Capital Project Business Case
A131 Braintree to Sudbury Route Based Strategy

The template

This document provides the business case template for projects seeking funding which is made available through the **South East Local Enterprise Partnership**. It is therefore designed to satisfy all SELEP governance processes, approvals by the Strategic Board, the Accountability Board and also the early requirements of the Independent Technical Evaluation process where applied.

It is also designed to be applicable across all funding streams made available by Government through SELEP. It should be filled in by the scheme promoter – defined as the final beneficiary of funding. In most cases, this is the local authority; but in some cases the local authority acts as Accountable Body for a private sector final beneficiary. In those circumstances, the private sector beneficiary would complete this application and the SELEP team would be on hand, with local partners in the federated boards, to support the promoter.

Please note that this template should be completed in accordance with the guidelines laid down in the HM Treasury's Green Book. https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-governent

As described below, there are likely to be two phases of completion of this template. The first, an 'outline business case' stage, should see the promoter include as much information as would be appropriate for submission though SELEP to Government calls for projects where the amount awarded to the project is not yet known. If successful, the second stage of filling this template in would be informed by clarity around funding and would therefore require a fully completed business case, inclusive of the economic appraisal which is sought below. At this juncture, the business case would therefore dovetail with SELEP's Independent Technical Evaluation process and be taken forward to funding and delivery.

SOUTH EAST
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The process

This document forms the initial SELEP part of a normal project development process. The four steps in the process are defined below in simplified terms as they relate specifically to the LGF process. Note – this does not illustrate background work undertaken locally, such as evidence base development, baselining and local management of the project pool and reflects the working reality of submitting funding bids to Government. In the form that follows:

Local Board Decision

- Consideration of **long list** of projects, submitted with a short strategic level business case
- **Sifting/shortlisting process** using a common assessment framework agreed by SELEP Strategic Board, with projects either discounted, sent back for further development, directed to other funding routes or agreed for submission to SELEP

SELEP

- Pipeline of **locally assessed projects submitted to SELEP**, with **projects supported by strategic outline business cases - i.e., partial completion of this template**
- Prioritisation of projects across SELEP, following a common assessment framework agreed by Strategic Board.
- **Single priorisited list of projects is submitted by SELEP to Government** once agreed with SELEP Strategic Board.

SELEP ITE

- Following the allocation of LGF to a project, scheme promoters are required to prepare an **outline business case, using this template** together with appropriate annexes.
- Outline Business Case assessed through **ITE gate process**.
- **Recommendations are made by SELEP ITE to SELEP Accountability Board** for the award of funding.

Funding & Delivery

- Lead delivery partner to commence internal project management, governance and reporting, ensuring **exception reporting mechanism back to SELEP Accountability Board** and working arrangements with SELEP Capital Programme Manager.
- **Full Business Case** is required following the procurement stage for projects with an LGF allocation over £8m.

Version control	
Document ID	A131 Braintree to Sudbury Route Based Strategy Business Case
Version	Gate 1 Version 1 – 180326
Author	Dave Joy
Document status	Final
Authorised by	
Date authorised	

SOUTH EAST
LOCAL ENTERPRISE
PARTNERSHIP

1. PROJECT OVERVIEW

1.1. Project name:

A131 Braintree to Sudbury Route Based Strategy Business Case

1.2. Project type:

A transport package with safety and highways improvements to key junctions along the A131 corridor, together with enhancements to cycling and pedestrian crossing provision.

1.3. Federated Board Area:

Essex

1.4. Lead County Council / Unitary Authority:

Essex County Council

1.5. Development location:

The A131 corridor from Marks Farm Roundabout, Braintree to the Suffolk border just south of Sudbury.

1.6. Project Summary:

The purpose of this bid is to deliver a package of schemes to improve safety and reduce delays along the A131 corridor from Braintree to the Suffolk border, just south of Sudbury.

The A131 is the primary route from Braintree, through Halstead, to Sudbury as shown in Figure 1 below. The route covers 13.5 miles (21.6 km), along which there is one roundabout, three mini roundabouts, a signalised junction, two zebra crossings and one signalised pedestrian crossing.

Braintree is undergoing significant growth and there is the potential for exponential growth with the adoption of a new garden community to the west of Braintree. The A131, leaving the north of Braintree, also provides an essential commercial link, via the A1017, on to the A14 and the M11.

Similarly, there are significant growth plans for Sudbury, which, together with developments in Halstead (the main town) halfway between the two destinations, will put increased pressure on the capacity and performance of this corridor.

The key junctions along the routes, from south to north, are as follows:

- Marks Farm roundabout – this important four-arm roundabout provides a key link at the eastern side of Braintree, to the A120 southwards to Chelmsford, westwards to Bishops Stortford and Stansted, and the A120 eastwards towards Coggeshall, Marks Tey and the A12.
- Broad Road roundabout – a three-arm roundabout providing access to Bocking and north Braintree.
- High Garrett – a three-arm signalised intersection, where the A1017 splits off towards Haverhill and subsequently the A11.
- Halstead – there are a number of minor junctions throughout the town, and, at the top of the High Street, there are two mini-roundabouts which connect the A1124 towards Earls Colne and Colchester, and the Hedingham Road towards Castle Hedingham and on to Haverhill.
- Halstead to Bulmer Tye – there are a number of minor country road intersections until the three-way junction between the A131 and the Hedingham Road, just south of Bulmer Tye, is reached.
- There is then only one additional minor intersection before the county boundary is reached, 800m south west of Sudbury.

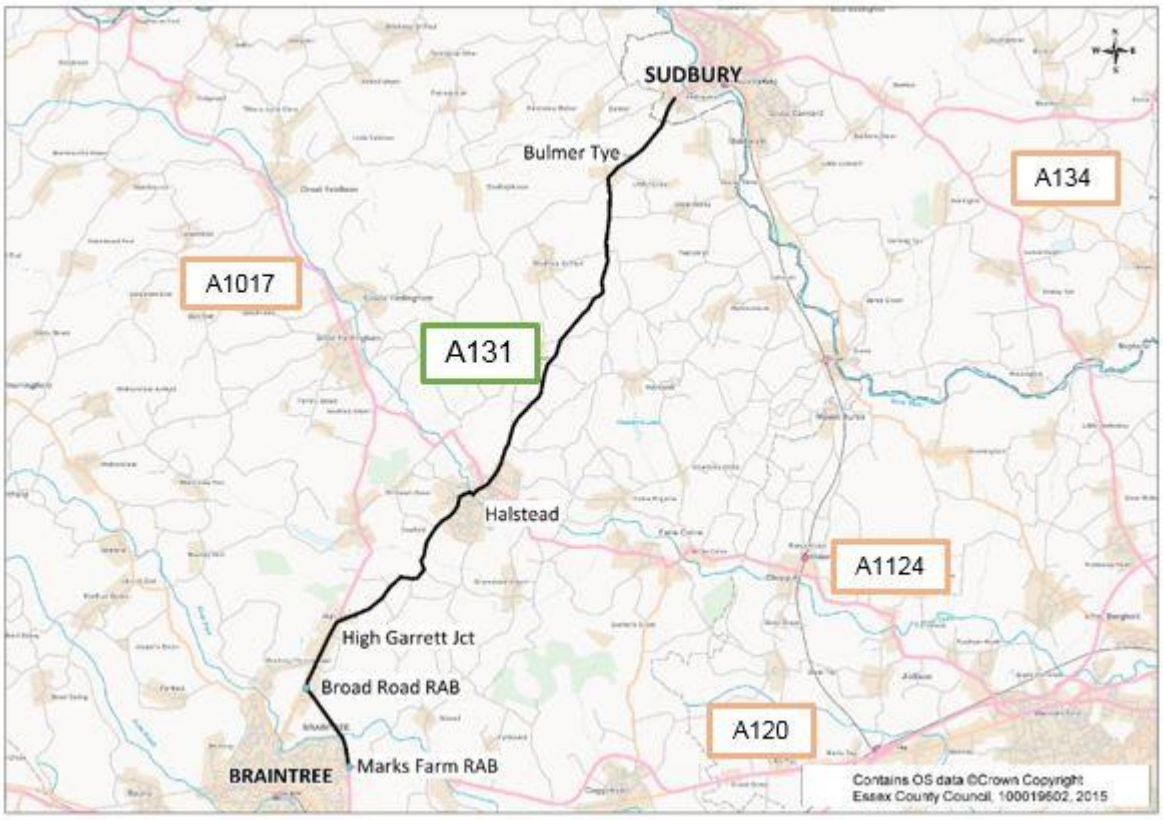

Figure 1: A131 Braintree to Sudbury

Following a Route Based Strategy review, that was conducted during 2015, a workshop was held with stakeholders in early 2016 from which twenty potential improvement schemes were identified. After a sifting exercise, conducted using a tool based on the DfT East sifting tool, the options were prioritised and resulted in the following list of potential improvements:-

- **Marks Farm** – widening of the entry flare and addition of a left turn slip for traffic travelling south and then heading east to Colchester along the A120.
- **Broad Road** – improving entry and exit flares to improve traffic flow.
- **High Garrett** – safety improvements including improved bus stops and crossing points
- **High Garrett junction with A1017** – improvements to layout, changes to signals and improved crossings and pedestrian facilities
- **Halstead** – improvements to parking facilities in the High Street
- **Hedingham Road Junction** – improvements to mini roundabout layouts to improve traffic flow
- **Bulmer Tye** – safety improvements.

During 2017, and after further, more detailed discussions with the client and with Essex County Council's Network Management, the list of options was reduced and the content modified to the following:-

- **Marks Farm** – widening of all four entry flares, introduction of a left turn slip from the A120 heading south and general improvements to the roundabout.
- **Broad Road** – improving entry flare from Broad Road and realignment to improve traffic flow.
- **High Garrett junction with A1017** – major improvements to layout, changes to signals, relocated and improved crossings and pedestrian facilities
- **Plaistow Green and Bulmer Tye** – safety improvements, including improved signage and non-slip surfacing.

Particularly, at the junctions near Braintree, there are capacity issues, which if not addressed, will only get worse with the impending developments that are scheduled.

The issues in Halstead are a little more complex. There is a feeling that echelon parking in the High Street, with forward entry in and forward exit out, would resolve some of the issues with vehicles reversing into the main flow of traffic. However, because of delivery vehicles only being able to deliver from the High Street, and because, where echelon parking has been tried elsewhere, but not found to be successful, it has been agreed that this option will not be progressed.

Also, because of significant land issues, it would not be possible to increase the highways boundary at this point, and, according to modelling results, introducing signals does not provide any benefit, because of the physical constraints, so it is not possible to alter the configuration of the two junctions.

Additionally, there are long term plans to investigate the introduction of a by-pass for Halstead which would significantly alleviate the current problems within the town.

Further north at Bulmer Tye, the adoption of advisory speed limit signs and markings have been agreed with Network Management. However, at Plaistow Green, Network Management do accept that advisory speed limits, in association with improved signage, will encourage drivers to slow through the sequence of sharp bends and therefore, consequently, reduce the number of collisions. At Bulmer Tye, it was accepted that further safety improvements should be introduced by providing non-slip surfaces through the bends and by providing improved signage.

Drawings of the proposed improvements can be found at Appendix F.

1.7. Delivery partners:

Partner	Nature and / or value of involvement (financial, operational etc)
Essex County Council	Financial, operational, programme management and project direction
Essex Highways	Responsible for design, management and coordinating delivery of schemes
Ringway Jacobs	Responsible for constructing schemes

1.8. Promoting Body:

Essex County Council

1.9. Senior Responsible Owner (SRO):

Andrew Cook, Director, Highways & Transportation, ECC

1.10. Total project value and funding sources:

Funding source	Amount (£m)	Constraints, dependencies or risks and mitigation
SELEP	£1.800	Dependent on this bid
ECC	£1.800	Confirmed
Total project value	**£3.600**	

1.11. SELEP funding request, including type (LGF, GPF etc.):

£1.8m capital funding is requested from SELEP in the form of a financial contribution.

The funding will not constitute State Aid.

1.12. Exemptions:

This scheme, as defined, is not subject to any Value for Money exemptions.

