

Essex Transport Strategy

# Implementation Plan: Mid Essex

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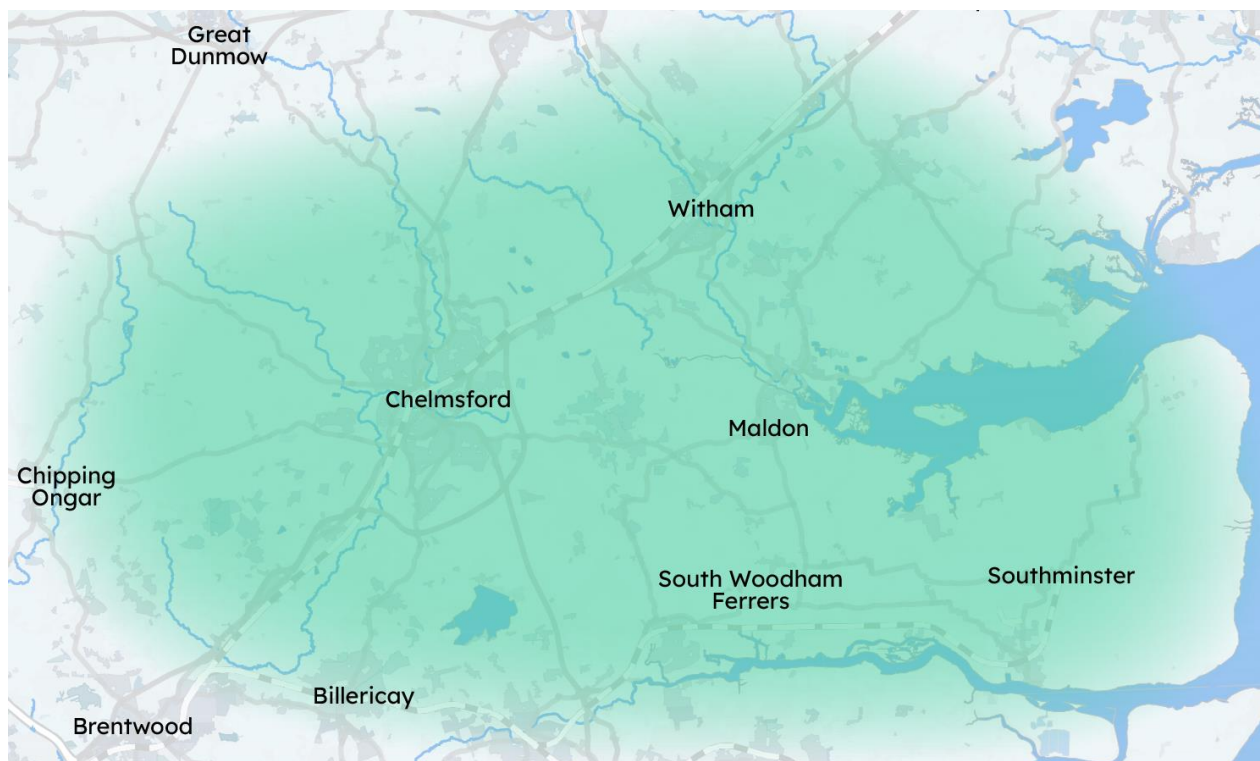
# 1. Introduction

## 1.1 Mid Essex

The Mid Essex area includes areas surrounding Chelmsford, including towns such as Maldon and Heybridge, South Woodham Ferrers, Billericay, Wickford, Burnham-on-Crouch, and Southminster. It covers the administrative districts of Chelmsford, Maldon and parts of Basildon and Rochford. The Mid Essex area excludes the Chelmsford City urban area as this is covered in a separate implementation plan.

The area, as a whole, has a growing number of young professionals and families, particularly in the areas surrounding Chelmsford, contributing to a highly educated workforce (with 33% holding university degrees compared to the Essex average of 28%)<sup>1</sup>, supported by institutions such as Anglia Ruskin University with campuses in central Chelmsford and Writtle. However, in contrast, Maldon has fewer degree-qualified workers, ranking in the bottom 20% of districts nationally. Employment rates in Mid Essex are lower than the Essex average (75% compared to 81%). There are also pockets of deprivation in Southminster and Rochford.<sup>2</sup>

Areas within the Mid Essex area such as Maldon district and parts of Basildon district, have life expectancies of 82 and 81 respectively (average of 82.3).<sup>3</sup>



The key transport ambitions for Mid Essex are:

- To reduce car use for shorter journeys and improve the local air quality through encouraging active and sustainable transport options for commuters, residents and visitors.
- Improving the affordability and choice of public transport options particularly for areas such as Maldon/Heybridge, Wickford/Runwell, Rochford and Burnham/Southminster.
- Improving access to active and sustainable travel options in the more rural areas such as the Maldon coast and Dengie Peninsula (including towns such as Burnham-on-Crouch, Southminster and Bradwell-on-Sea) ensuring all members of society can access key services.
- Connect residents sustainably to employment opportunities in areas such as Chelmsford, London and London Stansted Airport, as well as to education and training at institutions such as Anglia Ruskin University. Addressing connectivity challenges for isolated communities on the Maldon coast and Dengie Peninsula is central to our goals.

## 1.2 Local travel

High car ownership, vehicle movement and commuting often causes traffic delays on the main roads across the area at peak times. Only 11% of the Mid Essex population do not own a car or van, compared to the Essex average of 16%<sup>4</sup>. The high cost of local housing also results in some workers living a significant distance from their workplace. Consequently, in Mid Essex 72% of residents commute by car, higher than the Essex average of 65%<sup>5</sup>.

Maldon district's rural and coastal nature results in infrequent, fragmented public transport services, with multiple operators covering large geographic

areas<sup>6</sup>. Connections between buses and trains could also be improved such as with buses and train services on the Crouch Valley Line. Only 20% of commuting journeys in Maldon district use sustainable transport, and just 2% of workers in Maldon and Chelmsford commute by bus, below the Essex average of 3.3%, likely due to high car use and limited public transport options.

Mid Essex has multiple rail stations served by the Crouch Valley Line (including South Woodham Ferrers, Burnham-on-Crouch and Southminster), Southend Line (Billericay, Wickford and Rayleigh), and Great Eastern Main Line (Ingatestone, Hatfield Peverel and Witham), with interchange available between lines at Wickford and Shenfield respectively. The focus of the rail service has historically been on commuting to London, with most stations within 1 hour of Liverpool Street. Fares to London are slightly cheaper on the Crouch Valley and Southend Lines compared to stations on the Great Eastern Main Line

The Crouch Valley Line has less frequent services (typically every 40 minutes) than other routes as it is a single-track line with one place for trains to pass each other at North Fambridge. Outside of peak times, trains shuttle between Wickford and Southminster – and so some users choose to travel directly from Wickford station for its more direct, frequent, and reliable London services, resulting in increased car journeys to Wickford and fewer passengers at local stations.

Maldon and Heybridge are without access to a rail station, as the towns' station closed in 1964. Those wishing to commute by train need to use road routes such as the B1018, B1019, B1418 or A414 to gain access to rail services from stations such as Chelmsford, Hatfield Peverel, Witham, South Woodham Ferrers and North Fambridge. The opening of a new station at Beaulieu Park in

2025 will provide another option for these commuters.

Bus services within the Mid Essex Area are variable with some areas having good access to frequent bus services while others experience less frequent services. Most bus routes are commercially operated. The service linking Billericay and Chelmsford is the most frequent in the area (3 buses an hour), with half hourly services also linking Witham, Heybridge and Maldon, and Chelmsford, Danbury and Maldon. Burnham and Southminster are served by an at least hourly extension of the Chelmsford-Maldon service. Services between South Woodham Ferrers and Chelmsford are less frequent. Across the area, where they exist, Sunday bus services are less frequent and with limited hours of operation, in comparison to train services.

Rural areas away from the main roads that link these towns have either low frequency or non-existent services. This is a particular issue for the Dengie Peninsula outside the towns, and the Tollesbury area. Residents in the Dengie area in particular face challenges accessing essential services, such as GP and hospital appointments, without a private vehicle. Community transport options such as those provided by Community 360 services aim to fill this gap.

Maldon District is exploring water-based transport options, building on the Burnham Ferry, which reduces a 60-minute road journey to a 10-minute foot crossing the River Crouch between Wallasea Island and Burnham-on-Crouch. Expansion of ferry services for both passenger and freight trips could provide new sustainable transport linkages. The Chelmer and Blackwater Navigation also offers potential for walking and cycling routes, linking Maldon to Chelmsford off-road but mainly for tourism and wellbeing benefits.



Car clubs do exist in Mid Essex, including Co Wheels Car Club, where residents can hire cars from a choice of three hybrid and electric vehicles. Enterprise Car Club also exists, where two electric vehicles are available and parked in specially designated bays in local car parks.

Given the geographical size and rural nature of the area, the road network plays a vital role in connecting it to surrounding regions and to key services. Key routes such as the A127, A130, A132, A414 and B1007 provide links to other places within the County such as Chelmsford as well as the national road network, while the B1010, B1012, B1018, B1019 and B1021 are locally critical within the Maldon district and the Dengie Peninsula to provide access to key services and the national road network (A12 in particular).

Electric vehicles and plug-in hybrid electric vehicles play an important role in securing an environmentally friendly solution to car travel. However, EV's only account for 0.5% of all vehicles in Maldon therefore expanding public and private charging infrastructure, that is currently concentrated in urban areas, will be essential to encourage further uptake in more rural areas.

The England Coast path, a dedicated walking route connecting towns and villages along the coastline, is important to tourism in Maldon. With four million visitors a year, road congestion within the Maldon area is more severe in the summer months which is why more sustainable options are required.

## Mid Essex in numbers

**326,186** residents (2022)



**75%** economically active  
(of working population, as of 2021)



Life expectancy\* is **82**



**17%** are aged under 15



**23%** are aged over 65



**17%** of households do not own a car/van (2021)

**72%** of residents **drive** to work

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

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

**16%** of residents get the **train or underground** to work

### Top industries residents work in



Retail



Education



Health



Business  
Administration  
and Support



Professional,  
scientific &  
technical



Construction

\*Combination of Districts (Chelmsford, Maldon and Basildon)



## 2. Outcomes we want to achieve

### 2.1 Supporting people, health, wellbeing and independence

#### 2.1.1 People having inclusive and affordable access to key services

There are some pockets of deprivation and areas include parts of Southminster<sup>7</sup>. Transport affordability can be a key barrier. Improving bus services and affordability to provide better access to employment and training for all is a priority.

