

Essex Transport Strategy

Implementation Plan: Brentwood and Epping

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1. Introduction

1.1 Introduction to Brentwood and Epping area

This Implementation Plan covers the southwestern areas of Essex that are closest to London, incorporating parts of Brentwood and Epping Forest districts. These areas have been grouped together because people living in these areas are more likely to travel into London for key services, work and leisure, and therefore may have different needs than other areas within Essex.

The key towns are Brentwood and Shenfield (50,459), Loughton (33,261), Waltham Abbey (18,819) and Epping (9,876). The area's population is slightly younger than the Essex average – 19% of residents are under 15 (compared to 17%) and 19% of residents are over 65 (compared to 21%)¹.

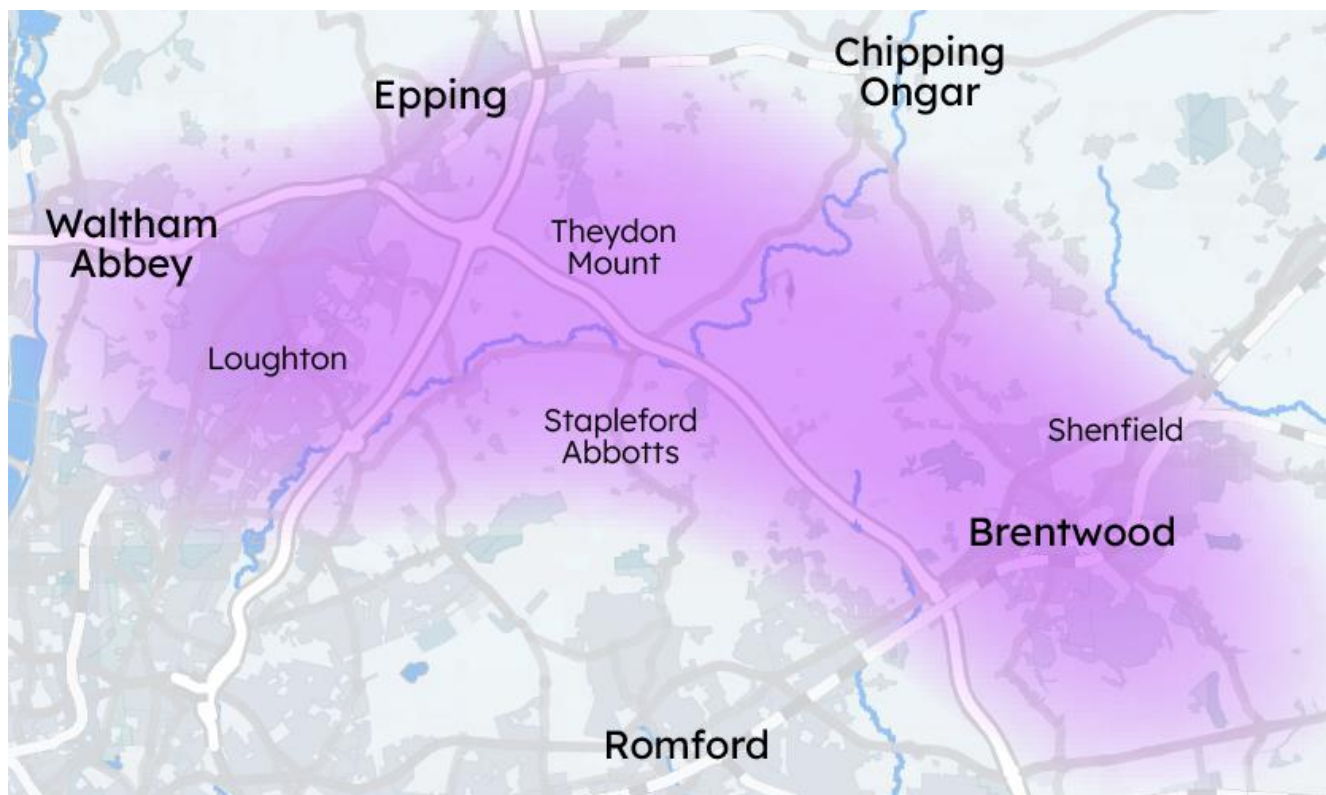
Working age residents are more likely to be actively engaged in work (75%) compared to the Essex average (73%)². The area is also popular with retired people (22%), while unemployment is slightly higher than the Essex average with 4% compared to 3%.

Many residents work in London. Despite good public transport access to Central London, the car and van is an important means of travelling to work in outer London where jobs are dispersed in numerous locations and not always well served by direct public transport journeys. Outer London is the most common destination for car commuters from this area, with other popular destinations including locations within Epping Forest district, Brentwood, Basildon and Chelmsford.

While the area is home to some of the highest average incomes in Essex, not everyone has a lot

of money. For example, there are parts of southern Epping Forest district that are in the top 20-40% most deprived areas in England³, for income, employment and health. This includes the area of Waltham Abbey and its surrounding rural areas. There are also areas where many residents have no qualifications.

Residents are less likely to be overweight or obese than other areas of Essex⁴, supporting life expectancies similar to the Essex average of 83 years. While rates of cycling are low, above average incomes provide more people with greater opportunity for leisure activities.



The key transport ambitions for the Epping and Brentwood area are:

- Transport investment for this area needs to support local economic growth, making the area attractive for businesses to invest, making the most of being near to London
- To invest in higher quality, higher frequency buses to encourage more growth and opportunities improving the quality of life for local people and enabling strong successful businesses.
- To use the Local Transport Plan to ensure that the right sustainable infrastructure is put in place to support growth in housing and jobs.

1.2 Local travel

While the majority of people live in towns, the area is also home to thinly populated villages. This area is reasonably well connected by road with the M25, M11, and A12 running through the area providing links to London and further afield. There are also more locally important routes like the A128, A113, A104, A121 and B1393 connecting towns with each other and outer London.

Car ownership is high⁵, but the area has a relatively low number of residents that travel to work by car⁶ indicating that while residents do not always travel to work by car as their main mode of transport, they may need them to access other services or to access rail services at our stations.

There are four main rail lines (including the Central Line operated by London Underground) serving the area with eleven stations. Slightly more residents travel to work by Underground (15%) than national rail (12%)⁷.

Epping, Loughton and Buckhurst Hill are served by the Central Line providing direct access to central London in 40 minutes. Chigwell is on a branch of the Central Line requiring a change of

trains to reach Central London. The Central Line also offers people significantly lower fares than nearby national rail services (such as at Harlow), making it attractive to people driving from outside the immediate local area, adding to local congestion and car parking issues.

Waltham Abbey does not have a rail station directly within the town, although nearby Waltham Cross (1 mile away) is served by trains to London and Hertfordshire.

Shenfield is served by the Great Eastern Main Line for fast services into London or east towards Chelmsford, Colchester and Southend. Brentwood has regular Elizabeth Line services to central London and Heathrow Airport that serve intermediate stations into London such as Romford. Since 2019 the opening of the Elizabeth Line has meant passenger numbers at Brentwood and Shenfield have increased 40%⁸.

