites using. TRACC mapping software is used to create journey time calculations for public transport journeys, using the current transport network.

6.1.4 Mapped connectivity to the following key services indicates the types of services accessible by sustainable means from each of the allocation sites:

- Employment centre
- Grocery store (all sizes of supermarket and corner shops)
- GP/ Healthcare
- Hospital
- Local facility cluster (inc. schools, doctors, dentists, food shops, post office, rail station, bus score)
- Education (inc. primary, secondary and college / sixth form)

6.1.5 The area based strategies build on the transport evidence and support the 'Decide and Provide' approach to transport in the Local Plan

[7] *Sustainable Transport Evidence. ITP.*

6.2 Saffron Walden Area Profile

6.2.1 As the largest town in the district, Saffron Walden has the highest level of service and facilities. This includes a secondary school, primary schools, supermarkets alongside bus connections.

6.3 Travel Demographics in Saffron Walden

6.3.1 In Saffron Walden access to a car or van is higher than the Essex average. People travel further than the Essex average, although more people work at home according to the last Census in 2021. Driving to work by car is slightly lower and walking is higher than the average in England. Bus use is much lower than the Essex average and bicycle use is also lower.

6.4 Sustainable Transport provision in Saffron Walden.

6.4.1 Table 4 below summarises the sustainable transport provision in Saffron Walden including any identified constraints and opportunities.

Table 4: Summary of sustainable transport provision in Saffron Walden

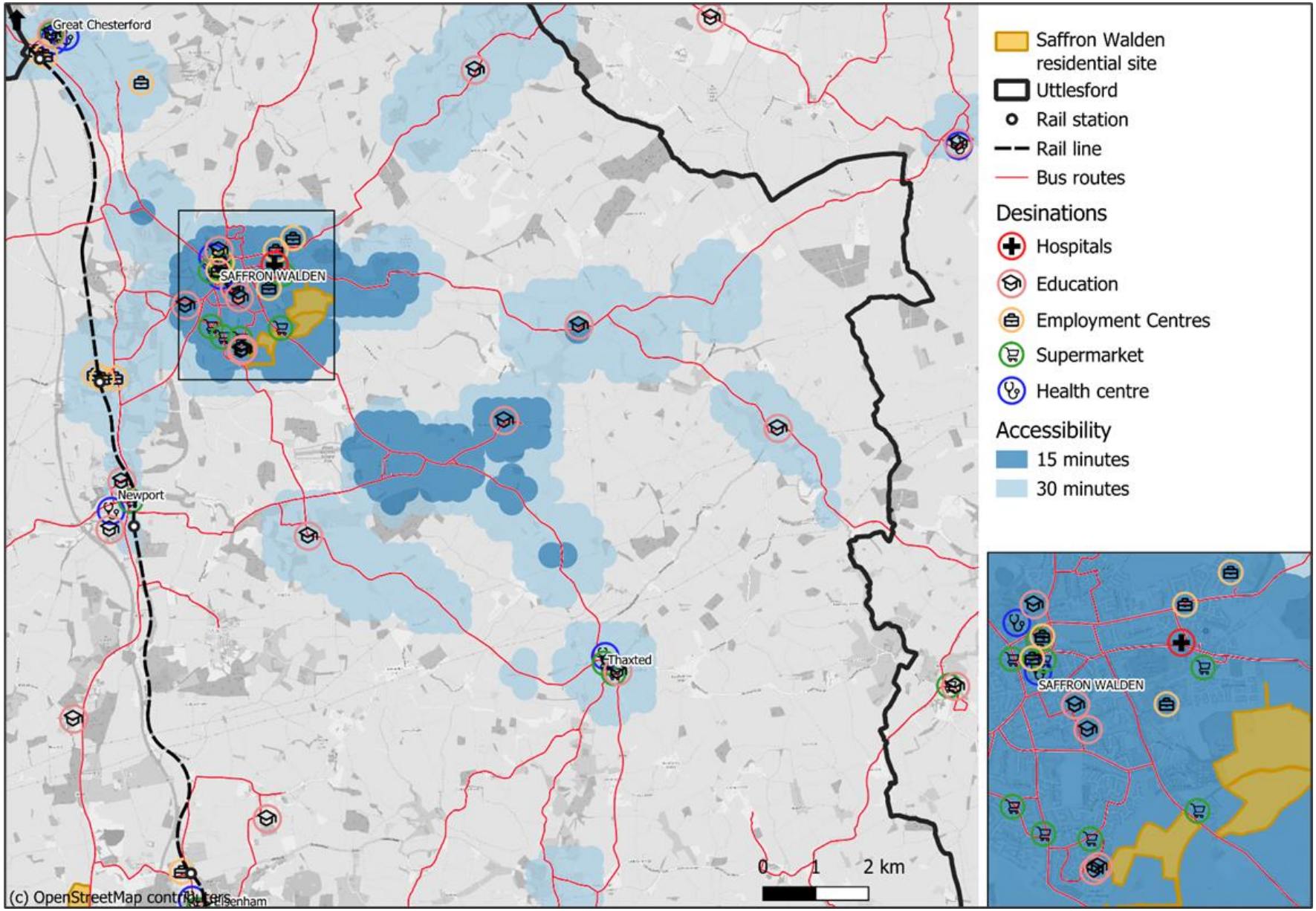
Public transport (bus and train)	Cycling and walking	Constraints	Opportunities
▪ Good coverage of bus stops, and accessibility to them ▪ Nearest train station is at Audley End, circa 3.5km SW of Saffron Walden	▪ Limited NCN access ▪ Consistent 30mph speed limits. ▪ Bike hire schemes and subsidised bike rental schemes. ▪ Most key services are within the town are within walking distance.	▪ No significant barriers such as rivers, motorways, or rail lines to impede internal movements. ▪ Historic centre with one-way streets which aren't wide enough for contraflow cycle lanes.	▪ High car dependency, and therefore significant potential for a mode shift.

6.5 Access to Services

6.5.1 The accessibility analysis indicates that most services in Saffron Walden is within a 15-min journey time by sustainable transport. This can be seen on the map at Figure 6.

6.5.2 The strategic development allocation in the south-east is accessible to a significant number and range of destinations within a 15-minute journey time. The destinations include two GP surgeries, one hospital and 10 education centres, as well as employment centres and shops. A further 15-minute journey increases the number of GP surgeries by four and education centres by 9, as well as employment locations and shops. The assessment is based on travel accessibility and does not take account of the capacity of any of these services to absorb more users.

Figure 6: Accessibility Analysis for Saffron Walden



6.6 Transport Assessment – Impact on highway network

6.6.1 The overall picture is one in which the impact of the proposed site allocations, over and above those set to be experienced because of committed growth, are relatively modest.

6.6.2 The package of interventions identified to mitigate the impacts, focuses on the need to improve travel choice and the provision of realistic and attractive alternatives to the car. The resultant reallocation of road space and reprioritisation of road users therefore results in marginal increases to the travel times and delays depicted in the Local Plan Case Modelling.

6.6.3 Overall it is considered that the additional impacts are deemed to be justifiable in the context of the improved travel choice on offer and in seeking to facilitate sustainable growth.

6.7 Saffron Walden: Summary of LCWIP proposals

6.7.1 Saffron Walden's historic streetscape means that there is very limited scope for segregated cycle facilities through the town, owing to narrow carriageway widths and highway boundary constraints. As such, improvements along strategic routes through the town should focus on corridor-wide improvements which aim to increase the overall conditions for walking and cycling. Alternative solutions such as light segregation might also be appropriate in some locations.

6.7.2 Corridor wide schemes should focus on reduction of vehicle speeds through 20mph speed limits, treatment of side-road junctions included tightened geometry, centre-line removal, footway widening where feasible and improved crossing facilities to reduce the severance effect of major roads through the town. To complement this, advisory cycle lanes may also be considered alongside these measures, ensuring a minimum width of 2m in line with LTN 1/20 (or 1.5m as the absolute minimum in more constrained locations). The porous nature of the town also means that there are often quieter alternatives to using the major roads through the town, however in many cases contraflow facilities will be required to enable two-way cycling.

6.7.3 One of the main focuses of the design recommendations is improving the permeability of the town for cyclists. At present, there are many one-way streets, particularly in the centre of the town where contraflow cycling is prohibited. By allowing contraflow cycling on these streets, with associated improvements as required, the accessibility of the town centre would improve greatly. Full details of the Saffron Walden LCWIP can be found in the Local Plan evidence base. The map of Saffron Walden LCWIP proposals can be seen overleaf at **Figure 7**.

6.8 Saffron Walden: Sustainable Transport Strategy.

6.8.1 The most significant intervention that will be delivered in Saffron Walden is the new development link road that will connect Radwinter Road to Thaxted Road. This new road will relieve the increased pressure that will be found at the Thaxted Road/Radwinter Road signalised junction.

6.8.2 Following the production of the sustainable transport evidence and the outputs of the transport modelling assessment, a range of sustainable transport interventions have been proposed to maximise the sustainable transport opportunities and the sustainable transport interventions are listed in **Table 5** below which are subsequently reflected in the Local Plan policies and informed the measures detailed in the Site Development Frameworks.