In the coastal and rural areas of Mid Essex, particularly the Dengie Peninsula, it takes more than an hour by public transport to gain access to the nearest hospital. This area has the third highest proportion of over 65s in Essex<sup>8</sup>, coupled with the longest journey times to healthcare. Despite this, in 2021, just over one in 11 people (9.1% of the population) were identified as disabled in the Mid Essex area. Public transport must ensure it supports the needs of these people and is a priority in our plan.

An example of where accessibility presents an issue from a transport perspective is at Wickford Station on the Southend Line where Crouch Valley branch line trains can now only terminate at platform 1 (given that Greater Anglia's new trains are too long for platform 4). Consequently, passengers at off peak times have to cross the footbridge for London bound trains. Passengers requiring step free access have to walk for 10 minutes through Wickford town centre to get to the entrance on platform 3.

#### 2.1.2 Improving physical and mental health and wellbeing

Mid Essex has high variation in health outcomes. Maldon and Rochford have above average life

expectancy of approximately 84. In contrast however, Basildon district's life expectancy is 83 years of age.

Air pollution is a health concern for in Mid Essex, largely due to high car use and emissions. The county's highest levels of lead pollution are on the A12, and Chelmsford district also has a significant level of air pollutants such as nitrogen oxides and sulphur dioxide, mainly from diesel vehicles.

Maldon has an identified Air Quality Management Area (AQMA) along a stretch of road between Anchorage Hill and Bull Lane, largely due to its proximity to the A414, the steep incline of Market Hill, and nearby properties. A previous AQMA in Danbury ended following improvements in air quality, mainly due to advances in engine technology.

Road noise also presents an issue, particularly near major routes like the A12 and A130, impacting residents and facilities such as schools and care homes.

In the mid Essex area 65% to 70% of adults are classified as obese,<sup>9</sup> higher than the Essex average of 65%, and much higher than in Chelmsford with 58%. Maldon also has the highest proportion of overweight children at reception age (26.2%) compared to the Essex average of 21.8%. Maldon lags behind the Essex average for cycling with 1.8% cycling to work compared with 2.1%,<sup>10</sup> likely due to its rural nature and higher proportion of over-65s. The Chelmer Blackwater Navigation Channel could offer opportunities for active travel connections between Maldon and Chelmsford for leisure and travel, increasing active travel has the potential to encourage more physical activity and improve people's health and wellbeing.

There is also potential to connect more residents in the area with green space (parks and gardens). The England Coastal Path (King Charles III Path), also known as the Saltmarsh Trail in Maldon district, provides a provides a great opportunity for residents within the Mid Essex area and beyond to access the countryside and coastal areas.

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

Mid Essex's high levels of car ownership and extensive road network means it has an increased risk of road accidents, with 35 road deaths reported between 2021 and 2023<sup>11</sup>. Achieving Essex's ambition of zero road deaths and serious injuries by 2040 will require a collaborative plan, working with the police and the Essex Safer Roads Partnership in supporting issues on more rural roads in the area. The plan will also require working with other partners, such as National Highways, who have responsibility for the A12.

Safety concerns also deter active and sustainable travel use. For example, bicycle theft rose by 55% in Chelmsford between 2021 and 2022, and hate crimes, including harassment and stalking, increased significantly in Maldon and Rochford. Safety measures, such as better lighting, CCTV, and helplines, are essential to address these issues.

### 2.2 Creating sustainable places and communities

#### 2.2.1 All places support the transport needs of all residents

Areas of Maldon district, particularly in the east (such as Tollesbury) and the Dengie peninsula, remain isolated due to limited public transport



options. More frequent, affordable bus services and better cycling infrastructure could help connect rural and coastal communities to employment and essential services.

In comparison to other towns in this area, Maldon and Heybridge are completely reliant on the bus for public transport links to key centres such as Chelmsford, Colchester and rail stations such as Witham. Services are however less frequent than between Billericay and Chelmsford, resulting in an over-reliance on the private car, adding to congestion on key roads.

The frequency of Crouch Valley Line services is slightly better than other branch lines in Essex, with a train every 40 minutes throughout Monday to Saturday with an hourly service on Sundays. However, the lack of a direct service to London outside of peak times does lead to some users preferring to drive to Wickford to access more frequent and direct services.

### **2.2.2 Work with partners to design sustainable developments from the start**

Mid Essex's population will continue to grow with people living longer and people moving to the area from other parts of the country.

The adopted Maldon Local Plan provides for 4,650 homes for the plan period to 2029 with an annual requirement of 276 per year. As of April 2024, around 2,650 homes have been completed with a minimum of 2,000 homes still to build. A Local Plan Review has commenced to cover the period to 2043 based upon the new government target of 569 per year as set out in the new National Planning Policy Framework. All of this growth needs to be supported by appropriate transport infrastructure. As residents become wealthier, we want to ensure that active and sustainable travel

choices are available as a first choice over buying a car.

The economic growth of the Chelmsford City includes plans for new business parks. A large development at Beaulieu in northeast Chelmsford and a 45,000 sqm office and business space in the Chelmsford Garden Community. The further development of Chelmsford Garden Community will bring 10,000 homes, 57,000 square metres of office space, a new railway station at Beaulieu Park, a new bus interchange, cycleways, new express bus service and new road connections throughout the district and surrounding areas. There are also new communities being constructed in both North Heybridge (1,400 homes) and South Maldon Garden suburbs (1,500 homes) and significant local growth planned for South Woodham Ferrers (1,220 homes).

The area is home to a former nuclear power station at Bradwell. The Government has previously selected Bradwell as one of a number of sites around the country that is suitable for another power station. Bradwell B could power four million homes across the country, however, planning is currently paused on the proposal. It's important that any future plans for a power station actively prioritise sustainable transport options for both its construction (such as marine and rail transport) and its workforce during construction and operation, to minimise the impact on communities and the environment.

We want all developments to be designed sustainably, and we will work with the local councils of Mid Essex 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**

Mid Essex is home to diverse habitats and has a rich history and heritage, with many listed buildings, conservation areas and parks. Multiple key rivers run through the area, including the Crouch, Roach, Blackwater and Chelmer. These features make the area vulnerable to extreme weather and rising water levels. The coastal nature of Maldon and Rochford districts means this area is vulnerable to the impacts of rising sea levels, coastal flooding, and erosion. Sustainable transport solutions must mitigate these risks to protect the local environment and heritage.

The area's road network has an impact on air quality. Currently, electric vehicle charging infrastructure and ownership is concentrated in urban areas, especially around Chelmsford<sup>12</sup>. Recognising that personal vehicles are still the only option for specific tasks (such as moving large items and reaching goods and services from rural areas), there is a significant opportunity to develop the existing car clubs, explore other sharing models, and to maintain and improve resident access to cars when needed. This will reduce the number of vehicles on the roads, improve congestion levels and help reclaim public space from existing car parking.

We will work jointly with local councils to improve air quality as set out in our Air Quality Strategy<sup>13</sup>. 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).

## **2.3 Connecting people, places and communities**

### **2.3.1 The business potential of Essex is maximised**

The district of Chelmsford has a strong economy, good transport links and an educated population, which helps it support around 87,000 jobs with over 9,000 businesses, with over 50% of its workforce living locally and around 20% of workers commuting to London.

Other popular destinations for Chelmsford residents to work are Basildon and Maldon. Around 36% of Chelmsford's workforce lives outside the area<sup>14</sup>, which shows the importance of the district as an employment and education hub. It's important that public transport services improve the links between Chelmsford and its more rural and coastal surrounding areas, such as those in Maldon, so that the population of Mid Essex can access a higher level of education and jobs.

Maldon district has an extensive network of footpaths and bridleways, as well as nature trails that enable access to public parks, nature reserves and rural parts of the district. Tourism is important, so continued access and improvement to leisure and the tourist walking coast is key, ensuring that they are accessible and well signposted. As the area continues to grow and its economy builds, we want to support people to move away from unnecessary car use. This will help create a more sustainable, accessible network, as well as improving air quality.

Maldon district's tourism is also growing, receiving four million visitors a year, with 500,000 visiting

Promenade Park and Hythe Quay alone. This growth will require planning to ensure new developments and tourism infrastructure is connected to active and sustainable ways of travelling. It's also essential to maximise the use of existing buildings, streets, public spaces, and the natural environment, each contributing to the unique character of the area's coastal towns.

Along with Colchester, Chelmsford experiences the most hours lost to delay on the road network. Outside of Chelmsford, significant delays are found on roads such as the A129 and A132 in Wickford town centre, A129 and B1007 in Billericay town centre, and the B1018 Fambridge Road south of Maldon<sup>15</sup>.

With more housing, developments, and jobs required across Mid Essex, the transport network needs to be reliable to ensure the safe, efficient movement of people and goods. This means reducing the area's car use, and shifting more journeys to public transport, walking, and cycling.

To make sure business and employees continue to locate in areas such as Chelmsford, the transport network should ensure seamless, comfortable, and reliable journeys to places of work. Our plan will target this from areas within the Mid Essex area, focussing on the affordability, frequency, capacity, reliability and accessibility of public transport options across Mid Essex.

There are some places in Mid Essex where less than 20% of homes have access to ultra fast broadband<sup>16</sup>, 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**

The Mid Essex area offers access to key secondary schools such as the Plume academy, Ormiston Rivers academy and William de Ferrers school as well as selective schools in Chelmsford and Southend. There are also further education opportunities at Anglia Ruskin University. With good schools and a variety of market and coastal towns near London, the area is an attractive location for people to move to and return to after school and university. It has the highest number of residents with degree-level qualifications in Essex (alongside Uttlesford). These factors also make it an attractive location for employment, and training.