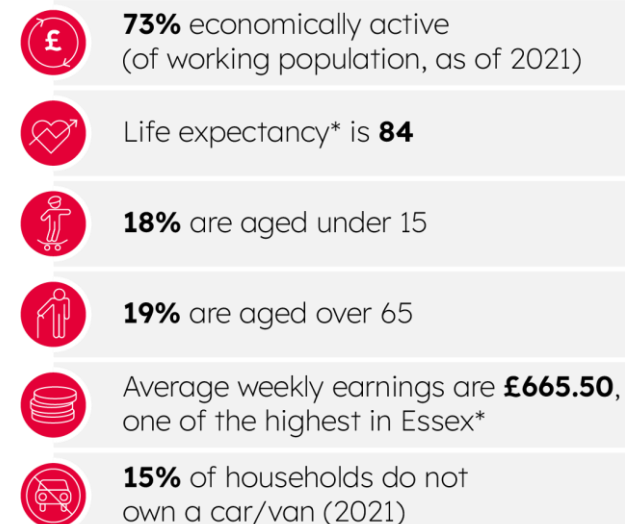
c2c operate services in the south of the area with a station at West Horndon providing access to London, Basildon and Southend. Some residents of the area may also access rail and District Line services at nearby Upminster.

Bus services are generally more limited and less well used. While there are good bus services within the urban areas and towards London (in particular those operated by Transport for London), connections to other towns and the surrounding rural areas within Essex are less comprehensive. The rural nature of large parts of the area makes it challenging to provide good connectivity by local bus services.

Travel to work by foot (7%) and bike (1%) is below the Essex averages of 9% and 2% respectively⁹. Cycleways tend to be found in the more urban areas of Brentwood, Loughton and Waltham Abbey, but are not always linked up together and still are small in number.

The Epping and Brentwood area in numbers

171,925 residents (2022)



60% of residents **drive** to work

2% of residents **get the bus** to work

8% of residents **cycle or walk** to work

28% of residents get the **train or underground** to work



*Epping Forest and Brentwood district figures

2. Outcomes we want to achieve

2.1 Supporting people, health, wellbeing and independence

2.1.1 People have inclusive and affordable access to key services

Good access to services enables everyone to maximise their potential and enjoy life. The rural areas of Epping and Brentwood have public transport times to some essential services like healthcare of over 60 minutes. Many of these rural areas are over 400 metres from a bus stop, which may put people off taking the bus or make buses completely inaccessible to those who cannot drive or those with limited mobility.¹⁰

Brentwood and Epping Forest, have the highest average weekly income in Essex¹¹, however, some rural areas are considered deprived¹². While a large proportion of residents may own a car, they may not have a choice and be spending a large proportion of their income on running a car.

There are often issues with providing public transport information to residents, like timetables. Additionally, according to a recent survey on public transport accessibility, many passengers complained about bus arrival times at rail stations not matching up with train timetables.

2.1.2 People enjoy improved physical and mental health and wellbeing

We want people to enjoy improved physical and mental health and wellbeing, however, there is some health deprivation in the more rural areas of Epping and Brentwood as well as areas that experience social isolation due to poor transport links. This means that residents of these areas are more likely to be unable to access opportunities, key services and community life and face

obstacles in everyday life through the wider impacts of having to travel. Within this area this is more noticeable in Loughton, Waltham Abbey and the more rural areas.

According to the Essex residents survey¹³, Brentwood district residents have high levels of anxiety. This may be down to stressful jobs in the city, but often anxiety is linked with lower levels of physical activity and access to green spaces. Increasing opportunities to walk and cycle and improve and publicise access to places like Epping Forest, Weald Country Park and Belhus Woods may help people's overall levels of mental health.

With low levels of walking and cycling activity in the area, more can be done to encourage physical activity. Better road surfaces and more segregated provision were identified as the top two factors that would encourage people to cycle more in the area.

2.1.3 The transport network is safe, and feels safe for all users

Keeping people safe and well is essential to enable people to make the most of life's opportunities. Between 2021 and 2023 there were 1,373 total collisions where 48 people were killed and 302 seriously injured within Epping and Brentwood area¹⁴. Collisions appear to be falling with 330 in 2021 to 312 in 2023. Around a third of all collisions within the South West Essex are on either the M11 or M25 managed by National Highways.

Buses, statistically, are a safe mode of travel. To make bus travel feel even safer we will support improved bus infrastructure at bus stops and transport hubs. This will include a more attractive

and safer environment, with better waiting facilities and passenger information (including real time passenger information). Additional measures could include increased use of CCTV on and off buses, and improved lighting at key locations. Similarly, the perceived safety of walking can be improved by designing open, well-lit, visible routes.

2.2 Creating sustainable places and communities

2.2.1 All places support the transport needs of all residents

The road network is well established in this area with good links into London and across the country. There are also four main rail routes that provide direct access to opportunities in Central London and Essex. However, the cycling network could be improved to enable more sustainable and affordable choices for residents to more local services, leisure routes, and to help connect residents to onward travel via rail stations.

It is important that the design of town centres encourage people to spend time in these areas for shopping or leisure. This means considering how people access these places and how vehicles move within them. At the moment the road network often prioritises vehicles without considering the purpose of the street and its main function. We are considering a 'Place and Movement' approach which will mean places like high streets are more designed for people.

There are challenges in rural areas to provide a comprehensive transport network due to the sparse nature of the population. This means they may not have good enough public transport or

walking and cycling provision for people to go about their daily lives. While it's really important to preserve the character of our rural towns and villages, we need to provide a wider range of transport options in order to support a modern economy by encouraging businesses to set up in the area and supporting our residents to access opportunities.

Existing buildings, streets, public spaces, and the natural environment, all contribute to the unique character of our rural areas. It's important that the most is made of these things as more attractive places encourage people to stay and invest their skills locally.

2.2.2 Work with partners to design sustainable developments from the start

The Epping and Brentwood area's population continues to grow with people living longer and people moving to the area from other parts of the country due to good access to London.

More homes are needed to cater for the increase with house prices increasingly unaffordable. The local planning authorities within the area include Brentwood and Epping Forest councils, both areas' Local Plan Reviews will commence shortly but with the new Government targets from the National Planning Policy Framework they now have an annual target of 724 and 1,299 new homes respectively. Not all of these homes will be within the area for this implementation plan, but it does give an indication of the housing required for those areas closest to London.

Part of the plans for growth include Dunton Hills Garden Village which will feature up to 4,000 new homes, community and sports facilities, four schools and 55,000 square metres of employment. The garden village will promote active lifestyles while protecting key ecological and historic

features. The garden village will be made up of three walkable neighbourhoods. Wider connectivity will be enhanced through mobility corridors to nearby West Horndon station and links to Basildon borough, as well as a network of cycling and walking routes.

