

Essex Transport Strategy:

the Local Transport Plan for Essex

June 2011



Foreword

This will be our third Local Transport Plan and unlike our previous local transport plans that were written to comply with specific Department for Transport (DfT) requirements, Essex County Council has prepared this plan to best respond to the needs of everyone who lives or works in Essex.

This is a long-term plan covering 15 years which sets out our aspirations for improving travel in the county, demonstrating the importance of our transport network to achieving sustainable long-term economic growth and enriching the lives of our residents.

We have prepared this plan during a period of uncertainty as Britain emerges from a recession. We know that funding will be in short supply over the next few years and that we will have to ensure that we make the most efficient use of our transport network, investing the resources we have in the most effective way. Our largest transport asset is our network of roads and pavements and we must make sure that this is well maintained and managed so that people and goods can travel efficiently across Essex. We also need to encourage and enable changes in travel behaviour so that the journeys we all make place a smaller demand on the transport network and the wider environment.

This is also a time of opportunity for Essex. Our Highways Strategic Transformation programme will see the County Council join forces with a private sector partner, combining the experience and best practice of the public and private sectors to deliver greater value for money for Essex Council tax payers.

The establishment of the Kent and Greater Essex and East Sussex Local Enterprise Partnership will improve co-operation across the Thames Estuary on issues of mutual concern such as the M25, the Dartford Crossing, and proposals for a Lower Thames Crossing.

Essex has a successful economy with an entrepreneurial workforce. The county is an attractive place to live and do business and we will be looking to attract investment to ensure that the quality of life experienced by Essex residents continues to improve.

This is a flexible transport plan that is able to react to changing circumstances and take advantage of new funding opportunities as they emerge. Publication of this plan is not the end of the process. Delivering the plan will require ongoing collaborative working between the County Council, transport operators, borough and district councils and wider partners.

In delivering the plan we will be accountable to our communities rather than to the DfT. We have for the first time included independent measures of customer satisfaction

within the LTP and local communities will have a real say in how our transport network is managed and improved.



Tracey Chapman

Cabinet Member for Highways and Transportation

Executive Summary

The role of the Local Transport Plan

Good transport is a vital factor in building strong and sustainable local communities and a successful economy. The Essex Transport Strategy, a key component of the third Local Transport Plan for Essex, is a crucial tool that helps us to plan for the longer term provision of adequate transport services, work with stakeholders (including the 12 district/borough councils within Essex), strengthen our place shaping role and guide the delivery of services to our communities. In particular, this strategy enables us to:

- Help deliver the Council's long term vision, contained within '*EssexWorks*', of delivering the best quality of life for Essex residents;
- Support the delivery of the priorities for Essex identified within the Integrated County Strategy;
- Identify priorities for transport investment (both capital and revenue), placing transport improvements in their wider context;
- Support funding bids to a variety of sources (for example to the Local Sustainable Transport Fund), including bids to as yet unidentified funding streams that may be available in the future.

The priorities of this strategy reflect the key issues identified in the extensive evidence base compiled to support its preparation as well as the views of our communities, businesses and other local organisations.

Local Transport Plan structure

Our new Local Transport Plan comprises two distinct parts:

- The Essex Transport Strategy (this document) which sets out our vision for transport, the outcomes we aim to achieve over a fifteen year period, our policies for transport and the broad approach to implementing these; and
- An Implementation Plan which sets out in greater detail how the outcomes of the strategy will be delivered and monitored and our priorities for investment in the short-term.

The Implementation Plan will be refreshed every three years and will be supported by a three-year rolling investment programme. This will enable flexibility in our long-term approach. The Transport Strategy will be reviewed and updated periodically to reflect significant changes in priorities.

The Local Transport Plan will also be accompanied by a suite of more detailed plans, identifying specific investment priorities for particular areas and types of transport service. These include:

- Delivery strategies for specific service areas (for instance our ‘Passenger Transport Strategy’, or ‘Speed Management Strategy’), which set out the key actions for these areas and the approach to be taken; and
- Area plans for each of the four planning areas of Essex which set out the specific local priorities for achieving the Essex Transport Strategy outcomes.

Vision, Outcomes and Challenges

Our Vision is for a transport system that supports sustainable economic growth and helps deliver the best quality of life for the residents of Essex.

The Essex Transport Strategy will seek to achieve five broad outcomes that have been developed in parallel with those being sought from the Council’s Highways Strategic Transformation (HST) programme:

- Provide connectivity for Essex communities and international gateways to support sustainable economic growth and regeneration
- Reduce carbon dioxide emissions and improve air quality through lifestyle changes, innovation and technology
- Improve safety on the transport network and enhance and promote a safe travelling environment
- Secure and maintain all transport assets to an appropriate standard and ensure that the network is available for use
- Provide sustainable access and travel choice for Essex residents to help create sustainable communities.

For each of the five outcomes, we have identified a series of ‘challenges’ which will need to be met if the outcome is to be achieved. These are based on the evidence base compiled to support the development of this strategy and the concerns raised by our communities, local businesses, district councils and other local organisations with a direct interest in local transport.

Outcome	Challenges
1. Provide connectivity for Essex communities and international gateways to support sustainable economic growth and regeneration	<ul style="list-style-type: none"> a) Providing good connectivity to and within urban areas to support self-contained employment and housing growth and regeneration b) Providing good inter-urban connectivity within Essex and with adjacent major urban areas c) Maximising the benefit to the local economy of Greater Essex’s international gateways and strategic transport links to London, the East and South East of England and the rest of the UK
2. Reduce carbon dioxide emissions and improve air quality through lifestyle changes, innovation and technology	<ul style="list-style-type: none"> a) Reducing the carbon-intensity of travel in Essex b) Reducing pollution from transport to improve air quality in urban areas and along key corridors c) Protecting and enhancing the natural, built and historic environment
3. Improve safety on the transport	<ul style="list-style-type: none"> a) Reducing the number of people killed or seriously

Outcome	Challenges
network and enhance and promote a safe travelling environment	<ul style="list-style-type: none"> a) injured on Essex roads b) Working with partners to promote a safe and secure travelling environment
4. Secure and maintain all transport assets to an appropriate standard and ensure that the network is available for use	<ul style="list-style-type: none"> a) Effectively and efficiently managing our roads and footways b) Effectively and efficiently managing all of the Council's wider transport assets c) Keeping the transport network operational and safe in all seasons d) Effectively managing the impact of planned works
5. Provide sustainable access and travel choice for Essex residents to help create sustainable communities	<ul style="list-style-type: none"> a) Enabling Essex residents to access further education employment and vital services (including healthcare, hospitals and retail) b) Maintaining the vitality of our rural communities c) Encouraging and enabling healthier travel and leisure activities d) Creating strong and sustainable communities

Transport in Essex

Demand for travel in Essex is high, reflecting the advantageous location of the county and its capacity for trips to London, across the UK and internationally.

Essex is fortunate to have good transport connections by road, rail, air and sea. The nationally important M11, M25, A12 and A120 run through the county, and major local roads (including the A13, A127, A130 and A414) provide good coverage. Three main rail lines radiate from London, supplemented by a number of branch lines, serving 57 railway stations, and the London Underground extends into the south of the county. The county also contains two major 'International Gateways': the UK's third busiest airport at Stansted and Harwich International sea port which provides nationally important connections to Holland and Denmark. The Port of Tilbury and the new London Gateway port development are located in Thurrock and the Port of Felixstowe is nearby in Suffolk.

Our urban transport networks generally provide good access to employment, education, retail and leisure opportunities. Major new transport infrastructure delivered as part of the previous Essex local transport plans, including the Chelmsford Park & Ride and First Avenue bus corridor in Harlow, have helped to substantially improve access, particularly by public transport. Major highway works undertaken by the Council, including A13/A130 Sadlers Farm improvements and the Roscommon Way extension, are also helping to support new development which will secure the long-term growth of the Essex economy; although significant further infrastructure investment will be required if this is to be achieved.

Connectivity

Essex has a successful economy with an entrepreneurial workforce and the county is an attractive place to live and do business. The Essex transport network is of critical importance to the performance of the local economy, with significant transport investment vital if we are to enable continued growth and support the regeneration of our town centres. Reliable connectivity enables Essex residents to access jobs and local businesses to access markets. For employers, this means access to a workforce which can provide the skills they need, particularly where these are not available locally. For individuals, it enables access to employment opportunities they would otherwise be unable to reach.

Transport improvements need to be delivered in a way that is joined up with spatial planning and economic policies; improving journey time reliability, providing good access for business, and making locations more attractive to live in. The Council needs to ensure that good connectivity is maintained between the main employment centres, the national transport network, and to the rapidly expanding ports and airports. The Council must also ensure that there is provision for sustainable transport to tackle persistent congestion problems within main towns and on our main inter-urban roads.

Carbon reduction and the environment

The ability to travel is an essential requirement of all our lives; however, the choices we make in how we travel have unwanted impacts on the world around us. Travelling by car is part of the daily routine for most residents, particularly those in the more rural parts of the county. This means that carbon emissions from transport in Essex are relatively high when compared to the national average. Petrol and diesel vehicles also generate other airborne pollutants which can be harmful to our health. There are 7 areas in Essex where air quality does not meet the internationally accepted minimum standard due to traffic emissions and a specific action plan has been adopted.

We will aim to reduce these impacts by; reducing the carbon intensity of travel in Essex, reducing pollution from transport to improve air quality in urban areas and along key corridors, and protecting and enhancing the natural, historic and built environment. We will build on our recent success in encouraging sustainable travel for daily trips, particularly for the journey to work and school, enable greater travel choice, and support initiatives to make car travel more sustainable. The Authority will also need to examine the role innovation and technology can play in reducing carbon emissions and pollutant levels such as the widespread introduction of electric vehicles and alternative fuels.

Protecting and enhancing the natural, historic and built environment will require the assessment of the environmental impact of our transport projects, designing sympathetically with the surrounding environment and minimising the visual and aural intrusion of transport.

Safety

Road deaths and serious injuries affect whole communities. A road network on which all users can travel safely is essential to achieving the Council's aim to provide the best quality of life for Essex residents. Safety on the highway network has improved markedly in recent years and it is essential that we continue to work in partnership with Essex Police, Essex Fire and Rescue service, the Highways Agency and the Essex Ambulance Service to do what we can to protect those who live and travel in Essex.

Promoting a safe travelling environment is also important to the delivery of the other outcomes of this strategy. To promote greater public transport use or healthier travel choices such as walking and cycling, we need to ensure that people are not only protected, but also have confidence that they will be safe when travelling. Similarly, improving safety is essential to making best use of our transport network, ensuring that our roads are effectively maintained and managed to minimise the risk of accidents and the disruption and delay these can cause.

Asset management

With a combined replacement cost of over £7 billion, our transport infrastructure represents one of Essex County Council's largest assets. In addition to over 4,700 miles of road, we manage and maintain a wide array of transport-related assets, including street lights, footways, bridges, bus stops, Public Rights of Way and cycleways; each serving an important role in enabling people to travel safely and efficiently in Essex.

Essex therefore already has a significant asset base and with limited funding for major new infrastructure, it is vital that we make best use of what we already have and ensure that this can be used effectively both now and in the future. We must therefore ensure that we use the funding we do have to deliver the most effective improvements, targeting investment to where it is most needed and exploring new and innovative ways of working to help us deliver continual efficiency improvements in the ways in which our assets are managed and maintained; enabling us to do more with less.

Recent cold winters and flooding across much of the country have shown how significantly peoples' lives and the economy are affected by an inability to use the transport network. Similarly, an incident on one of the major routes which pass through Essex could lead to significant disruption on our local roads, unless appropriate co-ordinated management is in place. The Authority has therefore identified a hierarchy of routes which are considered to be essential to the functioning of Essex, both as a competitive economy and as place to live. The Authority will endeavour to ensure that the essential parts of the network remain useable in all situations.

Equally, the Authority must balance the needs of the Essex economy with those of local communities. Localism will be a key theme that puts customers at the heart of everything the Authority does.

Access and travel choice

Our ability to reach essential services (including healthcare, retail and leisure facilities), employment or education has a major influence on our overall quality of life. Most of us have benefited from the improvement in personal mobility made possible by rising car ownership. This has offered many people greater choice in when and where they can travel and increased the opportunities available to them, for instance by enabling access to jobs across a wider area. Those without access to a car or those who have difficulty travelling often have more limited choices and opportunities.

Poor access to services can also affect certain groups of people disproportionately, particularly those with disabilities, mobility impairments or learning difficulties. If a person cannot make use of a particular mode of travel, for instance because they cannot physically access it or understand timetable information, then it does not matter to them how good a service it may provide to others. These barriers can therefore have significant impacts on personal independence.

The County Council will work with partners and service providers to make essential services accessible to all, continuing to remove barriers to travel for those with disabilities, and ensuring that travel information is available in different formats and is accessible to everyone. The Council will encourage and support innovation to improve the provision of essential services.

Essex is evolving with a number of areas, including the Thames Gateway undergoing major transformation. By 2018, the Essex population is forecast to have grown by around 10% which, without adequate provision for sustainable transport, would overwhelm our current transport networks and increase carbon emissions. If the Council is to achieve our vision of sustainable growth, it needs to broaden travel choices and promote the take-up of available sustainable travel options; for instance by encouraging the 30% of Essex residents who travel less than 3 miles to work to do so by bike, or by encouraging those travelling less than a mile to walk.

Transport Priorities

Using a combination of the evidence base compiled in support of this strategy, evidence from the individual district/borough Local Development Frameworks, and the findings from stakeholder and public consultations, we have determined a list of key priorities.

The priorities listed are not presented in order of importance, or intended to be exhaustive; we recognise too that these may change or evolve over the course of the lifetime of the strategy.

Strategic transport priorities

- Identifying an agreed and deliverable solution to address congestion at the Thames Crossing and adjacent M25 junction 30/31;
- Lobbying Government for enhancements to the A12;
- Lobbying Government for enhancements to the A120 to access Harwich port and between the A12 and Braintree;
- Lobbying Government for additional capacity on the Great Eastern Main Line and West Anglia mainline to accommodate growing commuter demand, the provision of competitive journey times for Essex Thameside services, and an enhanced local role in the rail franchise process.

Countywide priorities

- Reducing the number of people killed or seriously injured on Essex roads;
- Continuing to work with the Essex Casualty and Congestion Board;
- Working with partners to promote a safe and secure travelling environment;
- Maintaining the Essex highway network and other transport assets;
- Keeping the transport network safe and operational;
- Managing the impact of planned works on the highway network.

Priorities for Thames Gateway

- Providing for and promoting access by sustainable modes of travel to new development areas;
- Improving public transport links within and between the Thames Gateway towns (including the A13 Passenger Transport Corridor and *sert* schemes);
- Improving the availability of sustainable travel choices and raising public awareness of these through travel planning;
- Addressing maintenance, signing and broken links in the cycle network to improve conditions for cyclists and create a safer atmosphere for cycling.
- Improving the attractiveness and ease of use of public spaces to support regeneration;
- Improving journey time reliability on strategic inter-urban routes including the A127, A129, A130 and the A13;
- Improving access to London Gateway port and Southend Airport.

Transport priorities for the Haven Gateway

- Providing the transport improvements needed to accommodate housing and employment growth in a sustainable way;
- Tackling congestion within Colchester (including the provision of Park & Ride facilities);
- Improving the availability, reliability and punctuality of local bus services;
- Improving the attractiveness of public spaces to support regeneration, particularly within the coastal towns;

- Improving and promoting cycle networks; and improving the availability of travel choices and awareness of them;
- Improving journeys for commuters travelling to London from Colchester and Braintree; particularly by improving access to railway stations and improving facilities for passengers;
- Improving transport access to Harwich to enable low carbon expansion of the port and wind port.

Transport priorities for the Heart of Essex

- Delivering transport improvements to support growth, including the North Chelmsford railway station;
- Providing for, and promoting, sustainable forms of travel;
- Maintaining and improving public transport links;
- Tackling congestion and improving journey-time reliability;
- Improving access to railway stations and improving station facilities;
- Extending and upgrading the Chelmsford cycle network and promoting its use;
- Improving the attractiveness of streets and public spaces;
- Improving journey time reliability on key routes including the A130;
- Developing long-term solutions to resolving gaps within the strategic network.

Transport priorities for the West Essex

- Improving access to and from the M11 corridor;
- Tackling congestion and improving the management of traffic in Harlow town centre;
- Providing the transport improvements needed to support housing and employment growth;
- Improving the attractiveness of bus services;
- Improving cycling networks and walking routes and encouraging their greater use;
- Improving the attractiveness of public spaces and their ease of use;
- Working with Transport for London to improve the journey experience of Essex residents using the Central Line underground services;
- Improving access to Stansted Airport by low carbon forms of transport.

Transport priorities for rural areas

- Supporting the economy of our historic rural towns and villages, extensive coastline and varied countryside.
- Providing support for transport in rural areas to ensure that access is provided to employment, education, healthcare and food shopping.
- Ensuring that people in rural areas are able to access important services (including shopping, healthcare, library facilities, etc.), without needing to travel long distances.
- Minimising the impact transport has on the character of our rural areas.

Delivery of the Local Transport Plan

It is essential that transport services and projects are delivered efficiently and effectively. Robust procedures are being put in place to ensure that the programme of transport interventions delivers the outcomes identified within the transport strategy. The Highways Strategic Transformation programme will see changes to the way Essex County Council works; ensuring that value for money, efficiency and the wider needs of Essex are at the core of everything we do

The Essex Transport Strategy is accompanied by the Implementation Plan that will show how the strategy will be delivered over the period from 2011/12 to 2014/15

We will ensure that the transport programme is developed in a way that identifies and prioritises the most effective interventions and delivers these efficiently, following the governance procedures that have been put in place by Essex County Council.

We will continue to monitor and report on the delivery of the local transport plan. Each of the five outcomes will be monitored by a suite of performance indicators that will together give a broad measure of the effectiveness of our plan allowing Essex residents to assess the performance of the local transport plan and compare Essex against similar authorities elsewhere in England.

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1. Introduction

1.1 The Purpose of the Essex Transport Strategy

The Essex Transport Strategy is our long-term approach for transport in Essex. It sets out our aspirations for improving travel in the county, demonstrating the importance of meeting these aspirations to achieving sustainable long-term economic growth in Essex and enriching the lives of our residents.

This strategy is part of the Council's third Local Transport Plan for Essex. It follows the highly successful '*Essex Local Transport Plan 2006-2011: Now we're moving*' which supported significant investment in transport in Essex and enabled considerable improvement to the operation, safety and accessibility of our local transport network.

1.1.1 The County Council's role in local transport delivery

Essex County Council is the Local Transport Authority with responsibility for Essex. Local transport authorities must produce local transport plans. In producing our local transport plan we have a duty to:

- Consult with and involve the public and stakeholders in decision making.
- Manage the network to enable traffic, including cyclists and pedestrians, to flow freely by making sure roads are used efficiently and with reduced congestion.
- Consider the transport needs of people with disabilities.
- Have regard to the environment, including issues such as carbon dioxide produced by transport, air quality, noise, landscape and biodiversity.

Essex County Council is responsible for providing and working with partners to deliver a wide range of local transport services. Our responsibility includes:

- Maintaining and managing the County's roads (excluding motorways and trunk roads which are managed by the Government);
- Supporting local bus services and community transport services;
- Providing public transport infrastructure (including bus stations and waiting facilities);
- Improving safety on our roads;
- Investing in facilities to support and encourage the greater use of low carbon forms of travel (including walking and cycling);
- Providing up-to-date travel information;
- Maintaining footpaths, bridleways, byways and cycle routes;
- Planning for the future.

The Local Transport Plan sets out how we will deliver these services and how we will work with other organisations, including other transport providers, to secure and maintain a high quality transport network.

There are a number of other plans and duties that have been considered in the development of this local transport plan. Appendix A provides more detail on each of these.

1.1.2 A new type of transport plan for Essex

The Local Transport Plan is part of a new approach to long-term planning for transport in Essex. Unlike the County Council's preceding local transport plans, which responded to national priorities identified by central Government, this is a local strategy, developed specifically to respond to local issues. The priorities of this strategy reflect the key issues identified in the extensive evidence base compiled to support its preparation as well as the views of our communities, businesses and other local organisations. This strategy will address the issues that are most important to the people who live and work in Essex.

The Local Transport Plan is also wider in scope than previous plans, providing a framework for the effective and efficient delivery of all transport services provided by or on behalf of the Council. It will inform and guide our work with other organisations and local communities across Essex, ensuring that transport services are delivered in ways which effectively respond to local needs and offer good value for money to local taxpayers.

A summary of how this Local Transport Plan represents a new approach is shown in the panel below.

What's new:

- Local, rather than National priorities for transport
- No National targets
- A long-term strategy looking over 15 years, rather than 5 years
- Covers both capital investments and revenue funded services
- A framework for scheme development, rather than a detailed programme of transport schemes
- Greater flexibility in priorities and approach

1.2 The Structure of the Local Transport Plan

The Local Transport Plan has two key components: this document which is the long-term strategy for transport in Essex and a separate shorter term implementation plan.

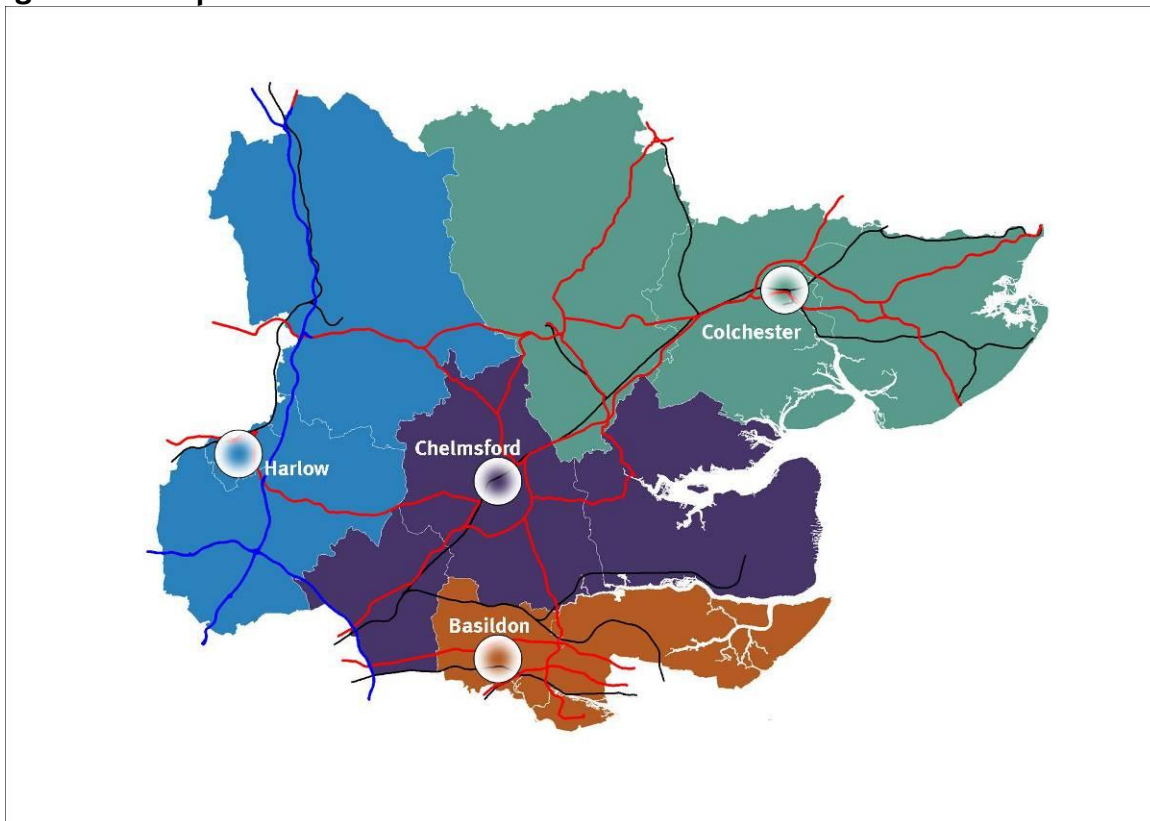
1.2.1 The Essex Transport Strategy

In the first part of the local transport plan, the Essex Transport Strategy, we set out our long-term vision for transport in Essex and the improvements to the transport network and peoples' experiences of travel we aim to achieve. The strategy is intended to provide a clear description of our objectives for transport in Essex and our approach to delivering these, whilst enabling enough flexibility to be able to respond to what remains an uncertain economic outlook.

Whilst there are issues that need to be tackled at a county-wide level (for instance improving the safety of Essex's roads, ensuring that our main roads are kept in good condition and meeting the needs of those in rural areas), local needs and priorities for transport differ. Within the Long-term Strategy, we therefore set out a countywide approach to delivering our vision and identify specific priorities to be addressed at a more local level through four area plans which cover the four planning areas of Essex (shown in the figure below). These are:

- **The Heart of Essex** (covering Brentwood, Chelmsford and Maldon)
- **Haven Gateway** (covering Colchester, Tendring and Braintree)
- **Thames Gateway** (covering Basildon, Castle Point and Rochford)
- **West Essex** (covering Epping Forest, Harlow and Uttlesford)

Figure 1.1 – Map of Essex



1.2.2 The Implementation Plan

The Essex Transport Strategy is accompanied by the Implementation Plan. These two documents together form the Essex Local Transport Plan.

The Implementation Plan describes how the strategy will be delivered over the period from 2011/12 to 2014/15. It will steer the three key elements of delivery:

1. Ensuring that the Essex Local Transport Plan drives the development of transport programmes that will most effectively deliver the Local Transport Plan outcomes;
2. Ensuring that effective structures for the ongoing management and review of the programme following the adoption of the Local Transport Plan are in place;
3. Ensuring that the Essex Local Transport Plan includes adequate monitoring of our performance.

1.2.3 Supporting Documents

The Local Transport Plan is supported by a number of additional documents; in particular:

- An extensive technical evidence base;
- A summary of the consultation process, including actions taken to modify the LTP in response to consultation;
- Four Area Plans which will be published during 2011 and will expand upon how the local transport plan will be delivered at the local level. These plans will be integrated with planning and development management processes and will be developed in parallel with the Integrated County Strategy Investment Plan.
- Appendix B lists several other plans that will support the delivery of the Local Transport Plan. These plans will be reviewed and if necessary updated to reflect the new LTP.

The Local Transport Plan has undergone Strategic Environmental Assessment, Habitat Regulation Assessment Screening, and Equality Impact Assessment.

2. Our Vision for Transport in Essex

The new transport strategy needs to address local priorities; helping to improve the economic, social and environmental well-being of the county.

2.1 The importance of this strategy to the wider priorities for Essex

2.1.1 *EssexWorks* – putting our customers first

Essex County Council is dedicated to improving Essex and the lives of our residents. Our vision, which is called *EssexWorks*, is to deliver the best quality of life in Britain, by providing excellent services which meet the needs of our customers and help the people of Essex to achieve their potential.

The *EssexWorks* programme has been developed to make this vision a reality. Following the most comprehensive consultation ever undertaken by the Council, the programme has been designed to implement our philosophy in line with our residents' priorities. Ten priorities have been identified, including an over-arching priority for us to put our customers first (see Table 1 below). These priorities have been grouped around three themes: 'Our People', 'Our Economy' and 'Our World'.

Table 2.1 – *EssexWorks* priorities

<i>EssexWorks</i> themes	Priorities
Overarching priority – Putting the customer first	
Our People – policies and services which enable people to reach their potential and enhance quality of life	Increasing educational achievement and skills
	Promoting health and leisure
	Supporting vulnerable people
	Making communities safer
Our Economy – policies that invest in key services, provide better value for the county's tax payer, and enhance the county's infrastructure	Promoting sustainable economic growth
	Delivering value for money.
Our World – policies which promote sustainability and ensure the county's physical environment is protected	Protecting the environment
	Reducing waste

Across the Council, significant reform is underway to ensure that we function in a way which drives efficiency and encourages greater community participation. This means identifying new ways of doing things; to improve our services by delivering more of what our customers want and delivering them in a way that they want them.

The Highways Strategic Transformation programme (discussed in Chapter 10) is a major part of this change and will see the Council join forces with a private sector partner from April 2012 to drive efficiency and improve the customer experience. The Essex Transport Strategy will provide the focus for the new partnership.

A commitment to improving the experience of our customers is crucial to the delivery of this, and is reflected in the first of our 15 policies (see **Policy 1 – Customer Experience** below). Our transformation programme will include a major review of the ways in which we engage with our customers to ensure:

- We are transparent in what we do by, for instance, making available meeting agendas and minutes and publishing detail on all expenditure over £500;
- We promptly and effectively manage customer enquiries and concerns;
- We make it easier for people to get the information they need to make informed choices about how they travel; and
- We encourage and facilitate participation in local service delivery, particularly by supporting our communities to help them secure local improvements themselves (see Chapter 8).

Policy 1 – Customer Experience

The County Council will put our customers at the heart of service delivery by:

- developing its customer service centres and systems to provide easy access to good quality information on local travel and planned works
- enabling the public, our partner organisations and other stakeholders to contribute to the work of the Council
- carrying out regular customer surveys to measure public satisfaction

In developing the Essex Transport Strategy, our priorities and approach have been shaped to reflect what we've been told through public consultation, opinion surveys, engagement with our delivery partners (including district and borough councils, transport operators, charities and volunteer groups) and engagement with local business groups.

With a long timeframe and many future uncertainties, it is crucial that this strategy is flexible in its approach and able to respond to changes in the needs of our customers. We recognise, in particular, that individual travel needs vary significantly and that over time where and how we travel may change. Ongoing engagement with our customers to ensure we are properly serving their needs is therefore essential.

2.1.2 The Greater Essex Integrated County Strategy

The Integrated County Strategy (ICS) provides a compelling vision for economic growth which is shared by the County Council, the two unitary authorities of Southend-on-Sea and Thurrock and the twelve Essex districts which make up 'Greater Essex'. The ICS identifies clear priorities which will contribute to long-term economic growth and is

intended to ensure that funding is directed towards the initiatives or infrastructure investments which will have the greatest impact on ensuring the continued success of our economy.

Central to the ICS is the shared vision for Essex:

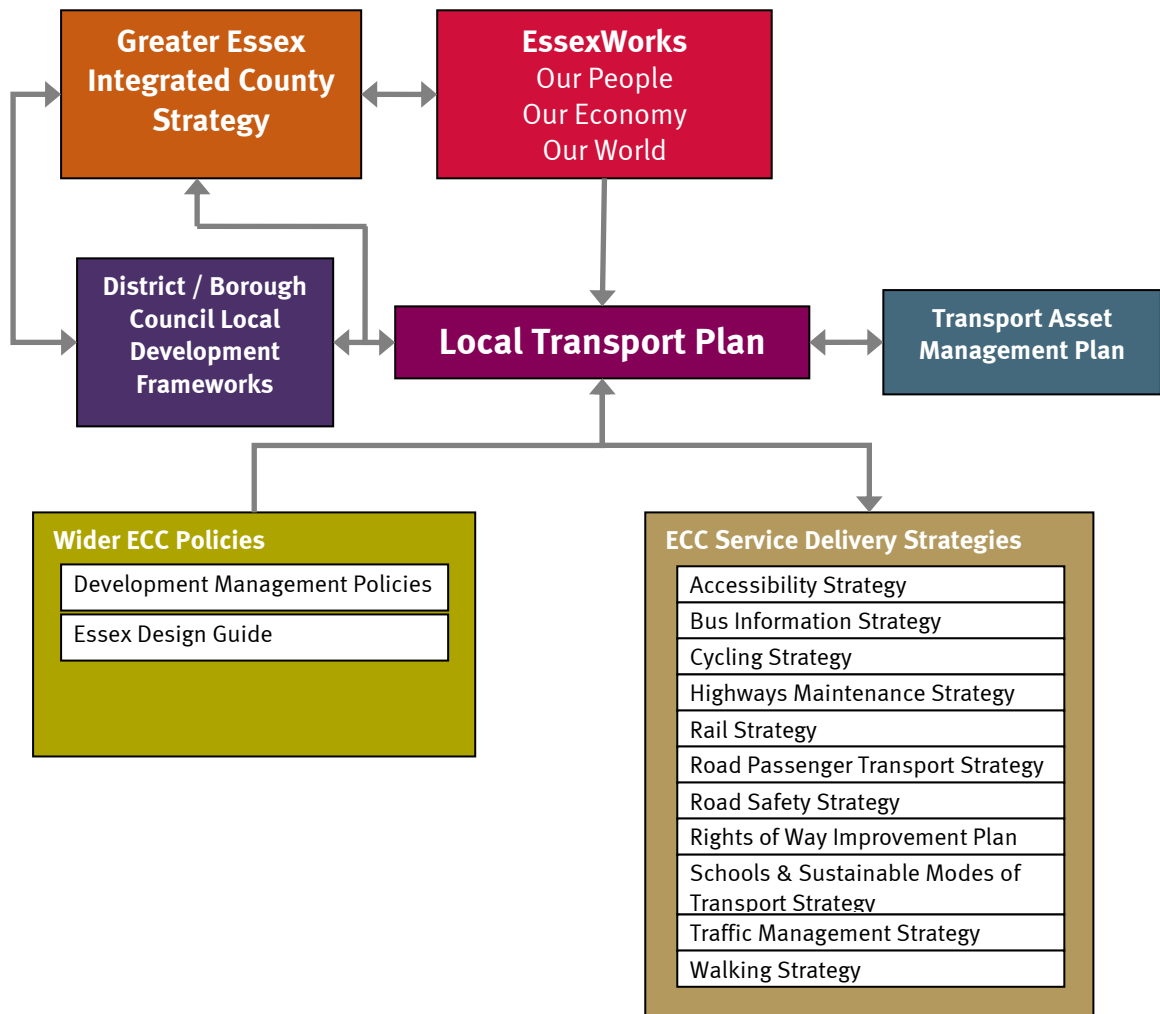
“Our ambition for Greater Essex is to create a highly performing and competitive economy that makes a significant contribution to UK economic growth and recovery, provides for the successful regeneration of Essex communities and provides a high quality of life for our residents.”

The ICS will deliver this vision through a strategic focus on low carbon energy, key towns and Thames Gateway South Essex. A priority theme of the ICS is ‘sustainable connectivity’, our collective effort to improve connectivity between our key towns to make the most telling contribution to economic growth. Supporting this, the ICS identifies the following areas for investment:

- Enhancements to key inter urban transport corridors and links with London, the rest of the UK and Europe.
- The need for integrated transport packages for our main urban areas
- Improvements to key public transport interchanges and facilities.
- Maximisation of rail capacity, station provision and quality of service.

The Local Transport Plan has a crucial role to play, ensuring that this part of the ICS is delivered.

Figure 2.1 – The Essex Transport Strategy within the wider policy context



2.2 Our Vision for Transport

Our vision for transport in Essex is a simple one. It is for:

“a transport system which supports sustainable economic growth and helps deliver the best quality of life for the residents of Essex.”

Achieving this will require us to make best use of the transport infrastructure we have, to invest wisely to deliver the greatest benefits to Essex residents and the local economy and to encourage and enable changes in travel behaviour.

2.2.1 Achieving our Vision

The Essex Transport Strategy Outcomes

To guide us in meeting our vision, we have identified five key ‘outcomes’ which this strategy aims to achieve. These are to:

- 1. Provide connectivity for Essex communities and international gateways to support sustainable economic growth and regeneration**
- 2. Reduce carbon dioxide emissions and improve air quality through lifestyle changes, innovation and technology**
- 3. Improve safety on the transport network and enhance and promote a safe travelling environment**
- 4. Secure and maintain all transport assets to an appropriate standard and ensure that the network is available for use**
- 5. Provide sustainable access and travel choice for Essex residents to help create sustainable communities.**

The Transport ‘Challenges’

For each of the five outcomes, we have identified a series of ‘challenges’ (or significant steps) which will need to be met if the outcome is to be achieved. These are based on the findings of the evidence base compiled as part of this strategy and the concerns raised by our communities, local businesses, district councils and other local organisations with a direct interest in local transport. The approach set out in chapters 4 to 8 relates to how each of these will be addressed.

These challenges and their relationship to the outcomes are summarised in Table 2.1 overleaf.

Table 2.1 – Challenges

Outcome	Challenges
1. Provide connectivity for Essex communities and international gateways to support sustainable economic growth and regeneration	<ul style="list-style-type: none"> a) Providing good connectivity to and within urban areas to support self-contained employment and housing growth and regeneration b) Providing good inter-urban connectivity within Essex and with adjacent major urban areas c) Maximising the benefit to the local economy of Greater Essex's international gateways and strategic transport links to London, the East and South East of England and the rest of the UK
2. Reduce carbon dioxide emissions and improve air quality through lifestyle changes, innovation and technology	<ul style="list-style-type: none"> a) Reducing the carbon-intensity of travel in Essex b) Reducing pollution from transport to improve air quality in urban areas and along key corridors c) Protecting and enhancing the natural, built and historic environment
3. Improve safety on the transport network and enhance and promote a safe travelling environment	<ul style="list-style-type: none"> a) Reducing the number of people killed or seriously injured on Essex roads b) Working with partners to promote a safe and secure travelling environment
4. Secure and maintain all transport assets to an appropriate standard and ensure that the network is available for use	<ul style="list-style-type: none"> a) Effectively and efficiently managing our roads and footways b) Effectively and efficiently managing all of the Council's wider transport assets c) Keeping the transport network operational and safe in all seasons d) Effectively managing the impact of planned works
5. Provide sustainable access and travel choice for Essex residents to help create sustainable communities	<ul style="list-style-type: none"> a) Enabling Essex residents to access further education employment and vital services (including healthcare, hospitals and retail) b) Maintaining the vitality of our rural communities c) Encouraging and enabling healthier travel and leisure activities d) Creating strong and sustainable communities

Our Transport Policies

Our approach to addressing these challenges and delivering the strategy outcomes is guided by 15 County Council transport policies.

Our policies set out how we will fulfil our responsibilities for managing and improving transport in Essex; ensuring that in so doing we support the long-term well-being of Essex residents and the integrity of our local environment. It is the intention that the policies are treated as a coherent whole that will be applied together to address a range of issues. These policies also provide clear guidance on how the County Council will work with local partners to deliver transport investments needed to support housing and employment growth in the county.

The summarised policies are shown in the most appropriate areas of discussion within the strategy. The fully-worded policies can be found in Appendix C.

Our approach

Three broad approaches to achieving our transport vision have been considered during the development of this strategy:

1. a focus on investment in the local economy – with priority given to improving transport links within and between our main towns;
2. a focus on carbon reduction – with priority given to improving travel choices and encouraging less car use; and
3. a focus on making Essex a better place to live – with investment more evenly spread across each of the five outcomes of this strategy with the aim of improving access to work, education, vital services and leisure activities.

The third of these (focussing investment towards making Essex a better place to live) emerged as the favoured approach during consultation. However, these three broad approaches are not mutually exclusive and it is acknowledged that some parts of Essex require greater focus on the local economy and that investment in carbon reduction is essential for the long term future of Essex.

Our approach to delivering this strategy is set out in chapters 4 to 8. This will follow a three-fold hierarchy that will maximise the efficiency of the Essex transport network and ensure that our resources are invested effectively by:

1. prioritising the maintenance and smarter use of our existing transport network; followed by
2. targeted action to tackle local network stress points and local network development; and finally
3. delivering larger scale projects where these are required to most effectively address the challenges and issues identified in this strategy.

To inform the delivery of the transport services that the Council provides, the Essex Transport Strategy is supported by 11 specific ‘Service Delivery Strategies’ which are listed in Appendix B. These provide a clear approach for the delivery of individual transport services, ensuring consistency with the outcomes and priorities set out within this document.

3. An Overview of Essex

3.1 Introduction

Before identifying how we will achieve the five outcomes of this strategy, it is important to look at Essex as it is today and how it is likely to change in the future. In this chapter we therefore consider the socio-economic characteristics of Essex and how these are evolving and our travel needs and behaviours are changing. We then provide an overview of our existing transport networks and how these currently perform.

3.2 Essex and its People

A diverse county

Covering an area of over 1,300 square miles, the county of Essex extends from the suburban fringes of London in the south-west, to the picturesque towns and villages of Uttlesford to the north-west, the bustling Haven Ports to the north-east, remote coastal estuaries and marshes in the east, and re-emerging industrial heartland of the Thames Gateway to the south.

