Capital Project Business Case

Braintree – Active Travel

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.

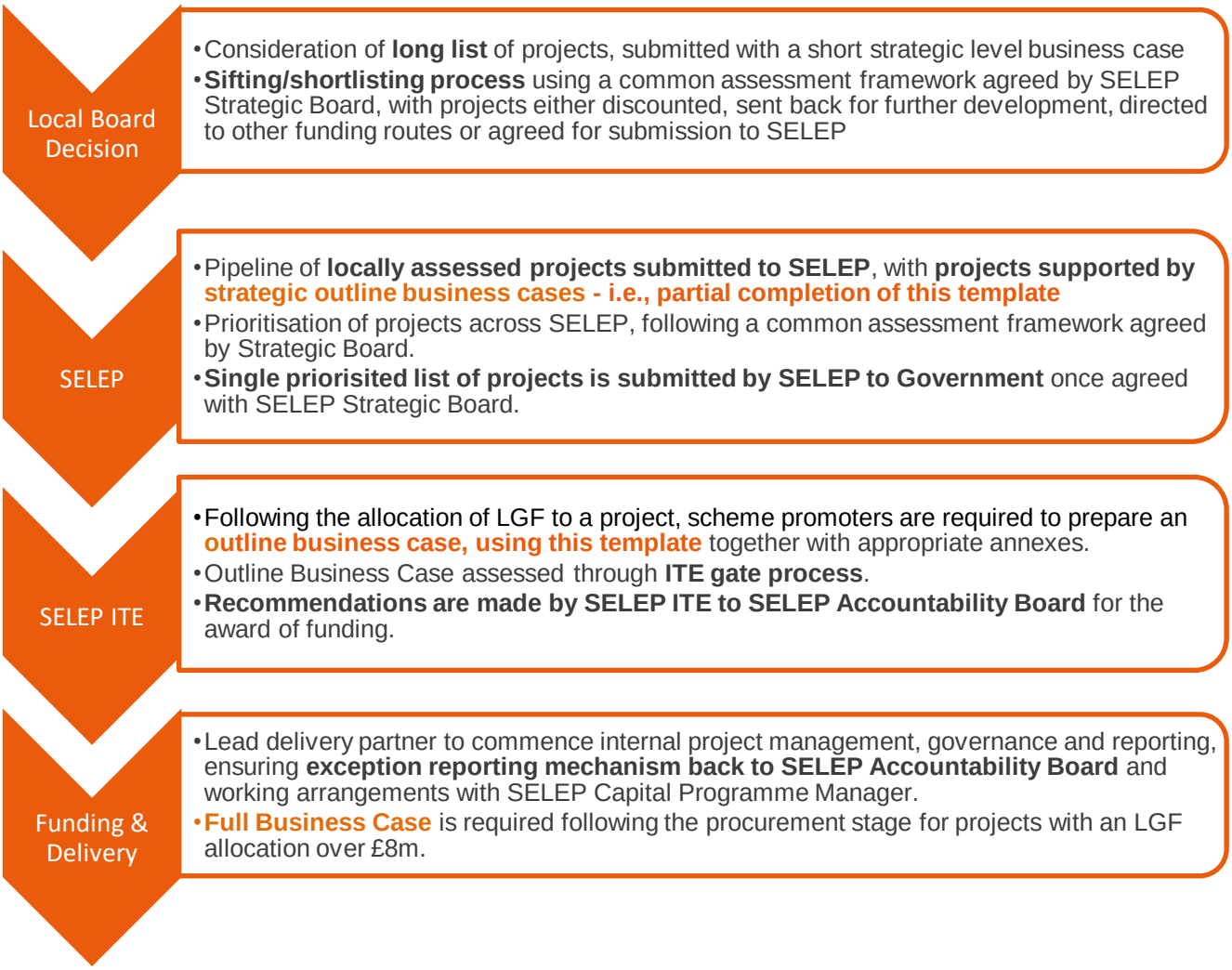
It is also designed to be applicable across all funding streams made available by Government through SELEP. It should be filled in by the scheme promoter – defined as the final beneficiary of funding. In most cases, this is the local authority; but in some cases, the local authority acts as Accountable 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.

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:



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SOUTH EAST
LOCAL ENTERPRISE
PARTNERSHIP

1. PROJECT OVERVIEW

1.1. Project name:

Braintree – Active Travel

1.2. Project type:

To supplement the package of walking and cycling improvements planned for delivery through the Active Travel scheme throughout Braintree.

1.3. Federated Board Area:

Essex

1.4. Lead County Council / Unitary Authority:

Essex County Council

1.5. Development location:

Various locations within Braintree.

1.6. Project Summary:

Braintree is a small market town in the north of Essex and has shown its commitment to be sustainable, through being the home to the first Electric Forecourt in the UK, proving a strong commitment to clean modes of transport, plus introducing measures to facilitate walking and cycling for shorter journeys.

Braintree is well connected to key growth points such as London, Cambridge and Stansted Airport and will to continue to be a liveable location for future growth with up to 14,320 new homes planned to 2033. As a result, Braintree is also fast becoming a destination of choice and it is vital to ensure that the right infrastructure and behaviours are woven into the network now before potential un-sustainable behaviours perpetuate.

To ensure that people are encouraged to walk, or cycle, for the short local journeys and to avoid using the car, we are delivering the objectives contained in Braintree's Cycling Action Plan. In particular, there is a need to deliver connected routes and cohesive networks that connect safely and directly to the existing footpaths and cycle way routes, to and from new developments to the main commuter, community and retail centres, or recreational links.

In 2020, ECC submitted a series of walking and cycling improvements for the five major towns in Essex in response to the government's Active Travel Fund. The schemes for Braintree were based on LCWIP routes that both head towards the town centre, one running from South to North and the other from North West in a South Easterly direction to meet up in the town centre.

The South-North route is approximately 0.85 miles (1.37 kms) in length, based on Braintree LCWIP 4 and starting at the railway station on Station Approach, progressing along South Street and Fairfield Road. At the junction with Manor Street, the route goes eastwards before travelling north and west along the Avenue and Coggeshall Road respectively. This route connects with existing provisions, and proposed LCWIP improvements (LCWIP 1b & LCWIP 4) to the South, to provide improved wider connectivity with the centre of the town.

The North West – South East route is approximately 0.57 miles (0.92 kms) in length, based on Braintree LCWIP 2, and starts adjacent to the schools and college in Porters Field, progresses along Panfield Lane and Bank Street where it meets the other route at the westerly end of Coggeshall Road.

These routes involve both permanent and temporary segregated corridors, footway widening (using the reallocation of road-space), junction improvements, crossing improvements, point closures, filtered permeability, School Streets and 20 mph speed limits.

The improvements in Station Approach are tied to other improvements the council are making for bus operation in the area around the train station. The improvements involve making traffic flow one way in an East to West direction whilst introducing a segregated contra-flow cycle lane going from West to East. The routes are mainly local urban, so traffic flows will only be impacted minimally.

This Proposal

The purpose of this business case is to request the release of the sum of £291,000, which has become available from the government's Getting Building Fund (GBF), to assist in the delivery of the above elements from the Active Travel Fund 2 package of sustainable transport improvements for Braintree. Costs have escalated, some quality enhancements are now being provided and various groundworks and Stats requirements have meant that the originally allocated money from the ATF 2 schemes is no longer sufficient. This money will permit the introduction of the original package as intended and will be used to launch the package of schemes, with the first priority being given to the improvements along Station Approach.

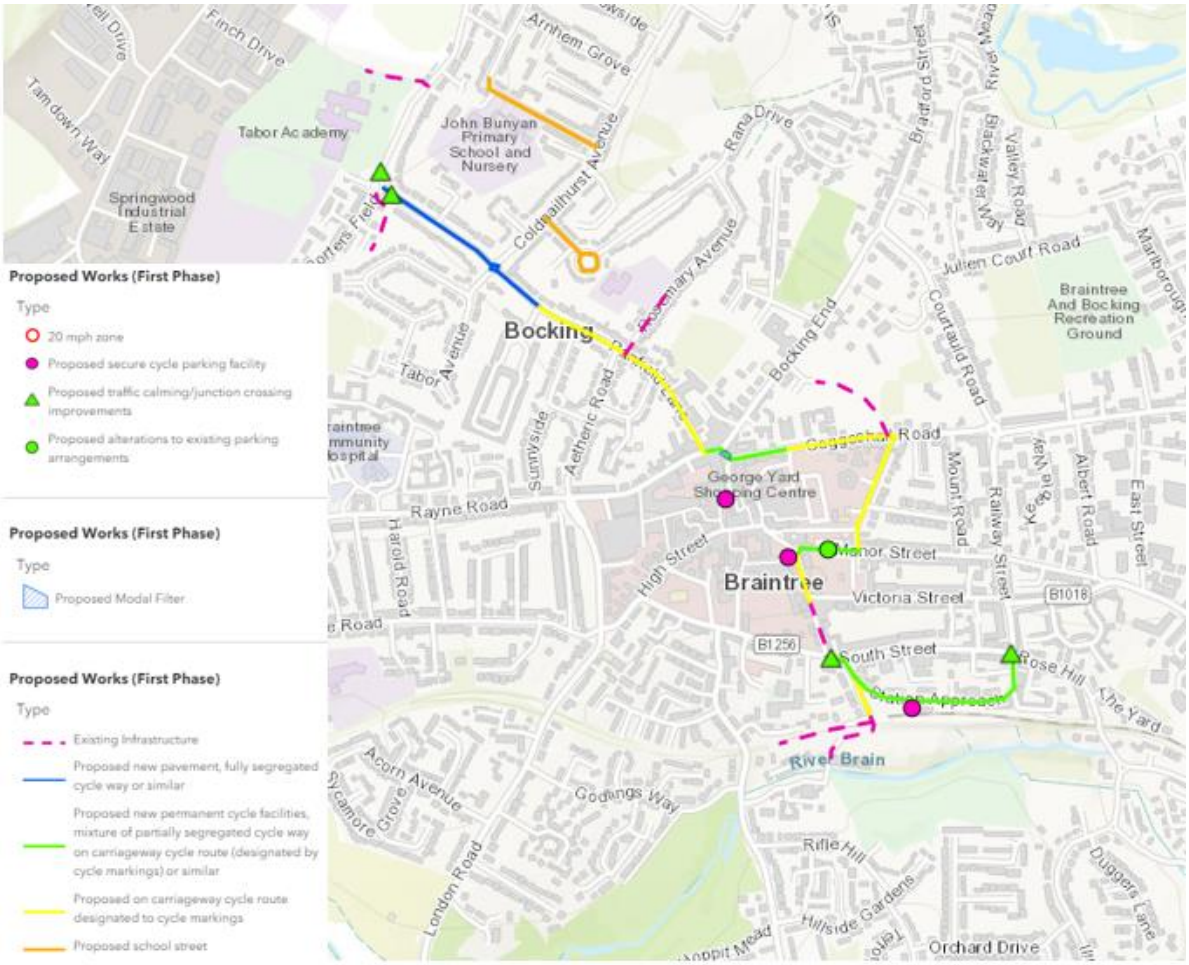


Figure 1: Braintree - ATF 2 Proposed Schemes

1.7. Delivery partners:

Partner	Nature and / or value of involvement (financial, operational etc.)
Essex County Council	Financial, operational, programme management and project direction
Braintree District Council	Support for scheme
Essex Highways	Responsible for design, management and coordinating delivery of schemes
Ringway Jacobs and partners	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:

	Expenditure Forecast		
Funding source (£m)	**21/22**	**22/23**	**Total**
SELEP - GBF	0.291	0.000	**0.291**
DfT - ATF 2	0.000	0.934	**0.934**
ECC Contribution	0.076	0.777	**0.853**
Total funding requirement	**0.367**	**1.711**	**2.078**

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

£0.291m GBF 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:

Project milestone	Indicative date
Detailed design	January 2022
Tender	January to February 2022
Start construction – Station Approach funded by GBF	March 2022
Phased construction	March to September 2022
End construction – all sections	September 2022

1.14. Project development stage:

Project development stages completed to date			
Task	**Description**	**Outputs achieved**	**Timescale**
Station Access Study	Detailed study	Completed – paper issued	March 2017
Options Assessment Report	Detailed Assessment Report	Completed – paper issued	March 2017
Vissim Report	Detailed Report	Completed – paper issued	March 2017
Station Accessibility Technical Note	Detailed Technical Note	Completed – paper issued	April 2017
Braintree Cycling Action Plan	Detailed action plan	Completed – paper issued	January 2018
EoI to SELEP	Expression of Interest	Completed – paper issued	August 2018
ATF 2 Bid	Business Case	Money awarded	November 2020
Project development stages to be completed			
Task	**Description**	**Timescale**	
Business Case	Paper issued to SELEP	December 2021	
Design	Detailed Design	January 2022	

1.15. Proposed completion of outputs:

		Year 2	Year 3		Year 4		Year 5			
FORECAST OUTPUT DELIVERY	Contracted	Qtrs 3&4	Qtrs 1&2	Qtrs 3&4	Qtrs 1&2	Qtrs 3&4	Qtrs 1&2	Qtrs 3&4	Total	Difference
		2021-22	2022-23	2022-23	2023-24	2023-24	2024-25	2024-25	Delivered	
	Outputs	Jan-Mar	Apr - Sept	Oct - Mar	Apr - Sept	Oct - Mar	Apr - Sept	Oct - Mar		
Km of roads, cycling lanes and walk ways built or upgraded	2.29								0	
KG of CO2 emissions avoided	TBE								0	
Jobs Created	N / A								N / A	N / A
Additional construction jobs	N / A								N / A	N / A
Jobs Safeguarded	N / A								N / A	N / A
Housing units unlocked	N / A								N / A	N / A
Housing units delivered	N / A								N / A	N / A
Sqm commercial floorspace	N / A								N / A	N / A
Sqm R&D facilities floorspace	N / A								N / A	N / A
Number of businesses or institutions assisted	N / A								N / A	N / A
Area of new or improved learning/training floorspace	N / A								N / A	N / A
Number of new learners assisted	N / A								N / A	N / A
Number of new super/ultrafast broadband connections	N / A								N / A	N / A
Number of new retrofits delivered	N / A								N / A	N / A
Sqm public realm or green space improved or created	N / A								N / A	N / A

Other related projects funded by SELEP:-

- Chelmsford to Braintree RBS – £3.66m funding – project completed
- Chelmsford City Growth Package (including a number of cycle route improvements) - £9.193m funding – project completed.