Figure 7:Suggested LCWIP interventions in Saffron Walden

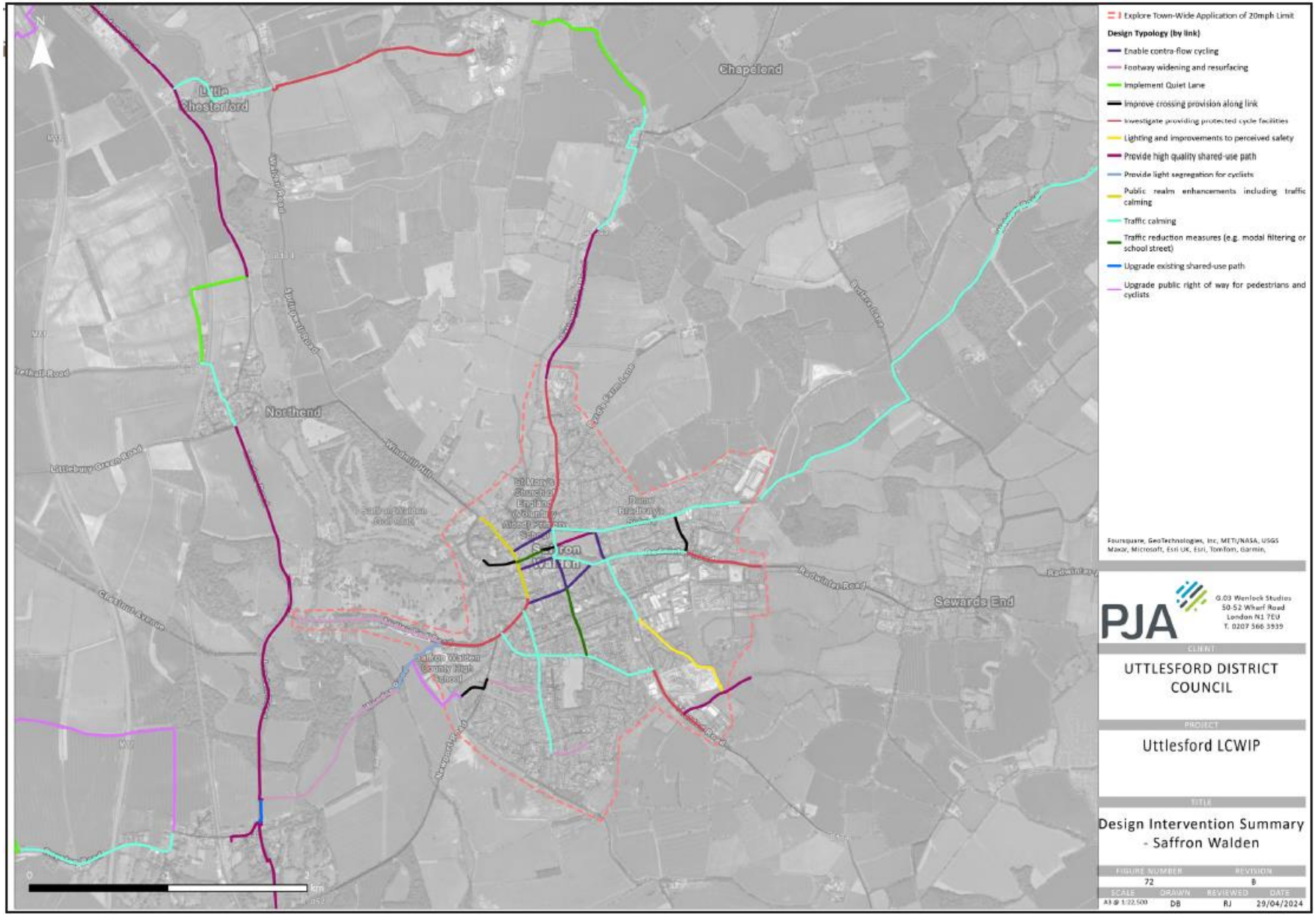


Table 5: Saffron Walden: proposed sustainable transport improvements

Theme	Proposed improvements through the Local Plan	Supporting Evidence Documents
Placemaking and land use planning	▪ Providing wayfinding within the development allocations and within Saffron Walden, to the town centre and Audley End railway station to aid the movement of people on foot and by cycle. ▪ Provision of a mobility hub within the northern housing allocation.	▪ Local Plan Sustainable Transport ▪ Local Cycling and Walking Infrastructure Plan ▪ Shared Transport in New Developments
Walking and cycling infrastructure	▪ A sustainable transport route should be provided to link Radwinter Road with Thaxted Road. ▪ Connect residential sites with LCWIP routes 3, 4, 10 and 12. ▪ Public Footpath Saffron Walden 7 to be upgraded to become an active travel route. ▪ Pedestrian routes to bus stops should be as direct as possible to aid amenity. ▪ Review routes and identify measures to link new developments to bus stops and facilities in the most direct way, and to identify barriers to people with disabilities and a mobility impairment. ▪ Bike share, e-bike charging stations, cargo bikes and bike maintenance hubs should be provided. ▪ Increase Audley End Railway station cycle parking.	▪ Local Plan Sustainable Transport ▪ Local Cycling and Walking Infrastructure Plan ▪ Shared Transport in New Developments
Public transport	▪ Review existing bus services and addition of new services to serve the allocations, linking them to the town centre and railway station. ▪ Sustainable transport route should be provided to link Radwinter Road with Thaxted Road. ▪ Provision of bus shelters at bus stops, provision of real time information, as well as reviewing existing stops to ensure they are accessible to people with a disability or a mobility impairment. ▪ Enhance interchange facilities at Audley End railway station.	▪ Local Plan Sustainable Transport ▪ Local Cycling and Walking Infrastructure Plan ▪ Shared Transport in New Developments ▪ Model Outputs: Saffron Walden
Parking and traffic	▪ EV car clubs with 2 spaces.	▪ Local Plan Sustainable

management	▪ EV charge points provided for all houses.	Transport ▪ Shared Transport in New Developments
Behavioural change	▪ Walking and cycling information and awareness campaigns. ▪ Provide details of bus services as part of residential and employment travel plans. ▪ Bus awareness and information campaigns.	▪ Local Plan Sustainable Transport ▪ Local Cycling and Walking Infrastructure Plan ▪ Shared Transport in New Developments ▪ Model Outputs: Saffron Walden
Governance, policy and funding	▪ Provision of discounted bus vouchers for new residents at strategic development site. ▪ Introduce Saffron Walden Transport Strategy measures for public transport, parking and traffic management and placemaking.	▪ Local Plan Sustainable Transport ▪ Shared Transport in New Developments ▪ Model Outputs

6.9 Great Dunmow Area Profile

6.9.1 Great Dunmow is the second largest settlement in Uttlesford and is classified as a 'Key Settlement' in the settlement hierarchy. It acts as the service centre for the south-eastern area of the district with a range of retail and service facilities including strategic bus services given its location close to the A120.

6.10 Travel Demographics in Great Dunmow

6.10.1 Great Dunmow residents had lower access to a car or van than the Uttlesford average with more residents with no car or 1 car. Fewer people worked from home than the Uttlesford average and those travelling to work commuted shorter distances. Driving to work by car is higher than the Uttlesford average, with all other modes broadly in line with the Uttlesford average.

6.11 Sustainable Transport provision in Great Dunmow.

6.11.1 The table below summarises the sustainable transport provision in Great Dunmow including any identified constraints and opportunities.

Table 2: Summary of sustainable transport provision in Great Dunmow

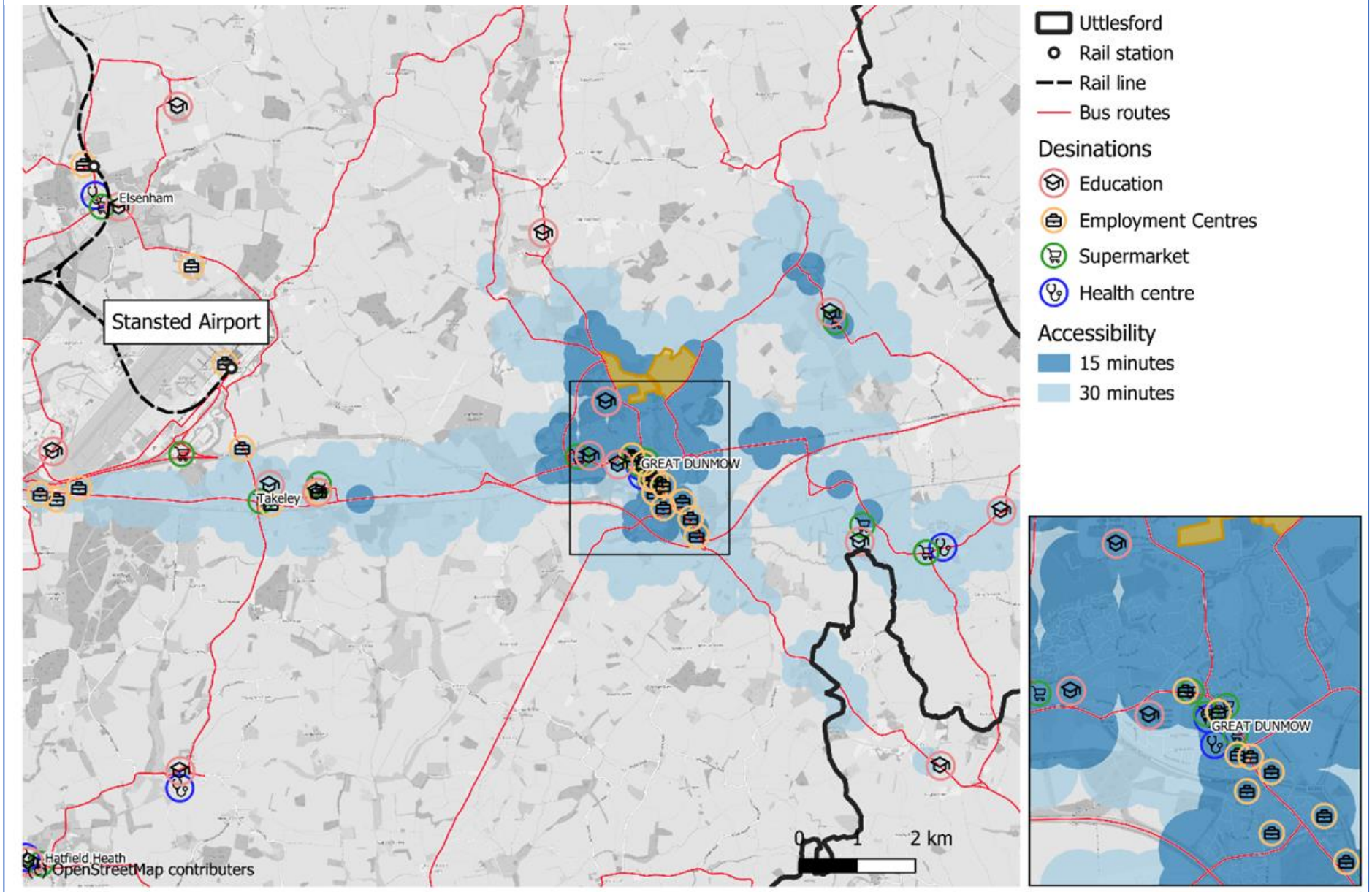
Public transport (bus and train)	Cycling and walking	Constraints	Opportunities
▪ Bus routes are classed as Low Accessibility. ▪ Nearest train station is at Stansted Airport, circa 7.2km West of town centre	▪ Great access to NCN. ▪ Possible to cycle to Stansted Airport via a mostly segregated route. ▪ Access to The Flitch Way.	▪ River Chelmer and the A120 represent instances of severance.	▪ A compact town where walking and cycling to services may be more attractive than driving. ▪ Transport to Stansted Airport, as the largest employer in Uttlesford.

6.12 Access to Services

6.12.1 The accessibility analysis indicates that there are many services in Great Dunmow that are within a 15-min journey time by sustainable transport. The destinations include two GP surgeries, four education centres, as well as employment centres and shops. A further 15-minute journey increases the number of GP surgeries by one and education centres by five, as well as employment locations and shops.

6.12.2

Figure 3: Accessibility Analysis for Great Dunmow



6.13 Transport Assessment – Impact on highway network

6.13.1 In Great Dunmow the overall picture is one in which the additional impacts of the site allocations are relatively modest.

6.13.2 There will be some increases in traffic volume and delays around the town and particularly at the junctions of the B1256 with the B184 Woodside Way and at the Braintree Road/St Edmunds Lane intersection.

6.13.3 The package of mitigation interventions focuses on the need to improve travel choice and the provision of realistic and attractive alternatives to the car. The resultant reallocation of road space and reprioritisation of road users therefore results in marginal increases to the travel times and delays depicted in the Local Plan Case Modelling. The measures that were assessed are detailed in Appendix 2.

6.13.4 The additional impacts are deemed to be justifiable in the context of the improved travel choice on offer and in seeking to facilitate sustainable growth.

6.14 Great Dunmow: Summary of LCWIP proposals

6.14.1 In Great Dunmow, one of the main weaknesses identified through the audits related to the comfort and safety of both pedestrians and cyclists, particularly in relation to traffic volumes and also traffic speeds in some locations. This was particularly evident along roads such as Chelmsford Road, where general traffic flows and HGV percentages were high. In locations such as this, segregated facilities for cyclists should be explored where the highway width allows. This could take the form of stepped cycle tracks.

6.14.2 Towards the centre of the town, where there are more width constraints, corridor-wide improvements should be explored which aim to increase the overall conditions for walking and cycling. As part of this, speed reduction should be considered and a town-wide 20mph speed limit could be pursued as one way to achieve this. In addition, treatment of side-road junctions included tightened geometry, centre-line removal, footway widening where feasible and improved crossing facilities to reduce the severance effect of major roads through the town.

6.14.3 Full details of the Great Dunmow LCWIP can be found in the Local Plan evidence base. The map of Great Dunmow LCWIP proposals can be seen overleaf at **Figure 9**.