1.13. Key dates:

Marks Farm Roundabout

Project milestone	Indicative date
Preliminary design	Now
Detailed design	April 2019
Tender	October 2019
Start construction	March 2020
End construction	March 2021

Broad Road Roundabout

Project milestone	Indicative date
Preliminary design	Now
Detailed design	April 2019
Tender	October 2019
Start construction	March 2020
End construction	March 2021

High Garrett Junction

Project milestone	Indicative date
Preliminary design	Now
Detailed design	April 2019
Tender	October 2019
Start construction	March 2020
End construction	March 2021

Plaistow Green and Bulmer Tye Safety Improvements

Project milestone	Indicative date
Preliminary design	Now
Detailed design	April 2019
Tender	October 2019
Start construction	April 2020
End construction	March 2021

1.14. Project development stage:

Project development stages completed to date			
Task	**Description**	**Outputs achieved**	**Timescale**
Route Based Strategy	Detailed study	Completed – paper issued	Feb 2016
Workshop	Develop options	Completed – options identified	Feb 2016
Options Assessment Report	Detailed report	Completed – report issued	Mar 2018
Project development stages to be completed			
Task	**Description**	**Timescale**	
Business Case	Full Business Case – this bid	Jan 2018 to Jun 2018	
Design	Detailed design	Nov 2017 to Apr 2019	

1.15. Proposed completion of outputs:

Other RBS related projects funded by SELEP:-

- Chelmsford to Maldon RBS – £2m funding, approved in 2015 with construction completed December 2016
- Chelmsford to Braintree RBS – £3.7m funding, approved at the November 2016 Accountability Board with work starting in January 2018
- Chelmsford to Harlow RBS – £2.2m funding, approved at the November 2017 Accountability Board
- Colchester to Clacton RBS - £2.7m funding, approved at the November 2017 Accountability Board.

2. STRATEGIC CASE

2.1. Scope / Scheme Description:

Significant growth is occurring in the south east region covered by Essex, and the towns of Braintree, Halstead and Sudbury (in Suffolk) are no exception.

The A131 is the major road that connects these three locations and also links to the A1017 which provides an onward connection to the A14 and M11.

The road sees annual average daily flows of over 20,000 in the southern section and over 10,000 in the northern section, above Halstead.

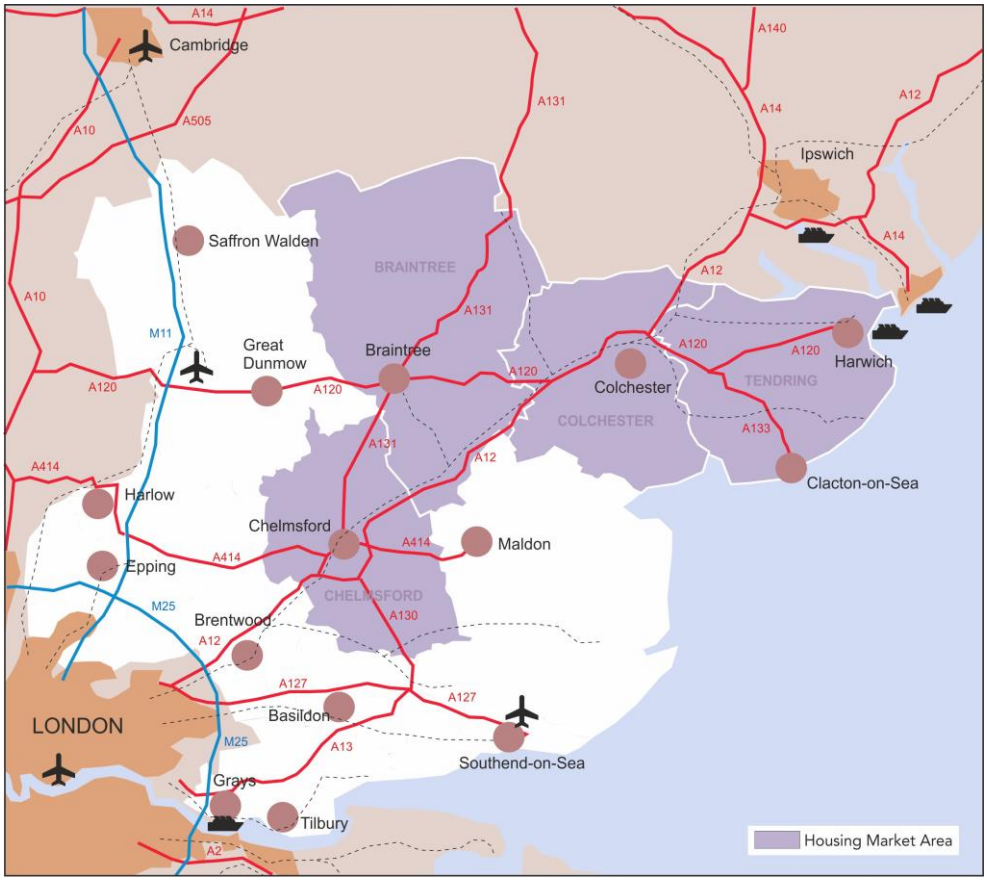

Figure 2: Strategic Transport Network and the Housing Market Area

North Essex - Housing
Provision of sufficient housing is critical to meet the needs of the growing population and for the effective functioning of the local economies.

The North Essex authorities are committed to plan positively for new homes and to significantly boost the supply of housing to meet the needs of the area, including the need to provide a suitable sized workforce for the forecast number of jobs. To meet the requirements of national policy to establish the number and type of new homes required, the authorities commissioned an 'Objectively Assessed Housing Need Study' building on earlier work that was conducted. This was first published in July 2015 and updated in November 2016. It was designed to meet the requirements of the National Planning Policy Framework in the preparation of a Strategic Housing Market Assessment (SHMA).

Detailed analysis suggested that a Housing Market Area comprising Braintree, Colchester, Chelmsford and Tendring Council areas is a sound basis for assessing housing need. Based on 2014 national projections, covering the period 2013 to 2037, the conclusion reached was that the objectively assessed need across the Housing Market Area was 2,999 new homes a year over the period 2013–2037. The total requirement across north Essex, excluding Chelmsford City Council's area, was 2,186 new homes per year and included a figure of 550 new homes per year for Tendring.

For Braintree specifically, the 'Objectively Assessed Need for Housing per Annum' was assessed at 716, with a total minimum housing supply in the plan period (2013 – 2033) of 14,320 homes and an annual incremental jobs forecast of 490.

Developments in Braintree
Braintree District Council (BDC) is currently developing a new local plan which will be adopted during 2018. BDC are planning for a total of 14,000 new houses and 10,000 new jobs by 2033. Essex Highways have tested six options in terms of transport impact to inform a preferred option and it is noted that these developments will increase forecast usage along the corridor.

The following large developments situated directly on the corridor will have an effect on the existing network:-

Table 1: Braintree LDP 2018-2033

Location		Dwellings	Employment	Approved
North Braintree	Straits Mill Gravel Pits, North of Marks Farm Roundabout	1,000	118	No
Halstead	Oak Road, Greenfield Site	300	138	Yes
	Land east of Sudbury Road (The Sleights) adjacent Churchill Ave	250	0	No

A greenfield site, situated south west of Halstead on Oak Road, covers 29 acres of land and has been granted planning permission for 300 dwellings and associated community infrastructure. As part of the planning permission, new footpaths are to be implemented and there is also a commitment to improve the existing sustainable transport network by upgrading bus stops.

Also, a redevelopment of 69 retirement homes is scheduled for build at Priory Hall, Halstead.

Premdor / Rockways Regeneration Site – Sible Hedingham
Residents from Sible Hedingham, which is located north of Halstead, access Braintree via the A1017, or Halstead via the A1124. The Masterplan for the Premdor Site includes the addition of up to 250 dwellings. Developments in the area will add demand to the High Garrett junction and the western mini-roundabout in Halstead.

Other Relevant Schemes

A120 Braintree to Marks Tey
Essex County Council (ECC) is leading a feasibility study to upgrade the A120 between Braintree and Marks Tey and is reviewing options through to preferred route status. This has resulted in a preferred short list of options which includes some off-line solutions. The feasibility process is part of the second RIS period (post-2020) led by Highways England and a current opening year of 2026 for the A120 schemes is envisaged. All current options will make for a diversion of A120 traffic away from the Marks Farm junction and which were accounted for in the economic appraisal - See Appendix J.

The Fennes
The Fennes Estate, Bocking has submitted planning permission to build a new access road from the A131 at High Garrett to the Fennes Estate. The new road will follow existing tracks and join the A131 by a new mini-roundabout on High Garrett which will add further traffic to the A131.

Future Significant Transport Plans in Braintree, Halstead, Sudbury and Essex
- Widening of the A12 (Highways England RIS)
- New A120 from Braintree to Marks Tey (A12)
- Introduction of Millennium Way Slips on the A120 prior to Galley's Corner
- Halstead by-pass
- Sudbury western by-pass

2.2. Location description:

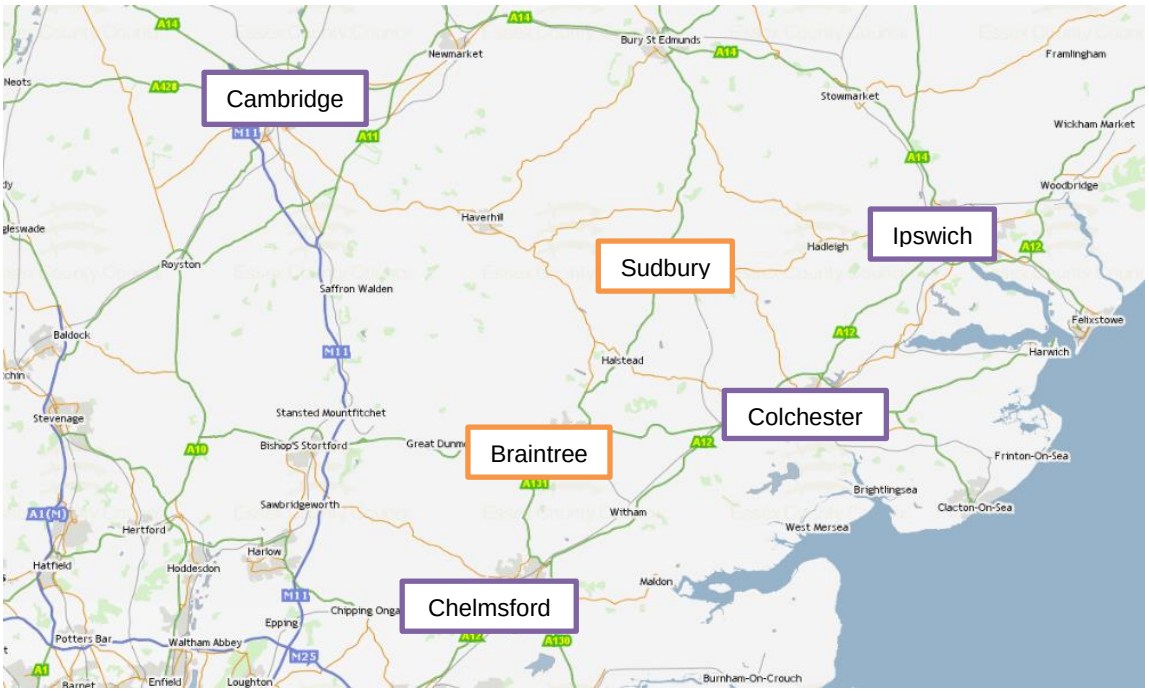

Figure 3: Location Map

Location – Braintree
Braintree is a major town within Essex and is approximately 11 miles north of Chelmsford and 15 miles west of Colchester.

History – Braintree
As early as the 14th Century, Braintree was processing and manufacturing woollen cloth, a trade it was involved with until the late 19th century. The wool trade died out in the early 19th century and Braintree became a centre for silk manufacturing when George Courtauld opened a silk mill in the town. By the late 19th century, Braintree was a thriving agricultural and textile town, benefiting from a railway connection to London. The wealthy Courtauld family had a strong influence on the town.

Population – Braintree
At the 2011 census, the population of Braintree town was 41,650.

Population comparison – Braintree and Babergh Districts
The population of Braintree District and Babergh District (which includes Sudbury) is 147,100 and 87,700 respectively, representing almost 11 percent of the Essex County (excluding the unitary authorities) and 12 percent of Suffolk's population.

Compared with the 2001 Census, the total population of Braintree District has grown by 11.3% compared with an overall Essex increase of 6.3%. Babergh District has increased by 5% since 2011.