We want all developments to be designed sustainably, and we will work with the local councils to prioritise locations for jobs and homes with good sustainable transport access to a wide range of services. This LTP is important to influence the process of Local Plan development and getting these plans right can bring in the right infrastructure. We will use the planning process, including funding from new development where possible, to improve transport options, benefiting both new and existing residents and businesses.

2.2.3 Transport has a reduced impact on the environment and adverse impacts on natural habitats are avoided

Transport contributes to pollution and can negatively impact the local environment. Waltham Abbey has poor air quality with high levels of nitrogen oxides and other pollutants. This is likely due to being next to the M25 and A10 which are major routes and carry large amounts of traffic.

Since 2023 people cannot travel by car into London unless they use a compliant vehicle (Euro 3 for motorcycles¹⁵, Euro 4 for petrol vehicles¹⁶, Euro 6 for diesel¹⁷, or any electric vehicle) or by paying the Ultra Low Emission Zone (ULEZ) cost. While the vast majority of vehicles that people own are compliant (97.4%)¹⁸, some people have had to upgrade their vehicle, or some have had to change their travel behaviour.

In the one year after report assessing the impact of the zone, TfL analysed traffic data around the edges of the ULEZ and found that there was only marginal growth in traffic which is considered related to overall traffic growth and not related to the scheme¹⁹.

There are currently limited public electric vehicle charge points in the area²⁰, and those that are available are mainly within Epping Forest district. Solutions such as electric vehicles (and providing charging facilities) so people have the confidence to buy cleaner vehicles and encouraging more trips by active and sustainable travel like buses, walking and cycling will help to make air cleaner and be better places to live, work and visit.

We will work jointly with local councils to improve air quality as set out in our Air Quality Strategy²¹. Measures will include encouraging the use of less polluting modes of travel (see LTP Policy 10), reducing congestion in Air Quality Management Areas through better traffic management (see LTP Policy 5) and better managing the movement of higher-polluting goods vehicles (see LTP Policy 6).

The Epping Forest is a designated Site of Special Scientific Interest, and a portion is a Special Area of Conservation. Green spaces like it make our climate more resilient, give places unique character, and provide people with enjoyment. However nationally many species are in decline, as previous development, pollution and climate change cause negative impacts.

New developments should be built considering their local environment and provide contributions to the natural environment, meaning that the development creates and improves natural habitats.

2.3 Connecting people, places and businesses

2.3.1 The business potential of Essex is maximised

Local businesses rely on goods and services being delivered when they are expected. Local people also rely on knowing how long a journey takes for commuting and personal appointments. The reliability of a journey, and good transport connections also makes the area more attractive to potential businesses, workers, residents and visitors, supporting job creation and increased economic growth.

The area can take advantage of its location near London by providing a good environment for businesses to thrive, with good sustainable transport links to move goods and people alike. Currently, businesses in Epping Forest, Brentwood and Basildon are among the top performing places in Essex for Gross Value Added (GVA), this measures the value of goods and services produced in an area and is often used to assess business performance, showing the benefits of being close to London.

However, delays can be common on main routes given they are heavily used, especially in Loughton, Waltham Abbey and Brentwood town centres, and along the A127 and the B1393²². With more jobs and housing expected in the area, the transport network needs to be robust enough to cater for the safe, efficient movement of people and goods.

There are some places in this area where less than 20% of homes have access to ultra fast broadband²³, which is a barrier for attracting businesses to the area as well as those looking to relocate to the area to work some of the time from home.

2.3.2 People have inclusive and affordable access to employment, education and training

Good transport links provide people with access to schools, training and a range of work opportunities to suit their skills and experience, helping them to make the most of their potential. Given that there are good transport links into central London they are heavily used, this shows the importance of improving and maintaining connections to the capital. However, it is not just central London that has job opportunities, there are many employment areas (such as industrial estates) spread out in outer London, who like businesses in the Epping and Brentwood area are taking advantage of being close to the capital and major transport links. Ensuring these employment sites are accessible by public transport for residents will also be important and will require partnerships with TfL and our neighbouring London Boroughs.

Despite being near to London some areas of Epping Forest, especially near to Waltham Abbey and more rural areas suffer from deprivation. Additionally, some residents of rural areas around Waltham Abbey do not have any qualifications. Waltham Cross station is a mile away from Waltham Abbey town centre, but the need to walk or cycle along the A121 or rely on buses will not help people make the most of using the station to access opportunities. We propose joint working with Hertfordshire County Council to improve easy access to this station by more active and sustainable travel for a relatively short distance.

Towns with access to London Underground stations are the least deprived due to having good transport access but this has the disadvantage of increasing house prices with them being more expensive nearer tube stations.

The Brentwood area is reasonably well connected to jobs by public transport, however parts of Epping Forest and Basildon districts are less well connected, with over an hour's journey time for many areas in Epping Forest district. Most areas would be relatively well connected to employment by bike, however some people may not feel comfortable cycling to work without safe dedicated cycle paths, and cycling as a mode of transport is not inclusive for everyone.

There may be further job opportunities with the Thames Freeport in Thurrock. It's a special economic zone that will create thousands of jobs and boost the area's economy. The Freeport's success will depend on efficient freight movement, access to a skilled workforce and sustainable travel options for them. Currently the port is not well connected to Epping and Brentwood by bus, and passengers cannot get there by train.

2.3.3 The transport network has a secure and long-term future

We may see changes to our natural environment in the future that may pose significant risks to the transport infrastructure in the Brentwood and Epping areas. We may see heavier rainfall and hotter summers which will have an impact on the transport network. Preparing and adapting to these challenges will be critical and it is vital that this strategy does not make this worse.

This will have significant implications on our network and its ongoing maintenance. For example, flooding will reduce how long our network lasts, and severe weather will reduce the time available for repairs.

This is crucial – the network provides access to jobs, education and essential services and it is often the only way people can access their everyday needs, particularly in rural and coastal areas. It is vital that the network is maintained and fit for purpose, for all modes but we also need to look at ways to solve the problem such as improving the materials we use, and reduce unnecessary travel. Improving bus services, walking and cycling routes, and working to increase rail freight will all help with this, reducing the pressure on our network and ensuring its long-term future.



3. Our plan for Brentwood and Epping

Our plan for Brentwood and Epping focuses on supporting people, creating sustainable places and connecting communities. To do this, we'll need to provide choice by considering all modes and be bold by considering new approaches and solutions.

3.1 Area wide

We will deliver the area's transport ambitions by providing transport choices to make it easier for residents to access services.

Our Bus Service Improvement Plan will aim to improve both bus stops and the network in the area to make using buses feel safer and easier, while supporting sustainable growth across the area. By collaborating with bus companies and health partners, we'll make it easier for residents without cars to access hospitals and healthcare.

This plan will improve links to multifunctional green spaces, creating walking and cycling routes that connect parks and natural areas. Local policy and strategies should focus on improving access to green space and creating greener communities, especially in areas of deprivation or where there is poor or unequal access.