6.15 Great Dunmow: Sustainable Transport Strategy.

6.15.1 Following the production of the sustainable transport evidence and the outputs of the transport modelling assessment, a range of sustainable transport interventions have been proposed in order to maximise the sustainable transport opportunities and the sustainable transport interventions are listed in **Table 7** below which are subsequently reflected in the Local Plan policies and informed the measures detailed in the Site Frameworks.

Figure 4:Suggested LCWIP interventions in Great Dunmow

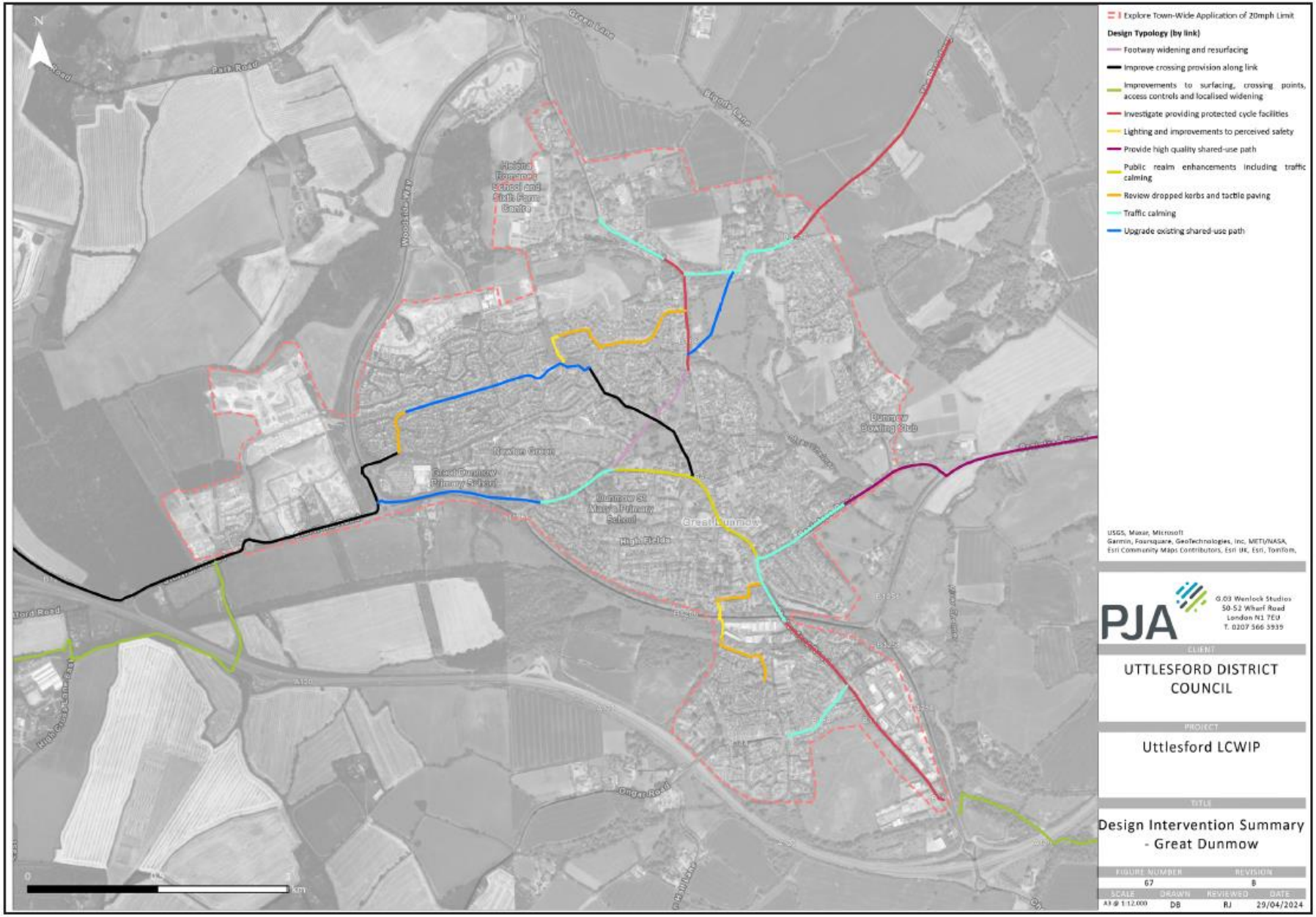


Table 7: Great Dunmow: proposed sustainable transport improvements

Theme	Proposed improvements through the Local Plan	Supporting Evidence Documents
Placemaking and land use planning	▪ Providing wayfinding within the development allocations and within Great Dunmow. ▪ Provision of a mobility hub within both residential sites.	▪ Local Plan Sustainable Transport ▪ Local Cycling and Walking Infrastructure Plan ▪ Shared Transport in New Developments
Walking and cycling infrastructure	▪ Potential to extend LCWIP 2 to the housing site, with LCWIP 7 connecting directly into the housing site. ▪ Potential to upgrade Public Footpath Great Dunmow 21 and 22 to bridleways. ▪ Review routes and identify measures to link new developments to bus stops and facilities in the most direct way, and to identify barriers to people with disabilities and a mobility impairment. ▪ Bike share, e-bike charging stations, cargo bikes and bike maintenance hubs should be provided.	▪ Local Plan Sustainable Transport ▪ Local Cycling and Walking Infrastructure Plan ▪ Shared Transport in New Developments
Public transport	▪ Review of existing bus services on the B1008 and B1057 to potentially service the new sites, including review of frequencies. ▪ New local bus services, including those proposed in the A120 corridor study, as well as new services to Stansted Airport which would also provide rail connectivity. ▪ Provision of bus shelters at bus stops. ▪ Provision of bus shelters at bus stops, provision of real time information, as well as reviewing existing stops to ensure they are accessible to people with a disability or a mobility impairment.	▪ Local Plan Sustainable Transport ▪ Local Cycling and Walking Infrastructure Plan ▪ Shared Transport in New Developments
Parking and traffic management	▪ EV car clubs with 2 spaces ▪ EV charge points provided for all houses to enable residents to own	▪ Local Plan Sustainable Transport ▪ Shared Transport in New

	and charge their vehicle at their residence.	Developments
Behavioural change	▪ Bus awareness and information campaigns. ▪ Walking and cycling information and awareness campaigns. ▪ Provide details of bus services as part of residential and employment site travel plans.	▪ Local Plan Sustainable Transport ▪ Local Cycling and Walking Infrastructure Plan ▪ Shared Transport in New Developments ▪ Model Outputs: Saffron Walden
Governance, policy and funding	▪ Provision of discounted bus vouchers for new residents at strategic development site.	▪ Local Plan Sustainable Transport ▪ Shared Transport in New Developments ▪ Model Outputs

6.16 Takeley Area Profile

6.16.1 Takeley is one of the six settlements classified as 'Local Rural Centres' by the settlement hierarchy. Located south of Stansted Airport, Takeley is currently served by several daily bus services with two primary schools and a number of retail facilities.

6.17 Travel Demographics in Takeley

6.17.1 In Takeley access to multiple cars or vans is slightly higher than the Uttlesford average, with single car and no car households are lower. More people travelled under 10km to work compared to the Uttlesford average while working from home was lower. Driving to work is higher than the average, however, walking, cycling and train travel to work are all lower than the Uttlesford average, whilst bus travel is notably higher.

6.18 Sustainable Transport provision in Takeley

6.18.1 The table below summarises the sustainable transport provision in Takeley including any identified constraints and opportunities.

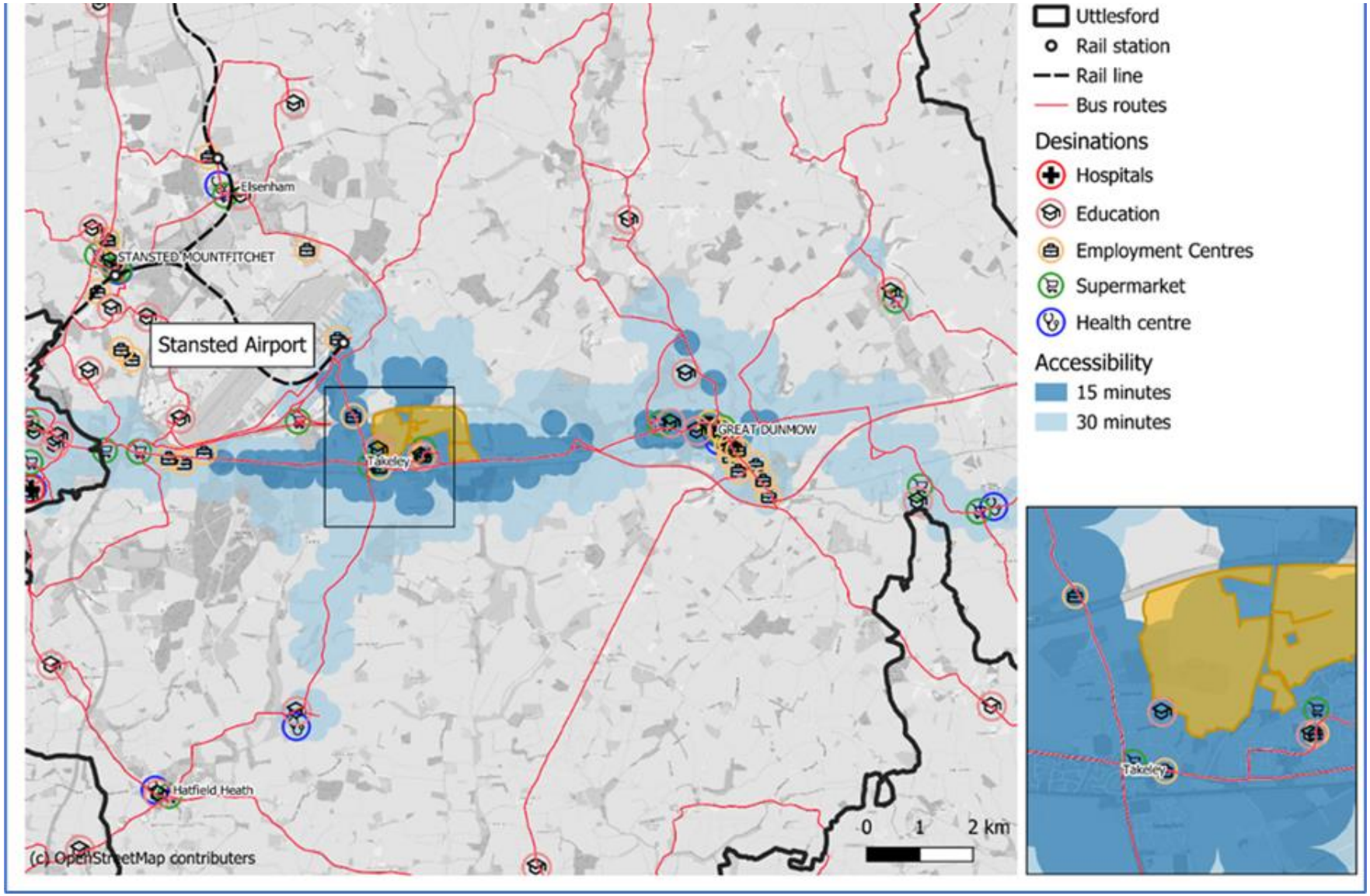
Table 9: Summary of sustainable transport provision in Takeley

Public transport (bus and train)	Cycling and walking	Constraints	Opportunities
▪ Good coverage of bus stops, and accessibility to them. ▪ No train station – nearest is at Stansted Airport. Direct bus services are available.	▪ Great access to NCN through the town. ▪ Signed shared footpath/cycleway	▪ The current road network in Takeley town centre is inefficient, leading to frequent traffic. ▪ Minor A120 severance.	▪ Potential to provide access to the multi modal transport hub at Stansted Airport. ▪ Stansted Airport is the largest employment site in the district so there is an opportunity to access employment by sustainable means.