The twelve districts which make up Essex are home to 1.4 million people, making our county the second most populated county in England. Over 60% of our residents live in urban areas¹, which include the four main towns of:

- Basildon - the main centre of the Thames Gateway with 100,000 residents;
- Chelmsford – the administrative centre of Essex with 100,000 residents;
- Colchester – the historic heart of the Haven Gateway with over 105,000 residents; and
- Harlow – an evolving New Town with 90,000 residents.

The county also contains a number of significant local centres, serving important retail, employment, healthcare and education roles for their residents and surrounding communities. These are listed in Table 3.1 overleaf.

Whilst much of our population is concentrated in urban areas, Essex is a county of many contrasts; composed of a broad range of landscapes which include large areas of heathland, estuary and clayland. Nearly a third of Essex residents live in small towns, villages and hamlets and much of Essex remains significantly rural in character, with 75% of the county composed of agricultural land (of which over half is classified as being high grade).

¹ Based on the definitions of 'urban' and 'rural' provided by the Department of the Environment and Rural Affairs.

Table 3.1 – Main Towns and Local Centres within Essex

Main Towns	Local Centres	
Basildon	Billericay	Harwich
Chelmsford	Benfleet	Loughton
Colchester	Braintree	Maldon
Harlow	Brentwood	Rayleigh
	Canvey	Rochford
	Clacton-on-Sea	Saffron Walden
	Great Dunmow	South Woodham Ferrers
	Epping	Waltham Abbey
	Frinton	Walton-on-the-Naze
	Hadleigh	Witham
	Halstead	Wickford

Essex is home to multiple internationally protected habitats and landscapes, including the Dedham Vale Area of Outstanding Natural Beauty, 10 RAMSAR sites, 6 National Nature Reserves, 24 nationally important sites of geological conservation and 81 Sites of Special Scientific Interest. With historic assets dating back to the Roman era, Essex also has 215 designated Conservation Areas and nearly 14,000 Listed Buildings.

Preserving the county's character and protecting our environmental, historical and built environment from the potentially negative impacts of travel will be key considerations for this strategy.

A growing county

As one of the most rapidly growing areas in the UK, the population of Essex is set to increase by nearly a fifth between 2008 and 2025, rising to 1.65 million.²

Many of these new residents will be accommodated by new homes in the Thames Gateway districts to the south which are within one of the largest regeneration and development areas in Europe.

Such growth will require significant construction of new housing. Whilst no longer confined by imposed targets for housing growth, the districts and boroughs of Essex remain committed to accommodating challenging numbers of new homes (see Table 3.2 overleaf). These growth figures, however, are indicative and subject to change with the introduction of new legislation promoting greater local decision making in planning.

² 2008 Office of National Statistics Sub-national Population Projections (2010)

Table 3.2 – Planned growth in house numbers by Essex district/borough

District / Borough	2010 Total Dwellings*	Planned Growth to 2021	
Basildon	73,430	3,589	indicative current permissions
Braintree	60,840	2,868	indicative current permissions
Brentwood	31,540	1,367	indicative current permissions
Castle Point	37,140	2,320	indicative current permissions
Chelmsford	71,610	10,036	based upon approved LDF
Colchester	74,200	9,047	based upon approved LDF
Epping Forest	53,850	1,120	indicative current permissions
Harlow	35,250	3,572	indicative current permissions
Maldon	26,530	N/A	currently under review
Rochford	34,300	2,088	indicative current permissions
Tendring	68,580	5,154	indicative current permissions
Uttlesford	32,090	3,229	indicative current permissions
Essex Total	599,360	44,390	

Source: Essex district/borough council growth forecasts.

A changing population

Ours is relatively prosperous county, though one in which inequalities remain. Overall, a higher than average proportion of those of working age (based on individuals aged between 16 and 64) are in employment, with the level of those claiming Job Seeker's Allowance below the All England average. Average earnings are also relatively high, though there is significant variation between districts and commuting means that there is a significant difference in income between locally based employees and those who travel to London for work.

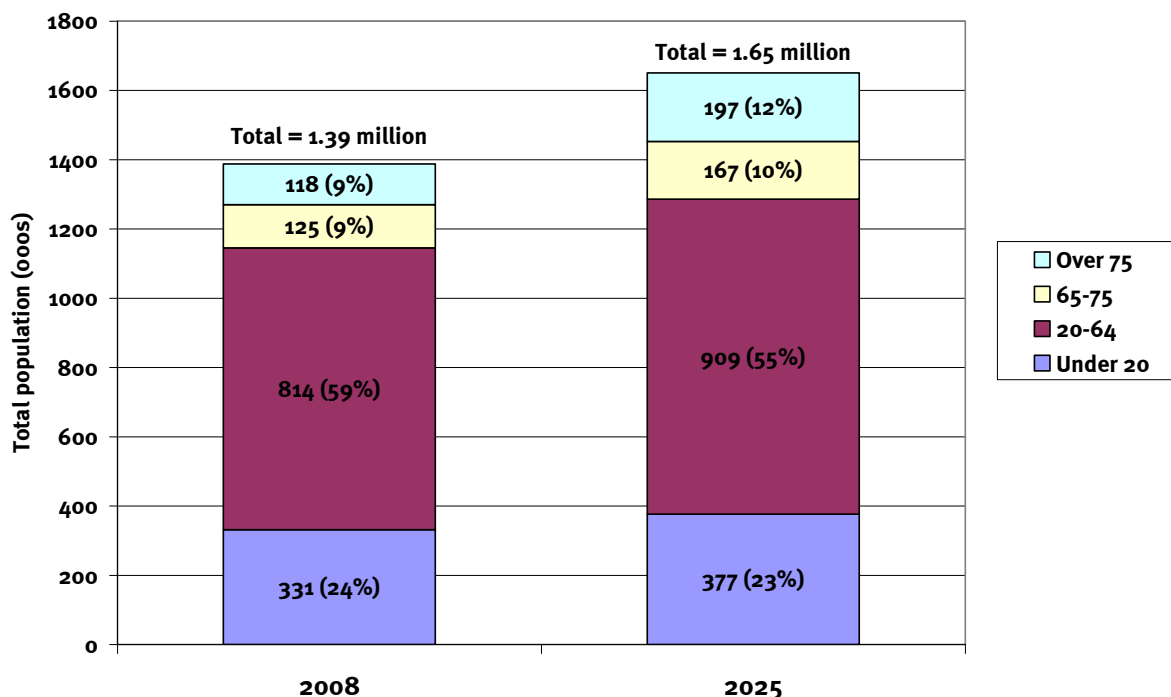
Significant pockets of deprivation still exist, however, with eight wards among the 20% most deprived in the country, primarily as a result of low income and low employment levels³. Individual skills levels amongst our residents vary significantly and on average are below regional and national averages. Creating opportunities for our residents by improving the skills levels of the local workforce to better match these to emerging job opportunities in Essex is a key objective of the Essex ICS and one for which transport connectivity has a vital role.

The general health of our population is good, though this also varies between districts. Mortality rates from circulatory diseases are below average (with the exception of Harlow and Tendring). Adult obesity, however, is a concern, with 25% of the Essex population classified as obese. Childhood obesity levels are generally below the

³ Based on 'Indices of Multiple Deprivation for Super Output Areas 2007', Office of National Statistics, 2010.

regional and national averages, and over 90% of children in Essex are recorded as being physically active.⁴ Again, however, there is significant variation between districts.

Figure 3.1 – Essex Population Change (2008 to 2025)



In keeping with wider national trends, our population is ageing; though in Essex this is happening at a faster rate than for many authorities across the UK. Government forecasts suggest that by 2025, 12% of Essex residents will be over 75 (a growth in real terms of 79,000 people). At the same time, the proportion of our population of who are of working age (16 to 64) will fall (see Figure 3.1).

Ensuring that elderly people are supported to provide them with best quality of life will raise new challenges for the ways in which services are provided and in adapting to different travel needs.

3.3 The Essex Economy

Essex is already home to over 50,000 businesses providing over 500,000 jobs. Each year, our county contributes more than £20 billion to the national economy.

Employment growth, leading up to the period of recession in 2008, was rapid, with the total number of jobs in the county increasing by over 17% in the preceding decade, compared to 9% in the East of England as a whole and national growth of 9.5%.⁵

⁴ Association of Public Health Observatories and Department for Health, 2009.

⁵ Based on annual employment statistics provided by NOMIS

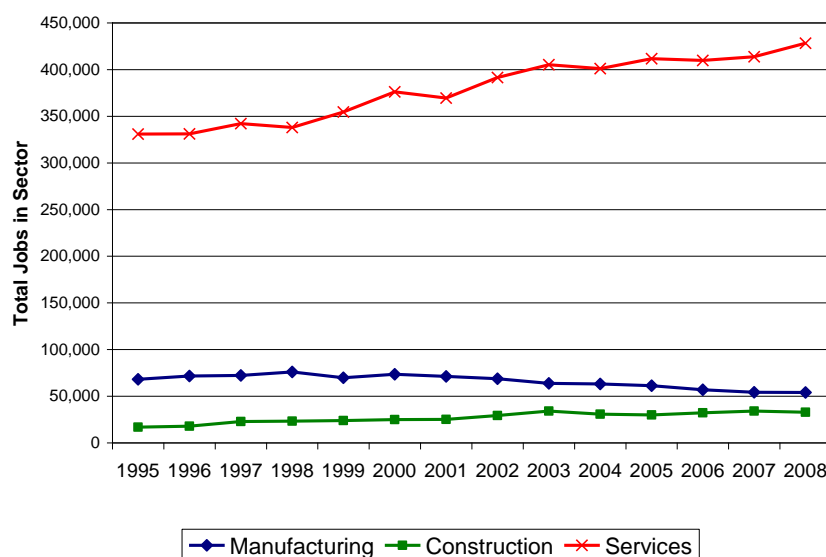
This recent growth has largely been due an expanding service sector (which includes administrative, retail and leisure employment) which now provides over 400,000 jobs (of which 130,000 are found within Chelmsford and Colchester).

The county is home to many internationally renowned companies operating in a range of markets, though the majority of employment is provided by small-to-medium sized businesses. This reflects a strong spirit of entrepreneurialism, with Essex having a particularly high rate of new business births, and a higher than average proportion of residents being self-employed.⁶ Supporting and fostering innovation and growth amongst small-to-medium sized businesses and encouraging and maintaining inward investment from international companies will be crucial to the on-going success of the local economy.

Whilst, in keeping with national trends, service sector employment has grown while that in more traditional industries has declined, manufacturing remains important, providing over 50,000 jobs (with nearly a quarter of these within Basildon). A large proportion of this is within high-tech and specialist manufacturing linked to the automotive industry.

Buoyed by a strong housing market and major new development, construction employment also grew over this period. (See Figure 3.2)

Figure 3.2 - Change in Employment by Sector in Essex 1995-2008



Source: NOMIS, 2010

Reflecting the diversity of Essex as a place, employment patterns also vary significantly between districts.

With much of Essex lying within the London commuter belt, ties to the capital are strong. Although for most of the county, the majority of local residents in employment

⁶ Based on figures provided by the ONS

work within Essex and are dependent on local centres for their needs, levels of ‘self-containment’ decrease as journey times to London-based jobs become shorter. Residents in the Thames Gateway and areas of the Heart of Essex and West Essex are particularly dependent on London for employment.

Whilst the economy of Essex has remained comparatively strong despite the recent economic downturn, the impacts of the global recession have affected some areas more than others. The Thames Gateway, for instance, along with parts of West Essex contains wards which are among the most deprived in the UK. Service sector employment, particularly that linked to international markets, has fallen and recovery rates are forecast to vary across the county as the economy readjusts.

Table 3.3 – new Job creation target recommendation by Essex district/borough

District / Borough	2011-2031 job target*
Basildon	10,700
Braintree	5,400
Brentwood	3,300
Castle Point	3,300
Chelmsford	20,700
Colchester	15,300
Epping Forest	3,600
Harlow	12,000
Maldon	4,000
Rochford	2,200
Tendring	6,900
Uttlesford	10,300
Total	114,100

*Based on data within the Essex Economic Assessment

Moving forward, increases in local jobs will be needed to match the ambitious plans for housing growth if containment levels are to remain high. Current district forecasts for employment growth are shown in Table 3.3 and the Essex ICS (discussed in Chapter 2) will take a clear lead in helping to deliver these.

Transport has a vital role in securing growth and ensuring improvements keep pace with housing and business development is essential if our county is to continue to prosper. Equally, growth must be managed in a way which minimises the impacts of this growth on the daily travel experience of existing residents and businesses and on the wider environment around us.

3.4 Travel in Essex

The existing transport network

This transport strategy is starting from a strong base. Essex is fortunate to have good transport connections by road, rail, air and sea. The nationally important M11, M25, A12 and A120 run through the county, and major local roads including the A13, A127, A130 and A414 provide good coverage. Three main rail lines radiate from London, supplemented by a number of branch lines, serving 57 railway stations, and the London Underground extends into the south of the county. The county also contains two major 'International Gateways': the UK's third busiest airport at Stansted (which handles around 20 million passengers each year); and Harwich International sea port which provides nationally important connections to Holland and Denmark.

Our urban transport networks generally provide good access to employment, education, retail and leisure opportunities. Major new transport infrastructure delivered as part of the previous Essex local transport plans, including the Chelmsford Park & Ride and First Avenue bus corridor in Harlow, have helped to substantially improve access, particularly by public transport. Major highway works undertaken by the Council, including the new J28 on the A12 at Colchester, A13/A130 Sadlers Farm improvements and the Roscommon Way extension, are also helping to support new development which will secure the long-term growth of the Essex economy; though significant further infrastructure investment will be required if this is to be achieved.

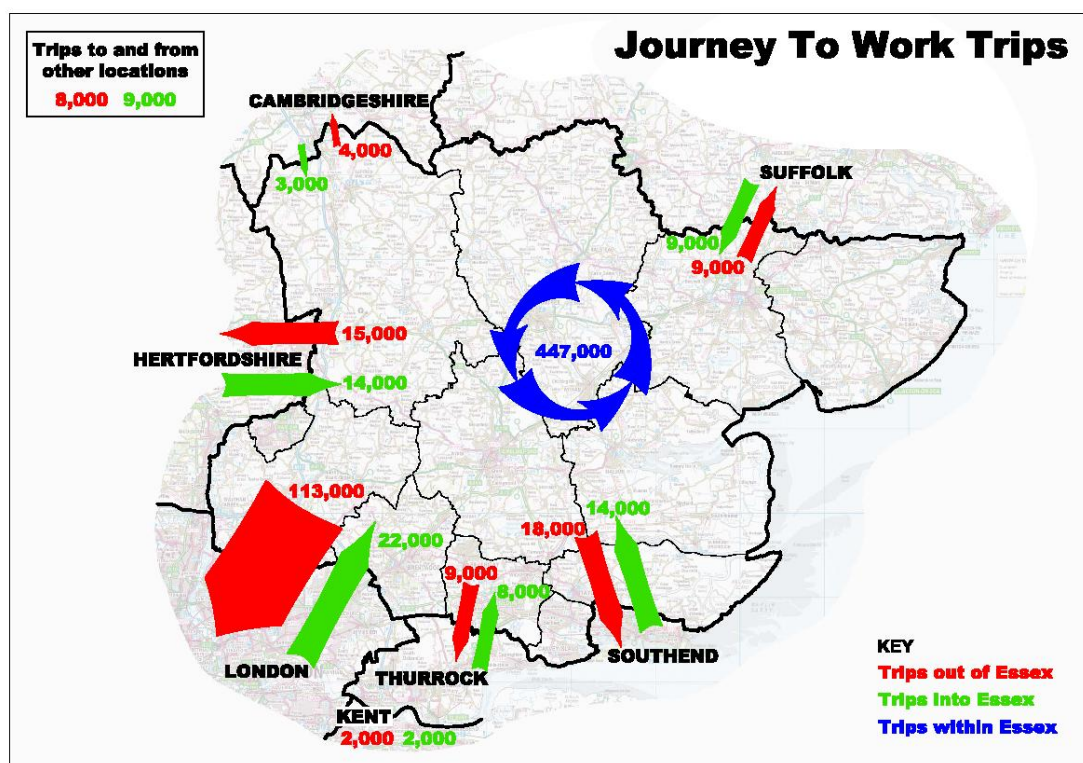
Travel demand and behaviour

Demand for travel in Essex is high, reflecting the advantageous location of the county and its capacity for trips to London, across the UK and internationally. The average Essex resident commuting distance, which at 14km (9miles) is 4km (2.5miles) above the national average, reflects the importance of London as a source of employment; particularly for those living to the west of the county. As can be seen in Figure 3.3 overleaf, more people currently commute out of Essex than commute in (with over 20,000 commuters travelling from Essex to the City of London alone each day). Apart from those who travel to London, journey to work data for Essex residents indicates that a high proportion of people live in close proximity to their place of work, with 30% of residents living less than 3 miles from their job.

This suggests that the major centres in Essex serve principally their own population and their associated rural catchment areas, providing jobs and services for local people. Commuting between the centres and between neighbouring boroughs or districts is relatively low, with the most significant movements being from Tendring to Colchester, Braintree to Chelmsford and Castle Point to Basildon.⁷

⁷ Based on data compiled as part of the 2001 Census.

Figure 3.3 – Commuting Patterns in Essex



Source: 2001 Census

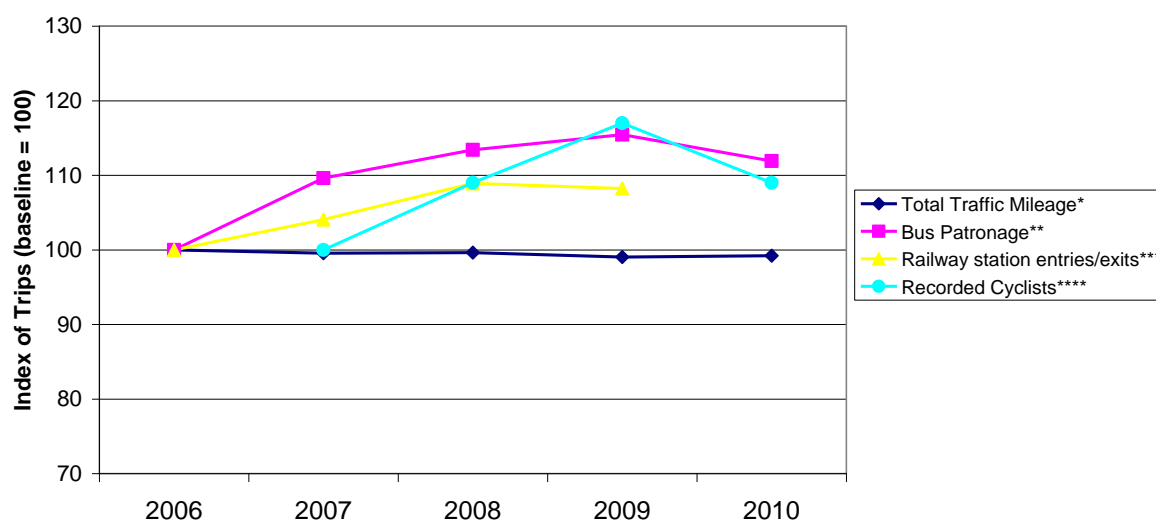
Whilst travel by car is the preferred travel choice for most trips, travel by train represents a higher proportion of trips made than in other comparable areas. A large proportion of commuting trips out of Essex are accommodated by the rail network which includes some of the country's busiest commuter lines, with over 7 million passenger entries and exits each year at Chelmsford station alone.

As can be seen in Figure 3.4 overleaf, the usage of Essex's railway stations and local bus patronage has grown significantly since 2006, whilst traffic levels in Essex have experienced a slight fall. Cycling levels too have risen substantially since 2007, supported by sustained investment in improving and promoting cycling, particularly as part of the Colchester Cycle Town initiative.

With our international gateways and the ports at Felixstowe, London Gateway and Tilbury in close proximity to the county's boundaries, significant volumes of freight are transported through Essex. Around 6% of traffic on Essex's roads is made up of HGVs, rising to nearly a fifth on the Essex section of the M25, 16% on the M11 and around 14% on sections of the A12 and A120⁸. In addition, around 50 freight trains pass through Essex each day, travelling mainly between Felixstowe and the North-West via London.⁹

⁸ Based on Average Annual Daily Traffic Flow (AADF) data produced by the Department for Transport, 2010

⁹ As reported by Network Rail in its 'Strategic Freight Network', 2008

Figure 3.4 – Change in Demand for Travel

Source: * ECC area-wide traffic data; ** ECC bus patronage data; *** Office of the Rail Regulator, 2010; **** ECC cycle counter data

The performance of the network

Whilst accommodating in excess of a million trips each day, the Essex road network operates safely and largely efficiently. The number of lives lost on local roads in Essex has been halved since 1998 and journey-time reliability has improved since 2005, particularly in our main centres through targeted measures to tackle congestion. Road condition too compares favourably with peer authorities, with substantial investment since 2005 in reducing a backlog of necessary works and in preventing further deterioration.

Persistent network efficiency issues remain however, especially on a number of strategic inter-urban routes which are operating at or near to capacity. The Government-managed A12 and M25 and M11 have widely recognised issues with poor reliability and delays. Congestion is common on specific sections of the Council-managed network, including sections of the A127, A130 and A414.

The rail network, including the Central Line of the London Underground, provides excellent connections to London and is an attractive option for commuting to the capital, as demonstrated by the increased use of train services (34% growth in passengers on the Great Eastern mainline between 1995 and 2007). During the morning and evening peaks all rail lines servicing Essex are operating at or above their capacity, with significant numbers of passengers standing for at least part of their journey. The map below illustrates this problem.

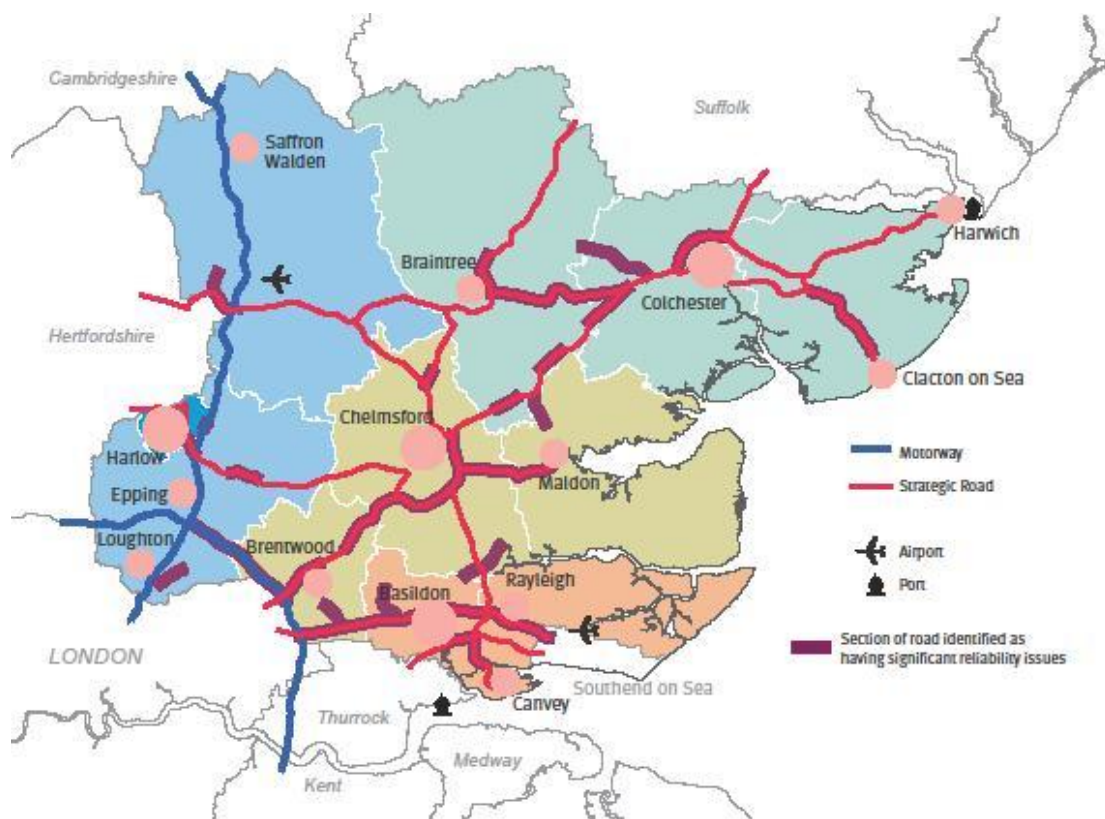


Figure 3.5 – Sections of the road network likely to suffer from journey unreliability

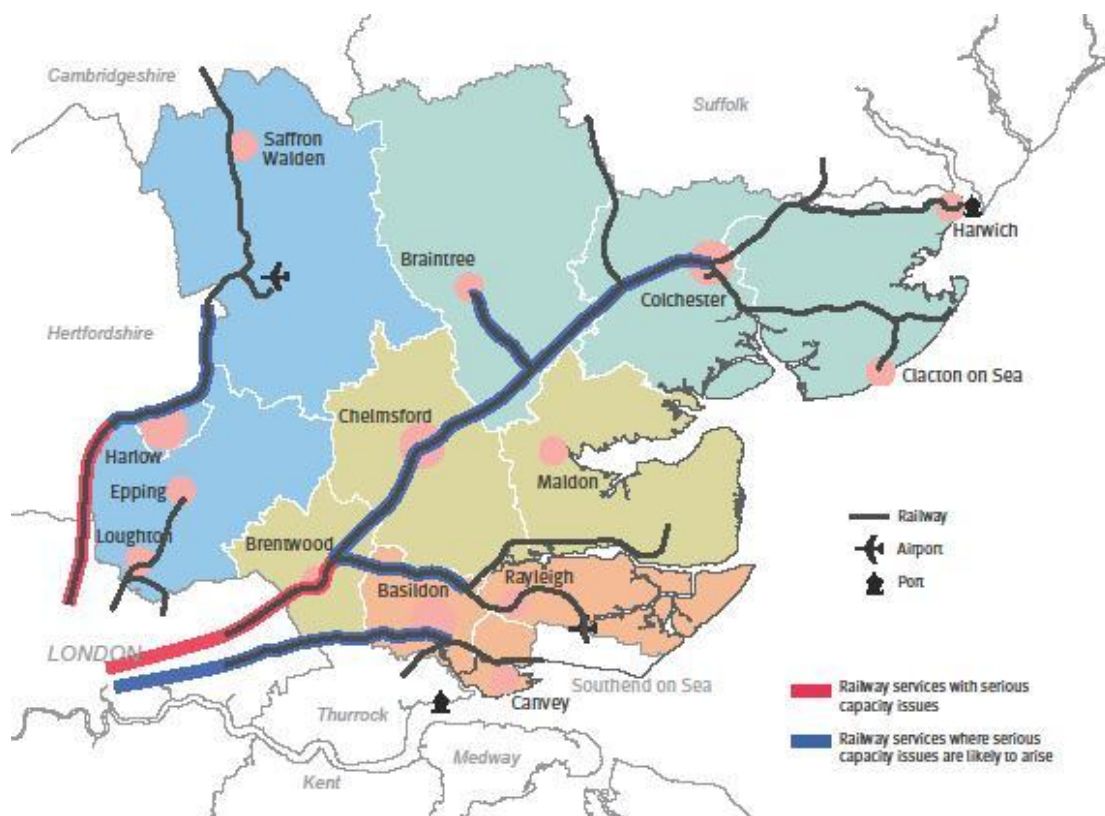


Figure 3.6 – Sections of the rail network with capacity issues

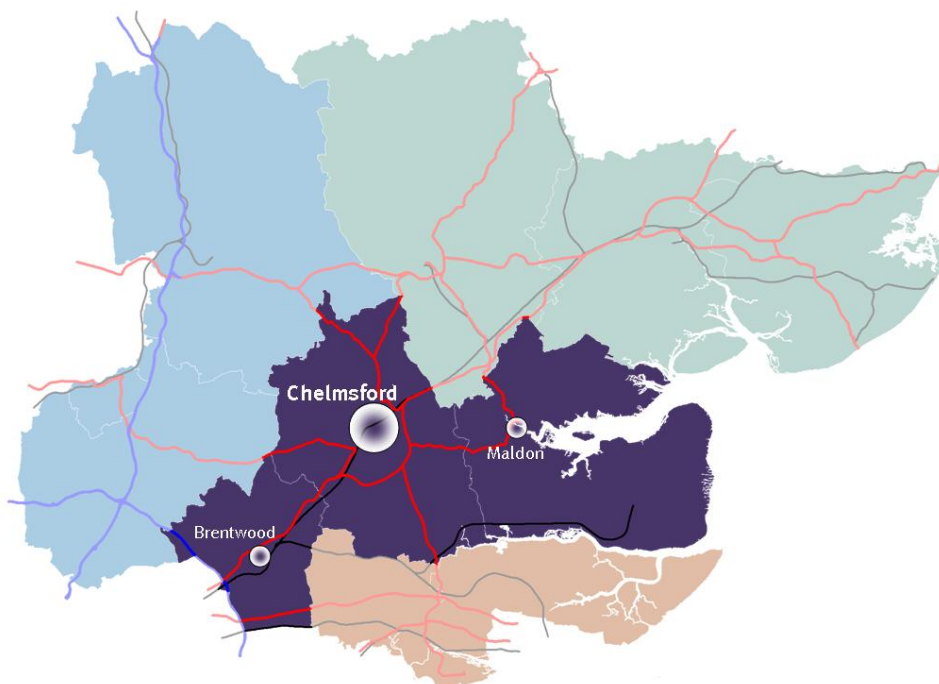
The introduction of additional trains, train lengthening and changes to the timetable have started to address this problem; however, the Draft London and South-East Rail Utilisation Strategy published in 2011 identifies significant shortfalls in supply across the Essex rail network by 2031, especially on the Great Eastern Mainline where significant investment is necessary if passengers are not to be displaced on to the already crowded A12.

3.5 The Heart of Essex

3.5.1 Overview

The Heart of Essex forms the core of the county, extending across the districts of Chelmsford, Brentwood and Maldon.

Figure 3.7 – The Heart of Essex



All of the area falls within the London commuter belt and has strong links with the capital's employment market, though the scale of out-commuting declines steadily as the distance from London increases.

London exerts significant influence over the *Heart of Essex*, though the area has a strong economy in its own right, being the location of 20,000 businesses and 175,000 jobs¹⁰. Chelmsford, as the county's administrative centre, is the focus of the local economy, attracting significant daily commuting from its neighbouring districts to

¹⁰ Business stock data provided by ONS Business Demography data for 2008; employment statistics for 2008 provided by NOMIS.

employment built around a strong professional services sector. The town also has a strong public sector employment base, given its function as the county town of Essex, and is a major centre of further and higher education (including Anglia Ruskin University). The centres of Brentwood and Maldon also serve as important functional centres in their own right.

The area has a strong manufacturing base, which includes the Ford Motor Company plant in Brentwood and other specialist manufacturing linked to the automotive industry. High-tech manufacturing provides significant employment in Maldon, which given its location is less strongly linked to London.

With significant potential for growth, particularly within Chelmsford, the area has been identified as a major location for new development. Under current plans, this includes 30,000 new homes and around 40,000 new jobs, making the area crucial to economic recovery and growth within Essex. Accommodating such growth in a manner consistent with a shift to a low carbon economy and without leading to increased congestion, will be a significant challenge for this transport strategy.

3.5.2 Key issues

Main Centre

As the main focus of growth, the population of **Chelmsford** is set to rise substantially in the near future, with the planned construction of 16,000 new homes by 2025. Over the same period, regeneration initiatives and new business developments aim to achieve the creation of an estimated 20,000 new jobs.

To support this, and to ensure that Chelmsford remains an attractive location for its residents and businesses, innovative transport measures are required. Many of the key corridors into Chelmsford town centre are congested, especially during the peak periods, with specific problems at junctions. Although the bus and cycling networks are extensive and serve the town well there are a number of key improvements required. The railway station is also at capacity at peak times and in need of environmental improvements.

Local Centres

More modest housing and employment growth is planned for **Brentwood** and **Maldon**. Congestion is common at peak times around Brentwood town centre, with Wilson's Corner currently designated as an Air Quality Management Area, as a result of transport-related emissions. There is also limited connectivity between Maldon and the strategic transport network.

The bus and cycle networks in all local centres are limited, specifically evening and weekend bus services and links to key services and passenger transport interchanges are essential.

Inter-urban Routes

The Heart of Essex is well connected to other parts of Essex and the rest of the UK, particularly by road. Many of the county's most important inter-urban routes cross through the area, including the A12 and A130. Congestion on the sections of these routes within the area is common, leading to unpredictable journey times. Peak period congestion is also common at peak times on local roads, including the A414 to the east and west of Chelmsford, which provide essential commuting links.

The area is traversed by the Great Eastern Main Line, one of the busiest commuter railway lines in the UK. This is of major importance to UK economy, linking the Haven Ports to London and beyond. Significant expansion in port activity is likely to place increasing pressure on capacity, as is anticipated growth in commuter demand for services to London.

Brentwood and Shenfield stations are important commuter links to London and Shenfield also acts as the interchange between the Great Eastern mainline and the line to Southend. With the opening of Crossrail, due in 2018, Brentwood and Shenfield stations are likely to become increasingly important, with Shenfield being the terminus for Crossrail services from central London and beyond.

3.6 The Thames Gateway

3.6.1 Overview

The Thames Gateway is a densely populated area along the Thames Estuary. It comprises the districts of Basildon, Castle Point and Rochford and is closely tied to Thurrock and Greater London to the west, Southend-on-Sea to the east and Kent to the south, forming part of the wider Thames Gateway regeneration area, the largest of its kind in Europe.

The regeneration of the area is of national importance due to the transformative impact that an improved Thames Gateway could have on national economic performance. Within the Essex part of the Thames Gateway alone, are plans for an additional 19,300 homes and 16,000 jobs by 2021. These plans are concentrated on existing urban centres and are combined with extensive town centre regeneration proposals. Basildon is one of three major urban areas in the wider Thames Gateway where regeneration and growth is to be concentrated (the others being Southend-on-Sea and Thurrock).

Figure 3.8 – the Thames Gateway



The area currently has a population of 331,000 and a significant economic base which includes offices, retailing and other commercial activities. However, there are far more local resident workers than local jobs, and many places act as dormitories for Greater London, with substantial volumes of commuters travelling from the area each morning.

3.6.2 Key issues

Main Centre - Basildon

Basildon is the largest centre in the area and has been identified as a location for job and housing growth. This will be of great benefit to the town, but also poses challenges for the transport network.

Only a quarter of those who live within 3 miles (5km) of their workplace either walk or cycle to work which is below the national average, despite there being a good network of cycle ways in Basildon. A reliable bus network is also extremely important, with nearly a quarter of households without a car. The bus network is also an important way of providing access to education and training.

Congestion is common on several key routes including, the A1235 and A132 around the Basildon Enterprise Corridor, the A176 between Five Bells and Basildon Hospital and the A132 / A13 junction in Pitsea.

Local Centres

Canvey Island also has significant plans for regeneration, new housing and employment growth. The improvements to the Sadlers Farm junction on the A130 are expected to have significant benefits, though other local congestion issues remain (particularly on East-West routes). Access to the island is an important issue and we

will continue to explore ways to improve the existing crossings, and investigate the viability of a new crossing.

The towns of **Rayleigh** and **Rochford** have a rich heritage and a strong historic character. Narrow roads, however, lead to local congestion problems and consequent issues with air quality.

Hadleigh has been chosen to host the Olympic Mountain Biking events; a boost to the local economy which will also help to raise the profile of cycling in the area. There are also plans to regenerate Hadleigh Town Centre.

Inter-urban Routes

Much of the inter-urban road network is operating at or near capacity in the peak periods, making it vulnerable to incidents, which can quickly affect other routes. This results in unreliable journey times for car and bus users. Particularly problematic are the strategic routes of the A127 and the A13 which provide important links between the Thames Gateway centres and London. Congestion is also common on roads linking Basildon to the local centres, including the A129 / A130 and B1007.

Inter-urban connections by bus are currently limited, leading to long journey times on these routes. There are a number of planned transport schemes which will open up new opportunities and provide a credible alternative to the car for inter-urban journeys. SERT and the A13 Passenger Transport Corridor will improve the inter-urban public transport network and provide greater choice and reliability for bus users.

The rail network provides important connections to Southend, Thurrock and London, with over 20,000 people commuting to London from the Thames Gateway each day. The area is served by two rail lines: the Southend Victoria branch of the Great Eastern mainline to Liverpool Street and the Thameside services to Fenchurch St. There is, however, no connection between these lines, increasing the importance of bus connections. The interchange between bus and rail at many of the stations is poor and the provision for walkers and cyclists varies considerably. Improving access to train stations will be an important consideration to support growth.

International Gateway

Southend Airport is an important asset and is set to increase in importance as it expands over the next few years. This will create many new jobs and attract new businesses to the area. However, it will result in a growth in traffic, which must carefully managed to ensure that access to the airport and surrounding transport network remain reliable.

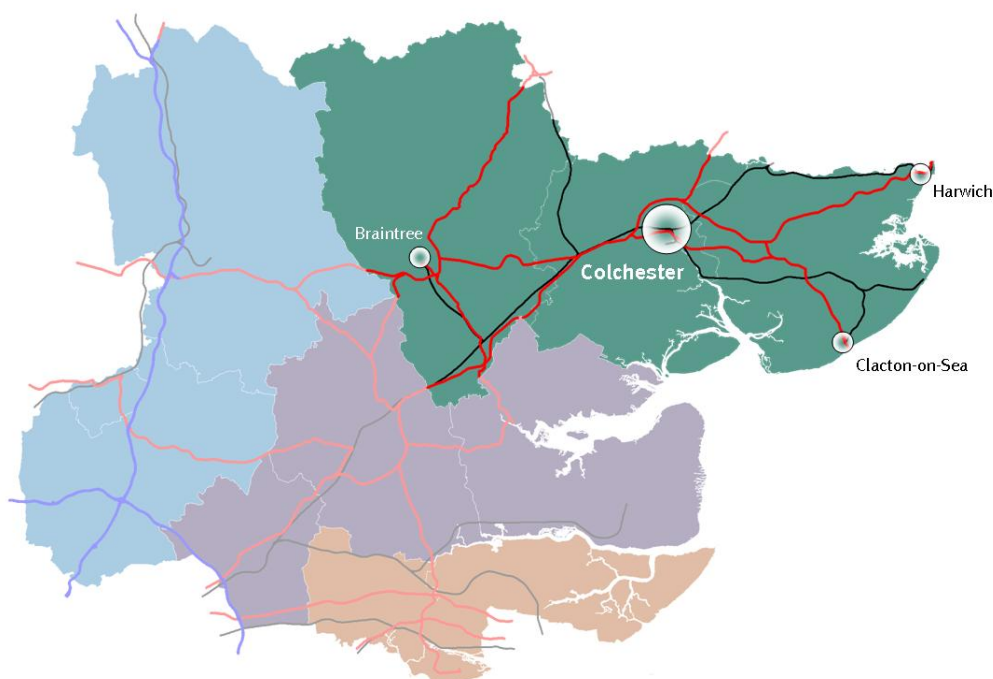
In close proximity to the Essex border is the London Gateway development in Thurrock. This will lead to the creation of a major deep-sea container port and Europe's largest logistics park, predicted to create 12,000 new jobs. The growth in travel demand created by the port development will have a significant impact on transport networks in both Essex and Thurrock.

3.7 The Haven Gateway

3.7.1 Overview

The Haven Gateway sub-region covers north-east Essex and south-east Suffolk and is one of the key international gateways to the UK, containing the internationally significant Haven Ports of Harwich and Felixstowe. The Essex Haven Gateway extends inland from the Essex Coast, to include Tendring District, Colchester Borough and Braintree District Councils.

Figure 3.9 – the Haven Gateway



The area's economy is closely linked to the maritime industry. Harwich International Port is one of the UK's major ferry ports and is also set to significantly increase in importance as a container freight terminal, with the planned £300m Bathside Bay development.

Colchester is one of the UK's fastest growing towns and has developed a strong economy, linked to the town's historic character, cultural activities and its university.

The attractive and environmentally important coastline has also spawned significant tourism.

3.7.2 Key issues

Colchester

Colchester is the dominant town within the Essex Haven Gateway and will accommodate the majority of the future growth in the sub-region. This growth is addressed within its Local Development Framework.

A number of key corridors into and around Colchester town centre suffer congestion, especially during the peak periods, with specific problems at some junctions along these routes. This can result in a reduction in air quality in some locations, and can also lead to poor public transport journey time reliability. Innovative transport measures will be required to ensure that growth can be accommodated sustainably.