To maximise opportunities at Thames Freeport for residents, we propose to explore how improve public transport links can be delivered. The aim with this is to help people access jobs without the need of a car supporting those on lower incomes to access greater employment opportunities. The improvements needed to develop more sustainable transport options must also focus on making public transport more affordable.

While the current £3 fare cap for buses provides cheaper bus travel for longer distance routes, we will continue to work with operators to seek more affordable bus and rail passes for those who find the cost a challenge to accessing work and other opportunities.

Should it be reconsidered, we would support the development of Crossrail 2 that could link the West Anglia Main Line to South West London via central London will bring benefits to the area in terms of making it more attractive to businesses and also allowing our residents better access into London.

Road transport is always going to be essential to connect people, places and communities, particularly for rural areas. This will require an effective maintenance programme, ensuring the network is fit for purpose now and in the future. For example, by using more durable materials and planning for more frequent floods, we can keep our infrastructure open whatever the season, or mode.

These improvements, typically funded by Central Government, will need to align with community and transport priorities, and include footway, cycleway, carriageway and drainage renewal. Supporting National Highways with projects such as improvements to M25 junctions 28 and 29, and implementation of the Lower Thames Crossing, a new link across the Thames to alleviate congestion at the Dartford Crossing will help keep people and goods moving throughout the area.

It should be noted that this implementation plan will need to be reviewed to reflect changes to Local Plans or other significant proposals.

3.2 Brentwood

To help encourage more physical activity and improve health conditions like anxiety, we will look to install more walking and cycling facilities across Brentwood to create a connected network, increase cycling and reduce congestion. We will also link to the National Highways cycle scheme in Havering by implementing a cycle path along the A1023 through M25 junction 28.

We would like to encourage more people to take the train and other sustainable transport options in South West Essex, part of this is to make journeys more pleasant from the start and this includes improving the public realm at Brentwood and Shenfield stations.

Traffic delays can be common within Brentwood town centre, Brentwood town centre traffic improvements can help aid the journeys of buses improving their reliability and encouraging more people to use them. Redesigning Wilson's Corner in the town centre will aid traffic movements and aid walking and cycling.

Furthermore, more local walking and cycling schemes can encourage more people to leave their cars at home and reduce traffic particularly for shorter journeys. This will help continue the success of the area's businesses and help attract further investment and boost economic growth.

We also aim to address these challenges in by improving station interchanges, like West Horndon to allow better transition from modes such as buses to rail services, and to work in partnership with TfL, Thurrock, Hertfordshire and relevant London Boroughs.

3.3 Epping and Waltham Abbey

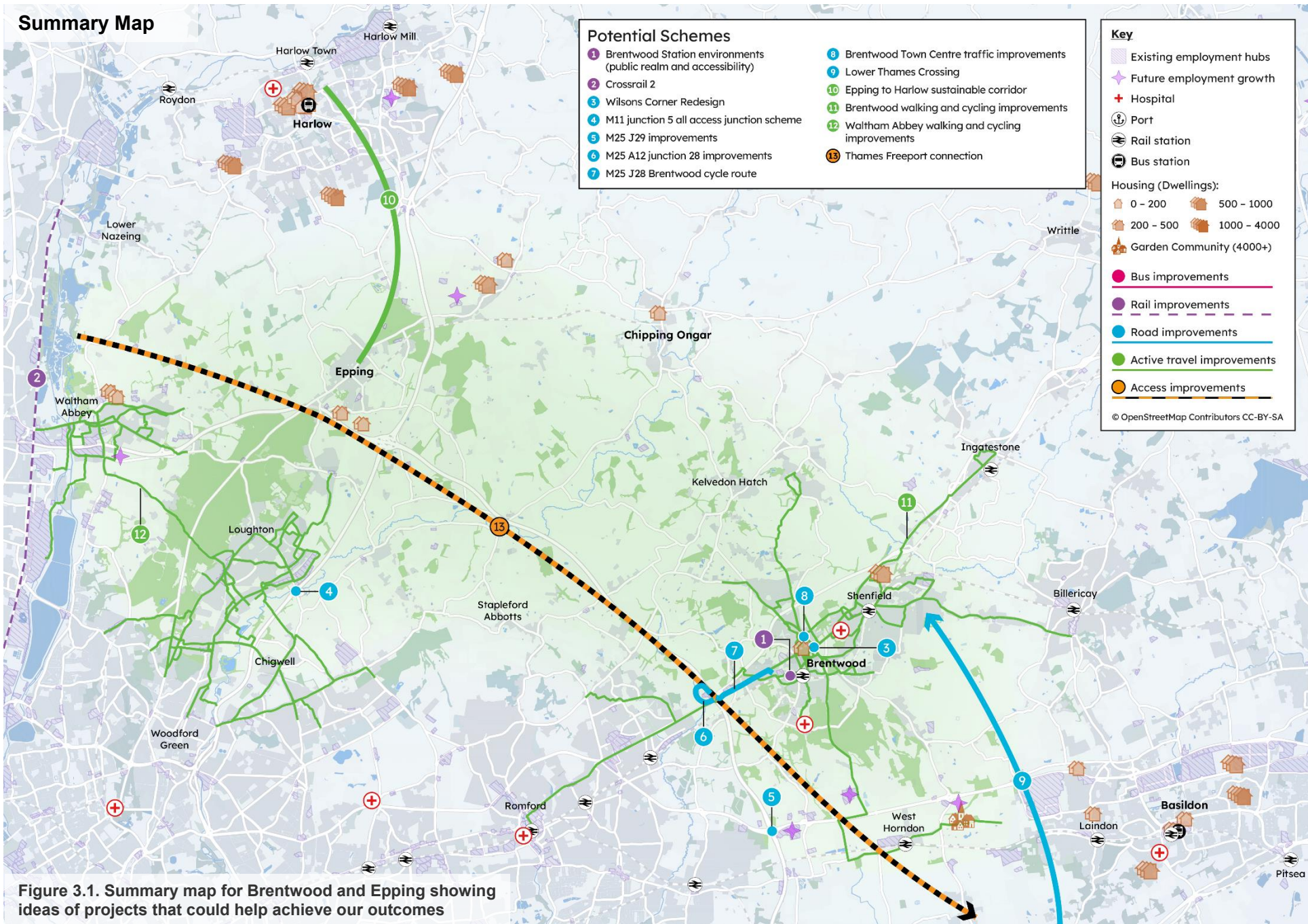
Getting people active may have a positive impact on their health, increase access to opportunities and may encourage more trips to railway stations. We propose to improve the walking and cycling networks in Epping and Waltham Abbey to help this. Currently there are no cycleways in the Epping urban area and very limited paths in Waltham Abbey.

To encourage people to take the bus, improvements to journeys from Epping to Harlow via a sustainable transport corridor can help support growth in Harlow giving people more options to access the London Underground.

Supporting National Highways making the M11 Junction 5, Loughton Interchange, an all access junction will help facilitate traffic movements in the area and reduce pressure on more local routes. This would mean being able to access the M11 northbound from Loughton, instead of travelling to junction 6.