Table 2: Census / Nomis summary statistics

	Braintree	Babergh
Usual Residence (16-74)	106,700	63,100
Economically active (16-74)	74,700	42,300
No. of Jobs	57,600	35,700
Car/Van to Work (% of Usual Residence 16-74)	49%	49%
Attraction (% working outside the Borough)	43%	55%
Economically active (% of Usual Residents 16-74)	70%	67%

Transport Connections – Braintree

Braintree has two railway stations, Braintree and Braintree Freeport, next to the Freeport shopping village area. Trains depart from Braintree station to Witham, where the Braintree Branch Line joins the Great Eastern Main Line to London Liverpool Street. Service frequency is approximately once an hour, during the daytime.

Regular bus services are run by First within the Braintree area, with additional services to neighbouring towns, including Chelmsford, Colchester, Halstead and Witham. There are, however, other operators in the area, including Arriva Shires & Essex, Hedingham Omnibuses, Regal Busways and the occasional service from Stephensons of Essex. There is also a shuttle bus service to Stansted Airport that runs regularly through the town. Additionally, a regular bus service between Colchester and Stansted runs frequently through Braintree.

The main roads, into and out of Braintree, include the A120, which serves as the town's main bypass. It provides a quick link to the M11 and Stansted Airport, situated almost 16 miles to the west. It also leads to the town of Colchester and the A12 to the east. Other routes include the A131 southwards to Chelmsford and the B1018, which links Braintree to Witham.

Sustainable Transport – Braintree

Braintree Branch Line Improvements

In June 2011, National Rail produced a feasibility study to look at potential improvements to the Braintree branch line. There were four options, which included, a speed increase south of White Notley, a static loop south of White Notley, a static loop at White Notley station and a dynamic loop through White Notley. Currently, however, there are no commitments to advance these options from Network Rail.

Demand Responsive Transport (DRT) Service

The demand responsive transport (DRT) is a fully flexible service replacing the more rural services which only run once or twice per week. There are three DRT services, one of which is relevant to this RBS - DRT3. DRT3 operates in the area north east of Braintree and operates Monday to Saturday 6am to 8pm. With this DRT, passengers can travel to and from anywhere within and between the surrounding parishes. The DRT3 allows for a direct link to:

- The town centres of Sudbury, Halstead and Haverhill
- Sudbury train station
- Health facilities in Clare, and
- Community hospitals in Sudbury and Halstead.

Location – Sudbury
Sudbury is a market town in the county of Suffolk. It is located on the River Stour near the Essex border, and is 60 miles north-east of London. At the 2011 census, the town had a population of 13,065, which rises to 21,971 when the adjoining large parish of Great Cornard is included. It is the largest town of Babergh district council, the local government district, and is represented in the UK Parliament as part of the South Suffolk constituency.

Sudbury is an historic town, which acts as both a retail and service centre. The main A131 passes through the centre of the town which leads to congestion and air quality issues. Almost half of the residents in Sudbury and Great Cornard travel less than 2km to work, reflecting Sudbury's position as a significant employment location for the area.

The main focus of the local plan is to reduce the need for travel by car. All new major developments have to implement travel plans with robust targets to minimise car use as a condition for approval.

Over time, sustainable transport networks are being improved to provide a wider range of travel options. The focus is on providing connections between housing, employment, education and other services and addressing the gaps and barriers to use. Specific new cycle routes have been identified, together with the introduction of an improved bus service.

The key Chilton Industrial Estate is to the east of the town centre and is a primary destination for the majority of heavy goods vehicles.

The proposed Sudbury Western bypass is considered necessary to relieve the town from through traffic. The county council plans to promote the bypass as a longer term project, but there is no clear way to deliver the project, as yet, and there are considerable environmental issues to overcome.

History – Sudbury
Sudbury was one of the first towns in which Edward III settled the Flemings, allowing the weaving and silk industries to prosper for centuries during the Late Middle Ages. As the main town in the area, Sudbury prospered, and many great houses and churches were built, giving the town a major historical legacy. The Woolsack in the House of Lords was originally stuffed with wool from the Sudbury area, a sign of both the importance of the wool industry and of the wealth of the donors.

During the 18th century, Sudbury became famous for its local artists. John Constable painted in the area, especially the River Stour. The artist Thomas Gainsborough was born in Sudbury in 1727, and was educated at Sudbury Grammar School.

Transport Connections – Sudbury
Sudbury is served by the A131 which runs from near Little Waltham, north of Chelmsford, and the A134 which runs from Colchester, through Sudbury and on to Bury St Edmunds.

The railway arrived in 1847 when Sudbury railway station was built on the Stour Valley Railway. The town escaped the Beeching Axe of the 1960s and maintained its rail link with London, although many villages, further up the river, lost their railway stations. Sudbury railway station now forms the terminus of the branch line which is marketed as the Gainsborough Line, with stops at Bures and Chappel and Wakes Colne railway stations and terminating at Marks Tey railway station. The junction on the Great Eastern Main Line provides connections to London, where trains terminate at Liverpool Street station.

Rail
There are rail services between Braintree and Sudbury, via Witham and Marks Tey. Two changes are required to travel by train between the two destinations. Firstly, the Braintree branch line from Braintree to Witham, changing at Witham on the Greater Eastern Main Line (GEML) to Marks Tey and then on the Gainsborough Line to Sudbury. This journey takes 1 hour and 15 minutes and is operated hourly in each direction.

However, given the orientation of the rail lines and the requirement to change twice between the two destinations, the service does not provide a viable alternative for the significant proportion of the travel demand for the A131 corridor.

The 2016 / 2017 entries and exits for Braintree, Braintree Freeport and Sudbury stations are 788,000, 83,000 and 320,000 respectively. This shows that Braintree station is significantly busier than Sudbury, with over twice the station entries and exits per year.

Bus
There are a number of bus routes that operate around or along the A131 corridor between Braintree and Sudbury, via Halstead. There is, however, just one infrequent direct service between the two towns.

Non-motorised Users
The A131 is largely unsuitable for non-motorised users, with no designated cycle routes, however, it is believed there is little demand for them.

2.3. Policy context:

SELEP Strategy
The Braintree to Sudbury Route Based Strategy supports the SELEP Vision; to 'Create the most enterprising economy in England' and the single SELEP goal; to promote steady, sustained economic growth over the next two decades.

Essex Strategy
Investment in corridor improvements is wholly compliant with the aspirations of the Economic Plan for Essex (EPfE) that updates and incorporates the Greater Essex Integrated County Strategy (ICS) and the ECC Economic Growth Strategy (EGS). The package of improvements proposed also supports the delivery of the Essex Local Transport Plan (LTP), and has the support of partner authorities.

Essex County Council has the stated ambition to make Essex the location of choice for business and to be a county where innovation brings prosperity:

- To grow, the Essex economy depends on the efficient movement of people, goods and information, via effective and reliable transport and communications networks to provide access to markets and suppliers. It is therefore essential that we develop and maintain the infrastructure that enables our residents to travel and our businesses to grow

- Support for employment and entrepreneurship across our economy is focused on ensuring a ready supply of development land, new housing and the coordinated provision of appropriate infrastructure.

This investment in this corridor is essential for the delivery of these ambitions.

The Essex County Council Corporate Outcomes Framework 2014-2018 sets out the seven high level outcomes that ECC want to achieve to ensure prosperity and wellbeing for Essex residents. Securing these outcomes will make Essex a more prosperous county; one where people can flourish, live well and achieve their ambitions.

The seven outcomes are listed below:

- Children in Essex get the best start in life
- People in Essex enjoy good health and wellbeing
- People have aspirations and achieve their ambitions through education, training and life-long learning
- People in Essex live in safe communities and are protected from harm
- Sustainable economic growth for Essex communities and businesses

- People in Essex experience a high quality and sustainable environment
- People in Essex can live independently and exercise control over their lives.

Greater Essex Growth and Infrastructure Framework (2016-2036)
This report presents an overview of growth patterns and the infrastructure projects needed to support such growth in Essex.

Growth in Greater Essex over recent decades has created a deficit in existing infrastructure. In particular, the growth in journeys by road and rail has not been matched by sufficient government investment to enhance the network. The framework has identified that the listed major transport projects need to secure at least £26.5 billion (regional) and £5.5 billion (cross-boundary) funding.

Capacity within Greater Essex will also be affected by housing and economic growth in neighbouring areas. In particular, the influence and reach of the London City Region, and the overheating Cambridge economy will impact in different ways on localities within Essex. The emergence of the new London Plan is expected to displace housing and employment from London along strategic growth corridors into Essex.

Essex Local Transport Plan
The *Essex Local Transport Plan (2001,) which included* the *Essex Transport Strategy (2011),* set out the 15 year vision to improve travel in the county and underlined the importance of the transport network in achieving sustainable, long term economic growth and enriching the life of residents. It has been supplemented by delivery strategies for public transport, highways, cycling and public rights of way.

Braintree District Council Local Plan: 2021 - 2036
Braintree has developed the following ten strategic policies:-

- Policy SP 1 – Sustainable Development
- Policy SP 2 – Spatial Strategy
- Policy SP 3 – Meeting Housing Needs
- Policy SP 4 - Providing for Employment and Retail
- Policy SP 5 – Infrastructure & Connectivity
- Policy SP 6 – Place Shaping Principles
- Policies SP 7 to SP10 – Development and Delivery of New Garden Communities.

Vision for North Essex
The plan is for North Essex to be an area of significant growth over the period to 2033 and beyond, embracing the need to build well-designed new homes, create jobs and improve and develop infrastructure for the benefit of new and existing communities.

Sustainable development principles are at the core of the strategic area's response to its growth needs, balancing social, economic and environmental issues. Green and blue infrastructure and new and expanded education and health care facilities will be planned and provided, along with other facilities, to support the development of substantial new growth, while the countryside and heritage assets will be protected and enhanced.

At the heart of the strategic vision for North Essex are new garden communities, the delivery of which is based on Garden City principles covered by policy SP7. The garden communities are designed to attract residents and businesses who value innovation, community cohesion and a high quality environment, and they will be provided with opportunities to take an active role in managing the garden community to ensure its continuing success.

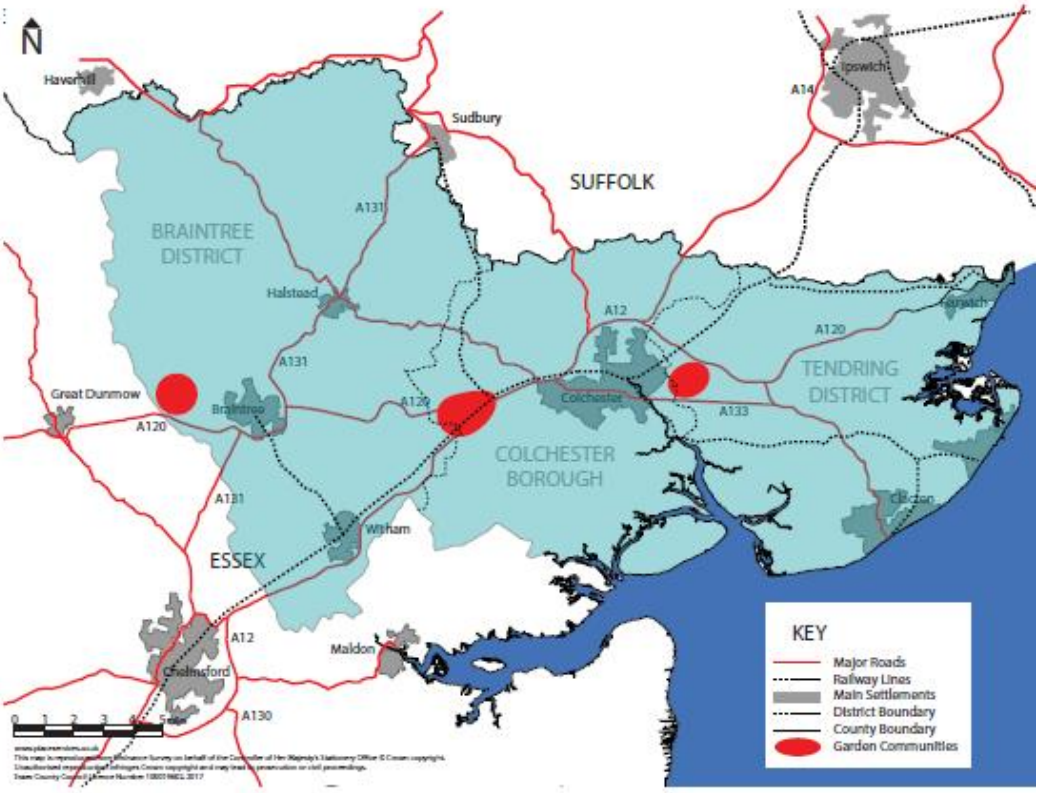

Figure 4: Map of the three new North Essex Garden Communities

The plan is for residents to live in high quality, innovatively designed, contemporary homes, accommodating a variety of needs and aspirations, located in well-designed neighbourhoods where they can meet their day-to-day needs. There will be a network of tree-lined streets and green spaces, incorporating and enhancing existing landscape features. It will also accommodate safe and attractive routes and leisure and recreation opportunities for both residents of, and visitors to, the garden communities.