Local Centres

A number of local centres exist in the Haven Gateway sub-region, including **Clacton, Harwich, Braintree, Witham** and **Halstead**, providing an important role for local communities. These are expected to accommodate more limited growth.

Growth in Tendring District is focussed mainly on Clacton while there will also be a strong focus on regeneration in the other coastal towns and their environs.

Housing and employment growth is also planned for Braintree where the town centre is in need of some regeneration. Current access to the town by train is likely to be insufficient to support future growth, with the single track Braintree branch line close to capacity.

Inter-urban Routes

The key interurban routes serving the Haven Gateway are the Great Eastern mainline and its branches to Harwich, Walton, Clacton and Braintree, the A12 and A120 Trunk Roads, and the A133. These can suffer from congestion at times of increased demand and can suffer from substantial delays should a major accident occur on or near them. Improvements to these routes are therefore strongly desired.

International Gateway

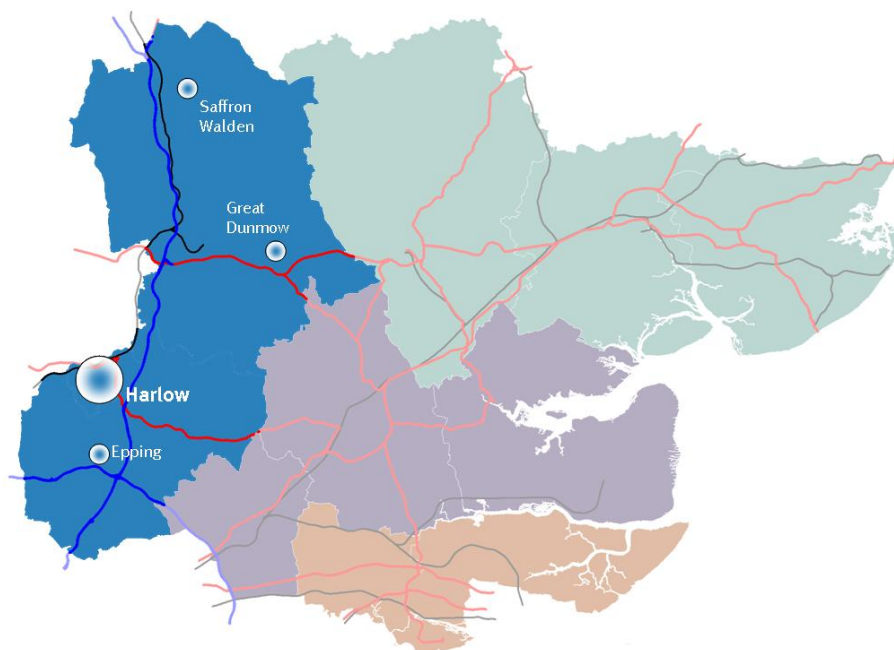
Harwich remains one of the UK's most important ports for passengers and freight and planning approval has been granted for the construction of the Bathside Bay Container Terminal (BBCT) to provide a major increase in UK container handling capacity. The area is also a key focus for the development of renewable energy industries.

3.8 West Essex

3.8.1 Overview

West Essex covers the west of the county from London along the M11 corridor, including the districts of Epping Forest, Harlow and Uttlesford. It is unique in the county in terms of the number of other authorities it bounds, including the London Boroughs of Redbridge and Waltham Forest and also county boundaries with Hertfordshire and Cambridgeshire.

Figure 3.10 – West Essex



It is also home to London Stansted Airport which is a major gateway to the east and South-east of England including London.

With access to a skilled workforce and good transport links, West Essex is a particularly attractive location for multi-national businesses. Internationally renowned companies including GlaxoSmithKline, Raytheon and Pearson Education have established bases in the area, which has become a centre for innovative research and development. As the home of Stansted airport, associated businesses have expanded significantly, reflecting the airport's rise in prominence to becoming a key international gateway for the UK.

3.8.2 Key issues

Harlow

Harlow is situated in the centre of the area and is the primary economic and growth centre, with 16,000 new homes and 12,000 new jobs planned in the next 15 years. Harlow is ideally placed, being close to the M11 and M25, on the West Anglia mainline and close to Stansted airport. Access to Harlow is, however, somewhat restricted with only one link to the strategic road network (via Junction 7 of the M11) and two railway stations located on the edge of the town.

The primary means of road access to the town, the A414, also serves as an important through route. With high levels of traffic using this one route, congestion is common with its impacts often felt across the town's wider road network. Innovative solutions are required alongside some road improvements.

Furthermore, having largely been constructed in the 1950s and 1960s, much of the town's transport infrastructure is now ageing and was originally designed for a time of lower levels of car ownership and mobility.

Local Centres

Saffron Walden is a historic town with a population of over 15,000 with opportunities for growth in the town limited by the historic street layout. The town is served by road via the M11 and by rail by the station at Audley End, situated some distance from the town.

Loughton is part of a spur of continuous development extending from London through Buckhurst Hill with a combined population of over 40,000. It is located just 12 miles from the centre of London. It is bypassed by the M11, but only has access to it in the London direction. Congestion within the town is common during peak periods.

The nearby market town of **Epping** also suffers from significant congestion during peak times of travel. Part of the town centre has been declared as an Air Quality Management Area, as a result of high levels of pollutants from traffic.

Loughton, Epping and the other settlements in the area have the benefit of easy access to the London Underground Central Line. Growing congestion on the Central Line and issues relating to the way this is accessed are areas of concern.

Inter-urban Routes

The M11 runs north-south and M25 east-west across the area, both of these key national corridors suffer from congestion, particularly at peak times. The A414 links Harlow to Chelmsford and continues through the town to Hertfordshire.

International Gateway

Stansted Airport is now the third largest airport in the UK for both passengers and freight. The airport currently employs 10,900 workers with 59% of the airport's employees living in Essex. The Airport had a throughput of 19.7 million passengers per annum in 2009, having peaked at 23.5 million in 2007 before the start of the recession. Planning approval has been given to enable the airport terminal building to handle up to 35 million passengers per year using the airport's single existing runway.

4. Providing reliable connectivity

4.1 Introduction

The Essex transport network is of critical importance to the local economy, with significant transport investment vital if we are to enable continued economic growth and to support the regeneration of our town centres. Providing good transport and communications links between our communities, international ports and airports and the areas surrounding Essex is especially important.

Reliable connectivity enables Essex residents to access jobs and local businesses to attract employees. For employers, this means access to a workforce which can provide the skills they need, particularly where these are not available locally. For individuals, it enables access to employment opportunities they would otherwise be unable to reach.

A dependable and reliable transport network is fundamental to the efficient functioning of our local economy. Businesses need to attract customers and many are dependent on an ability to transport goods and people with an accurate indication of how long the journey will take. If the transport network is frequently congested and unreliable, extra time needs to be factored in for deliveries and business trips, reducing the productivity of staff and increasing the cost of transporting goods. Such costs directly impact upon business competitiveness; particularly for businesses which rely on the frequent and low-volume movement of commodities, or require high numbers of employee business trips.

Transport has been shown to be an important factor in attracting new investment to an area. The provision of good transport links has been identified as being particularly important to globally mobile businesses, for whom the ability to quickly and easily access wider domestic markets and travel internationally is essential. A key aim of the ICS is to attract greater inward investment and the potential of Greater Essex needs to be better exploited to attract mobile businesses to the area and ensure that existing businesses remain and are able to grow. Good connectivity with the rest of the UK and the proximity of our international gateways puts Essex in a good position to attract investment. Making the best use of these advantages is crucial.

More indirectly, transport decisions can help support the agglomeration of related businesses, particularly within the major urban areas. Delivered in a joined up way with spatial planning policies and measures, transport improvements can support agglomeration by making locations more attractive particularly by improving connectivity, reducing journey times and increasing journey time reliability, and providing good access to skilled employees.

Our aim, therefore, is to provide a reliable and well-connected transport network which best supports a growing economy and strengthens the competitiveness of local

businesses, but also ensures that this is not at the expense of the quality of life of our residents or the natural, built and historic environment.

4.2 Evidence Base and Analysis

4.2.1 The connectivity of our main urban areas

As discussed in Chapter 3, Essex's largest towns are major providers of employment, retail, leisure opportunities and essential services for those who live in them and the smaller towns and villages which surround them. Many centres also serve as important transport hubs, with commuters benefiting from frequent and direct rail services to London. Chelmsford station, for instance, is the 2nd busiest in the east of England, accommodating nearly 7.4 million passengers each year, with over 10,000 people travelling from the station each day.¹

Current connectivity by road

The importance of our centres, however, has led to high levels of traffic, particularly during peak periods. Whilst significant progress has been made in reducing journey times and improving journey time reliability (particularly in Chelmsford and Colchester), congestion remains a common feature, with many urban roads already operating at or close to capacity. This in turn leads to unpredictable journey times.

Current connectivity by public transport, walking and cycling

Connectivity by public transport to and within urban areas is generally good and services have been significantly enhanced through Quality Bus Partnerships between the Council and bus operators. Reliability and punctuality remain concerns, however, with around 1 in 5 bus services not running on time. Similarly, cycling networks within our centres and linking surrounding communities are generally good as are urban walking routes, though gaps exist and routes are not always clear.

Future connectivity issues

Maintaining good connectivity over the life of this strategy will be challenging, with Essex districts aiming to deliver some of the most ambitious plans for town centre regeneration, housing and employment growth in Europe (see Chapter 3). Demand for rail travel, which has risen significantly in recent years, is also set to continue to grow², potentially further increasing pressure on local stations as commuter hubs. Without accompanying investment in new infrastructure, this is likely to add significant pressure to already busy transport links.

¹ Based on data provided by the Office of the Rail Regulator, 2010.

² The Greater Anglia Rail Utilisation Strategy, published by Network Rail in 2007 indicates growth in rail patronage of 34% between 1995 and 2007 on the Great Eastern Main Line.

4.2.2 Connectivity between our centres

As outlined in Chapter 3, Essex is characterised by strong inter-dependency between its local and its main centres. A high proportion of Essex residents commute into our main centres which also continue to serve an important role as centres of retail and leisure activities.

Connectivity by road

Connections by road between the four main towns of Basildon, Chelmsford, Colchester and Harlow are good as are connections between these and their surrounding local centres. Most journeys by car between each of the four towns can be achieved in under an hour. However, there are specific sections of road where congestion is common. These include the A127 and A130 in south Essex, the A414 to the east of Chelmsford and connections from north and west Harlow to the M11.

The county's strategic roads (including A12 and A120), also serve as important inter-urban links. As discussed later in this chapter, a legacy of underinvestment means that disruption is common and journeys can be unreliable, especially at peak times.

Connectivity by public transport

Connectivity between Essex centres by public transport is more variable, particularly for journeys between major centres. Chelmsford, given its central location, is well served by rail and bus services and each of the other major centres can be reached in under an hour with relatively frequent services. Harlow and Basildon, however, are less well connected to the other major centres by public transport.

4.2.3 Connections with international gateways

The international gateways within Greater Essex³ – Stansted and Southend airports, Harwich Port, Tilbury and London Gateway – support a range of related local businesses, including logistics firms, and have an important role in attracting inward investment into the area.

Significant volumes of freight traffic travel by road and rail through Essex to and from these gateways. Around three-quarters of container freight arriving at Harwich and Felixstowe is transported by road, with approximately 1,400 heavy goods vehicles (HGVs) travelling in each direction each day along the A12 corridor alone.⁴ HGV traffic accounts for around 6% of all traffic in Essex, with the most significant volumes recorded on the M25 (18% of all daily traffic), M11 (16%), A12 (14%) and A120 (14%). On the railway network, around 50 trains travel through the county each day, mainly travelling to and from Felixstowe, with goods largely destined for locations in the north-west of the country.

³ Greater Essex includes Southend-on-Sea and Thurrock councils.

⁴ As estimated in the *National Networks – London to Haven Ports Study*, Department for Transport, 2010.

Whilst there has been a recent drop in freight movements in the county (particularly in HGV traffic), the recent DfT '*London to Haven Ports*' study⁵ has indicated that with continued growth in international trade, demand for road and rail freight from the Haven Ports (which include Harwich International and Felixstowe in Suffolk) will nearly double between 2010 and 2031. Similarly, port development at Tilbury and London Gateway is likely to impact on roads within and leading into Essex. This will place increased pressure on key transport corridors within the county, especially the A12, A13, A120 and Great Eastern Main Line.

Stansted International Airport processes around 20 million non-transferring passengers each year and is the third largest handler of air freight in the UK, with a 170% growth in freight volumes since 1994. With excellent rail connections to London, nearly half of all passengers arriving at Stansted Airport do so by public transport. Public transport connections to surrounding areas and the main towns in Essex, however, are weaker and a high proportion of those travelling to the airport from within Essex do so by car.

Southend Airport, whilst modest in size compared to Stansted, is planned to grow into a major regional airport for London and the wider south-east, taking advantage of limited capacity at London's other airports. Passenger volumes are forecast to rise from 3,500 in 2010 to at least 740,000 by 2020.⁶ A new railway station for the airport is now complete and further improvements are proposed to improve access from the surrounding areas.⁷

4.2.4 Strategic links to 'Greater Essex', London, Kent, Cambridgeshire, Suffolk and Hertfordshire

As discussed in Chapter 3, there are strong links between Essex and London, with around 20% of Essex residents commuting to the capital for employment.⁸ Significant commuter flows also occur between Essex and Southend-on-Sea and Essex and Thurrock.

Road links

Essex's trunk roads and sections of motorway (the A12, A120, M11 and M25) provide links with London, the areas surrounding the county and the wider strategic road network. Given their importance to the national economy, these routes are managed by the Government. Historically, investment in these routes has not kept pace with growing demand and all sections of road are currently operating at, or near, capacity. Journeys can therefore be unpredictable, especially at peak times, and incidents can lead to serious disruption.

⁵ See 13.

⁶ 2010 data provided by the Civil Aviation Authority airport statistics; growth figures based on those presented within *London Southend Airport Transport Assessment*, Jacobs, 2009.

⁷ See the 'Southend-on-Sea Local Transport Plan 3' for more discussion on access to Southend Airport.

⁸ Based on 2001 census data.

The A12, in particular, has significant reliability issues which have been highlighted by the Council-commissioned A12 Inquiry. Closures are common, with the Inquiry finding that there is a 1 in 30 chance that the A12 will be closed at some point on its length during a typical day. This impacts not only on traffic on the road itself, but also on traffic levels on other roads in Essex.

Of the Council-managed roads, the A127, A13 and A130 in particular provide important links to Greater Essex and London. Recorded traffic flows on the A127 are the highest of all the Council-managed roads, with sections of the road, especially those to the east of the county, currently experiencing significant congestion.⁹

Rail links

The rail network provides good connections to central London for each of the four major centres, all of which are within one hour of the city by train. The capacity of the existing rail network, particularly the Great Eastern Main Line, to accommodate the forecast growth in demand, however, is a serious concern. The Greater Anglia Rail Utilisation Strategy (published by Network Rail in December 2007), reported that the line was operating at least 90% of its capacity on the inner-suburban section between Shenfield and London Liverpool Street and between 70 and 90% of its capacity between Shenfield and Colchester. Much of the line only has two tracks for large sections and there is a lack of realistic diversionary routes. Any incident affecting the line is therefore likely to have a significant impact on all services.

As a consequence, serious overcrowding has been recorded during peak periods, particularly on inner-suburban services during peak periods, but also on outer suburban services (linking Chelmsford, Clacton and Colchester). Services are also operating close to capacity on large sections of the Thameside route between Fenchurch Street and Shoeburyness).¹⁰

London Underground services also provide an important link into the capital, particularly for those living in Epping Forest. The Central Line, however, is currently running at capacity with high levels of demand at Essex stations from commuters.

Cross-Thames links

Cross-Thames movements, linking Kent and Essex are also currently constrained by limited capacity at Dartford Crossing. The *Dartford River Crossing Study* (2009), commissioned by the DfT, highlighted that the existing Dartford Crossing has already reached operating capacity and that a failure to provide additional capacity would be likely inhibit the long-term competitiveness of the Thames Gateway.

Future issues

Significant growth is planned adjacent to Essex which is likely to add further pressure to strategic transport networks. This includes major development and regeneration

⁹ Based on Annual Average Daily Traffic (AADT) data provided by the DfT for 2007. The A13 is shown to be the second-busiest route.

¹⁰ As recorded in the Greater Anglia Rail Utilisation Strategy, Network Rail, 2007.

within Greater London (for instance the regeneration of the Lower Lea Valley which aims to create 40,000 new homes and 50,000 new jobs).

4.2.5 Summary of key issues

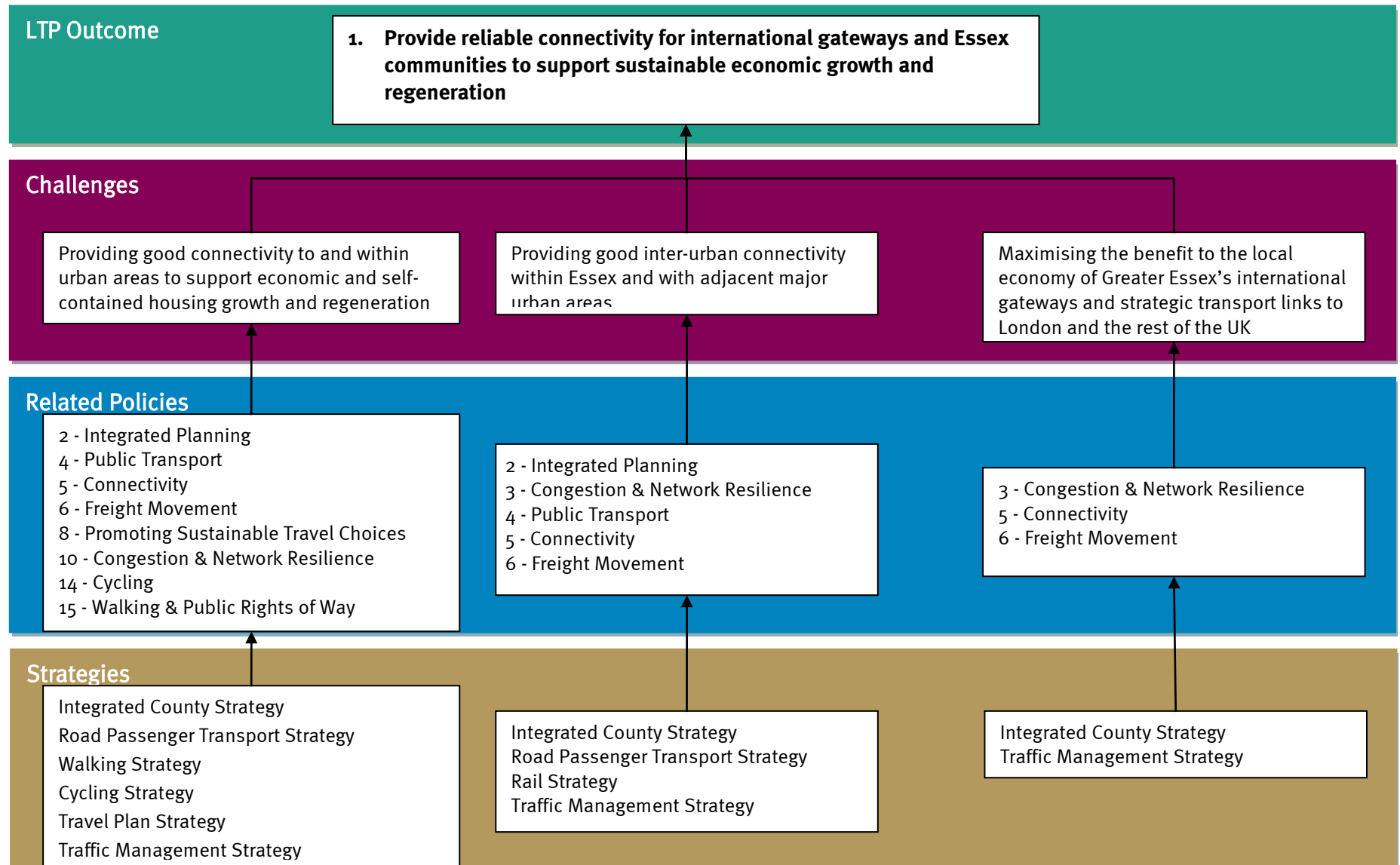
Based on the evidence summarised above, we have identified three challenges which need to be met if we are to provide reliable connectivity within Essex. These are shown in the table below, along with the key issues to emerge from our analysis.

Challenge	Key Issues
Providing good connectivity to and within urban areas to support self-contained employment and housing growth and regeneration	<ul style="list-style-type: none"> ▪ Congestion around centres during peak periods, particularly from local traffic ▪ Concern over the reliability and punctuality of public transport ▪ Limited capacity of existing transport network to accommodate growth ▪ Need to provide access to development and improved access to regeneration areas
Providing good inter-urban connectivity within Greater Essex, with London and with surrounding areas	<ul style="list-style-type: none"> ▪ Unreliable journey times on key inter-urban roads ▪ Variable standard of connectivity by public transport – particularly between the Thames Gateway centres
Maximising the benefit to the local economy of Greater Essex's international gateways and strategic transport links to London and the rest of the UK	<ul style="list-style-type: none"> ▪ Limited capacity of strategic road and rail networks to accommodate forecast growth in demand ▪ Strategic routes particularly vulnerable to disruption ▪ Limited choices for travel to Stansted Airport from within Essex ▪ Limited capacity at Dartford Crossing, potentially compromising economic growth in the Thames Gateway

4.3 Challenges and Approach

Our approach to meeting the three challenges is discussed below. The relationship between these, the 15 transport policies and the service delivery strategies is summarised in Figure 4.1.

Figure 4.1 – Providing reliable connectivity



4.3.1 Providing good connectivity to and within urban areas to support self-contained employment and housing growth and regeneration

Key Issues
<ul style="list-style-type: none"> ▪ Congestion around centres during peak periods, particularly from local traffic ▪ Concern over the reliability and punctuality of public transport ▪ Limited capacity of existing transport network to accommodate growth ▪ Need to provide access to development and improved access to regeneration areas

Approach

When identifying measures to improve connectivity within urban areas we will give greatest focus to those locations which are considered to be fundamental to the functioning of the Essex economy. These will include the major centres of employment or planned employment growth, particularly within the four main towns of Basildon, Chelmsford, Colchester and Harlow (see **Policy 5 – Connectivity**).

Our priority will be to ensure that the transport networks within and into to our main towns support the safe and reliable movement of goods and people, both now and in the future. In particular, this means providing for and promoting the take-up of travel choices which can accommodate growth in travel demand and help to reduce road traffic volumes causing congestion.

Planning for growth

Where growth is located influences the travel choices people have. If we are to promote self-contained growth, it is essential that transport and land-use planning is undertaken in a joined-up and coordinated way (see **Policy 2 – Integrated Planning**), with the implications for travel of development and regeneration proposals considered at an early stage. The Council will therefore commit to working in partnership with district planning authorities to:

- identify suitable locations for development;
- ensure that proposed developments will adequately provide for and promote sustainable modes of travel to minimise traffic growth;
- identify the priority transport measures needed, particularly to provide good connectivity with local services and nearby employment; and
- deliver transport measures in a co-ordinated and cost-effective way, making best use of all available sources of funding.

Limited funding for major infrastructure investment will dictate that housing and employment growth must largely be accommodated by making better use of our existing transport networks. Our focus will therefore be on identifying packages of measures which will enable the effective integration of new developments with existing networks and on ensuring that developments are well connected with their surrounding areas (see the North Colchester case study on page 55 for an example of our approach).

Policy 2 – Integrated Planning

Transport and land-use planning will be used together to secure new development at the most appropriate and sustainable locations by:

- working closely with district planning authorities to enable a better balance of new homes, jobs and services;
- locating new developments in areas which are accessible to key services by sustainable forms of transport;
- ensuring new developments provide for sustainable transport and effective travel planning;
- requiring new developments to provide appropriate transport infrastructure in line with the Council's current development management policies; and
- making the most effective use of all available funding sources by co-ordinating the delivery of ECC and development funded works.

The application of the Council's *Development Management Policies* will support us in this. These will help ensure that access to new sites is appropriately located, that low carbon travel is promoted, traffic growth is minimised, and that developers make appropriate contributions towards transport costs.

Reducing congestion

In order to improve connectivity within our towns, our approach will focus on improving journey time reliability and increasing the proportion of trips to and within our urban areas which are made by public transport, on foot or by bicycle.

Traffic congestion and unexpected delays not only inconvenience travellers, but also lead to lost revenue for local businesses. As well as seeking to reduce the volume of traffic, it is vital that we effectively manage the performance of our urban roads through the implementation of the Council's *Traffic Management Strategy*.

As set out in **Policy 3 – Congestion and Network Resilience**, interventions will include:

- Further developing the capability of the Essex Traffic Control Centre to improve the monitoring, operation and control of traffic and driver information to enable us to better manage heavy traffic flows and respond in a coordinated way to incidents and collisions;
- Concentrated measures to increase capacity or better manage traffic at congestion hotspots;
- Information to motorists (including real-time information through variable message signs) to direct them along the most appropriate routes, avoiding congestion hotspots;
- Working in partnership with the Essex district councils to improve the management of parking within urban areas, including the possible development of Park & Ride facilities to remove traffic from congested corridors;
- Stronger parking enforcement, particularly where illegally parked vehicles impede traffic flows or block access by public transport; and

- Working with partners to improve the management of goods deliveries, ensuring that appropriate vehicles are used and that delivery and loading does not inhibit traffic flows (see **Policy 6 – Freight movement**).

From April 2011, the management of all street-based parking across Essex (including the administration of residential parking permits and the management of parking restrictions and enforcement measures) will be the responsibility of two Essex Parking Partnerships: the South Essex Parking Partnership (between the County Council and Chelmsford Council as the lead Council for the area) and the North Essex Parking Partnership (between the County Council and Colchester Council).

The County Council, working jointly with these partnerships, will develop an Essex Parking Strategy to ensure the management of parking across Essex is consistent with the aims of the Essex Transport Strategy.

Policy 3 – Congestion and Network Resilience

The County Council will facilitate the improved reliability of journeys by:

- undertaking its network management duty in line with the Traffic Management Act;
- monitoring and managing the impact of traffic through the Essex Traffic Control Centre;
- focusing investment on those parts of the network that would give the greatest benefit to the economy and quality of life;
- using a functional hierarchy of routes to manage traffic;
- working with operators to improve the punctuality of bus services;
- minimising disruption by co-ordinating and managing the impact of roadworks undertaken by the County Council and utility companies; and
- applying the Speed Management Strategy.

Improving local bus services

Local bus services play a key role in providing good connectivity. The Council's *Passenger Transport Strategy* will identify a network of 'Core Bus Routes' (see **Policy 4 – Public Transport**), which will include those routes serving rail and bus stations, large employment sites/areas, new residential/commercial/business developments, town centres and strategic Park and Ride sites.

Our approach to improving the attractiveness of services along these routes will include:

- Agreeing joint commitments between the Council and bus operators to improve the quality of bus services on poorly performing routes;
- Working in partnership with operators to improve the punctuality of buses on routes, corridors or areas where there are particular issues, including the use of cost-effective bus priority measures (where necessary and practicable) to improve the reliability and punctuality of services; and

- Ensuring that accurate, consistent and up-to-date information is available on local services through a range of media (including Real Time Passenger Information) and in a manner in which it can be clearly understood by all.

Policy 4 – Public Transport

The County Council will develop the public transport network to assist economic growth and improve access to essential services by:

- focusing development and improvement on a network of core bus routes linking locations that attract significant numbers of people;
- working with commercial bus service operators to improve service reliability, punctuality and accessibility;
- continuing to work in partnership with train operating companies and Network Rail to improve rail services;
- working with bus and train operators to improve integration between bus and rail services;
- working towards the introduction of multi-operator ticketing;
- managing the English National Concessionary Travel Scheme for Essex;
- ensuring that accurate and up-to-date service information is made available through a range of media;
- working with the police and public transport operators to reduce crime and fear of crime when travelling on the transport network; and
- lobbying Government for increased local involvement in the planning and provision of local rail and more effective partnership working with operators over the provision of bus services.

Improving connectivity for pedestrians and cyclists

Encouraging people to consider walking or cycling is important to reducing traffic congestion, as well as improving health and reducing emissions of CO₂. Improving the pedestrian environment is also a significant component of wider initiatives to revitalise and regenerate our town centres.

Focusing on the four main towns and other urban areas with high levels of planned housing growth, we will continue to develop urban cycling networks, walking routes and public rights of way, with particular emphasis on addressing gaps in routes and improving signing, in order to improve connectivity between residential and employment areas, schools and public transport interchanges (see **Policy 14 – Cycling** and **Policy 15 – Walking and Public Rights of Way**).

In accompaniment to infrastructure improvements, the Council will work with local businesses, schools and other significant employers to promote alternatives to lone travelling by car, particularly to encourage more people to choose to walk, cycle or travel by public transport. This will include providing support for the development of school and workplace travel plans and encouraging more flexible ways of working (see Chapter 5).

Case Study: Joined-up planning in North Colchester

Description



The area to the north of Colchester, which includes the former Severalls Hospital site, is one of the largest development areas in Essex, with the planned construction of 6000 new homes and 20 hectares of new commercial development by 2023.

Without careful management, the additional traffic generated by development on this scale would massively over-burden local transport networks and put even greater pressure on Essex's strategic routes (particularly the A12). Building the extra road capacity needed to meet this demand, however, would be neither affordable nor feasible. It would also not provide a long-term

solution and may potentially exacerbate congestion problems elsewhere.

It is essential then, that new housing and employment growth is accommodated without increasing traffic. To achieve this, new development must make provision for and encourage travel behaviours which can be sustained in the long term, particularly by enabling and promoting access by walking, cycling and public transport. For this to happen, it is vital that travel is considered at an early stage, with planners and transport planners working together and engaging private developers and local communities to identify, design and deliver lasting solutions.

The Council has therefore forged a strong partnership with Colchester Borough Council to ensure transport and for land-use planning in the area is joined up, and that developments and transport improvements are delivered in a coordinated way. By working with a range of partners, including the Highways Agency (as the body responsible for the management of the A12), developers and local communities, the team is currently developing a North Colchester Strategy which will identify the investment and supporting measures needed to promote sustainable travel behaviours for those living and working in the area. Particular focus is being given to what is needed to make walking, cycling and public transport attractive choices, including the measures needed to improve connectivity with the town centre by these modes. Once complete, this Strategy will provide a clear guide for developers on what transport provision is needed in their plans.

Key Successes

- Traffic impacts of new development proposals clearly understood and managed from the outset
- Measures to promote sustainable travel behaviours as preferred choice delivered in coordination with new developments
- Impact on surrounding communities and businesses of new development minimised

4.3.2 Providing good inter-urban connections within Greater Essex, with London and with surrounding areas

Key Issues

- Unreliable journey times on key inter-urban roads
- Variable standard of connectivity by public transport – particularly between the Thames Gateway centres

Approach

To enable our economy to grow and to maintain and build on the vibrancy of our towns, we must ensure that centres are well connected to each other by both road and public transport. Our economy is not confined to the Essex boundary, so to secure growth we must also ensure good connectivity with areas adjacent to the county (including London, Southend, Thurrock, Cambridgeshire, Suffolk and Hertfordshire).

Our approach will focus on tackling the causes of congestion and unreliable journey times on inter-urban journeys and improving choices for inter-urban travel (see **Policy 5 – Connectivity**).

Policy 5 – Connectivity

Transport networks will be strengthened to support a vibrant, successful and sustainable future for Essex by:

- improving travel links within and between our main towns;
- focusing investment on routes where improvements will give the greatest benefit to the economy of Essex;
- improving journey times and journey-time reliability by targeting congestion improvement measures (see Policy 10);
- providing for the use of more sustainable forms of travel (see Policy 5);
- ensuring international gateways have effective surface access strategies that promote appropriate and sustainable transport;
- developing appropriate provision of park and ride facilities serving our main towns;
- working with partner agencies to identify and deliver essential improvements to nationally important road and rail connections.

Addressing the causes of congestion will require a combination of measures to tackle specific capacity problems and those to promote changes to travel behaviour which will reduce the volume of traffic.

Tackling congestion and journey-time unreliability on inter-urban routes

Inter-urban journeys are supported by both the Highways Agency-managed trunk roads and motorways (including the A12, A120, M11 and M25) and the Council-managed road network. For the routes for which we are responsible our approach will focus on

measures which will enable our inter-urban routes to operate efficiently and safely (see **Policy 3 Congestion and Network Resilience**). This will include:

- managing access to strategic inter-urban routes to maintain good traffic flows;
- providing real-time information to drivers to ensure that they can follow the most suitable routes and that congestion hotspots can be avoided (whenever an appropriate alternative route is available);
- identifying targeted congestion alleviation measures for key problem areas including management measures to improve traffic flow (for instance through better traffic signalling or changes to signal phasing), or minor capacity enhancements (for instance through junction improvements);
- keeping routes which are vital to the functioning of Essex well maintained and ensuring they support safe travel throughout the year (see Chapter 7);
- coordinating planned roadworks (whether by the Council or utilities companies), and managing their impacts so that disruption to all road users is minimised (see Chapter 7); and
- working in partnership with the police, the Highways Agency and our neighbouring authorities to manage the impact of accidents, incidents or planned events

To guide our approach and prioritise investment, we will produce a revised *Traffic Management Strategy* which will set out in greater detail how and where measures will be implemented.

For those inter-urban routes where the Council is not responsible, we will continue to press for investment by Government to enhance capacity and improve resilience (see discussion in the next section of this chapter). We will also consider alternative ways in which enhancements could be delivered, working with the Local Enterprise Partnership to explore funding opportunities.

Improving choices for interurban travel

To make best use of our inter-urban routes, we need to ensure that people are provided with alternatives to travelling by car which are convenient, reliable, easy to use and punctual. Accompanying the measures identified above we will:

- promote and provide up-to-date information on alternatives to travelling by car between our centres to help minimise traffic levels (see Chapter 5).
- deliver improvements to support improved punctuality and reliability for inter-urban bus services (see **Policy 4 Public Transport**);
- seek to reduce journey times by public transport for inter-urban trips, particularly through working with operators to better integrate services;
- lobby Government for improvements to local and commuter rail services;
- work with planning authorities and Government to deliver new or enhanced railway infrastructure needed to support housing growth, including North Chelmsford Station;

- deliver measures to improve the ‘end-to-end’ journey experience of public transport users, particularly by making it easier to access and change between services (see Chapter 8); and
- work with neighbouring London boroughs and Transport for London to develop connections between Essex and Greater London (including London Underground, bus or cycle connections).

As well as improving physical connectivity, ‘virtual’ connectivity provided by better telecommunications networks will help to bring our communities closer together. Through the ICS, the Greater Essex councils will seek to drive the expansion of high speed broadband and mobile phone network coverage, enabling increased home working and greater opportunity for tele-conferencing.

Improving connectivity across the Thames Gateway

As the largest regeneration and development area in Essex, the revitalisation of the Thames Gateway will be critical to the ongoing success of the county’s economy. Providing good connectivity along the Thames Gateway corridor will be crucial to securing the inward investment needed. Significant improvements are already underway (see case study overleaf), but further investment is essential if the transformation of the areas is to be achieved.

Among the most significant initiatives needed to improve connectivity is the South Essex Rapid Transit (*sert*) system which will provide a high-quality, fast, frequent and reliable link between the three main Thames Gateway areas of Basildon, Southend-on-Sea and Thurrock. With many of the features of a tram, but at a lower cost, *sert* will use high quality, environmentally friendly and accessible vehicles, running where needed on dedicated lanes, with priority at traffic lights to ensure fast and reliable journey times. With frequent services, passengers will simply be able to “turn-up-and-go”.

By serving existing rail and bus interchanges and linking with other local public transport services, *sert* will help to deliver a fully integrated public transport network for the Thames Gateway, connecting homes, jobs and other destinations. Delivering *sert* is therefore essential not only for economic growth, but for the wellbeing of local residents and in securing a low carbon future for the area.

In recognition of its importance to Greater Essex, *sert* is being jointly promoted by Essex County Council, Thurrock Council, Southend-on-Sea Borough Council and bus operators. The scheme has been identified by Government as one which has significant potential to offer value for money and we are working together to secure funding for its delivery.

Further details on *sert* and our progress can be found at www.sert.org.uk.

Improving Connectivity in the Thames Gateway

Description



Thames Gateway South Essex forms part of a national priority area for growth. The transformation of the area, however, is currently constrained by inadequate transport links, leading to significant congestion and a lack of attractive travel choices.

As one of the most important, but also most frequently congested, corridors in the Thames Gateway, the A13 is a major focus for improvement.

A lack of capacity has led to slow and unreliable journey times and is discouraging inward investment. Addressing this is a major priority for the Council and we are currently implementing two major initiatives which will significantly improve journeys for all types of road user and significantly contribute to the capacity needed to support future growth.

The first of these is the £6m package of **A13 Basildon to Hadleigh Passenger Transport Improvements** which will be completed in spring 2012. This will:

- make bus services more attractive and improve the availability of information – by providing new shelters and electronic real-time information;
- make services more reliable – by increasing the provision of bus lanes, delivering minor junction improvements and by enabling traffic signal priority for services which are late;
- make buses more accessible – through improved facilities for those with disabilities;
- lead to wider benefits for all road users – including though the signalisation of Tarpots junction which will improve traffic flow and safety.

The second is the £63m **A13/A130 Sadlers Farm junction scheme**, which is one of only two major highway schemes to be approved by Government in its current spending round. From early 2012 this will:

- improve journey time reliability by providing a direct link between the A13 to London and the A130 to Chelmsford, thereby bypassing a busy junction
- tackle congestion and enable growth by widening the westbound A13 from the junction to the Pitsea Interchange and the northbound A130 to the Rayleigh Spur roundabout
- reconfigure the existing junction into a conventional signal controlled roundabout, with all approaches widened and dedicated bus, pedestrian and cycle routes. Traffic signal timings will be able to respond to traffic levels, with the system linked to the signals within the A13 Passenger Transport Corridor.

Key Successes

- Reduced journey times and improved journey time reliability for all road users
- Increased capacity to support enable planned growth, with better use made of existing infrastructure
- Improved attractiveness of public transport choices

4.3.3 Maximising the benefit to the local economy of Greater Essex's international gateways and strategic transport links to the rest of the UK

Key Issues
<ul style="list-style-type: none"> ▪ Limited capacity of strategic road and rail networks to accommodate forecast growth in demand ▪ Strategic routes particularly vulnerable to disruption ▪ Limited choices for travel to Stansted Airport from within Essex ▪ Limited capacity at Dartford Crossing, potentially compromising economic growth in the Thames Gateway

Approach

Our strategic transport networks and international gateways provide Essex with excellent connections to the rest of the UK and beyond. They are a key attractor for inward investment and vital to maintaining the competitiveness of local businesses, particularly those operating in wider domestic and global markets. Our international gateways also support a range of supporting industries, offering significant potential for business growth with proposed expansions. It is therefore crucial that we enable the full benefit of this to be realised by ensuring that good connectivity is provided to the strategic road and railway network and to our ports and airports.

Improving connectivity with the international gateways

The international gateways within and adjacent to Essex account for a significant proportion of freight movements within the county and we will work with partners to ensure these are made in an efficient way. As outlined in **Policy 6 – Freight Movement**, we will seek to facilitate the movement of freight in a number of ways, including by:

- Supporting, in principle, improvements to rail freight access to international ports, including the proposed capacity enhancements between Harwich Haven Ports and the Midlands and the planned rail freight hubs in neighbouring Thurrock at London Gateway and West Thurrock;
- Facilitating a shift towards rail freight by working with district councils to safeguard existing rail freight facilities and promote their use by encouraging development in their vicinity;
- Considering whether use could be made of Essex's waterways for freight transit, where these may offer a viable and sustainable alternative to road and rail transportation.

In so doing, however, it will be important to maintain an appropriate balance between the needs of the economy and the quality of life of Essex residents, particularly to ensure that freight traffic does not impact on the character or integrity of our natural, built and historic environment (see Chapter 5).

Policy 6 – Freight Movement

The Council will manage the efficient movement of freight within the county by:

- working with operators to ensure that heavy goods vehicles use identified routes and that other freight traffic uses the most appropriate routes;
- working with local businesses to promote and support the sustainable distribution of goods;
- working in partnership with the Highways Agency and neighbouring authorities to provide live travel information to freight operators;
- encouraging a shift of freight from road transport to rail transport.