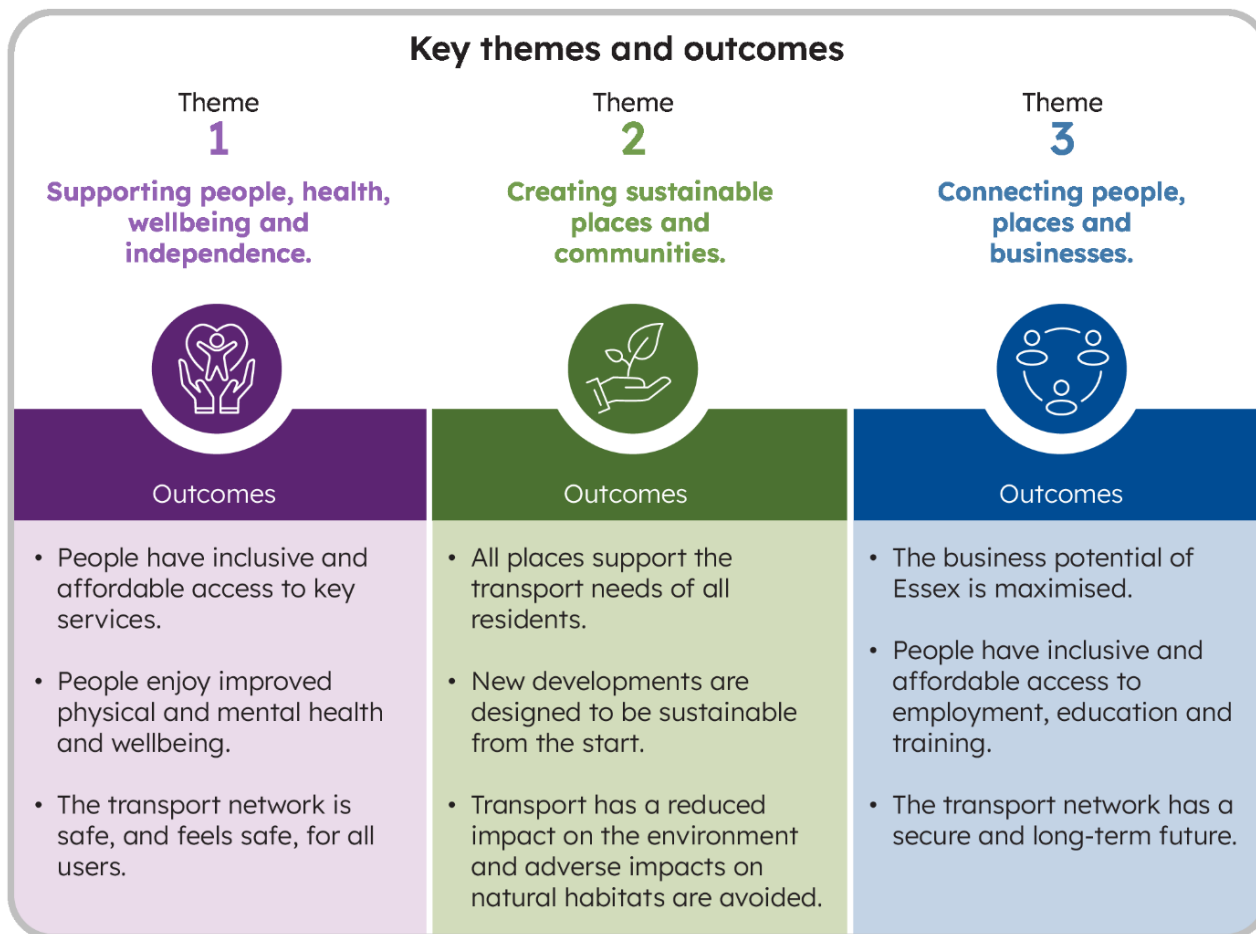
Scheme Details can be found in Appendix A.





Appendix A. Scheme list

The table below sets out some ideas of projects that could help achieve our outcomes and solve some problems identified in this Implementation Plan. These projects have emerged from a prioritisation exercise and represent ideas from a snapshot in time and are not guaranteed to be funded as part of LTP4. As funding and circumstances change so will our priorities for schemes.



*	Weak Alignment
**	Medium Alignment
***	Strong alignment

Project	Description	Impact	Supporting People			Sustainable Place			Connecting People		
			Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5	Outcome 6	Outcome 7	Outcome 8	Outcome 9
Area Wide											
Thames Freeport Access Package	Feasibility studies into how projects can aid access to the Freeport. Train link for passengers. Bike link for Canvey. Fast bus link from South Essex. Water connectivity - and the need to provide connection to Basildon, Basildon Town Centre, Brentwood and Castle Point.	Improving access to services, health and wellbeing, and access to employment.	**	**	**	**	*	***	**	**	
M25 / A12 junction 28 improvements	Dedicated slip from M25 anticlockwise to A12 north	Keeps the network moving by improving safety and reducing congestion	*	*	**	**	*	*	***	*	
Crossrail 2	Transformational Cross London rail infrastructure to link WAML to SW London via central London	Improved public transport options into London improving links and journeys.	**	*		*	*	**	***	**	**
Lower Thames Crossing	New strategic link to address capacity constraints at the Dartford Crossing	Improving journeys to Kent and boosting economic growth	*	*	*	*	*		***	*	
M25, J29 improvements	Brentwood and wider south Essex region - impact journey time reliability on strategic network - businesses, freight etc.	Keeps the network moving by improving safety and reducing congestion			*	*			***		*

Project	Description	Impact	Supporting People			Sustainable Place			Connecting People		
			Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5	Outcome 6	Outcome 7	Outcome 8	Outcome 9
Brentwood											
M25, J28 - Brentwood cycle route	Link with National Highways scheme with Havering on A1023.	Improved walking and cycling options across the M25 into Havering.	**	***	**	*	*	**	**	**	***
Brentwood walking and cycling improvements	Delivery of the prioritised walking and cycling network identified in the LCWIP.	Improved walking and cycling options in the area.	**	***	**	*	*	**	**	*	**
Wilson's Corner redesign	Feasibility into design options for Wilson's corner.	Keeps the network moving by reducing congestion and improving bus journey times.	**	**	**	**	*	**	***	*	
Brentwood Town Centre traffic improvements	Feasibility study into improvements in Brentwood town centre.	Keeps the network moving by reducing congestion and improving bus journey times.		**	*	**	*	**	***		***
Brentwood Station environments (public realm and accessibility)	Brentwood and Shenfield railway station public realm improvements. Part of measures to facilitate behavioural change towards sustainable travel.	Improved public realm around the station encouraging more active and sustainable travel.	*	*	**	*	*	**	**	*	**
Epping and Waltham Abbey											
Epping walking and cycling improvements	Delivery of the strategic walking and cycling network identified.	Improved walking and cycling options in the area.	**	***	**	*	*	**	**	*	**

Project	Description	Impact	Supporting People			Sustainable Place			Connecting People		
			Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5	Outcome 6	Outcome 7	Outcome 8	Outcome 9
Waltham Abbey walking and cycling improvements	Delivery of the strategic walking and cycling network identified.	Improved walking and cycling options in the area.	**	***	**	*	*	**	**	*	**
M11 junction 5 'all access' junction scheme	Redesign of the junction to enable access to the M11 from all directions.	Keeps the network moving by reducing congestion and improving bus journey times.			*	*	*		**	*	*
Epping to Harlow sustainable corridor	Bus journey time improvements (Latton Priors to Epping corridors via Epping Green)	Supports growth in Harlow to Epping, including North Weald.	**	*	*	**	**	**	**	**	***

Appendix B. Addressing the Challenges

Appendix B outlines the challenges outlined in this implementation plan, identifies some high level activities that we could do to address these and the potential schemes we could do to address these challenges. For scheme descriptions, please see Appendix A and the core text to understand why these schemes can address the challenges.