However, accessing these education and employment opportunities via public transport can be more problematic in some areas of Mid Essex. North-south routes are constrained by the coastline, and buses may not serve some employment locations where they are located on the edge of urban areas. Basildon and Rochford also have significant areas with poor access to higher-paying jobs, education, and training opportunities. For many residents, public transport or walking journeys to these opportunities can take between 30 minutes and an hour. Better public transport, including low cost, frequency, and journey time to areas with higher-paying jobs, would improve people's access to employment, education, and training, while helping to attract and keep people with higher qualifications.

### **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 Mid Essex. The



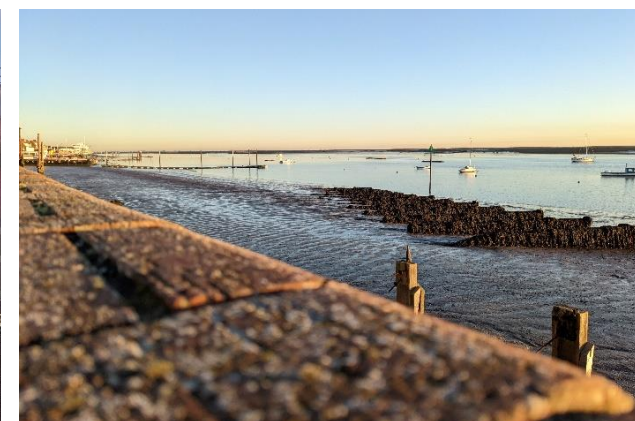
presence of key rivers and the Heybridge Basin means that any flooding, will have an increasingly negative impact on the reliability of transport infrastructure for everyday journeys as well as its ongoing maintenance.

We may see heavier rainfall and hotter summers which will have an impact on the transport network, especially the rail network where high temperatures can cause the ground underneath the railway to dry out, resulting in temporary speed restrictions for trains. For example, the Crouch Valley Line had a temporary timetable for a number of months while Network Rail repaired tracks following the hot summer of 2022. 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 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 the Mid Essex

Our plan for Mid Essex focuses on supporting people, creating sustainable places, and connecting communities. Here's how we'll achieve these outcomes across the various areas within in Mid Essex:

### 3.1 Area Wide

With connections to and from London, and elsewhere in the county, it is important that the Mid Essex population is able use them effectively. We will focus on making these connections affordable for everyone.

A key public transport option for the south of the area is the Southend Line and Crouch Valley Line providing services to London for a range of journeys. As well as providing direct services to London at peak times, the Crouch Valley Line provides a vital local function as the main source of local public transport connecting the towns of Southminster, Burnham, South Woodham Ferrers and Wickford for a range of reasons such as school, work, leisure and shopping.

We will continue to work with the rail industry and the Essex and South Suffolk Community Rail Partnership to deliver better services and more attractive station environments for passengers. For example, the partnership seeks to provide more attractive rail station environments to encourage their use. We also have an aspiration for all of our branch lines to have a turn up and go service of two trains per hour. The best frequency that can be currently provided with the passing loop at North Fambridge and current line speeds is 40 minutes. Any transport strategy for a future development of another power station at Bradwell (Bradwell B) will need to prioritise sea, rail and sustainable movements due to constraints on the

road network. For example, it could provide the opportunity to provide further double track sections on the branch to cater for a service every 30 minutes to help movement of freight.

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, (such as between Chelmsford, Maldon and Burnham) 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. We'll also look at improving community and demand-responsive transport, building on existing services provided by Community 360 services for rural communities. This could include a form of the DigiGo digital demand responsive transport, successfully launched in Braintree district.

Tourism is key to Maldon district's economy, supporting local businesses and job opportunities and enhancing quality of life. The area is popular with outdoor activities such as walking, cycling and sailing as well as the food and drink sector, with numerous vineyards and a Rail Ale Trail in operation along the Crouch Valley.

Supporting the growth of this sector is important to this plan. It's important that visitors feel that Maldon, Heybridge and Burnham-on-Crouch are accessible by train, bus, car, and cycle to support sustainable growth in the visitor economy. While Burnham has its station, for Maldon and Heybridge we need to promote and facilitate easy interchange with bus at nearby stations such as Beaulieu Park, Hatfield Peverel, Chelmsford and

Witham. Targeted improvements to the transport network and services, alongside improvements to the local walking and cycling network, will make it easier for visitors to explore all the coast has to offer. Enhancing the look and feel of these coastal towns will also make them more attractive to visitors, boosting local businesses.

To promote physical and mental wellbeing, improve access to services and open space and promote more healthy activity we'll continue to promote existing cycling and walking routes and seek opportunities to invest in new infrastructure. This will include locally important cycling and walking routes within the area's key towns, and where appropriate, between them.

The electrification of Mid Essex's road infrastructure will also be important in improving the sustainability and the air quality of the area. This plan will look to expand public electric vehicle (EV) charging infrastructure for cars and logistics vehicles. It will also support the ongoing trials of e-scooter and e-bikes (currently in Chelmsford), with an increasing focus on electric vehicles for logistics, deliveries, and cargo. Car clubs will be supported further by this electrification, offering more affordable and available options to share EVs.

Investing in more sustainable journey options will also require an improvement to the transport network's resilience and efficiency. With climate change, resilience must also focus on enduring extreme weather and coastal conditions, with high winds, heatwaves, and flooding, posing a risk to roads, rail lines, bridges and paths. Our maintenance approach will ensure the network remains high functioning and accessible in the

future. By using more durable materials, robust structures, and planning for more frequent floods and higher temperatures, we will be able to keep our infrastructure in operation.

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 Maldon and Heybridge**

Maldon and Heybridge have a combined population of over 22,000 and have been the focus of much of Maldon district's growth in recent decades.

Much of this growth has been supported by local road infrastructure like the North Heybridge relief road but to improve the local environment, we need to make it easier for people to walk and cycle for their everyday journeys, and so we plan to expand walking and cycling infrastructure, building on the already-existing networks particularly in Maldon but also across in Mid Essex area. Collaborating more with Active Travel Essex to campaign for those living with disabilities or long-term illnesses will encourage more groups to take up sport or physical activity.

Good quality, frequent and relatively quick bus services are also essential to reduce the reliance on the car for everyday journeys. We'll continue to work with bus operators and developers to secure better services for existing and new residents of Maldon and Heybridge, helping people to access key places such as Chelmsford, Colchester and railway stations frequently and affordably, reducing the reliance on the private car to get around.

Any infrastructure must be safe and feel safe for everyone to use at all times of day. This applies to public transport infrastructure, including bus stops,

where improvements to lighting, shelter, seating, and real time information are essential.

Affordability and accessibility must also improve to widen access to public transport. For example, access to essential services in Maldon and further afield from places such as Tollesbury and the Dengie Peninsula can be difficult by public transport. Reducing the prices and improving the reach of public transport allow more people to use it. This will help improve access to key services and enable tourists to travel here more sustainably, particularly in the summer. It will also further unlock access to key services, education, and employment opportunities in places such as Maldon and Chelmsford for the residents of mid Essex.

To help support better and more affordable access to health care services we will work with the NHS to roll out mobile treatment units, supporting elderly populations and those experiencing the highest levels of public transport exclusion, such as Tollesbury and the Dengie Peninsula. A key consideration will be broadband access, which affects the effectiveness of digital healthcare in reducing the need for travel.

The Chelmer and Blackwater Navigation also offers potential for walking and cycling paths, linking Maldon to Chelmsford off-road but mainly for tourism and wellbeing benefits. This plan will explore these new and exciting opportunities for expanding active and sustainable travel options in association with the relevant Local Plan preparation and implementation.

### **3.3 Burnham-on-Crouch and the Dengie Peninsula**

Burnham-on-Crouch and Southminster have a combined population of over 13,000 people and have been the main focus for recent housing

growth in the south of Maldon district. They are home to a range of essential services and local jobs for the wider Dengie Peninsula including the only secondary school, shops, cinema, GP surgeries and two rail stations. Improving sustainable transport links between Burnham and Southminster to maximise their combined potential and to them from nearby villages are important parts of our plan. This plan aims to make public transport, cycling, and walking more attractive options, enabling more efficient and healthier journeys to work and to key services or employment.

For essential services such as health care, the Dengie Peninsula is particularly isolated, with the private car often the only viable option for most people to access hospitals such as Broomfield within an acceptable timeframe. As a result, the car remains the most popular mode of transport across the area, particularly during the morning and evening commutes, resulting in high levels of delay on roads leaving the area such as the A414, B1018 and A132.

From an employment perspective the town of Maldon provides various opportunities ranging from retail/leisure to light manufacturing. The future for employment opportunities in the area could include a new nuclear facility at Bradwell providing significant opportunities for local people and residents elsewhere in Essex. We plan to work with all significant employment partners to ensure residents can access job opportunities via sustainable transport links. Safe and reliable road access for goods vehicles will also be essential to support the area's economic success.

Maldon District continues to explore water-based transport options. The long-running Burnham Ferry reduces a 60-minute road journey to a 10-minute ferry for pedestrians and cyclists between



Essex Marina, Wallasea Island and Burnham-on-Crouch. This helps provides access to the town from South Essex during the spring and summer months, as well as providing a link to the RSPB nature reserve on Wallasea.

Ensuring efficient, active and sustainable travel into the City of Chelmsford is crucial to the Mid Essex economy, with 36% of the workforce living in other areas and travelling into Chelmsford, most notably Maldon and Basildon. With Chelmsford's economic growth and planned housing developments, the transport network must reduce delays and support more sustainable journeys. Improvements to the road network and public transport services will help achieve this.

### **3.4 South Woodham Ferrers and parts of South Essex**

South Woodham Ferrers is a planned riverside town from the 1970s and 1980s, with a population of around 16,000. There is significant growth planned for the South Woodham Ferrers area which is providing several active and sustainable improvements to enable connectivity to the existing urban area and town centre. We will work closely with Chelmsford City Council to ensure that the developments taking place in this area have the most appropriate options for residents to reduce their travel by car.

More locally, it is important that walking and cycling are the normal form of transport for short trips. South Woodham Town Council for example is keen to implement a town wide cycle grid along with other measures which make use of streets and spaces safer for all, including a town-wide reduction of speed limits on all roads to 20mph, particularly those around existing and proposed new schools.