2. STRATEGIC CASE

2.1. Scope / Scheme Description:

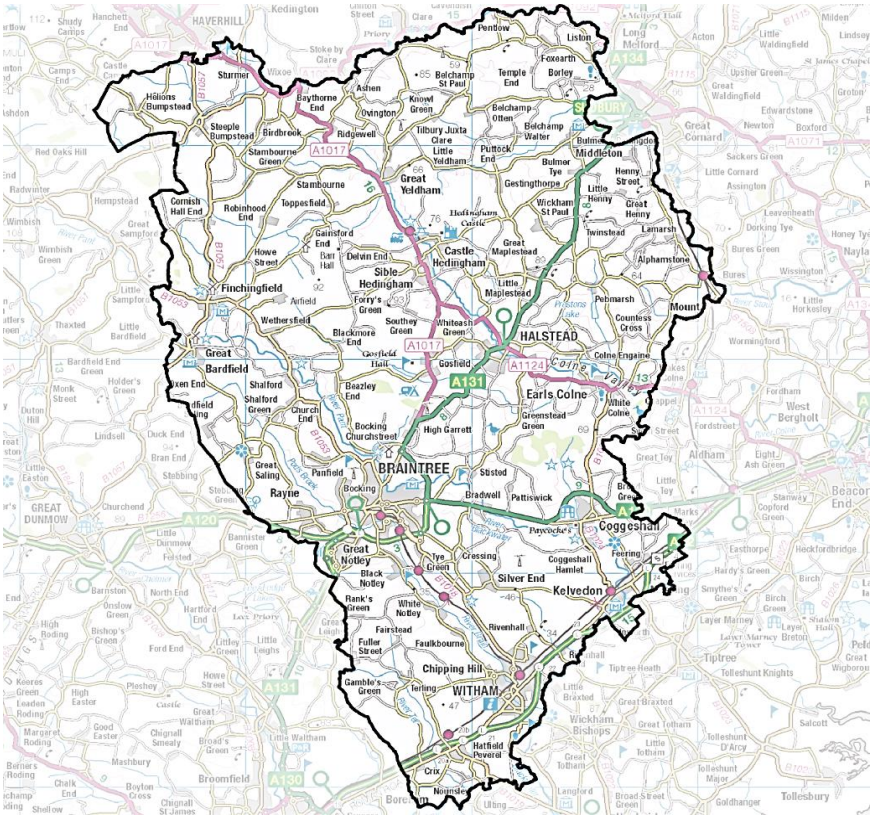


Figure 2: Braintree District Map

Traffic in Braintree

Traffic congestion in Braintree is shown in Figures 3 & 4 below.

The Teletrac plots show that, during the AM peak hour:

- Traffic heading southbound to Galley's Corner is extremely heavy and congested
- Roads leading to the town centre are all congested
- In particular, there is congestion around Springwood Drive and South Street.

The delay during the PM peak hour is also significant and virtually repeats the problems seen in the morning peak:

- Traffic heading eastbound towards Galley's Corner is extremely heavy and congested.
- Roads leading to / from the town centre are all congested
- In particular, there is heavy congestion along and around Springwood Drive and South Street.

The data shows that, any opportunity to reduce these traffic flows will ease congestion and will help improve the efficiency of existing businesses in the surrounding area and the commute to the station.

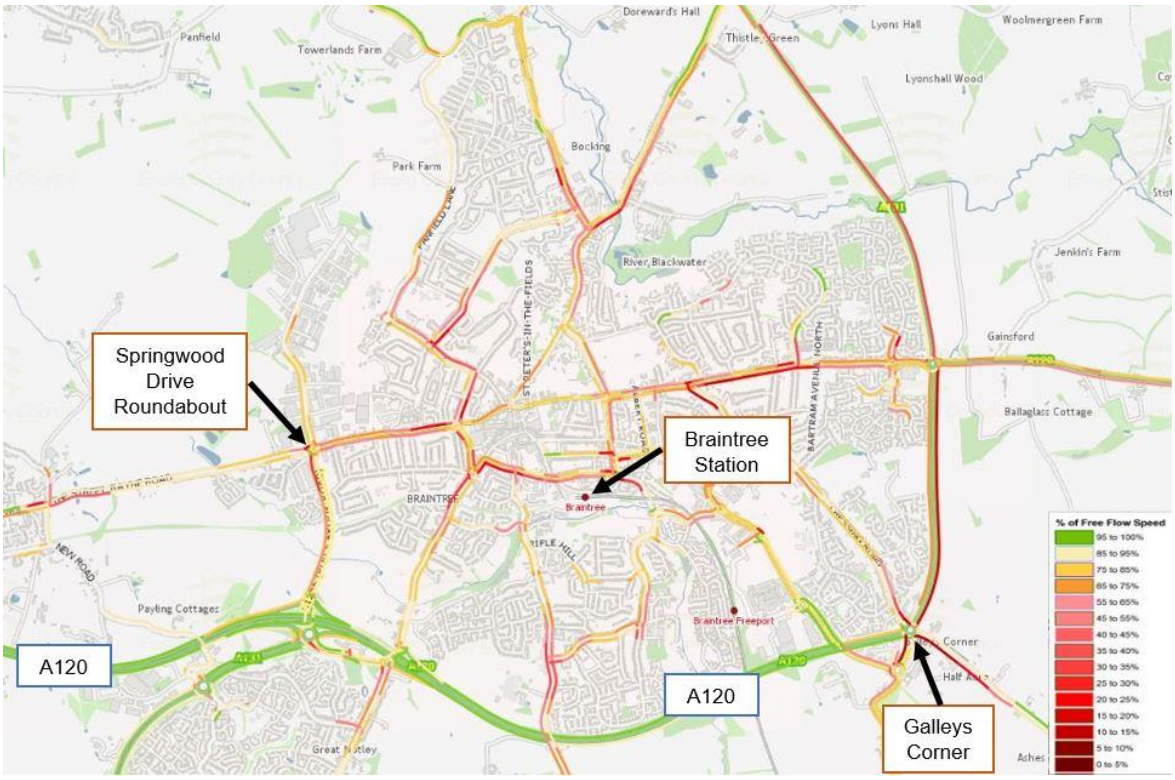


Figure 3: 2017 Teletrac AM peak (07:00-08:00) plot

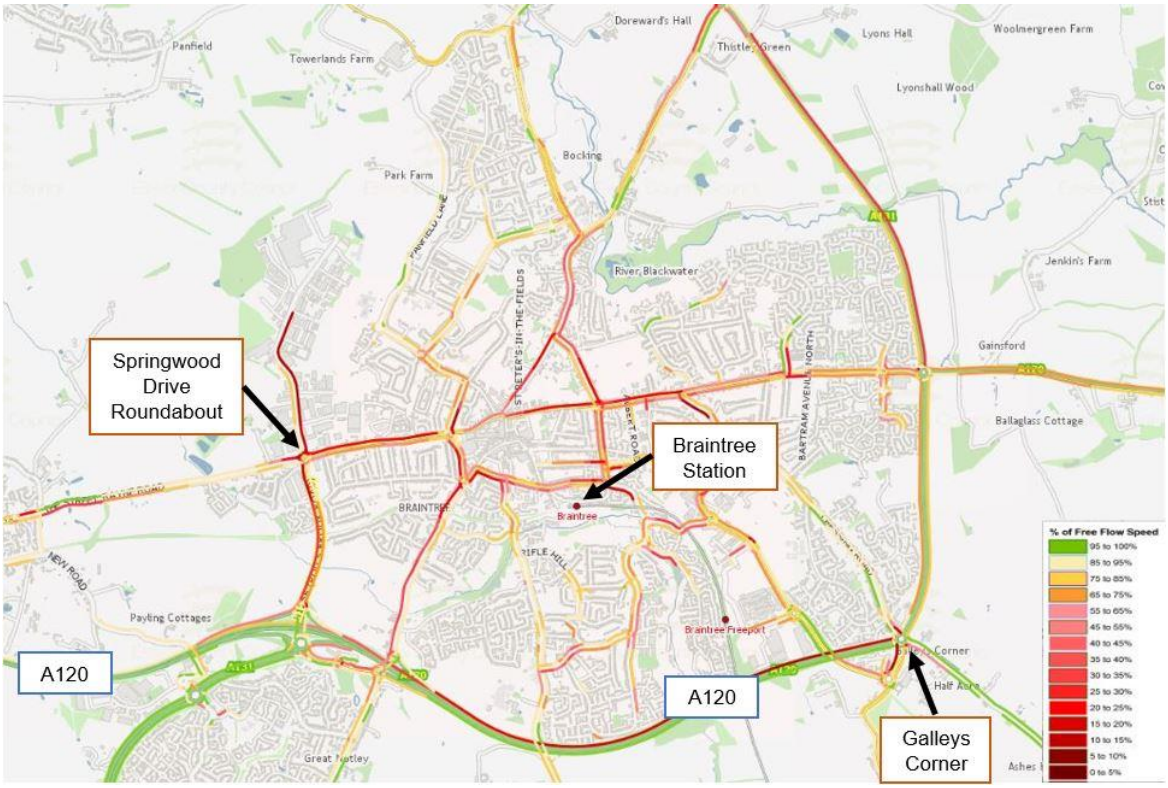


Figure 4: 2017 Teletrac PM peak (17:00-18:00) plot

Modelling
To provide improvements, the following schemes have been tested in a traffic assignment and simulation model:

- Make Station Approach one way westbound with separate dedicated contra-flow cycle lane
- Pierrefitte Way signal alterations
- Railway Street signal alterations

The results of the modelling indicate that all schemes would likely have some benefits in future years, although some arms of junctions on the Pierrefitte Way and Railway Street corridors may still have delays, although less, even with the schemes in place. However, the modelling suggests that the schemes would have positive journey time benefits.

It should be noted that the cycling elements were not specifically included in the Vissim model.

Cycling Action Plans
As part of the county-wide Essex Cycling Strategy, Cycling Action Plans (CAPs) have been developed for individual Boroughs, Districts and cities of Essex, including one for the District of Braintree.

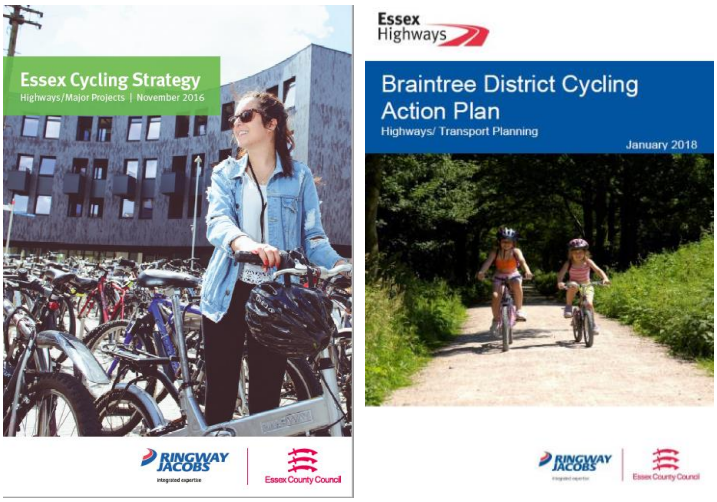


Figure 5: Essex Cycling Strategy and Braintree Cycling Action Plans

The document identifies opportunities to develop and promote cycling in Braintree through providing improvements to the infrastructure. Together with the wider promotion of cycling by Active Essex, Essex County Council (ECC) and Braintree District Council (BDC), the proposal is to establish cycling in the public's mind as a 'normal' mode of travel, especially for short A-to-B trips, and as a major participation activity and sport for all ages.

Two key commitments of the Essex Cycling Strategy are to:

- establish a coherent, comprehensive and advantageous cycle network in every major urban area, utilising a combination of on-carriageway and off-carriageway cycle facilities; and
- ensure each Borough / District / City has an up-to-date Cycling Action Plan (which will be renewed every five years).

The CAPs identify any high quality and well-planned infrastructure which will be vital in encouraging cycling and improving safety. It is ECC's policy to ensure that every urban area has a well-planned cycle network that:

- connects key destinations;
- supports a network of recreational routes; and
- caters for all users and abilities.