Those schemes in bold with an asterisk are ***Countywide Initiatives** – they are not in the map above

B.1 People theme

Outcome	Challenge	High Level Activity	Schemes to address these challenges
People have inclusive and affordable access to key services	The rural areas of SW Essex have public transport times to some essential services like healthcare of over 60 minutes	<ul style="list-style-type: none"> Encourage digital innovation, such as new apps that enable the delivery of essential services, such as healthcare, in ways that are less dependent on travel Support the rollout of faster broadband and ongoing improvements to 5G mobile coverage in rural and deprived areas Implement our Bus Service Improvement Plan Provide attractive, safe, convenient, inclusive and high quality public transport routes and facilities, designed in line with latest design standards and guidance Explore opportunities to expand our Demand Responsive Transport network in rural areas Work with partners to promote more sustainable forms of car use, such as lift sharing and car clubs Design, build, operate and maintain transport infrastructure so that it is accessible, easy and safe to use for everyone Work with the bus and rail industries to secure further improvements to the accessibility of public transport and passenger assistance on buses, trains and at bus and rail stations 	<ul style="list-style-type: none"> Dunton Hill – Laindon Sustainable Corridor Epping to Harlow sustainable corridor *Roll out of shared mobility initiatives *Integrated Ticketing across modes

Outcome	Challenge	High Level Activity	Schemes to address these challenges
		<ul style="list-style-type: none"> Travel information will make use of new technology and be available in a range of formats for everyone to access Support the introduction of multi operator and fully integrated smart ticketing for transport services in Essex 	
	Many areas have a walking distance of over 400m to a bus stop	<ul style="list-style-type: none"> Implement our Bus Service Improvement Plan Provide attractive, safe, convenient, inclusive and high quality public transport routes and facilities, designed in line with latest design standards and guidance Explore opportunities to expand our Demand Responsive Transport network in rural areas Work with partners to promote more sustainable forms of car use, such as lift sharing and car clubs 	<ul style="list-style-type: none"> *Bus stop improvements
	Large part of the area is considered deprived	<ul style="list-style-type: none"> Support the rollout of faster broadband and ongoing improvements to 5G mobile coverage in rural and deprived areas Implement our Bus Service Improvement Plan Provide attractive, safe, convenient, inclusive and high quality public transport routes and facilities, designed in line with latest design standards and guidance Explore opportunities to expand our Demand Responsive Transport network in rural areas Develop and deliver mobility hubs to facilitate convenient access to public transport services, shared mobility solutions, and active travel options. In rural locations, these could combine transport, retail and community services 	<ul style="list-style-type: none"> M25, J28 - Brentwood cycle route (A1023 Brentwood cycling and walking scheme) Epping walking and cycling improvements Brentwood walking and cycling improvements Waltham Abbey walking and cycling improvements Crossrail 2 *Roll out of shared mobility initiatives *Cycle Quietways in Residential Areas

Outcome	Challenge	High Level Activity	Schemes to address these challenges
		<ul style="list-style-type: none"> Provide training and promote free initiatives to increase people's confidence and participation in cycling Continue to evaluate the suitability of our towns and cities for new electric forms of transport, such as e-scooters while we await new national laws 	
	Many passengers complain about bus arrival times at rail stations not matching up with train timetables.	<ul style="list-style-type: none"> Implement our Bus Service Improvement Plan Provide attractive, safe, convenient, inclusive and high quality public transport routes and facilities, designed in line with latest design standards and guidance Develop and deliver mobility hubs to facilitate convenient access to public transport services, shared mobility solutions, and active travel options. In rural locations, these could combine transport, retail and community services Work with the bus and rail industries to secure further improvements to the accessibility of public transport and passenger assistance on buses, trains and at bus and rail stations 	<ul style="list-style-type: none"> West Horndon interchange Brentwood Station environments (public realm and accessibility) Epping to Harlow sustainable corridor *Expansion of plus bus schemes and new ones cross county *Integrated Ticketing across modes
People enjoy improved physical and mental health and wellbeing	There is some health deprivation in rural areas of SW Essex and areas that experience Transport Related Social Exclusion.	<ul style="list-style-type: none"> Promote the support we provide on mental health and wellbeing through our Essex Wellbeing Service Promote the work of the independent charity – Rural Community Council of Essex – in tackling hidden deprivation and social isolation in our villages and rural areas 	<ul style="list-style-type: none"> M25, J28 - Brentwood cycle route (A1023 Brentwood cycling and walking scheme) Epping walking and cycling improvements Brentwood walking and cycling improvements Waltham Abbey walking and cycling improvements Crossrail 2 *Use of autonomous self-driving (without passenger) vehicles to support elderly communities *Cycle Quietways in Residential Areas

Outcome	Challenge	High Level Activity	Schemes to address these challenges
	According to the Essex residents survey, Brentwood residents have high levels of anxiety.	<ul style="list-style-type: none"> Promote the support we provide on mental health and wellbeing through our Essex Wellbeing Service Promote the work of the independent charity – Rural Community Council of Essex – in tackling hidden deprivation and social isolation in our villages and rural areas 	<ul style="list-style-type: none"> M25, J28 - Brentwood cycle route (A1023 Brentwood cycling and walking scheme) Epping walking and cycling improvements Brentwood walking and cycling improvements Waltham Abbey walking and cycling improvements
The transport network is safe, and feels safe	High levels of collisions due to M25 and M11	<ul style="list-style-type: none"> Follow a safe systems approach in designing and maintaining our highway network Collaborate with partners, such as the police and Safer Essex Roads Partnership, to improve safety Work in partnership to create safe environments around schools Provide cycle training to develop or improve people's skills and confidence to cycle safely within Essex 	<ul style="list-style-type: none"> M25, J28 - Brentwood cycle route (A1023 Brentwood cycling and walking scheme) M11 junction 5 'all access' junction scheme
	Better road surfaces and more segregated provision were identified as the top two factors that would encourage people to cycle more in the area.	<ul style="list-style-type: none"> Provide cycle training to develop or improve people's skills and confidence to cycle safely within Essex 	<ul style="list-style-type: none"> M25, J28 - Brentwood cycle route (A1023 Brentwood cycling and walking scheme) Epping walking and cycling improvements Brentwood walking and cycling improvements Waltham Abbey walking and cycling improvements