6.19 Access to Services

6.19.1 The accessibility analysis indicates that the majority of services in Takeley is within a 15-min journey time by sustainable transport. The destinations include two GP surgeries, as well as employment centres and shops. There are no education centres within a 15-minute journey by bus. A further 15-minute journey increases the number of GP surgeries by five, as well as employment locations and shops.

Figure 10: Accessibility Analysis for Takeley



6.20 Transport Assessment – Impact on highway network

6.20.1 In Takeley the overall picture is one in which the additional impacts of the site allocations, over and above those set to be experienced because of committed growth, are relatively modest.

6.20.2 There will be some increases in traffic volume and delays around the town and these are most evident around the known existing pinch point of the Four Ashes junction (B1256/Parsonage Rd / Station Road). The new 8 form entry secondary school on the Strategic Allocation in Takeley will contribute to these delays, most evidently in the AM peak.

6.20.3 The impact of HGVs on the village and the B1256 are not considered to be significant, however, the planning strategy for the development of the employment sites will require a HGV routing strategy which will focus on routing HGV traffic towards the strategic road network by the most direct route.

6.20.4 The package of interventions which have been identified to mitigate the impacts, focuses on the need to improve travel choice and the provision of realistic and attractive alternatives to the car.

6.21 LCWIP proposals around Takeley

6.21.1 There are two main routes which the LCWIP suggests should be delivered in the Takeley Area: Alignment 1 generally follows the Flitch Way and includes an important spur linking to Stansted Airport. Alignment 2 follows the B1256 corridor.

6.21.2 The majority of the Alignment 1 follows the Flitch Way, which is an existing traffic-free route providing a connection between Bishop's Stortford and Braintree.

6.21.3 The main constraint of this route is the quality of surfacing along the route and the fact that the route is unlit and lacks passive surveillance along the traffic-free sections. This means that the route is not suitable as a utility route for regular commuting trips, and/or trips undertaken outside of daylight hours or in poor weather conditions.

6.21.4 The focus of improvements along the route therefore is to upgrade the existing surfacing in sections to a smooth, bound surface that is clear of debris, cracks and has suitable drainage in place. It may not be possible to provide lighting along the route due to ecological constraints, however this should be investigated and alternative solutions such as recessed stud lighting could be considered.

6.21.5 The route (Alignment 1) also connects Takeley to Stansted Airport via Parsonage Road. Vehicle volumes and speeds are unlikely to be suitable for cyclists to mix with traffic and there is an existing 2m wide footway which runs alongside the carriageway. Given the low pedestrian flows, it is recommended that this facility is upgraded to a high quality shared-use route, measuring at least 3m in width. Within Takeley itself, it would be preferable to separate pedestrian and cycle traffic given the higher pedestrian flows, likely through provision of segregated cycle tracks on either side of the carriageway along Parsonage Lane. Where there are width constraints, alternative on-carriageway solutions or short sections of shared-use might be necessary.

6.21.6 Within the airport site, the route utilises the internal road network to connect to the terminal and to the business park. As noted, there are some sections of on-carriageway cycle lanes along Long Border Road, as well as a footway separated from the carriageway by a grass verge. Given likely vehicular flows and proportion of HGVs within the airport site, cyclists should be separated from motor traffic. Therefore, it is recommended that the existing footway is upgraded and widened to provide a high quality shared use route alongside the carriageway, aiming for a minimum width of 3m.

6.21.7 For Alignment 2 there is an existing shared-use footway cycle route through Takeley, via the residential area north of the B1256. This starts east of Parsonage Lane and terminates at Thornton Road. It then starts again east of Bluegates Farm and continues into Great Dunmow. Therefore, a critical issue to address along this route is the gap in provision along the B1256 between these two points. To do so, widening of the existing footway would be required and land purchase may be necessary to provide a “behind the hedge” type facility if there is not sufficient width available within the highway boundary.

6.21.8 Full details of the LCWIP can be found in the Local Plan evidence base. The map of Takeley area LCWIP proposals can be seen overleaf at **Figure 11**.

6.22 Takeley: Sustainable Transport Strategy.

6.22.1 Following the production of the sustainable transport evidence and the outputs of the transport modelling assessment, a range of sustainable transport interventions have been proposed in order to maximise the sustainable transport opportunities and the sustainable transport interventions are listed in **Table 10** below which are subsequently reflected in the Local Plan policies and informed the measures detailed in the Site Development Frameworks.

Figure 11:Suggested LCWIP interventions the Takeley area

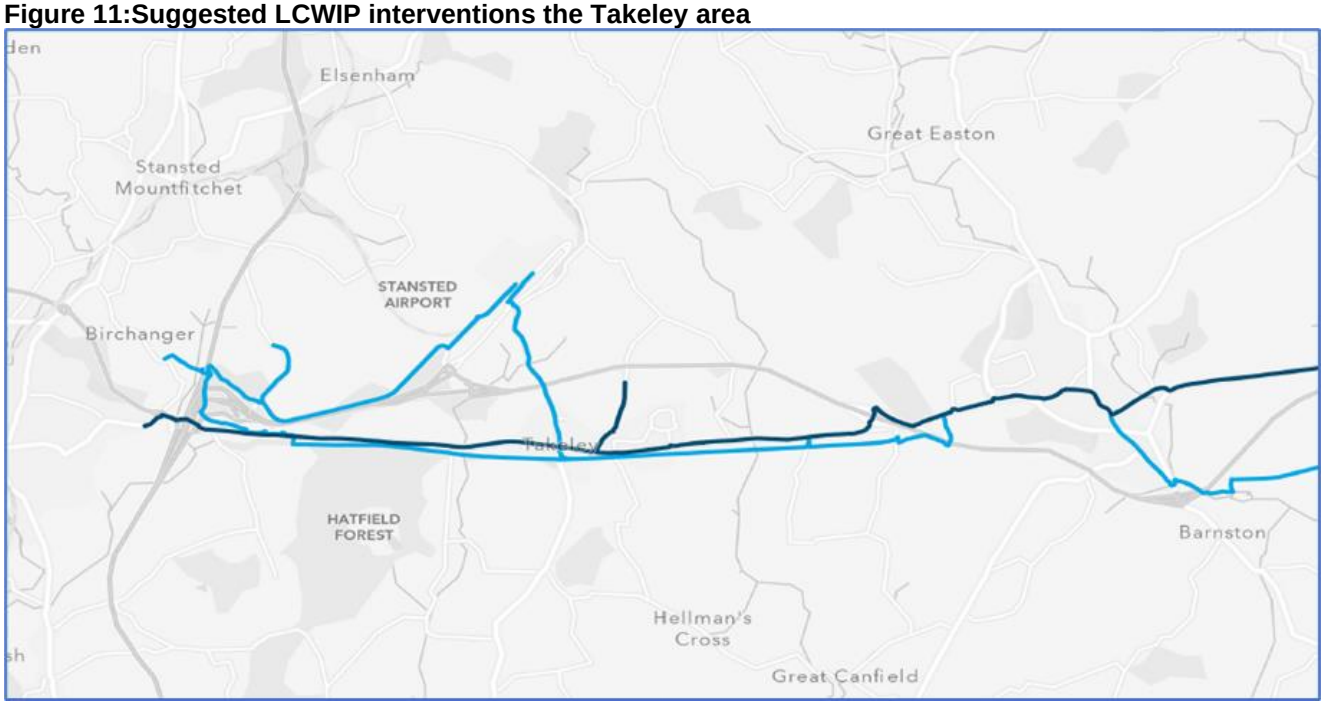


Table 10: Takeley: proposed sustainable transport improvements

Theme	Proposed improvements through the Local Plan	Supporting Evidence Documents
Placemaking and land use planning	▪ Providing wayfinding for the housing and employment allocations to services and facilities and the railway and bus stations at Stansted Airport ▪ Provision of a mobility hub serving both residential sites.	▪ Local Plan Sustainable Transport ▪ Local Cycling and Walking Infrastructure Plan ▪ Shared Transport in New Developments
Walking and cycling infrastructure	▪ Connect sites with LCWIP routes ▪ A sustainable transport route will be delivered through the Takeley strategic site which will be designed to accommodate all appropriate road users and deliver walking and cycling schemes to the highest standard. ▪ Public transport and active travel connections will be improved between Takeley and Stansted Airport public transport interchange. ▪ Upgrades to local walking and cycling routes, including multi-functional surfacing for all users and measures to improve biodiversity. ▪ Walking and cycling routes should be provided to the proposed primary (including early years provision and facility to accommodate Special Educational Needs) and secondary school. ▪ Review routes and identify measures to link new developments to bus stops and facilities in the most direct way, and to identify barriers to people with disabilities and mobility impairments. ▪ Bike share, e-bike charging stations, cargo bikes and bike maintenance hubs should be provided. ▪ Providing wayfinding for the housing and employment allocations to services and facilities and the railway and bus stations at Stansted Airport	▪ Local Plan Sustainable Transport ▪ Local Cycling and Walking Infrastructure Plan ▪ Shared Transport in New Developments

Public transport	▪ Review existing bus services and addition of new services to serve the allocations. ▪ The services should connect to the bus and rail interchange at Stansted Airport. The services should be routed to local facilities and services that will encourage travel by bus by new and existing residents. ▪ Provision of bus shelters at bus stops, provision of real time information, as well as reviewing existing stops to ensure they are accessible to people with a disability or a mobility impairment.	▪ Local Plan Sustainable Transport ▪ Local Cycling and Walking Infrastructure Plan ▪ Shared Transport in New Developments ▪ Model Outputs
Parking and traffic management	▪ EV car clubs with 2 spaces ▪ EV charge points provided for all houses to enable residents to own and charge their vehicle at their residence. ▪ The highway mitigation and junction improvements that are required in Takeley and Great Dunmow as identified in the transport evidence including appropriate and proportionate mitigation measures at Junction 8. ▪ Smiths Green Lane will be closed to through vehicular traffic at Warish Hall Farm and the route will be prioritised for walking and cycling whilst retaining local access.	▪ Local Plan Sustainable Transport ▪ Shared Transport in New Developments
Behavioural change	▪ Bus awareness and information campaigns. ▪ Walking and cycling information and awareness campaigns. ▪ Provide details of bus services as part of residential and employment site travel plans.	▪ Local Plan Sustainable Transport ▪ Local Cycling and Walking Infrastructure Plan ▪ Shared Transport in New Developments
Governance, policy and funding	▪ Provision of discounted bus vouchers for new residents at strategic development site.	▪ Local Plan Sustainable Transport ▪ Shared Transport in New Developments ▪ Model Outputs

6.23 Stansted Mountfitchet Area Profile

6.23.1 Stansted Mountfitchet is the third largest settlement in Uttlesford and is classified as a 'Key Settlement' according to the settlement hierarchy. It has a range of services and retail facilities including good rail and bus connections.

6.24 Travel Demographics in Stansted Mountfitchet

6.24.1 Access to a car or van is in-line with the Uttlesford average with slightly more people owning one car. Distances travelled to work is similar to the Uttlesford average, with slightly more shorter journeys less than 10km taking place. Driving to work by car is lower than the Uttlesford average, whilst travel by train is notably higher. Other public transport and active mode use are slightly lower than average.

6.25 Sustainable Transport provision in Stansted Mountfitchet

6.25.1 The **Table 11** below summarises the sustainable transport provision in Stansted Mountfitchet including any identified constraints and opportunities.