Widening out to other parts of South Essex we want residents to benefit from good access to healthcare, employment opportunities and key services. Bus improvements, for example, along the A127 enterprise corridor and better bus provision between urban centres, such as Basildon to Wickford and Basildon to Brentwood, will help to improve public transport connections to key destinations. Plans to improve Wickford station will also help to make rail travel more attractive and accessible for local residents.

Park and Ride options will be explored to help improve access to Basildon University Hospital and reduce congestion on the surrounding network. Capacity improvements, where required, for example, at the Fairglen Interchange where the A130, A127 and A1245 all meet will also help to address local congestion. There will be a need for further improvements at Fairglen Interchange as it is an important part of the network and it will need to be resilient with planned growth in the area.

### **3.5 Parts of Northwest Chelmsford**

The Mid Essex area as a whole together with other neighbouring implementation plan areas are expected to deliver significant numbers of new homes. Significant office space and working infrastructure is also planned, as well as the further expansion of garden communities. For new developments to succeed, they must be supported by appropriate transport infrastructure and community services. For transport, this means a greater focus on more sustainable transport corridors, more walking and cycling infrastructure, and accessibility improvements to existing bus or rail services to enable all residents to travel sustainably.

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.

Chelmsford, London, London Stansted Airport and Anglia Ruskin University, all offer good employment and education opportunities, and we want local people to benefit from them. We will work with partners to ensure local people can gain access to their jobs and courses in early career stages, with sustainable links to and from the more remote areas.

**Scheme Details** can be found in Appendix A.

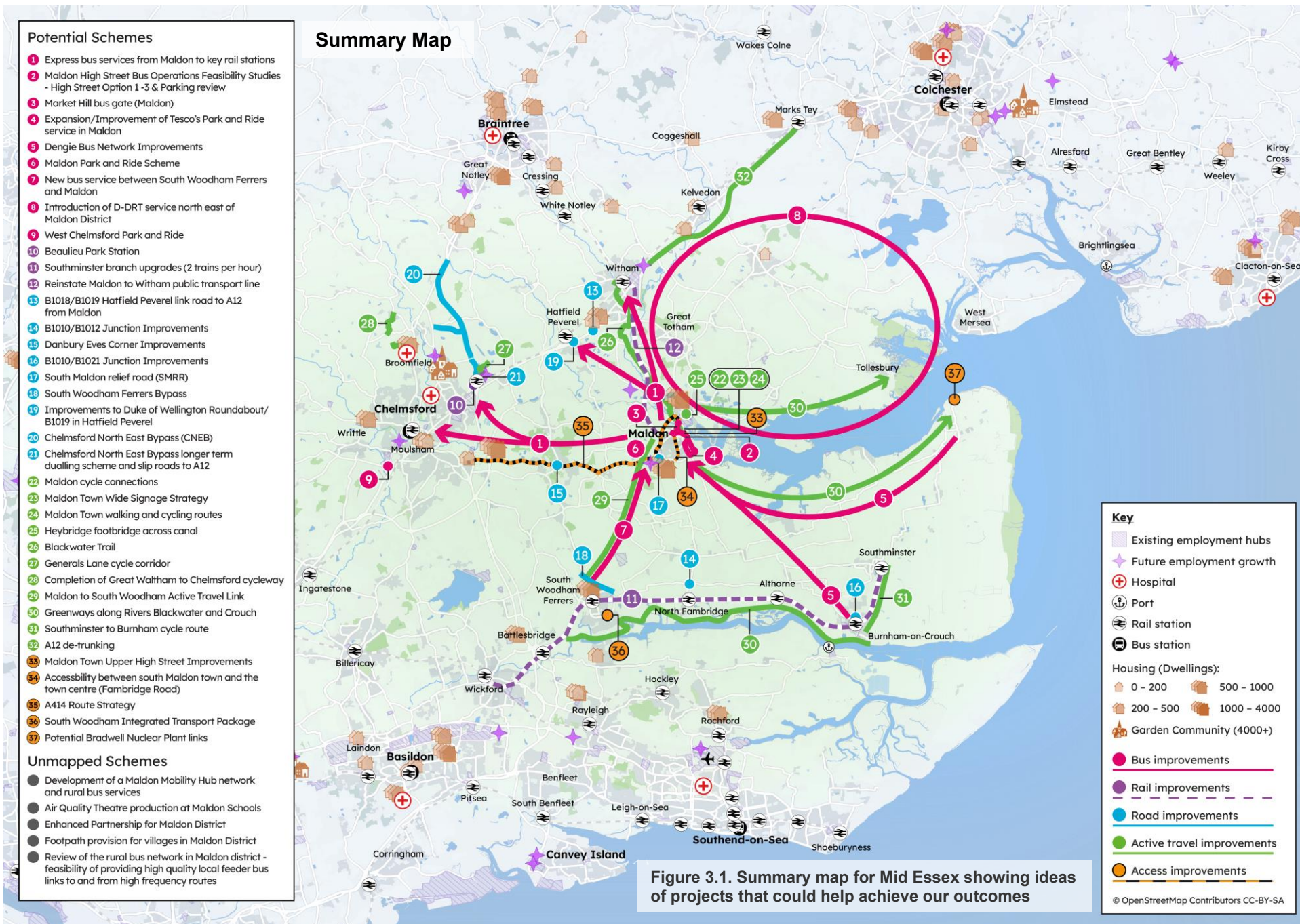
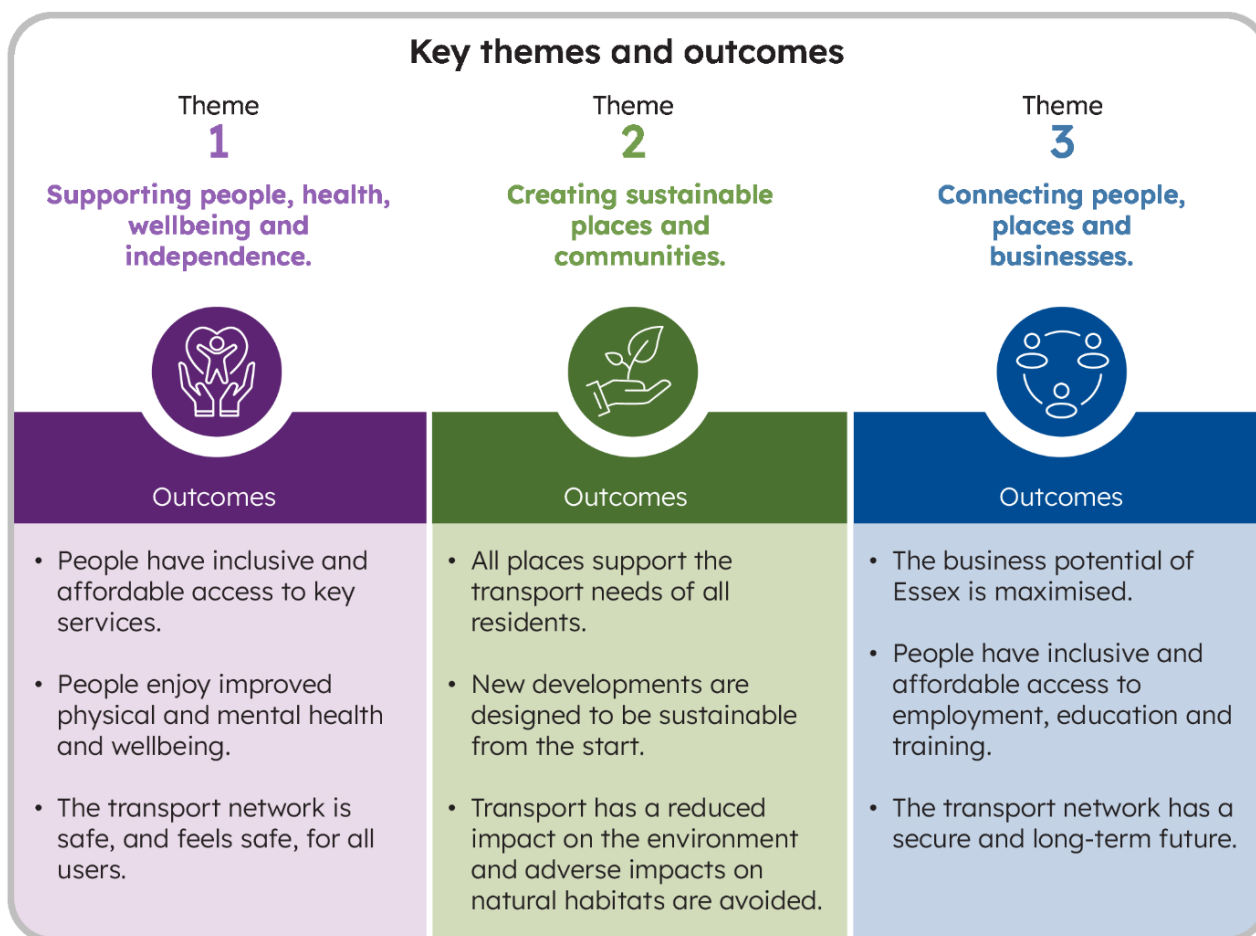


Figure 3.1. Summary map for Mid Essex showing ideas of projects that could help achieve our outcomes

## 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											
A414 Route Strategy	Feasibility studies into how the A414 corridor can be enhanced to reduce congestion and improve active and sustainable transport options.	To support growth in Maldon and provide access/connectivity improvements between Maldon, A12 and Chelmsford.			*	**		*	*		**
B1018/B1019 Hatfield Peverel link road to A12 from Maldon	Feasibility studies into new link road to A12 Widening scheme at J21	Keeps the road network moving by reducing congestion in Hatfield Peverel and making journeys easier from Maldon district.			*	*	*		**	*	*
Danbury Eves Corner Improvements	Improvements for adopted Maldon local plan growth to 2029.	To support growth in Maldon and provide access/connectivity improvements between Maldon, A12 and Chelmsford.			*	**		*	*		**
Enhanced Partnership for Maldon District	Agreement between ECC and bus operators to improve services	Improved public transport options for Maldon district.	**	*	*	*	**	*	**	**	*
Footpath provision for villages in Maldon District	Feasibility study into footpath provision in towns and villages	Improved walking options encouraging people to be more active and connecting people in villages to services and education.	*	**	***	*	*	*	*	*	*