The following strategic objectives are designed to support the vision for the area and provide a basis for the development of strategic topic-based policies that will help in achieving the vision:-

- provide sufficient new homes
- foster economic development
- provide new and improved transport & communication infrastructure
- address education and healthcare needs
- ensure high quality outcomes.

Suffolk Local Plan

Suffolk's Local Plan states that the main aim is to improve Suffolk's transport networks, reduce congestion, and improve access to jobs and markets.

Suffolk is a largely rural county with some significant urban centres. The transport challenges arising from the need to support economic growth are different across the county, reflecting the variety of growth sectors in the Suffolk economy and differences in housing growth pressures. Sudbury has been identified as a key urban centre for growth where transport interventions could have a significant impact.

The key challenge is to use effective traffic management measures to get more out of the existing system and to reduce peak time traffic by encouraging greater use of sustainable forms of transport.

In rural areas, the key challenge is to ensure that people are able to access jobs, education and services. A priority is to ensure that the highway network is maintained in a good condition and that the negative environmental impacts of transport are minimised.

A high priority is to support the growth of Sudbury's businesses so that they are able to capitalise on future opportunities. Transport plays a key role in this by reducing delay and wasted time and by reducing the costs associated with the movement of goods and people.

By 2031, the population of Suffolk is expected to grow by a further 27%, one of the fastest rates in the East of England. Suffolk's population is also ageing, with forecasts estimating that approximately 250,000 people over the age of 65 will be living in the county by 2031, which equates to nearly one third of the total population. The forecast growth of the population indicates that significant expansion in the economy, jobs and housing will be needed in the future. The former East of England Plan provided for 60,000 homes and 57,000 jobs in the period up to 2021.

Babergh Local Plan 2011-2031
The Babergh Core Strategy and Policies document is the first part of the new local plan. Published in February 2014, the Core Strategy sets out the vision for growth in the District. It aims to provide 9,700 new jobs and 2,500 new dwellings over the plan period. The preferred approach is to expand in urban areas such as Sudbury.

In Sudbury, 850 new dwellings are proposed, 500 of which are located east of Sudbury / Great Cornard. In addition to these new dwellings, there are 700 homes that were allocated in the 2006 Local Plan Saved Policies that have been carried forward.

The Sudbury strategic land allocation is in the Chilton and Woodhall area, north Sudbury, covering 131 hectares. This is where the majority of the development will be, with the exception of the aforementioned 500 dwellings in east of Sudbury / Great Cornard. The land allocation for employment and housing is as follows:

- Fifteen hectares north of Woodhall Business Park for new employment land,
- Five hectares of land north of Waldingfield for employment use, and
- Provision for approximately 1,050 new homes.

2.4. Need for intervention:

North Essex
North Essex has experienced significant population, housing and employment growth in recent years, and this is forecast to continue.

The local authorities and their partners (Braintree District Council, Colchester Borough Council and Tendring District Council) have agreed to work together to address some of the key strategic issues in North Essex and to get the best outcomes for current and future communities. In particular, they plan to work together to deliver sustainable development that respects local environments and provides new jobs and essential infrastructure.

North Essex borders a large number of other local authorities who will continue to be engaged and involved on an active and ongoing basis on strategic cross border issues. These authorities include Babergh, Chelmsford, Maldon Mid Suffolk, St Edmundsbury, South Cambridgeshire, Uttlesford, and both Suffolk and Cambridgeshire County Councils.

The geographic and functional relationship between the authorities' areas is demonstrated by the fact that, with Chelmsford City Council, they form a single Housing Market Area (HMA) for planning purposes; and they are a major part of the Haven Gateway, an established economic partnership. Within this context, the forecast levels of future population growth, together with the geography of North Essex, means that any consideration for future growth will include options that have clear cross-boundary implications. These include both the expansion of existing towns and villages, as well as possible new communities.

Braintree, Colchester and Tendring
Consequently, Braintree, Colchester and Tendring have agreed to come together because of their shared desire to promote a sustainable growth strategy for the longer term; and the particular need to articulate the strategic priorities within the wider area and how these will be addressed. Central to this is the effective delivery of planned strategic growth, particularly housing and employment development, with the necessary supporting infrastructure.

Braintree, Colchester and Tendring districts are located to the north of Essex between the east coast ports and London Stansted airport. The principal towns are Braintree, Colchester and Clacton-on-Sea and a number of secondary settlements: Halstead, Witham, Wivenhoe, Tiptree, Brightlingsea, Manningtree, Harwich, Walton and Frinton.

Road, Rail and Air
The area's strategic road and rail network is heavily used, particularly, given the proximity to, and connectivity with, London. The principal roads are the A12 and A120, while the A130, A131, A133 and A414 also form important parts of the Strategic Road Network (SRN) and will form part of the new Major Road Network (MRN).

The Great Eastern Main Line provides rail services between London Liverpool Street and the East of England, including Witham, Chelmsford, Colchester and Clacton-on-Sea. It also carries freight traffic to and from Harwich International Port, which handles container ships and freight transport, to and from the rest of the UK. Harwich is also one of the major UK ports for ferry and cruise departures.

The growing demand for the use of airports, including London Stansted and London Southend, will create additional associated pressures on road and rail infrastructure. The County Council, along with local and national agencies and other organisations, is working collaboratively with the Local Planning Authorities to ensure infrastructure meets demand for enhanced economic growth.

Employment and Economy
Braintree and Colchester are the major centres of employment within the North Essex strategic area. While there are high levels of commuting to London, many residents work and live within the local area, with significant commuting across borough and district boundaries, reflecting a functional economic geography.

The area has a mixed economy focused on the service sector, including wholesale, retail, business services, tourism, health and education, alongside manufacturing, logistics and construction.

Braintree District's employment is relatively focused on industrial-type sectors, including construction and manufacturing. London Stansted airport, in neighbouring Uttlesford, plays a significant role in employing residents of the District and encouraging the indirect economic benefits associated with proximity to such a large employment hub.

Retail is the second largest sector by employment and plays an important role in sustaining the District's three key town centres. The financial and insurance sector, where Braintree District traditionally has a relatively small proportion of employment, has seen strong growth in recent years.

Due to the extensive rural areas outside the urban settlements, agriculture and its related industries play an important part in the overall economy. This rurality also means that there are large areas of open countryside, including protected natural and historic landscapes. Areas of importance for nature conservation are to be found particularly along the coast and river estuaries, while the villages and towns include many built heritage assets.

Growth
Due to its strong economic base, proximity to London and attractiveness as a place to live and work, North Essex has seen significant growth over recent years. As stated above, the area is well-placed and connected to key growth points in the wider region including London, Cambridge and Stansted

Airport and, as a result, is likely to continue to be a successful location for growth. In particular, Braintree and Colchester have regularly exceeded planned house building targets and this is expected to continue.

Planning for, and managing, future population growth requires an appropriate response from the local authorities to ensure that sufficient homes, employment premises, land, and supporting social and other infrastructure are provided in a sustainable way.

In Braintree District, the growth will be mainly addressed via a mixture of urban extensions and new communities. Braintree town, as the largest service centre in the District, will have a number of new urban extensions and over 4,000 new homes will be allocated in this area. Other parts of the District, including the town of Halstead, will have smaller allocations to reflect a more local need and make the best use of brownfield sites, recognising that these areas are not as sustainable. A new strategic scale garden community will be located to the west of Braintree, on the boundary with Uttlesford DC and on the eastern boundary with Colchester BC.

Infrastructure and Connectivity
Infrastructure and connectivity strategies have been developed under the following headings:-

- Inter-Urban Road Network
- Route-Based Strategies
- Rail
- Bus, Walking and Cycling
- Sustainable Transport
- Major new developments
- Garden Communities.

Any new development must be supported by provision of infrastructure, services and facilities that are identified to serve the arising needs.

The following are the strategic transport priorities for infrastructure provision, or improvements:

- New and improved infrastructure required to support economic growth, strategic and site-specific priorities
- Substantially improved connectivity by promoting more sustainable travel patterns, introducing urban transport packages to increase transport choice, providing better public transport infrastructure and services, and enhanced inter-urban transport corridors
- Increased rail capacity, reliability and punctuality, coupled with reduced overall journey times
- Support changes in travel behaviour by applying the modal hierarchy and increasing opportunities for sustainable modes of transport that can compete effectively with private vehicles
- Prioritise public transport, particularly in the urban areas, by introducing new and innovative ways of providing public transport, including;
    - high quality rapid public transit networks and connections, in and around urban areas, with links to the new Garden Communities
    - maximising the use of the local rail network to serve existing communities and locations for large-scale growth
    - a bus network that is high quality, reliable, simple to use, integrated with other modes and offers flexibility to serve areas of new demand
    - promotion of wider use community transport schemes.
- Improved road infrastructure and strategic highway connections to reduce congestion and provide more reliable journey times along the main corridors to improve access to markets and suppliers for business, widen employment opportunities and support growth
- Improved junctions on the A12 and other main roads to reduce congestion and address safety
- A dualled A120 between the A12 and Braintree
- A comprehensive network of segregated walking and cycling routes linking key centres of activity, thereby contributing to an attractive, safe, legible and prioritised walking / cycling environment

- Develop innovative strategies for the management of private car use and parking, including support for electric car charging points.

Traffic Congestion

The following diagrams show the congestion flows based on recent Trafficmaster data.