As well as promoting the efficient movement of freight to and from our international gateways, it will also be important to ensure that employees and passengers accessing our international gateways are provided with travel choices. In particular we will:

- work with the operators of airports and ports to ensure that Travel Plans are regular monitored and reviewed;
- help to promote access to all international gateways by sustainable forms of travel; and
- help to ensure that the international gateways are well connected to surrounding areas, particularly by public transport.

Improving the strategic road corridors

Improving the capacity and reliability of the strategic road corridors in Essex is essential to support economic growth in the county and to enable the expansion of our international gateways. Whilst out of direct Council control, we will ensure that the needs of our residents and businesses are adequately understood by Government and will continue to lobby strongly for additional investment in our trunk roads and motorways. In particular we shall continue to press for:

- improvements to the resilience of the A12, in accordance with the recommendations of the independent A12 Inquiry;
- improvements to the A120 corridor, especially those needed to support the proposed expansion of the Haven Ports; and
- improved access to the strategic road network from within Essex (for instance access to the M11 from West Essex and access to the M25 from the Thames Gateway).

Increasing cross-Thames capacity

One key area of concern is the current lack of capacity at the Dartford Crossing. It is essential that this issue is addressed, not only to support economic growth and regeneration within the Thames Gateway area, but also for the long-term efficiency of this vitally important national route. In collaboration with Kent County Council, Southend-on-Sea Borough Council and Thurrock Council, we will therefore continue to lobby Government to provide a new Lower Thames Crossing. We will also work with the

new Local Enterprise Partnership to explore alternative ways in which this could be delivered.

Improving the strategic railway connections

As with our strategic road network, significant investment in our railway network is needed to alleviate existing capacity and reliability problems and to ensure that there is sufficient capacity in future to accommodate growth in rail travel. The Council will therefore press Government for:

- a greater role in the management of local rail services, particularly by seeking greater involvement in the rail franchising process; and
- investment in rail infrastructure, especially the Great Eastern Mainline, to alleviate overcrowding levels and improve resilience.

4.4 Further work

Action	Timescale
• Working with Essex districts to develop local planning documents	Ongoing
• Update of the Council's Traffic Management Strategy	Medium-term
• Development of an Essex Parking Strategy	Medium-term
• Development of a revised Passenger Transport Strategy	Medium-term

5. Reducing carbon dioxide emissions and protecting our environment

5.1 Introduction

The ability to travel is an essential requirement of all our lives. However, the choices we make about how we travel have unwanted impacts on the world around us and on the health and quality of life of our residents.

Transport is one of the most significant contributors of the UK's carbon dioxide (CO₂) emissions, with approximately a quarter of the UK's domestic CO₂ output coming from road vehicles.¹ Reducing CO₂ is a key Government policy and an aspiration for everyone in the developed and developing world. Reducing the carbon footprint of travel will therefore be critical to achieving the Government's commitment to an 80% reduction in CO₂ by 2050.

The Council has a vital role to play in helping to deliver this reduction and in supporting the transition towards a low carbon future. This includes enabling and promoting travel by lower carbon modes of transport (including public transport, walking and cycling), minimising emissions from our own operations and encouraging wider lifestyle and behavioural changes (for instance home working and car sharing). Equally, we have a role in helping to ensure that in accommodating growth in homes and jobs we do not add to Essex's carbon footprint, by working with partners to deliver new development which enables and encourages low carbon travel choices.

We must also seek to protect our habitats and biodiversity, the county's largely rural character, and the built and historic assets which all contribute to Essex's uniqueness and attractiveness. Transport, for instance, can encroach on protected areas, even if it does not do so directly (for instance by reducing tranquillity through traffic noise), so it is important that we carefully monitor and manage its potentially negative impacts on the environment around us.

For our residents, emissions from transport can disproportionately affect those with medical conditions. Poor air quality, caused by airborne pollution has been demonstrated to negatively impact on our health, with those who already have lung weaknesses or heart conditions most likely to be affected. Cars, vans and lorries are among the largest sources of airborne pollutants in the UK, emitting harmful gases (including nitrogen dioxide) and fine dust particles (known as particulate matter or PM).

Our aim therefore is to provide a transport network in Essex which fits harmoniously within the natural, built and historic environment; to ensure people are not negatively affected by others' travel; and to demonstrate leadership in reducing CO₂ emissions from travel.

¹ Department of the Environment and Climate Change, 2008.

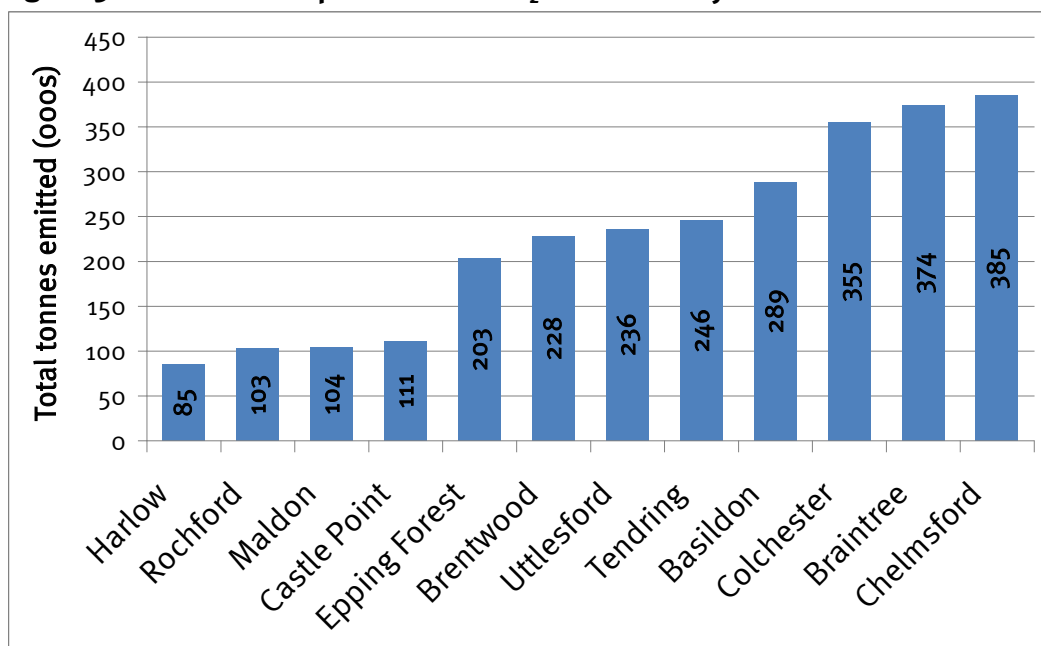
5.2 Evidence Base and Analysis

5.2.1 Transport-related CO₂ emissions in Essex

Current CO₂ emission levels

Road transport is one of the largest sources of CO₂ emissions within Essex, accounting for 30% of all the county's emissions. In total, 2.7 million tonnes of CO₂ are emitted from vehicles travelling on Council-managed roads each year, with a district level analysis (see Figure 5.1) indicating that over 40% of these emissions come from four Essex districts (Chelmsford, Braintree, Colchester and Basildon).²

Figure 5.1 – Road Transport-related CO₂ emissions by Essex district



Source: National Indicator 186, Local Authority CO₂ emissions (2008)

When considered as CO₂ emissions from transport per person (currently just below 2 tonnes per Essex resident), levels in Essex are in line with other nearby authorities, but above the national average.³ Reflecting the diverse character of Essex, there is considerable variation in per person emission totals between our districts and boroughs. In contrast to the district emission totals, this analysis shows levels to be generally higher in the more rural parts of the county (see Figure 5.2 overleaf).

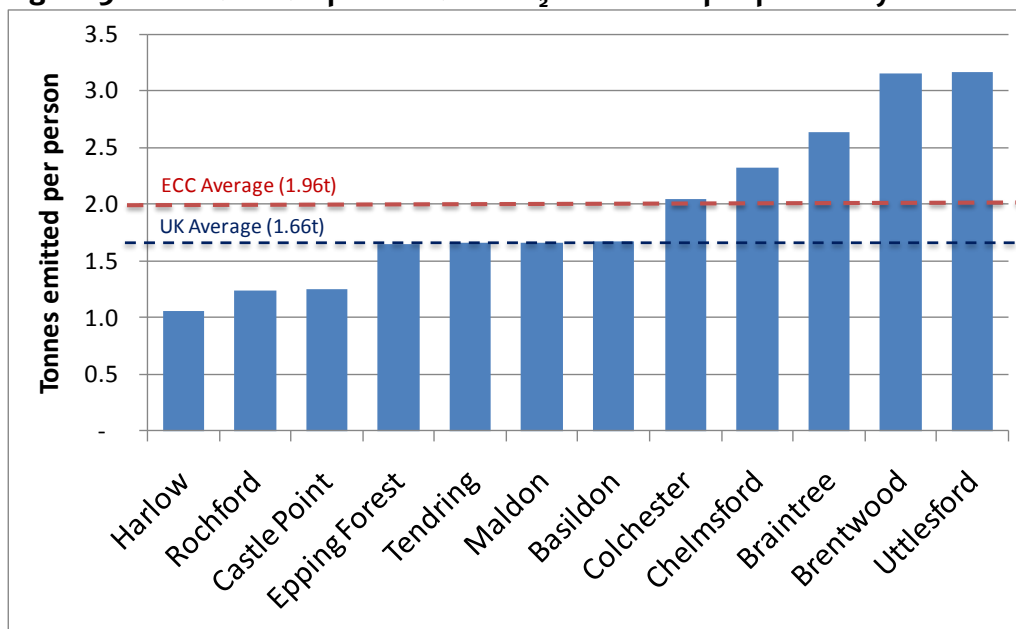
Car and van traffic on the A road network is the largest contributor; an indication of the current importance of car travel for the majority of trips in Essex. Whilst rail patronage is high (particularly for commuters to London) and bus patronage and cycling levels have been increasing in recent years, more is needed to be done to provide attractive alternatives to car travel which meet people's needs and expectations.

² Based on emissions for local authority managed roads as reported in NI186, 2008

³ Based on data provided by Department Energy and Climate Change for Essex in 2008.

Without remedial action, CO₂ emissions from transport in Essex will continue to rise. A study commissioned by the East of England Development Agency forecasted that this rise could be as much as a third by 2031.⁴ Identifying a way to achieve a continuing reduction in CO₂ emissions, without compromising the benefits of transport is a crucial challenge for this strategy.

Figure 5.2 – Road Transport-related CO₂ emissions per person by Essex district



Source: National Indicator 186, Local Authority CO₂ emissions (2008)

Low carbon travel choices in Essex

Increasing the proportion of people travelling by public transport will have a key role in reducing CO₂ emissions. Annual patronage on local bus services grew to over 44 million in 2010 – with over 6 million more passengers than 2003/04. However, it is not clear the extent to which the 12% growth in patronage since 2006 has been as a result of the introduction of the national concessionary fare scheme.

Satisfaction amongst bus users has also improved, with most people who use the bus in Essex satisfied with local services and very few expressing dissatisfaction. Whilst this is good, when asked about specific aspects of their service, fewer were satisfied. Value for money attracted most dissatisfaction followed by bus information, reliability and frequency. Similar concerns were raised about rail travel, with value for money again the main area of dissatisfaction. However, levels of satisfaction are improving, especially with regard to key areas of performance such as punctuality.⁵

Cycling levels also have significant potential for growth, with over 30% of commuters travelling fewer than 3 miles to work, but only 3% by cycling. Similarly, 15% of trips to work are less than 2km in length (1.25 miles) but only 8% of commuting trips are made on foot.⁶ Significant increases in cycling in Colchester and Harlow have been achieved through sustained investment in cycle networks and promoting cycling, indicating that

⁴ As identified within the East of England Transport and Carbon Study (TraCS), EEDA, 2009.

⁵ As taken from the '2009 Essex Bus Satisfaction Survey'

⁶ Based on reported levels in the 2001 census.

there is significant opportunity for growth. Similarly reductions in car travel for trips to schools in Essex and accompanying increases in the proportion of students walking indicates also indicate what may be achieved through travel planning and promotion.

As discussed in Chapter 8, there are a number of barriers which will need to be overcome. Poor perceptions of the safety of cycling or walking remain a concern and there are also significant gaps in our public rights of way and cycling networks which can prohibit their greater use.

Other travel options and lifestyle changes will need to be promoted if CO₂ reductions are to be achieved. As identified in the ICS, high speed broadband coverage in Essex is not comprehensive, making it difficult to promote greater working from home or teleconferencing. Facilities for alternative fuelled vehicles (including electric vehicles) are also limited and will need to be increased if their greater use is to be encouraged.

In addition to reducing the CO₂ emissions generated by existing activities in Essex, we must ensure that new housing and employment development is accommodated in a way which supports a sustained overall decline. This will mean ensuring that new development enables and encourages low carbon travel behaviours.

5.2.2 Air quality in Essex

As well as being a major emitter of CO₂, road transport is also a significant source of the pollutants that lead to poor quality. To protect us from harmful emissions, there are internationally agreed maximum levels for each type of airborne pollutant. Where these are exceeded, the relevant district or borough council is required to declare an Air Quality Management Area (AQMA) and to work with the County Council to develop and implement an Air Quality Action Plan (AQAP) which will reduce these to acceptable levels.

At present, 15 AQMAs have been declared by Essex districts as a result of transport-related pollutants – principally nitrogen dioxide (NO₂) or particulate matter (PM₁₀). Of these, 7 have agreed AQAPs. Pollutant levels are also close to acceptable limits at a number of other locations across the county, indicating that further transport-related AQMAs may be declared in future, unless mitigating action is taken.

5.2.3 Transport and the environment

Our natural environment, built environment and rich heritage is part of what makes Essex a special place to live. As discussed in Chapter 3, Essex is predominantly rural in character, with a diverse wildlife and important historic features. However, current and future development pressures could threaten our landscape, rural tranquillity and urban character, as well as threatening our historic buildings and biodiversity, and degrading our water resources.

Appropriate planning and implementation of transport interventions can play an important role in mitigating existing environmental problems and in minimising the impact that new transport schemes have on the wider environment, particularly through the sensitive and sympathetic planning and design of transport projects. We

also carry out appropriate assessments of the environmental impact of our transport projects

Urban regeneration is a high priority for many centres within Essex and especially improving the quality of the public realm. There will be a need to make sure transport contributes to a higher quality built environment as part of the redevelopment of town centres and regeneration projects in particular, whilst also ensuring that this is done sympathetically with the local character and with historic features.

5.2.4 Summary of key issues

On the basis of the evidence summarised above, we have identified three key changes for reducing CO₂ emissions and protecting our environment. These challenges and the headline issues are summarised in the table below.

Challenge	Key Issues
Reducing the carbon intensity of travel in Essex	<ul style="list-style-type: none"> ▪ Dependency on single occupancy car or van travel ▪ Future housing and employment growth and potential to increase CO₂ emissions ▪ Variable availability of low carbon travel choices
Reducing pollution from transport to improve air quality in urban areas and along key corridors	<ul style="list-style-type: none"> ▪ 7 agreed Air Quality Action Plans, with the number likely to grow ▪ High traffic volumes in urban areas, with many sections of road close to full capacity
Protecting and enhancing the natural, historic and built environment	<ul style="list-style-type: none"> ▪ Vital need to safeguard natural, historic assets which include: <ul style="list-style-type: none"> ○ Multiple protected habitats and landscapes, including 3 Special Areas of Conservation and 11 Special Protection Areas ○ Unique historical buildings and archaeological features, reflecting Essex's rich history, include 215 Conservation Areas and around 14,000 listed buildings ▪ Town centres in need of regeneration

5.3 Challenges and Approach

The relationship between the three challenges, the fifteen transport policies and the service delivery strategies is summarised in Figure 5.1. The following discussion outlines our approach to addressing each challenge.

5.3.1 Reducing the carbon intensity of travel in Essex

Key Issues

- Dependency on single occupancy car or van travel
- Future housing and employment growth and potential to increase CO₂ emissions
- Variable availability of low carbon travel choices

Approach

Our approach to reducing the carbon-intensity of travel will focus on enabling and encouraging the take-up of lower carbon travel choices, reducing CO₂ emissions from road traffic, and where possible promoting alternatives to travel (see **Policy 7 – Carbon Reduction**).

Policy 7 – Carbon Reduction

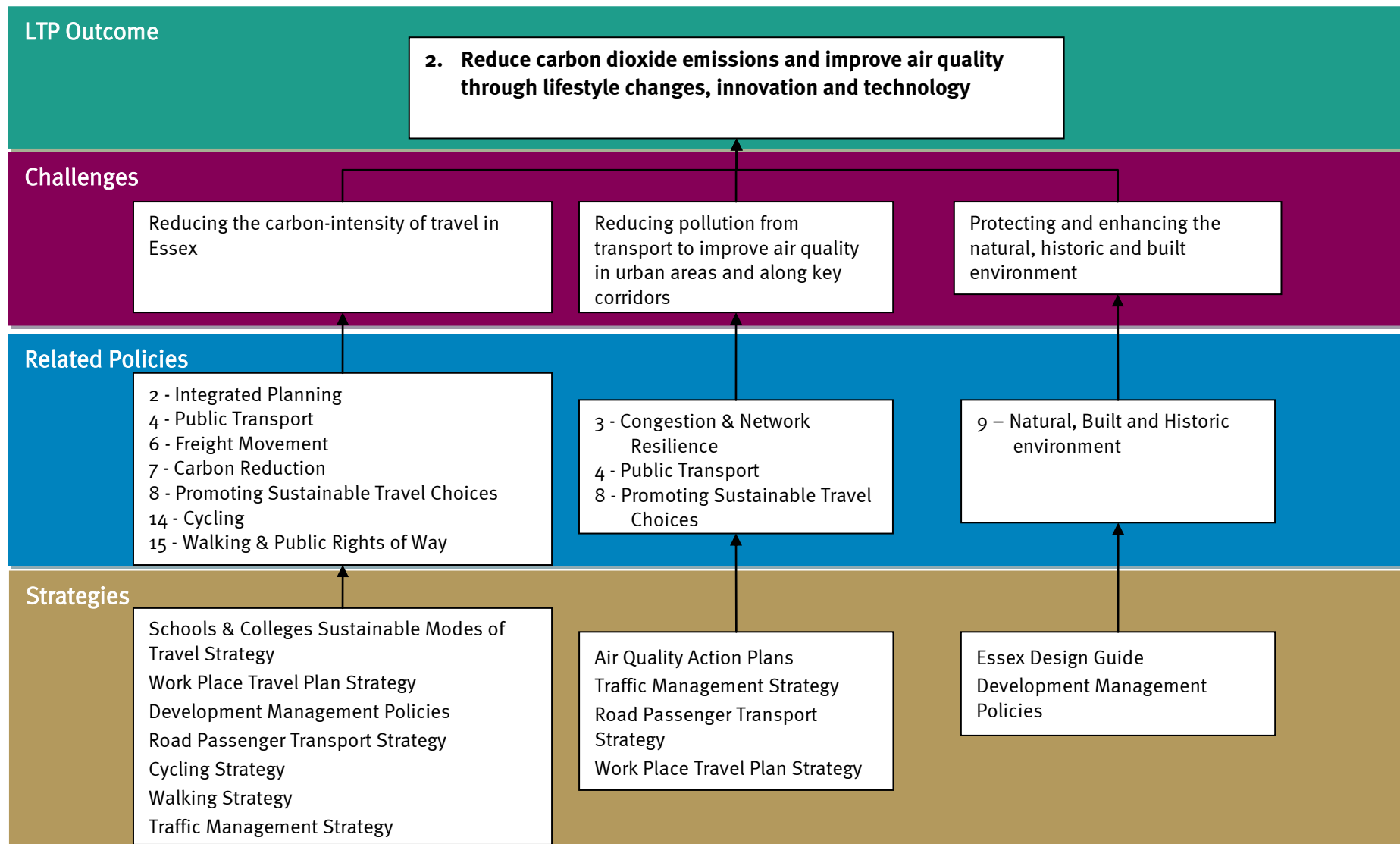
Essex County Council will support and encourage the use of lower carbon travel by:

- promoting the use of more sustainable forms of travel (Policy 8);
- ensuring new developments minimise the number and length of trips made by private vehicles (Policy 2);
- supporting use of emerging low-carbon technologies to reduce carbon emissions from transport sources;
- ensuring the Essex road network operates efficiently to minimise CO₂ emissions from vehicles; and
- adopting measures to improve energy efficiency and further reduce carbon emissions arising from our own activities.

Promoting low carbon travel choices and behaviours

With a high proportion of trips to work being short in length and the majority of these being made by car (see Chapter 3), we will work with employers to develop and implement workplace travel plans which encourage the take up of healthy and low carbon travel choices (see **Policy 8 – Promoting Sustainable Travel Choices**). This will include promoting alternatives to travel – for instance the benefits of home working and the savings offered by virtual meetings as an alternative to face-to-face meetings.

Figure 5.3 – Reducing CO₂ emissions and improving air quality



School travel is another area on which we need to focus if we are to achieve long-term changes in travel behaviour.

Most schools and colleges in Essex now have a travel plan in place and these have already led to significant rises in the numbers of students arriving on foot or by bicycle and reductions in car travel. To sustain and build on this progress, we will continue to work closely with schools and colleges to promote low carbon choices, ensuring that travel plans remain active and are regularly monitored and that students are provided with the information, skills and facilities to use them (as outlined in our *Schools & Colleges Sustainable Modes of Travel Strategy*).

The Council will continue to engage with those schools currently without a travel plan will also ensure that proposals for new school facilities (including the significant expansion of existing sites) are accompanied with appropriate travel planning measures.

Policy 8 – Promoting Sustainable Travel Choices

The County Council will encourage the use of more sustainable forms of travel by:

- consistently supporting and promoting sustainable travel;
- providing infrastructure for sustainable transport;
- working with partners and service providers to promote the use of sustainable forms of travel and to identify new ways to provide services;
- requiring effective travel planning for proposed developments in line with the Council's current development management policies;
- developing effective travel plans with existing work places, schools, and other locations that attract a significant number of people;
- promoting access by sustainable forms of transport to the county's railway stations, ports and airports.

Making low carbon travel easier

We understand that people are less likely to choose lower carbon forms of travel choices unless they provide a convenient, safe and attractive alternative to the ways they currently travel. In particular, we appreciate people's experiences throughout a journey have a major influence on their choice of how to travel, not just their satisfaction with the major part; for instance if there is nowhere to securely keep your bike at the end of their trip, cycling is likely to be an unattractive choice, even if the cycle network is good.

If we are to encourage greater use of more sustainable forms of transport, we must therefore aim to improve 'end-to-end' journey experiences (i.e. by ensuring that from the point at which people leave their door through their point of arrival at their destination their journey can be undertaken with minimal difficulty).

The ways in which we will do this include:

- improving facilities at railway stations for pedestrians, cyclists and bus passengers, making it easier to walk or cycle from home or to change between bus and train (using the lessons learnt through the Station Travel Plan pilot at Colchester to inform our approach);
- working with employers to encourage them to provide suitable facilities for those who choose to walk or cycle to work (for instance secure lockers, cycle stands and showers)
- working with public transport (bus and rail) operators to simplify and better integrate ticketing (including smartcards, multi-operator or area ticketing schemes) and to better co-ordinate the times and routes of services to make it easier for users to change between them (see **Policy 4 – Public Transport**); and
- providing people with easy to understand and sufficiently detailed information on travel options for individual journeys (including walking and cycling routes) to enable them to make informed choices.

Most trips involve walking at some stage, and we will deliver measures to improve the extensiveness and ease of use of walking and cycling routes – especially where these provide access to employment, stations and bus interchanges and essential services (see **Policy 14 – Cycling** and **Policy 15 – Walking and Public Rights of Way**). As directed by our refreshed *Cycling* and *Walking* strategies and our *Rights of Way Improvement Plan*, our approach will focus on:

- addressing gaps in existing networks;
- better linking walking and cycling routes with the Public Rights of Way network;
- improving signing;
- improving crossing facilities; and
- ensuring that pedestrian routes are accessible for everyone.

If walking and cycling are to become simple and safe travel choices, it is essential that pavements, public rights of way, cycle routes and public spaces are accessible for all those who will use them. To support us in identifying barriers and in developing appropriate improvements, we will therefore continue to work closely with local communities, disability groups, cycle groups and other local partners (see Chapter 8).

Reducing carbon emissions from road traffic

We recognise that for many people in Essex, their car or van is their primary mode of transport and that, given the convenience and flexibility this offers, the attractiveness of travelling this way over other choices is unlikely to change. It is therefore important that we consider how we can to help lower the levels of CO₂ currently emitted by vehicles.

One approach will be through measures to improve traffic flows, in order to reduce the time spent in congestion. Reductions in average journey times around Chelmsford and Colchester have, in large part, been achieved by being able to better manage traffic through investment in intelligent transport technologies (including traffic signal control

improvements, traffic cameras and variable message signs). This has enabled us, through the world-renowned Essex Traffic Control Centre (ETCC) to respond quickly to the causes of congestion and delay to keep traffic moving. The Council will therefore continue to build on the capability of the ETCC, exploring and developing innovative solutions which improve traffic flows and making use of cutting edge technologies where these offer value for money solutions.

Secondly, the Council will facilitate the take-up of electric and other ultra-low emission vehicles. This will include working with the Essex district councils and developers to identify appropriate points for refuelling facilities, for instance by promoting the provision of electric vehicle charging points within new developments. Other options will be explored as new technologies emerge.

Minimising transport-related CO₂ emissions from new developments

The Essex districts' plans for housing and economic growth are among the most ambitious in the country and we must ensure that this growth is not accompanied by an equivalent rise in transport-related CO₂ emissions. By working closely with developers and planning authorities we will ensure that, from the outset, new developments are planned to promote sustainable travel (see **Policy 2 – Integrated Planning**); enabling and encouraging those who will live, work or visit there to make travel choices which will minimise road traffic growth.

In accordance with the Council's *Development Management Policies*, proposals will therefore need to demonstrate that adequate provision is to be made for public transport, walking and cycling, with appropriate links provided to existing networks. The Council's current parking standards will ensure that suitable facilities are provided for alternatives to the private car and that car traffic growth is minimised.

For all new residential developments, a 'Transport Information and Marketing Scheme' will be required, providing those moving in to them with information on local public transport services, walking and cycling networks and facilities and other low carbon travel opportunities. Non-residential proposals for developments which will employ more than 50 people will be required to provide a Travel Plan, setting out how the development will support access by low carbon forms of transport.

Reducing carbon emissions from our own operations

We recognise that if we are to encourage others to reduce to their CO₂ emissions, we must lead by example. The Council will therefore continually review the ways in which we operate to identify opportunities to lower our own carbon footprint. This will include:

- reviewing our highway maintenance practices to identify opportunities to reduce their carbon footprint (for instance by considering the source of materials as part of the material selection process);
- Identifying opportunities to improve the energy efficiency of street lighting and other traffic equipment (including traffic lights and lit bollards);

- Promoting sustainable travel by Council employees by supporting low carbon travel choices for commuting and business trips, discouraging unnecessary travel and maintaining and monitoring travel plans for the Council's main sites;
- Working with our single highways services contractor to reduce the carbon footprint of the delivery of operations undertaken on the Council's behalf; and
- Seeking to reduce CO₂ emissions from our own vehicle fleet, for instance by investing in low-carbon vehicles when replacements are needed.

The Council is currently developing its carbon reduction policy which will extend to our transport-related operations.

5.3.2 Reducing pollution from transport to improve air quality in urban areas and along key corridors

Key Issues
<ul style="list-style-type: none"> ▪ 7 agreed Air Quality Action Plans, with the number likely to grow ▪ High traffic volumes in urban areas, with many sections of road close to full capacity

Approach

In line with our approach to CO₂ reduction, our strategy for addressing poor air quality will focus on reducing traffic levels and vehicle emissions.

Measures to improve air quality will be prioritised within identified AQMAs where AQAPs have been agreed. Whilst actions will be tailored to respond to specific issues in each, our approach is likely to include:

- Promoting the use of less polluting forms of travel – particularly public transport, walking, cycling and travel sharing (see **Policy 8 – Promoting Sustainable Travel Choices**);
- Identifying opportunities to improve the movement of traffic, including possible changes to traffic signalling and parking and loading restrictions (see **Policy 3 – Congestion and Network Resilience**); and
- Working with local businesses and logistics companies, to ensure that HGV traffic follows the most appropriate routes (see **Policy 6 – Freight Movements**).

We must also take steps to ensure that there is no further deterioration in air quality within existing AQMAs, particularly in locations where there are plans for significant regeneration and growth. In accordance with the Essex County Council Development Management Policies, new development will only be permitted within a designated AQMA where it can be demonstrated that it will have no detrimental impact on air quality or where appropriate mitigating actions are undertaken by the developer (see **Policy 2 – Integrated Planning**).

Case Study: Cycle Colchester

Description



Since 2008, Colchester has been the home of a cycling revolution. Selected by the Government as one of 18 UK Cycling Towns, over £4 million has been invested in improving the cycling experience and getting more people onto their bikes through the 'Cycle Colchester' project.

'Cycle Colchester' has represented a new way of promoting cycling; bringing together the County and Borough councils, local cycling groups, schools, businesses, residents, healthcare professionals and others to identify and deliver

real improvements for cyclists and raise the profile of cycling in the town.

Over three years, the project has established 7 clearly marked safe cycle routes, doubled the amount of town centre cycle parking, educated thousands of local school children on the benefits of cycling, worked with individuals to raise awareness of how they could cycle more, and provided hundreds of children and adults with the skills and confidence to cycle.

The project has also been closely co-ordinated with the joint County Council and National Express East Anglia Colchester Station Travel Plan initiative (which includes £2.2 million of improvements), which has improved cycle access to the station, doubled the number of cycle parking spaces for passengers and created a new 'secure cycle park'.

Working collaboratively has enabled far greater progress than could have been achieved by each of the partners working alone. Lessons from the Cycle Colchester project are already being extended to other towns in Essex and we will continue to work with our partners to promote cycling as an enjoyable, healthy and sustainable means of travel.

Key Successes

- 7 clearly signposted and easy to follow cycle routes
- Improved access for cyclists to the town centre and a doubling of cycle parking
- Easier access for cyclists to Colchester station,
- 400% increase in number of children cycling to targeted schools
- 100s of children and adults trained
- More than 1,500 pledges from local residents and visitors to Colchester to cycle more

5.3.3 Protecting and enhancing the natural, historic and built environment

Key Issues

- Vital need to safeguard natural, historic assets which include:
 - Multiple protected habitats and landscapes, including 3 Special Areas of Conservation and 11 Special Protection Areas
 - Unique historical buildings and archaeological features, reflecting Essex's rich history, include 215 Conservation Areas and around 14,000 listed buildings
- Town centres in need of regeneration

Approach

In delivering this transport strategy, we will ensure that our natural, historic and built environment is protected from potentially harmful effects (see **Policy 9 – The Natural, Historic and Built Environment**).

Policy 9 – The Natural, Historic and Built Environment

The County Council will protect the natural, historic and built environment from the harmful effects of transport by:

- designing and implementing transport improvements and maintenance works that retain the integrity of the built environment, natural habitats and biodiversity, the natural and historic landscape, and water quality;
- minimising the visual and noise impacts of transport;
- addressing air quality issues through appropriate measures, particularly in designated Air Quality Management Areas;

Protecting the natural environment

We will work with a range of partners to ensure that any potential impacts on the natural environment are avoided. This will include respecting biodiversity through our planning, decision making and delivery of transport improvements and, wherever possible, maximising opportunities for habitat creation.

We will also take steps to ensure that potential side-effects from new transport infrastructure on the environment are prevented. For instance by:

- Minimising impacts on water courses, by ensuring that new transport infrastructure is designed to minimise the possible impact of storm water run-off and by implementing Sustainable Drainage Systems, where appropriate, to minimise diffuse water pollution from transport sources;
- Ensuring that infrastructure has minimal impact upon the landscape in which it is situated, through the use of appropriate visual screening and planting;
- Reducing the adverse impact of transport from noise, vibration and visual intrusion, especially in areas of tranquillity, by using low noise road surfacing

and screening when constructing and maintaining roads, except where there are other conflicting issues (such as flood risk); and

- Promoting sustainable design and construction practices, including the minimisation of construction waste and the use of local materials and recycled highway materials

The Council has extensive policies which cover the delivery of all services which may impact on our environment. More detail on these can be found on our website (www.essex.gov.uk).

Protecting and enhancing the built and historic environment

Urban regeneration is a key issue for Essex and the Council will continue to work closely with planning authorities and commercial developers to improve the design and environmental standards of new developments and public spaces. This is supported by the renowned Essex Design Guide (produced by the Council-led Essex Design Initiative) which provides guidance on planning and delivering high quality, sustainable urban developments.

Transport infrastructure can impact on the quality of our urban environments, and the integrity of historic centres and sites. The Council will therefore ensure that signs, street furniture (for instance barriers, lights and bus stops) and structural materials used in transport projects are in keeping with the character of the area and contribute to a sense of place. We will ensure that street clutter is minimised (for instance by removing unnecessary barriers or signs), particularly within and around our historic and cultural assets.

Unwanted side-effects from transport can impact on the quality of life of our communities as well as the natural environment – for instance through traffic noise, or light pollution. We will therefore take measures to preserve and improve tranquillity in built-up areas. This will include:

- seeking to reduce noise from traffic – for example, through the use of low-noise surfacing treatments where these offer a value for money solution;
- reducing light pollution, through the better management of street lighting – for instance by changing lighting levels at different times of the night; and
- reducing the visual intrusion of transport infrastructure, through appropriate screening measures.

5.4 Further Work

Action	Timescale
<ul style="list-style-type: none"> • Development of the Council's carbon reduction policy 	Short-term
<ul style="list-style-type: none"> • Updates to the Essex Design Guide 	
<ul style="list-style-type: none"> • Update to the Schools & Sustainable Modes of Travel Strategy 	Medium-term

6. Improving safety

6.1 Introduction

A road network on which all users can travel safely is essential if we are to achieve the Council's aim of providing the best quality of life for Essex residents; with reducing the number of road users who are killed or seriously injured being a key component of the EssexWorks priority of making our communities safer.

Road deaths and serious injuries affect whole communities. It is therefore essential that we continue to work in partnership with Essex Police, Essex Fire and Rescue service, the Highways Agency and the East of England Ambulance Service to do what we can to protect those who live and travel in Essex, particularly those who are most at risk.

Promoting a safe travelling environment is also important to the delivery of the other outcomes of this strategy. To promote greater public transport use or healthier travel choices such as walking and cycling, we need to ensure that people are not only protected, but also have confidence that they will be safe when travelling. Similarly, improving safety is essential to making best use of our transport network, ensuring that our roads are effectively maintained and managed to minimise the risk of collisions and the disruption and delay these can cause.

Our aspiration is for an Essex where all people are able to travel around safely and where people have the confidence to travel by whichever form of transport they choose.

6.2 Evidence Base and Analysis

Road safety

Excellent progress has been made in recent years in improving road safety. Since its formation in 2000 the Essex Casualty and Congestion Reduction Board (a partnership between the County Council, Essex Police, Essex Fire and Rescue Service and the East of England Ambulance Service) has enabled a more co-ordinated approach to improving road safety in Essex, leading to a significant reduction in casualties and fatalities on our roads.

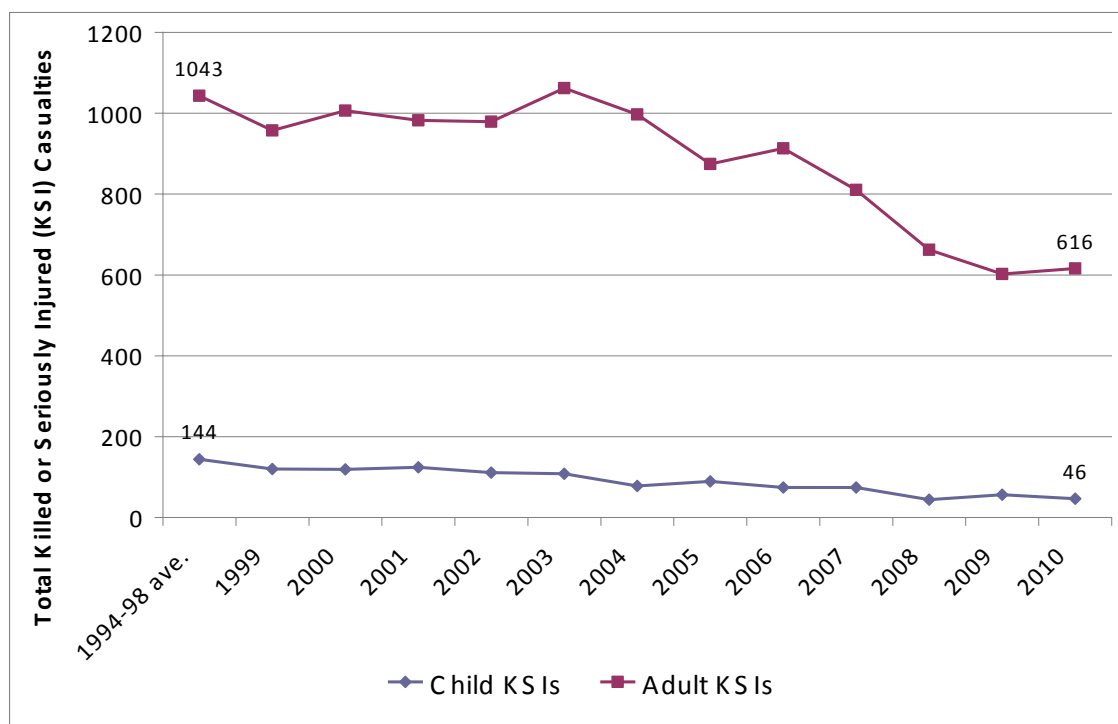
Overall, the annual number of people killed or seriously injured on our roads has reduced by 44% since the late 1990s¹, with the greatest reductions being recorded amongst car drivers and cyclists (with a 56% reduction for each group). Over half of this reduction has been achieved since the publication of the Board's road safety 'Intervention Plan' in 2007 (see Figure 6.2). The work of the Board has also helped to

¹ Based on a baseline of the average number of people killed or seriously injured in one year between 1994 and 1998.

reduce by two-thirds the number of children who are killed or seriously injured on our roads each year.

Importantly, these reductions have been accompanied by an equivalent reduction in number of slight injury casualties (which have reduced by 45% since the late 1990s baseline period), indicating that the improvement has not only been in lessening the severity of injuries caused by collisions.

Figure 6.2 – Annual number of people killed or seriously injured on roads in Essex



However, we are not complacent. The number of people killed or seriously injured each year on our roads is still unacceptable and the rate of progress in reducing this number has varied significantly between different types of road user and different types of road. For instance, the analysis of casualty statistics compiled by the Council² indicates that:

- young men aged between 16 and 25 continue to be particularly at risk of being involved in a serious collision, representing over a fifth (22%) of all those killed or seriously injured on our roads in 2009;
- the rate of reduction in number of those killed or seriously injured on urban roads, whilst having fallen significantly, has been lower than that for rural roads (a 38% reduction for the former between 1994-98 and 2009 compared to a 50% reduction for the latter);
- the number of motorcyclists and moped riders killed or seriously injured each year has fluctuated considerably, with the number of casualties in 2009 slightly above the 1994-98 average. The largest proportion of casualties were young

² Published in 'Road Casualties – Essex: 2009 Annual Report', 2010, Essex County Council

men aged between 16 and 20 (who along with being less experienced also tend to use their motorcycle or moped more frequently for daily travel, rather than leisure use); and

- whilst representing one of the largest overall reductions in percentage terms since 1994-98, the rate of casualty reduction amongst cyclists has slowed since 2006. A key factor in this likely being the growing popularity of cycling, reflected in a rise in the average distance travelled by bike.³

Furthermore, despite significant reductions in casualty numbers, people's perceptions of their safety when using our roads vary. For instance, in a recent survey undertaken on behalf of the Council, more than half of the residents questioned were concerned about the safety of cycling in Essex, with particular concern over the safety of children when cycling.⁴

Personal security

Most people in Essex feel secure when travelling and crime levels are relatively low when compared against other counties⁵. However, fear of crime is a common concern, with reducing crime in Essex frequently identified in Council consultations as being a high priority for our residents (see for instance the Council's recent 'Tracker' survey where reducing crime was the fifth highest priority of respondents). Over a quarter of those responding to the Council's latest 'Tracker' survey also indicated that they did not feel safe when travelling at night⁶, while consultations carried out by Essex Police on community safety have recorded high levels of concern with regard to road safety and the anti-social use of cars (such as speeding).