Coherent cycle networks will ensure that:

- physical barriers to cycling in Essex's urban areas are progressively broken down; and
- cycling becomes a prioritised mode of transport in the mind of Essex residents.

In addition, the priority aims for Active Essex (County Sports Partnership) and how cycling can help achieve these aims are shown in Table 1 below.

Table 1: Active Essex Priority Aims

Active Essex priority aims	How cycling helps achieve these aims
Increase participation in sport and physical activity	Cycling is one of the most popular sports in Essex and can be enjoyed by people of all ages
Encourage healthy and active lifestyles	Cycling provides a means of active transport that can help to reduce the number of short car journeys
Develop sporting pathways	Alex Dowsett, cycling world record breaker, is from Essex and benefited from Active Essex Sporting Ambassador funding and support when he was a talented young cyclist
Encourage lifelong learning and skills development	Bikeability courses help children and adults to acquire physical skills and road safety awareness

The aims of the Action Plan are to:

- Identify how cycling levels can be increased in the District;
- Prioritise funding for new cycling schemes in Braintree;
- Create a usable, high-quality cycle network that connects residential areas with key employment locations, rail stations and town centres; and
- Create opportunities to increase recreational cycling in Braintree.

2.2. Location description:

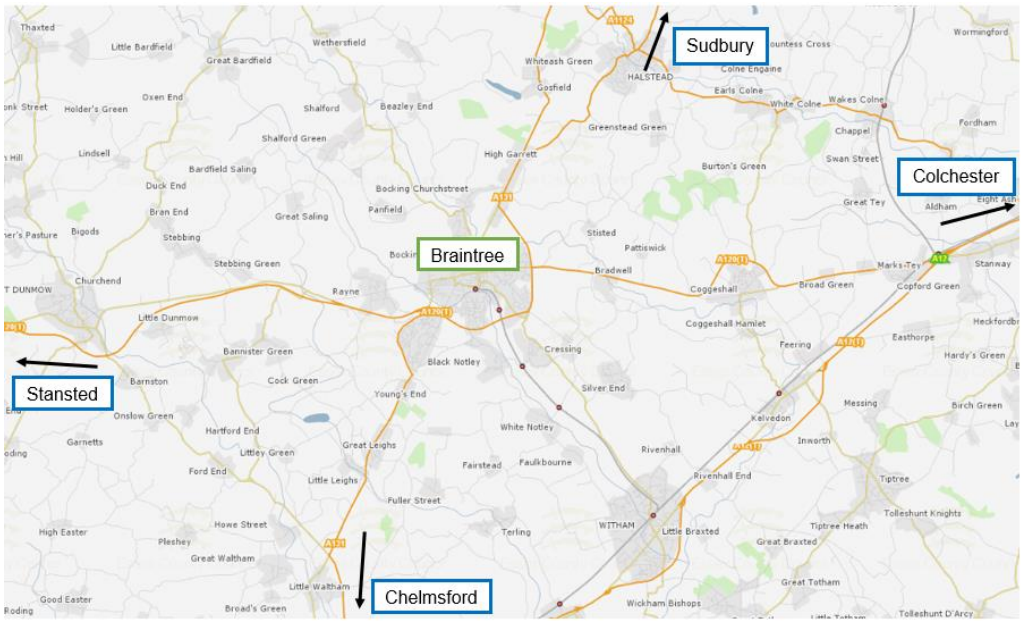


Figure 6: Location of Braintree

Location – Braintree

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

It is located approximately half way along the A120 between the M11 / Stansted Airport and Colchester. It is also approximately half way between Chelmsford and Sudbury on the A131.

The District of Braintree is situated in the north of Essex. Covering approximately 612 square kilometres, Braintree District is the second largest Essex authority in terms of geographical area, but only the fifth most populated of the 12 Essex local authorities. The District consists of the two large market towns of Braintree and Halstead, along with the 1970's urban 'expanded town' of Witham, all interconnected with many smaller villages and urban areas. The District is served by five rail stations, located at Braintree, Braintree Freeport, Hatfield Peverel, Kelvedon and Witham.

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, but, with the inclusion of some of the key surrounding villages, the urban area population increases to 53,500.

Employment and Economy
Braintree is one of 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. The financial and insurance sector, where Braintree traditionally has a relatively small proportion of employment, has seen strong growth in recent years.

Braintree District Council (BDC) has ambitious plans for growth, and its emerging Local Plan has a target of 14,320 new homes and 51ha of employment land by 2033.

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.

Braintree Railway Station
Braintree Railway Station is located approximately ⅓ mile to the south of the town centre with off-road cycle access possible from the south and west through National Route 16. Facilities connecting the station and the town centre / additional areas of the town are relatively poor.

In terms of cycle parking facilities, the station currently has 32 Sheffield stand spaces and 20 rack spaces. All cycle parking is covered.

2.3. Policy context:

SELEP

SELEP's Strategic Economic Plan aimed to:

- enable the creation of 200,000 sustainable private sector jobs over the decade to 2021, an increase of 11.4% from 2011,
- complete 100,000 new homes by 2021, which will entail increasing the annual rate of completions by over 50% in comparison with recent years; and,
- lever investment totalling £10 billion, to accelerate growth, jobs and homebuilding.

National

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/918442/cycling-walking-investment-strategy.pdf

"We aim to double cycling, where cycling activity is measured as the estimated total number of cycle stages made each year, from 0.8 billion stages in 2013 to 1.6 billion stages in 2025, and will work towards developing the evidence base over the next year".

Cycling and Walking Investment Strategy (CWIS)

Under the Infrastructure Act 2015, the UK Government is required to set a Cycling and Walking Investment Strategy (CWIS) for England. A CWIS strategy was published in 2017, which sets out the UK Government's ambition for creating a walking and cycling nation; the targets and objectives they are working towards; the financial resources available to meet their objectives; the strategy for delivering the objectives; and the governance arrangements that will review this delivery.

The strategy states that the Government "wants to make cycling and walking the natural choices for shorter journeys, or as part of a longer journey". The aim is for more people to have access to safe, attractive routes for cycling and walking by 2040.

Local Cycling and Walking Infrastructure Plans (LCWIPs)

LCWIPs, as set out in the Government's Cycling and Walking Investment Strategy, are a strategic approach to identify cycling and walking improvements required at the local level. They enable a long-term approach to developing local cycling and walking networks and form a vital part of the Government's strategy to increase the number of trips made on foot, or by cycle.

Gearchange

In July 2020, the Government identified a need to introduce a step-change in cycling and walking in the coming years by transforming the role cycling and walking can play in the transport system, and to get England moving differently.

The potential benefits identified are huge. Increasing cycling and walking can help tackle some of the most challenging issues society faces by improving air quality, combatting climate change, improving health and wellbeing, addressing inequalities and tackling congestion on our roads. By taking bold action it will help to create places we want to live and work – with better connected, healthier and more sustainable communities. It will help deliver clean growth, by supporting local businesses, as well as helping ensure prosperity can spread across the country and level up the nation.

Physical activity, like cycling and walking, can help to prevent and manage over 20 chronic conditions and diseases, including some cancers, heart disease, type 2 diabetes and depression. Physical inactivity is responsible for one in six UK deaths (equal to smoking) and is estimated to cost the UK £7.4 billion annually (including £0.9 billion to the NHS alone).

The recent COVID-19 restrictions have profoundly impacted the way people live, work and travel as evidenced by the public's desire to be more active, and the rise in popularity of cycling and walking (Sport England, 2020). Now, those changes can be embedded in people's travel behaviour, by increasing active travel and transforming permanently how people move around, particularly in towns and cities.

LTN 1/20

In July 2020, the government updated national cycling guidance for highway authorities and designers with the aim to encourage cycling to become more of a form of mass transit. The guidance boosts design standards and improves safety and describes the much higher standards now expected. The guidance contains tools which give local authorities flexibility on infrastructure design and sets a measurable quality threshold to achieve when designing cycling schemes. The design options include segregation from traffic, measures for cycling at junctions and roundabouts, and updated guidance on crossings, signal design and the associated traffic signs and road markings.

Essex

Essex Climate Action Commission

The Essex Climate Action Commission (ECAC) was set up to advise about tackling climate change. The commission will run for two years initially and make recommendations about how to improve the environment and the economy of Essex:-

- identify ways to mitigate the effects of climate change, improve air quality, reduce waste across Essex and increase the amount of green infrastructure and biodiversity in the county
- explore opportunities to attract investment in natural capital and low carbon growth.

The Commission has looked at six different subject areas in relation to climate change:-

- Adapting to an already changing climate
- Transport
- Built environment
- Land use and green infrastructure
- Energy and waste
- Community engagement.

Special Interest Groups were established for each area and groups meet on a number of occasions to collate and review evidence and develop recommendations for changes. The aim of this consultation is to understand the views of Essex residents on the recommendations put forward by the Commission.
Following a review of the Essex Future Energy Scenarios and Pathways to Net Zero work, the ECAC expressed a desire to follow a more ambitious timeline and potentially achieve Net Zero earlier than 2050.

Everyone's Essex

Essex has developed a plan for levelling up the county from 2021 to 2025.

Essex will:-

- renew the Essex economy, because prosperity is the best pathway to a good life. Businesses will be supported as they seek to recover the ground lost by the pandemic and create the jobs that underpin wellbeing

- seek equality so that opportunity is more fairly distributed across Essex – we want all residents to be able to maximise their potential
- be as ambitious for the people of Essex as the people of Essex are for themselves and their families.

Alongside these themes – Renewal, Equality, Ambition – that run through everything, the focus will be on four areas where outcomes really matter for the quality of life of residents. They are:-

- the economy
- the environment
- children and families
- promoting health, care and wellbeing for all the parts of the population who need support.

In focusing on these areas and by addressing today's challenges, work will begin to tackle tomorrow's.

Essex Local Transport Plan

The Essex Local Transport Plan (2001,) which included the Essex Transport Strategy (2011), set out the original 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.

There are common themes across the policy documents, including the need to facilitate economic growth through new housing and jobs, and improve travel conditions to support businesses to expand and operate efficiently. The scheme aligns strongly with the economic growth objectives of SELEP, the emerging local plans for new homes and job creation and the importance of sustainable transport.

Essex Transport Policy

The Essex Transport Strategy seeks to promote sustainable travel, by providing the appropriate infrastructure and promoting the use of travel plans. In particular, it seeks to achieve the following five broad outcomes:-

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

Future of Essex Strategy

Investment in improved sustainable transport access is wholly compliant with the recently published 'Future of Essex' strategy. This states that an effective transport system is integral to peoples' daily lives; it underpins business and commerce; provides access to work, education and training, essential services and leisure activities; and enables people to make the most of opportunities, as they arise.

The strategy, developed collaboratively with partners throughout Essex, identifies the importance of connecting us to each other, and the world, if the county is to be developed sustainably and prosperity shared with everyone.

The provision of Local Cycling and Walking Infrastructure Plans (LCWIPs) is strongly aligned with the 'Future of Essex' priority of enhancing sustainable transport, thereby tackling congestion on our roads and providing transport options for those who cannot afford a car.

Investment in the transport network is aimed at ensuring the efficient and effective movement of people and goods to boost economic growth, create great places to live, work and visit, enable people to live independently, and improve the lives of people using the transport network throughout Essex.

Specifically, the provision of LCWIPs helps enable inclusive and sustainable economic growth within North Essex, identified as a major economic engine within the Essex Organisational Strategy and supports the following strategic priorities:

- Enables Essex to attract and grow large firms in high growth industries. The scheme supports trade, by better connecting key economic centres, especially along major transport corridors, and helping people to travel by public transport, bike and on foot.
- Helps secure sustainable development and protect the environment. The scheme ensures that growth can be sustainable and accommodated in a way that enhances Essex.
- Facilitates growing communities and new homes, the project enhances access to employment, higher education and training, and essential services including healthcare, retail and leisure facilities to enable participation in everyday life.

The proposal supports the delivery of the Essex Local Transport Plan vision for a transport system that supports sustainable economic growth and helps deliver the best quality of life for the residents of Essex by providing connectivity for Essex communities and gateways to support sustainable economic growth and regeneration.

Greater Essex Growth and Infrastructure Framework (2016-2036)

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.

ECC Organisational Strategy Commitments 2021-2025

Strong, Inclusive and Sustainable Economy

1: Good jobs
2: Levelling up the economy
3: Infrastructure
4: Future growth and Investment
5: Green Growth

High Quality Environment

6: Net zero
7: Transport and built environment
8: Minimise waste
9: Levelling up the environment
10: Green communities

Health, wellbeing and independence for all ages

11: Levelling up health
12: Healthy lifestyles
13: Promoting independence
14: Place-based working
15: Carers

A good place for children and families to grow

16: Education outcomes
17: Levelling up outcomes for families
18: Family resilience and stability
19: Safety
20: Outcomes for vulnerable children

Essex Cycle Strategy (2016)

In response to the legal requirement, and also the requirements of the Essex Transport Strategy, the Essex Cycle Strategy was prepared with the aim of setting out a strategy for providing coherent cycle networks. The strategy set out the key elements of a long-term plan that will lead to a significant and sustained increase in cycling in Essex, establishing it in the public's mind as a 'normal' mode of travel, especially for short A-to-B trips, and as a major participation activity and sport for all ages. The strategy was produced in conjunction with Essex County Council, the 12 Essex Districts / Districts, the two Unitary Authorities (Southend-on-Sea and Thurrock) and other key stakeholders. It takes account of current UK policy, data on cycling levels within Essex and best practice from around the world.