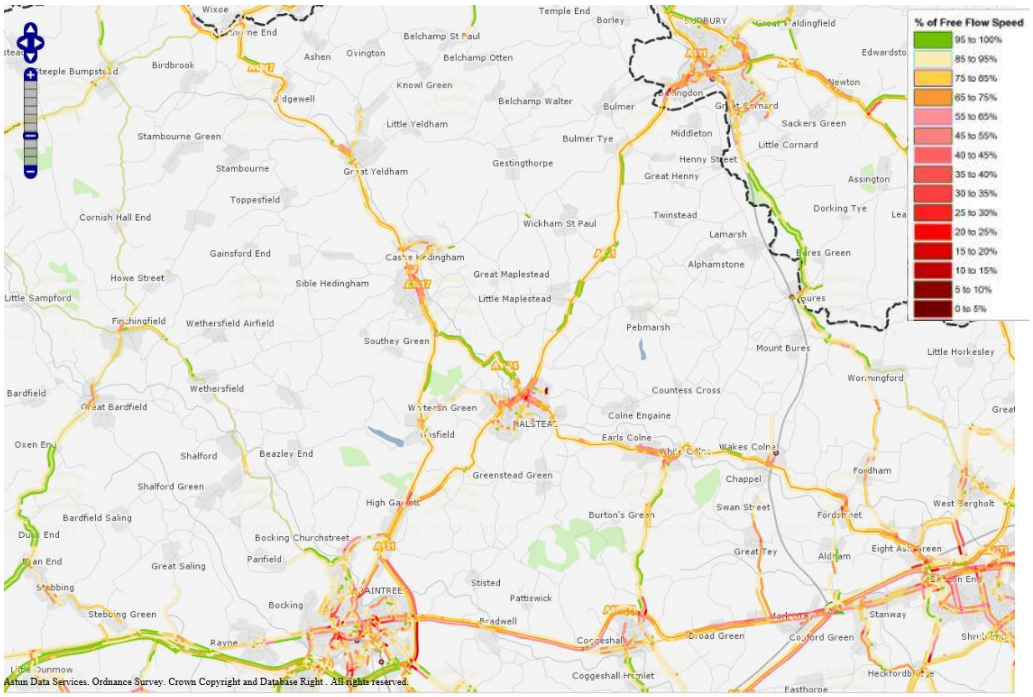

Figure 5: AM Peak Hour Congestion Indicator

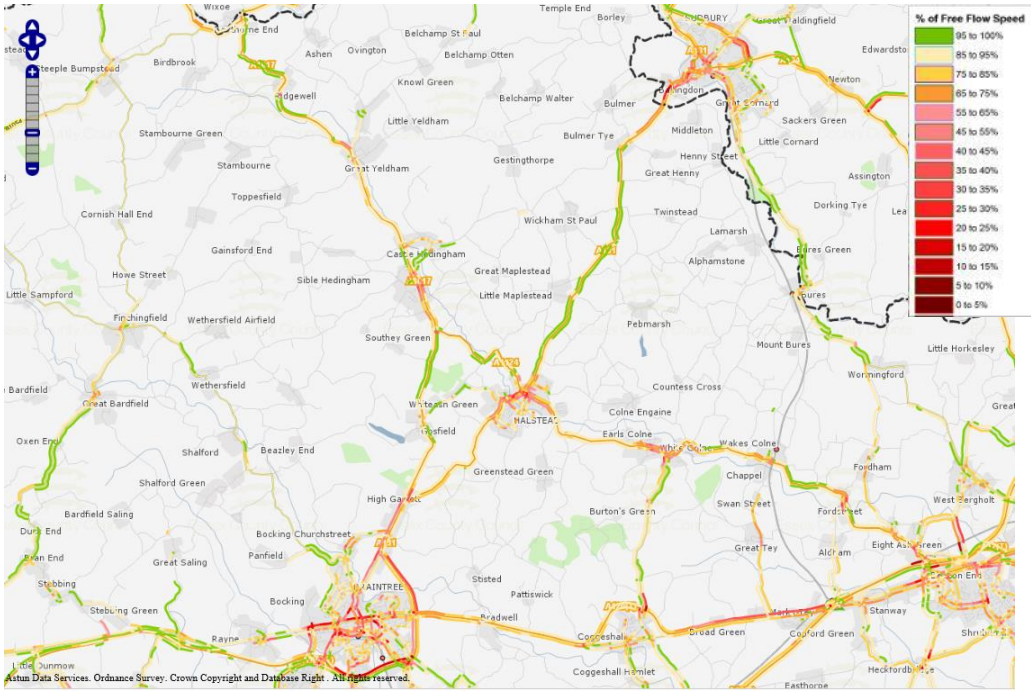

Figure 6: PM Peak Hour Congestion Indicator

It can be seen that the significant issues in the AM and PM Peaks are on the A131 to the east of Braintree, at the High Garrett junction with the A1017 and in the centre of Halstead.

Collisions
Personal Injury Collision data, recorded by Essex Police, has been analysed for the time period December 2012 to December 2017. During this period, there were 57 collisions between Braintree and Sudbury, of which, one was fatal, 18 were classed as serious and 38 were slight. The proportion of serious incidents is 32% of the total, which compares to a ratio of 14% across Great Britain, most probably due to the higher speeds on the rural sections of this route. Over the study period, the collision levels across the area have reduced slightly, but are still at unacceptable levels. The location of each accident is relatively evenly spread across the route, at least as far as Little Maplestead, from which point on, the collisions become more sporadic, reflecting traffic flow usage.

All of the above demonstrates the need for intervention to improve the situation.

2.5. Sources of funding:

If funding for this package is not secured, it would not be possible for ECC to fund all of the works without support. Individual elements could be considered, but, as described above, an overall corridor change is required and separate options, on their own, would not have the same level of impact.

Doing nothing is not an option, because all of the transport modelling indicates that, with the steady progression of developments in Braintree, Halstead and Sudbury, the route will be seriously constrained as demand continues to increase.

2.6. Impact of non-intervention (do nothing):

Private funding is not an option, so that the only other opportunities for funding are through SELEP and ECC. There is, however, a small amount of residual S106 money left over from a Tesco development that can be used towards the funding of the Marks Farm Roundabout improvements.

- **Marks Farm Roundabout** – A 'Do Nothing' alternative would clearly be viable, but unacceptable, as all arms of this junction are increasingly congested. Longer term, the new proposed A120 will alleviate some of the traffic, but vehicles travelling from the north of Braintree will still have to pass through the Marks Farm junction to head south or eastwards. The actions to improve this roundabout are judged as being complimentary to the main A120 scheme. A 'Do Minimum' alternative, could be envisioned by restricting the improvements to one arm or another, but this would not have the required effect at this junction and would be regarded as a missed opportunity. The 'Do Something' option would be the complete proposal on all four arms.
- **Broad Road Roundabout** – A 'Do Nothing' would be possible, but undesirable. Although the original proposal was to substantially alter the complete roundabout to improve flows in all directions, more detailed modelling has demonstrated that the best value for money is achieved by improving just the eastern side of the roundabout.
- **High Garrett Junction with the A1017** – This is a major junction providing access from the two main northerly corridors. The layout restricts movement from the A1017 southwards, the signals require replacement and retiming and the crossing points need to be substantially improved. It would not be acceptable to undertake selected actions of this package and, individually, they would not provide a sufficient level of improvement on their own. The 'Do Something' option would be the complete proposal on all three arms.
- **Plaistow Green and Bulmer Tye Safety Improvements** – Given that there has been a spate of collisions where drivers have misjudged their ability at both of these bends, it would be appropriate to introduce safety improvements along these two stretches of road. Network Management have supported the recommendation to introduce advisory speed limits at Plaistow Green along with improved signage. Additionally, resurfacing, with a high friction surface, and improved signage will be introduced at Bulmer Tye. It would negate the benefits totally if either safety improvement element was taken out of these proposals. For this reason, it would not be acceptable to do anything other than the complete recommended package.

2.7. Objectives of intervention:

	Problems / Opportunities identified in Need for Intervention section			
	Support Growth	**Congestion**	**Safety**	**Walking / Cycling**
Objective 1	✓✓			
Objective 2	✓✓✓			
Objective 3	✓✓	✓✓✓	✓✓	✓✓
Objective 4				
Objective 5	✓✓	✓✓	✓✓	✓✓

Objectives

The following strategic objectives support the vision for the area and provide a basis for the development of strategic policies that will help in achieving the vision:-

- Objective 1 - Provide Sufficient New Homes
- Objective 2 - Foster Economic Development
- Objective 3 - Provide New and Improved Transport & Communication Infrastructure
- Objective 4 - Address Education and Healthcare Needs
- Objective 5 - Ensure High Quality Outcomes.

Outcomes will primarily be to:-

- improve journey times and reliability for all vehicles (JT flows etc)
- improve safety, especially for cyclists and pedestrians (reduced collisions)
- improve sustainable transport (increased number of buses and passengers)
- support completion of at least 1,550 new homes (new homes)
- support economic growth and businesses (jobs and new starts / builds)
- provide for incremental jobs associated with the new developments (new jobs).

2.8. Constraints (see appendix G for Powers and Constraints):

Clearly, the proposals for the new improved A120 will have a massive impact on the junctions close to Braintree. Until the final decision for the route has been taken in Spring 2019, there may be resulting connected constraints on the delivery of these RBS improvements. The junction to the south of Marks Farm, Galleys Corner, is now generally regarded as one of the worst pinch points on the Essex highways network with unacceptable levels of congestion and there are high public expectations for any highway improvements around the area to alleviate the current problems. The improvements noted in this RBS, because they will be implemented before the A120 improvements and the introduction of the new Millennium Way Slips, may not be judged to provide sufficient improvements on their own, but, when coupled with the other changes, will jointly make a significant difference to traffic flows and congestion.

As mentioned above, the physical constraints surrounding the two mini roundabouts at the northern end of the High Street in Halstead do prevent the ability of introducing any level of improvement at these two connected junctions.

2.9. Scheme dependencies (see Appendix H):

As stated above, only when all improvements are delivered will there be a significant impact on traffic flows and congestion. Although each scheme will be delivered separately, they are all ultimately dependent on each other.

The safety schemes can be implemented independently, but enhancing capacity at the three junctions in close vicinity of each other, with two already severely congested, is essential and unlikely to have any impact on their own.

2.10. Expected benefits:

See Significant Developments listed above in Section 2.1.

- Homes – 1,550 new homes along the corridor itself, with up to 4,000 in and around Braintree, plus up to 10,000 in the new Garden Development, as listed above
- Jobs – over 250 new jobs along the corridor itself with an annual incremental jobs forecast for Braintree of 490.

2.11. Key risks:

A summary of the key risks is shown below:-

Type	Description	Respons-ibility	Mitigation / Proposed Resolution	Prob-ability	Impact
Design	Design and construction scope changes	Essex Highways / ECC	Clear communication and early confirmation of scope	Low	Medium
Utilities	Discovery of undetected utilities during construction	Essex Highways	Undertake early surveys with trial holes	Medium	Medium
Ground Conditions	Unforseen soft spots and voids requiring redesign	Essex Highways	Undertake early surveys with trial holes	Low	Medium
Traffic Management	Potentially complex and costly with approvals required	Essex Highways	Consult early and work closely with Network Management	Low	Medium
Tender Prices	Tender prices at variance with estimates and client budget	Essex Highways	Obtain early estimates, compare with other recent information and work with suppliers	Low	Medium
Costs	Construction costs escalation	Essex Highways	Monitor regularly and develop alternative actions as necessary	Low	Medium
Stats Costs	C3 Prices at variance with estimates	Essex Highways	Timely requests, utility mapping and trial holes	Low	Medium
Approvals	Time consuming processes with legal and cost implications	Essex Highways	Commence approval process early	Low	Low
Weather	Adverse conditions could jeopardize programme timing	Essex Highways	Plan programme taking account of likely weather conditions and provide programme float	Low	Low
Project	Lack of capacity to deliver the programme in full	ECC	Ensure resources are allocated and identify potential contingency support	Medium	Medium

Scheme specific risks are summarized on Appendix B1 and a QRA can be found at Appendix B2.

3. ECONOMIC CASE

3.1. Options assessment:

The Baseline RBS Review Report highlighted the following transport-related problems for this route:

1. **Congestion** – the route is congested in the southbound direction towards Marks Farm roundabout in both peak hours, southbound from north of High Garrett junction to Broad Road roundabout in the AM peak hour and northbound from Broad Road roundabout to High Garrett junction in the PM. Halstead experiences congestion throughout the day.
2. **Reliability** – the route is unreliable from the High Garrett junction to Marks Farm roundabout throughout the day (07:00-19:00) and less than 82% reliable in the PM peak period (15:00-18:00).
3. **Junction Capacity** –Both the High Garrett and Marks Farm junctions are operating at or near capacity, with virtually no room for growth. .
4. **Link Capacity** – the section between the High Garrett junction and Broad Road roundabout experiences a high flow to link capacity of 0.90 in the southbound AM (08:00-09:00) and 0.72 in the northbound PM (17:00-18:00).
5. **Safety** – Personal Injury Collision data has been analysed for the period 2012-17. This shows that 57 collisions had occurred (of which one was fatal and 18 were serious), with notable clusters in Halstead, High Garrett and at Bulmer Tye. There is a noted high proportion of motorcyclists, cyclists and pedestrians involved in these collisions.
6. **Sustainable Transport** – the census journey to work statistics showed a high proportion (over 91%) of travellers for work between the two destinations travelled by car. It is evident that there was not sufficient sustainable transport alternatives between the two destinations, with no regular direct connections via bus or rail.

In line with the strategic priorities drawn from ECC's Third Local Plan (LTP3), a set of six route-specific objectives were established. These support a number of broad themes, to which regional and local policy can be aligned and reflect the route problems identified above. These objectives formed part of the framework for the appraisal and evaluation of each transport option for this route:

1. Providing the transport improvements needed to accommodate housing and employment growth
2. Improve safety on the route and reduce the number of people killed or seriously injured
3. Tackling congestion
4. Improving journey-time reliability
5. Providing for, and promoting, sustainable forms of travel
6. Recognising the 'bigger picture' and overall fit with other schemes.

The purpose of the option generation process was to derive a broad range of measures or interventions, in a logical, transparent and auditable manner that address or ameliorate the problems on the corridor.

An initial set of potential improvement options were developed, informed by the following sources and approaches:-

- Baseline review and forecasting
- Recent studies
- Adjacent existing and proposed schemes
- Relevant policy and strategy documents
- Brainstorming
- Consultation and engagement.

With key representatives from the Client, Local Councils, Network Operations, Traffic Management, Passenger Transport, Safety Engineering, Intelligent Transport Systems and Development Control, an Options Workshop was held in February 2016 to:-

- ratify the study objectives
- confirm the problems and issues identified

- agree the potential options which should be considered.

The 20 options that emerged included a range of highway infrastructure, collision reduction and sustainable transport schemes aimed at resolving the identified problems.