Crime on public transport is rare. Fewer than 300 recorded incidents of criminal or anti-social behaviour on buses or at bus stations/stops in 2007/08, whilst over 41 million passenger trips were made in the same year⁷. Railway station security is also good, with many of the busiest stations in Essex now with 'Secure Station' accreditation, following a Government-led assessment of their design and management.⁸

Many people's perceptions of their personal safety when travelling by public transport, however, do not reflect the actual level of risk. It is therefore essential that if we are to encourage greater use, people are confident in their ability to use public transport safely.

Security is also a concern for pedestrians and cyclists which can potentially discourage walking and cycling for many short distance trips. Bike theft or vandalism is a particular concern, and if we are to encourage more people to cycle, good cycle security

³ As identified within the Department for Transport National Travel Survey, 2008

⁴ The National Highways and Transport Public Satisfaction Survey, 2010

⁵ Based on Home Office 'Recorded Crime per Authority Area' for 2010, comparing Essex against other Shire counties.

⁶ The '2009/10 Essex County Council Tracker' survey was issued to over 27,000 households.

⁷ 293 incidents were reported to Essex Police during this period.

⁸ 26 stations had been accredited as 'Secure Stations' by the Department for Transport as of October 2009

is required (especially as part of commuting trips where bikes are likely to be unattended for a long period of time).⁹

6.2.1 Summary of key issues

On the basis of the evidence summarised above we have identified two main challenges for improving safety and security within Essex. These challenges and the related issues are summarised in the table below.

Challenge	Key Issues
Reducing the number of people killed or seriously injured on Essex roads	<ul style="list-style-type: none"> ▪ Unacceptable number of fatalities and serious injuries on our roads ▪ Disproportionately high numbers of casualties involving particular groups, behaviours or locations
Working with partners to promote a safe and secure travelling environment	<ul style="list-style-type: none"> ▪ Concerns over fear of crime and personal safety ▪ Security concerns potentially discouraging cycling and public transport use

6.3 Challenges and Approach

Our approach to addressing the two challenges shown above is discussed below. An overview of the relationship between each challenge, the 15 transport policies and the service delivery strategies is shown in Figure 6.1.

6.3.1 Reducing the number of people killed or seriously injured on Essex roads

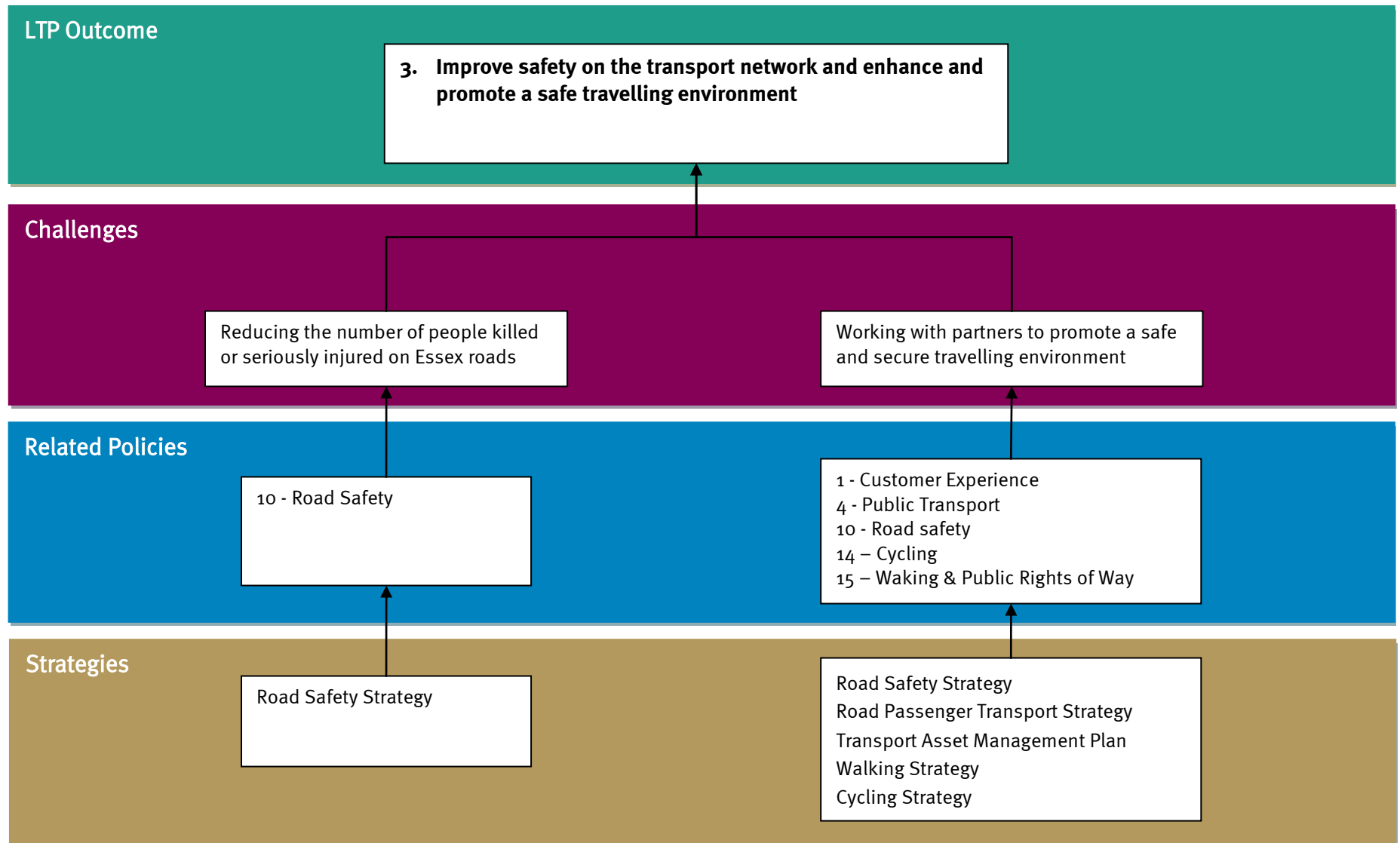
Key Issues
<ul style="list-style-type: none"> ▪ Unacceptable number of fatalities and serious injuries on our roads ▪ Disproportionately high numbers of casualties involving particular groups, behaviours or locations

Approach

Many agencies have a role to play in improving safety and security on the transport network, particularly the police, fire service and the Highways Agency. We have found that strong partnership working is vital, ensuring the highest level of strategic agreement, with all partners being prepared to target shared effort and resources on identified, and ever changing, problem areas.

⁹ A recent report by Transport for London (*Cycling in London, 2008*), for instance, identified the availability and security of cycle parking as the two biggest cycling-related concerns.

Figure 6.1 – Improving safety



Our approach to improving road safety will focus on four key types of intervention: *engineering, education and engagement and enforcement* (see **Policy 10 Road Safety**).

10 – Road Safety

The County Council will work to reduce the incidence and severity of road traffic collisions on roads in Essex by:

- continuing to work within the strong partnership framework provided by the Essex Casualty & Congestion Reduction Board;
- prioritising measures which reduce the number of people killed or seriously injured;
- ensuring Safety Audits are undertaken of all proposed designs of new highway schemes or proposals to materially alter the existing public highway.

Improving safety through engineering

Engineering measures will be used to enhance the safety of roads, with a focus on reducing the number of those killed or seriously injured. Measures will be prioritised using a range of criteria, including the number and seriousness of collisions within a given location and the effectiveness and cost of the scheme. The types of measure to be considered will include:

- signing, road lining and road surface treatments, particularly in locations where there are identifiable and treatable patterns of collisions; and
- measures to make the road environment more forgiving when mistakes happen, using “passive” safety measures, such as removing or protecting hard objects like signposts (a key target for such measures likely being those routes which are frequently used by motorcyclists).

Physical traffic calming measures to reduce speed will only be introduced where this is essential to improve the safety of non-motorised users, to improve the quality of life for residents of the area and where public transport will not be compromised. In delivering all measures, it will also be necessary to ensure the design of the scheme does not discourage walking or cycling.

Safety will be integrated into all other transport improvements and maintenance schemes. All schemes undergo a safety audit or safety assessment, in accordance with the Essex Road Safety Audit Policy. Maintenance schemes will, in addition to improving the condition of the road surface, aim to improve skid resistance.

Changes to signing and lining will also be considered, where these are likely to encourage the safer use of our roads. This will include the removal of white centrelines and introduction of edge-lining on appropriate rural roads to make roads appear narrower and encourage more cautious driving.

Improving safety through education

Education is essential to improve the safety of road users of all ages and will increasingly become the focus of the work of the Essex Casualty and Congestion Reduction Board.

Road safety education and training will be delivered in schools, mainly by teachers and often as part of the curriculum. The Council will also work with schools to develop and maintain a road safety plan as part of their School Travel Plan.

To support both children and adults, we will continue to work with partners to facilitate or provide training for those choosing to walk or cycle so as to equip them with the skills to be safer on the roads.

Other education and training interventions will include:

- initiatives to improve the driving / riding skills of young drivers and motorcyclists, complementing but not replacing training services supplied commercially;
- providing driving offenders with opportunity to attend courses, aimed at achieving lasting changes in their attitude and behaviour (such as the successful ‘Speed Awareness Course’) as an alternative to a Fixed Penalty (where this is deemed to be appropriate by the police); and
- measures to improve the safety of business travel, for instance by providing safety training for Council staff travelling on business and ensuring the employers of contractors appointed by the Council have undertaken appropriate safety training.

Improving safety through engagement and enforcement

Enforcement measures play an important role in road safety – for instance by tackling illegal behaviours and offences and removing unsafe vehicles from our roads. However, to achieve sustained improvements in safety in Essex, the approach of the Essex Casualty and Congestion Reduction Board partners will increasingly focus on using enforcement measures as a means of improving engagement with road users, enabling us to better educate those whose attitudes and behaviour are putting themselves and others at risk.

The Council will continue to provide speed cameras in Essex to help deter speeding and red-light jumping on roads which have a casualty and speeding problem. In keeping with the Board’s emphasis on education over prosecution, the majority of offenders will be offered the opportunity to attend a Speed Awareness course, rather than face prosecution.

The Council will continue to provide support through the Board in the identification and implementation of targeted enforcement measures. This will include roadside support to the police and fire service.

Case Study: Essex Casualty and Congestion Reduction Board Intervention Strategy

Description



The Essex Casualty and Congestion Reduction Board was formed in 2005, bringing together representatives from the Council, Essex Police, Essex Fire & Rescue Service, the East of England Ambulance Service and the Highways Agency to tackle what were at the time rising casualty numbers on Essex's roads in a coordinated and joined up way.

In July 2007, the Board launched its 'Intervention Strategy'; a coordinated plan of action with an emphasis on high profile enforcement, media engagement and very visible public education. Resources from each partner were pooled to deliver joint initiatives which incorporated measures that had proven most effective in the UK and internationally. These included:

- Intense enforcement activities, targeting those most at risk of being involved in a serious collision (including motorcyclists and young drivers) and focusing on the most dangerous behaviours (including drink and drug driving);
- High profile publicity campaigns to inform the public of the increased enforcement and why it was happening and to provide a local edge to national safety campaigns; and
- Community engagement measures, including the 'Community Wheels' vehicle (pictured above) which has travelled to communities across Essex to raise awareness of safety risks and educate people on how to minimise them.

The effect of the Strategy was dramatic. The number of people killed or seriously injured on Essex's roads fell from 987 in 2006 to 884 in 2007. A downward trend in serious collisions has been maintained, with 662 people killed or seriously injured in 2010.

The Strategy has shown that coordinated action is crucial to reducing still unacceptable casualty levels in Essex and the commitment of each of the Board partners to making our roads safer remains undiminished. A new strategy will be published shortly and will provide the focus for the Council's future investment in road safety measures.

Key Successes

- Significant added value through joint working, leading to a step-change in performance
- Number of those killed or seriously injured on Essex's roads each year reduced by a third since the Strategy's introduction (2010 totals compared to 2006)
- Particularly significant reductions in the number of young driver casualties and those killed or seriously injured as a result of speeding offences or through a collision involving a driver who had been drinking

6.3.2 Working with partners to promote a safe and secure travelling environment

Key Issues
<ul style="list-style-type: none"> ▪ Concerns over fear of crime and personal safety ▪ Security concerns potentially discouraging cycling and public transport use

Approach

Improving people's confidence to travel on foot or by bike

The Council will work closely with the Essex district councils, Essex police and local communities to improve people's perceptions of safety when travelling by foot or by bike. The types of measure will include:

- considering the introduction of 20mph speed limits in residential areas, where there is strong community support and where large numbers of pedestrians and cyclists can be expected;
- considering 'Home Zones' as part of new developments, to create shared spaces for cars, pedestrians, cyclists and other non-motorised road users;
- the provision of secure facilities for cyclists at key locations (for instance stations, hospitals or town centres) to reduce concerns over cycle theft;
- offering cycle training to both children and adults to provide people with the skills and confidence to travel safely by bike (see **Policy 14 – Cycling**); and
- working with developers and planning authorities (with the support of the *Essex Design Guide*) to ensure that whenever possible crime and fear of crime are "designed out" as part of new development proposals

All changes to speed limits and other calming measures will be developed in accordance with the Council's *Speed Management Strategy*. Any changes which incorporate physical calming measures or Home Zones will be required to respect the existing character of the surrounding area (see **Policy 9 – the Natural, Historic and Built Environment**).

Improving people's confidence to travel by public transport

The Council will work closely with public transport operators, local communities, the police and other partners to help reassure our residents that travel by public transport is safe.

Many of our railway stations now have 'Secure Station' accreditation and we will continue to work with the rail industry to improve perceptions of safety around railway stations. Where required, this will include high quality and secure cycle parking, high quality and well lit bus infrastructure, good transport information, crossing facilities and general street-scene improvements.

6.4 Further Work

Action	Timescale
<ul style="list-style-type: none"> Essex Casualty and Congestion Reduction Board to publish updated Intervention Plan 	Late 2011
<ul style="list-style-type: none"> Review of the implications for the Council of the forthcoming Government 'strategic framework' for road safety 	Short-term

7. Securing and maintaining all transport assets to an appropriate standard

7.1 Introduction

With a combined replacement cost of over £7 billion, our transport infrastructure represents one of Essex County Council's largest groups of assets. In addition to over 4,700 miles of road, we manage and maintain a wide array of transport-related assets, including street lights, footways, bridges, bus stops, the Public Rights of Way network and cycleways; each serving an important role in enabling people to travel safely and efficiently in Essex.

The ways in which our assets are managed and the standard to which they are maintained, directly impacts on the quality of life of Essex residents and the achievement of all of the outcomes of this strategy. For instance:

- providing appropriately maintained roads and footways benefits all road users (including cyclists, pedestrians and other road users) by making journeys safer, reducing vehicle operating costs and improving travelling experiences;
- salting roads during freezing conditions ensures that good connectivity between our centres can be maintained throughout the year; and
- reducing the energy consumed by street-lighting can lead to significant reductions in the Council's CO₂ emissions.

Essex already has a significant asset base and with limited funding for major new infrastructure, it is vital that we make best use of what we already have and ensure that this can be used effectively both now and in the future.

We are constrained in this, however, by a long-standing shortfall in the funding allocated from Government for maintenance. The Council considers maintenance a high priority and has therefore invested significantly from its own funds in recent years to improve the condition of roads and footways in Essex. However, bringing all our transport assets up to, then maintaining them at, the ideal standard would be well beyond what is affordable to the Council and would not represent an appropriate use of scarce resources.

We must therefore ensure that we use the funding we do have to deliver the most effective improvements, targeting investment to where it is most needed. We will also explore new and innovative ways of working to help us deliver continual improvements in the efficiency with which our assets are managed and maintained. This will enable us to do more with less.

7.2 Evidence Base and Analysis

7.2.1 An overview of current transport assets

The extent our transport assets as of 2011 is summarised in Table 7.1. Those assets where specific issues have been identified through the evidence base are discussed in more detail below.

Table 7.1 – Selected County Council transport assets as of 2011

Asset	Total Quantity / Length
Roads	
Principal classified carriageways ('A' roads)	440 miles
Non-principal carriageways ('B' and 'C' roads)	1,450 miles
Unclassified roads	2,800 miles
Footways	3,530 miles
Cycleways	150 miles
Public Rights of Way	3,900 miles
Structures	
Road bridges	998
Significant bridges	16
Foot bridges	265
Retaining walls	88
Other structures	13
Lighting	
Street lights	122,000
Bollards	6,000
Illuminated signs & beacons	1,946
Passenger transport infrastructure	
Bus shelters	1,880
Bus stop poles	4,923
Intelligent Transport Systems equipment	
Real time information signs	268
Traffic CCTV Cameras	29
Automatic Number Plate Recognition cameras	93
Traffic monitoring sites	66
Variable Message Signs	64

Roads

The Council is responsible for the management of over 4,700 miles of road. This includes 440 miles of 'A' roads (known as principal classified carriageways), 1,450

miles of 'B' and 'C' roads (known as non-principal carriageways) and 2,800 miles of local (or unclassified) roads.

The condition of our roads can directly impact on the safety of all road users, vehicle operating costs and people's travelling experiences. Data on road condition in Essex indicates a substantial improvement in recent years, with the Council investing over £60m between 2005 and 2011 in addition to funding provided by the DfT on improvement works. Benchmarking undertaken in 2010 indicated that the condition of both our principal and non-principal roads compared favourably with those of other councils of similar size and type.

Seasonal changes in our weather present us with difficult challenges to keeping our roads operating safely and efficiently. These include vegetation growth during spring and summer months, high temperatures in the summer and ice and snowfall in the winter. Recent snowfall and freezing temperatures, in particular, have resulted in significant damage, increasing the need for minor repair works and additional resources to tackle defects.

Footways and public rights of way

The footway network is divided into two key groups: Category 1 & 2 Footways, comprising those which are most heavily used (for instance footways within town centres and those which lead to bus and rail stations, hospitals and schools etc.); and Category 3 & 4 Footways, which are more lightly used (for instance footways in residential areas). The Council currently manages approximately 350 miles of the former and approximately 3,200 miles of the latter.

In addition to the footway network, Essex also has over 3,500 miles of Public Rights of Way. These are managed and maintained by the Council in partnership with voluntary groups and landowners. This has helped to ensure that, as of 2011, over 80% of footways and Public Rights of Way in Essex are easy to use by members of the public.

Bridges and other structures

We manage and maintain nearly 1,000 road bridges and over 250 foot bridges, along with other structures including subways, retaining walls and sign gantries. These are essential to enabling the transportation of people and goods around Essex. Ensuring they remain fit for purpose is therefore a high priority.

By working with the University of Sheffield to develop advanced techniques to assess the safety and integrity of our structures, the Council has been able to better focus investment to those where maintenance measures which are most urgently needed and reduce non-essential works. Innovative approaches (such as the use of carbon fibre as part of strengthening works) have helped to lower the costs of works and reduce the time taken to complete them.

Street lights

Our street lights play an important role in enabling people to travel safely and with confidence after dark. However, with more limited funding available, a need to significantly reduce our CO₂ emissions and local concern that lighting has become excessive in some areas, we have been forced to question what levels of light are appropriate and what is affordable into the long term.

To ensure that the Council can continue to provide necessary lighting in a way which can be sustained, we have been undertaking a part-night lighting trial involving the districts of Maldon and Uttlesford. From 2007, street lights in selected areas have been switched off between midnight and 5 am, with light continuing to be provided in areas where there is an established need to do so.

Monitoring of the trial has shown that street lighting energy consumption has been reduced by 23% in Maldon and 18% in Uttlesford. Furthermore, research undertaken in 2009 suggested that this has been achieved without increasing crime rates or people's fear of crime and that the emergency services' responses to incidents had not been affected.¹

The monitoring report concluded that if this trial were to be extended across Essex, it could help to achieve up to a 30% saving in CO₂ emissions and deliver cost savings of around £1 million each year.

Intelligent Transport Systems (ITS) assets

Our Intelligent Transport Systems (ITS) assets enable us to better manage traffic (for instance by changing traffic signal timings), provide us with up-to-date information on the performance of transport networks (for instance by using cameras to identify congestion and delays) and provide real-time information to travellers (for instance through roadside message signs or live timetable information). These assets are managed by the internationally recognised Essex Traffic Control Centre.

The Council has invested significantly in expanding its ITS capabilities, in recognition of the increasing role that technology can have in improving the operation of our transport networks and people's journey experiences and improvements in the affordability of the equipment available.

7.2.2 Summary of key issues

Based on the evidence base summarised above and the statutory duties placed on the Council for maintenance works (see discussion later in this chapter), we have identified four key challenges relating the management of our transport assets. The challenges and what we consider to be the key issues relating to these are summarised in the table overleaf.

¹ Reported in the *Joint Monitoring Group Report on the Part-Night Lighting Pilot in Maldon and Uttlesford Districts* (2009)

Challenge	Key Issues
Effectively and efficiently managing our roads and footways	<ul style="list-style-type: none"> Protecting the value of our assets Arresting the deterioration of roads and footways Making best use of limited funding
Effectively and efficiently managing all of the Council's wider transport assets	<ul style="list-style-type: none"> Ensuring assets remain fit-for-purpose Making best use of limited funding
Keeping the transport network operational and safe in all seasons	<ul style="list-style-type: none"> Making best use of winter salting resources Responding to winter weather damage Making best use of limited funding
Effectively managing the impact of planned works	<ul style="list-style-type: none"> Ensuring disruption caused by works is minimised Ensuring works are undertaken safely, on time and are delivered to an appropriate standard

7.3 Challenges and Approach

Our approach to managing our transport assets is discussed below, with Figure 7.1 overleaf summarising the relationship between each challenge and the 15 transport policies and the service delivery strategies which will guide our approach.

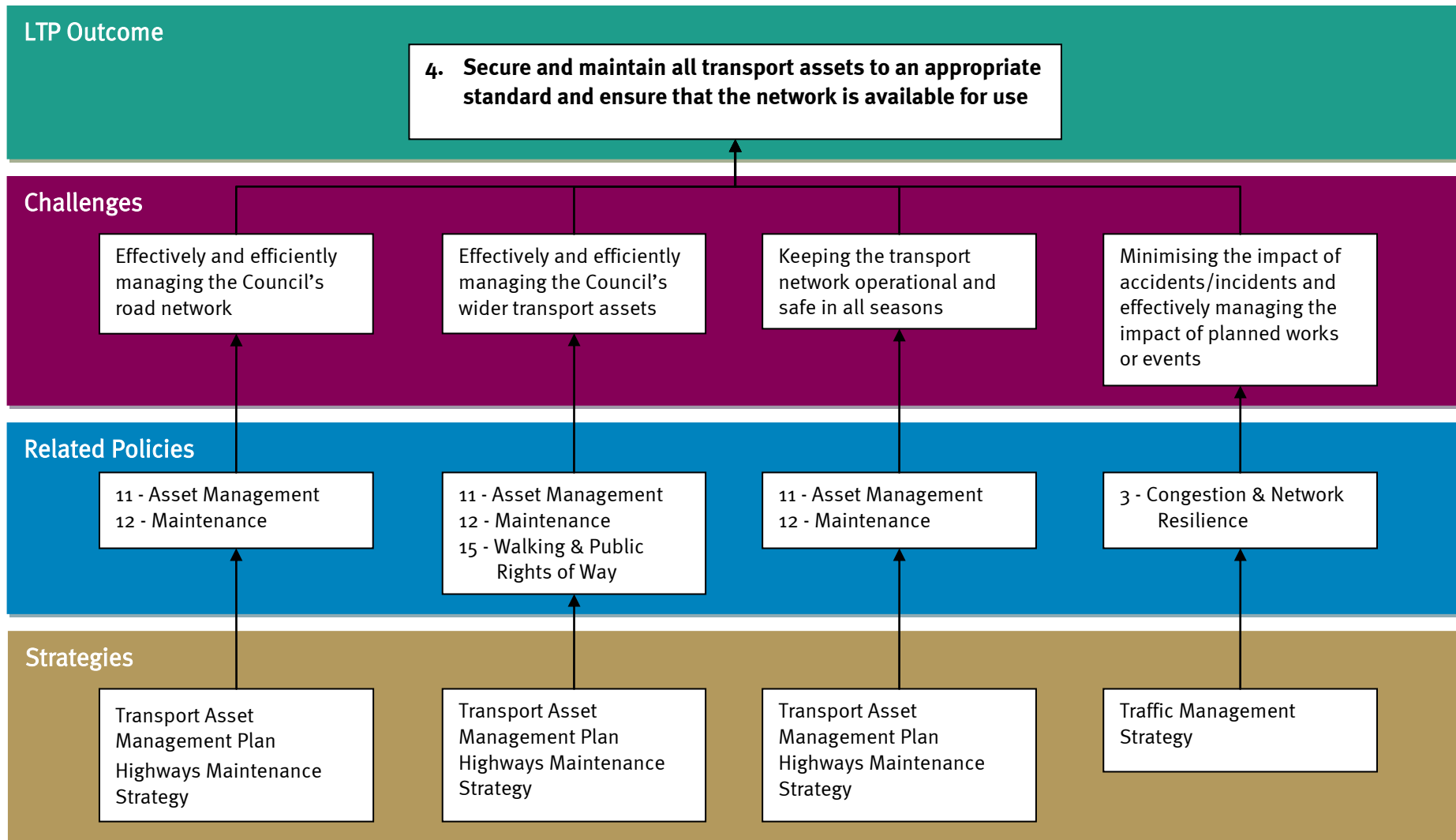
7.3.1 Our overall approach to managing our assets

Long-term planning and 'whole life costs'

With limited funding available, we must ensure that the resources that we do have are deployed in the most effective way. Our approach to asset management is therefore founded on:

- identifying appropriate standards to which assets should be secured and maintained;
- planning for requirements over the long term; and
- understanding the 'whole life costs' of our infrastructure (i.e. not just the initial purchase cost, but also the costs of ongoing maintenance and ultimately removal or replacement).

Figure 7.1 – Securing and maintaining our transport assets



Securing appropriate infrastructure

With the county home to some of the most ambitious plans for new development and regeneration in the country, the future costs to the Council of managing newly created transport infrastructure is a key concern. We will therefore work closely with developers to ensure that, where infrastructure is to be ‘adopted’ by the Council in future, the costs of maintenance, repair and replacement are adequately considered when selecting which equipment or materials are to be used. Securing appropriate contributions to maintenance costs is a key consideration within our *Estate Construction Guide* and *Development Management Policies*.

Developing our asset management approach

The Council has long practiced asset management principles and was provided with a welcome opportunity to bring these together in our first Transport Asset Management Plan (TAMP) in 2007 (the key points of which are summarised in Appendix B). Developing and refining the approach set out in the TAMP remains a high priority for the Council as we aspire to deliver continual improvement in the value for money of the services we provide.

By moving to a new way of working, which will include partnering with a single private sector partner to deliver highways and transportation services (discussed in Chapter 10), we are confident that further efficiencies and improvements in the effectiveness of investments can be achieved. Working alongside a single contractor will, for instance, enable us to exchange information quicker, avoid duplication and better programme works. We believe this will leave us better placed to respond positively to increasing pressures on limited resources.

7.3.2 Effectively and efficiently managing our roads and footways

Key Issues
<ul style="list-style-type: none">▪ Protecting the value of our assets▪ Arresting the deterioration of roads and footways▪ Making best use of limited funding

Approach

Our roads and footways are some of our most important assets and investing in their maintenance is, and will continue to be, a high priority for the Council.

Protecting the condition of our roads

Our approach to road maintenance is founded on the availability of comprehensive data on the condition of our network, an understanding of likely deterioration rates and the costs of different types of treatment works. This helps us to accurately estimate how much funding is needed to keep our roads well maintained – both in the short and long term.

In planning our annual road maintenance programmes, we are supported by our Network Performance Forecast Model. This estimates the funding needed (now and in the future) to maintain or improve the condition of the road network and enables us to compare the costs and benefits of different treatment options. The model outputs help to guide investment decisions and also the allocation of funding to individual Districts.

To ensure we deliver the best value for money in maintaining our roads, our priority is to take steps to prevent those sections of road where the condition is deteriorating reaching a level where costly structural works will be required. To help identify the priority sections for repair, we use condition data from annual surveys to produce a map on the current state of our entire road network. Each section of road, depending on the type and number of defects recorded, is split into the following categories:

- Green – where the road is in good condition;
- Amber – where the condition is deteriorating; or
- Red – where the condition is deemed to be poor.

This map provides a useful tool in helping to develop annual maintenance programmes, with priority generally given to maintenance works on the ‘Amber’ sections of roads (see **Policy 11 Asset Management**). These programmes are also developed in close liaison with councillors and local ‘highway panels’ to ensure that proposed works best address community issues.

Policy 11 – Asset Management

The County Council will protect the value of transport assets to enable the safe and efficient operation of the network by:

- regularly inspecting and monitoring the condition of all of our highway and transport assets;
- maintaining all its highway assets to appropriate standards that offer value for money to the travelling public and the Essex taxpayer;
- working with our partner organisations to ensure minimal disruption to the Essex transport network; and
- ensuring the long-term affordability of new transport infrastructure and that appropriate contribution and provision is made by new development.

Monitoring the impact of our maintenance programmes is essential if we are to ensure that the investment decisions we make are the right ones and that the works we are undertaking are having the desired effect. A more detailed analysis of the condition of our roads is therefore carried out on an annual basis, breaking the condition survey defect scores down into eleven separate condition bands (beyond the simple ‘Red’, ‘Amber’ or ‘Green’ categories). This provides us with an in-depth profile of the condition of the entire road network which helps to reveal whether our approach is addressing the right priorities and whether recent works have arrested deterioration in a cost effective manner. A further development on this approach is now planned, which will change the scope of this analysis from a countywide to a district-by-district

level. This will help to ensure that, within each district, maintenance is being delivered where it most needed, and that the road condition is being maintained evenly throughout the county.

Maintaining our footways

As with our approach to road maintenance, the management of our footways will focus on improving efficiency to ensure we are arresting deterioration and tackling defects in the most cost-effective way. Access to good quality information is essential to this.

Since 2008, there has been no requirement for local authorities to report on the condition of their footways to Government. The Council however, along with others across the country, has subsequently developed its own approach to monitoring which enables us to focus on defects where repair works should be a priority.

Condition data is currently compiled to a level of detail which reflects the use of particular footways and the types of defect which are likely to pose a risk to safety. Each year, we undertake a detailed visual inspection survey on 25% of all of our Category 1 & 2 footways (those which are most heavily used) and a less detailed inspection, which focuses only on serious defects, on the equivalent proportion of our more lightly used Category 3 & 4 footways.

Our footway data collection process is reviewed annually to ensure it is cost-effective and provides us with the information needed to remove defects in the most effective way. To ensure that we make the best use of available data, we will be exploring how we could reduce our reliance on traditional condition surveys and better incorporate information from a wider range of sources. For example, we are developing our response to established links between highway insurance claims relating to pedestrian ‘footway trips’ and the detailed data recorded by our highway safety inspectors. A move away from traditional surveys and data reporting procedures to develop footway maintenance programmes would represent a bold approach, but one which we believe could offer greater value for money.

Maintaining our Public Rights of Way

The Council is committed to maintaining and protecting the network of Public Rights of Way across the county. We are guided in our approach by the Essex ‘Rights of Way Improvement Plan’ which is summarised in Appendix B.

We recognise that Public Rights of Way are of particular importance to local communities and that locally-led initiatives can help to ensure that these routes remain open and are regularly used. The Council will therefore continue to support the community-led Parish Paths Partnership scheme (known as P3), which encourages volunteers to become involved in managing the Rights of Way network by:

- inspecting footpaths, bridleways and byways to ensure these are well maintained and available for use;
- clearing vegetation and building and repairing bridges, styles and gates;

- removing obstructions and upgrading existing facilities;
- promoting greater use of routes, including organising walks or preparing maps; and
- participating in conservation works to help restore existing and create new habitats.

7.3.3 Effectively and efficiently managing all of the Council’s wider transport assets

Key Issues
<ul style="list-style-type: none"> ▪ Ensuring assets remain fit-for-purpose ▪ Making best use of limited funding

Approach

Maintaining our structures

Our approach to the maintenance of our structures will focus on ensuring they are safe and are able to meet all the requirements of our road, footway & Public Rights of Way networks. Road bridges will be maintained to meet current highway loading requirements.

Major structural repairs can be costly and cause significant disruption to travellers and local communities. In keeping with the asset management principles discussed earlier in this chapter, we will develop a long-term strategy for the management of our structures, based on an understanding of when works are likely to be needed in order to maintain their safety and avoid more costly repairs and how we can therefore best use the funding which we have available. An excellent understanding of the condition of our assets and their likely rate of deterioration is essential and the Council will work with its new highway services contractor to further improve our assessment processes.

In undertaking planned works on structures in Essex, we shall:

- Seek to minimise disruption for local communities through early engagement when planning maintenance works and by providing appropriate advanced information on works and diversionary routes (see **Policy 1 – Customer Experience**);
- Continue to explore innovative approaches to strengthening as a means of minimising costs and disruption to travellers;
- Ensure that appropriate materials are used (particularly where structures have historic value) and that the impacts on the environment are adequately considered and mitigated (see **Policy 9 – The Natural, Built and Historic Environment**).

Providing appropriate street lighting

As an organisation committed to making best use of available funding, we believe it is important to provide street lighting in a responsible and appropriate way – ensuring

that light is provided when it is needed, but not wastefully when it is not. Switching off lighting when it is not needed not only helps to respond to rising energy costs, but also makes a significant contribution to our need to cut CO₂ emissions (see Chapter 5).

Following the completion of successful trials in the districts of Maldon and Uttlesford, with street lights in selected areas switched off between the hours of midnight and 5 am, the Council will be extending part-night lighting to all Essex districts. We recognise that for safety and personal security reasons, not all streetlights can be turned off during this period. Working with all district, borough and parish councils and with the emergency services, we will identify those which can.

To enable us to do this, the Council will introduce a Central Management System, providing us with greater control over the times at which street lights throughout Essex come on and go off. Further savings will be achieved through the implementation of this system, as it will also automatically identify where lights are not working, allowing us to quickly schedule repair work. This will reduce the current requirement to 'scout' our network to identify failures.

Managing our ITS assets

Our approach to the management of our ITS assets is focussed on understanding the role of the ETCC both in the short and the long term (see discussion in Chapter 5 and later in this chapter). This allows us to better predict the cost of delivering ITS services for the foreseeable future and to plan accordingly.

The development of new technology is in itself likely to change the requirements for inspection and maintenance (for instance by increasing the life of components and reducing the risk of failure). The Council will therefore review inspection requirements, the ways in which maintenance is undertaken and the frequency with which assets are replaced to ensure that our approach delivers the best value for money.

New technologies are also likely to offer opportunities to enable us to make better use of our existing assets, without the need for full replacement. For instance, 'retro-fitting' traffic signals with low voltage lighting equipment can help deliver significant energy savings and extend the lifetime of the asset. The Council will therefore continue to look for appropriate alternatives to the total refurbishment of our assets, enabling us to increase the amount of improvements we are able to deliver each year with the funding available.

Managing other assets

The Council is currently looking to extend the use of the asset management principles discussed earlier in this chapter to cover all our assets, as well as those specifically addressed above (including, for instance passenger transport infrastructure and cycling infrastructure). With funding constrained, it will be particularly important to identify how replacement costs can be reduced by re-using and recycling materials and by partially replacing or refurbishing assets to extend their lifetime (where this can be done without compromising the safety of users).

Case Study: Delivering efficiency in street lighting

Description



The County Council manages the operation of over 120,000 street lights and recognises how important these lights are to enabling safe travel and providing our residents with the confidence to travel after dark. We believe it is essential that we do not lose these benefits.

However, as energy prices have soared in recent years, the pressure on our limited resources has grown. New challenges have also emerged, including the need to substantially reduce our carbon dioxide emissions and the increasing need to protect the tranquillity of the unique areas that add so much to the character of Essex. These have necessitated some difficult decisions on what level of lighting we should provide and when it should be provided.

In response, we have undertaken a pilot part-night street lighting scheme in the districts of Maldon and Uttlesford, with streetlights switched off between midnight and 5am, except in those areas where lighting is essential for safety (which include town centres, key road junctions and other locations with a high risk of collision). Since the commencement of the pilot in early 2007, careful monitoring has indicated that there has been no significant change in recorded crime or collisions in either district. At the same time, energy costs have reduced by 20%.

Following this success, the Council is to invest in a Central Management System (CMS) which will allow part-night lighting to be extended across all districts in Essex. This will enable a more dynamic approach to lighting, allowing us to remotely control individual street lights and to ensure that the times at which lights are switched on/off are more accurate and reflect actual natural light levels. As well as achieving substantial energy savings, this will also reduce our carbon dioxide emissions by an estimated 8,000 tonnes each year (equivalent to the carbon footprint of 800 people). The CMS will also improve the calculation of energy consumption and enable the immediate identification of streetlight faults.

The CMS will be introduced over a two-year period commencing in August 2011. Extensive consultation is being undertaken with district, borough and parish councils and emergency services before any decision is made on which lights will be switched to part-night operation.

Key Successes

- Continued provision of essential lighting
- Managed reduction in lighting expenditure, without compromising safety
- Up to 8,000 tonne reduction in carbon dioxide emissions

7.3.4 Keeping the transport network operational and safe in all seasons

Key Issues
<ul style="list-style-type: none"> ▪ Making best use of winter salting resources ▪ Responding to winter weather damage ▪ Making best use of limited funding

Approach

As well as protecting the condition of our roads through significant works, more routine maintenance is needed throughout the year to ensure that routes remain operational and safe – in particular to ensure that vegetation growth is contained, good drainage is maintained and that any pot holes which represent a significant hazard to road users are quickly repaired.

Our approach to these types of maintenance works are set out in the Council's *Highways Maintenance Strategy* and summarised in **Policy 12 – Maintenance**. As with our overall approach to asset management, our approach to maintenance is founded on maintaining an excellent knowledge of the condition of our roads and an understanding of when works are likely to be required. We therefore undertake frequent safety inspections of our highway network to ensure possible defects are identified at an early stage and aim make it as easy as possible for members of the public, the police and others to report any defects they encounter. As set out in **Policy 1 – Customer Experience**, achieving continual improvement in the way that the public and other partners are able to engage with the Council over their concerns is a high priority.

Repairing pot-holes and other defects

In rectifying potholes and other defects, we will continue to give priority to those which require prompt or urgent attention as they represent an immediate or imminent hazard or because there is a risk of their condition rapidly deteriorating in the short term.

Vegetation growth and drainage

Vegetation cutting and drain clearing has traditionally been undertaken at set times throughout the year. However, we recognise that this can be disruptive and in some locations not always necessary. To ensure we deliver the best value for money, our approach now focuses on using local knowledge and responding to issues raised during routine safety inspections to determine the need for works.

Winter salting

Freezing conditions and winter snowfall can cause significant disruptions to travel and compromise the safety of our roads. To ensure that we make best use of our salting supplies, winter salting is prioritised to those routes which are most crucial to the

functioning of Essex. These are identified as the ‘*precautionary*’ routes in our *Traffic Management Strategy*.

Policy 12 – Maintenance

The County Council will ensure that the highway network (including roads, footways and cycleways) is resilient, safe to use, and fit for purpose, especially during periods of adverse weather, by:

- Inspecting the network to identify defects;
- prioritising the repair of defects which are an immediate hazard or are at risk of more serious deterioration;
- salting the ‘precautionary route’ network;
- using local knowledge to develop programmes of maintenance for cutting verges and hedgerows and cleaning drains and culverts; and
- maintaining the public rights of way network in line with usage and linkages to vital services.

7.3.5 Effectively managing the impact of planned or emergency works

Key Issues

- Ensuring disruption caused by works is minimised
- Ensuring works are undertaken safely, on time and are delivered to an appropriate standard

Approach

We understand the disruption that can be caused by works on our roads and streets and will aim, whenever possible, to ensure that the delays and congestion they create is minimal.