B.2 Place

Outcome	Challenge	High level Activity	Schemes to address these challenges
All places support the transport needs of all residents	The bus and cycling network could be improved to enable more sustainable and affordable choices for Epping and Brentwood residents	<ul style="list-style-type: none"> Introduce a 'Place and Movement' approach to help embed the principles of 'Healthy Streets' and manage the transport network effectively for both existing streets and new developments Implement 'well designed neighbourhood principles' in the redesign of existing neighbourhoods 	<ul style="list-style-type: none"> M25, J28 - Brentwood cycle route (A1023 Brentwood cycling and walking scheme) Epping walking and cycling improvements Brentwood walking and cycling improvements Waltham Abbey walking and cycling improvements Wilson's Corner redesign Brentwood Town Centre traffic improvements

Outcome	Challenge	High level Activity	Schemes to address these challenges
			<ul style="list-style-type: none"> ▪ A128 improvement across C2C railway at West Horndon ▪ Epping to Harlow sustainable corridor ▪ *Expansion of plus bus schemes and new ones cross county ▪ *Better access to rail stations ▪ *Cycle Quietways in Residential Areas ▪ *Integrated Ticketing across modes
New developments are designed to be sustainable from the start	Large numbers of housing growth expected for the Epping Forest district and Brentwood borough.	<ul style="list-style-type: none"> ▪ Introduce a 'Place and Movement' approach for planning all new developments ▪ Adopt a vision-led approach to planning for new growth and its transport needs, including through all new Local Plans and the identification of monitoring measures ▪ Adopt an 'Avoid-Shift-Improve' approach to plan transport and development from the earliest stages of development planning ▪ Use connectivity planning to help locate new homes, jobs and essential services in sustainable places that align with our vision for transport ▪ Work with Local Planning Authorities (LPAs) and other partners to allocate developments in Local Plans and deliver new Garden Communities to help meet the significant housing targets set for Essex by the Government ▪ Work with LPAs to ensure that measures proposed in large developments and Garden Communities to promote sustainable transport are deliverable and sufficient to meet the vision for active and sustainable mode share ▪ Set up Transport Review Groups for larger developments to help the ongoing management of transport impacts 	<ul style="list-style-type: none"> ▪ West Horndon interchange ▪ M25, J28 - Brentwood cycle route (A1023 Brentwood cycling and walking scheme) ▪ Epping walking and cycling improvements ▪ Brentwood walking and cycling improvements ▪ Waltham Abbey walking and cycling improvements ▪ Brentwood Station environments (public realm and accessibility) ▪ Crossrail 2 ▪ Dunton Hills – Laindon Sustainable Corridor ▪ A128 improvement across C2C railway at West Horndon ▪ Dunton Hills Garden Village Bus Lanes ▪ Dunton Hills Garden Village-Basildon Connection ▪ Epping to Harlow sustainable corridor ▪ *Business and School Travel Planning ▪ *Residential Travel Planning ▪ *Behavioural change programme ▪ *Better access to rail stations ▪ *Roll out of shared mobility initiatives ▪ *You Smart Travel Planning Tool ▪ *Provision of Cycling equipment in new development ▪ *Integrated Ticketing across modes

Outcome	Challenge	High level Activity	Schemes to address these challenges
		<ul style="list-style-type: none"> Require effective travel plans for all new homes, new and existing workplaces and schools, including Garden Communities and other large-scale developments in line with our travel plan guides for residential, workplace, school, and large-scale developments and garden communities Monitor the delivery of active and sustainable mode share targets through the Travel Plan with permission for latter phases of development linked to the achievement of modal split targets for early phases in line with our travel plan guide for large-scale developments and garden communities Work with LPAs to embed inclusive design principles into all new developments Promote tools, guidance and best practice documents, such as A New Street Types Model for Essex, EPOA 2024 Parking Guidance, Mobility Hubs as part of the Essex Design Guide and the Highways Technical Manual, to help plan all new developments sustainably Implement 'well designed neighbourhood principles' in the design of new communities Require planning applications to be supported by a Health Impact Assessment (HIA) considering the Essex Healthy Places Checklist 	
Transport has a reduced impact on the environment and adverse impacts on natural	Waltham Abbey has poor air quality with high levels of nitrogen oxides and other pollutants	<ul style="list-style-type: none"> Adopt an 'Avoid-Shift-Improve' approach to plan transport and development from the earliest stages of development planning Implement the Essex Air Quality Strategy to reduce exposure to poor quality air Develop effective and deliverable Air Quality Action Plans with partners 	<ul style="list-style-type: none"> Waltham Abbey walking and cycling improvements Crossrail 2 *Promotion of Synthetic Fuels *Behavioural change programme *Roll out of shared mobility initiatives *Cycle Hire *Cycle Quietways in Residential Areas

Outcome	Challenge	High level Activity	Schemes to address these challenges
habitats are avoided		<ul style="list-style-type: none"> Implement our Green Infrastructure Strategy to deliver 'Healthy Streets' and more accessible green spaces and links that provide multiple benefits for people and the environment Avoid adverse effects from new transport projects on the integrity of internationally important habitat sites. 	
	There are currently not very many public electric charge points in the area.	<ul style="list-style-type: none"> Adopt an 'Avoid-Shift-Improve' approach to plan transport and development from the earliest stages of development planning Implement the Essex Air Quality Strategy to reduce exposure to poor quality air Develop effective and deliverable Air Quality Action Plans with partners Implement our Green Infrastructure Strategy to deliver 'Healthy Streets' and more accessible green spaces and links that provide multiple benefits for people and the environment 	<ul style="list-style-type: none"> *Roll out of EV infrastructure
	The area has few cycleways, so cycling may not currently be a practical choice for everyone	<ul style="list-style-type: none"> Adopt an 'Avoid-Shift-Improve' approach to plan transport and development from the earliest stages of development planning Implement the Essex Air Quality Strategy to reduce exposure to poor quality air Develop effective and deliverable Air Quality Action Plans with partners Implement our Green Infrastructure Strategy to deliver 'Healthy Streets' and more accessible green spaces and links that provide multiple benefits for people and the environment 	<ul style="list-style-type: none"> M25, J28 - Brentwood cycle route (A1023 Brentwood cycling and walking scheme) Epping walking and cycling improvements Brentwood walking and cycling improvements Waltham Abbey walking and cycling improvements *Cycle Quietways in Residential Areas