To enable easier analysis of all the options, the route was split into five sections with one further category for options that affected the complete corridor.

Table 3: Route Section Reference

Ref	Section
1	Marks Farm roundabout to Broad Road roundabout
2	Broad Road roundabout to High Garrett junction
3	High Garrett junction to Oak Road, Halstead
4	Oak Road, Halstead to Churchill Road, Halstead
5	Churchill Rd, Halstead to Essex County Boundary
All	The route corridor as a whole

The options (set out in the following Table) were considered as potential solutions resulting from the option generation process outlined above. These schemes, at an initial concept stage, were then subjected to a sifting process, from which the better performing options were developed. Options were grouped in accordance with their location along the route and were assigned a unique code for reference.

Table 4: Potential Options

Ref	Option
1-1	Marks Farm roundabout - Move left-turn slip eastwards and create two lanes southbound on A131 approach
1-2	Broad Road roundabout - Modify deflections to improve traffic flow
2-1	Church Street / Broad Road junction - Change the junction into a mini-roundabout, or implement a right-turn lane
2-2	Reduce the speed limit on the northern section of Broad Road
2-3	Extend the middle hatching along more sections of Broad Road
2-4	Review positioning of all bus stops along Broad Road and develop solutions
2-5	Implement safer crossing points along Broad Road
2-6	Widen High Garrett and cut the trees back
2-7	High Garrett junction - alter signal timings and modify islands
2-8	High Garrett junction - Remove pedestrian crossing
3-1	Extend slip road and create a dedicated right turn lane at the ingress / egress for Three Counties Crematorium on Halstead Road
3-3	Resurface and add warning signs at the bends at Plaistow Green

Ref	Option
4-1	Provide more crossings in Halstead
4-2	Investigate all on-street parking in Halstead
4-4	Investigate providing more sustainable transport in and around Halstead
4-5	Bypass for Halstead
4-6	Halstead double-mini roundabout - Signalise junction
5-1	Bulmer Tye - Investigate options to further improve junction through resurfacing / speed restrictions / signs / lines
All-1	Erect Vehicle Messaging Signs (VMS) at key locations
All-2	Investigate options for increasing / improving bus services along the route

Initial Sift and Option Appraisal Methodology

The assessment of potential options described above was carried out using a bespoke appraisal framework tool. The framework was developed to assess options based on their performance against the following criteria:

- Identified Route Problems
- Study Objectives
- Scheme Deliverability, Feasibility & Affordability.

The framework aimed to provide an efficient, robust and easily presentable means of identifying legitimate options to be considered further. It was developed with consideration of the DfT's Early Assessment and Sifting Tool (EAST).

The framework was spreadsheet based and included the intervention specific reference and description. An outline cost and indicative timeframe were also included, broad categories of which are defined in Tables 5 and 6 below. It should be recognised that these categories were indicative and were only used to assist the prioritisation of options for improvement.

Table 5: Outline Cost

Outline Cost
< £1m
£1m - £5m
> £5m

Table 6: Timeframe Definition

Timeframe	Definition
Short Term	0-2 years
Medium Term	2-5 years
Long Term	More than 5 years

Each option was scored on a seven point scale against these elements, using the scoring system outlined in Table 7 below. A minimum appraised sum of two points against each of the problems and objectives was required for the option not to be discounted. The scoring process was based on existing evidence where available, and qualitative assessment to allow a structured approach to be adopted. The simple numerical basis aimed to provide consistency in the approach to appraising each option.

Table 7: Qualitative Assessment Scoring System

3	Large beneficial impact
2	Beneficial impact
1	Minor beneficial impact
0	Neutral impact
-1	Minor adverse impact
-2	Adverse impact
-3	Large adverse impact

These scores were then combined with weightings, as shown in the Table, to produce an overall score for each. The weightings, shown below, were agreed with the Client and were approved by the Key Stakeholders with the aim to prioritise schemes based upon the perceived importance of each problem or objective.

Table 8: Identified Problems Weighting

Problem Headings	Weight
Congestion	4
Reliability	4
Junction Capacity	4
Link Capacity	4
Safety	4
Signage	4
Sustainable Transport	4

Table 9: Objectives Weighting

Objective Headings	Weight
Providing the transport improvements needed to accommodate housing and employment growth	8
Improve safety on the route and reduce the number of people killed or seriously injured	6
Tackling congestion	4
Improving journey-time reliability	4
Providing for, and promoting, sustainable forms of travel	4
Recognise the 'bigger picture' and overall fit with other schemes	2

Each option was also assessed against its viability to ensure that it was appropriate for further consideration as part of the study. The criteria used to assess this was to rate the deliverability, feasibility and affordability of each option. Descriptions of these are set out in the following Table,

with outcomes classified as 'deliverable / feasible / affordable', 'deliverable / feasible / affordable with challenges' and 'undeliverable / unfeasible / unaffordable'.

Table 10: Viability Assessment Description

Viability Assessment	Description
Deliverability	Consideration of issues around deliverability e.g. in terms of political, planning, timescale or third party issues.
Feasibility	Consideration of practicalities which may present issues in delivery (e.g. physical constraint, land availability and design standards).
Affordability	Consideration of whether the scheme would be affordable within the budget, or whether additional funding would be required to deliver the scheme and whether this is likely to be available.

Whilst options that did not pass the viability assessment were discounted from the study at this stage, all options that were likely to pass 'with challenges' were then numerically discounted. The appraisal results for each of the options put forward were used as the basis for selecting and prioritising the most appropriate solutions. Initial sifting criteria looked to identify options that:

- Fit with route problems (Appraisal score sum >=2)
- Fit with route objectives (Appraisal score sum >=2)
- Deliverable
- Feasible
- Affordable.

Total scores against identified route problems and study objectives were combined to produce an overall score for each option, to discount options that did not pass the criteria and, therefore, provide a prioritised list of measures.

Options assessment:

See above.

Additionally, the junction of Church Street and Broad Road was modelled to identify the effects of the proposed new development off Church Street. Although a couple of options were tried, it was eventually assessed at not providing any great benefit. It was agreed that, once the full development started to progress, it might be necessary to reassess the junction with a view to introducing a roundabout, or a signalised junction, but to take no action at this time.

Similarly, if the new developments off Oak Road in Halstead all went ahead, then the junction with the A131 on the edge of Halstead would have to be vastly improved, or a new junction added. Again, it was agreed that this decision would be deferred until the proposals for developments were further progressed.

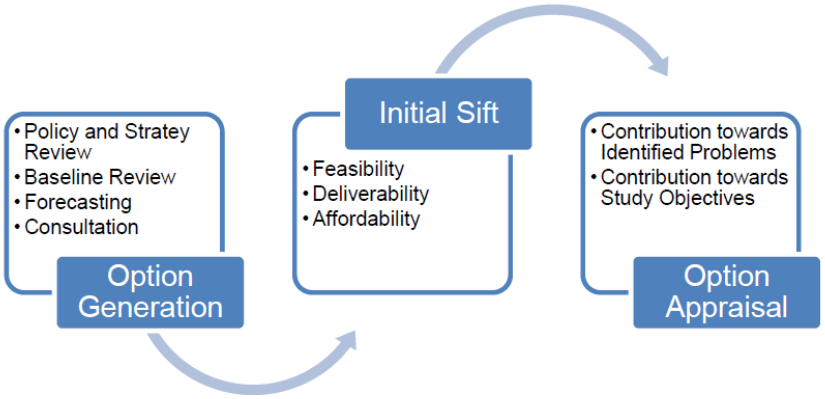

Figure 7: Overview of Option Assessment Approach

Option Generation

The purpose of the option generation process was to develop a range of measures or interventions that would have the potential to achieve the objectives identified above. The initial options were developed through a high level review, informed by the following sources and approaches:

- Relevant policy and strategy documents
- Recent studies
- Individual Studies
- Consultation and engagement exercises.

The initially identified options were selected to support strategic issues, and also concerns of a more localised nature, tackling areas and facilities that could be enhanced and developed in order to improve connectivity, reduce congestion and enhance accessibility for all modes.

The options that emerged from the studies included a range of highway infrastructure, public transport and signage schemes aimed at resolving the identified network and safety issues. The options were grouped by type and each assigned a unique code for reference.

3.2. Preferred option:

The Sifting Process provided the following results:-

Table 11: Sifting Process Results

Priority	Option
Priority 1	Investigate options for increasing / improving bus stops and services along the route
Priority 2	Marks Farm roundabout - Move left-turn slip eastwards and create two lanes southbound on A131 approach
Priority 3=	High Garrett junction - alter signal timings and modify islands
Priority 3=	Investigate providing more sustainable transport in and around Halstead
Priority 5	Broad Road roundabout - Modify deflections to improve traffic flow

As described earlier, as the project moved into the next, more detailed design phase, further meetings were held with the client and with Network Management that resulted in the following preferred list of options:-

- **Marks Farm** – widening of all four entry flares, introduction of a left turn slip from the A120 heading south and general improvements to the roundabout
- **Broad Road** – improving entry flare from Broad Road and realignment to improve traffic flow
- **High Garrett junction with A1017** – major improvements to layout, changes to signals, relocated and improved crossings and pedestrian facilities
- **Plaistow Green and Bulmer Tye** – safety improvements with resurfacing and improved signage, together with advisory speed limits.

3.3. Assessment approach:

See Note on Economic Appraisal at Appendix J.

3.4. Economic appraisal inputs:

See Note on Economic Appraisal at Appendix J and Table below.

3.5. Economic appraisal assumptions and results

Appraisal Assumptions	Details
WebTAG version	Safety Schemes: TAG Databook December 2017 Highway and Bus Schemes TUBA 1.9.9, verified against December 2017 Databook
Opening Year, Final Modelled Year and Appraisal Duration	Opening Year – 2019 Final Modelled Year – Opening Year plus 5 years Appraisal Duration – Highway Schemes = 60 Years, Safety Schemes = 20 years Modelling horizons were reduced for the purposes of the economic appraisal, as long forecasts resulted in unrealistic delay in the do-minimum case, yielding very high benefit. Growth was thus controlled on a scheme by scheme basis as set out in Appendix Jn. A sensitivity test for highway schemes included no-growth scenarios.
Price Base / GDP Deflator	Prices were in 2018 values, inflated date of expenditure and deflated from that point to 2010 with deflator values from WebTAG Databook December 2017. For the purposes of economic appraisal for highway schemes, 44% optimism bias was added to the scheme costs and 15% for safety improvements
Real Growth (i.e. above CPI or below)	Construction inflation per the Construction Price Indicators was applied to 2018 Cost Estimates for the Financial Case. For the Economic Case, prices, including inflation, were deflated and discounted to 2010 values.
Discounting	Per WebTAG and Standard TUBA Economics File, discounting at a rate of 3.5% per year for 30 years and 3.0% thereafter.

	£m PV (2010)
Costs*	
Capital Costs	2.029
Renewal Costs	included
Operating Costs	

Journey Time Benefits	29.831
Highway Externalities	1.206
Revenue	-
Indirect Tax	-0.953
Appraisal	
Present Value of Costs (PVC)	2.900
Present Value of Benefits (PVB)	30.391
Net Present Value (NPV)	27.491
Benefit Cost Ratio (BCR)	10.48 (Adjusted to 10.89)

3.6. Sensitivity tests:

Overall the sensitivity tests combined:

- Assumption of no growth in demand or delays for the junction assessments
- Reverting back to Value of Time Method 3, although a case is made that Method 1 is more realistic, given the relatively small network
- Although a case is made above, that a 15% optimism bias is probably the most applicable to the simpler designs of safety schemes, the sensitivity test includes allowance of 44% optimism bias on the safety schemes.

Analysis showed that this would reduce the package BCR from 10.89 to 6.91. Simple calculation showed that a decease by 81% of the benefits will still yield a BCR of 2.0, and similarly an increase of costs by a factor of 4.2 will reduce BCR to 2.0. As a combined example, if costs double and benefits reduce by 43%, the resulting BCR will still be 2.0.