The Council has a duty, in accordance with the Traffic Management Act of 2004, to take appropriate steps to ensure that we make best use of our roads for all users and secure the expeditious (quick and efficient) movement of traffic. This duty, termed the Network Management Duty, also requires bordering councils to work together to ensure that their approach to the management of their roads does not prevent their neighbours from doing the same. A Traffic Manager is appointed by the Council, with responsibility for overseeing the approach we take to managing our roads and undertaking works, to ensure that the requirements of the Duty are met.

A key requirement of the Traffic Management Act is to ensure that works on our roads – whether undertaken on behalf of the Council or by other Statutory Undertakers (which include utilities and telecommunications companies) – are undertaken safely and with minimum disruption to travellers. Our focus is therefore on:

- co-ordinating works so that where multiple works needed at one location these can be undertaken at the same time;
- whenever possible, co-ordinating works so that conflicting works (for instance those which also cause disruption on diversionary routes) are not undertaken at the same time;
- minimising the impact of street works on local communities, but also allowing works promoters the necessary time and space in the street to complete their works efficiently; and
- monitoring, checking and inspecting street works to ensure that they are compliant with relevant Codes of Practice and where they are not ensuring that appropriate fees/charges are levied and collected.

The Essex Traffic Control Centre (discussed in greater detail in Chapter 5) has an important role in helping with this. In particular, it enables us to collate information from across a range of sources to help understand the impacts that works are likely to have, to identify when works should be undertaken, and to develop appropriate strategies to ensure that the impacts of works on people's trips are minimised.

7.4 Further Work

Action	Timescale
<ul style="list-style-type: none"> • Reviewing and updating the Traffic Management Strategy to ensure this remains appropriate 	Ongoing
<ul style="list-style-type: none"> • Working jointly with our new delivery partner to develop our asset management approach 	From 2012
<ul style="list-style-type: none"> • Developing a permit system to manage works on the highway network 	
<ul style="list-style-type: none"> • Preparation of the new Development Manual, updating and replacing the current Estate Construction Guide 	
<ul style="list-style-type: none"> • Developing the Council's approach to engaging our customers and involving local partners in highways maintenance decision-making 	

8. Providing sustainable access and travel choice

8.1 Introduction

Our ability able to reach essential services (including healthcare, retail and leisure facilities), employment or education has a major influence on our overall quality of life. Most of us have benefited from the improvement in personal mobility made possible by rising car ownership. This has offered many people greater choice in when and where they can travel and increased the opportunities available to them, for instance by enabling access to jobs across a wider area. However, those without access to a car or those who have difficulty travelling often have more limited choices and opportunities – for instance, the life opportunities available to our residents, particularly younger residents, can be constrained by their ability to reach education or employment.

Whilst poor access to essential services can affect the quality of life of those living anywhere in Essex, even those within our main towns, the effects are often most acutely experienced by those living in the county's more rural areas. Wider societal changes have significantly altered the age and income profile of our rural communities and changed the role and importance of local towns and villages. In many areas, travel has become unavoidable as the local provision of services such as shops, post offices, public houses and GP surgeries – once mainstays of village life – has been significantly reduced. Those without access to a car and those less able to travel (particularly the elderly and vulnerable), can be left isolated unless suitable travel alternatives are provided.

The ability access services is not the only influences of travel choices has on people's quality of life. Many of our most pressing health concerns, including the rising prevalence of diabetes and heart disease, can be lessened by increasing levels of physical activity. Enabling and promoting the wider use of 'active' forms of travel for everyday trips, for example by promoting walking or cycling rather than the car for a trip to the shops, can lead to significant improvements in personal health.

Our transport network can also significantly affect the level of independence of those with disabilities, mobility impairments or learning difficulties. If a person cannot make use of a particular mode of travel, for instance because they cannot physically access it or understand timetable information, then it does not matter to them how good a service it may provide to others. Improving the accessibility of our transport networks not only makes it easier for all people to travel, but helps to provide opportunities for independent living.

Within this chapter we will set out how we will help to provide access for all Essex residents to the essential services they need and enable and encourage sustainable and healthy choices which help to create truly sustainable communities.

8.2 Evidence Base and Analysis

Access to essential services

Most people in Essex are fortunate enough to reach essential services with minimal inconvenience. However, as a large shire county with significant rural areas, there are many locations where access can be difficult, particularly to local healthcare, hospitals and food shopping. Nearly a fifth of Essex households do not have access a car and a significant proportion of these are found within the more rural areas of the county.¹

For those living within our main towns and the more substantially built-up areas, access to most essential services by walking, cycling or travelling on public transport is generally good. This is also the case for public transport connections along the main interurban corridors (as discussed in Chapter 4). One area of notable exception is access to hospitals, where, due to the location of facilities, access can be difficult even for those within areas which are otherwise well connected to essential services (for example, the district of Basildon which, despite having a hospital on the edge of the authority area, has more than 11,000 households with poor access).²

In less densely-populated areas, access levels are more variable. Whilst car ownership is generally higher in the more rural areas of our county, the impact on those who live there and do not have a car is often greater. For instance, a third of Essex households without a car are located in the rural districts of Braintree, Maldon, Tendring and Uttlesford. Of these households, around 40% do not currently have good access by public transport to a GP centre. Difficulty in accessing essential services has been exacerbated by a progressive closure of such services as the local post office, village shop or even public house. The closure of post offices is also of particular importance to the ongoing competitiveness of local businesses, with 65% of businesses surveyed by the Council in 2010 citing access to a post office as being important.³

Our ability to access essential services independently also changes with our age. As the average age of our population becomes progressively older and the number of elderly residents increases (see Chapter 3), the proportion of households affected by poor access is set to rise significantly unless appropriate action is taken. This again is set to be most significantly felt in rural areas, where the average age of residents is increasing at the fastest rate.

Access to education and training

Improving the skills levels of the Essex workforce is one of the critical challenges identified within the Integrated County Strategy. As discussed in Chapter 3, a significant proportion of our residents, particularly our younger residents, have limited qualifications. Whilst there has been recent improvement at an Essex-wide level,

¹ Based on 2001 Census data.

² All data on access to services, education and employment based on DfT 'Core Accessibility Data' for 2009

³ As reported in the 'Essex Local Economic Assessment' (2011), produced by Essex County Council and partners.

almost 1 in 8 adults have no qualifications at all, and in some districts (including Tendring, Maldon and Basildon) this is closer to 1 in 5.⁴ Furthermore, nearly 7% of young people aged between 16 and 18 in the county in 2008 were not in employment, education or training.⁵

The evidence base indicates that the ability to access further education for 16-19 year-olds by public transport, walking or cycling is currently slightly below that recorded in comparable authorities. This, however, will in part be offset by the rise in statutory education leaving ages (from 16 to 17 in 2013 and to 18 by 2015) which will increase the number of students eligible for home-to-school transport, improving access for those who would otherwise depend on public transport. However, the comparatively low level of access for cyclists indicates there is significant opportunity for improvement in this area.

Access to employment

Access to employment is generally very good in Essex. For those of employment age (aged between 16 and 74), nearly 97% have access to employment by car.

Essex has benefited from relatively low levels of unemployment, supported in part by the employment opportunities in London. For those residents in receipt of Jobseekers Allowance (as of 2008), the ability to access employment is generally good. Over four fifths (81%) have good access by public transport or by walking (a comparable level to other authorities of equivalent size and type) and over two-thirds have good access by cycling. However, this does mask variation at a district level meaning a significant number of those without employment may have difficulty in travelling to work, with access by cycling particularly low in some districts.

Ease of access of the transport network

Significant progress has been made through working with our partners to improve the physical accessibility of local transport, particularly to meet the requirements of the Disability Discrimination Act Legislation for accessible facilities, vehicles and equality of access to services. However, there is more that can be done to improve accessibility ahead of legislated deadlines.

Though concessionary fares have helped to remove cost as a barrier to bus use for many, physical barriers remain, especially with regard to accessing public transport. For instance:

- One in three railway stations have either only partial step free access or no ramp for train access meaning people with disabilities are likely to experience difficulty when trying to travel independently through these stations;
- There is an on-going programme of bus stop improvements, but two out of three bus stops in Essex do not have raised kerbs to facilitate access onto vehicles; and

⁴ As recorded by the Department for Children, Schools and Families, 2008.

⁵ As reported by *Connexions*, 2008

- Around one quarter of footways are in need of some structural repair. Uneven surfacing on footways can make wheelchair access difficult and pose a risk of tripping, which is a serious concern for older people.

Travel and health

As discussed in Chapter 3, our residents generally consider themselves to be healthy, with reported personal health comparing favourably with other neighbouring and equivalently-sized local authority areas.⁶ Obesity, however, is a significant and growing concern, particularly adult obesity which is at a level above the national average. Rising levels of child obesity too, are of major concern at a national level, although children living in Essex generally have healthy levels of physical activity (with the exception of Basildon and Harlow where levels are below the national average). Increasing the number of people adopting healthier, active travel choices as part of their everyday lives would help deliver notable improvements to overall health.

Significant recent progress has been made in encouraging children to walk or cycle to school, particularly in increasing the number of primary school children walking to school. But this has been mixed, with many secondary schools recording rises in the proportion of students arriving by car. For adults, relatively few people walk or cycle to work, although 30% live within 5km of their workplace.⁷ Walking and cycling to work is more popular in the built up areas such as Harlow and Colchester where people are more likely to live close to where they work.

Access to the countryside and green spaces

Our green spaces, countryside and coastline are a fundamental part of what makes Essex an attractive place to live. Enabling people to enjoy these is therefore an important factor in promoting well-being and in encouraging healthy leisure pursuits. Good access to natural green space, measured as a function of distance from home, is surprisingly low in Essex and this could have an effect on general well-being. The areas that fare the worst are the more rural parts of the county as there is often limited official public access beyond the rights of way network. The districts of Tendring, Uttlesford and Braintree have the highest proportions of households without good access to natural green space with 59%, 54% and 35% respectively.

Many of the solutions to this will be beyond this strategy, though this serves to emphasise the importance of maintaining access provided by the rights of way network and maximizing the amount of the network that is easy to use, as well as enhancing it where appropriate. Doing so will also enable people to enjoy views of green space, even if it is space they cannot access.

⁶ Based on data from the Department for Communities and Local Government's *'Place Analysis Tool'*, 2008.

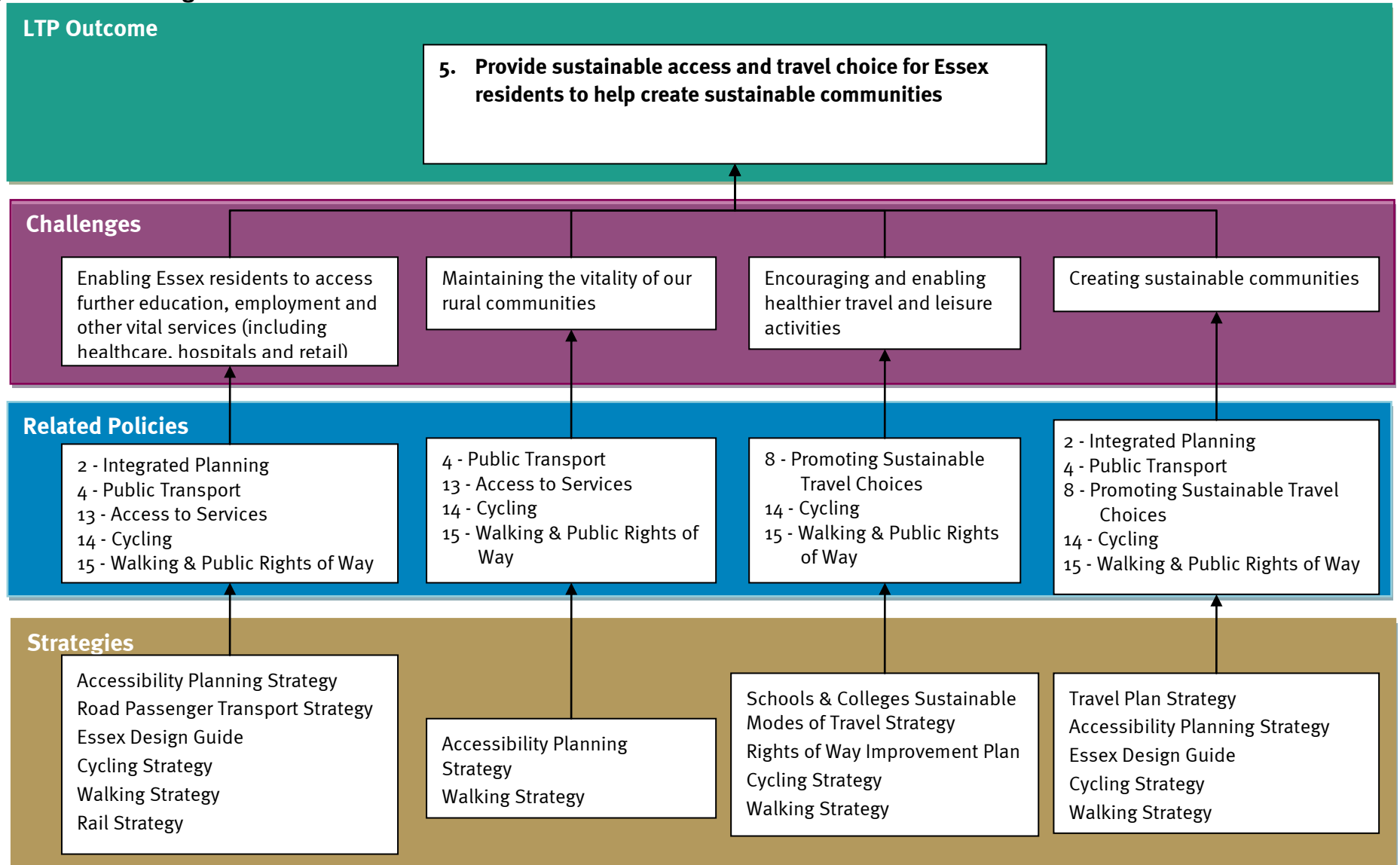
⁷ Based on 2001 Census statistics.

8.2.1 Summary of key issues

On the basis of the evidence base and analysis summarised above we have identified four challenges which need to be met if we are to provide sustainable access and travel choice. These challenges and the key issues related to each are summarised in the table below.

Challenge	Key Issues
Enabling Essex residents to access further education, employment and other vital services (including healthcare, hospitals and retail)	<ul style="list-style-type: none"> ▪ Increasing numbers of elderly residents with specific transport needs ▪ Accessibility of transport network for people with disabilities or mobility issues ▪ Variability of access to essential services ▪ Comparatively low skills levels amongst younger residents
Maintaining the vitality of our rural communities	<ul style="list-style-type: none"> ▪ Diminishing local service availability ▪ Rapidly ageing population, with increasing number of people without access to a car ▪ Encroachment of inappropriate traffic and inappropriate traffic speeds impacting on rural character
Encouraging and enabling healthier travel and leisure activities	<ul style="list-style-type: none"> ▪ Higher than average obesity levels ▪ Relatively low levels of access to green space ▪ Potential for growth in walking and cycling
Creating sustainable communities	<ul style="list-style-type: none"> ▪ Providing new homes and jobs in strong communities that people want to live in. ▪ Involving the local community in transport decisions and delivery

Figure 8.1 – Providing sustainable access and travel choice



8.3 Challenges and Approach

8.3.1 Enabling Essex residents to access further education, employment and other vital services (including healthcare, hospitals and retail)

Key Issues
<ul style="list-style-type: none"> ▪ Increasing numbers of elderly residents with specific transport needs ▪ Accessibility of transport network for people with disabilities or mobility issues ▪ Variability of access to essential services ▪ Comparatively low skills levels, particularly amongst younger residents

Approach

We understand how important the ability to travel is to personal well-being and particularly the impact that not being able to travel can have on personal independence. We must therefore ensure that we support those who are most at risk of suffering from a poorer quality of life as the result of an inability to reach vital services, employment opportunities, or even the chance to meet and socialise with others.

Providing transport for those who need it most

The Council is committed to ensuring that our residents can reach the services they need. We will therefore continue to support a network of contracted bus services to complement the commercial bus service, with a focus on maintaining access to key services (see **Policy 13 - Access to Services**).

Policy 13 – Access to Services

The County Council will ensure that Essex residents have access to essential services by:

- working with partners and service providers to make essential services accessible to all;
- making transport infrastructure accessible for all by continuing to remove barriers to travel for those with disabilities;
- ensuring that travel information is available in different formats and is accessible to everyone;
- encouraging and supporting innovation to improve the provision of essential services.

We recognise, however, that support for a conventional bus service is not always the most appropriate or affordable solution. Organisations other than commercial bus operators, including community and volunteer groups, also play a vital role in providing transport for those who would otherwise be unable to travel.

We will continue to work in partnership with, and provide financial support to, the district-based Community Transport schemes in Essex and support the continued provision of specialist transport. Opportunities for other forms of locally-provided transport, including ‘demand-responsive’ services, will also be considered.

For those living in more isolated areas, or those who find travel difficult, taxi companies offer an important lifeline. Better facilities for taxi users and drivers with an understanding of all passenger needs will ensure that more people can use them. Where not already in place, we will promote Quality Taxi Partnerships to improve the quality and standards of taxis – making these accessible to all Essex residents. Particular focus will be given to those areas with the poorest public transport coverage.

Making transport accessible for everyone

Essex County Council is committed to partnership working to ensure that all forms of public transport are inclusive of the needs of all residents (see **Policy 13 Access to Services**).

In accordance with the requirements of the Equalities Act, the Council has an important role in delivering an accessible network of services and providing equal access for people with disabilities. We recognise that by making public transport more accessible to people with disabilities, mobility impairments or learning difficulties, we improve not only the quality of life of those whose independence would otherwise be affected, but also make these services more attractive for all users.

Particular measures will include:

- Improving access for those of all levels of mobility at bus stops and public transport interchanges (including railway stations);
- Providing information which is understandable and accessible for all, including people with sight or hearing impairments;
- Working with public transport operators (including taxi companies) to ensure that staff understand and are able to accommodate the needs of people with disabilities, mobility impairments or learning difficulties; and
- Seeking to simplify ticketing arrangements, including the use of Smartcard technology.

Education is a key part of improving independence and the Council will continue to support travel training initiatives, equipping people unfamiliar with independent travel (particularly by public transport) with the skills they need to travel by themselves (see case study panel).

We must also help ensure that our streets and public spaces are safe and accessible for everyone. This will include removing unnecessary barriers, addressing footway defects and ensuring that the needs of those with disabilities and mobility impairments are adequately considered as part of street design.

The Council will continue to work closely with disability groups (including the Options for Independent Living group) to identify and effectively remove actual or potential barriers.

Providing access to employment

The Council will ensure there is good access by public transport to major employment locations by developing and improving a network of 'Core bus routes' (as identified in **Policy 4 Passenger Transport**). Providing access to employment will also be a key consideration when determining support for non-commercial services.

In addition, we will seek to improve access to employment by a range of travel options and ensure that sufficient information is provided to allow people to make informed decisions on what option they choose. In particular, we shall:

- Work with public transport operators to improve the integration of local bus and rail services and to improve interchange between different forms of transport (see Chapter 4 for further discussion);
- Work with employers to develop workplace travel plans and encourage employees to consider different ways of travelling to work (for instance by sharing a car journey with a colleague);
- Work with employers and other partners to ensure that young people are able to travel to a job in order to reduce the proportion of young people in Essex who are NEET (not in employment, education or training); and
- Provide up-to-date travel information through a range of media to inform people of the travel options available to them and how they can use these, including providing data to the national 'Traveline' personal journey planning tool.

Providing access to education

The Council is responsible for providing Home to School transport and will continue to do so in the most cost-effective and fair way, ensuring that subsidy is retained to support those on low incomes. We will also continue to explore opportunities to improve the availability of public transport for travel to school (for instance by co-ordinating local bus services with school and social care statutory provided transport).

With a particular need to raise individual skills levels and improve the employability of many of our younger residents, we must ensure that access to centres of further education is not a barrier to continuing education or undertaking training. The Council will therefore continue to work with schools and colleges to enable access – particularly by public transport, walking and cycling – and provide information on travel options to students. Particular areas for consideration will include:

- Better coordinating local bus services with statutory school transport; and
- Improving facilities for pedestrians and cyclists at major transport interchanges (including bus and railway stations) to enable students to walk or cycle then change to public transport in order to get to a centre of further education.

Case Study: Travel Training

Description



Understanding how to travel is something most of us take for granted. However, for people with additional needs, a lack of confidence or a lack of understanding of how to travel alone can be a major barrier to independence.

The Essex 'Travel Training' team was established by the Council in 2006 and works predominantly with young people and adults with learning difficulties, physical or behavioural difficulties, to provide them with the skills needed to access everyday activities (including education, employment, training and leisure activities) helping them to live independently. Through individual support, trainers teach participants a range of important skills, including:

- the basics of the Highway Code and how to cope with crossing busy roads;
- how to plan a journey and to understand a timetable;
- how to pay for a ticket; and
- where to go to get help.

This is done initially by helping to prepare participants to make a specific journey from their home. Often, once this training has been completed, further referrals are made for additional journeys. Timescales range from 2-3 weeks to 6 months + and trainers will only sign off a participant once they are entirely confident that they are able to travel on the journey independently (the majority will reach this level).

Over 1000 people have been referred to the scheme since 2006 and over 900 people have now successfully completed the training. In recognition of the Travel Training team's commitment, the Council was awarded the 'Dedication to Access for All' award at the 2009 National Transport Awards and in April this year the Council was awarded The European Osmose Award in the category of "Innovative Concepts to enhance Accessibility"

Key Successes

- Greater independence for over 900 people with additional needs
- Savings to the Council of over £600,000 through reduced need for organised transport

8.3.2 Maintaining the vitality of our rural communities

Key Issues
<ul style="list-style-type: none">▪ Limited and diminishing local service availability▪ Number of people without access to a car set to rise significantly as population ages▪ Encroachment of inappropriate traffic and inappropriate traffic speeds impacting on rural character

Approach

Working with partners to maintain the availability of essential services

Whenever possible, we want to ensure that people in rural areas are able to access important daily services (including shopping, healthcare, library facilities, etc.), without needing to travel significant distance. The Council will therefore work with partners from across the public, private, charity and voluntary sectors to:

- protect the availability of local services, by working with local businesses and communities and lobbying Government to ensure that essential services are preserved;
- identify and promote alternative ways of providing services to our residents; and
- ensure that proposed changes to the location of an essential service (for instance the relocation of GP centres) give necessary consideration to the travel implications for those who use it, particularly the elderly and most vulnerable.

Working with partners to provide essential transport

Those living in rural areas are often most affected by a lack of transport choices – particularly people who do not have access to a car. The Council will therefore continue to provide support for rural transport, with a focus on ensuring that access is provided to employment, education, healthcare and food shopping.

In addition to direct support for contracted bus services and community transport services (as discussed above), a key role for the Council will be to facilitate local communities to develop their own local transport projects which meet local needs. These may include innovative transport solutions, for instance village lift sharing or social car schemes. The Council will continue to work closely with the Rural Community Council of Essex (RCCE) to help deliver initiatives.

Our approach to delivering rural public transport will be expanded upon within the Council's *Passenger Transport Strategy*.

Protecting the character of rural areas

As well as enabling those in rural areas to travel, we must also ensure that travel and transport does not negatively impact on the local character. Steps we will take to do this will include:

- Seeking to minimise street clutter and ensuring that materials, signs and other street furniture are in keeping with the local character;
- Encouraging the appropriate use of rural roads by directing freight and other through-traffic away from sensitive areas (see **Policy 6 Freight Movement**).
- Promoting a safer environment for cyclists and horse riders on local rural roads by encouraging more cautious driving behaviours through the removal of centre-lining (except where necessary for safety reasons) and addition of edge-lining to make roads appear narrower;
- Working with rural communities and the police to identify other appropriate local means of slowing traffic speeds where these are a specific concern;

Supporting the rural economy

The rural economy is important to Essex and employment and business opportunities are many and varied. Many of the issues that affect the wider economy of Essex also affect its rural areas. However, rural areas also have their own specific problems, such as access to markets and access to modern communications technology. The provision of broadband is seen as particularly important by local businesses and has been identified as a priority within the new Integrated County Strategy. Broadband access will improve access to many services, help to reduce the need for travel, and offer increased opportunity for those living in rural areas to work from home.

The county's historic rural towns and villages, extensive coastline and varied countryside attract large numbers of visitors each year. There is, however, significant opportunity for growth in tourism and leisure activities. The Council will support access to these areas in a sustainable manner by, for instance by:

- Providing information and publicity material on opportunities for walking and cycling;
- Encouraging visitors to use of the County's branch lines (through the Essex and South Suffolk Community Rail Partnership); and
- Promoting the use of the County's ferry services for access to leisure opportunities.

Our wider access to employment and services policy (**Policy 13 – Access to Services**) will further seek to ensure that people living in rural areas have access to employment opportunities.

Improving Access to Travel

Description



With significant pressure on public finances, we must ensure that we focus on the most effective solutions to improving travel choice and enabling access to essential services for all our residents. Whilst our commitment to supporting essential bus services remains undiminished, we must also look to build on the vital roles that the private and voluntary sectors and charities play in providing local transport and enable them to deliver more.

Community transport plays an essential role in providing mobility to those who would otherwise be unable to make a journey independently. We believe that, with the right support, community transport can offer even more. The Council supports a substantial network of community transport services, and in the past 3 years alone, has worked with partners to deliver 27 shopper services which provide access to shops, healthcare and leisure opportunities for over 50 rural communities. We are also supporting a number of pilot initiatives which extend the role of services, including the 'Crouch Village Link' which is helping to boost local tourism by providing a link from Rochford station to the Wallasea Island ferry during the summer and the 'Queens Shopper Service' providing direct access to the Queens hospital in London.

For many, taxis and private hire vehicles also offer an essential travel choice. Through the award winning Quality Taxi Partnership initiative, we have helped to significantly improve taxi provision in areas with poor transport coverage. As with community transport, we believe there is considerable opportunity for taxi operators to assume an even greater role and have recently helped to launch the 'Dengie Dart', in partnership with a local taxi firm and the Rural Community Council of Essex. The 'Dart' combines the regularity of conventional bus with the convenience and comfort of a taxi, providing essential access for those living in the Dengie Peninsula to Maldon St Peter's and Broomfield hospitals, at less than a third of the cost of a conventional taxi. As with a bus, the 'Dart' runs to a fixed schedule between Broomfield hospital and Maldon town centre and passengers can join from the roadside (as with regular buses, concessionary passes also accepted). For other villages along the route, pick-up points are flexible; with passengers required to book in at least 30 minutes in advance of the service's scheduled arrival time.

The key to the success of each of these new schemes has been local ownership of the service. We recognise, in particular, that services such as the 'Dengie Dart' and 'Crouch Village Link' not only provide essential access, but are also an important means of reducing social and rural isolation. As we seek to deliver the best value for money to Essex taxpayers, the exploration of innovative initiatives such as these will be at the heart of our approach to improving access to travel.

Key Successes

- Access to essential services in a more affordable way for those who need it most
- Effective local transport in a way which delivers best value for money for Essex taxpayers
- Independence for those who would otherwise be dependent on others for travel
- Community ownership of the service

8.3.3 Encouraging and enabling healthier travel and leisure activities

Key Issues

- Higher than average obesity levels
- Relatively low levels of access to greenspace
- Potential for growth in walking and cycling

Approach

Physical inactivity is one of the principal causes of obesity. Increasing the numbers of residents choosing more active forms of travel, such as walking and cycling, for all types of trip would therefore significantly help to improve their overall health as well as help to reduce congestion.

Increasing cycling levels

Working in conjunction with a range of partners (including local communities, GP consortia, charities, cycle groups and other bodies), we will enable and promote increases in cycling in Essex for all types of trip. In accordance with **Policy 14 – Cycling**, measures undertaken with partners will include:

- completing missing links in existing cycle networks, providing better signing and improving cyclist facilities (for instance crossings and cycle priority measures) to provide continuous and safe routes, linking urban and surrounding areas;
- improving cycle facilities (for instance secure cycle parking) at key cyclist destinations, including town centres, workplaces, schools, railway/bus stations and hospitals;
- Providing people with information on cycle routes in Essex, together with detail on where they can securely park their bike and how long a journey is likely to take (via the ‘Transport Direct’ cycle planner service);
- Ensuring cycle access is provided to new developments, with links to the surrounding community and existing cycle networks;
- Promoting cycling, for instance through publicity material, educational programmes and cycling events; and
- Providing cycle training opportunities for school children and adults to provide people with the confidence to travel safely by bike.

To support us in this, the Council will produce an updated *Cycling Strategy*.

Policy 14 – Cycling

The County Council will encourage cycling by:

- promoting the benefits of cycling;
- continuing to improve the cycling facilities within the main urban areas of Basildon, Chelmsford, Colchester and Harlow;

- developing existing cycling networks in other towns where cycling offers an appropriate local solution;
- working with schools and employers to improve facilities for cyclists;
- improving access to local services by integrating the Public Rights of Way, walking and cycling networks to form continuous routes; and
- providing training opportunities to school children and adults.

Increasing walking levels and use of public rights of way

Our public rights of way provide important links to key services and facilities as well as access to the countryside and green space for leisure purposes. Working with a range of local partners (including landowners, walking groups and local communities), the Council will enable and encourage people to walk more as part of a healthy lifestyle.

Our approach to the management of the public rights of way network (which is outlined in **Policy 15 – Walking and Public Rights of Way**) will be directed by the Council's *Rights of Way Improvement Plan*. Key measures will include:

- Better promotion to encourage greater use of the network, particularly in more rural areas;
- Providing an up-to-date and publicly available map of the entire network;
- Providing a better signed and maintained network;
- Increasing the amounts of bridleways and off-road cycling routes and addressing gaps in the network; and
- Working with local partners to ensure that the network is accessible and easy to use (including the continued employment of ramblers to undertake independent assessments of this).

Policy 15 – Walking and Public Rights of Way

The County Council will promote walking and use of the Public Rights of Way network by:

- promoting the benefits of walking;
- facilitating a safe and pleasant walking environment that is accessible to all;
- improving the signage of walking routes;
- ensuring that the public rights of way network is well maintained and easy to use by walkers, cyclists and equestrians.

With much of the network not owned by the Council, we will work positively with landowners to maintain and improve the network, using enforcement powers only where necessary.

8.3.4 Creating strong communities

Quality of life is important for people living in Essex and a key component of this is the places people live in. We recognise that people want to live in an attractive, well designed environment with good access to jobs, a range of facilities such as schools, health centres, shops and leisure activities, and access to open spaces. It is also important that our communities can evolve, that younger people can find work and a home locally, and that older people have access to the services that they need. Many of our older towns and villages have developed over many years to provide places where people want to live. However, new homes are needed and some of our communities are in need of regeneration. We want to support strong and sustainable local communities and this needs us to work in partnership with planners, developers, other local authorities and most importantly, the communities themselves.

Key Issues
<ul style="list-style-type: none"> ▪ Providing new homes and jobs in strong communities that people want to live in. ▪ Involving the local community in transport decisions and delivery

Approach

Ensuring that our communities are strong and sustainable in the long-term requires an integrated approach to planning and a collaborative working relationship with members of the local community.

Providing new homes and jobs in strong communities that people want to live in

Strong communities support the needs of the entire local community. For instance: people need to be able to find jobs and earn incomes to support the local economy; new homes are needed to enable young people to stay in the local area; schools are needed to educate young people; and everyone needs to be able access health services, shops and leisure facilities.

To promote strong communities, it is essential that transport and land-use planning (see **Policy 2 – Integrated Planning**) is undertaken in a joined-up and coordinated way, with the transport and wider implications of development and regeneration proposals considered at an early stage. We will work in partnership with district and borough planning authorities and local communities to ensure that development is sustainable and meets the needs identified by local neighbourhoods.

The Council will continue to work closely with planning authorities and commercial developers to improve the design and environmental standards of new developments and public spaces. We will ensure that the materials used in transport projects are in keeping with the character of the local area and contribute to a sense of place. We will also take a long term view, exploring new types of development, new ways of living and working, and new ways of involving local communities in the decision process.

Involving the local community

We want our local communities to have a real say in how our transport network is managed and improved. The Council has been at the forefront of initiatives to promote ‘localism’ in local government which included the creation of 9 ‘Local Highway Panels’ to provide local communities with the opportunity to have their say on the priorities for highways in their area. Building on this strong foundation will be especially important to the delivery of this strategy.

Council support will therefore continue for the Local Highways Panels and we are currently exploring how this approach can be refined to adapt to the wider changes being undertaken across the Council (see discussion in Chapter 2). The Council will prioritise improving engagement with communities in those areas currently without a Panel, exploring how they can become more involved in managing highways services in their area.

Involving local communities, however, is about more than giving our residents a voice. The Council is a strong advocate of the Government’s ‘Big Society’ and we firmly believe in giving our residents greater choice and responsibility. In particular, we recognise that the Council is not always going to be the most effective or most efficient way of providing transport services at a local level. Community and voluntary groups in particular have a significant role to play in delivering services which help improve the lives of local residents.

This approach is illustrated by the highly successful community transport services in Essex, which have for many years provided an important accompaniment to the commercial and Council-supported bus networks, offering an essential link for people who would otherwise find travel difficult. Similarly, the ‘Parish Paths Partnership’ initiative enables local residents to assume greater responsibility for the footpaths in their area, by providing them with the resources and skills they need to improve local paths and keep them well maintained.

The Council will continue to encourage and facilitate locally-led initiatives, helping promoters to develop initiatives and identify suitable sources of funding.

8.4 Further Work

Action	Timescale
<ul style="list-style-type: none"> Increasing the ability of local residents, community groups and volunteers to shape and deliver transport-related services 	On-going
<ul style="list-style-type: none"> Revision and updating of the Council Cycling Strategy 	Medium-term
<ul style="list-style-type: none"> Improving the experience of customers engaging with the Council 	Short-term

9. Investment Priorities for Essex

In chapters 4 to 8, we outlined our broad approach to delivering the five outcomes of this strategy, setting out how we would work in partnership with others to deliver these.

Within this chapter we consider in more detail the specific priorities for the strategic transport corridors, the four planning areas and the rural areas in Essex, based on the evidence compiled in support of this strategy and through engagement with partners and local residents.

9.1 Priorities for the strategic transport corridors

With London in close proximity, two international airports, one international port and other very large ports nearby, the strategic road and rail links across Essex are of significant importance to the National economy and essential for local businesses. Improving connectivity between our key towns and the area's international gateways is a top priority of the ICS and crucial to securing economic growth.

9.1.1 Priorities for the strategic roads in Essex

Motorways, trunk roads and major 'A' roads in Essex provide a vital role in the functioning of the county. They include four routes defined by Government as being of 'National' importance: the M25 and Dartford Crossing, the M11 and the A12, and parts of the A120. As identified in Chapter 3, a legacy of under-investment in the strategic road network has, however, led to congestion, un-reliable journey times and a lack of resilience to incidents. Specific routes and issues are discussed below.

Cross-Thames links and the M25

Improving the Dartford Crossing is a strategic transport priority for Greater Essex and Kent and of significant importance to the UK economy. International, national and local trade is delayed by congestion at the current crossing, with hauliers and business travellers having to time their trips to coincide with ferry timetables and customers' demands rather than times when travel volumes are lowest. The newly created Kent, Greater Essex and East Sussex Local Enterprise Partnership (see Chapter 10) is particularly keen to see a resolution to the issues at the current Dartford Crossing and supports the further analysis of options including proposals for a new Lower Thames Crossing, building upon earlier studies to identify an agreed and deliverable solution. Congestion at the complex and adjacent M25 Junctions 30 and 31 also needs to be addressed if the potential of the London Gateway Port and logistics centre is to be realised without having undue impact upon the road network.

The A12 corridor

Problems encountered along the A12 are well documented, having been examined in 2008 by an Essex County Council funded Public Inquiry and the 2010 DfT-led *London to*

Haven Ports Study. Through the A12 Alliance we will continue to lobby the Highways Agency to address specific local problems along the A12 and to develop a longer-term investment plan that recognises the importance of the A12 to the Essex economy.

The A120

The A120 trunk road linking Harwich port to the M11 is currently part of the European TEN-T network¹ but only part of route is included within the Government's National Strategic Network². Improvement of the A120 would support the regeneration of the Essex coast and the establishment of Harwich as a centre for wind energy development.

Between the A12 at Marks Tey and Braintree the A120 is currently a single carriageway road. A range of small scale safety and journey reliability improvements have been identified by the Highways Agency and we will lobby for their implementation. Longer-term dualling of the A120 would improve connectivity across northern Essex and provide essential network resilience for traffic accessing the Haven Ports by providing an alternative to the A12 and A14 in line with TEN-T ambitions to improve network efficiency.

Council-managed strategic roads

Essex County Council is responsible for the network of roads that link our main towns (other than the M25, M11, A12 and A120 discussed above) including the A127, A13, A414, A130 and A131. Several improvements to these routes have recently opened or are under construction. These include:

- junctions improvements along the A127 benefiting businesses in and around Basildon;
- the Sadlers Farm junction improvement scheme, which will significantly improve traffic flow at the junction between the A13 and A130;
- the A130 Roscommon Way Extension which will improve access to Canvey;
- the A13 Passenger Transport Corridor improvements and redesign of Tarpots Junction which will benefit all users of this busy route;
- a new junction on to the A12 at Cuckoo Farm and the extension of the Northern Approaches road which will significantly improve access to northern Colchester; and
- the dualling of the final section of the A414 between the M11 and Southern Way which will improve access to Harlow.

Despite recent improvements there are still a number of locations on the local strategic road network where journeys are unreliable or improvements will be required to support significant numbers of new homes. The Council will therefore continue to

¹ The Trans-European Transport network (TEN-T network) is comprised of routes defined by the European Union as being of significant importance to the economy and to promoting social cohesion.

² The routes defined by the UK Government as being of national importance.

identify measures to tackle the causes of unreliable journeys and work with planning authorities to identify investment needs to support growth.

9.1.2 Priorities for the Strategic Rail Network

The three rail lines serving Essex are all operating close to, or already at, full capacity during the morning and evening peaks as evidenced in the 2010 *London and South East Route Utilisation Strategy Draft for Consultation* (LSE RUS). ECC will lobby Government to ensure that all current planned and proposed improvements are implemented and outstanding overcrowding issues are addressed.

The Great Eastern Main Line

Recent timetable changes on the Great Eastern mainline have gone some way towards addressing current overcrowding on this line. However, it is essential that the holder of the new franchise (to be awarded in 2013) works with local stakeholders, Network Rail and DfT to develop deliverable solutions that address the serious future overcrowding identified in the LSE RUS. The Council will seek to be involved in the re-franchising process from the earliest stage.

The Essex Thameside Line

For Essex Thameside services into London, train speeds are considerably lower than on other comparable commuter links, leaving destinations within the Essex Thames Gateway at a competitive disadvantage when attempting to attract employers – for whom the proximity of London should be an advantage. The Council will therefore lobby for faster services.

The West Anglia Line

Rising passenger demand on the West Anglia Line will lead to significant over-crowding unless additional capacity can be provided. Much of this be met by running additional services to Stratford, and then to Liverpool Street following completion of Crossrail. However, the bottleneck at Tottenham Hale needs to be addressed and Coppermill junction improved. All improvements should also allow for the later implementation of full four-tracking of the Lee Valley route. The Council will lobby for these improvements to be delivered.

Crossrail

Crossrail will improve links from Essex to central and western London by providing a high frequency service from Shenfield via Brentwood, Stratford and Liverpool Street to the West End and on to Maidenhead. This is an opportunity for Essex but improvements will be required at Shenfield and Brentwood stations to improve access and interchange opportunities for passengers

The London Underground Central Line

The Central Line serves 8 stations in Essex or on the boundary with London (Epping, Theydon Bois, Debden, Loughton, Buckhurst Hill, Roding Valley, Chigwell and Grange Hill) providing a frequent commuter service to the centre of London. We will continue to lobby Transport for London to ensure that the interests of Essex residents are represented and to improve access to underground stations and interchange opportunities for passengers.

9.1.3 Priorities for access to the international ports and airports

Essex is home to two of the UK's major international gateways at the Port of Harwich and Stansted airport, with Southend airport planned to grow significantly from an airport of local importance, to one of increasingly national significance. Immediately adjacent to the county is the UK's largest container port at Felixstowe, Tilbury Port in Thurrock and the major port development at London Gateway. These gateways serve a crucial role for the local economy, but also generate significant traffic which needs to be carefully managed to avoid affecting the quality of life of Essex residents. Our priorities for these gateways are discussed below.