Specifically, it commits to:-

- Establish a coherent, comprehensive and advantageous cycle network in every major urban area, utilising a combination of on-carriageway and off-carriageway cycle facilities;
- Ensure each Borough / District has an up-to-date cycling action plan (renewed every 5 years);
- Provide well placed and high-quality cycle parking at key public destinations such as town centres, leisure facilities and railway stations;
- Ensure that all new housing includes secure and easily accessible cycle storage and that new secure cycle storage is facilitated in existing housing developments;
- Ensure that cycling is prioritised over motorised transport in all new developments – making it easier to carry out short trips by bicycle than by car. Cycle routes within commercial and residential developments will be more direct and convenient than car routes and will connect in to existing cycling infrastructure on leaving the site;
- Prioritise more frequent and good maintenance of our cycle network;
- Provide a clear and consistent standard of good quality, well placed cycle signage – to an appropriate density, with provision of journey times as well as distances (to cater for all audiences) where possible;
- Continue to improve cycle safety at sites with actual and perceived safety problems;
- Develop an improved mechanism for the reporting of safety issues.

Cycling Action Plans

As part of the county-wide Essex Cycling Strategy, Cycling Action Plans (CAPs) have been developed for individual Boroughs, Districts and cities of Essex, including one for the Borough of Colchester.

The document identifies opportunities to develop and promote cycling in Colchester through providing improvements to the infrastructure. Together with the wider promotion of cycling by Active Essex, Essex County Council (ECC) and Colchester Borough Council (CBC), the proposal is to

establish cycling in the public's mind as a 'normal' mode of travel, especially for short A-to-B trips, and as a major participation activity and sport for all ages.

ECC's suite of Cycling Action Plans inform the future development of the Colchester LCWIPs by:-

- encouraging adults to cycle to work using the improved network
- encouraging pupils to cycle to school using the improved network
- providing a network plan for cycling which identifies preferred routes and core zones for further development;
- providing a prioritised programme of infrastructure improvements for future investment; and
- developing a report which sets out the underlying analysis carried out and provides a narrative which supports the identified improvements and network
- creating an innovative new approach to planning a walking and cycling network in Colchester to help manage future growth pressures and provide an alternative for shorter local journeys.

Two key commitments of the Essex Cycling Strategy are to:-

- establish a coherent, comprehensive and advantageous cycle network in every major urban area, utilising a combination of on-carriageway and off-carriageway cycle facilities; and
- ensure each Borough / District / City has an up-to-date Cycling Action Plan (which will be renewed every five years).

The CAPs identify any high quality and well-planned infrastructure, which will be vital in encouraging cycling and improving safety. It is ECC's policy to ensure that every urban area has a well-planned cycle network that:-

- connects key destinations;
- supports a network of recreational routes; and
- caters for all users and abilities.

Coherent cycle networks will ensure that:-

- physical barriers to cycling in Essex's urban areas are progressively broken down; and
- cycling becomes a prioritised mode of transport in the mind of Essex residents.

In addition, the priority aims for Active Essex (County Sports Partnership) and how cycling can help achieve these aims are shown in Table 1 above.

The aims of the Action Plan are to:

- Identify how cycling levels can be increased in the Borough;
- Prioritise funding for new cycling schemes in Colchester;
- Create a usable, high-quality cycle network that connects residential areas with key employment locations, rail stations and town centres; and
- Create opportunities to increase recreational cycling in Colchester.

Braintree

Braintree is specifically recognised in the Essex Transport Strategy as being set to accommodate significant housing and employment growth. It is noted that transport priorities for the Haven Gateway (within which Braintree is located) include "improving and promoting sustainable travel". In addition, for local centres within the Haven Gateway, such as Braintree, priorities include: providing for and promoting access by sustainable modes of transport to development areas and the town centre; improving access to stations; and promoting sustainable travel choices.

The new Braintree Local Plan will ensure that housing growth is supported by transport infrastructure. The National Planning Policy Framework (NPPF) requires that the transport system be balanced in favour of sustainable transport modes such as buses, cycling and walking.

Braintree District Local Development Framework (Core Strategy)
The Core Strategy (adopted September 2011) has been prepared by Braintree District Council with the involvement of the Local Strategic Partnership in order to:

- Provide a vision of how Braintree District will change between now and 2026;
- Set out the aims and objectives of the Council and its partners;
- Identify how and where the District will meet its needs for housing, employment, retail development and community facilities up to 2026;
- Set out the core planning policies, which will underpin the strategy;
- Show how the environment will be protected, notwithstanding the demands and requirements for growth;
- Show how infrastructure will be provided to support the proposed development; and
- Show how the strategy will be monitored to ensure that it is achieving its objectives.

Chapter 3 of the Core Strategy sets out the Vision, Aims and Objectives. It is noted that most of the growth is to be provided within Braintree and Witham, including a new mixed-use Garden City neighbourhood to the north-west of Braintree comprising housing, employment and community uses. This area has been identified as a significant growth location within Braintree.

The aims of the Core Strategy are:-

- Promoting accessibility for all;
- Creating a clean and green environment and addressing climate change;
- Achieving a prosperous local economy; and
- Enabling everyone to enjoy a safe and healthy lifestyle.

The key transport objectives that have formed the basis for the transport policies set out in the Core Strategy are:

- **"Accessibility –** To reduce the need to travel by locating development in sustainable locations where it will enable people to access employment, housing, retail provision, public transport and key services; such as education, healthcare, recreational facilities and open space".
- "**Transport –** To make it safer and easier for the community to travel to jobs and key services by improving sustainable forms of transport such as public transport, walking and cycling, and seeking to reduce carbon emissions".

Braintree District Draft Local Plan
The Council is currently developing the Local Plan, a new long-term strategy for the District. The new Local Plan will plan for the growth set out in the Government's national planning policy (National Planning Policy Framework), which requires local authorities to significantly boost the supply of new homes, providing a presumption in favour of sustainable development, to be supported by infrastructure, jobs and community facilities.

At a local level, the Local Plan target for new homes in the District is based on an annual average of 862 homes for the New Local Plan period 2016-2033. The new Local Plan (when it is complete, it will replace the Core Strategy) must ensure that housing growth is supported by transport infrastructure. The National Planning Policy Framework (NPPF) requires that the transport system be balanced in favour of sustainable transport modes such as buses and cycling.

In order to promote the most sustainable forms of transport, the spatial strategy in the emerging Local Plan proposes to allocate development in locations where it can be well served by existing public transport networks and where services may be in close proximity to facilitate walking and cycling.

The Draft Local Plan states that the internal design of new developments should prioritise walking and cycling, as well as public transport, over private vehicle movements, to ensure that they encourage shorter internal journeys to take place by these modes. New developments will also be expected to connect safely and directly to the existing external footpath and cycle way routes in the local area, and contributions will be sought, as appropriate, to improve connections from new

developments to the main commuter, community and retail centres, or recreational links. Public rights of way which are impacted upon by new development may require protection, or enhancement, to accommodate new users.

The emerging Local Plan notes that "there are greater opportunities for short trips to be made by walking and cycling", particularly where there is little opportunity to improve urban road networks and, so, address congestion.

Policy SP5 'Place Shaping Principles' states that all new development should create well connected places that prioritise the needs of pedestrians, cyclists and public transport services above use of the private car.

The 'Sustainable Access for All' policy (LPP 36) indicates that sustainable modes of transport should be facilitated through new developments to promote accessibility and integration into the wider community and existing networks. Priority should be given to cycle and pedestrian movements and access to public transport.

With regard to walking and cycling, the NPPF expects Local Plans to support patterns of development which facilitate the use of sustainable modes of transport. In particular, plans should be located and designed to give priority to pedestrian and cycle movements, and create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians.

Braintree LWIPs
ECC's suite of Cycling Action Plans are informing the future development of the Braintree LCWIP by providing:

- a network plan for cycling which identifies preferred routes and core zones for further development;
- a prioritised programme of infrastructure improvements for future investment; and
- a report which sets out the underlying analysis carried out and provides a narrative which supports the identified improvements and network
- encourage pupils to cycle to school using the improved network
- an innovative new approach to planning a walking and cycling network in Braintree to help manage future growth pressures and provide an alternative for shorter local journeys.

2.4. Need for intervention:

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. 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 has 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 is planned for the west of Braintree, on the boundary with Uttlesford DC and another garden community on the eastern boundary with Colchester BC.

Braintree is one of the fastest growing districts in Essex with plans to increase the rate of house building by up to 950 homes built across the district per year. With this growth comes the need for more sustainable travel options in the District to help prevent the negative impacts of traffic

congestion and air pollution as a consequence of increased population. The population of Braintree District recorded in the 2011 Census was 147,084 people (62,743 households), of which 92% were aged 74 years or less.

One of the main strategic roads within the Braintree District is the A120 trunk road, managed by Highways England, which forms an east-west corridor between the M11 near Stansted Airport and Harwich and Harwich International Port. The single carriageway section of the A120 situated within the Braintree District, between the Braintree Bypass via Broad Green and the Colchester Borough boundary to Junction 25 on the A12 at Marks Tey, is currently under specific consideration by Highways England and Essex County Council for major highways improvements by 2025.

The 2015 Braintree Transport Strategy highlights cycling growth as one of the key interventions which need to be addressed over the coming years, with the following key cycle interventions:

- Join up existing cycle routes to create continuous cycle routes;
- Provide new cycle routes to connect with new development;
- Provide segregated on or off-road cycle routes where possible, to provide safer routes for cyclists; and
- Provide cycle routes to connect with key employment, residential and leisure zones.

Walking and cycling improvements are needed now, prior to further growth in Braintree and, in particular, to improve access to the railway station and town centre. The traffic network around the town centre can become very congested at peak times and, by providing these improvements now, coupled with a strong marketing push to encourage modal shift with the provision of viable sustainable transport options, it is hoped that further congestion can be avoided in the future.

North Essex - Housing

The North Essex authorities are committed to plan positively for new homes and to significantly boost the supply of housing to meet the requirements of the area, including the need to provide a suitable sized workforce for the forecast number of jobs. To meet the requirements of the 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 the 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.

Centres of Employment

There are three main centres of employment in Braintree, located in the north-western (Springwood Industrial Estate), central (Braintree town centre) and south-eastern (Braintree Freeport) areas of the town. Cycle connections to the three are poor, with isolated sections of off-road routes bordering them infrequently.

Future Developments

A new Braintree District Local Plan is currently being developed, which will bring together all major planning policy for the District in one single document during the period 2017 - 2033. However, there is potential for significant already-committed development on the edges of Braintree town. All of these are separated from existing infrastructure. The largest committed development is on the north-western fringe of the town - Panfield Lane (600 homes).

Commuter Flow Analysis

The 2011 Census records how residents choose to travel to work, as well as the location of their workplace. The aim of analysing this information is to establish where the predominant local commuter movements exist.

Figure 7 below, illustrates the mode of travel to work for residents of Braintree District (excluding those who work from home).

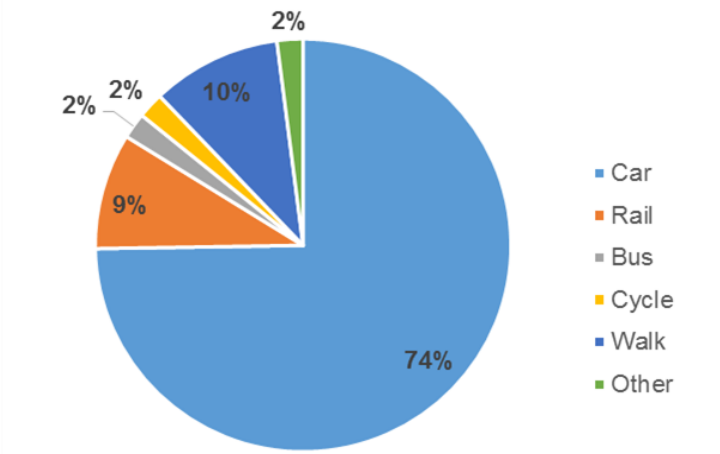


Figure 7: Main Mode of Travel to Work for usual residents of Braintree District.

From this, the key points regarding how people travel to work are:

- In Braintree District, 74% of journeys to work are by car;
- This is followed by walking (10%) and rail (9%), which depends largely on the level of access to a station; and
- In Braintree District (and in general across Essex), there is relatively low usage of bus (2%) and cycling (2%) as the main mode of travel to work.

The predominant commuter flows for Braintree District have been calculated based on travel between Medium Super-Output Areas (MSOAs). As journeys to work take place to and from all MSOAs within the District, only the top 10 most popular commuter journeys per mode have been analysed. It has been assumed that commuters would choose the same route and mode of travel to work (in the AM) as they do to return from work (in the PM).

As part of the 10 year national census, respondents are asked to state their main mode of travel to work, by distance. The 2011 Census results for cycling in Essex are shown in Figure 8 below.