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
Review of the rural bus network in Maldon district - feasibility of providing high quality local feeder bus links to and from high frequency routes	<p>Redesign of the supporting network – optimising funding resources by converting infrequency “branch” services of main routes to through high frequency feeder routes connecting to the mainline. Examples of routes to be investigated include:</p> <ul style="list-style-type: none"> <li>Service 91 – Tollesbury – Kelvedon – Witham</li> <li>Service 73 – Maldon – Hatfield Peverel – Chelmsford</li> <li>D1/D2 – Bradwell - Maldon</li> </ul>	Improved public transport options for Maldon district.	**	*	*	*	**	*	**	**	*
<b>Maldon and Heybridge</b>											
Maldon cycle connections	Review of cycling routes in the district	Improved cycling and walking options encouraging people to be more active	**	***	**	*	*	**	**	**	*
Blackwater Trail	Feasibility study into the conversion of the old rail line to sustainable transport links	Improved cycling and walking options encouraging people to be more active	*	***	**	**	*	***	**	*	*
Maldon Town Walking and Cycling Routes	Implementation of strategic walking and cycling routes in the town	Improved cycling and walking options encouraging people to be more active	**	***	**	*	*	**	**	**	*

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
Express bus services from Maldon to key rail stations	Offers alternative to private car to access Colchester, Witham and Chelmsford stations.	Improved public transport options for Maldon district.	*	*	**	**	**	**	**	*	**
New bus service between South Woodham Ferrers and Maldon	New service to provide access to retail options in South Woodham Ferrers and the train station	Improved public transport options for Maldon district.	*	*	**	*	**	**	**	*	**
Maldon Town Upper High Street Improvements	<p>Improvements to the public realm and how the highway operates. Environmental improvements to this priority section of High Street should be agreed, programmed and delivered through a co-ordinated, heritage led townscape initiative to give greater priority to pedestrians whilst not significantly revising the town centre traffic management regime. Opportunities include:</p> <ul style="list-style-type: none"> <li>Improvements to the carriageway and pavement surfacing to give a more unified sense of shared space will give pedestrians more priority.</li> <li>A programme of feature lighting along</li> </ul>	Improved public realm in Maldon encouraging trips to the town centre by foot and improving outlook for local businesses.	**	**	*	*	**	**	*	*	**



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
	<p>this historic stretch of commercial frontage will help to support the evening economy.</p> <ul style="list-style-type: none"> <li>A rigorous programme to remove street clutter including guardrails, extraneous street posts, etc.</li> <li>Improvements and refurbishments of existing buildings will be encouraged by the Council."</li> </ul>										
Reinstate Maldon to Witham public transport line	Feasibility study into a high quality public transport link to reconnect Maldon to the rail network (likely to be a rapid transit option due to redevelopment of track bed and constraints at Witham station)	Improved public transport options for Maldon district.	**	***	**	*	***	**	**	**	**
Maldon to South Woodham Ferrers Active Travel Link	Feasibility study into a South Woodham Ferrers to Maldon old railway line green links	Improved cycling and walking options encouraging people to be more active	*	***	**	*	*		*	*	*
Market Hill bus gate	Introduce a bus gate on Market Hill.	A bus gate would improve journey times and the reliability of public transport whilst reducing traffic from private cars.	*	**	**	*	*	***		*	*

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
Maldon Park and Ride Scheme	Implementation to reduce congestion. Site on the edge of Maldon town to the town centre	Improved public transport options for Maldon district.	*	*	*	**		*	**	*	**
Development of a Maldon Mobility Hub network and rural bus services	Increasing viability of long-distance routes by shortening, increasing frequency and encouraging interchanging at hubs, feeding supporting routes into the commercial core network, particular for the Dengie and review of the rural bus network – providing high quality local feeder bus links to/from high-frequency routes	Improved public transport options for Maldon district.	**	*		*	**	*	*	**	**
Maldon High Street Bus Operations Feasibility Studies - High Street Option 1 -3 & Parking review	Investigation into options to improve bus operation through Maldon High Street and a review of parking on the High Street	Improved public transport options for Maldon district.		*		**	*	**	*		*
South Maldon relief road (SMRR)	Potential new relief road to help accommodate planned growth in the adopted Local Plan	To reduce congestion and keep the network moving			*	**			*		*
Maldon Town Wide Signage Strategy	Development of Town wide Signage Strategy	Improved wayfinding can reduce congestion and encourage more walking and cycling	*	*	*	***	*	*	**	*	

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
Expansion/Improvement of Tesco's Park and Ride service in Maldon	Feasibility Study of expansion / improvement of Tesco's Park and Ride 288 circular service	Improved public transport options for Maldon district.	***	*	*	*	*	*	**	***	
Accessibility between south Maldon town and the town centre (Fambridge Road)	Feasibility study into improving accessibility along Fambridge Road, between South Maldon Town and the Town Centre	Improved public transport, walking and cycling options for Maldon district.	**	***	**	**	**	*	**	**	*
Air Quality Theatre production at Maldon Schools	Delivery of an interactive theatre production at primary schools on Air Quality issues. There is a declared Air Quality Management Area in Maldon town.	Improved awareness of air quality issues for children who may encourage families to think about their travel, encourage walking to school and improve congestion in the town at school run times.		***	*	**		**	*		
Footbridge across the canal to connect industrial estates to Heybridge	Delivery of Footbridge across the canal to connect industrial estates to Heybridge	Improved accessibility to employment and retail by walking.	**	***	*	*	**	*	**	**	*
Introduction of D-DRT service north east of Maldon District	Feasibility Study into expanding DRT services in Maldon. Introduce a new D-DRT area in the north east of Maldon District	Improved public transport options for Maldon district.	***	*	*	*	**	**	*	***	**
<b>Burnham-on-Crouch and the Dengie Peninsula</b>											
Southminster to Burnham cycle route	Cycleway connecting Southminster to Burnham-on-Crouch.	Improved cycling options connecting key services and education.	**	***	**	*	*	*	*	*	*
Greenways along Rivers Blackwater and Crouch	Active travel paths along the river banks	Improved walking and cycling options	**	***	**	*	*	**	*	**	*



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
	connecting Maldon town with Tollesbury and villages in the Dengie, links to the England Coast Path,	connecting to services and increased attractiveness to tourists.									
Southminster branch upgrades (2 trains per hour)	Upgrade Wickford to Southminster Line including passing loops and/or twin tracking to support 2 trains per hour service. Could support any future development at Bradwell B.	Provides more frequency for trains on this line, making it a more reliable option and people less likely to drive to Wickford.	**	*	*	**	*	**	**	**	***
Dengie Bus Network Improvements	Improvements to the bus network in order to support growth and increase connectivity in the area including implementation of a D-DRT service.	Improved public transport options for Maldon district.	***	*	*	*	**	**	*	***	*
Potential Bradwell Nuclear Plant links	Sustainable and other links to power station - reducing impacts of unsustainable commuting. To minimise impact on rural road network. Any strategy will look to maximise sea, rail and sustainable measures for the movement of workers at all phases of construction.	Improve active and sustainable transport links to potential Bradwell B site, reducing impact on local villages.	*	**	*	***	**	**	*	**	

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
B1010/B1021 Junction Improvements	Explore opportunities to increase capacity at the junction given available land and protected tree	Keeping the network moving			*	**		*	*		**
B1010/B1012 Junction Improvements	B1010/B1012 Lower Burnham Road junction improvement to remove the pinch point	Keeping the network moving and improve road safety			*	*			*		
<b>South Woodham Ferrers and parts of South Essex</b>											
South Woodham Integrated Transport Package	Package of measures to improve active and sustainable transport in South Woodham Ferrers.	Improved public transport, walking and cycling options.	***	***	**	**	*	***	**	***	*
South Woodham Ferrers Bypass	Bypass to relieve A132 / Burnham Road to the north of SWF. Development is providing enhancements to the connectivity across the A132 and at key junctions.	Keeping the network moving, a Bypass may assist in opening up needed growth in the wider area.			*	*	*		**		**
<b>Parts of Northwest Chelmsford</b>											
Generals Lane cycle corridor	Cycleway along Generals Lane	Improved walking and cycling options in the area, supporting housing at Chelmsford Garden Community.	**	***	**	*	***	**	**	**	**
Completion of Great Waltham to Chelmsford cycleway	This would allow the extension of e-scooters to villages.	Improved walking and cycling options in the area, supporting housing at Chelmsford Garden Community.	**	***	**	**	*	**	*	**	*

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
A12 de-trunking	<p>We propose removing one carriageway from the existing dual carriageway and using it to create good off-road provision for active travel modes, such as walking, cycling and horse-riding.</p> <p>This would be known as an 'Active Travel Corridor' and would also provide space for environmental enhancements through planting and greening. This would be achieved by breaking up redundant sections of the existing carriageway and covering them with earth/topsoil to create suitable growing conditions for different plants, with landscaping focused on developing native habitat types. Opportunity to use newly released capacity to support housing growth, modal shift (e.g. Feering)</p>	Improved strategic active travel option between Marks Tey and Feering and Rivenhall. Improved environmental benefits.	***	**	*	**		*	**		
Chelmsford North East Bypass (CNEB)	New link road between the A12 Boreham junction and the A131 to	Keeping the network moving and supporting	*	*	*	*	*		**	*	**

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
	<p>the north east of Chelmsford. With potential to be expanded in the future</p> <p>In conjunction with Beulieu Park station, the bypass supports the sustainable delivery of over 14,000 new homes.</p> <p>Phase 1A – to connect with Beaulieu Parkway relief road in the south providing connectivity to the A12 at Boreham Interchange via Generals Lane Bridge. To the north, the CNEB will join with the Northern Radial Distributor Road being delivered as part of the Chelmsford Garden Community and will connect through to the Wheelers Hill roundabout on the A130 Essex Regiment Way. This phase will use HIF monies and will also deliver Beaulieu Park station in full enabling the delivery of around 6,000 homes by 2036. A new bridge north of Beaulieu Parkway will allow for the continuation</p>	housing growth in north Chelmsford.									