	£m PV (2010)
Combined Sensitivity Test	
Present Value of Costs (PVC)	3.146
Present Value of Benefits (PVB)	21.744
Net Present Value (NPV)	18.597
Benefit Cost Ratio (BCR)	6.91

3.7. Environmental impacts:

Environmental Impact	**Assessment**
Noise	Slight Beneficial
Air Quality	Slight Beneficial
Greenhouse Gases	Slight Beneficial
Landscape	Slight Beneficial
Townscape	Slight Beneficial
Heritage	Neutral
Biodiversity	Neutral
Water Environment	Neutral

3.8. Social impacts:

Social Impact	Assessment
Accidents	Moderate Beneficial
Physical Activity	Slight Beneficial
Security	Neutral
Severance	Moderate Beneficial
Journey Quality	Moderate Beneficial
Option values and non-use values	Slight Beneficial
Accessibility	Slight Beneficial
Personal Affordability	Slight Beneficial

Social Impacts – See Appendix K1

3.9. Distributional impacts:

See above.

3.10. Wider impacts:

Wider impacts were only assessed as 10% of Business Consumer Benefits = £1.186m.

3.11. Value for money:

Details can be found in Appendix J: Note on Economic Appraisal, while the Appraisal Summary Table can be found at Appendix L. Supporting TUBA files and spreadsheets will be provided in a compressed folder to be separately provided.

Analysis of Monetised Costs and Benefits	**£'000**
Greenhouse Gases	335
Safety Benefits	871
Economic Efficiency: Consumer Users (Commuting)	10,738
Economic Efficiency: Consumer Users (Other)	7,230
Economic Efficiency: Business Users and Providers	11,863
Wider Public Finances (Indirect Taxation Revenues)	-953
Present Value of Benefits (PVB)	30,391
Broad Transport Budget	2,029
Present Value of Costs (PVC)	2,900
OVERALL IMPACTS	
Net Present Value (NPV)	**27,491**
Benefit to Cost Ratio (BCR)	**10.48**
Wider Economic Adjustment: Business Users and Providers	1,186
Adjusted PVB	31,577
Adjusted NPV	28,677
Adjusted BCR	**10.89**

Economic Efficiency of the Transport System(TEE)	**£'000**
Consumer - Commuting user benefits	
Travel Time	10,275
Vehicle operating costs	463
User charges	-
Construction maintenance delays	-
NET CONSUMER - COMMUTING BENEFITS	10,738
Consumer - Other user benefits	
Travel Time	6,761
Vehicle operating costs	467
User charges	-
Construction maintenance delays	-
NET CONSUMER - OTHER BENEFITS	7,230
Business user benefits	
Travel Time	10,609
Vehicle operating costs	1,252
User charges	-
Construction maintenance delays	-
Subtotal	11,863
Other business Impacts	
Developer contributions	-
NET BUSINESS IMPACT	11,863
TOTAL	
Present Value of Transport Economic Efficiency Benefits (TEE)	**29,831**

Public Accounts	**£'000**
Local Government Funding	
Revenue	0
Operating Costs	-554
Investment Costs	2,582
Developer Contributions	0
Grant/Subsidy	0
NET IMPACT	2,029
Central Government Funding: Non-Transport	
Indirect tax revenues	953
TOTALS	
Broad Transport Budget	2,029
Wider Public Finances	953

4. COMMERCIAL CASE

4.1. Procurement options:

Essex County Council (ECC) are committed to providing best value in the delivery of major highways schemes across the county. ECC has undertaken numerous procurement processes for major schemes.

- Essex Highways will be the delivery partner for the design of the scheme
- The construction will be subject to tender process through the Eastern Highway Alliance (EHA)
- ECC have a good track record of scheme delivery through this process
- Use of the EHA ensures a ready supply chain / contractors.

4.2. Preferred procurement and contracting strategy*:*

The Eastern Highways Alliance and SMARTe and the Highways Agency Framework have all been used extensively in prior major projects e.g. Sadlers Farm, Army & Navy Improvements, Chelmsford and Roscommon Way, Canvey.

Construction will be delivered through the Essex Highways Service Direct Delivery Framework using supply chain partners.

The benefits of procuring the scheme through this route are:-

- early involvement with the contractor
- use of supply chain partners who are familiar with the delivery of smaller complex projects under tight deadlines
- flexibility and opportunity to accelerate the delivery of smaller elements through the 'Walk, Talk and Build' process, thus increasing confidence in project delivery timeframe
- the utilisation of the Framework is endorsed by the ECC procurement team and the ESH Construction Management Group.

4.3. Procurement experience:

Essex Highways / Ringway Jacobs have been responsible for delivering all non-HE highway schemes in Essex since April 2012. All schemes are run to tight budgets and timing constraints and this programme would be managed in the same way.

Since 2014, Essex County Council has delivered, or is in the process of delivering, over £125m of transport improvement schemes through SELEP LGF funding.

The following schemes are operational and were delivered on programme and to budget:

- A414 Maldon to Chelmsford RBS - £3.9m
- Colchester Integrated Transport Package (ITP) - £12.7m
- Colchester LSTF - £2.0m
- Colchester Town Centre - £5.0m
- South-East LSTF - £3.0m
- Colchester Park and Ride - £7.2m
- Basildon ITP (Phase 1) - £2.0m

Under construction:

- A127 Resilience Package - £9.1m
- Mill Yard, Chelmsford - £2.9m
- A414 Harlow Pinch Point Package - £14.9m

Construction about to commence:

- Basildon ITP (Phase 2) - £8.7m

- Chelmsford to Braintree RBS - £7.3m

Approved at the November 2017 Accountability Board:
- Chelmsford to Harlow RBS - £4.3m
- Colchester to Clacton RBS - £5.5m
- M11 J8 - £9.1m

Approved at the February 2018 Accountability Board:
- Chelmsford City Growth - £14.9m
- Gilden Way Upgrading - £12.3m

4.4. Competition issues:

The construction will be subject to a tender process through the Eastern Highway Alliance (EHA).

4.5. Human resources issues:

None identified.

4.6. Risks and mitigation:

Throughout the development of the scheme, risks will be identified, recorded and actively managed. Where appropriate, risk owners will be allocated and tasked with eliminating risks, where possible, or identifying mitigation measures for residual risks. The same ethos will be taken through to the delivery stages of the scheme.

The quantified risk register will be updated as part of the procurement process to collate and cost, as accurately as possibly, construction related risk. This process will inform a more competitive tendering process.

The approach to risk transfer will be such that the management of a particular risk will rest with the party best placed to manage them.

Any cost overrun will be met by ECC.

4.7. Maximising social value*:*

During the development of the strategy, public consultations have been held with regard to the overall Braintree Local Plan which have allowed all interested parties and stakeholders to share their views on overall developments in the area. This will have ensured that any developments were considered against the economic, social and environmental well-being of the residents or persons affected.

5. FINANCIAL CASE

5.1. Total project value and funding sources:

The total value of the project is £3.6m.

5.2. SELEP funding request, including type (LGF, GPF, etc.,):

This bid requests £1.8m of capital funding from SELEP.

5.3. Costs by type (see Appendices M1 and M2 for details):

	Expenditure Forecast			
Cost type (£m)	**18/19**	**19/20**	**20/21**	**Total**
Capital - Scheme Preparation	0.380	0.528		0.908
Capital - Construction Costs		0.788	0.279	1.067
Capital - Stats Costs		0.537		0.537
QRA		0.557	0.286	0.843
Monitoring and Evaluation	0.015	0.043	0.020	0.078
Inflation	0.050	0.058	0.060	0.168
Total funding requirement	**0.445**	**2.510**	**0.645**	**3.600**
Inflation (%)	3.0	3.5	3.5	

NB: Optimism Bias has not been applied to the costs in the Financial Case.

5.4. Quantitative risk assessment (QRA):

The Quantitative Risk Assessment used can be seen at Appendix B2.

5.5. Funding profile (capital and non-capital):

	Expenditure Forecast			
Funding source (£m)	**18/19**	**19/20**	**20/21**	**Total**
SELEP	0.223	1.578	0.000	1.800
ECC	0.223	0.932	0.645	1.800
Total funding requirement	**0.445**	**2.510**	**0.645**	**3.600**

There is some flexibility within the funding profile, but construction will need to be timed to avoid undue congestion as a consequence of the traffic management required.

5.6. Funding commitment:

ECC funding has already been approved by Cabinet.

Section 151 Officer sign-off is included at Appendix A.

5.7. Risk and constraints:

The Quantitative Risk Assessment used can be seen at Appendix B2.

Throughout the development of the scheme, risks will be identified, recorded and actively managed. Where appropriate, risk owners will be allocated and tasked with eliminating risks, where possible, or identifying mitigation measures for residual risks. The same ethos will be taken through to the delivery stages of the scheme.

The quantified risk register will be updated as part of the procurement process to collate and cost, as accurately as possibly, construction related risk. This process will inform a more competitive tendering process.

The approach to risk transfer will be such that the management of a particular risk will rest with the party best placed to manage them.

Any cost overrun will be met by ECC.

Risk Management

A proactive risk management procedure is in operation, including a quantified risk assessment approach, which ensures that risks are continuously identified, owners assigned and mitigation measures put in place. Regular reviews check the status of each risk and regulate their control and mitigation. Project procedures also require that, should the likelihood or severity of risks be identified as increasing by this process, responsibility for its mitigation is escalated upwards through the project management chain to ensure that this is achieved.

All risks are currently owned by the partner authorities. As the project develops, it is expected that some of these risks will be transferred to contractors constructing the infrastructure. In addition, Essex County Council uses a proprietary online Risk Register to assess levels of risk and to track the progress of the risk management strategy for the scheme. The §151 Officer also has access to this system. Risks are categorised into five main areas, i.e.:

- Project and programme risks related to delivery;
- Consultation and stakeholder acceptance;
- Reputational risks to the project partner authorities (and ultimately the contractors and service providers);
- Statutory Processes; and
- Financial and funding risks.

Risk Allocation

ECC will bear all risk for the project as part of its role as Highways Authority.

Further detailed risks are shown as part of the QRAs which can be seen at Appendix B2.

6. MANAGEMENT CASE

6.1. Governance:

The organisation to deliver the scheme is indicated in Figure 8 below. The roles and responsibilities of the parties indicated in the figure are described in the following paragraphs.

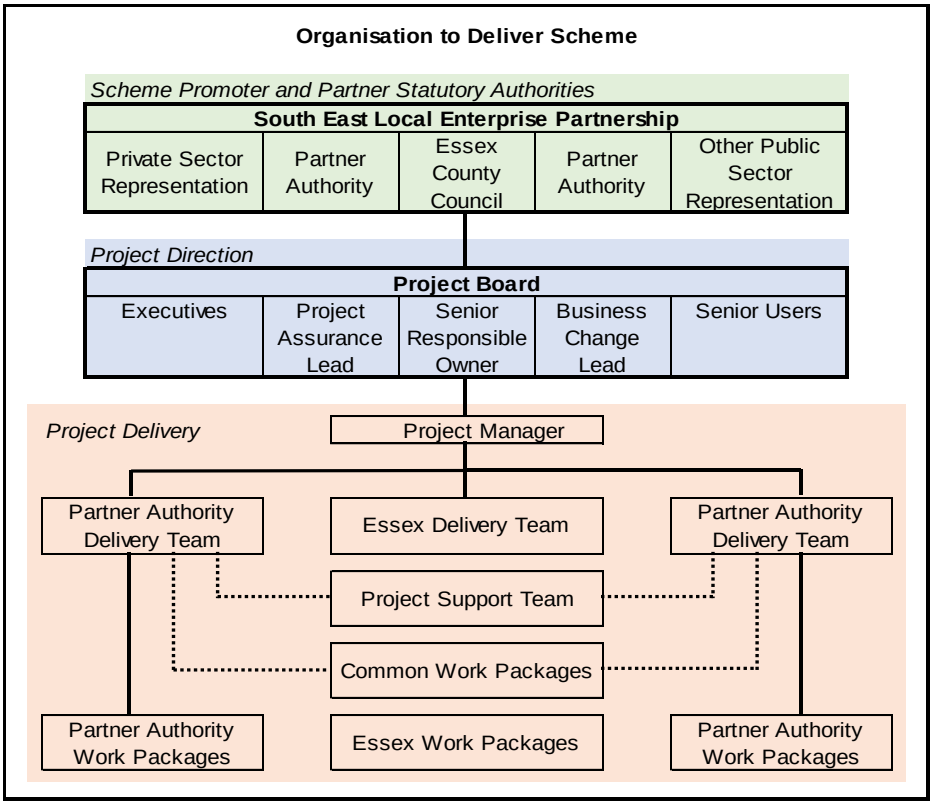

Figure 8: Arrangements for Scheme Delivery

Roles of Key Interested Parties:

South East Local Enterprise Partnership Board (SELEP) – brings together senior officers and transport portfolio holders of the partner statutory authorities promoting the scheme. Essex County Council acts as the lead authority for the scheme and provides the project's Senior Responsible Owner.