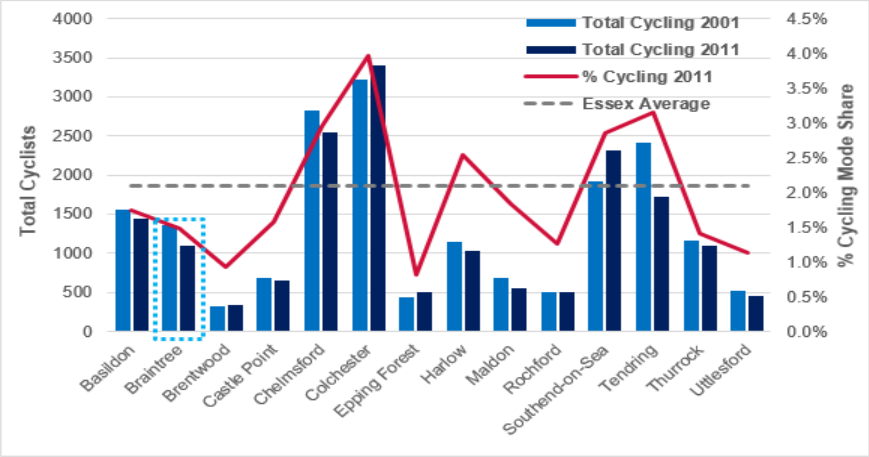


Figure 8: Census Cycling to Work by Borough / District / City

As can be seen in Figure 8, Braintree has relatively low to medium levels of people cycling to work when compared with other Essex Districts, with 1,100 people cycling to work every day in 2011. In terms of modal share, 1.5% of all journeys to work are made by bike; however, this is lower than the Essex average of 2.1%.

Figure 9 shows the existing cycle routes in Braintree town.

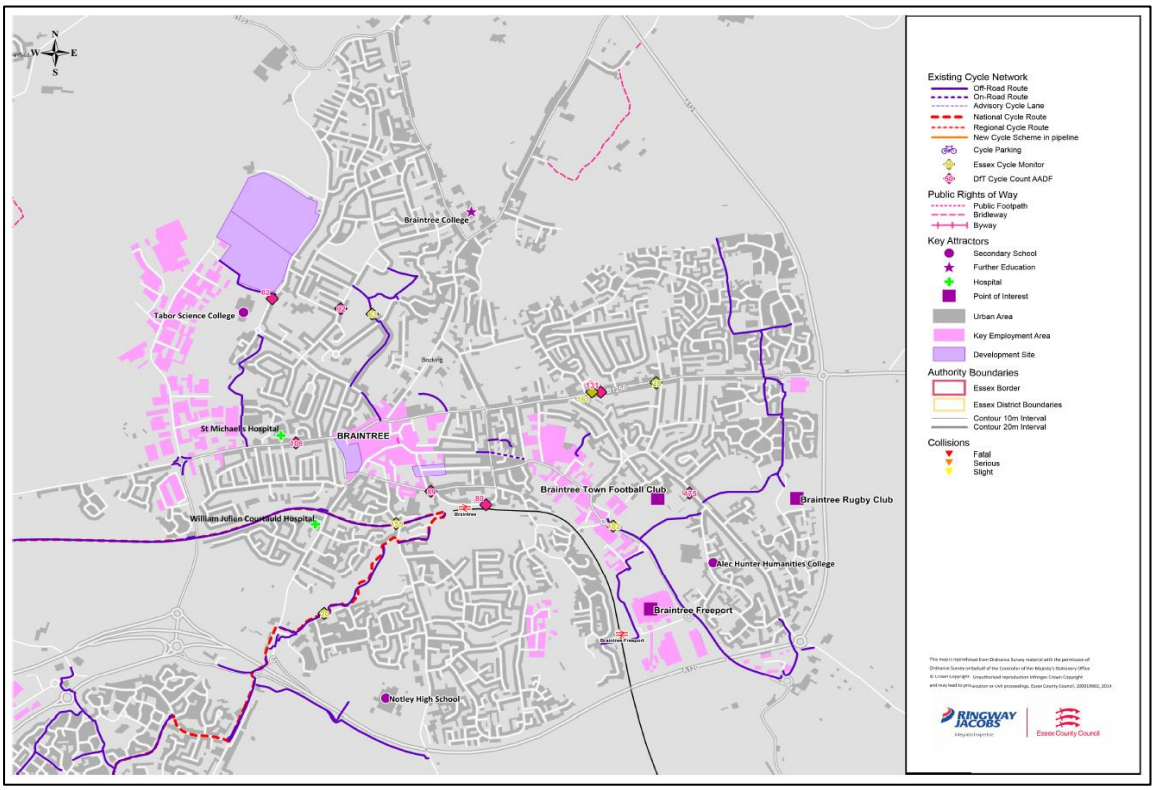


Figure 9: Existing cycle infrastructure in Braintree Town

Car trips

A total of seven of the ten most popular district-wide commuter journeys by car were made within Braintree town (the remaining three were made in Witham).

Within Braintree town, the higher levels of car use originate from large residential areas. This is evident in the north-east of the town, where a combined 549 car commuter journeys were made (in the peak period – three hours) to Springwood Industrial Estate, Manor Road industrial area and the town centre (combined).

Furthermore, there is reasonably high car commuting demand from the residential areas in the south west and south to Braintree town centre and Manor Road industrial area. Figure 10 displays the predominant commuter flows for journeys to work by car within Braintree Town.

Importantly, it has to be noted that all the predominant commuter car flows within the District are short distance trips (5km or less) which could easily be undertaken by cycle.

The census did reveal the highest single MSOA rail commuting total in Braintree town to be 296 people.

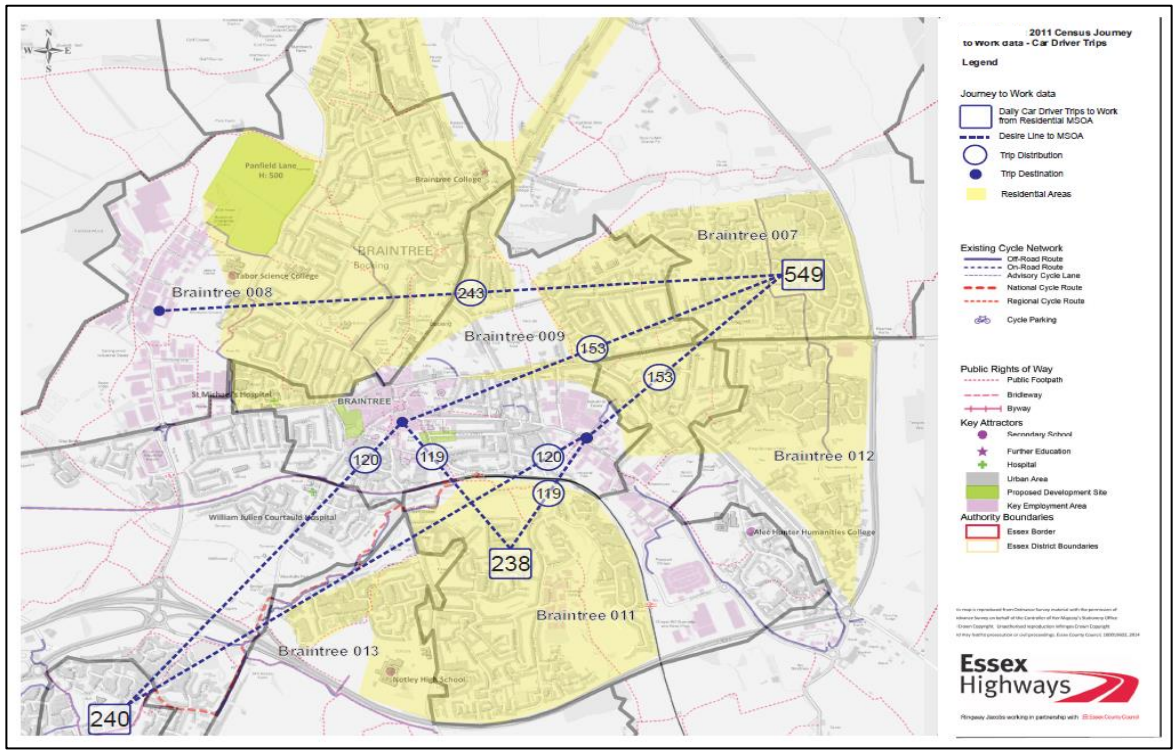


Figure 10: Journey to Work by Car in Braintree (Census 2011)

Rail

The 2019 / 2020 entries and exits for Braintree and Braintree Freeport stations are 730,000 and 110,000 respectively.

The 2011 Census only records main mode, by distance, and, therefore, assumptions must be made when analysing journeys that would be multi-modal. Where commuters have stated their main mode of travel to work to be by rail, it has been assumed that rail commuters would predominantly choose the closest station to them, unless a main line station is located within a similar proximity. In such a case, it is assumed the preference would be the main line station.

An additional assessment has been made which excludes a percentage of rail commuters living within 1km of the rail station, as it is expected the majority of those people would walk to the rail station.

Rail station commuter station choice within Braintree town is difficult to establish, considering an unknown percentage of rail commuters from Braintree drive to Witham to access the more frequent rail services to / from London.

Braintree Railway Station is located approximately ⅓ mile to the south of the town centre with off-road cycle access possible from the south and west through National Route 16. Facilities connecting the station and the town centre / additional areas of the town are relatively poor.

As identified above, there are a significant number of people driving short distances (3 miles or less) to access work within Braintree town. The majority of these trips occur from the north east and southern sides of Braintree town and are focused on the town centre and industrial areas to the west and could be undertaken by non-motorised modes (cycling or walking). Figure 11 shows the cycle desire lines for Braintree town. Therefore, providing improved cycle routes and marketing targeted towards car drivers residing in those locations could provide the biggest gains in terms of mode shift towards cycling in Braintree town.

Propensity to Cycle
Propensity to cycle tools were used to identify the best areas to increase modal share and assist in increasing trips.

Propensity to cycle is high in Braintree town, most notably in central areas, in the vicinity of Railway Street and Trinovantian Way. There are also isolated pockets of high propensity in the north-east, and southern areas – in fact, one of the identified desire lines was from Notley Road to the Railway Station.

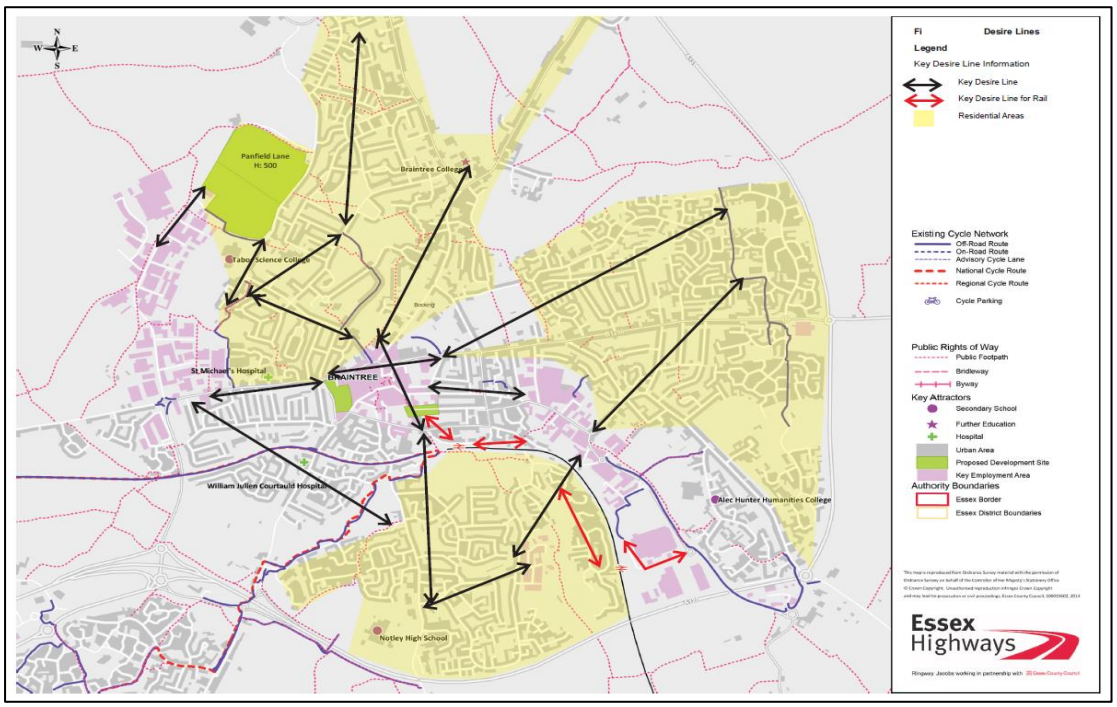


Figure 11: Cycling Desire Lines in Braintree

Significant Projects in North Essex
There are a number of significant projects elsewhere in North Essex that will influence traffic flows. Some of these projects will create new jobs, and will therefore create new commuting patterns, opportunities in new spin-off industries and new skill requirements. Others will create new shopping and leisure opportunities for residents that will need to be addressed, in order that town centres, such as Braintree, continue to grow and thrive to serve local people.

2.5. Sources of funding:

In 2020, ECC secured funding from the DfT's Active Travel Fund 2 Bid for a package of sustainable transport improvements in five towns around the county, including Braintree. One of the packages was for improvements within Braintree including upgrading or new walking and cycleways.

Costs have escalated, enhancements have been added and various groundworks and Stats requirements have meant that the originally allocated money from the ATF 2 schemes is no longer sufficient. This additional money will permit the introduction of the original package as intended.

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

Impact of not changing
It would be unfortunate if ECC had to modify the scheme to the currently available funds, as it would not be possible to deliver the package of sustainable improvements in its entirety. As the scheme has already gone to public consultation, this would be viewed by the public as a missed opportunity in a highly visible location.