B.3 Connectivity

B.3.1 Outcome -> Issue -> Activity -> data

Outcome	Challenge	High Level Activity	Schemes to address these challenges
The business potential of Essex is maximised	Delays can be common on main routes, especially in SW Essex areas of Loughton, Waltham Abbey and Brentwood town centres, the A127 and the B1393 in Epping Forest	<ul style="list-style-type: none"> Introduce a 'Place and Movement' approach to help embed the principles of 'Healthy Streets' and manage the transport network effectively for both existing streets and new developments Adopt a vision-led approach to planning for new growth and its transport needs, including through all new Local Plans Prioritise journey time reliability for all modes of transport, including freight and passenger transport Work with partners to make the case for investment in our strategic road and rail links, including to the airports and ports to provide enhanced capacity for freight Work with the Government to explore how their plans for local government finance, devolution and wider policy objectives can enable Essex to play its full part in supporting national economic growth 	<ul style="list-style-type: none"> Wilson's Corner redesign Brentwood Town Centre traffic improvements Thames Freeport connection M25 / A12 junction 28 improvements Crossrail 2 Lower Thames Crossing M11 junction 5 'all access' junction scheme M25, J29 improvements *Business and School Travel Planning *Smart junctions *Behavioural change programme *Active Intelligent Traffic Management Systems
People have inclusive and affordable access to employment, education and training	Despite being near to London some areas of Epping Forest, especially near to Waltham Abbey and more rural areas are income, employment and education deprived	<ul style="list-style-type: none"> Enable greater use of buses, with targeted improvements where services are poor. Ensure existing businesses have plans in place to encourage walking and cycling. Encourage businesses to have less polluting vehicles. Invest in active travel such as walking and cycling, and promote it in new developments Ensure that residents can take advantage of accessing education and skills training, especially by sustainable transport 	<ul style="list-style-type: none"> M25, J28 - Brentwood cycle route (A1023 Brentwood cycling and walking scheme) Epping walking and cycling improvements Brentwood walking and cycling improvements Waltham Abbey walking and cycling improvements Thames Freeport connection Crossrail 2 *Better access to rail stations *Roll out of shared mobility initiatives *Cycle Hire

Outcome	Challenge	High Level Activity	Schemes to address these challenges
		<ul style="list-style-type: none"> Identify opportunities to support wider non-transport outcomes, such as improving health and wellbeing 	
	<p>The Brentwood area of SW Essex is reasonably well connected to areas with a lot of jobs by public transport, however most of the Epping Forest, Thurrock and Basildon areas are less well connected, with over an hour's journey time for many areas in Epping Forest</p>	<ul style="list-style-type: none"> Tackle barriers to travel, such as accessibility, complexity and security, to support greater use by everyone Work with organisations such as bus operators and active travel organisations and funders to make the case for new investment Work with partners to improve walking, cycling and public transport connections between residential and employment areas Work with partners to secure better facilities at stations for onward travel via all modes of transport, including step-free access Work in partnership to provide attractive, safe, convenient, inclusive, and high quality walking, cycling and public transport routes and facilities Deliver high quality rapid transit networks where feasible Support the introduction of multi operator and fully integrated smart ticketing for transport services in Essex 	<ul style="list-style-type: none"> M25, J28 - Brentwood cycle route (A1023 Brentwood cycling and walking scheme) Epping walking and cycling improvements Brentwood walking and cycling improvements Waltham Abbey walking and cycling improvements Thames Freeport connection Crossrail 2 *Business and School Travel Planning *Expansion of plus bus schemes and new ones cross county *Better access to rail stations
<p>The transport network has a secure and long term future</p>	<p>We may see changes to our natural environment in the future that may pose risks to the area. Heavier rainfall and hotter summers which will have an impact on the transport network. Transport networks need to be resilient to ensure the safe, efficient movement of people and goods. Some areas of southern Brentwood have a higher risk of flooding.</p>	<ul style="list-style-type: none"> Implement our Highways Infrastructure Asset Management Plan and supporting plans and strategies to maintain our transport infrastructure to appropriate standards which offer value for money to the Essex taxpayer Proactively monitor the condition of our road, cycle and pedestrian networks and other pieces of infrastructure Manage, maintain and improve our network by considering our Climate Adaption Plan Framework, Decarbonisation Strategy and our Strategy for managing the Green Estate 	<ul style="list-style-type: none"> M25 improvements *Smart junctions *Active Intelligent Traffic Management Systems

Outcome	Challenge	High Level Activity	Schemes to address these challenges
		<ul style="list-style-type: none"> ▪ Develop our own ability as a Council to adapt to climate-related risk ▪ Deliver suitable actions that enable our transport network to adapt to change ▪ Deploy approaches such as Sustainable Drainage and Natural Flood Management to promote greater flood resilience on the highway network ▪ Play an active role in flood defence, coastal protection, and conservation to reduce the risks and impacts on our coastal communities and transport network ▪ Work with National Highways and neighbouring local transport authorities to provide a common approach to innovation ▪ Accurately digitise our highway networks and traffic regulation orders to support future use of our networks by autonomous vehicle systems ▪ Manage the introduction of appropriate alternative fuel infrastructure to encourage cleaner zero-emission travel ▪ Support the pilot and where appropriate the adoption of new technology which enables more sustainable travel 	

Appendix C. References

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- ³ Index of Multiple Deprivation 2019 (quintiles 1 and 2). Ministry of Housing, Communities and Local Government. 2019. Available at: <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019>
- ⁴ Essex Joint Strategic Needs Assessment. ECC. 2019. Available at: <https://data.essex.gov.uk/jsna-home/>
- ⁵ Car or van availability Census 2021. NOMIS. 2021. Available at: <https://www.ons.gov.uk/datasets/TS045/editions/2021/versions/4>
- ⁶ Method of travel to work Census 2011 (Census 2021 data is not representative of commuting travel because of the pandemic.) NOMIS. 2011. Available at: <https://www.nomisweb.co.uk/census/2011/qs701ew>
- ⁷ Method of travel to work Census 2011
- ⁸ Estimates of station usage. Office for Rail and Road. 2024. Available at: <https://dataportal.orr.gov.uk/statistics/usage/estimates-of-station-usage>
- ⁹ Method of travel to work Census 2011
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- ¹³ Essex Residents Survey. ECC. 2022. Available at: <https://data.essex.gov.uk/dataset/29wzo/essex-resident-survey-2022-dashboard>
- ¹⁴ Collision Data sourced from Essex Police 2021-23
- ¹⁵ Typically motorcycles introduced pre 2007
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- ¹⁷ Typically vehicles introduced pre 2015
- ¹⁸ ULEZ compliance data. Transport for London. 2024. <https://tfl.gov.uk/modes/driving/ultra-low-emission-zone/ulez-compliance-data>
- ¹⁹ London wide ULEZ one year report. Transport for London. 2025. Available at: <https://content.tfl.gov.uk/london-wide-ulez-one-year-report.pdf>
- ²⁰ ZapMap. 2025. Available at: <https://www.zap-map.com/live/>
- ²¹ Essex Air Quality Strategy, Draft document for public consultation. Essex Air. 2025. Available at: https://consultations.essex.gov.uk/essex-highways/essex-air-quality-strategy/supporting_documents/essex_air_quality_strategy_web_version.pdf
- ²² Department for Transport journey time data
- ²³ OFCOM, 2022