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
	existing of mineral extraction at Bulls Lodge and serve as a new east-west vehicle, cycle and pedestrian route post extraction. Phase 1A is planned to commence in early 2025 with completion in Spring 2026. Phase 1B and 2 – to connect to the A131 at Chatham Green unlocking the remaining housing growth across Chelmsford including Great Leighs and Broomfield and in Braintree district at Great Notley. ECC continue to proactively seek funding for these later phases, including potential developer contributions.										
Chelmsford North East Bypass longer term dualling scheme and slip roads to A12	Longer term plan to dual the Chelmsford NE bypass and provision of slip roads to access A12 directly from A130.	Keeping the network moving and supporting housing growth in north Chelmsford.			**	**	*		**	*	**
West Chelmsford Park and Ride	Reduce general traffic on city centre network.	Improve public transport options for Chelmsford	*	*	*	**		*	**	*	
Improvements to Duke of Wellington Roundabout/B1019 in Hatfield Peverel	Impacts of/on A12 widening on this junction in order to reduce congestion	Keeping the network moving and increasing capacity of the junction			*	*		*	*		**

## 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 area's rural and coastal nature results in infrequent, fragmented public transport services	<ul style="list-style-type: none"> <li>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</li> <li>Support the rollout of faster broadband and ongoing improvements to 5G mobile coverage in rural and deprived areas</li> <li>Implement our Bus Service Improvement Plan</li> <li>Explore opportunities to expand our Demand Responsive Transport network in rural areas</li> <li>Work with partners to promote more sustainable forms of car use, such as lift sharing and car clubs</li> <li>Develop and deliver long-term plans to improve our cycling and walking networks by considering our Local Cycling and Walking Infrastructure Plans</li> <li>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</li> <li>Support the introduction of multi operator and fully integrated smart ticketing for transport services in Essex</li> </ul>	<ul style="list-style-type: none"> <li>Enhanced Partnership for Maldon District</li> <li>Review of the rural bus network in Maldon district - feasibility of providing high quality local feeder bus links to and from high frequency routes</li> <li>Express bus services from Maldon to key rail stations</li> <li>New bus service between South Woodham Ferrers and Maldon</li> <li>Reinstate Maldon to Witham public transport line</li> <li>Development of a Maldon Mobility Hub network and rural bus services</li> <li>Maldon High Street Bus Operations Feasibility Studies - High Street Option 1 -3 &amp; Parking review</li> <li>Introduction of D-DRT service north east of Maldon District</li> <li>Southminster branch upgrades (from Wickford Station)</li> <li>Dengie Bus Network Improvements</li> <li>South Woodham Integrated Transport Package</li> <li><b>*Integrated ticketing across modes</b></li> <li><b>*Use of mobile apps and web information (supporting traditional information way finding) to encourage use of public transport</b></li> </ul>

Outcome	Challenge	High Level Activity	Schemes to address these challenges
		<ul style="list-style-type: none"> <li>Use travel planning to promote active travel choices across all sizes of development and major existing generators of traffic</li> <li>Provide training and promote free initiatives to increase people's confidence and participation in cycling</li> </ul>	
People enjoy improved physical and mental health and wellbeing	In the coastal and rural areas of Mid Essex, particularly in the Dengie peninsula, it takes more than an hour to reach a hospital by public transport and a high proportion of those over 65	<ul style="list-style-type: none"> <li>Support people and increase their confidence to travel by improving travel information, while making fares and ticketing easier and simpler to understand</li> <li>Promote the support we provide on mental health and wellbeing through our Essex Wellbeing Service</li> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>Enhanced Partnership for Maldon District</li> <li>Review of the rural bus network in Maldon district - feasibility of providing high quality local feeder bus links to and from high frequency routes</li> <li>Express bus services from Maldon to key rail stations</li> <li>New bus service between South Woodham Ferrers and Maldon</li> <li>Development of a Maldon Mobility Hub network and rural bus services</li> <li>Introduction of D-DRT service north east of Maldon District</li> <li>Dengie Bus Network Improvements</li> <li>South Woodham Integrated Transport Package</li> </ul>
	There are air quality problems in Maldon and along the A414	<ul style="list-style-type: none"> <li>Develop and deliver long-term plans to improve our cycling and walking networks by considering our Local Cycling and Walking Infrastructure Plans</li> <li>Widen access to Essex Pedal Power, which provides free bikes and a support service for our most disadvantaged communities</li> <li>Implement our Green Infrastructure Strategy to deliver better quality and more accessible multipurpose green spaces and links for everyone</li> <li>Work with landowners and other partners to ensure that public rights of way are well maintained and easy to use</li> <li>Improve access to, and raise awareness of, the green spaces, facilities and activities available to the public</li> </ul>	<ul style="list-style-type: none"> <li>A414 Route Strategy</li> <li>Danbury Eves Corner Improvements</li> <li>Maldon Town Upper High Street Improvements</li> <li>Reinstate Maldon to Witham public transport line</li> <li>Market Hill bus gate (Maldon)</li> <li>Maldon Park and Ride Scheme</li> <li>Maldon High Street Bus Operations Feasibility Studies - High Street Option 1 -3 &amp; Parking review</li> <li>Expansion/Improvement of Tesco's Park and Ride service in Maldon</li> <li>Accessibility between south Maldon town and the town centre (Fambridge Road)</li> <li>Air Quality Theatre production at Maldon Schools</li> <li>Introduction of D-DRT service north east of Maldon District</li> <li><b>*Synthetic fuels</b></li> <li><b>*Roll out of EV Infrastructure</b></li> <li><b>*Cycle Hire</b></li> </ul>

Outcome	Challenge	High Level Activity	Schemes to address these challenges
	Maldon district has the highest proportion of overweight children at reception age in Essex.	<ul style="list-style-type: none"> <li>Develop and deliver long-term plans to improve our cycling and walking networks by considering our Local Cycling and Walking Infrastructure Plans</li> <li>Widen access to Essex Pedal Power, which provides free bikes and a support service for our most disadvantaged communities</li> <li>Implement our Green Infrastructure Strategy to deliver better quality and more accessible multipurpose green spaces and links for everyone</li> <li>Work with landowners and other partners to ensure that public rights of way are well maintained and easy to use</li> <li>Improve access to, and raise awareness of, the green spaces, facilities and activities available to the public</li> </ul>	<ul style="list-style-type: none"> <li>Footpath provision for villages in Maldon District</li> <li>Maldon cycle connections</li> <li>Blackwater Trail</li> <li>Maldon town walking and cycling routes</li> <li>Maldon to SWF Active Travel Link</li> <li>Accessibility between south Maldon town and the town centre (Fambridge Road)</li> <li>Footbridge across the canal to connect industrial estates to Heybridge</li> <li>Southminster to Burnham cycle route</li> <li><b>*Cycle Hire</b></li> </ul>
	Lower cycling rates in Maldon district	<ul style="list-style-type: none"> <li>Develop and deliver long-term plans to improve our cycling and walking networks by considering our Local Cycling and Walking Infrastructure Plans</li> <li>Widen access to Essex Pedal Power, which provides free bikes and a support service for our most disadvantaged communities</li> <li>Implement our Green Infrastructure Strategy to deliver better quality and more accessible multipurpose green spaces and links for everyone</li> <li>Work with landowners and other partners to ensure that public rights of way are well maintained and easy to use</li> <li>Improve access to, and raise awareness of, the green spaces, facilities and activities available to the public</li> </ul>	<ul style="list-style-type: none"> <li>Maldon cycle connections</li> <li>Blackwater Trail</li> <li>Maldon town walking and cycling routes</li> <li>Maldon to SWF Active Travel Link</li> <li>Accessibility between south Maldon town and the town centre (Fambridge Road)</li> <li>Footbridge across the canal to connect industrial estates to Heybridge</li> <li>Southminster to Burnham cycle route</li> <li>Greenways along Rivers Blackwater and Crouch</li> <li><b>*Rural cycling and walking strategic routes</b></li> <li><b>*Cycle Hire</b></li> </ul>
The transport network is safe, and feels safe	High levels of car ownership and extensive road network means an increased risk of road	<ul style="list-style-type: none"> <li>Follow a safe systems approach in designing and maintaining our highway network</li> </ul>	<ul style="list-style-type: none"> <li>Footpath provision for villages in Maldon District</li> <li>Maldon cycle connections</li> <li>Maldon town walking and cycling routes</li> <li>Maldon to SWF Active Travel Link</li> </ul>



Outcome	Challenge	High Level Activity	Schemes to address these challenges
	accidents, 35 road deaths were reported between 2021 and 2025.	<ul style="list-style-type: none"> <li>Collaborate with partners, such as the police and Safer Essex Roads Partnership, to improve safety</li> <li>Promote training initiatives (e.g. Bystander training) and apps (e.g. Travel Guardian) to improve safety and confidence when travelling</li> <li>Collaborate with the police and public transport operators to reduce crime and the fear of crime when travelling on the transport network</li> <li>Design new and improved infrastructure and promote well-designed neighbourhoods so that they feel safe and secure to use</li> <li>Work in partnership to create safe environments around schools</li> <li>Provide cycle training to develop or improve people's skills and confidence to cycle safely within Essex</li> </ul>	<ul style="list-style-type: none"> <li>Accessibility between south Maldon town and the town centre (Fambridge Road)</li> <li>Footbridge across the canal to connect industrial estates to Heybridge</li> <li>Southminster to Burnham cycle route</li> <li>Greenways along Rivers Blackwater and Crouch</li> <li>Generals Lane cycle corridor</li> </ul>

## B.2 Place

Outcome	Challenge	High Level Activity	Schemes to address these challenges
All places support the transport needs of all residents	There are pockets of high deprivation in Maldon district and Rochford	<ul style="list-style-type: none"> <li>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</li> <li>Implement 'well designed neighbourhood principles' in the redesign of existing neighbourhoods .</li> </ul>	<ul style="list-style-type: none"> <li>Enhanced Partnership for Maldon District</li> <li>Review of the rural bus network in Maldon district - feasibility of providing high quality local feeder bus links to and from high frequency routes</li> <li>Maldon cycle connections</li> <li>Maldon town walking and cycling routes</li> <li>Maldon to SWF Active Travel Link</li> <li>Development of a Maldon Mobility Hub network and rural bus services</li> <li>Introduction of D-DRT service north east of Maldon District</li> <li><b>*Cycle Hire</b></li> <li><b>*Integrated ticketing across modes</b></li> </ul>