2.7. Objectives of intervention:

	Problems / Opportunities versus Objectives						
	Congestion	**Connectivity**	**Employment**	**Environment**	**Sustainability**	**Safety**	**Resilience**
Objective 1	✓✓	✓✓	✓✓✓				✓✓
Objective 2	✓✓	✓✓✓	✓✓				✓✓
Objective 3	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	
Objective 4				✓✓	✓✓✓	✓✓	
Objective 5	✓✓	✓✓✓	✓✓	✓✓	✓✓	✓✓	
Objective 6	✓✓	✓✓			✓✓	✓✓✓	
Objective 7	✓✓	✓✓		✓✓	✓✓	✓✓✓	
Objective 8	✓✓✓					✓✓	✓✓✓
Objective 9	✓✓	✓✓		✓✓		✓✓	✓✓✓

Objectives

The following are the scheme objectives:

- Connectivity

  Objective 1 – Accommodate / manage future travel demands to facilitate proposed growth in Braintree – meets government and local policies of encouraging modal shift

  Objective 2 - Ensure good connectivity to businesses, within Braintree and to the station – meets Essex transport policies to facilitate access to housing and jobs

- Environment

  Objective 3 – Encourage residents and employees in Braintree to access alternative modes such as cycling – meets Essex and Braintree's environment and climate change policies

  Objective 4 – By encouraging modal switch provide a positive effect on the environment by improving air quality and reducing emissions – meets Essex and Braintree's environment and climate change policies

- Sustainability

  Objective 5 – Improve connectivity and encourage sustainable methods of travel for residents and employees in Braintree – meets Braintree's Local Plan policies on promoting sustainable transport modes

- Safety

Objective 6 – Improve safety by enabling better and smoother moving traffic – meets Essex's Strategic commitment policies

Objective 7 – Improve safety by removing motorised traffic from the network – meets Essex and Braintree's Plan policies

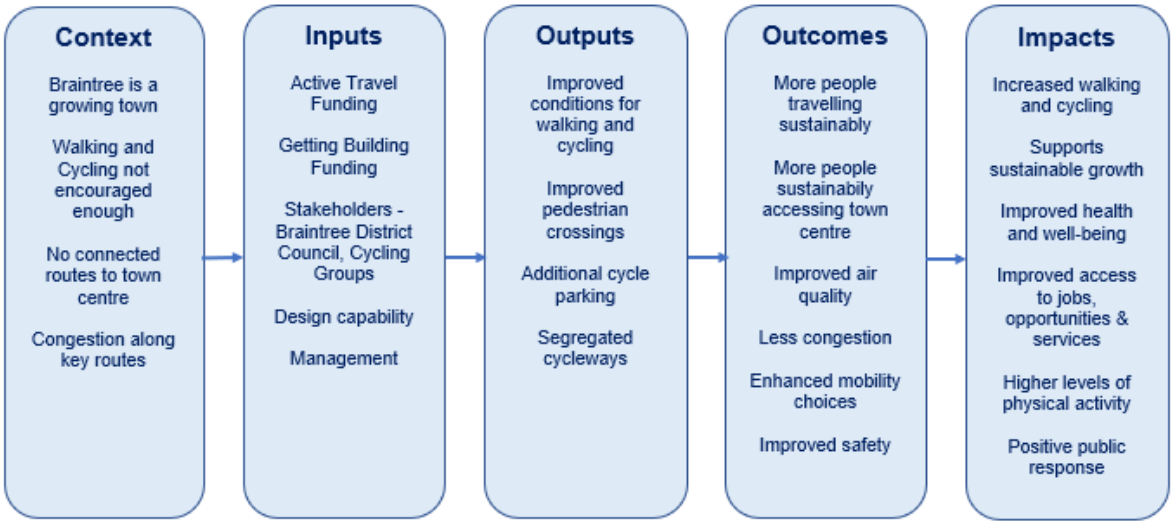
- Resilience

Objective 8 – Assist in the reduction of congestion at peak times and enhance the provision of reliable journey times in and around Braintree – meets Essex and Braintree's Plan policies

Objective 9 – Provide enhanced cycling infrastructure with improved maintenance provision – meets National cycling policies.

2.8. Logic Map:

See below for a logic map outlining the Inputs, Outputs, Outcomes and Impacts:-



2.9. Constraints:

All land identified for this scheme is either Highways land, or is on land belonging to Braintree District Council. Consequently, it is believed that no new specific planning permissions will be required.

A number of statutory undertaker works have already been identified which will require both the support and cooperation from the bodies concerned.

Braintree – Active Travel Business Case	
Scheme Title	**Powers / Consents / Orders Required**
Active Travel	Traffic Regulation Orders
	Road Space Permits
	All works are on Highway's land, but planning intentions will be advised to Braintree District Council
	Utility companies permits
	Liaison with Bus Companies
	Liaison with Taxi Companies

2.10. Scheme dependencies:

Braintree – Active Travel Business Case		
Scheme Title	**Dependencies / Interdependencies**	
	Internal	**External**
Braintree – Active Travel	Construction phases must be timed to reduce the interaction and impact on network traffic between the different locations	Programmed and linked traffic management requirements essential
		Ingress and egress to Station area to be kept open during construction to avoid detrimental effects on commuters
		Possible interaction between this scheme and other ATF funded schemes in and around Braintree
		Utilities work
		Bus route diversions during construction work

2.11. Expected benefits:

See Developments in Braintree listed above in Section 2.4 above.

2.12. Key risks:

For the Risk Management Strategy, see below and for Key Risks Appendix B.

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

3. ECONOMIC CASE

3.1. Options assessment:

Station Access Study
A Station Access Study and an associated Technical Note were published in March and April 2017 respectively. These reviewed the different options for improving access to Braintree Station and concluded that making Station Approach into a one-way road provided the best benefits.

Vissim
A Vissim model was developed as part of the Braintree Integrated Transport Package study for Braintree Town Centre and this was used to test a number of engineering design options to improve traffic flow around the network. The options included making Station Approach one-way, physical improvements to the Pierrefitte Way corridor, improvements to Springwood Drive roundabout and changes to the signal timings along the Railway Street corridor.

Of the options, only making Station Approach one-way westbound was found to provide reasonable benefits, with the other options only providing minor improvements. However, the study found that SCOOT revalidation, undertaken on the Pierrefitte Way and Railway Street corridors would improve traffic flow.

Cycling

Potential cycling schemes in Braintree were prioritised according to four criteria of their design:
- Deliverability;
- Directness;
- Extension of existing network; and
- Key attractors.

A score of high, medium or low was given for each potential scheme against each of the prioritisation elements. It was then possible to determine the overall prioritisation score for each scheme (again, scoring each potential scheme as high, medium or low).

Options assessment

The corridors chosen for this package represent the routes with the greatest desire lines for commuters and those people wanting to access the town centre (see above). Other potential corridors exist, but these selected were felt to provide the best opportunities for modal shift.

Additionally, modelling work dictated that the best option for Station Approach was for traffic to flow from East to West with a segregated cycle lane flowing in the opposite direction.

Short list of options:

The list of options was derived from the Cycling Action Programme and the subsequent development of the LCWIPs for Braintree.

3.2. Preferred option:

For cycling, from the work outlined above, a number of schemes were put forward for further analysis. However, some schemes required more extensive and costly work, particularly at key crossing points or, for some, insufficient space would make cycle segregation difficult. Hence, these key options were chosen.

3.3. Assessment approach – Methodology (See Appendix G):

The methodology of the core case follows the submission for the Active Travel Fund, except for updates to the Active Mode Appraisal Toolkit (AMAT) and revised induced user uplifts, as well as a range of sensitivity tests.

PCT and AMAT

Potential demand was obtained from application of the Propensity to Cycle Tool (PCT).

The Active Mode Appraisal Toolkit (AMAT) User Guide, May 2020 was also closely followed, and the November 2021 AMAT, which included updates from the TAG Data Book v1.17 November 2021, was used.

Benefits from AMAT were viewed in two categories, namely those associated with increases in cycling trips, and Journey Ambience benefits.

The benefits from increased cycling trips are not dependent on length of trips, or the type of cycling provision:-

- Congestion benefit
- Infrastructure maintenance
- Accidents
- Local air quality
- Noise
- Greenhouse gases
- Reduced risk of premature death
- Absenteeism.

The Ambience Benefits are driven, however, by trip length and the type of cycling infrastructure provision that is proposed.

3.4. Economic appraisal inputs:

The route was divided into sections where it can be reasonably assumed that the demand will be similar along the section. In addition, there are areas off the primary routes where a variety of measures are proposed, including on-street parking management, speed restrictions, school streets, etc. Trip uplifts and ambience benefits were applied to the primary routes, while ambience benefits only were assigned to the school street area off the primary routes.

The part of the networks with existing infrastructure, with no significant proposed changes, were not included in the assignment of trips or benefits.

PCT

Trip Estimates from Propensity to Cycle Tool

The PCT is based on journey to work data from the 2011 Census. The estimates provided by the tool were applied and unadjusted for growth in the Core Case.

The PCT uses geographical information to allocate the Origins and Destinations (O-Ds) of trips to the most appropriate routes on the network. The “Fast routes” data generated at LSOA level was used for the purpose of this study and provides cycle trip allocations as per the fastest route between individual origin and destination pairs.

Using GIS, the ‘Fast Routes’ dataset was applied to extract only the trips using the proposed route in each area. In order to capture all trips of interest, a shape file of each scheme was created and a 10m buffer applied to capture all cycle trips travelling along the route in either direction, and across junctions along the route. All cycle trips on the network that intersected the buffer zone for each

scheme were then extracted, and any very short intersections (15m or less) were filtered out to remove trips that were crossing, as opposed to following the route. This data was extracted into Excel to provide a list of one-way commuting trips for each route and a total number of cycle trips.

The above process was carried out, both for the entire scheme length, but also for individual sections based on the scheme designs. This allowed the extraction of cycle trips on individual route sections, providing an understanding of trip distribution across the route. As well as the main scheme route, side areas shown as 'School Streets' were also sectioned out and commuter trip numbers extracted for these areas.

Per the ATF guidance, numbers of cyclist commuters were multiplied by 6 to estimate total weekday cycling trips, scaling up to reflect outbound and homeward trips (x2) and converting from commuting to all-purpose cycling trips (x3).

Trip Uplifts

The original ATF appraisal was bound by the use of a specific tool "200710 uplifts tool.xlsx", issued with the invitation and not in general use, which calculates an uplift based on investment per kilometre. This results in a very low 1.1% uplift.

There are wide ranging suggestions on estimating additional trips as a result of new infrastructure improvements and, in particular, the AMAT health benefits are very sensitive to this number. Sustrans, in their Active Travel Toolbox, suggests it can be as much as 74% for new off-road facilities and 15% for on-road segregated facilities. For the core case, it was opted to use a more modest 5% increase in users, with other scenarios presented as sensitivity tests.

For each section, the uplifted trips and costs were distributed to the sections, based on length, for input to AMAT.

Application of AMAT

A separate AMAT was completed for each of the five route sections where either the demand changed, or the type of provision (mostly off-road segregated) changed.

All default values in AMAT were kept unchanged. The only changes were to the marginal external cost for congestion, from the average that AMAT uses, to Congestion Band 4 as this was considered more applicable to Braintree, and annualisation is as outlined below.

A 20-year appraisal period was used.

PCT only provides weekday commuting numbers based on the 2011 Census, expanded as described above, and AMAT uses 253 weekdays as default annualisation. To include for weekend trips, it was assumed that Saturdays, Sundays, and Bank Holidays would carry half the number of weekday trips. This is deemed to be quite conservative, as from continuous cycle counters across the county, it is seen that weekend trips can often exceed weekday trips. Annualisation was therefore taken as 309 days (253 + (2*52+8)/2).

The percentage of the average cycle trip that would use each section was calculated by the length of the section, divided by the average trip length in AMAT from the National Travel Survey (4.84km), with a maximum of 100%.

Handling the schemes, with routes and sections and additional ambience benefits added, required multiple applications of AMAT for the scheme, one for each of the sections. An example of input is shown in Appendix G. To facilitate this, a VBA program was used to read scheme, route and section input and transfer that to AMAT sheets.

For the primary sections, the benefits of uplifted trips (e.g. decongestion, health etc), as well as the ambience benefits, were calculated. The ambience benefits were assigned as "on-road segregated" facilities in line with the scheme proposals on the main routes.

AMAT does not lend itself to assessment of parking restrictions, speed reduction etc. and the benefits assigned to the "school streets" were chosen as "wider lanes" as being the most descriptive.

3.5. Cost Estimates:

The cost estimates applied in the economic appraisal, included:-

- Itemised quantities, rates and cost
- Allowance for risk
- Preparation cost including design cost
- Supervision cost
- Inflation from 2021 Base to 2022 (envisaged implementation / opening year).

As an explicit Quantified Risk Assessment has not yet been undertaken, and as construction methods are well known and not intrusive, it was considered that the 15% Optimism Bias default to apply to the cost estimate in AMAT is appropriate.

For entry to AMAT, it was assumed that the additional infrastructure would require an extra 2% of construction cost every 5 years to maintain it, and this was entered as nominal values in the "User Interface Costs" sheet in the AMAT applications.