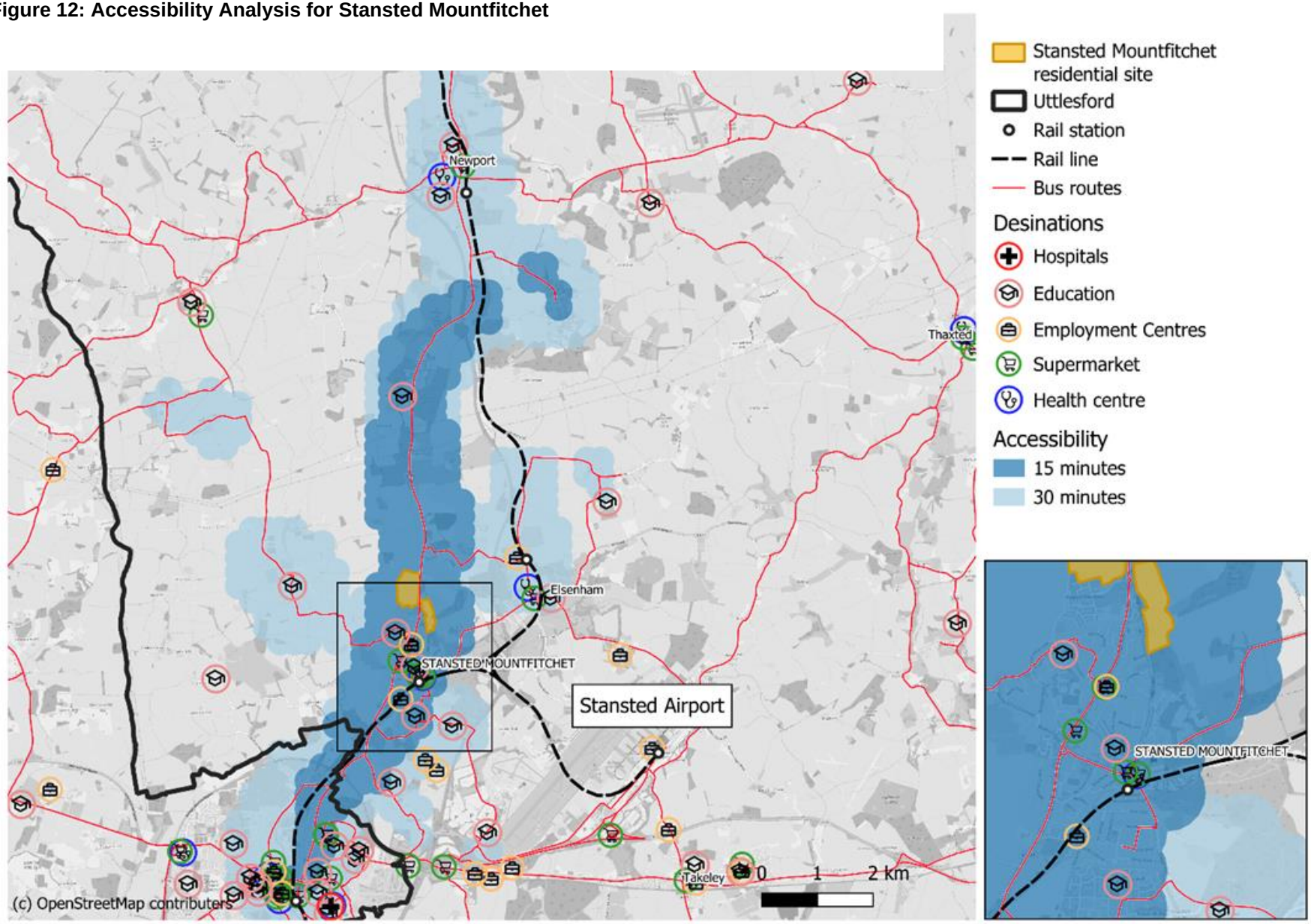
Table 11: Summary of sustainable transport provision in Stansted Mountfitchet

Public transport (bus and train)	Cycling and walking	Constraints	Opportunities
▪ Central rail station with regular journeys to key destinations. ▪ Adequate bus network.	▪ Stansted Mountfitchet links to NCN16 but lacks safe routes to the airport. ▪ A 92-mile route, NCN 11 runs north from Stansted Mountfitchet.	▪ Severance from M11 and A120. There are just 3 crossing points.	▪ B1383 Stansted Mountfitchet to Bishop Stortford active travel could be improved. ▪ Rail station ensures the town is well-connected.

6.26 Access to Services

6.26.1 The accessibility analysis indicates that the residential sites are accessible to a significant number and range of destinations within a 15-minute journey time. The destinations include two GP surgeries, seven education centres, as well as employment centres and shops. A further 15-minute journey increases the number of GP surgeries by five and education centres by 20, as well as employment locations and shops. A summary of local services within a 30 minute proximity are shown on the map at **Figure 12**.

Figure 12: Accessibility Analysis for Stansted Mountfitchet



6.27 Transport Assessment – Impact on highway network

6.27.1 In Stansted Mountfitchet the overall picture is one in which the additional impacts of the site allocations, over and above those set to be experienced because of committed growth, are relatively modest, albeit with some localised junction impacts.

6.27.2 There will be some increases in traffic volume and delays to the east and south and these are most evident on the B1051 with traffic looking to travel into the village from Elsenham and delays at the Gypsy Lane/B1383 junction.

6.27.3 The package of interventions which have been identified to mitigate the impacts, focuses on the need to improve travel choice and the provision of realistic and attractive alternatives to the car. The resultant reallocation of road space and reprioritisation of road users therefore results in marginal increases to the travel times and delays depicted in the Local Plan Case Modelling.

6.27.4 The additional impacts are deemed to be justifiable in the context of the improved sustainable transport travel choice on offer and in seeking to facilitate sustainable growth.

6.28 Stansted Mountfitchet: Sustainable Transport Strategy.

6.28.1 Following the production of the sustainable transport evidence and the outputs of the transport modelling assessment, a range of sustainable transport interventions have been proposed in order to maximise the sustainable transport opportunities and the sustainable transport interventions are listed in **Table 12** below which are subsequently reflected in the Local Plan policies and informed the measures detailed in the Site Development Frameworks.

Table 12: Stansted Mountfitchet: proposed sustainable transport improvements

Theme	Proposed improvements through the Local Plan	Supporting Evidence Documents
Placemaking and land use planning	▪ Providing wayfinding within the development allocations and within Stansted Mountfitchet.	▪ Local Plan Sustainable Transport ▪ Local Cycling and Walking Infrastructure Plan ▪ Shared Transport in New Developments
Walking and cycling infrastructure	▪ Adoption of the second LCWIP strategic alignment would the aid accessibility of the western residential allocation by foot and cycle ▪ Improvement of Stansted Mountfitchet footpath 19 should be investigated which includes surfacing, thereby providing a link to the footway on High Street. ▪ Review routes and identify measures to link new developments to bus stops and facilities in the most direct way, and to identify	▪ Local Plan Sustainable Transport ▪ Local Cycling and Walking Infrastructure Plan ▪ Shared Transport in New Developments

	barriers to people with disabilities and mobility impairments. ▪ Bike share, e-bike charging stations, cargo bikes should be provided. ▪ Providing wayfinding within the development allocations and within Stansted Mountfitchet.	
Public transport	▪ Review existing bus services and addition of new services to serve the allocations, linking them to the village centre and Bishop Stortford should be explored. The service should also connect to the railway station at Stansted Mountfitchet, benefiting new and existing residents. ▪ Investigate bus service connections to Stansted airport, which would also provide rail connectivity. ▪ Provision of bus shelters at bus stops, provision of real time information, as well as reviewing existing stops to ensure they are accessible to people with a disability or a mobility impairment.	▪ Local Plan Sustainable Transport ▪ Local Cycling and Walking Infrastructure Plan ▪ Shared Transport in New Developments ▪ Model Outputs
Parking and traffic management	▪ EV charge points provided for all houses to enable residents to own and charge their vehicle at their residence.	▪ Local Plan Sustainable Transport ▪ Shared Transport in New Developments
Behavioural change	▪ Bus awareness and information campaigns. ▪ Walking and cycling information and awareness campaigns. ▪ Provide details of bus services as part of residential travel plans.	▪ Local Plan Sustainable Transport ▪ Local Cycling and Walking Infrastructure Plan ▪ Shared Transport in New Developments
Governance, policy and funding	▪ Provision of discounted bus vouchers for new residents at strategic development site.	▪ Local Plan Sustainable Transport ▪ Shared Transport in New Developments ▪ Model Outputs

6.29 Elsenham Area Profile

6.29.1 Elsenham is one of the six settlements classified as 'Local Rural Centres' by the settlement hierarchy. Located in the western part of Uttlesford, Elsenham has a doctor's surgery, primary schools and a railway station.

6.30 Travel Demographics in Elsenham

6.30.1 Access to a car or van is in-line with the Uttlesford average, with slightly fewer households with 3 or more cars. Working from home in Elsenham is lower than the average. In terms of travel to work, driving to work by car is higher than the average. Walking, cycling and bus travel to work is notably lower but train is higher than the average.

6.31 Sustainable Transport provision in Elsenham

6.31.1 Table 13 below summarises the sustainable transport provision in Elsenham including any identified constraints and opportunities.

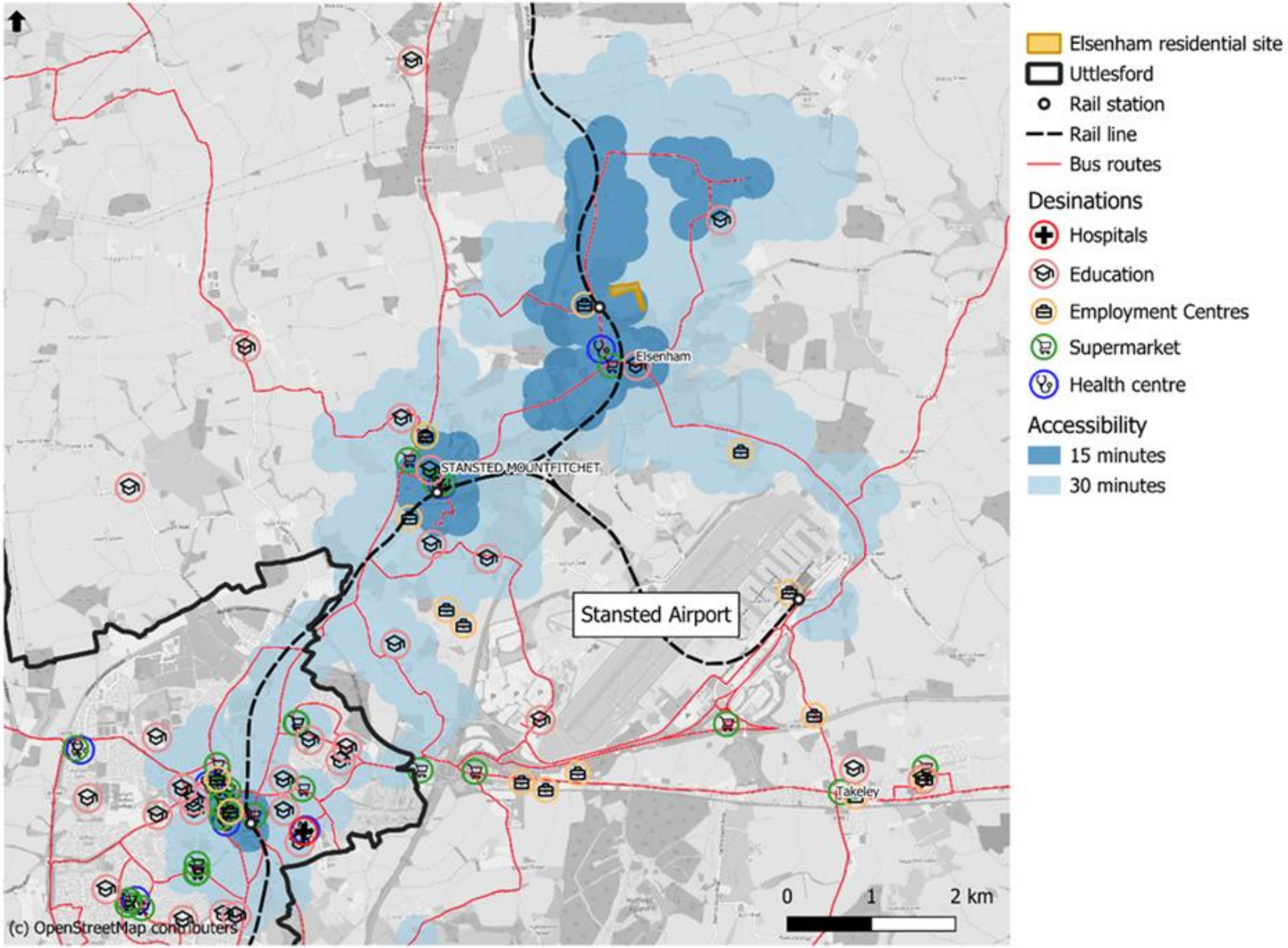
Table 13: Summary of sustainable transport provision in Elsenham