Outcome	Challenge	High Level Activity	Schemes to address these challenges
	Areas of rural Maldon district remain isolated due to limited public transport options	<ul style="list-style-type: none"> <li>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</li> <li>Implement 'well designed neighbourhood principles' in the redesign of existing neighbourhoods</li> <li>Implement our Electric Vehicle Strategy to provide suitable access to a reliable, convenient, accessible and fairly priced network of electric charge points</li> </ul>	<ul style="list-style-type: none"> <li>Enhanced Partnership for Maldon District</li> <li>Review of the rural bus network in Maldon district - feasibility of providing high quality local feeder bus links to and from high frequency routes</li> <li>Express bus services from Maldon to key rail stations</li> <li>New bus service between South Woodham Ferrers and Maldon</li> <li>Reinstate Maldon to Witham public transport line</li> <li>Maldon to SWF Active Travel Link</li> <li>Development of a Maldon Mobility Hub network and rural bus services</li> <li>Introduction of D-DRT service north east of Maldon District</li> <li>Southminster to Burnham cycle route</li> <li>Greenways along Rivers Blackwater and Crouch</li> <li>Southminster branch upgrades (from Wickford Station)</li> <li>Dengie Bus Network Improvements</li> <li><b>*Rural cycling and walking strategic routes</b></li> <li><b>*Integrated ticketing across modes</b></li> </ul>
New developments are designed to be sustainable from the start	Continued growth in population with increased housing targets	<ul style="list-style-type: none"> <li>Introduce a 'Place and Movement' approach for planning all new developments</li> <li>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</li> <li>Adopt an 'Avoid-Shift-Improve' approach to plan transport and development from the earliest stages of development planning</li> <li>Use connectivity planning to help locate new homes, jobs and essential services in sustainable places that align with our vision for transport</li> <li>Work with Local Planning Authorities (LPAs) and other partners to allocate developments in Local Plans and deliver new Garden Communities to</li> </ul>	<ul style="list-style-type: none"> <li>A414 Route Strategy</li> <li>B1018/1019 link road to A12 from Maldon</li> <li>Danbury Eves Corner Improvements</li> <li>Enhanced Partnership for Maldon District</li> <li>Review of the rural bus network in Maldon district - feasibility of providing high quality local feeder bus links to and from high frequency routes</li> <li>Maldon cycle connections</li> <li>Maldon town walking and cycling routes</li> <li>Reinstate Maldon to Witham public transport line</li> <li>Maldon to SWF Active Travel Link</li> <li>Development of a Maldon Mobility Hub network and rural bus services</li> <li>Maldon Park and Ride Scheme</li> <li>South Maldon relief road (SMRR)</li> </ul>

Outcome	Challenge	High Level Activity	Schemes to address these challenges
		<p>help meet the significant housing targets set for Essex by the Government</p> <ul style="list-style-type: none"> <li>▪ 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</li> <li>▪ Set up Transport Review Groups for larger developments to help the ongoing management of transport impacts</li> <li>▪ 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</li> <li>▪ 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</li> <li>▪ Work with LPAs to embed inclusive design principles into all new developments</li> <li>▪ 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</li> <li>▪ Implement 'well designed neighbourhood principles' in the design of new communities</li> <li>▪ Require planning applications to be supported by a Health Impact Assessment (HIA) considering the Essex Healthy Places Checklist</li> </ul>	<ul style="list-style-type: none"> <li>▪ Expansion/Improvement of Tesco's Park and Ride service in Maldon</li> <li>▪ Accessibility between south Maldon town and the town centre (Fambridge Road)</li> <li>▪ Footbridge across the canal to connect industrial estates to Heybridge</li> <li>▪ Introduction of D-DRT service north east of Maldon District</li> <li>▪ Southminster to Burnham cycle route</li> <li>▪ Greenways along Rivers Blackwater and Crouch</li> <li>▪ Southminster branch upgrades (from Wickford Station)</li> <li>▪ Dengie Bus Network Improvements</li> <li>▪ South Woodham Integrated Transport Package</li> <li>▪ South Woodham Ferrers (SWF) Bypass</li> <li>▪ Generals Lane cycle corridor</li> <li>▪ Completion of Great Waltham to Chelmsford cycleway</li> <li>▪ A12 de-trunking</li> <li>▪ Chelmsford North East Bypass (CNEB)</li> <li>▪ Chelmsford North East Bypass longer term dualling scheme and slip roads to A12</li> <li>▪ West Chelmsford Park and Ride</li> <li>▪ <b>*Business and School Travel Planning</b></li> <li>▪ <b>*Residential Travel Planning</b></li> <li>▪ <b>*Rural cycling and walking strategic routes</b></li> <li>▪ <b>*Cycle Hire</b></li> <li>▪ <b>*Provision of cycling equipment in new development</b></li> </ul>

Outcome	Challenge	High Level Activity	Schemes to address these challenges
Transport has a reduced impact on the environment and adverse impacts on natural habitats are avoided	The road network is impacting on air quality. Electric charging infrastructure is concentrated around urban areas	<ul style="list-style-type: none"> <li>Adopt an 'Avoid-Shift-Improve' approach to plan transport and development from the earliest stages of development planning</li> <li>Implement the Essex Air Quality Strategy to reduce exposure to poor quality air</li> <li>Develop effective and deliverable Air Quality Action Plans with partners</li> <li>Avoid adverse effects from new transport projects on the integrity of internationally important habitat sites.</li> </ul>	<ul style="list-style-type: none"> <li>Maldon cycle connections</li> <li>Maldon town walking and cycling routes</li> <li>Southminster to Burnham cycle route</li> <li>Greenways along Rivers Blackwater and Crouch</li> <li>Generals Lane cycle corridor</li> <li>Completion of Great Waltham to Chelmsford cycleway</li> <li>A12 de-trunking</li> <li><b>*Synthetic fuels</b></li> <li><b>*Roll out of EV Infrastructure</b></li> <li><b>*Rural cycling and walking strategic routes</b></li> <li><b>*Cycle Hire</b></li> </ul>

## 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	High car ownership, vehicle movement and commuting often causes traffic delays	<ul style="list-style-type: none"> <li>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</li> <li>Adopt a vision-led approach to planning for new growth and its transport needs, including through all new Local Plans</li> <li>Prioritise journey time reliability for all modes of transport, including freight and passenger transport</li> <li>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</li> <li>Work in partnership to implement our Rail Strategy to influence the delivery of nationalised rail services and plan rail improvements</li> </ul>	<ul style="list-style-type: none"> <li>A414 Route Strategy</li> <li>B1018/1019 link road to A12 from Maldon</li> <li>Danbury Eves Corner Improvements</li> <li>Enhanced Partnership for Maldon District</li> <li>Review of the rural bus network in Maldon district - feasibility of providing high quality local feeder bus links to and from high frequency routes</li> <li>Maldon cycle connections</li> <li>Maldon town walking and cycling routes</li> <li>Express bus services from Maldon to key rail stations</li> <li>New bus service between South Woodham Ferrers and Maldon</li> <li>Reinstate Maldon to Witham public transport line</li> <li>Maldon to SWF Active Travel Link</li> <li>Maldon Park and Ride Scheme</li> </ul>



Outcome	Challenge	High Level Activity	Schemes to address these challenges
		<ul style="list-style-type: none"> <li>Work with the rail industry to explore how Essex stations can be served by a minimum of two trains per hour</li> </ul>	<ul style="list-style-type: none"> <li>Development of a Maldon Mobility Hub network and rural bus services</li> <li>Maldon High Street Bus Operations Feasibility Studies - High Street Option 1 -3 &amp; Parking review</li> <li>Maldon Town Wide Signage Strategy</li> <li>Expansion/Improvement of Tesco's Park and Ride service in Maldon</li> <li>Accessibility between south Maldon town and the town centre (Fambridge Road)</li> <li>Footbridge across the canal to connect industrial estates to Heybridge</li> <li>Introduction of D-DRT service north east of Maldon District</li> <li>Southminster to Burnham cycle route</li> <li>Greenways along Rivers Blackwater and Crouch</li> <li>Southminster branch upgrades (from Wickford Station)</li> <li>Dengie Bus Network Improvements</li> <li>Bradwell Nuclear Plant links</li> <li>B1010/B1021 Junction Improvements</li> <li>B1010 Junction Improvements</li> <li>South Woodham Integrated Transport Package</li> <li>South Woodham Ferrers (SWF) Bypass</li> <li>Generals Lane cycle corridor</li> <li>Completion of Great Waltham to Chelmsford cycleway</li> <li>Chelmsford North East Bypass (CNEB)</li> <li>Chelmsford North East Bypass longer term dualling scheme and slip roads to A12</li> <li>West Chelmsford Park and Ride</li> <li>Improvements to Duke of Wellington Roundabout/B1019 in Hatfield Peverel</li> <li><b>*Business and School Travel Planning</b></li> <li><b>*Residential Travel Planning</b></li> <li><b>*Smart Junctions</b></li> <li><b>*A12 improvements</b></li> <li><b>*Cycle Hire</b></li> </ul>