The Port of Harwich

The Port of Harwich is a major roll-on roll-off terminal and in recent years has grown through the expansion of the cruise ship trade. Planning permission exists for the significant expansion of container handling capacity at Bathside Bay and Harwich is being developed as a base for the offshore wind industry. Necessary improvements to the A120 from Harwich to the A12 are expected to be partially funded by the developers of the Bathside Bay container terminal, though this project has been delayed by the worldwide economic downturn. We will therefore continue to lobby the Highways Agency and investigate alternative funding mechanisms to ensure that the A120 continues to support the regeneration of Harwich.

Stansted Airport

London Stansted Airport, the third largest airport in the UK, handled 19.7 million passengers in 2009. Planning approval has been granted which will enable this to increase to 35 million passengers per year, without the provision of an additional runway. Improved sustainable access to the airport from Essex is necessary if the Essex economy is to benefit fully from the business opportunities it offers.

Southend Airport

London Southend Airport is an important asset and is set to increase in importance as it expands over the next few years with the potential to create many new jobs and attract new businesses to the area. Expansion of the airport could result in traffic growth, which must be carefully managed to ensure the airport and surrounding transport network does not become congested.

Ports in neighbouring areas

Road and rail access to ports just beyond the boundary of Essex (the Port of Felixstowe in Suffolk, Tilbury Port in Thurrock, and the new London Gateway Port currently under construction in Thurrock) also impacts upon the Essex transport network. We will therefore continue to work constructively with neighbouring authorities, port owners, the Highways Agency and the rail industry to ensure that reliable and sustainable transport connections are provided to the ports.

9.2 Priorities for the Essex Areas

In Chapter 3 we introduced the four planning areas within Essex and the specific issues which have been identified within each. Using a combination of the evidence base compiled in support of this strategy, evidence from the individual district/borough Local Development Frameworks, and the findings from stakeholder and public consultations, we have determined a list of the key priorities for each area. These are listed in detail in Appendix D and summarised in the discussion below.

In accompaniment to the Local Transport Plan, we will work with our local partners to develop a more detailed 'Area plan' for each of the areas. These will set out how the outcomes of the Local Transport Plan will be delivered at a local level.

Priorities for the Heart of Essex

The strategic routes which traverse the Heart of Essex (which include the A12, A120 and Great Eastern Main Line) provide vital links to London and beyond. Ties between the area and London are strong (particularly to the west), with good access to the strategic routes particularly important to those who live and work there. Making better use of these links is therefore a key priority; particularly by:

- Lobbying Government for additional capacity on the Great Eastern Main Line to accommodate growing commuter demand;
- Lobbying Government for enhancements to the A12;
- Improving access to railway stations and improving station facilities;
- Improving links between the Heart of Essex centres and the strategic network; and
- Developing long-term solutions to resolving gaps within the strategic network.

As the administrative centre of Essex and largest town in the area, Chelmsford is set to accommodate the greatest levels of employment and housing growth in the county. Providing for this growth without over-burdening existing transport networks will be a key challenge. Priorities therefore include:

- Providing for, and promoting, sustainable forms of travel;
- Delivering transport improvements to support growth, including the North East Chelmsford Station;
- Tackling congestion and improving journey-time reliability; and
- Maintaining and improving public transport links.

More modest, but significant, growth is planned for the local centres in the Heart of Essex. These serve an important role for local residents and their surrounding communities (particularly as much of the area is rural in character). Providing good access by a range of travel choices to essential services, improving connections between the centres, and delivering transport improvements which support regeneration and growth are key priorities.

Priorities for the Thames Gateway

The Thames Gateway is home to some of the most ambitious plans for regeneration and growth in Europe. With the area extending beyond the boundaries of Essex and encompassing the administrative areas of Southend-on-Sea and Thurrock, a joined-up approach between the three 'Greater Essex' authorities is required to deliver the transport improvements needed (see the joint statement in the next chapter). Of key importance will be ensuring that these improvements encourage the adoption of sustainable, low carbon travel choices. Priorities for the area therefore include:

- Providing for, and promoting access by, sustainable modes of travel to new development areas;
- Improving public transport links between the Thames Gateway centres (including the A13 Passenger Transport Corridor and *sert* schemes);
- Improving the availability of travel choices (including improving cycling networks) and raising public awareness of these through travel planning; and
- Improving the attractiveness and ease of use of public spaces to support regeneration.

As the largest of the Thames Gateway centres within Essex, Basildon is a major location of employment and housing growth. Priorities identified for the town include improving local bus services, improving the town's cycle networks (including links with surrounding areas) and promoting sustainable travel.

Strategic links with London are vital to the area, with large volumes of commuters travelling by train from Thames Gateway stations to the capital. Long commuting times relative to the distance travelled and increasingly limited capacity on services are potential inhibitors to regeneration and growth in the area, making lobbying for improvements to rail services and greater involvement by the Council in the rail franchising process high priorities.

Strategic inter-urban roads in the area (which include the A127, A129, A130 and A13) are also subject to frequent congestion. It will be important, both to the area and the wider economy of Essex, to improve the reliability of journeys along these routes.

Priorities for the Haven Gateway

As a major international gateway for the UK, the strategic links to the Haven Gateway serve an important national, as well as local, role. Improvements to the A12 and A120 corridors and the Great Eastern Mainline are therefore vital to the ongoing success of

the area (with the former two especially important to the delivery of the proposed port expansion and wind port development in Harwich).

Regeneration and growth are local priorities, with the area's economy largely self-contained and fewer residents commuting long distances for work than in other parts of Essex. Colchester, as the main town within the area, is the most rapidly growing town in Essex, with Braintree also set to accommodate significant housing and employment growth. Transport priorities for the Haven Gateway therefore include:

- Providing the transport improvements needed to accommodate housing and employment growth in a sustainable way;
- Improving the attractiveness of public spaces to support regeneration (particularly within the coastal towns);
- Improving the availability, reliability and punctuality of local bus services;
- Tackling congestion within Colchester (including the provision of Park & Ride facilities);
- Improving access to railway stations and improving facilities for passengers;
- Improving and promoting cycle networks; and
- Improving the availability of travel choices and awareness of them.

Away from the main towns, much of the area is rural in character. Providing rural and remote communities with access to employment and essential services is imperative if we are to help our residents enjoy a good quality of life (see rural priority discussion).

Priorities for West Essex

West Essex borders more of Essex's neighbouring authorities than any of the other planning areas. The character of the area is diverse, encompassing the edge of the London commuter-belt, the "new town" of Harlow, as well as historic rural towns and villages. The priorities for the area therefore reflect the importance of cross-boundary movements and the differing needs of local communities.

With significant housing and employment growth to be delivered in West Essex, particularly within and around Harlow, it will be essential to ensure that this is accompanied by measures which support access and promote the selection of sustainable travel choices. Priorities include:

- Improving access to and from the M11 corridor;
- Tackling congestion and improving the management of traffic in Harlow town centre;
- Providing the transport improvements needed to support housing and employment growth;
- Improving cycling networks and walking routes and encouraging their greater use;
- Improving the attractiveness of public spaces and their ease of use

Links to London are vital, particularly to the south of the area, with much of the local economy closely tied to that of the Capital. Priorities therefore include working with Transport for London to improve the journey experience of Essex residents using the Central Line underground services, and lobbying government for improvements to West Anglia rail services.

With much of the area rural in character, access to employment and services for those is an important issue. Providing access to the local centres, to Harlow, and to essential services from rural areas and improving choices for travel between the centres are priorities.

9.3 Priorities for our rural areas

While the majority of the population of Essex lives in urban areas, more than two thirds of the county is rural, with our coastal areas are especially remote. The rural areas define our county's unique character and continue to support a productive agricultural sector, with over 240,000 hectares of farmed land in Essex.³ Strong rural communities are essential if we are to deliver the best quality of life to our residents and growth in the Essex economy will be dependent on support for the expansion of rural businesses.

Transport has an important role in meeting the needs of our rural areas, but it is important that it does not in turn impinge upon the unique rural character. Our priorities for the rural areas of Essex therefore include:

- Supporting the economy of our historic towns and villages, extensive coastline and varied countryside;
- Supporting transport to ensure that access is provided to employment, education, healthcare and food shopping;
- Ensuring that people are able to access important services (including shopping, healthcare, library facilities, etc.), without needing to travel long distances; and
- Minimising the impact transport has on the local character.

Specific priorities for each of the four planning areas will be identified within the relevant Area plan.

³ As reported by the Department for the Environment and Rural Affairs in its survey of land use, livestock and labour on agricultural holdings, 2009.

10. Delivering the transport strategy

Essex County Council is committed to providing efficient, effective, customer-focused transport and highways services to the people of Essex. Our aim is to provide first class highways and transportation services which make best use of the more limited resources available to the Council. This can only be achieved by developing new ways of working, including partnerships with both public and private organisations, to provide the best balance of leadership, expertise and value for money. Our new approach, therefore, is about more than cost savings; it is about improving our core services and delivering services people require in the most effective way.

Within this chapter we set out how we will achieve the outcomes of this strategy by working in new ways with partners from across the public, private, charity and voluntary sectors. We also explain how we will monitor our progress.

10.1 A partnership for the future: the Highways Strategic Transformation Programme

A key component of the Council's new approach to delivery is our Highways Strategic Transformation programme. This will see the County Council join forces with a private sector partner, enabling us to combine experience and best practice from the public and private sectors to deliver the following outcomes for Essex Council Tax payers:

- Value for money whilst maintaining or enhancing standards of overall quality and customer services;
- A flexible and adaptive service within a long term contract that can successfully deliver the evolving requirements of Essex under changing social, technological, economic and political conditions;
- Improved economic, environmental and social wellbeing, arising from a well maintained, well managed and safe highway network that satisfies the needs of those who depend on it, use it or frontage it; and
- A delivery model that has the potential to achieve further growth and economies of scale via trading.

Collaborative working and developing and maintaining a healthy partnership are crucial to the success of the programme.

Work on identifying the most appropriate partner commenced in early 2010, with the objective of having the new strategic partnership operational from April 2012.

10.2 Working across boundaries

Transport services and networks do not end at county boundaries and it is important that Essex residents and businesses can travel easily to neighbouring areas, into London and to the rest of the United Kingdom.

Delivering the transport strategy will require a joined-up approach between the County Council, transport operators, borough and district councils and wider partners. Specific partnerships are discussed below.

10.2.1 The Kent, Greater Essex and East Sussex Local Enterprise Partnership

The Kent and Greater Essex and East Sussex Local Enterprise Partnership (LEP) has been formed to help to create the right conditions for business growth at a strategic level. It brings together leaders from business, local government and further and higher education to articulate the area's strategic priorities and develop solutions which will remove barriers to growth. The LEP is a strategic body, focusing its efforts on issues of cross-border economic importance where there is greater value in working together. In particular, the LEP will take targeted, strategic joint action in order to:

- Unlock the potential of the Thames Gateway – by supporting the work of the Thames Gateway Strategic Group and developing solutions to bring forward critical infrastructure in the Gateway to support growth;
- Unlock the potential of coastal East Sussex, Greater Essex and Kent and Medway – by focusing on the opportunities of Britain's largest ports cluster and the regeneration potential of coastal towns, supporting the work of the coastal authorities and businesses in identifying priorities;
- Unlock the potential of rural East Sussex, Greater Essex and Kent and Medway – by focusing on supporting and creating rural business opportunity and the crucial need for investment in broadband connectivity to enable growth; and
- Unlock the potential of our key towns and cities – by investing in the infrastructure needed to support business and housing growth.

The establishment of the LEP will improve co-operation between partners from across the Thames Estuary on issues of mutual concern (including the M25, the Dartford Crossing and proposals for a Lower Thames Crossing) and will help bring forward strategic solutions for the M11, A12, A13, A127, A120 and A130 and the rail network. The LEP will also develop a common approach to airport expansion.

Essex will also maintain relationships with the Greater Cambridgeshire and Greater Peterborough, Hertfordshire, and New Anglia Local Enterprise Partnerships, seeking to develop a common approach for key transport corridors.

10.2.2 A joined up approach for Essex Thames gateway

The following is a joint statement supported by Essex County Council, Southend-on-Sea Borough Council and Thurrock Council.

The Thames Gateway is a UK national and regional priority area for regeneration and growth due to the transformative impact that an improved local economy could have on the economic performance of UK plc

The three authorities have worked together with the district authorities within Essex to develop the Integrated County Strategy that identifies a clear and agreed vision for “Greater Essex” which includes a strategic focus on growth and regeneration within Thames Gateway South Essex (TGSE). Future growth and regeneration in Thames Gateway South Essex up to 2031 is being focussed mainly on the three major urban centres of Thurrock, Basildon and Southend.

The three Local Transport Authorities of Thurrock, Essex and Southend recognise that transport will be vital in realising and delivering the aspirations for TGSE. The Thames Gateway South Essex Transportation Board was formed in 2004 and comprises representatives of the three Local Authorities, the Department for Transport, Homes and Communities Agency, the Highways Agency, rail operators, district councils, and private businesses. In 2005 the Board published its “Thames Gateway South Essex Business Plan for Transport” to ensure that the growth and regeneration in TGSE was underpinned by the provision of appropriate transport infrastructure. Delivery of the Plan is overseen and monitored by the TGSE Transportation Board and underpins the three new Local Transport Plans that cover the TGSE area.

Over the past seven years funding has been secured for seven key schemes, amounting to over £114 million (see map). In addition an innovative mass transit scheme known as “South Essex Rapid Transit” (*ser/t*) is currently in the DfT “Development Pool” awaiting approval with a view to confirming £35 million of co-funding to allow delivery by 2014/15.

As we move into a new era of financial constraint, working in partnership to support economic growth with cost effective and sustainable transport solutions is vital. The TGSE Transportation Board has forged and will continue to forge strong links within the newly formed Local Economic Partnership and Thames Gateway Strategic Group and will continue to work closely with businesses. A key role will be to identify funding opportunities to deliver the priorities outlined below.

The three authorities are already sharing expertise and achieving better value for money by working together in areas such as passenger transport services (Thurrock and Essex), bus priority systems (Southend, Thurrock and Essex) and traffic control systems. The three authorities will further extend successful partnership working and accountability (with our transport providers) in order to share best practice and achieve best value.

The three authorities have agreed the following joint priorities:

1. Supporting economic and housing growth with bespoke, innovative and sustainable transport solutions by:
 - Providing sustainable and healthy transport choices within town centres and ensuring access to local jobs and services. Focusing on supporting better access to the strategic areas of growth:
 - London Gateway Port
 - London Southend Airport and Town Centre

- Lakeside Basin
- Basildon Town Centre and Enterprise corridor.

2. Improving reliability and journey times on the strategic network by:

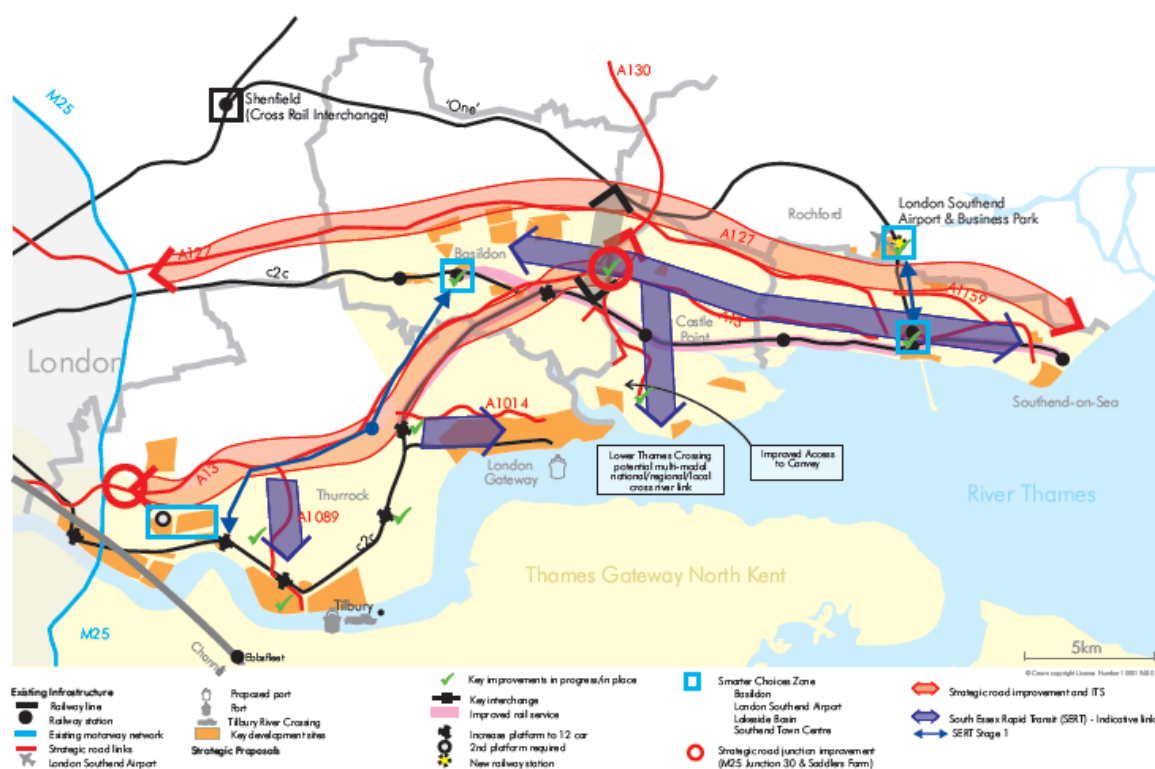
- Developing packages of measures to improve capacity and reliability at junctions and actively manage car, freight and passenger transport traffic through integrated transport management and information systems to improve network resilience and provide alternatives to the car. Particularly on the A127 and the A13 that act as strategic routes through TGSE and beyond the region to the M25, Dartford Crossing and London.
- Pressing for capacity increases at junctions 29 and 30 on the M25 which are key contributors to unreliable journey times on the network and are seen as limiters to economic growth in the TGSE and the wider region.
- Working through the LEP with the Department for Transport to address the current bottleneck at the Dartford Crossing; firstly by encouraging the development of free flow tolls and a review of options for capacity enhancements funded by crossing tolls; and secondly by working to get agreement on the best way forward for a new Thames Crossing, ensuring that the funding for any crossing includes link roads and improvement to the existing strategic network as well as the crossing itself.

3. Improving the speed and reliability of the rail network within TGSE by:

- Working with Train Operating Companies and Network Rail to identify opportunities to increase capacity, introduce faster trains and reduce journey times, particularly through the franchising process.
- Taking a co-ordinated approach to improving sustainable access to key rail stations across the gateway.

These priorities are visualised in the map shown overleaf.

Figure 9.1 – The joint priorities for the Essex Thames Gateway



10.2.3 Working with other neighbouring authorities and local partners

In addition to the two partnerships discussed above, the Council is engaged in other formal and informal partnerships, boards and forums to discuss and address transport issues that are of mutual importance to Essex and our neighbours. With limited funding available for the foreseeable future, we need to build upon these relationships and work closely with our partners, considering how we can work jointly to improve approaches to service delivery.

Examples of other partnerships and forums in which we participate include:

- The Regional Transport Forum (and the Strategic Transport Sub Group that supports it) which has proven to be a useful and successful way to discuss transport issues common to the East of England Region. The Forum will continue to function during 2011-12 to oversee the transition from regional structures to the new Local Enterprise Partnerships;
- The Haven Gateway Partnership which encourages regeneration and development across the Haven Gateway and has seen collaborative working between Essex County Council, Suffolk County Council, the constituent districts and local businesses (including the Haven Ports);
- The Harlow Stansted Gateway Transport Board, which brings together partners including Hertfordshire County Council, Harlow, East Herts and Epping Forest district councils, Harlow Renaissance, the operators of Stansted Airport and local public transport operators. Its focus is on improving travel in and around

Harlow and identifying the investment needed to support regeneration and growth;

- The A12 Alliance, which was established by Essex County Council following the A12 Inquiry and includes representatives from Suffolk County Council, the Highways Agency, the local business community and Essex Police who work together to address problems and lobby for solutions on the nationally important A12;
- The Great Eastern Mainline Vision Group which has been established to lobby for improvements that balance the need for intensive commuter services, fast intercity services, and freight access to the Haven Ports. The group is chaired by the local business community and includes Essex County Council, Suffolk County Council, Norfolk County Council, Ipswich Borough Council, Colchester Borough Council, Norfolk City Council, and representatives from the rail industry. In the west of the county the West Anglia Routes Group performs a similar function.

In addition, an Epping Forest Transport Strategy is being developed in partnership with the City of London and the London Boroughs of Redbridge and Waltham Forest. This strategy contains a series of realistic and sustainable measures to reduce the impact of traffic and to better protect the forest landscape.

10.3 Managing delivery

It is essential that transport services and projects are delivered efficiently and effectively. Robust procedures are being put in place to ensure that the programme of transport interventions delivers the outcomes identified within the transport strategy. These procedures will see changes to the way Essex County Council works; ensuring that value for money, efficiency and the wider needs of Essex are at the core of everything we do

We will ensure that the transport programme is developed in a way that identifies and prioritises the most effective interventions and delivers these efficiently, following the governance procedures that have been put in place by Essex County Council. Our processes are discussed in greater detail in the Implementation Plan that accompanies this strategy.

10.4 Monitoring Performance

Unlike past local transport plans this plan will not include specific targets for nationally defined measures of performance. However, it is essential that we continue to monitor and report on the delivery of the local transport plan. Each of the five outcomes will be monitored by a suite of primary and secondary performance indicators that together give a broad measure of the effectiveness of our plan. This is explained in the table overleaf.

Outcome	Primary Performance Measure
All outcomes	Satisfaction with highways and transportation services in Essex (KBI 01)
Provide reliable connectivity for Essex communities and international gateways to support sustainable economic growth and regeneration	Reliability of journey time on Essex routes Bus punctuality and reliability Satisfaction with traffic levels and congestion (KBI 17)
Reduce carbon dioxide emissions and improve air quality through lifestyle changes, innovation and technology	CO2 emissions from transport in Essex Satisfaction with local levels of traffic pollution
Improve safety on the transport network and enhance and promote a safe travelling environment	Annual number of people killed and seriously injured. Satisfaction with road safety locally (KBI 20)
Maintain all transport assets to an appropriate standard and maximise network availability and resilience	% principal road network where structural maintenance should be considered % non-principal road network where structural maintenance should be considered Satisfaction with condition of highway locally
Provide sustainable access and travel choice for Essex residents to help create sustainable communities	Countywide measure of access to services (to be developed). Ease of access to key services (all modes) (KBI 03)

Particular areas of concern will also be monitored (for instance, road condition is currently of particular concern to the public following the cold winters of 2009/10 and 2010/11). We will also carry out specific monitoring of the effectiveness of individual transport schemes to ensure that the chosen solution is effective (for instance, we will monitor the rate of casualty reduction at sites where safety improvements have been made).

We will also monitor public opinion using the independent annual National Highways and Transport survey conducted on behalf of more than 80 transport authorities by Ipsos-MORI.

Appendix A – Plans and Duties Relevant to the LTP

Network Management Duty

Under the Traffic Management Act 2004, local highway authorities have a statutory duty to manage their road network to secure the expeditious movement of traffic on their network and to facilitate the same on the networks of other authorities. Local transport authorities which are also local highway authorities should therefore ensure that their LTP strategy and implementation plan details how they plan to fulfil these duties by avoiding, reducing and minimising congestion or disruption

Transport Asset Management Plan

Transport infrastructure assets in many cases represent an authority's biggest body of assets. To deliver good value for money to the public in managing these, DfT recommends that local transport authorities consider the value of an asset management approach. The DfT considers that the best way to achieve this is to develop a Transport Asset Management Plan (TAMP), and for this TAMP to be integrated with the LTP. The TAMP approach enables authorities to take a strategic view on the optimal use of resources for the management, operation, preservation and enhancement of their transport assets. The TAMP should set out the role for corporate and (where appropriate) highway asset managers, and cover service levels, investment, risk assessment, and monitoring processes.

Air Quality Action Plan

Local authorities have a duty to review and assess local air quality under the UK Air Quality Strategy. Where local authorities have declared an Air Quality Management Area (AQMA), they are required to produce an Air Quality Action Plan (AQAP) indicating how they plan to improve air quality. Where air quality is a transport issue, the integration of AQAPs with LTPs will continue to provide a systematic way of joining up air quality management and transport planning. Air quality reports are made direct to the Department of the Environment, Food and Rural Affairs on an annual basis.

Rights of Way Improvement Plan

The Countryside and Rights of Way Act 2000 introduced a duty for all local highway authorities to prepare a Rights of Way Improvement Plan (ROWIP), in consultation with Local Access Forums. The current round of ROWIPs runs from 2007 to 2017.

Noise Action Plans

Authorities should examine the options for addressing noise problems identified in Noise Action Plans in order to meet the requirements of the European Environmental Noise Directive (2002). The Directive aims to establish a common approach intended to avoid, prevent or reduce on a prioritised basis the harmful effects, including annoyance, due to exposure to environmental noise. This includes noise emitted by transport.

Bus Information Duty

Under the Transport Act 2000, local transport authorities have a duty to work with bus operators to determine what local bus information should be made available to the public, and how it should be provided. This should include information on bus routes, the timetabling of services, fares (including concessionary fares), facilities for disabled passengers, connections with other public transport services, and any other information the authority deems appropriate in relation to its area. As part of this process, the authority should consult with local user representatives and the Traffic Commissioner (an individual appointed by the Secretary of State whose duties include overseeing the licensing of the operators of buses and coaches and the registration of local bus services). Where appropriate, a local transport authority should work with other authorities to carry out this duty.

Local Economic Assessment Duty

The Local Democracy, Economic Development and Construction Act (2009) provides for the new local authority economic assessment duty. This requires all county councils and unitary authorities to prepare an assessment of the economic conditions of their area. These assessments should inform a range of local authority strategies, including local transport plans.

School travel

To meet provisions in the Education and Inspections Act 2006, local authorities are required to develop a sustainable modes of travel strategy. This involves assessing the travel and transport needs of all children and young people in their area, and considering how they need to plan their transport infrastructure to meet the needs of all pupils. In doing so, they are required to maximise the potential to promote and utilise sustainable modes of travel.

Disability Equality Duty

Local transport legislation has, since 2000, contained an obligation for local transport authorities to have regard to the transport needs of older people and people with mobility difficulties when developing transport plans and policies. The Local Transport Act 2008 adds a new requirement to have regard to the needs of disabled people, both in developing and implementing plans. This broadens the scope of local transport legislation to bring it in line with the Disability Discrimination Act 2005.

Public Sector Equality Duty

On 5 April 2011 the new public sector Equality Duty came into force. The Equality Duty replaces the three previous duties on race, disability and gender, bringing them together into a single duty, and extends it to cover age, sexual orientation, religion or belief, pregnancy and maternity, and gender reassignment. The aim of the Duty is for public bodies to consider the needs of all individuals in their day to day work, in developing policy, in delivering services, and in relation to their own employees.

Local Development Frameworks

It is critical that transport and spatial planning are closely integrated. Both need to be considered from the outset in decisions on the location of key destinations such as housing, hospitals, schools, leisure facilities and businesses, to help reduce the need to travel and to bring environmental, health and other benefits. LTPs should reflect and support Local Development Frameworks (LDFs). LTPs should be a key consideration in the planning process. In two-tier areas, counties and Integrated Transport Authorities should work closely with districts to ensure alignment between LDFs and LTPs.

The integration of transport and spatial planning will be a particular consideration for growth areas, where there is an opportunity to use the system to facilitate more sustainable travel patterns and choices. The presumption is that growth will be located in places where existing transport infrastructure can accommodate the consequent demand. Approaches such as demand management can help improve use of existing capacity.

National Park Management Plan and AONB Management Plans

A National Park Management Plan sets out a long-term vision and a shorter-term action plan for how the objectives for a National Park should be fulfilled through sustainable development. It sets the framework for activities pursued within a National Park, including transport. Area of Outstanding Natural Beauty (AONB) management plans are similar in nature.

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Accessibility Strategy (2006)

Key Actions
Working with planning partners to assess the accessibility of proposed developments
Providing ongoing support for community transport
Working with operators to improve integration between public transport modes
Improving access to key services by walking and cycling
Improving the physical accessibility of the public transport network
Working with service providers to identify and implement measures to improve access for socially excluded groups
Improving the coordination of local bus services with statutory school and social care transport
Working with health providers to improve information on access to hospitals and to better coordinate with hospital transport provision
Working with education providers to improve access to schools by walking and cycling
Working with employers and centres of further education to improve access to employment, education, training and skills development for key groups (particularly the NEET group)

Bus Information (2006)

Key Actions
Working with operators to ensure local service information is available, accurate and is produced in the appropriate format
Extending the provision of Real Time Passenger Information at stops on selected corridors (generally in conjunction with QBP arrangements)
Working with operators to ensure that all roadside timetable information is of a consistent design and standard
Providing comprehensive and up-to-date information on bus services for Traveline
Providing electronic passenger information at key interchanges – including departure screens at principal interchanges and passenger enquiry terminals at interchanges and selected off-route locations
Marketing to raise awareness of, and stimulate the use of, public transport
Providing people with sufficient information on all forms of sustainable transport (including walking, cycling, taxis and community transport)
Providing specialised information for disabled passengers through the ETCC
Offering high-quality web-based public transport travel information – including real-time information, journey planning tools (through Traveline) and interactive timetable services.
Publishing a comprehensive bus timetable three times per year
Extending the provision of on-street Information Kiosks

Cycling Strategy (2001)

Key Actions
Improving facilities for cyclists through traffic management measures, junction improvements, cycle lanes/tracks and cycle parking at key trip generators
Improving cycle safety through physical measures at problematic sites and ‘softer’ initiatives (including education, training and publicity)
Improving cycle security through the provision of secure and suitable cycle parking in residential areas, places of work, schools, town centres and transport interchanges.
Promoting a cycle-friendly culture through publicity material and events to raise awareness and encourage behavioural change, working with schools and employers and providing training facilities and infrastructure
Integrating cycling into other relevant policy initiatives and programmes; for instance by combining cycling with public transport travel for longer trips and promoting the recreational aspects of cycling

Development Management Policies (2010)

Key Actions
Protecting the highway network for the safe and efficient movement of people and goods by all modes, by minimising access on roads within the DM Route Hierarchy, assessing and determining proposals against current standards and ensuring safe and convenient access for sustainable transport
Protecting the function of Strategic Routes / Main Distributors between defined settlement areas by prohibiting direct access / the intensification of an existing access and within defined settlement areas by ensuring the number of access points is minimised
Protecting the function of Secondary Distributors between defined settlement areas by prohibiting direct access / the intensification of an existing access and within defined settlement areas by ensuring that where access is available to a lower category of road this is used
Protecting the function of all other routes by ensuring that new access points are designed and constructed to current standards
Protecting the safety and efficiency of the highway network by have a general presumption against the use of secondary or multiple accesses on Strategic Routes and Main Distributors
Ensuring that residential estates allow access by passenger transport; new residential and industrial Estate Roads are designed in accordance with the EDG, Urban Place Settlement and relevant national guidance; and estate roads are designed with an emphasis on a high quality built environment and urban realm
Protecting the highway network for the safe and efficient movement of people and goods by ensuring that all works within the highway comply with the current national and ECC design standards
Ensuring that development proposals comply with Essex County Council's current parking standards.
Ensuring that the developer will minimise the number of trips by the private vehicle through the provision of alternative transport modes and / or associated infrastructure by assessing and determining proposals against the Road Passenger Transport, Cycling, Walking, Rail and Schools and Colleges Sustainable Modes of Travel strategies.
Safeguarding existing Public Rights of Way, requiring an alternative route where they cannot be and requiring new or enhanced PRow.
Requiring a Stage 1 Safety Audit to accompany any planning application which seeks to materially alter the existing public highway
Protecting the function of the public highway by requiring the developer to demonstrate

Key Actions
that the proposal has no impact in congestion and requiring the provision of appropriate mitigation measures when needed
Presuming against development that would cause a detrimental impact to existing AQMAs unless appropriate mitigation measures are provided by the developer
Requiring maintenance payments for a 15 year period for infrastructure directly related to the development site.
Protecting the function of the highway network by ensuring proposals which will generate significant heavy goods traffic are: located in close proximity to Strategic Routes / Main Distributors and / or Secondary Distributors; and are connected to Strategic Routes / Main Distributors and / or Secondary Distributors via short sections of other roads
Ensuring that a Construction Traffic Management Plan is submitted and agreed prior to the commencement of development

Highways Maintenance Strategy (2008)

Key Actions
Develop, adopt and regularly review policies for highways maintenance, actively engaging with local communities and focusing on their needs.
Efficiently and consistently collect and process highway inventory, condition and status information
Adopt a risk-based approach to rectifying defects on the highway network, prioritising those which require urgent or prompt attention as they represent an immediate or imminent hazard or because there is a risk of short-term structural deterioration.
Seek to take a proactive approach to maintenance by addressing deteriorating assets before they require costly intervention
Adopt a reactive (rather than routine) approach to maintenance for hedges and trees, embankments and highway drainage; responding to issues raised during routine safety inspections.
Ensure that works on the Council-managed highway network (no matter by whom) are planned and managed so as far as is practicable, to enable the expeditious movement of traffic (including pedestrians and cyclists)
Where possible, and where funds allow, take the opportunity to add value to planned maintenance works by combining these with wider measures to improve the safety and journey experience of non-motorist road users
Set annual targets for condition standards for carriageways, based on available funding, local public priorities, conditioning data and engineering judgement
Review maintenance programmes on an annual basis to reflect new condition data, changes in funding levels, changes in corporate and public priorities and changes in current and desired levels of service.
Consider the longer term options for the management of a growing highway asset, including future maintenance costs of new assets and how these can be minimised
Seek to, whenever possible, gain value or environmental benefit from a scheme, including proactively identifying suitable places within the public highway for the planting of trees.
Ensure that, as far as is reasonably practicable, safe passage along the County's highways is not endangered by snow or ice; undertaking salting on specific routes within the operational network, known as 'precautionary routes' in accordance with the Council's Winter Service Plan

Integrated County Strategy (2011)

Key Actions
<i>Thames Gateway South Essex (TGSE)</i> – Achieve transformational development and change throughout TGSE to significantly improve the local economy, quality of life of residents, and natural and built environment
<i>Key Towns</i> – Promote opportunities for economic growth, redevelopment, and regeneration in the key urban centres of Southend, Thurrock, Basildon, Harlow, Chelmsford, and Colchester
<i>Low Carbon Energy</i> – Support the growth of renewable and low carbon energy as a key sector and promote the growth and location of associated industries in Essex

Rail Strategy (2006)

Key Actions
Improving interchange facilities between bus, rail and other transport modes
Working with the rail industry and local communities to improve actual and perceived safety at stations
Improving the accessibility of stations through better facilities and access routes.
Working in partnership with the Essex and South Suffolk Community Rail Partnership to promote and increase the use of the Essex branch lines
Working with operators to raise awareness of, promote and provide information on rail travel opportunities

Road Passenger Transport Strategy (2006)

Key Actions
Maintain the network of bus and coach services along Identified Key Passenger Transport Corridors (IKPTCs) providing access to the four major centres, other centres of employment, education and employment, vital services, leisure and recreation, major transport interchanges and international gateways
Maintain Quality Bus Partnerships (QBPs) along the IKPTCs to improve the standard of services along these routes.
Monitor and improve punctuality along key corridors through Punctuality Improvement Partnerships (PIPs) with local operators
Develop and implement bus priority measures along the IKPTCs where necessary to improve reliability and punctuality.
Further develop the provision of Park & Ride facilities at each of the four major centres
Extend the provision of Real Time Passenger Information (RTPI), using the Essex Traffic Control Centre to provide comprehensive information to passengers
Develop rapid transit and express coach services, in particular the South Essex Rapid Transit (SERT) system, to support growth in the Thames Gateway.
Work with bus operators to improve integration between services
Work to improve the integration of ticketing, including the development of smart card technology
Develop more flexible demand responsive transport services in rural areas to support access to employment, vital services, retail and leisure
Work with local communities and charities to maintain and further develop Community Transport services
Improve security on vehicles, at interchanges and bus stops through CCTV and lighting measures
Reduce emissions from our own passenger transport fleet through more efficient vehicles and fuels and work with other operators to reduce emissions through QBPs.

Road Safety Strategy (2006)

Key Actions
Working as part of the Essex Casualty & Congestion Reduction to agree joint accident / casualty reduction strategies between partners and coordinate activities.
Identifying and investigating sites with a history of accident clusters and prioritising remedial treatments through a benefit/cost ratio
Implementing the cost-effective Surface Treatment Programme to improve the road surface at sites where a high proportion of accidents occur because of wet conditions or where vehicles repeatedly lose control
Coordinating the implementation of road safety improvements with the delivery of highways maintenance works, with accident rates a key criterion in identifying priority sites for planned maintenance works.
Trialling emerging engineering technology and road safety developments to improve our road network in line with best practice
Improving the driving standards of young and inexperienced drivers through the promotion of training initiatives
Reducing the number of KSIs as a result of drink and drug driving through awareness campaigns and educational programmes and working in partnership with the police to identify target areas for enforcement measures
Providing support and training for businesses to develop and implement a road safety policy and offering driver assessments
Working with Essex Police to implement the Speed Awareness Scheme which offers offenders (on referral from the Police) the opportunity to attend a course as an alternative to a Fixed Penalty fine and penalty points
Improving cyclist safety and cycle security through adult and child training, cycle route enhancements, and increased secure cycle parking.
Improving pedestrian safety through: Home Zones, traffic calming measures and community street audits (where these are appropriate); engineering measures (including safety measures around schools, and the promotion of pedestrianisation within town centres); and educational measures to encourage safe travel behaviour
Improving child safety by providing resources through schools for training and education, setting up and supporting Walking Buses, promoting and supporting measures to improve the safety of children as passengers and improving safety around schools

Rights of Way Improvement Plan (2008)

Key Actions
Providing co-ordinated, branded and targeting promotional material for the Rights of Way network to increase public use and benefits to rural areas
Producing an up-to-date and publicly available digitised Rights of Way map for the whole of Essex
Providing a better signed and maintained network to make footpath, bridleways and cycle paths more appealing and easier to use
Improving and increasing the amounts of bridleways and off-road cycling routes to provide continuous routes
Working in partnership with parishes and disabled groups to provide a continuous network which is accessible to all and meets the requirements of all users
Improving access to public rights of way through higher standard sustainable transport links (particularly by bus)
Reducing anti-social behaviour on public rights of way, through enforcement and education measures.

Schools & Colleges Sustainable Modes of Travel Strategy

Key Actions
Develop travel plans at any schools without one and support colleges in the production of travel plans
Ensure that published school and college travel plans remain active and are updated regularly
Maintain two-way information flow to ensure alignment between school/college travel plans and Sustainable Modes of Travel Strategy
Ensure that the principles of sustainability and good accessibility are embedded at an early stage into proposals for new or re-sited school/college developments
Improve access to post-16 education and training (see Accessibility Strategy)
Consider travel and transport implications of extended schools provision and incorporate appropriate measures into travel plan approach
Consider travel and transport implications of plans to develop collaborative learning / vocational training programmes and incorporate measures into travel planning process
Provide young people with opportunities to be involved in shaping the policies, services and products that flow from the Schools & Colleges Sustainable Modes of Travel Strategy
Ensure that young people have access to comprehensive and consistent information regarding travel options to support decisions about education, training and employment

Speed Management Strategy (2010)

Key Actions
Balancing the need to travel with the need to improve the quality of life through a speed policy which takes account of the contribution of appropriate travel speeds to environmental and social objectives as well as road safety at a national and local level
Whenever appropriate, aligning local speed limits so that the original mean speed driven on the road is at or below the new posted speed limit
Consulting and engaging local communities (and where appropriate transport operators) when undertaking measures of mean average speeds and on any scheme which involves physical changes to the local road network.
Maintaining free-flowing traffic on Priority 1 & 2 County Routes, ensuring that speed limits are consistent along the route so that similar environments are treated in the same way and new limits should not result in too many changes for the driver.
Encouraging more cautious driving behaviour on rural local roads by removing white centrelines (except where necessary for safety reasons) and providing edge lining to make roads appear narrower.
Considering the introduction of 20mph speed limits and zones on local roads in areas where a high volume of non-motorised road users can be expected or where the character of the carriageway and use of the area demands a reduction in speed.
Ensuring 30mph speed limits in all villages exceeding 11 dwellings and extending beyond a minimum of 350 metres.
Considering the use of variable speed limits where a high volume of vulnerable road users may be expected at specific times
Supporting the introduction of Home Zones in any new development and on existing local roads where there is a high level of community support and traffic volumes are low.
Implementing road humps only as a last resort and only on local roads

TAMP (2006)

Key Actions
Adopting a 'life cycle' approach to the management of the Council's transport assets, detailing the whole life cost of each (i.e. installation, maintenance and removal)
Maintaining up-to-date quality information on the location, number and condition of assets, their rate of deterioration, funding requirements (now and in the future) and when treatment will be required.
Using this information to give an indication of current and future asset needs, repair and replacement costs and to help identify priorities and plan work
Developing cost-effective strategies for the long-term management of Council assets; giving full consideration to the potential effects of different levels of service on the public, services and the environment.
Informing the public and stakeholders on how decisions on service levels are made and what can be delivered with the available budget; using customer information to define levels of service and shape future policy and practice
Achieving continual improvement in the management of transport assets by improving the information held on asset condition and valuation, better reviewing and managing risks and identifying opportunities for greater efficiencies.