Public transport (bus and train)	Cycling and walking	Constraints	Opportunities
▪ Sparse, and infrequent bus network. ▪ Has a rail station which provides frequent links to key destinations.	▪ New Road has a footway on just one side of the carriageway. ▪ No safe cycling connections between Elsenham and Stansted Mountfitchet and not served by NCN.	▪ Severance of M11 and rail line. ▪ New Road is unlikely to be wide enough for contraflow cycle lanes.	▪ Major scope to increase the mode share of active travel modes. ▪ Opportunity to upgrade bus stop facilities and improve walking and cycling provision at key junctions.

6.32 Access to Services

6.32.1 The accessibility analysis indicates that the residential site is accessible to a significant number and range of destinations within a 15-minute journey time. The destinations include six GP surgeries, 24 education centres, as well as employment centres and shops. A further 15-minute journey increases the number of GP surgeries by three and education centres also by three, as well as employment locations and shops. A summary of local services within a 30 minute proximity are shown on the map at **Figure 13**.

Figure 13: Accessibility Analysis for Elsenham



6.33 Transport Assessment – Impact on highway network

6.33.1 In Elsenham the overall picture is one in which the additional impacts of the site allocations, over and above those set to be experienced because of committed growth, are relatively low.

6.33.2 There will be some increases in traffic volume and delays and these are most evident on the B1051 in Stansted Mountfitchet with traffic travelling westwards from Elsenham.

6.33.3 The package of interventions which have been identified to mitigate the impacts, focuses on the need to improve travel choice and the provision of realistic and attractive alternatives to the car. The resultant reallocation of road space and reprioritisation of road users therefore results in marginal increases to the travel times and delays depicted in the Local Plan Case Modelling.

6.33.4 The additional impacts are deemed to be justifiable in the context of the improved travel choice on offer and in seeking to facilitate sustainable growth.

6.34 Elsenham: Sustainable Transport Strategy.

6.34.1 Following the production of the sustainable transport evidence and the outputs of the transport modelling assessment, a range of sustainable transport interventions have been proposed in order to maximise the sustainable transport opportunities and the sustainable transport interventions are listed in **Table 14** below which are subsequently reflected in the Local Plan policies and informed the measures detailed in the Site Development Frameworks.

Table 14: Elsenham: proposed sustainable transport improvements

Theme	Proposed improvements through the Local Plan	Supporting Evidence Documents
Placemaking and land use planning	▪ Providing wayfinding within the development allocations and within Elsenham.	▪ Local Plan Sustainable Transport ▪ Local Cycling and Walking Infrastructure Plan ▪ Shared Transport in New Developments
Walking and cycling infrastructure	▪ A pedestrian route should be provided from the housing site to the station via the consent housing site. ▪ Delivery of attractive, convenient and all-weather active travel routes within allocated development site, including connections to and enhancements of the existing Public Rights of Way network. ▪ New and improved off site active travel routes providing connections to key service centres or facilities.	▪ Local Plan Sustainable Transport ▪ Local Cycling and Walking Infrastructure Plan ▪ Shared Transport in New Developments

	▪ Pedestrian routes to bus stops should be as direct as possible to aid amenity. ▪ Bike share, e-bike charging stations, cargo bikes and bike maintenance hubs should be provided.	
Public transport	▪ Pedestrian connectivity to the railway station via the adjacent housing needs to be explored to maximise the opportunity provided by housing site location. ▪ Financial contributions towards the improvement of bus services, allowing for an increased frequency of services. ▪ Explorer diverting the bus service into the employment site to improve connectivity. ▪ Provision of bus shelters at bus stops, provision of real time information, as well as reviewing existing stops to ensure they are accessible to people with a disability or a mobility impairment.	▪ Local Plan Sustainable Transport ▪ Local Cycling and Walking Infrastructure Plan ▪ Shared Transport in New Developments ▪ Model Outputs
Parking and traffic management	▪ EV charge points provided for all houses to enable residents to own and charge their vehicle at their residence. ▪ EV charge points to be provided at the employment allocation to facilitate the use of electric vehicles at employment sites.	▪ Local Plan Sustainable Transport ▪ Shared Transport in New Developments
Behavioural change	▪ Bus awareness and information campaigns. ▪ Walking and cycling information and awareness campaigns. ▪ Provide details of bus services as part of residential travel plans.	▪ Local Plan Sustainable Transport ▪ Local Cycling and Walking Infrastructure Plan ▪ Shared Transport in New Developments
Governance, policy and funding	▪ Financial contributions towards the improvement of bus services, allowing for an increased frequency of services. ▪ Provision of discounted bus vouchers for new residents at strategic development site.	▪ Local Plan Sustainable Transport ▪ Shared Transport in New Developments ▪ Model Outputs

6.35 Great Chesterford Area Profile

6.35.1 The employment site at Great Chesterford is located at Chesterford Research Park which is an existing centre offering laboratory and office accommodation for bioscience research. The site is located to the southeast of the village of Great Chesterford in a rural setting.

6.35.2 For the purposes of this section, it is not appropriate to examine the specific travel demographics for the wider area as the nature of the employment sites means that it is likely to attract employees and visitors from the wider area including a significant proportion of people travelling from outside of Uttlesford.

6.36 Sustainable Transport provision in Great Chesterford

6.36.1 **Table 15** below summarises the sustainable transport provision in Great Chesterford and close to the Research Park, including any identified constraints and opportunities.

Table 15: Summary of sustainable transport provision in Great Chesterford

Public transport (bus and train)	Cycling and walking	Constraints	Opportunities
▪ Served by a sparse, and infrequent bus network. ▪ Great Chesterford has a rail station which provides frequent links to: Cambridge and London Liverpool Street.	▪ The proximity to Cambridgeshire, where many work, makes cycling more attractive with the right infrastructure. ▪ The access road to the station is poorly maintained. ▪ Lack of footways and dominance of parked cars on street.	▪ Severance of the River Cam and M11. ▪ Isolated location.	▪ Just 1.2% of the population cycle to work. Saffron Walden, the closest town, is 6 miles away, a feasible cycling distance with appropriate infrastructure. ▪ Opportunities for traffic calming measures on the B183.

6.37 Transport Assessment – Impact on highway network in Great Chesterford

6.37.1 A specific junction capacity assessment has been undertaken to understand the existing and forecast operations of the Stump Cross Interchange at M11 Junction 9a, between the M11 and the A1301 and B184 corridors.

6.37.2 As with the rest of the district the overall picture is one in which the additional impacts of the site allocations, over and above those set to be experienced because of committed growth, are relatively modest and most of the impact is caused by the committed growth coming forward over the local plan period. Large developments have been given consent and are to be delivered within this period, including, but not limited to, employment growth in South Cambridge, namely the Welcome Gnome, Babraham Research, Granta Park and Cambridge Biomedical campuses.

6.37.3 However, traffic generated by Uttlesford District Council's Local Plan allocations is expected to add to queuing and delays forecast to occur at the M11 southbound off slip approach to the southern dumbbell roundabout junction at Stump Cross Interchange. Given that the junction forms part of the SRN managed by National Highways, and performs a wider strategic function, it is likely that a scheme to improve M11 Junction 9a will need to be delivered in collaboration with National Highways, Essex County Council and South Cambridgeshire District Council.

6.37.4 The purpose of the assessment was not to produce a definitive scheme at Stump Cross, but rather to quantify the relative traffic impact at the interchange caused by UDC's Local Plan strategic allocations. On this basis a mitigation scheme has been conceptualised to demonstrate that widening of the slip road is sufficient to alleviate these queues and enable the junction to operate at similar levels to those forecast in the Reference Case (committed growth) scenario.

6.38 Great Chesterford Research Park: Sustainable Transport Strategy.

6.38.1 Following the production of the sustainable transport evidence and the outputs of the transport modelling assessment, a range of sustainable transport interventions have been proposed in order to maximise the sustainable transport opportunities and the sustainable transport interventions are listed in **Table 16** below which are subsequently reflected in the Local Plan policies and informed the measures detailed in the Site Development Frameworks.

Table 16: Proposed sustainable transport improvements

Theme	Proposed improvements through the Local Plan	Supporting Evidence Documents
Placemaking and land use planning	▪ Providing wayfinding within the employment allocation and within Great Chesterford, to the village centre, the railway station and other facilities ▪ Providing wayfinding within the employment allocation and within Great Chesterford, to the town centre, the railway station and other facilities	▪ Local Plan Sustainable Transport ▪ Local Cycling and Walking Infrastructure Plan ▪ Shared Transport in New Developments
Walking and cycling infrastructure	▪ Direct connection into the LCWIP route. ▪ The potential to improve the route of Public Footpath Little Chesterford 11 should be explored. The footpath provides connectivity to the southbound bus stop. ▪ Review of routes from new development to bus stops and facilities to identify barriers to people with disabilities and a	▪ Local Plan Sustainable Transport ▪ Local Cycling and Walking Infrastructure Plan ▪ Shared Transport in New Developments

	mobility impairment to identify measures that should be provided to remove those barriers. ▪ Provide active travel improvements at Great Chesterford railway station. The improvements would include secure cycle parking and e-bike charging points. ▪ Provide e-bike charging stations and bike maintenance hubs.	
Public transport	▪ Improved bus access to the research park and employment allocation by re-routing the service and reconfiguring the access road. ▪ Improved bus service frequency connecting Saffron Walden, Great Chesterford, Great Chesterford Research Park and Cambridge. ▪ Enhancements will also be required for interchange facilities at Great Chesterford railway station ▪ Provision of bus shelters at bus stops, provision of real time information, as well as reviewing existing stops to ensure they are accessible to people with a disability or a mobility impairment.	▪ Local Plan Sustainable Transport ▪ Local Cycling and Walking Infrastructure Plan ▪ Shared Transport in New Developments ▪ Model Outputs
Parking and traffic management	▪ EV car clubs with 2 spaces ▪ EV charge points provided for all houses to enable residents to own and charge their vehicle at their residence.	▪ Local Plan Sustainable Transport ▪ Shared Transport in New Developments
Behavioural change	▪ Bus awareness and information campaigns. ▪ Walking and cycling information and awareness campaigns. ▪ Provide details of bus services as part of employment travel plans.	▪ Local Plan Sustainable Transport ▪ Local Cycling and Walking Infrastructure Plan ▪ Shared Transport in New Developments

Governance, policy and funding	▪ Provision of discounted bus vouchers for new residents at strategic development site.	▪ Local Plan Sustainable Transport ▪ Shared Transport in New Developments ▪ Model Outputs

7 Assessment of Transport Impacts

7.1 National Planning Policy Framework and Transport Assessments

7.1.1 The transport modelling assessment forms part of the wider transport evidence base which has been produced and described elsewhere in the Paper. The level of analysis it provides on the current and future performance of the road network is proportionate to the requirements of a Local Plan as required by the National Planning Policy Framework (NPPF).