Outcome	Challenge	High Level Activity	Schemes to address these challenges
	Tourism is important to Maldon district with four million visitors a year. Road congestion is more severe in the summer months.	<ul style="list-style-type: none"> <li>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</li> <li>Adopt a vision-led approach to planning for new growth and its transport needs, including through all new Local Plans</li> <li>Prioritise journey time reliability for all modes of transport, including freight and passenger transport</li> <li>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</li> <li>Work in partnership to implement our Rail Strategy to influence the delivery of nationalised rail services and plan rail improvements</li> <li>Work with the rail industry to explore how Essex stations can be served by a minimum of two trains per hour</li> </ul>	<ul style="list-style-type: none"> <li><b>*Promotion of the Smarter Travel Network to Essex Businesses</b></li> <li><b>*Cycle parking package</b></li> <li><b>*Integrated ticketing across modes</b></li> <li>A414 Route Strategy</li> <li>B1018/1019 link road to A12 from Maldon</li> <li>Danbury Eves Corner Improvements</li> <li>Enhanced Partnership for Maldon District</li> <li>Review of the rural bus network in Maldon district - feasibility of providing high quality local feeder bus links to and from high frequency routes</li> <li>Maldon cycle connections</li> <li>Blackwater Trail</li> <li>Maldon town walking and cycling routes</li> <li>Express bus services from Maldon to key rail stations</li> <li>Maldon Town Upper High Street Improvements</li> <li>Maldon to SWF Active Travel Link</li> <li>Development of a Maldon Mobility Hub network and rural bus services</li> <li>Maldon Park and Ride Scheme</li> <li>Maldon High Street Bus Operations Feasibility Studies - High Street Option 1 -3 &amp; Parking review</li> <li>Expansion/Improvement of Tesco's Park and Ride service in Maldon</li> <li>Introduction of D-DRT service north east of Maldon District</li> <li>Southminster to Burnham cycle route</li> <li>Greenways along Rivers Blackwater and Crouch</li> <li>Southminster branch upgrades (from Wickford Station)</li> <li>Dengie Bus Network Improvements</li> <li><b>*Rural cycling and walking strategic routes</b></li> <li><b>*Cycle Hire</b></li> <li><b>*Cycle parking package</b></li> </ul>
People have inclusive and affordable	Employment rates are lower than the Essex average	<ul style="list-style-type: none"> <li>Tackle barriers to travel, such as accessibility, complexity and security, to support greater use by everyone</li> </ul>	<ul style="list-style-type: none"> <li>Enhanced Partnership for Maldon District</li> </ul>

Outcome	Challenge	High Level Activity	Schemes to address these challenges
access to employment, education and training		<ul style="list-style-type: none"> <li>▪ Work with organisations such as bus operators and active travel organisations and funders to make the case for new investment</li> <li>▪ Work with partners to improve walking, cycling and public transport connections between residential and employment areas</li> <li>▪ Work with partners to secure better facilities at stations for onward travel via all modes of transport, including step-free access</li> <li>▪ Ensure that residents can take advantage of accessing education and skills training, especially by sustainable transport.</li> <li>▪ Deliver locally relevant training programmes to address skills gaps holding people back and stopping firms from investing</li> <li>▪ Support the rollout of gigabit speed broadband and ongoing improvements to 5G mobile coverage in rural and deprived areas</li> <li>▪ Work in partnership to provide attractive, safe, convenient, inclusive, and high quality walking, cycling and public transport routes and facilities</li> <li>▪ Deliver high quality rapid transit networks where feasible</li> <li>▪ Support the introduction of multi operator and fully integrated smart ticketing for transport services in Essex</li> </ul>	<ul style="list-style-type: none"> <li>▪ Review of the rural bus network in Maldon district - feasibility of providing high quality local feeder bus links to and from high frequency routes</li> <li>▪ Reinstate Maldon to Witham public transport line</li> <li>▪ Dengie Bus Network Improvements</li> <li>▪ <b>*Integrated ticketing across modes</b></li> </ul>
	High cost of housing results in some workers living far from their workplace	<ul style="list-style-type: none"> <li>▪ Tackle barriers to travel, such as accessibility, complexity and security, to support greater use by everyone</li> <li>▪ Work with organisations such as bus operators and active travel organisations and funders to make the case for new investment</li> <li>▪ Work with partners to improve walking, cycling and public transport connections between residential and employment areas</li> </ul>	<ul style="list-style-type: none"> <li>▪ Enhanced Partnership for Maldon District</li> <li>▪ Review of the rural bus network in Maldon district - feasibility of providing high quality local feeder bus links to and from high frequency routes</li> <li>▪ Development of a Maldon Mobility Hub network and rural bus services</li> <li>▪ Dengie Bus Network Improvements</li> </ul>

Outcome	Challenge	High Level Activity	Schemes to address these challenges
		<ul style="list-style-type: none"> <li>Work with partners to secure better facilities at stations for onward travel via all modes of transport, including step-free access</li> <li>Support the rollout of gigabit speed broadband and ongoing improvements to 5G mobile coverage in rural and deprived areas</li> </ul>	
	The Crouch Valley line is a single track line with one passing point, with less frequent services. Commuters often travel by car to Wickford for its more direct services to London.	<ul style="list-style-type: none"> <li>Tackle barriers to travel, such as accessibility, complexity and security, to support greater use by everyone</li> <li>Work with organisations such as bus operators and active travel organisations and funders to make the case for new investment</li> <li>Work with partners to improve walking, cycling and public transport connections between residential and employment areas</li> <li>Work with partners to secure better facilities at stations for onward travel via all modes of transport, including step-free access</li> <li>Support the rollout of gigabit speed broadband and ongoing improvements to 5G mobile coverage in rural and deprived areas</li> </ul>	<ul style="list-style-type: none"> <li>Enhanced Partnership for Maldon District</li> <li>Review of the rural bus network in Maldon district - feasibility of providing high quality local feeder bus links to and from high frequency routes</li> <li>Development of a Maldon Mobility Hub network and rural bus services</li> <li>Southminster branch upgrades (from Wickford Station)</li> <li>Dengie Bus Network Improvements</li> <li><b>*Better access to rail stations</b></li> <li><b>*Cycle parking package</b></li> </ul>
	Transport affordability is a barrier for access to employment and training	<ul style="list-style-type: none"> <li>Tackle barriers to travel, such as accessibility, complexity and security, to support greater use by everyone</li> <li>Work with organisations such as bus operators and active travel organisations and funders to make the case for new investment</li> <li>Work with partners to improve walking, cycling and public transport connections between residential and employment areas</li> <li>Work with partners to secure better facilities at stations for onward travel via all modes of transport, including step-free access</li> <li>Support the rollout of gigabit speed broadband and ongoing improvements to 5G mobile coverage in rural and deprived areas</li> </ul>	<ul style="list-style-type: none"> <li>Enhanced Partnership for Maldon District</li> <li>Maldon cycle connections</li> <li>Blackwater Trail</li> <li>Maldon town walking and cycling routes</li> <li>Maldon to SWF Active Travel Link</li> <li>Development of a Maldon Mobility Hub network and rural bus services</li> <li>Footbridge across the canal to connect industrial estates to Heybridge</li> <li>Southminster to Burnham cycle route</li> <li>Greenways along Rivers Blackwater and Crouch</li> <li>Generals Lane cycle corridor</li> <li>Completion of Great Waltham to Chelmsford cycleway</li> <li>West Chelmsford Park and Ride</li> <li><b>*Cycle parking package</b></li> </ul>



Outcome	Challenge	High Level Activity	Schemes to address these challenges
The transport network has a secure and long-term future	Rising temperatures, severe weather, and flooding, which will all have increasingly significant implications for the reliability of transport infrastructure and its ongoing maintenance. Area is vulnerable to rising sea levels, coastal flooding, erosion	<ul style="list-style-type: none"> <li>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</li> <li>Proactively monitor the condition of our road, cycle and pedestrian networks and other pieces of infrastructure</li> <li>Manage, maintain and improve our network by considering our Climate Adaption Plan Framework, Decarbonisation Strategy and our Strategy for managing the Green Estate</li> <li>Develop our own ability as a Council to adapt to climate-related risk</li> <li>Deliver suitable actions that enable our transport network to adapt to change</li> <li>Deploy approaches such as Sustainable Drainage and Natural Flood Management to promote greater flood resilience on the highway network</li> <li>Play an active role in flood defence, coastal protection, and conservation to reduce the risks and impacts on our coastal communities and transport network</li> <li>Work with National Highways and neighbouring local transport authorities to provide a common approach to innovation</li> <li>Accurately digitise our highway networks and traffic regulation orders to support future use of our networks by autonomous vehicle systems</li> <li>Manage the introduction of appropriate alternative fuel infrastructure to encourage cleaner zero-emission travel</li> </ul>	<ul style="list-style-type: none"> <li><b>*Cycle Hire</b></li> <li><b>*Integrated ticketing across modes</b></li> <li>B1018/1019 link road to A12 from Maldon</li> <li>A12 de-trunking</li> <li>Chelmsford North East Bypass (CNEB)</li> <li>Chelmsford North East Bypass longer term dualling scheme and slip roads to A12</li> <li><b>*A12 improvements</b></li> </ul>

Outcome	Challenge	High Level Activity	Schemes to address these challenges
		<ul style="list-style-type: none"> <li>Support the pilot and where appropriate the adoption of new technology which enables more sustainable travel</li> </ul>	

## Appendix C. References

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- <sup>1</sup> Highest Level of Qualification Census 2021. NOMIS. 2021. Available at: <https://www.nomisweb.co.uk/datasets/c2021ts067>
- <sup>2</sup> 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>
- <sup>3</sup> Essex Joint Strategic Needs Assessment. ECC. 2019. Available at: <https://data.essex.gov.uk/jsna-home/>
- <sup>4</sup> Car or van availability Census 2021. NOMIS. 2021. Available at: <https://www.ons.gov.uk/datasets/TS045/editions/2021/versions/4>
- <sup>5</sup> 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>
- <sup>6</sup> Many of these issues are set out in Maldon Area (Bus) Review, part of ECC's' Bus Service Improvement Plan (BSIP) which can be found here: <https://www.essexhighways.org/getting-around/bus/bus-strategy>
- <sup>7</sup> Index of Multiple Deprivation 2019 (quintiles 1 and 2). Ministry of Housing, Communities and Local Government. 2019
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- <sup>13</sup> 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](https://consultations.essex.gov.uk/essex-highways/essex-air-quality-strategy/supporting_documents/essex_air_quality_strategy_web_version.pdf)
- <sup>14</sup> Census 2011 Origin Destination analysis. NOMIS. 2011. Available at: <https://www.nomisweb.co.uk/census/2011/rf04aew>
- <sup>15</sup> Department for Transport journey time data
- <sup>16</sup> OFCOM, 2022