Traffic Management Strategy (2005)

Key Actions
Achieve a clear, consistent, understandable road network; allocating roads to a network depending on whether they fulfil a strategic (Priority One) or distributory (Priority Two) traffic function (County Routes); or largely only serve local needs (Local Roads). The County Council will make decisions on County Routes; district / borough councils decisions on Local Roads.
Identifying strategic routes for all modes, determining where conflicts occur, which mode has priority and what measures need to be put in place to control this.
Categorising cycle and pedestrian routes on the basis of whether they are strategically important, provide local access or are primarily leisure routes
Priority One County Routes will be upgraded as necessary and maintained to the highest standards, subject to funding – with each assessed to identify possible capacity and safety improvements.
Balancing the needs of local traffic on local roads with those of non-motorised users, taking into account the different roles of local roads in rural and urban areas. For Priority Two County Routes, motorised vehicle traffic will generally take precedence over the other modes on these routes.
Identifying suitable areas for additional capacity or congestion reduction initiatives, with a blue-print of improvements provided for each of the main towns – based on benefits to journey times, capacity, safety and non-motorised users.
Providing up to date traffic information to in-car satellite navigation service providers, to ensure travel directions reflect the route hierarchy and avoid known congestion hotspots
Monitoring congestion through the ETCC, providing real-time information to road users and improved coordination with the Highways Agency
Reviewing traffic control strategies to maximise performance and operation, ensuring priority is given to the County Routes where necessary.
Ensuring County Routes are restored to full capacity as quickly as possible as a result of unplanned incidents and working in partnership with the police and Highways Agency to as quickly as possible remove and resolve any incident which will impact on County Routes
Ensuring that, as far as possible, County and important through-routes remain congestion free, particularly at peak times, by reviewing parking and loading restrictions (including the introduction of clearways)
Meeting on a monthly basis to identify future works/delays to the strategic network and developing a plan of action (to be agreed by the Traffic Manager) to minimise delays
Proactively monitoring, checking and inspecting streetworks to ensure they are

Key Actions
compliant with relevant Codes of Practice; failure to comply will be dealt with through the courts.
Ensuring County Routes are kept clear of all obstructions (especially during peak periods) by preventing works by Statutory Undertakers during peak periods; and not allowing planned works lasting more than a month unless carried out during the lowest traffic volumes and with the approval of the Traffic Manager.
Operating a system for reporting road maintenance problems
Working with district / borough councils to set standards for Local Roads, ensuring these meet nationally determined performance standards
Developing new cycle routes, lanes and tracks to link smaller villages and towns to their nearest major centre or transport interchange.
On County Routes, accommodating cyclists either on-road with suitable enhancements/measures, or where possible, off-road on signed routes.

Walking Strategy (2001)

Key Actions
Work with partners to promote walking; particularly for trips to school, work and shops and as a leisure activity.
Work with partners to improve pedestrian safety and security
Improve the quality of the walking environment; particularly by: addressing the needs of people with disabilities; working with public transport operators to improve pedestrian facilities at interchanges; maintaining, extending and enhancing the public rights of way network; and maintaining and enhancing footways
Introduce and maintain walking as the primary mode of transport, where appropriate, ensuring the maximum provision of walking facilities as part of new development.

Appendix C – The Transport Policies

This appendix contains the full wording for the policies which are summarised in the main body of the report. This includes supporting text to clarify and expand upon points in the policy wording.

Policy 1 – Customer Experience

The County Council will put our customers at the heart of service delivery by:

- developing its customer service centres and systems to provide easy access to good quality information on local travel and planned works;
- enabling the public, our partner organisations and other stakeholders to contribute to the work of the Council;
- carrying out regular customer surveys to measure public satisfaction.

Supporting Text

Essex County Council aims to provide Essex residents with the best quality of life in Britain. A key part of this is putting our customers at the heart of everything we do; giving Essex residents an opportunity to help shape the services we provide and feel involved in service delivery.

Transport services and people's experiences of using them can have a major influence on their overall quality of life. As part of our approach to delivering services the County Council wants to enable our customers to find information as easily as possible, report their concerns, provide feedback on services and generally interact with the Council in a modern, cost-effective, and efficient manner. In particular the Council will enable the reporting of faults and incidents in a way that assists the early rectification of problems.

There are already a number of ways in which customer service is monitored, including annual tracker surveys and customer satisfaction surveys which benchmark the Council's performance against other local authorities in the country. The Council will continue to collect information on a variety of transport-related topics and use findings and wider feedback to drive continual improvements to the services it provides

The Local Transport Plan will be implemented with our customers at the forefront of planning and delivery.

Policy 2 – Integrated Planning

Transport and land-use planning will be used together to secure new development at the most appropriate and sustainable locations by:

- working closely with district planning authorities to enable a better balance of new homes, jobs and services;
- locating new developments in areas which are accessible to key services by sustainable forms of transport;
- ensuring new developments provide for sustainable transport and effective travel planning;
- requiring new developments to provide appropriate transport infrastructure in line with the Council's current development management policies
- making the most effective use of all available funding sources by co-ordinating the delivery of ECC and development funded works.

Supporting Text

Essex is one of the largest shire counties in England. Its proximity to London, nationally important ports and airports and its proximity to Europe have made it a focus for growth in homes and a location for economic development. This in turn has put huge pressure on its infrastructure, necessitating integrated planning and transport provision in order to make the best use of its transport assets and promote sustainable living.

Land use and transportation planning arrangements will be guided by the needs of specific areas within the context of the Integrated County Strategy which identifies four important sub-areas of the county; Heart of Essex, Thames Gateway, Haven Gateway and West Essex.

Essex County Council will work with district and borough councils to identify and deliver transport infrastructure that supports new development and regeneration, links new housing to jobs and services, and unlocks business growth, by improving access to national transport networks and international gateways. The Council will also work with wider service providers to support the delivery of local services, including alternative means of service provision, to reduce the need for travel. The Council will make the most effective use of funding secured from developers, minimising the need for ECC to support the delivery of transport infrastructure.

The newly emerging Local Enterprise Partnership for Essex, Kent and East Sussex will also help to guide strategic considerations including priorities for investment.

This policy will be supported by:

- Development Management Policies
- Car Parking Standards

- Essex Design Guide
- Integrated County Strategy
- Economic Development Strategy
- Traffic Management Strategy

Policy 3 – Congestion and Network Resilience

The County Council will facilitate the improved reliability of journeys by:

- undertaking its network management duty in line with the Traffic Management Act;
- monitoring and managing the impact of traffic through the Essex Traffic Control Centre;
- focusing investment on those parts of the network that would give the greatest benefit to the economy and quality of life;
- using a functional hierarchy of routes to manage traffic;
- working with operators to improve the punctuality of bus services;
- minimising disruption by co-ordinating and managing the impact of roadworks undertaken by the County Council and utility companies;
- applying the Speed Management Strategy.

Supporting Text

Congestion and reliability of journey time are key issues which the Council has to address. With a complex network of inter-urban and town highway and bus networks, and a growing expectation on the part of the public and businesses that the highway operation is well managed and customers kept informed, there is a constant need to plan to keep the network open and reliable as much as possible. From either a financial, environmental or technical perspective, it is shown that we cannot simply build our way out of this problem with more road capacity.

This complex area of work covers a surprisingly varied mix of initiatives from, planning and managing road works; having a good intervention policy in times of disruption; informing the public by a variety of means, as to conditions on the network; facilitating and promoting alternative modes of travel to reduce traffic volumes; and planning improvements to signal control and traffic management works to assist flow and reduce congestion.

The transport network in this context is considered to comprise the Council managed roads although strong links are in place with the Highways Agency which manages trunk and motorway networks and private streets, as well as adjacent highway authorities covering London and eastern England.

The Traffic Management Act places a duty on the authority to ensure that users of all modes of travel are able to complete their journeys in a safe and timely manner.

Congestion will be tackled by utilising a wide variety of measures including traffic management and control, highway improvements as well as seeking to maximise the use of public transport, cycling and walking. The most economically important

routes are identified as those which have an important role in maintaining the competitiveness of the Essex economy by providing access to the main urban areas, the strategic highway network (including national routes) and international gateways. These include the M11, M25, A12, A120, A127, A13, A130, A131, A414, A133, A1060, A132 and A128

The Essex Traffic Control Centre monitors traffic on our roads and manages the operation of the Council's Intelligent Transport Systems (which includes advanced traffic signal capabilities and roadside message signs) for the benefit of the public by helping to reduce congestion and respond to incidents and collisions

The functional hierarchy of routes will be used to channel and direct traffic onto the highest level in the road hierarchy appropriate for the length and function of journeys. New development on the Strategic network and County Route network will be controlled. Speed management plans will be introduced to enable the network to operate in a safe and consistent manner.

Essex County Council has a duty to co-ordinate and manage roadworks, whether undertaken by the County Council or by utility companies, in order to minimise disruption and maintain the availability of the transport network. Incentives will be developed to encourage utility companies to minimise the duration of their works. In addition the County Council's own maintenance programme will be planned to minimise delays on economically important routes and bus routes.

The Speed Management Strategy is used to determine appropriate speed limits depending on road classifications, usage and environments.

The strategies which underpin this policy and which will guide its application include:

- Traffic Management Strategy
- Road Passenger Transport Strategy
- Travel Information Strategy
- Development Management Policies

Policy 4 – Public Transport

The County Council will develop the public transport network to assist economic growth and improve access to essential services by:

- focusing development and improvement on a network of core bus routes linking locations that attract significant numbers of people;
- working with commercial bus service operators to improve service reliability, punctuality and accessibility;
- continuing to work in partnership with train operating companies and Network Rail to improve rail services;
- working with bus and train operators to improve integration between bus and rail services;
- working towards the introduction of multi-operator ticketing;
- managing the English National Concessionary Travel Scheme for Essex;
- ensuring that accurate and up-to-date service information is made available through a range of media;
- working with the police and public transport operators to reduce crime and fear of crime when travelling on the transport network;
- lobbying Government for increased local involvement in the planning and provision of local rail and more effective partnership working with operators over the provision of bus services.

Supporting Text

The provision of an excellent passenger transport network (comprising both road and rail services), is widely recognised as a key attractor of inward investment and business growth. Excellent network coverage enables the easy movement of people, makes it possible for people to travel into the area for employment and helps to reduce traffic levels on our roads, cutting costly delays to businesses caused by congestion.

Similarly, the provision of attractive public transport has a major role in cutting carbon emissions, by attracting those who would otherwise travel on their own by car. It also offers access to employment and access to education for those who may otherwise be excluded from these opportunities.

Passenger transport is therefore one of the key considerations of the Essex Local Transport Plan. If the Council is to help to stimulate the recovery and long-term growth of the Essex economy, it will need to promote and develop the passenger transport network across the county and linkages with surrounding areas in an affordable and sustainable way.

The County Council will adopt an approach which will focus effort on improving on its

economically most important bus routes to develop high intensity bus corridors with priority and publicity measures in place to improve reliability and attract increased numbers of passengers. These will include routes linking large employment sites/areas; residential area, commercial or business developments; town centres and transport interchanges

Similarly, the County Council is developing its priorities for rail linkages in the county with a view to working with operators and government on future enhancements, franchise requirements and interchange improvements. To this end, the Council will seek to be involved in franchise negotiations and monitoring processes. We will work with the rail industry to promote rail use (particularly for commuting to destinations other than London) and to improve access to stations by sustainable modes (particularly bus, pedestrian and cycle access).

The strategies which underpin this policy and which will guide its application include:

- Road Passenger Transport Strategy
- Rail Strategy
- Travel Information Strategy
- Traffic Management Strategy
- Development Management Policies.

Policy 5 – Connectivity

Transport networks will be strengthened to support a vibrant, successful and sustainable future for Essex by:

- improving travel links within and between our main towns;
- focusing investment on routes where improvements will give the greatest benefit to the economy of Essex;
- improving journey times and journey-time reliability by targeting congestion improvement measures (see Policy 3);
- providing for the use of more sustainable forms of travel (see Policy 8);
- ensuring international gateways have effective surface access strategies that promote appropriate and sustainable transport;
- developing appropriate provision of park and ride facilities serving our main towns;
- working with partner agencies to identify and deliver essential improvements to nationally important road and rail connections.

Supporting Text

The ability to travel efficiently and reliably within Essex and from the county to London, Europe and the rest of the UK has been fundamental to its growth and relative prosperity. Our public transport and highway networks generally provide excellent connectivity, enabling us to travel quickly and efficiently between the places we live, go to work, are educated, shop and undertake leisure pursuits; and enable our businesses to trade effectively by providing access to employees, suppliers and customers.

Excellent though these networks are, there is a pressing need to target specific routes and address gaps in network coverage. Good connectivity is essential to the on-going competitiveness and growth of the Essex economy, as the ability for people and goods to be transported efficiently and in a timely manner, is particularly important to attracting new investment into the county.

Connectivity within the context of this policy is considered to extend across a range of transport modes, including the ability to travel between places by public transport and other forms of low carbon travel, as well as by car or van.

Connectivity can only be improved slowly within available resources and in a targeted way which prioritises value for money projects and which supports economic development.

The greatest economic benefit will occur if investment is focussed on routes such as those that enable access to:

- current and future major employment areas;
- the main urban areas;
- the international ports and airports within and adjacent to Essex; and
- the national strategic network, neighbouring counties and destinations throughout the UK.

The four main urban areas, in terms of their importance to the County's economy, are identified as Basildon, Chelmsford, Colchester and Harlow. London is also a significant provider of employment for Essex residents and excellent road and rail connections are vital.

Connectivity will be improved through the promotion of more sustainable travel patterns, introducing urban transport packages to increase transport choice, providing better public transport infrastructure and rail/bus services, enhancing inter-urban transport corridors, and by supporting the provision of improved digital infrastructure, including broadband and telephony, to reduce the need to travel.

The international ports and airports identified include Harwich, Bathside Bay, London Gateway, Tilbury, Felixstowe, Stansted Airport and London Southend Airport.

The strategies which underpin this policy and which will guide its application include:

- Development Management Policy
- Integrated County Strategy
- Road Passenger Transport Strategy
- Rail Strategy
- Economic Development Strategy

Policy 6 – Freight Movement

The Council will manage the efficient movement of freight within the county by:

- working with operators to ensure that heavy goods vehicles use identified routes and that other freight traffic uses the most appropriate routes;
- working with local businesses to promote and support the sustainable distribution of goods;
- working in partnership with the Highways Agency and neighbouring authorities to provide live travel information to freight operators;
- encouraging a shift of freight from road transport to rail transport.

Supporting Text

Essex is a natural conduit for freight movements because of its trunk road and rail routes, its ports and airport connections to international markets. Similarly, local distribution is vital for Essex businesses, and the retail lifeblood of its major urban areas and towns. With so much of the county's retail stock being on the move, there is a need to manage and plan for freight in a proactive way in order to allow our ports, airports and town centres to thrive. But at the same time, we need to ensure that freight movement respects the needs of Essex's communities and does not impinge upon people's quality of life.

The Council will support the provision of 24 hour lorry parks for heavy goods vehicles accessing Harwich International Port and London Stansted Airport, provided demand can be shown to exist and that they can be located away from residential areas, with good and suitable access to the Strategic Road Network.

Heavy Goods Vehicles (HGVs) will be encouraged to use 'Priority 1' roads in the Council's Road Hierarchy (comprising the strategic road network and inter-urban county roads). Where the use of 'Priority 1' roads is not possible, HGVs will be expected to use 'Priority 2' roads (those that distribute traffic between the local road network and 'Priority 1' roads). The use of the remaining local road network by HGVs will be minimised and will be for access to the destination only. This will help to reduce any adverse impacts on amenity, the environment and the structural integrity of the highway.

We will work in partnership with freight carriers and major ports and airports to promote and facilitate a shift to rail freight from road freight, where this does not have a detrimental impact on rail capacity for passengers. In particular we will lobby for investment to address capacity constraints on the Great Eastern Main Line and the West Anglia Main Line to support increased rail freight traffic, particularly by working with the Government to help maximise opportunities for investment through the rail franchising process.

The strategies which underpin this policy and which will guide its application include:

- Freight Strategy (to be developed)
- Essex Design Guide
- Traffic Management Strategy
- Development Management Policies

Policy 7 – Carbon Reduction

Essex County Council will support and encourage the use of lower carbon travel by:

- promoting the use of more sustainable forms of travel (Policy 8);
- ensuring new developments minimise the number and length of trips made by private vehicles (Policy 2);
- supporting use of emerging low-carbon technologies to reduce carbon emissions from transport sources;
- ensuring the Essex road network operates efficiently to minimise CO₂ emissions from vehicles;
- adopting measures to improve energy efficiency and further reduce carbon emissions arising from our own activities.

Supporting Text

Carbon reduction is a key Central Government policy and transport accounts for 30% of carbon emissions in Essex. A combination of new technology, sustainable planning and investment in more sustainable travel is essential to contribute to national and worldwide targets.

More sustainable travel will be supported by ensuring adequate provision is made for public transport and other low carbon forms of travel, such as walking and cycling, and that low carbon travel choices are promoted through travel planning and similar measures.

We will support the take-up of low carbon vehicles and other new low carbon technologies, for instance by encouraging the provision of electric vehicle recharging points within new developments and by considering new technologies which improve the management of traffic, where these offer a value for money solution.

We will increase the carbon efficiency of the services we provide by the use of measures such as the use of low-energy street lighting and traffic lights equipment and measures to reduce the carbon footprint of highway maintenance works.

The strategies which underpin this policy and which will guide its application include:

- Accessibility Planning Strategy
- Travel Information Strategy
- Road Passenger Transport Strategy
- Traffic Management Strategy
- Sustainable Transport Strategy
- Street Lighting Policy
- Development Management Policies

Policy 8 – Promoting Sustainable Travel Choices

The County Council will encourage the use of more sustainable forms of travel by:

- consistently supporting and promoting sustainable travel;
- providing infrastructure for sustainable transport;
- working with partners and service providers to promote the use of sustainable forms of travel and to identify new ways to provide services;
- requiring effective travel planning for proposed developments in line with the Council's current development management policies;
- developing effective travel plans with existing work places, schools, and other locations that attract a significant number of people;
- promoting access by sustainable forms of transport to the county's railway stations, ports and airports.

Supporting Text

Pressure on our infrastructure, the growth predictions for housing and jobs in Essex, and the consequences of growth in the demand for travel, mean that building our way out of transport problems is not an option, especially in our large towns and urban areas. Travel is not an end in itself so the Council will promote a “smarter choices” agenda which seeks to make the best out of all travel possibilities. This will become increasingly important in the main urban areas of Basildon, Chelmsford, Colchester and Harlow.

We will work with partners including public authorities, schools, employers, hospitals, developers and healthcare providers to reduce the need to travel and to promote the use of sustainable travel modes (including walking, cycling, public transport, and more sustainable forms of car use such as car sharing) which will help to reduce congestion and reduce carbon emissions.

More sustainable travel will be supported by ensuring adequate provision is made within new developments for public transport and other low carbon forms of travel, that the development complies with current Council parking standards, and that low carbon travel choices are promoted through travel planning and similar measures

Public transport services are usually provided by commercial operators. We will negotiate with public transport operators to incentivise public transport use to support service provision and the local economy.

More active forms of travel such as walking and cycling also have health benefits and research shows that sustainable travel measures are good for retailers, with those travelling by cycle, public transport or walking spending the same or more per

head then those travelling by car.

The strategies which underpin this policy and which will guide its application include:

- Development Management Strategy
- Workplace Travel Plan Strategy
- Schools and Colleges Sustainable Modes of Travel Strategy
- Essex Design Guide
- Walking Strategy
- Cycling Strategy
- Road Passenger Transport Strategy
- Rights of Way Improvement Plan

Policy 9 – The Natural, Historic and Built Environment

The County Council will protect the natural, historic and built environment from the harmful effects of transport by:

- designing and implementing transport improvements and maintenance works that retain the integrity of the built environment, natural habitats and biodiversity, the natural and historic landscape, and water quality;
- minimising the visual and noise impacts of transport;
- addressing air quality issues through appropriate measures, particularly in designated Air Quality Management Areas;

Supporting Text

Transport infrastructure and travel patterns can have a significant unwanted impact on both the built and natural environment by affecting biodiversity levels, changing landscapes and dramatically altering habitats. Potential impacts must therefore be carefully assessed, managed and monitored.

We will protect the tranquillity of rural areas by helping to minimise the noise and visual impacts of travel. In particular we will aim to minimise noise from traffic, the impact of street lighting on “dark skies” and the visual intrusion of transport infrastructure on the landscape. In urban areas and along inter-urban roads, we will seek to reduce traffic noise where this adversely impacts on significant numbers of people, manage street lighting to reduce light pollution (where it is appropriate to do so) and when appropriate, enhance the public realm.

We will work jointly with district and borough authorities to develop effective and deliverable Air Quality Action Plans where air quality is poor as a result of transport-related sources of pollution. Measures will include encouraging the use of less polluting modes of travel (see Policy 8), improving the movement of vehicles in AQMAs through better traffic management (see Policy 3) and better managing the movement of higher-polluting goods vehicles (see Policy 6).

There are a number of National and European Acts which the Council must respect when introducing transport services, new policies or infrastructure improvements. This includes legislation covering air quality, the protection of environmentally sensitive areas, historic building control, the requirements for environmental appraisal in scheme design and strategic environmental appraisal.

The strategies which underpin this policy and will guide its application include:

- Integrated County Strategy
- Development Management Strategy
- Traffic Management Strategy

Policy 10 – Road Safety

The County Council will work to reduce the incidence and severity of road traffic collisions on roads in Essex by:

- continuing to work within the strong partnership framework provided by the Essex Casualty & Congestion Reduction Board;
- prioritising measures which reduce the number of people killed or seriously injured;
- working to improve the safety of pedestrians, cyclists and other vulnerable groups;
- ensuring Safety Audits are undertaken of all proposed designs of new highway schemes or proposals to materially alter the existing public highway.

Supporting Text

Protecting the public by helping to reduce the probability of a collision on the highway network and relentless focusing on preventing serious injuries and fatalities as a result of collisions are vital County Council activities. Working increasingly in with a wide variety of partners has led to a rapid fall in collisions, and a reduction in the severity of casualties.

The Essex Casualty Reduction & Congestion Board is made up of partners from Essex County Council, Essex Police, Essex County Fire and Rescue Service, the East of England Ambulance Service and the Highways Agency. The Board agrees a joint strategy and coordinates activities between partners to reduce the incidence and severity of road traffic collisions by:

- Educating people who travel in Essex;
- Enforcing traffic law; and
- Providing well engineered transport networks.

Reducing the number and severity of collisions will be achieved by:

- Identifying routes or specific sites with an unusually high number of collisions and addressing these using the most cost effective measures;
- Addressing excessive speed and other reckless behaviour (including drink and drug driving and mobile phone use) related to increased accident severity;
- Identifying and targeting high risk groups (including younger and inexperienced drivers and motorcyclists)

Road safety training and education initiatives will be targeted towards those groups which make up a disproportionately high number of serious injury casualties and fatalities. Specifically, this includes younger and inexperienced drivers and motorcyclists.

Safety Audits ensure that safety considerations are integrated into the design and delivery of all transport improvements, maintenance schemes and new infrastructure to the appropriate standards.

The strategies which underpin this policy and which will guide its application include:

- Road Safety Strategy
- Speed Management Strategy
- Walking Strategy
- Cycling Strategy

Policy 11 – Asset Management

The County Council will protect the value of transport assets to enable the safe and efficient operation of the network by:

- regularly inspecting and monitoring the condition of all of our highway and transport assets;
- maintaining all its highway assets to appropriate standards that offer value for money to the travelling public and the Essex taxpayer;
- working with our partner organisations to ensure minimal disruption to the Essex transport network;
- ensuring the long-term affordability of new transport infrastructure and that appropriate contribution and provision is made by new development.

Supporting Text

Our road and rail network and supporting highway and public transport infrastructure has grown over many generations, and is largely taken for granted by today's travelling public. However this vast resource needs to be carefully managed in order to ensure it continues to underpin the travel needs of the county. Careful asset management by all parties, but particularly the County Council as highway and streetworks authority, is essential to keep the network operational and in good condition.

Our priorities for structural maintenance of the highway network will also take highway function in to consideration to ensure that those routes that are most important to the Essex economy are maintained to a high standard.

We will adopt a rigorous maintenance regime which enables us to make best value of all existing highway assets. Structural maintenance works on the highway network will be prioritised to:

- Address those parts of the network which are most likely to deteriorate to a poor state without immediate intervention, in order to arrest deterioration and prevent more costly works ("amber" parts of the network);
- Address those parts of the network which have already deteriorated to an unacceptable state ("red" parts of the network)

Essex County Council is responsible for the maintenance of highway structures such as bridges, footbridges, subways, culverts and retaining walls. We will apply a rigorous programme to assess, manage and maintain our bridges and other structures, with an ongoing load carrying assessment programme which examines structures to ensure they are safe and fit for purpose. Where appropriate structures will be strengthened.

We will carry out routine inspection and testing of our existing and new lighting stock to ensure that it is electrically and structurally safe and fit for purpose. We will also carry out regular night time inspections to ensure that the lighting is working correctly.

We will also inspect and maintain roadside infrastructure of a varying types (including traffic signals, lighting systems, signing and bus stop facilities) in line with product lifecycles and changing specifications

We will maintain our Public Rights of Way network to ensure that it is easy to use and maintain the Essex Definitive Map.

We will design and construct improvements to our assets in a way that minimises future maintenance and operating costs being incurred by the County Council.

Partner organisations include the Highways Agency, Network Rail, train operating companies, and bus companies.

The strategies which underpin this policy and which will guide its application include:

- Transport Asset Management Plan
- Highways Maintenance Strategy
- Traffic Management Strategy
- Development Management Policies

Policy 12 – Maintenance

The County Council will ensure that the highway network (including roads, footways and cycleways) is resilient, safe to use, and fit for purpose, especially during periods of adverse weather, by:

- Inspecting the network to identify defects;
- prioritising the repair of defects which are an immediate hazard or are at risk of more serious deterioration;
- gritting and salting the ‘precautionary route’ network;
- using local knowledge to develop programmes of maintenance for cutting verges and hedgerows and cleaning drains and culverts;
- maintaining the public rights of way network in line with usage and linkages to vital services.

Supporting Text

The Council is responsible for the management of over 4,500 miles of highway network. Working hand in hand with our approach to asset management is the ongoing maintenance of the highway network which is an essential component of the Council’s day to day work. Maintenance involves the systematic identification and recording of defects, and a planned and managed way of prioritising both the rectification of existing defects and measures to ensure that future defects are kept to a minimum by timely intervention.

Adverse weather includes flooding, snow and ice or high summer temperatures. We will incorporate appropriate measures to improve resilience to adverse weather into the design of new infrastructure.

‘Precautionary routes’ are the routes that are gritted during periods of cold weather. The ‘precautionary route’ network is identified in the Council’s Winter Service Operational Plan, and includes those routes which are fundamental to the functioning of the Essex economy and those which enable access to vital services.

Routine maintenance comprises measures which are undertaken according to a regular and consistent schedule, including pot hole and small defect repairs, cleaning, grass cutting and drain clearing. Highway network defects can be identified through routine inspection, by the police or by members of the public

The strategies which underpin this policy and which will guide its application include:

- Transport Asset Management Plan
- Highways Maintenance Strategy
- Traffic Management Strategy

- Rights of Way Improvement Plan
- Winter Service Operational Plan

Policy 13 – Access to Services

The County Council will ensure that Essex residents have access to essential services by:

- working with partners and service providers to make essential services accessible to all;
- making transport infrastructure accessible for all by continuing to remove barriers to travel for those with disabilities;
- ensuring that travel information is available in different formats and is accessible to everyone;
- encouraging and supporting innovation to improve the provision of essential services.

Supporting Text

Having good access to a range of vital services is necessary to create vibrant and sustainable communities and to prevent the social and geographic isolation of more vulnerable groups. Improving access to services can help older people to stay in their own homes, younger people to access a better range of education and employment opportunities, and those with disabilities to fulfil their potential.

Through its quality of life agenda, the County Council wants to promote a society where equality and diversity flourish. It will therefore seek to improve and maintain access essential services including employment, education, healthcare, retail and leisure.

In order to ensure that services are accessible to all we will work with commercial bus operators to improve service accessibility and Network Rail to improve facilities at stations. We will also support a network of contracted bus services to supplement the commercial local bus network and support and develop the role of Community Transport services. We will continue to provide cost effective home to school transport and co-ordinate the procurement of social care transport. We will also work with district and borough councils, taxi and private hire vehicle providers to improve the quality, accessibility and professionalism of taxi services in Essex. We will improve access to services by walking and cycling and ensure that the Public Rights of Way network is easy to use.

There are a number of statutory requirements on the County Council to provide transport and transport information, which it will meet. The Council has also developed a strong working relationship with user groups representing people with disabilities, including the Options for Independent Living (OIL) group and intends to maintain these.

The strategies which underpin this policy and which will guide its application

include:

- Accessibility Planning Strategy
- Travel Information Strategy
- Road Passenger Transport Strategy
- Development Management Policy

Policy 14 – Cycling

The County Council will encourage cycling by:

- promoting the benefits of cycling;
- continuing to improve the cycling facilities within the main urban areas of Basildon, Chelmsford, Colchester and Harlow;
- developing existing cycling networks in other towns where cycling offers an appropriate local solution;
- working with schools and employers to improve facilities for cyclists;
- improving access to local services by integrating the Public Rights of Way, walking and cycling networks to form continuous routes;
- providing training opportunities to school children and adults.

Supporting Text

A high proportion of travel in Essex involves journeys of less than three miles. Many trips of this nature which currently take place by car could in fact be undertaken by bike given the right circumstances. Essex has invested heavily in recent years in the concept of cycle towns, particularly in Colchester and Harlow. It has also developed a longer distance network of routes linking centres of population such as the national Cycle Network. As well as being a low carbon form of travel and a cheap means of getting around cycling also benefits physical fitness and well-being.

Although the Council can implement many improvements on its own, the Cycle Town concept has shown that most initiatives are best developed with local councils, communities, cycle groups, the health sector and rail operators as part of a partnership approach. We will use this model to encourage more cycling in our main towns.

We will also encourage cycling in smaller towns, especially where;

- local services are available within a distance that is suitable for cycling, but where safe routes are needed to take advantage of this;
- efforts are being focused on reducing congestion through modal shift for peak time journeys to work and school;
- there is evidence to suggest that levels of physical activity are low; and
- high levels of housing or employment growth are planned.

Elsewhere, improvements that aid cycling will be implemented as opportunities arise, especially through the planning system as part of making new development more sustainable. Measures will aim to improve access to town centres, railway stations and local services such as GPs, schools, jobs and supermarkets

Support will also be given to the on-going improvement and further development of

the National Cycle Network

Cycling will be promoted as a way to reduce congestion within urban areas, to encourage healthier lifestyles, and as a valuable leisure and tourism opportunity that is important to the local economy. The Council will also support cycling events where these can be shown to have a positive effect on levels of community cycling and will build upon the legacy of the Olympic mountain biking event at Hadleigh Castle.

The strategies which underpin this policy and which will guide its application include:

- Development Management Policy
- Workplace Travel Plan Strategy
- Schools and Colleges Sustainable Modes of Travel Strategy
- Walking Strategy
- Cycling Strategy
- Rights of Way Improvement Plan
- Road Safety Strategy

Policy 15 – Walking and Public Rights of Way

The County Council will promote walking and use of the Public Rights of Way network by:

- promoting the benefits of walking;
- facilitating a safe and pleasant walking environment that is accessible to all;
- improving the signage of walking routes;
- ensuring that the public rights of way network is well maintained and easy to use by walkers, cyclists and equestrians.

Supporting Text

Nearly all trips involve walking at some stage and, after driving, travelling on foot is the most common way for people to get to work. A lack of easy access for pedestrians can have a significant impact on the ability of many people (particularly the elderly and those with disabilities) to get around freely and independently, comprising their quality of life. The pedestrian environment can also have a significant impact on our perceptions of a place.

Public Rights of Way have an important role as key links in the transport network. They can provide important access to essential services, offer opportunities for outdoor leisure activities and enable access to green spaces.

Walking is the most sustainable form of transport and the Council will integrate opportunities to improve pedestrian networks and facilities within highway projects to promote access by walking to essential services, including bus and rail stations.

The Rights of Way Improvement Plan will see the Council develop a cohesive rights of way network for walkers, cyclists and equestrians. We will provide information, promote its use, and improve access.

Many, if not the majority, of these initiatives will be implemented through partnerships and with district councils, community groups, parishes and user groups. We will work with landowners and other partners to ensure that the Public Rights of Way Network is well maintained, with a view to making it easy to use. The planning system will be used wherever possible to improve Public Rights of Way and pedestrian environments.

Walking will be promoted as a way to reduce congestion within urban areas, to encourage healthier lifestyles, and as a valuable leisure and tourism opportunity that is important to the local economy.

The strategies which underpin this policy and which will guide its application include:

- Development Management Policy
- Workplace Travel Plan Strategy
- Schools and Colleges Sustainable Modes of Travel Strategy
- Walking Strategy
- Road Safety Strategy
- Rights of Way Improvement Plan
- Essex Design Guide
- Estate Construction Guide

Appendix D – The Essex Area Priorities

This appendix contains the priorities for each of the four Essex planning areas which have been determined through evidence compiled in support of this strategy, evidence prepared in support of the individual district/borough Local Development Frameworks, and stakeholder and public consultation findings.

The priorities listed are not presented in order of importance, or intended to be exhaustive; we recognise too that these may change or evolve over the course of the lifetime of the plan. Greater detail on how they will be delivered will be provided in the Area Implementation Plans.

Priorities for the Heart of Essex

Main Town (Chelmsford)	
<ul style="list-style-type: none"> • Providing for and promoting access by sustainable modes of transport to development sites • Delivering the proposed North East Chelmsford station • Tackling congestion hotspots, particularly those which cause air quality problems • Improving journey-time reliability on key roads into Chelmsford and links to the A12, A120 and A130 • Improving the attractiveness and usability of streets and public spaces 	<ul style="list-style-type: none"> • Improving the reliability and punctuality of bus and Park & Ride services along key corridors • Improving access to Chelmsford station and improving facilities for passengers • Improving the continuity of the Chelmsford cycle network and its links with surrounding areas • Working with major employers, schools and other education providers to promote sustainable travel
Local Centres (Brentwood, Maldon, South Woodham Ferrers)	
<ul style="list-style-type: none"> • Improving public transport links to Chelmsford and between the local centres • Improving the quality of streets and public spaces • Providing good access by a range of travel choices to essential services 	<ul style="list-style-type: none"> • Improving rail journeys for commuters, particularly by improving access to the main stations and passenger facilities • Providing for and promoting access by sustainable modes of transport to development areas
Inter-urban Routes	
<ul style="list-style-type: none"> • Lobbying Government for increased capacity and service frequency on the Great Eastern Main Line • Lobbying Government for necessary enhancement measures on the A12 corridor 	<ul style="list-style-type: none"> • Improving connectivity between the local centres and strategic routes • Identifying long-term solutions to removing gaps within the strategic network

Priorities for the Thames Gateway

Main Town (Basildon)	
<ul style="list-style-type: none"> • Providing for and promoting access by sustainable modes of transport to development areas • Improving bus services to and within Basildon town centre • Improving the attractiveness and usability of streets and public spaces 	<ul style="list-style-type: none"> • Improving the Basildon cycle network (including the links with surrounding areas) and promoting cycling • Providing travel planning services aimed at improving awareness of travel choices
Local Centres (Benfleet, Billericay, Canvey, Hadleigh, Rayleigh, Rochford, Wickford)	
<ul style="list-style-type: none"> • Providing for and promoting access by sustainable modes of transport to development areas • Improving the attractiveness and usability of streets and public spaces to support regeneration • Improving journey time reliability on congested routes 	<ul style="list-style-type: none"> • Improving the attractiveness of cycling for all types of trip • Providing travel planning services aimed at improving awareness of travel choices • Improving access to green spaces
Inter-urban Routes	
<ul style="list-style-type: none"> • Improving journey time reliability on the main inter-urban roads, including the A127, A129, A130 and A13 • Improving public transport links between the Thames Gateway centres – particularly <i>sert</i> the A13 corridor 	<ul style="list-style-type: none"> • Lobbying Government for improvements to local rail services
International Gateways (Southend Airport and Thames ports)	
<ul style="list-style-type: none"> • Improving access to Southend Airport • Working with Thurrock to ensure good access to London Gateway port 	<ul style="list-style-type: none"> • Minimising the impact of port expansion on transport networks in Essex

Priorities for the Haven Gateway

Main Town (Colchester)	
<ul style="list-style-type: none"> • Improving the availability, reliability and punctuality of bus services along key transport corridors • Providing Park & Ride facilities • Tackling congestion hotspots on routes into Colchester • Providing for and promoting access by sustainable modes of transport to development areas 	<ul style="list-style-type: none"> • Improving the attractiveness and usability of streets and public spaces • Improving access to Colchester North station • Continuing improvements to the Colchester cycle network • Tackling air quality issues • Improving awareness of and promoting sustainable travel choices
Local Centres (Braintree, Clacton-on-Sea, Halstead, Harwich, Walton-on-the-Naze, Witham)	
<ul style="list-style-type: none"> • Providing for and promoting access by sustainable modes of transport to development areas • Improving the attractiveness and usability of streets and public spaces in the coastal towns to support regeneration 	<ul style="list-style-type: none"> • Improving local cycle networks • Improving access to stations and facilities for rail passengers (particular for stations popular with commuters) • Promoting sustainable travel choices
Inter-urban Routes	
<ul style="list-style-type: none"> • Lobbying Government for increased capacity and service frequency on the Great Eastern Main Line and Braintree branch line • Lobbying Government for the delivery of necessary enhancement measures on the A12 corridor 	<ul style="list-style-type: none"> • Reducing the duration and improving the reliability of journey times along the A120 corridor • Improving bus and rail links between the Haven Gateway centres to improve access to employment and essential services
International Gateway (Harwich International Port)	
<ul style="list-style-type: none"> • Improving access to support port expansion and the development of the wind port 	

Priorities for West Essex

Main Town (Harlow)	
<ul style="list-style-type: none"> • Improving access to Harlow from the M11 • Providing for and promoting access by sustainable modes of transport to development areas • Improving the attractiveness and usability of streets and public spaces 	<ul style="list-style-type: none"> • Tackling congestion and improving the management of traffic in Harlow town centre • Improving the Harlow cycle network and promoting greater use • Improving public transport connections
Local Centres (Great Dunmow, Epping, Loughton, Saffron Walden, Waltham Abbey)	
<ul style="list-style-type: none"> • Providing for and promoting access by sustainable modes of transport to development areas • Improving passenger transport connections to and between the local centres, key services and Harlow • Improving the attractiveness and usability of streets and public spaces 	<ul style="list-style-type: none"> • Improving cycling and walking routes and promoting their greater use • Improving connections to London, working with Transport for London to make best use of and manage access to Underground links • Improving links with surrounding rural areas
Inter-urban Routes	
<ul style="list-style-type: none"> • Lobbying Government for improvements to journey time reliability on the M11 corridor 	<ul style="list-style-type: none"> • Lobbying Government for improvements to West Anglia rail services
International Gateway (Stansted Airport)	
<ul style="list-style-type: none"> • Improving access to Stansted Airport from within West Essex by sustainable forms of travel 	

This strategy is issued by

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