3.6. Value for Money:

From the above methodology, the core scenario, using as 5% demand uplift, resulted in a conservative Benefit Cost Ratio of 1.35. Prices and values have been deflated and discounted to 2010 within AMAT. The results of further tests with alternative scenarios are shown below.

Table 2: Analysis of Monetised Costs and Benefits (in £'000s) - 2010 Values and Prices

	5% uplift	15% uplift	5% uplift with Government growth target
Congestion benefit	154.50	340.61	167.36
Infrastructure maintenance	0.22	0.67	0.33
Accident	6.68	20.39	10.02
Local air quality	3.37	3.03	1.49
Noise	0.45	1.36	0.67
Greenhouse gases	4.25	10.56	5.19
Reduced risk of premature death	781.11	2,343.33	1,151.36
Absenteeism	100.22	300.67	147.73
Journey ambience	1,021.16	1,070.97	1,448.95
Indirect taxation	-5.80	-14.01	-6.88
Government costs	1,527.41	1,527.41	1,527.41
Present Value of Benefits PVB	2,065.94	4,076.93	2,925.87
Present Value of Costs PVC	1,527.19	1,526.74	1,527.08
Net Present Values NPV	**538.75**	**2,550.19**	**1,398.79**
Benefit Cost Ratio BCR	**1.35**	**2.67**	**1.92**

3.7. Sensitivity tests:

It is possible to develop a wide variety of sensitivity tests due to the number of variables involved.

Presented here are the results of testing changes to the number of base users and changes to the uplift values of user numbers attributed to the scheme.

A test with 15% uplift in user numbers, corresponding to the Sustrans view for new segregated on-road facilities, resulted in a BCR of 2.67 and a Net Present Value (NPV) of £2.55M.

A test with an uplift of achieving the Government targets of a doubling of background cycling growth by 2025 was estimated by discounting the annual number to bring that back to 2021, assuming no further growth after 2025 and taking the average as the base number. This, with an assumed 5% uplift, induced by the specific scheme, resulted in a BCR of 1.92 and an NPV of 1.399M.

3.8. Additional Benefits:

As indicated above, there are limitations to the benefits that can be used in AMAT. For example, provisions of crossings and the benefits of reduced motorised vehicle speeds etc cannot be fully assessed.

The scheme proposals contain some elements that will be beneficial to pedestrians, such as crossing facilities, while speed reduction, removal of on-street parking and separation of modes will also benefit pedestrians. Due to the unavailability of methods to assess these improvements and restricted data, ambience benefits to pedestrians have not been assessed.

Only cycling benefits are covered by the scheme analysis, as the proposals only include peripheral benefits for walking which are not possible to capture with conventional tools. School Trips, either by walking or cycling have also not been assessed. There is unfortunately a shortage of data and the methodology of applying the PCT, as outlined, for commuters on school trips produced very modest results.

It is also possible, but unclear, that the 3X factor (above) already covers school trips. Table NTS0409a appears to indicate that it does. Combined with doubts over the applicability of TAG values and AMAT to school trips, this cast too much doubt to enable reporting on cycle trips to school with confidence.

NTEM was not used, as NTEM forecasts are quite low and would only provide numbers slightly over the core case and not near the Government target scenario.

3.9. 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

3.10. Social impacts:

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

For a summary of the Social Impacts, see below:-

Physical Activity

This scheme will have a positive impact on cycling as a consequence the new improved cycleway on Station Approach with improved signage and surfacing.

Journey Quality

Journey quality will be improved as identified below:-

Factor	Sub-factor	Description	Assessment
Travellers' Views	External Views – Environment	Good visibility and clear signage.	Moderate Beneficial
Traveller Care	Cleanliness	Clear and clean signage and resurfaced carriageways will provide a clean appearance	Slight Beneficial
	Facilities	Clear and clean signage and resurfaced carriageways will provide an appearance of good, modern facilities	Slight Beneficial
	Information	Clear and clean signage and resurfaced carriageways with appropriate markings will provide good information	Slight Beneficial
Traveller Stress	Frustration	Clear and logical layouts with segregation will reduce cyclist's frustration	Moderate Beneficial
	Fear of potential accidents	The one-way operation in Station Approach should reduce the potential for accidents	Moderate Beneficial
	Route uncertainty	Clear and clean signage and resurfaced carriageways and cycleways with appropriate markings will reduce route uncertainty	Slight Beneficial
Lighting		Well-lit carriageways will provide better visibility and improve safety	Slight Beneficial

3.11. Distributional impacts:

For a summary of the Distributional Impacts, see below:-

Indicator	Comment
User Benefits	TUBA user benefit analysis software has been used to appraise the economics of the improvements.
Noise	By improving traffic flows and encouraging people to cycle, traffic should move more freely with a consequent reduction in noise.
Air Quality	By improving traffic flows and encouraging people to cycle, traffic should move more freely with a consequent reduction in air quality.
Greenhouse Gases	By improving traffic flows and encouraging people to cycle, traffic on the network should move more freely with a consequent reduction in greenhouse gases.
Accidents	By improving traffic flows and encouraging people to cycle, traffic should move more freely with a consequent reduction in accidents.
Security	The proposed changes will have a minor improvement in security as a consequence of improved visibility on Station Approach.
Severance	The proposed changes should improve severance by providing complete joined-up cycle routes.
Accessibility	The proposed changes will improve accessibility, as accessing the town centre and other key attractors will be easier with improved sustainable options.
Affordability	The proposed changes will have a positive impact on affordability as more people are encouraged to cycle.

4. COMMERCIAL CASE

4.1. Procurement process:

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.

- Ringway Jacobs (RJ) will manage the delivery of the scheme as part of the Essex Highways Partnership. Essex Highways have supported the development of the schemes from the initial DfT bid stage to detailed design. Delivery of the schemes will be sub-contracted via a competitive tender to independent suppliers who are part of the RJ supplier framework. RJ will seek best value and efficiency of costs from these suppliers and will bring to bear their expertise in managing the contracts to deliver the schemes within the timescales required by DfT and to the scope and quality standards specified.

- Due to the exacting timescales, a sample scheme will be used to test the market and obtain initial pricing. This will then be used to develop a 'price list' (or target price) for scheme components. Known and vetted sub-contractors will be invited to tender to ensure quality and reduce the procurement time. The award of works will take into consideration, price, volume of work previously awarded, performance on work completed on the contract, and social value impact.

4.2. 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. As the established process is proven and successful, it will follow that this scheme uses the same processes for procurement although soft market testing will establish that this is still the most cost-effective method of delivery.

Since 2014, Essex County Council has delivered, or is in the process of delivering, nearly £160m of transport improvement schemes through SELEP LGF funding.

As a demonstration of prior experience at delivering programmes such as this, the following schemes are operational and were delivered on programme and to budget:

- A414 Maldon to Chelmsford RBS
- Colchester Integrated Transport Package (ITP)
- Colchester LSTF
- Colchester Town Centre
- South-East LSTF
- Colchester Park and Ride
- Basildon ITP (Phase 1)
- A127 Resilience Package
- Mill Yard, Chelmsford
- A414 Harlow Pinch Point Package
- Chelmsford to Braintree RBS
- Colchester to Clacton RBS
- Chelmsford City Growth

4.3. Human resources issues:

None identified.

4.4. 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.

4.5. Maximising social value*:*

During the development of the project, the opinions of all interested parties and stakeholders have been taken into account on the proposed schemes. This ensures that proposed actions have been 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 package of improvements is estimated to total £2.078m. ATF 2 will contribute £0.934m funding and ECC will contribute £0.853m.

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

This bid requests £0.291m of GBF capital funding from SELEP. ECC will guarantee to spend the GBF fund prior to the end of March 2022 in line with GBF funding criteria. The ATF 2 funding will be spent after spend completion of the GBF funds.

5.3. Costs by type:

Cost type (£m)	21/22	22/23	Total
Capital - Scheme Preparation	0.138	0.100	0.238
Capital - Construction Costs	[redacted]	[redacted]	[redacted]
Capital - Stats Costs	[redacted]	[redacted]	[redacted]
Risk at 15%	[redacted]	[redacted]	[redacted]
Management & Supervision	0.025	0.073	0.098
Monitoring and Evaluation	0.003	0.012	0.015
Inflation at 3%	0.015	0.047	0.062
Total funding requirement	**0.367**	**1.711**	**2.078**

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

5.4. Quantitative risk assessment (QRA):

The Quantitative Risk Assessment will be developed later at the start of the programme.

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

Funding source (£m)	Funding Constraints	Expenditure Forecast		
		21/22	22/23	Total
SELEP - GBF	Dependent on this bid	0.291	0.000	**0.291**
DfT - ATF 2	Funding already secured	0.000	0.934	**0.934**
ECC Contribution	Funding approved	0.076	0.777	**0.853**
Total funding requirement		**0.367**	**1.711**	**2.078**

A requirement of the ATF2 funding was for all schemes to go to public consultation, which in this case, was conducted earlier this year (May to July). Also, schemes were required to be delivered by end March 2022, which will limit any other opportunities to seek alternative funding, at this late stage. Available S106 funds are already committed elsewhere.

5.6. Funding commitment:

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

5.7. Risk and constraints:

Throughout the development of the scheme, risks will be identified, recorded and actively managed. See Appendix B. 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.

Costs will be carefully monitored throughout the scheme and if any overruns start to emerge, contingency action will be developed. Options may include using alternative materials, programme timing acceleration or slight modifications to scheme design.

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.

6. MANAGEMENT CASE

6.1. Governance:

The organisation to deliver the scheme is shown in Figure 12 below. The roles and responsibilities of the parties indicated in the figure are described in the following paragraphs.

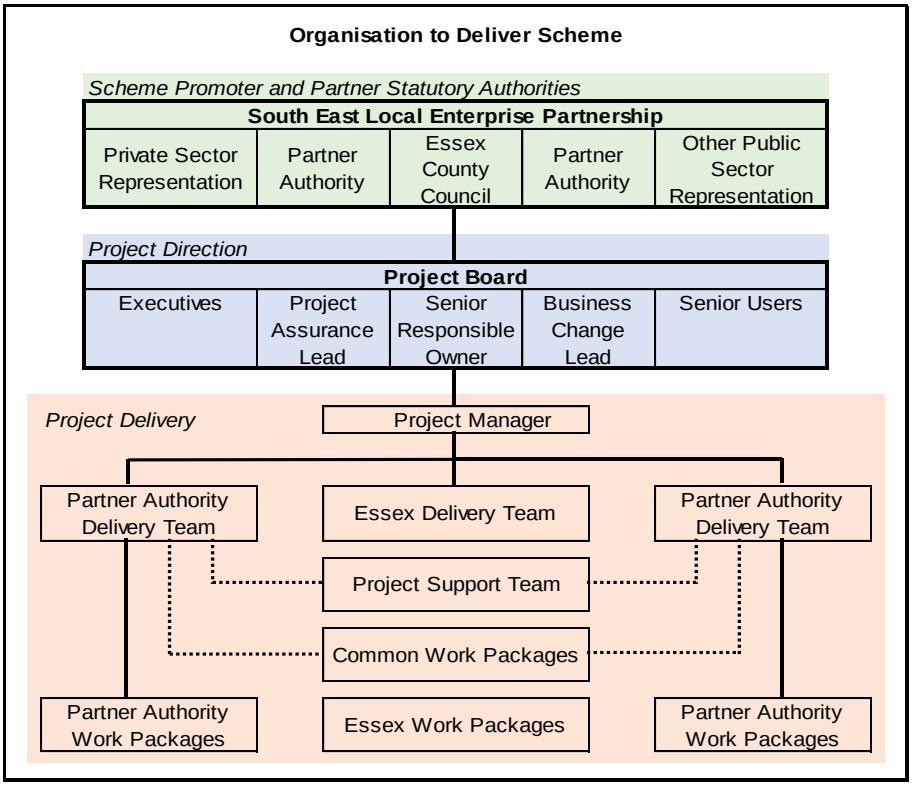


Figure 12: Arrangements for Scheme Delivery

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 (Paul Chapman, Principal Economic Growth and Regeneration Officer, Economic Growth, 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 (David Forkin, Senior Manager, Head of Maintenance; Alan Lindsay, 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:

Management decisions will follow established practices through the teams reporting to the Board on a regular basis. Any decisions required will be ratified by the Board.

6.3. Contract management:

Monitoring / evaluation will be undertaken at the appropriate points during scheme development (see Baseline Report – Appendix E). 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

Engagement

Extensive engagement has taken place with a range of interested parties in developing the scheme. Between December 2020 and Summer 2021, a Steering Group made up of local and county members, businesses, cycle groups, accessibility groups met to review emerging designs and influence the scheme overall design. This group had an instrumental role in developing a scheme which would garner public support and deliver the benefits to a wide range of the public and a number of stakeholders.

Public Consultation

Following governmental guidance on the requirement for all ATF2 schemes to conduct public consultations prior to final design and work progressing, ECC and Braintree conducted consultations earlier this year (May to July) with the public and all key stakeholders. Residents were consulted via an online GIS tool (StoryMapper) which set out the proposed routes and interventions. The public were encouraged to respond online by answering a questionnaire with free text boxes in order to allow a comprehensive expression of views. In order to promote the consultation, a roadshow event took place in June 2021 in Braintree Town Centre and ads were placed in local papers, as well as promotion through social media. The consultation resulted in overwhelming positive support for the scheme. The local MP was consulted and his support was reported to the DfT to confirm that there was sufficient approval to proceed with the scheme. ECC is confident, therefore, that the public and key stakeholders have had opportunities to engage on the development of the scheme and that there is sufficient public support to deliver the scheme.