7.2 Background

7.2.1 Uttlesford District Council commissioned transport and planning consultants Tetra Tech to undertake a transport study to inform the spatial strategy options and associated transport mitigation to be included within the emerging Local Plan. To inform this process a series of transport models have been developed and used to assess the alternative spatial options and interventions.

7.3 Modelling to inform the Regulation 19 Submission Local Plan

7.3.1 This section summarises the robust assessment that was undertaken to understand the impacts of development on the highway network. It builds upon previous analysis to focus on the spatial approach as detailed in the Regulation 19 Local Plan.

7.3.2 This section will also summarise the ability of supporting interventions to mitigate Local Plan development traffic impacts, together with the wider changes in travel demand that the area will face by 2040.

7.3.3 This section will cover two main areas of assessment:

- North Uttlesford including Saffron Walden and Great Chesterford
- A120 Corridor: South Uttlesford and Stansted Mountfitchet & Elsenham

7.3.4 Four scenarios have been assessed focusing upon the AM and PM peak periods for the following scenarios:

- Base Year (2021) – typical current conditions.
- Reference Case (2040) – future conditions without the Local Plan sites coming forward.
- Local Plan Growth (2040) – the additional impact of the Local Plan sites.
- Mitigation Package (2040) – future conditions with the Local Plan sites and mitigation in place.

7.3.5 The assessment of the performance of the corridor is based upon the following metrics:

- The volume of traffic.
- Journey times and the associated speed of traffic.
- Junction delays.

7.3.6 Full details on the outputs of the model are detail in the Modelling reports that form the evidence based for the Local Plan.

7.4 A120 Corridor Assessment

7.4.1 The assessment of the impacts of Local Plan development has been undertaken using the A120 Corridor VISUM Model. Technical details of the model and the methodology applied in the assessment of the network are described in separate technical notes (see Section 1.6 below).

7.4.2 Details on how the assessment impacts on each settlement is summarised in the Area Profiles and Strategies in **Section 6**.

7.5 Interventions in the A120 Corridor

7.5.1 Following the identification of the traffic impacts of the Local Plan related growth, a series of interventions were agreed with Essex County Council. These sought to consider the future role of sustainable transport in accommodating future demand, and only when all realistic opportunities had been exhausted, were further capacity enhancements considered.

7.5.2 The schemes are affordable and deliverable and proportionate to the level of growth – and impact – likely to be experienced on the network. Further work will be required to develop the designs in more detail before inclusion in the Infrastructure Delivery Plan (IDP). It is not an exhaustive list and further studies that may identify additional active travel or public transport initiatives.

7.5.3 The resultant package of interventions within the corridor and individual settlements are detailed within the Modelling Reports which are part of the Local Plan evidence base.

7.6 Impact on Volume of Traffic in the A120 Corridor

7.6.1 Both committed development and the Local Plan allocations will impact on the volume of traffic on the road network across the district.

7.6.2 The spatial strategy contained within the Local Plan will both reduce the need to travel associated with the site allocations and maximise opportunities for sustainable travel. The assessment has not reflected the potential for mode shift and therefore presents a worst-case scenario.

7.6.3 Even in this context, the traffic impact of the Local Plan sites is relatively modest. Increases in real terms and percentage uplifts in vehicles are small, particularly with regards to HGV movements in Takeley. The exception to this is the amount of additional general traffic on the network within the village, specifically on the B1256 to the east of the built-up area.

7.7 Impact on Journey Times and Speed of Traffic in the A120 Corridor

7.7.1 Longer journey times and slower traffic will be a feature of the future highway network in 2040, predominantly because of committed development and background growth in demand to travel. The Local Plan allocations will have an additional impact on vehicular journey times but is likely to be relatively modest on most routes. These changes reflect the increase in the volume of traffic on the network and should not necessarily be viewed as a negative trend, given the potential for safety benefits to be derived from slower moving traffic.

7.7.2 The approach to mitigating the impact of the Local Plan is not focused on the provision of increasing highway capacity. The wider transport strategy to support the Plan prioritises the provision of greater travel choice and realistic alternatives to the car. In this respect, the interventions can result in longer journey times and a reduction in the speed of traffic but presents a more sustainable 'vision led' approach than the historic predict and provide method of accommodating future demand on the network.

7.8 Impact on Junction Delay in the A120 Corridor

7.8.1 There are known delays and 'pinch points' along the A120 and surrounding local network. These will change when committed growth comes forward by 2040 (the Reference Case), and again when demand from the Local Plan sites is considered.

7.8.2 Committed developments will have a demonstrable impact on the demand placed on the capacity of many key junctions within the A120 corridor. Junctions currently operating within capacity will see increases in queuing and delays consequently.

7.8.3 The additional demand generated due to the Local Plan allocations is relatively modest. However, as this demand is being introduced onto a network which is already operating at its limits, the delays at junctions will be compounded.

7.8.4 The proposed interventions to mitigate the impact of the Local Plan sites are successful in alleviating many of the most acute 'pinch points' at Great Dunmow. Junction entry widening and signalisation schemes will help to provide more capacity and regulate the flow of traffic.

7.8.5 However, the approach to mitigating the impact of the Local Plan is not focused on the provision of increasing highway capacity. The wider transport strategy to support the Plan, of which this is part, priorities the provision of greater travel choice and realistic alternatives to the car. In this respect, the interventions can result in longer delays on the network in places, particularly where new traffic signals incorporate green phases for pedestrians.

7.8.6 Notwithstanding this approach, the measures to be taken forward will enable the junctions on the highway network to function relatively efficiently in the future.

7.9 A120 Corridor Assessment Conclusions

7.9.1 This section has detailed the impact of Local Plan allocations in the A120 corridor and the extent to which proposed interventions will mitigate the increases in demand to travel on the network.

7.9.2 The overall picture is one in which the additional impacts of the site allocations, over and above impacts due to committed growth, are relatively modest. The Local Plan will add to the level of demand on the corridor but only marginally when compared to other increases because of committed developments and expansion of operations at Stansted Airport.

7.9.3 The interventions proposed to mitigate the increases in travel demand across Uttlesford are predominantly all schemes that will be delivered on the local road network and not the SRN. Whilst there is clearly a need for a long-term solution to address delays which occur at M11 J8, the key driver for this is not the Local Plan.

7.9.4 It is anticipated that when a solution has been determined, Local Plan development sites would contribute a commensurate amount towards the costs of the scheme, proportionate to the scale of impact this technical note demonstrates.

7.9.5 Where highway interventions have been identified, they seek to ensure that the existing highway capacity operates more efficiently. These measures supplement the focus of the wider transport strategy to support the Local Plan, one which prioritises sustainable transport through the provision of realistic travel choice and alternatives to the car.

7.9.6 In those instances, in which the introduction of traffic signals may increase the journey times for general traffic for example, the benefits to active travel are part of this wider focus and the results of the analysis contained within this report should be viewed in this context.

7.10 Saffron Walden and North Uttlesford Assessment

7.10.1 This section discusses the impacts in North Uttlesford in two distinct assessments. First, there is the presentation of the assessment of the impacts of Local Plan development has been undertaken using the Saffron Walden VISUM Model. Secondly, there is the summary information on the impacts on the Stump Cross junction in the north of the District.

7.11 Saffron Walden Assessment

7.11.1 The assessment of the impacts of Local Plan development has been undertaken using the Saffron Walden VISUM Model. Details on how the assessment impacts on Saffron Walden is summarised in the Area Profiles and Strategies in **Section 6**.

7.12 Proposed Interventions in Saffron Walden

7.12.1 Following the identification of the impacts of the Local Plan related growth a series of interventions were agreed. These sought to maximise the future role of sustainable transport in accommodating future demand, and only when realistic opportunities had been exhausted were further capacity enhancements considered.

7.12.2 The resultant package of interventions to come forward within the town are detailed within the Modelling Reports which are part of the Local Plan evidence base.

7.13 The impact on the volume of traffic in Saffron Walden

7.13.1 Both committed development and the Local Plan allocations will impact on the volume of traffic on the road network across the district.

7.13.2 In Saffron Walden the assessment highlights:

- Committed development will see increases in the volume of traffic across the town. The increases will be particularly noticeable on Cardamon Road between Thaxted Road and Radwinter Road.
- The new through route through the committed housing allocations will reduce the flow of traffic on both Thaxted Road and Radwinter Road on their approaches to the town centre, together with Ashton Road.
- With Local Plan growth in place, the new development link road through the strategic allocation will be provided between Thaxted Road and Radwinter Road and this will accommodate most of the increase in flow.
- Nevertheless, there will be further albeit marginal increases in demand to travel through the town centre to access strategic routes north and south of the town.
- The interventions proposed in the town will help to reduce the volume of traffic on numerous links. The mitigation package focuses on providing realistic and more attractive alternatives to the car and as such it is envisaged that reliance on the car can be reduced.

7.14 Impact on Journey Times and Speed of Traffic

7.14.1 Journey times and the associated speed of traffic has been assessed on six routes in the town. The ability of these measures to alleviate increases in journey times on the six routes assessed is summarised as follows:

- The impact on journey times and vehicle speeds is not just as a consequence of the new junctions and closure of Church Street, but also the introduction of a new 20mph speed limit across the town.
- In this respect, it highlights that the objective of the strategy is not to necessarily reduce journey times and increase the speed of traffic, but to rebalance road user priorities, civilise the streets and make the town safer for all.
- Traffic will travel slower across the town. The average speed of traffic will not exceed 20mph on any of the selected routes. This has significant advantages in terms of the safety of all road users.
- Changes in the routing of traffic will see the journey times on some routes reduce, particularly in the PM peak period when compared to the Local Plan growth scenario.
- Where there are increases in journey times (and subsequent reductions in the speed of traffic), the changes in most cases are negligible. In the Local Plan growth case, none of the routes will see a reduction in vehicle speed of more than 4mph, with the exception of northbound traffic on Thaxted Road in the AM peak.

7.15 Impact on Junction Delay in Saffron Walden

7.15.1 There are known delays and pinch points on the highway network in Saffron Walden. The impacts of committed development and that proposed to come forward through the Local Plan on these and other junctions on the network are summarised below:

- More locations will experience delays of more than 60 seconds on the worst performing arm of the respective junctions as a result of both committed development and Local Plan growth.
- The B184 High Street in particular will experience delays at several junctions including with George Street and Church Street in both the AM and PM peak periods.
- Junctions in the south of the town on Thaxted Road and Peaslands Road will also see an increase in delays as a result of both committed growth and Local Plan related growth.
- Conversely, as a result of a new link coming forward as part of a committed site between Thaxted Road and Radwinter Road, delays at the intersection of the links will be mitigated.