The arrangements between the statutory authorities promoting the scheme are in the process of being formalised through a joint working partnership agreement. This sets out the basis for governance of the project and for the financial contributions to be made by each party.

The Project Board – is responsible for the direction and overall management of the scheme. The Project Board is chaired by the Senior Responsible Owner and made up of the Executive and Senior User for each of the partner statutory authorities, the Project Assurance Lead and the Business Change Lead. These roles are defined below. Project Board meetings are normally held every six weeks. The Project Manager reports regularly to the Project Board, keeping members informed of progress and highlighting any issues or concerns.

The responsibilities of the Project Board include:

- Setting the strategic direction of the project;
- Defining the scope and setting the timescales for major project milestones;

- Approving the appointment of the Project Manager;
- Providing the Project Manager with the strategy and decisions required to enable the scheme to proceed to programme and resolve any challenges;
- Securing necessary approvals through the partner statutory authorities;
- Approving the project scope of work, programme and budgets, as well as any subsequent changes;
- Signing off completion of each stage of the project and authorising the start of the next stage; and
- Monitoring project risks and taking any appropriate action to mitigate risks.

Strategic Partnership Board – formed to be responsible for managing the scheme and handling of any issues. Essex Highways will also provide technical support and advice.

Delivery Teams – reporting to the Project Manager, the Delivery Teams (one for each partner statutory authority) are responsible for organising and delivering work packages on the highways under the authority's jurisdiction. The Essex Delivery Team has the additional responsibility for common work packages.

Project Support – this team is responsible for project administration, including document control, project team communications, arranging meetings, updating plans, and chasing up the completion of actions.

Individual Roles:

Senior Responsible Owner (Andrew Cook, Director, Highways & Transportation, ECC) – has ultimate responsibility and delegated authority for ensuring effective delivery of the scheme on time and on budget.

Project Manager (Elliot Smith, Infrastructure Project Manager, ECC) – is the individual responsible for organising, controlling and delivering the scheme. The Project Manager leads and manages the project team, with the authority and responsibility to run the project on a day-today basis. They also will be assigned the task of running and updating the risk register and organising the monitoring of the delivery of the programme objectives.

Executives – represent the group in each partner statutory authority with responsibility for obtaining funding for the scheme (Chris Stevenson, Head of Connected Essex Integrated Transport, ECC) and securing resources to deliver it (Ben Finlayson, Head of Infrastructure Delivery, ECC).

Sponsor – the role of major sponsor is coordinated through the Transportation Strategy and Engagement Group (Alan Lindsay, ECC).

Commissioning Delivery Manager (Gary MacDonnell, Project Manager, Commissioning Delivery, ECC) - The Commissioning Delivery Manager will provide coordinated management of projects associated with change management activities to achieve the aims and objectives associated with external funding requirements.

Senior Users (including Braintree District Council; David Forkin, Senior Manager, Head of Maintenance; Sean Perry, Head of Transportation, Planning and Development, ECC) – represent the group who will oversee the future day-to-day operation of the scheme.

Project Assurance Lead (Erwin Deppe, Client Services Director, Ringway Jacobs) – provides an independent view of how the scheme is progressing. Tasks include checking that the project remains viable, in terms of costs and benefits (business assurance), the users' requirements are being met (user assurance), and that the project is delivering a suitable solution (technical assurance).

6.2. Approvals and escalation procedures:

See above

6.3. Contract management:

A Benefits Realisation Plan has been produced (see Appendix P) and monitoring / evaluation will be undertaken at the appropriate points during scheme development. Monitoring activities will be aligned to those best placed to do so and to existing regular monitoring and evaluation work. Land-use development related outputs are routinely monitored by planning authorities and this information will be tracked and linked to scheme completion where appropriate.

6.4. Key stakeholders:

Key Stakeholders	Nature of involvement
Essex County Council	Support for scheme
Braintree District Council	Support for scheme
Halstead Town Council	Support for scheme
Babergh District Council	Support for scheme

6.5. Equality Impact Assessment:

See Appendix N.

6.6. Risk management strategy:

A proactive risk management procedure is in operation, including a quantified risk assessment approach, which ensures that risks are continuously identified, owners assigned and mitigation measures put in place. Regular reviews check the status of each risk and regulate their control and mitigation. Project procedures also require that should the likelihood or severity of risks be identified as increasing by this process, responsibility for its mitigation is escalated upwards through the project management chain to ensure that this is achieved.

All risks are currently owned by the partner authorities. As the project develops it is expected that some of these risks will be transferred to contractors constructing the infrastructure. In addition, Essex County Council uses a proprietary online Risk Register to assess levels of risk and to track the progress of the risk management strategy for the scheme. The S151 Officer also has access to this system. Risks are categorised into five main areas, i.e.:

- Project and programme risks related to delivery;
- Consultation and stakeholder acceptance;
- Reputational risks to the project partner authorities (and ultimately the contractors and service providers);
- Statutory Processes; and
- Financial and funding risks.

6.7. Work programme:

See Appendix C.

6.8. Previous project experience:

Essex Highways / Ringway Jacobs have been responsible for delivering all non-HE highway schemes in Essex since April 2012. All schemes are run to tight budgets and timing constraints and this programme would be managed in the same way.

Since 2014, Essex County Council has, or is, in the process of delivering nearly £100m of transport improvement schemes through SELEP LGF funding.

The following schemes are operational and were delivered on programme and to budget:

- A414 Maldon to Chelmsford RBS - £3.9m
- Colchester Integrated Transport Package (ITP) - £12.7m
- Colchester LSTF - £2.0m
- Colchester Town Centre - £5.0m
- South-East LSTF - £3.0m
- Colchester Park and Ride - £7.2m
- Basildon ITP (Phase 1) - £2.0m

Under construction:

- A127 Resilience Package - £9.1m
- Mill Yard, Chelmsford - £2.9m
- A414 Harlow Pinch Point Package - £14.9m

Construction about to commence:

- Basildon ITP (Phase 2) - £8.7m
- Chelmsford to Braintree RBS - £7.3m

Approved at the November Accountability Board:

- Chelmsford to Harlow RBS - £4.3m
- Colchester to Clacton RBS - £5.5m
- M11 J8 - £9.1m

6.9. Monitoring and evaluation:

Inputs

Construction equipment and materials with appropriate management and supervision.

Outputs (delivering the scheme/project)

Trafficmaster and INRIX plots to show congestion, speeds and flows together with collision statistics.

Outcomes (monitoring)

Traffic flows will be monitored (as above). Also, levels of new housing and businesses will be recorded. See Appendix D.

Impacts (evaluation)

As above - Traffic flows will be monitored on a regular basis and levels of new housing and businesses will be recorded on an annual basis.

Although construction work has just commenced on the Chelmsford to Braintree Route Based Strategy, this scheme is sufficiently far away for it not to have any direct benefit or impact. In fact, the nearest construction on the Chelmsford to Braintree RBS is over seven miles away from the most southerly work proposed in this RBS.

However, the proposed improvements to Millennium Way Slips that are being sponsored through the recent DfT NPIF scheme are only just over one mile (and two junctions) away from Marks Farm and, inevitably, there will be interaction between the two schemes (as stated earlier in the dependencies / interdependencies section – 2.9). The considered view is that both schemes will provide positive benefits to people travelling around Braintree.

A Benefits Realisation Plan has been developed and will be refined further as part of the business case development to confirm the principal benefits of the scheme. Lessons learned from prior projects are automatically fed through to new projects on inception.

A requirement of the SELEP Assurance Framework is that each scheme will have an evaluation plan produced prior to final approval, independently reviewed, and monitored in accordance with this plan. This monitoring will be done according to government guidance and will, where appropriate, include 1 and 5 year reports.

A monitoring and evaluation plan for the scheme will be developed as an output of the full business case work. The plan would be informed by the quantitative and qualitative analysis undertaken for the key performance metrics and wider benefits anticipated.

ECC is mindful of the need to review and monitor highway network performance at various stages of scheme implementation to manage and minimise any potential negative scheme impacts. A process of monitoring and evaluation will be implemented to support and inform ongoing wider monitoring activities that are in place, utilising where possible survey data which is already collected.

Surveys will need to capture volumes, patterns of movement and journey times for all modes of transport, including private vehicles, public transport, and non-motorised users. Traffic volumes, speeds and journey times will be monitored at key locations within the area affected by the scheme.

Road safety impacts will be monitored as part of routine county-wide annual monitoring programmes to verify future accident incidences, numbers and locations.

The process evaluation will be ongoing throughout the life of the project and will be managed by the Project Executives and reported through the Project Board. Lessons learned, as part of the development of the scheme, will be reported.

Process Evaluation Monitoring reports will be produced at key milestones. Impact Evaluation Reports will be produced in line with key scheme progression and delivery milestones.

The management of risk in delivering to the monitoring and evaluation requirements will also been taken into account and mitigation measures set out in the risk register.

6.10. Benefits realisation plan:

A Benefits Realisation Plan has been produced (see Appendix P) and monitoring / evaluation will be undertaken at the appropriate points during scheme development. Monitoring activities will be aligned to those best placed to do so and to existing regular monitoring and evaluation work. Land use development related outputs are routinely monitored by planning authorities and this information will be tracked and linked to scheme completion where appropriate.

7. DECLARATIONS

Has any director / partner ever been disqualified from being a company director under the Company Directors Disqualification Act (1986) or ever been the proprietor, partner or director of a business that has been subject to an investigation (completed, current or pending) undertaken under the Companies, Financial Services or Banking Acts ?	No
Has any director / partner ever been bankrupt or subject to an arrangement with creditors or ever been the proprietor, partner or director of a business subject to any formal insolvency procedure such as receivership, liquidation, or administration, or subject to an arrangement with its creditors	No
Has any director / partner ever been the proprietor, partner or director of a business that has been requested to repay a grant under any government scheme ?	No

I am content for information supplied here to be stored electronically, shared with the South East Local Enterprise Partnerships Independent Technical Evaluator, Steer Davies Gleave, and other public sector bodies who may be involved in considering the business case.

I understand that a copy of the main Business Case document will be made available on the South East Local Enterprise Partnership website one month in advance of the funding decision by SELEP Accountability Board. The Business Case supporting appendices will not be uploaded onto the website. Redactions to the main Business Case document will only be acceptable where they fall within a category for exemption, as stated in Appendix E.

Where scheme promoters consider information to fall within the categories for exemption (stated in Appendix E), they should provide a separate version of the main Business Case document to SELEP six weeks in advance of the SELEP Accountability Board meeting at which the funding decision is being taken, which highlights the proposed Business Case redactions.

I understand that if I give information that is incorrect or incomplete, funding may be withheld or reclaimed and action taken against me. I declare that the information I have given on this form is correct and complete. Any expenditure defrayed in advance of project approval is at risk of not being reimbursed and all spend of Local Growth Fund must be compliant with the Grant Conditions.

I understand that any offer may be publicised by means of a press release giving brief details of the project and the grant amount.

Signature of applicant	
Print full name	
Designation	

8. APPENDIX A - FUNDING COMMITMENT

Dear Colleague,

In submitting this project Business Case, I confirm on behalf of Essex County Council that:

- The information presented in this Business Case is accurate and correct as at the time of writing.
- The funding has been identified to deliver the project and project benefits, as specified within the Business Case. Where sufficient funding has not been identified to deliver the project, this risk has been identified within the Business Case and brought to the attention of the SELEP Secretariat through the SELEP quarterly reporting process.
- The risk assessment included in the project Business Case identifies all substantial project risks known at the time of Business Case submission.
- The delivery body has considered the public-sector equality duty and has had regard to the requirements under s.149 of the Equality Act 2010 throughout their decision-making process. This should include the development of an Equality Impact Assessment which will remain as a live document through the projects development and delivery stages.
- The delivery body has access to the skills, expertise and resource to support the delivery of the project
- Adequate revenue budget has been or will be allocated to support the post scheme completion monitoring and benefit realisation reporting
- The project will be delivered under the conditions in the signed LGF Service Level Agreement with the SELEP Accountable Body.

I note that the Business Case will be made available on the SELEP website one month in advance of the funding decision being taken, subject to the removal of those parts of the Business Case which are commercially sensitive and confidential as agreed with the SELEP Accountable Body.

Yours Sincerely,

SRO (Director Level) ……

S151 Officer ……