The results of the consultation can be found on the site with the following link:-

https://storymaps.arcgis.com/stories/1f084bfe1bac452da418b142e86d75f3

6.5. Equality Impact:

A full Equality Impact Assessment has been conducted and is available on request.

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:

A Microsoft Project Plan has been developed and can be seen at 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.

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, nearly £160m of transport improvement schemes through SELEP LGF funding.

As a demonstration of prior experience at delivering programmes such as this, the following schemes are operational and were delivered on programme and to budget:

- A414 Maldon to Chelmsford RBS
- Colchester Integrated Transport Package (ITP)
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- Basildon ITP (Phase 1)
- A127 Resilience Package
- Mill Yard, Chelmsford
- A414 Harlow Pinch Point Package
- Chelmsford to Braintree RBS
- Colchester to Clacton RBS
- Chelmsford City Growth

6.9. Availability of resources:

Through the Essex Highways partnership and by using a number of well-established contractors and suppliers, sufficient resources will be made available to meet the programme timing requirements. Work will be phased over the different scheme sections, but no concerns have been raised about the ability to deliver the package on time.

6.10. Monitoring and evaluation (See Appendix E):

Inputs

- Design, experience and expertise
- Construction equipment and materials
- Appropriate management and supervision.

Outputs

- Numbers of cyclists using new cycleway
- Teletrac plots to show congestion
- Speeds and flows
- Collision statistics.

Outcomes

- Teletrac plots to show congestion, speeds and flows
- Numbers of cyclists will be monitored
- Collision statistics
- Also, subsequent levels of consequential new housing and businesses will be recorded, but will be difficult to attribute to this scheme specifically.

Impacts (evaluation)

As above – Numbers of cyclists and traffic flows will be monitored on a regular basis using Vivacity cameras with indicative locations for the cameras shown below in Figure 13. Also, there are four permanent cycle counters in Braintree which can provide additional information and corroboration of the Vivacity cameras output.

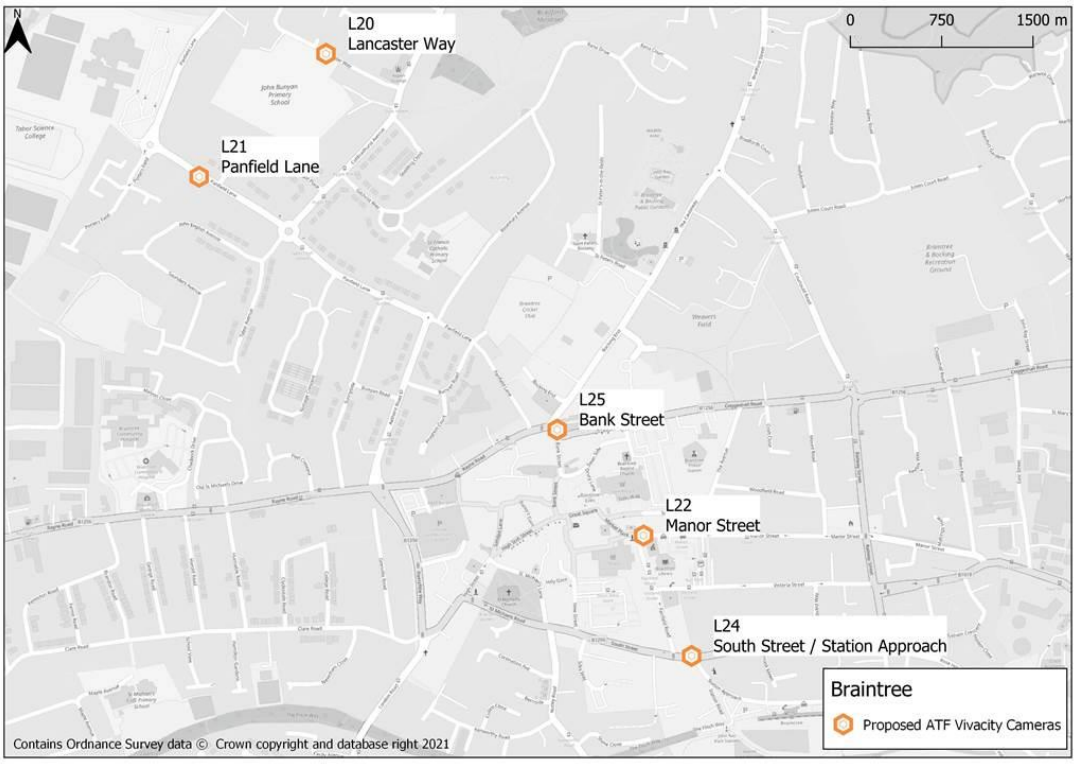


Figure 13: Proposed locations for Vivacity Cameras

Levels of new housing and businesses will be recorded on an annual basis, although it will be extremely difficult to align such increases specifically to the walking and cycling improvements.

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 include 1 and 3 year reports.

ECC is mindful of the need to review and monitor highway or cycleway 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 primarily capture numbers of pedestrians and cyclists. However, traffic on the network will also be monitored from time to time to judge what levels of modal shift have taken place.

Collisions 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.

6.11. Benefits Realisation Plan:

For this package of cycling schemes, the normal benefits realisation process will be modified to make it more applicable to the programme.

The Programme Manager, supplemented by Essex Highways resources, will be responsible for conducting this process.

As such, the following will be monitored:-

- Number of cyclists
- It may also be possible to periodically record the number of cycles parked at the station
- Where Vivacity cameras are installed – number of pedestrians
- Air quality
- Collision data
- Network traffic.

It will be almost impossible to specifically attribute any new homes or jobs to this package of schemes. However, new housing and NOMIS data will be reviewed to record overall statistics for the town.

Data will be collected prior to scheme opening and then at one year and three year post scheme completion.

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 Partnership's Independent Technical Evaluator, Steer 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 F.

Where scheme promoters consider information to fall within the categories for exemption (stated in Appendix F), 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.

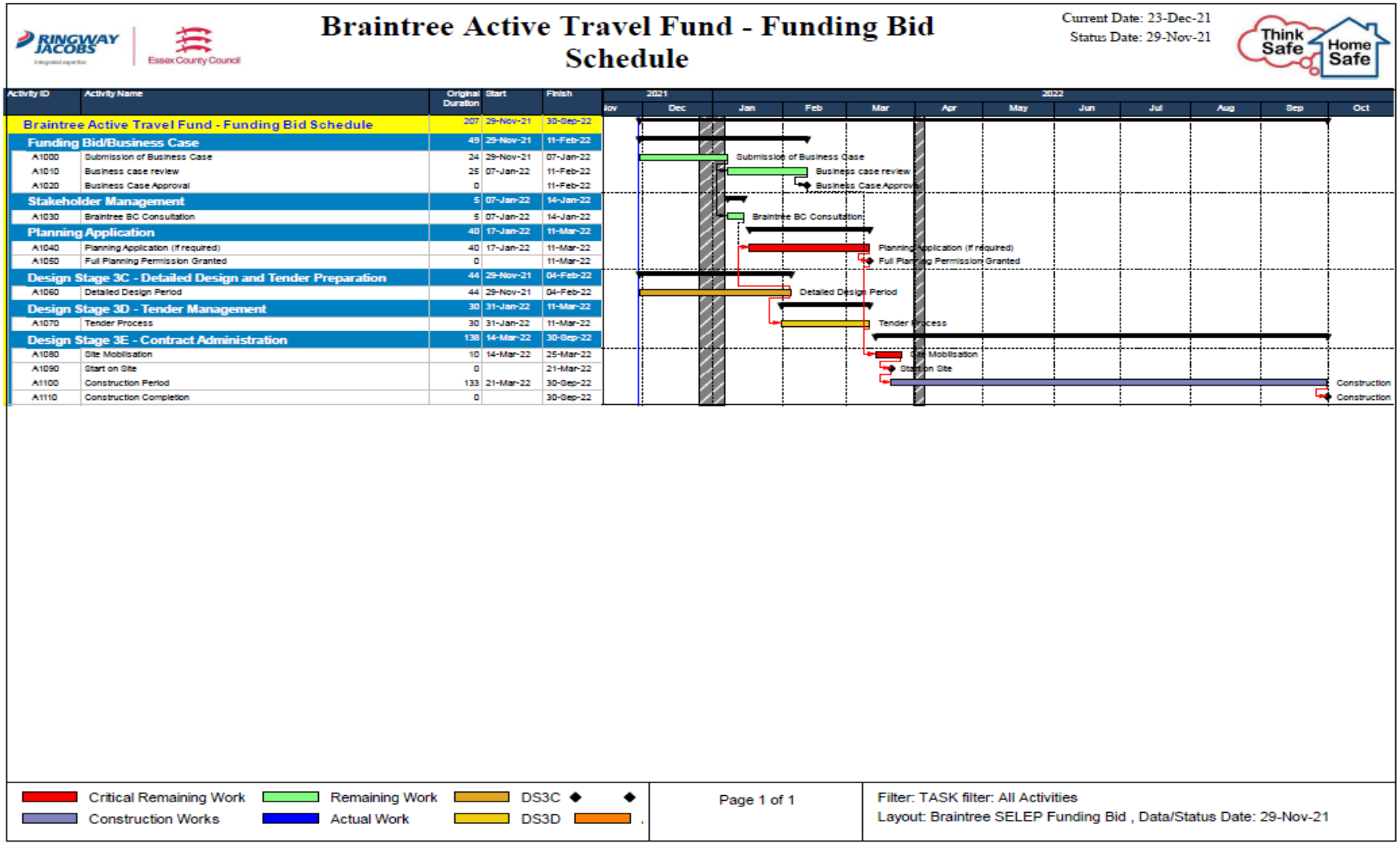
I understand that any offer may be publicised by means of a press release giving brief details of the project and the grant amount.

Signature of applicant	
Print full name	*Andrew Cook*
Designation	*Director Highways and Transportation, Essex County Council*

8. APPENDIX B – Risk Management Strategy

Description of Risk	Impact of Risk	Risk Owner	Likelihood of occurrence (Very Low/ Low/Med/ High/ Very High) (1/2/3/4/5) *	Impact (Very Low/ Low/ Med/ High/ Very High) (1/2/3/4/5) **	Risk Rating	Risk Mitigation	Residual Likelihood/Impact Scores
Programme requires alignment with Braintree District Council's plans	Minimal as Braintree support the actions	ECC	Very Low	Very Low	1	Early discussions required (Already commenced)	1
Requires alignment with work being undertaken on other schemes scheduled in and around the town.	Could cause traffic disruptions	ECC / Essex Highways	Low	Medium	6	Early and ongoing discussions required	2
Potential clash with other key third party works	Could cause disruptions	ECC / Essex Highways	Low	Low	4	Careful and early planning with third parties should avoid this issue	2
Impact on key corridors / junctions during construction, which will require careful management	Could cause traffic disruptions	ECC / Essex Highways	Low	Medium	6	Careful planning and ensure appropriate traffic management in place at key locations	2
Public objections to the scheme	Could casue delay or changes to the programme	ECC	Medium	Medium	9	Unlikely, as public consultations are already underway and no serious concerns have been raised. The suite of schemes provides recognisable benefits to the community	3
Unscheduled utility works	Could casue delay or changes to the programme	Essex Highways	Low	Low	4	Unlikely, as public consultations are already underway and no serious concerns have been raised. The suite of schemes provides recognisable benefits to the community	2
Adverse ground conditions	Could casue delay or changes to the programme	Essex Highways	Low	Low	4	Undertake early surveys with trial holes where appropriate	2
Adverse weather conditions	Could casue delays to the programme	Essex Highways	Very Low	Very Low	1	Sufficient time has been built into the programme to allow for this	1
Construction cost escalation	Could casue changes to the programme	Essex Highways	Medium	Medium	9	Monitor regularly and develop alternative actions as necessary	3

9. APPENDIX C – GANTT Chart / Timing Plan



10. APPENDIX F – CATEGORIES OF EXEMPT INFORMATION

There is a clear public interest in publishing information and being open and transparent. But sometimes there is information which we can't publish because it would cause significant harm to the Council - for example by damaging a commercial deal or harming our position in a court case. Equally sometimes publishing information can harm someone who receives a service from us or one of our partners.

The law recognises this and allows us to place information in a confidential appendix if:

(a) it falls within any of paragraphs 1 to 7 below; and
(b) in all the circumstances of the case, the public interest in maintaining the exemption outweighs the public interest in disclosing the information.

1. *Information relating to any individual.*
2. *Information which is likely to reveal the identity of an individual.*
3. *Information relating to the financial or business affairs of any particular person (including the authority holding that information)*
4. *Information relating to any consultations or negotiations, or contemplated consultations or negotiations, in connection with any labour relations matter arising between the authority or a Minister of the Crown and employees of, or office holders under, the authority.*
5. *Information in respect of which a claim to legal professional privilege could be maintained in legal proceedings.*
6. *Information which reveals that the authority proposes— (a) to give under any enactment a notice under or by virtue of which requirements are imposed on a person; or (b) to make an order or direction under any enactment.*
7. *Information relating to any action taken or to be taken in connection with the prevention, investigation or prosecution of crime.*