7.15.2 The proposed interventions to mitigate the impact of Local Plan growth are detailed in the Modelling Reports which are part of the Local Plan evidence base. The assessment of the impact of these interventions' highlights:

- The emphasis of the interventions in the town is on seeking to rebalance road user priorities and not necessarily reducing journey times and delays. Notwithstanding this focus, the package of measures identified has been effective in significantly reducing delays in the centre of the town in both peak periods.
- Where increases in delays occur, this is by design in seeking to hold queuing traffic outside of the urban area to enable the more efficient operation of the network in the town centre.
- The greatest benefits are in terms of removing queuing vehicles on Church Street. Its closure sees delays of almost three minutes removed from the network in the AM peak period.

7.16 Saffron Walden Assessment Conclusions

7.16.1 This section has detailed the impact of Local Plan allocations in Saffron Walden and the extent to which proposed interventions will mitigate the increases in demand to travel on the network.

7.16.2 The overall picture is one in which the additional impacts of the site allocations, over and above those set to be experienced as a result of committed growth, are relatively modest.

7.16.3 The package of interventions which have been identified to mitigate the impacts, focuses on the need to improve travel choice and the provision of realistic and attractive alternatives to the car. The resultant reallocation of road space and reprioritisation of road users therefore results in marginal increases to the travel times and delays depicted in the Local Plan Case.

7.16.4 The additional impacts are deemed to be acceptable in the context of the improved travel choice on offer and in seeking to facilitate sustainable growth.

7.17 North Uttlesford – Stump Cross Junction Assessment

7.17.1 This section details the traffic impacts of Uttlesford Local Plan development on the performance of M11 Junction 9a, also known as Stump Cross. It builds upon previous analysis to focus on the allocations set to come forward in the Local Plan.

7.17.2 It also examines the ability of supporting interventions to mitigate Local Plan development traffic impacts on the interchange.

7.18 The Junction Capacity Assessment

7.18.1 A junction capacity assessment was undertaken to understand the existing and forecast operations of the Stump Cross Interchange at M11 Junction 9a, between the M11 and the A1301 and B184 corridors.

7.18.2 Large developments have been given consent and are to be delivered within this period, including, but not limited to, employment hubs in South Cambridge, namely the Welcome Genome, Babraham Research, Granta Park and Cambridge Biomedical campuses. The Reference Case scenario therefore models a 2040 future year that applies traffic generated by these committed development sites in additional to that observed in the Base.

7.18.3 By 2040, the junction is expected to come under greater pressure in the Reference Case scenario, particularly in the AM peak, where the additional background growth and committed development traffic on the network leads to significant queuing at delays at the A1301 southern arm of the northern dumbbell junction, which forms part of the internal link road.

7.18.4 Furthermore, it is expected that the B184 approach to the southern dumbbell is over capacity whilst the M11 southbound off slip is also expected to operate at capacity and so may be subject to some level of queueing and delay during busy periods. There are no arms at either dumbbell that are forecast to be at or over capacity in the Reference Case scenario during the PM peak period.

7.18.5 The addition of traffic generated by the Local Plan site allocations is expected to add to the pressures on the interchange forecast in the Reference Case scenario, particularly along the M11 southbound off slip during the AM peak, where queues could build in excess of 180 vehicles.

7.18.6 Apart from the M11 southbound off slip approach, when compared against the results for the existing arrangement in a 2040 Reference Case scenario, much of the queuing and delay forecast at the interchange is due to the traffic generated by committed development and background growth rather than the Local Plan site allocations.

7.19 Mitigation Measures at Stump Cross

7.19.1 It is proposed that the M11 southbound off slip could be widened to accommodate two lanes of queuing traffic along a distance circa 50m back from the existing give-way line. It is also proposed that the entry be slightly widened to accommodate two heavy vehicles at the give-way line to enable them to queue side by side. Lining could be used to provide effective separation between the lanes, with the left lane providing a dedicated left turn onto the B184 with the right lane providing access to the A1301 corridor.

7.19.2 It has been assumed that the mitigation scheme identified above is deliverable within the highway boundary and is subject to design and cost estimates.

8 London Stansted Airport

8.1.1 London Stansted Airport is wholly located within Uttlesford and is owned and operated by Manchester Airports Group (MAG), who manage the airport infrastructure and are also the highway authority in relation to the roads within its boundary.

8.1.2 London Stansted Airport is the fourth largest airport in the country and is an international gateway serving the regional and national air travel and air freight market. The airport is one of the largest centres of employment in Essex and the East of England and provides excellent direct access for local businesses to a wide range of international destinations. The airport has permission to expand to allows airfield works to enable 274,000 aircraft movements (of which 16,000 movements may be cargo air transport movements) and a passenger throughput of 43 million per annum.

8.2 Sustainable transport and access to the Airport

8.2.1 The airport acts as a successful regional and local transport interchange for bus, coach and train services to provide access to a range of destinations in the UK, but it also performs a vital local function as a multi modal transport hub. The airport's public transport mode share is the highest of any UK airport[8] and 52% of passenger transport (airport) trips arrived by public transport in 2019. Although this figure was pre-Covid 19 pandemic, it is understood that public transport levels are recovering back towards the 2019 levels.

8.2.2 The Department for Transport strategy entitled Flightpath to the Future published in May 2022[9] promotes the use of airports as transport hubs.

8.2.3 It is important the airport provides and strengthens the choice of modes of transport for those persons using the airport, and the community that would wish to access the airport and take advantage of the excellent public transport provided, including through active travel links to existing and future locations of employment.

8.3 Public Transport to the airport

8.3.1 Sustainable transport choice to the multi-modal transport hub should be reasonably accessible over the 24-hour period to enable staff, visitors and passengers to access the airport, recognising many of the airport operations are day and night. The availability and provision of sustainable transport choice should be detailed in the airport's Sustainable Development Plan and Surface Access Strategy and the Council will work with Essex County Council and the Airport to ensure opportunities are maximised in these documents.

8.3.2 The Local Plan includes policies to strengthen public transport connections from the strategic allocations in Takeley and Great Dunmow which deliver new and enhanced bus services to the airport. There is an opportunity to strengthen the role that the airport performs as a multi-modal transport interchange for Uttlesford residents without detrimentally impacting on the existing successful airport interchange function.

8.4 Active Travel access to the airport

8.4.1 Access to the airport by active travel modes is more challenging and the active travel environment within the airport is limited.

[8] *MAG data from Reg 18 Representation. December 2013*
[9] *https://www.gov.uk/government/publications/flightpath-to-the-future-a-strategic-framework-for-the-aviation-sector*

8.4.2 There are operational considerations that the airport wants to manage, especially in relation to aiming to diminish the potential for 'off-site' dropping off on the periphery of the airport and pedestrians with luggage roaming across the airport estate trying to find the terminal buildings. This issue is also related to the concern around 'fly parking', i.e. where airport passengers may park on nearby local roads or residential streets and then walk into the airport in order to avoid car parking or drop off charges. Fly parking can impact on local residents with obstructions to the highway and residential and business premises.

8.4.3 The 2015 Sustainable Development Plan (SDP) produced by the airport states that "We aim to reduce car use by encouraging sustainable modes of transport. For airport staff living locally, and recreational use, we will improve cycle routes and facilities."

8.4.4 The SDP further went on to outline that the airport will continue to seek improved, safe routes to key local settlements. The priorities stated were to provide routes: to the west and north to Bishop's Stortford, Birchanger, Stansted Mountfitchet and Elsenham; extend the Sawbridgeworth – Bishop's Stortford link; and install storage, shower and secure parking at key locations on site, including North Side.

8.4.5 The Airport National Policy Statement[10] highlights that "airport surface access strategy must contain specific targets for maximising the proportion of journeys made to the airport by public transport, cycling or walking".

8.4.6 The cycle access to the airport from the main settlements in the area is currently inadequate. There is a segregated cycle path from Birchanger Lane in Birchanger, which provides a connection into the west of the airport, however, there are limited onward connections and no further segregated provision – e.g. towards Stansted Mountfitchet. National Cycle Route 12 runs along the Flitch Way (2.5km or 1½ mile to the south) but it does not connect with the airport. There are no dedicated or segregated cycle routes from either Takeley or Great Dunmow connecting into the site.

8.4.7 There is a footway for the majority of the route between Takeley and the airport boundary. However, this currently terminates at the Parsonage Road/Hall Road roundabout. There are no onward active travel connections at any of the main highway access points at the Coopers End Roundabout (north of Parsonage Road) or at the Bassingbourn Roundabout.

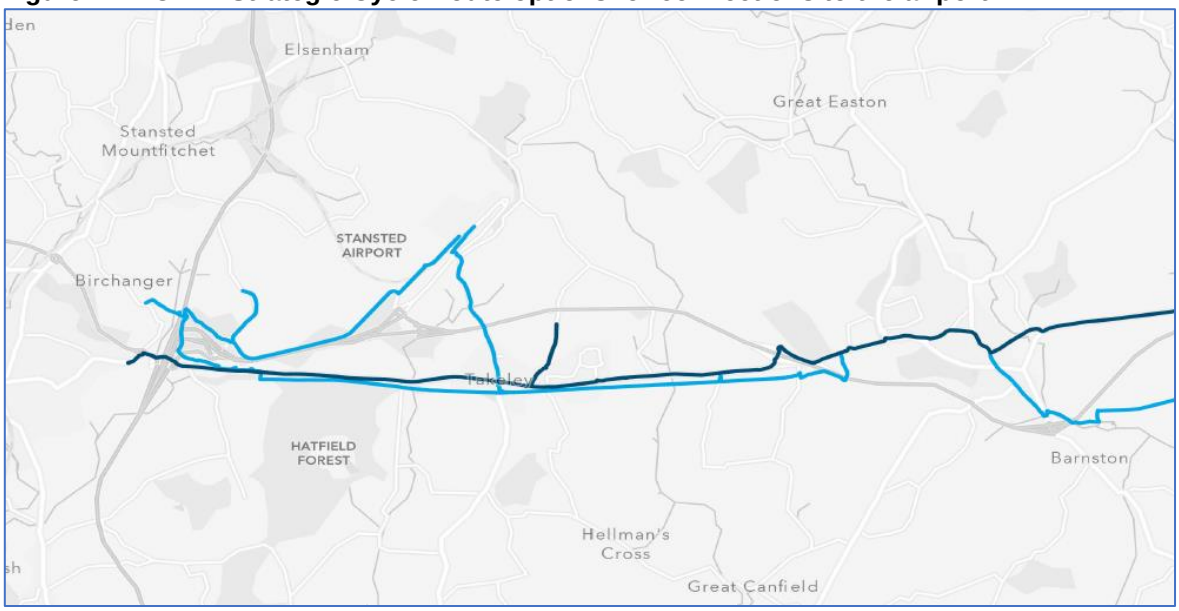
8.4.8 There is some cycle parking available close to the terminal building and at the associated offices and service buildings However, it is unclear how cyclists are expected to navigate through the site from the wider area to utilise the facilities.

8.4.9 It is understood that the airport is currently revising the SDP and surface access strategy and this will be published in late 2024.

8.4.10 As detailed in **Sections 5 & 6** the Uttlesford LCWIP is proposing that a strategic cycle route should be provided connecting the airport with Great Dunmow, Takeley and Bishop's Stortford. The LCWIP details the travel demand basis for the route and the route aligns with the infrastructure delivery requirements stated in the Local Plan (and IDP) to deliver an active travel route along Parsonage Road.

[10] https://www.gov.uk/government/publications/airports-national-policy-statement

Figure 14: LCWIP Strategic Cycle Route options for connections to the airport.



8.4.11 The Local Plan policies for the South Area Strategy propose that active travel links to the airport should be strengthened, particularly from Takeley as detailed in the previous sections and shown on **Figure 14** above. The Council will continue to work closely with the Airport owners and Essex County Council on the delivery of sustainable transport links to the airport, including carefully considering the impact of active travel routes across airport land.