Braintree Local Plan Review

Sustainable Accessibility & Baseline Appraisal

Technical Report

January 2026

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1. Introduction

1.1 Background

Braintree District Council (BDC) are currently undertaking a review of their Local Plan adopted in July 2022. Essex Highways have been commissioned to provide consultancy support through the Local Plan review process, with a specific remit to support development of the transport evidence base. This technical report and accompanying appendices serve as the first in a series of deliverables to be provided by Essex Highways and covers the following material to be published for Regulation 18 consultation:

1) A sustainable accessibility appraisal of proposed Local Plan Review sites
2) A sustainable accessibility appraisal of proposed Local Plan Spatial Options
3) A limited assessment of existing network conditions
4) An outline review of District and County transport strategies, referencing proposed sustainable/active travel measures and highway schemes for Braintree District
5) A summary review of spatial options

The purpose of this study is to support the identification of spatial options to take forward for strategic modelling to assess the traffic impact of development allocations on the local and strategic road network. The appraisal conforms with National Planning Policy Framework (NPPF) guidance which emphasises the need for Local Authorities to place sustainability at the heart of their Local Plans. By considering the sustainable accessibility of sites in the identification of spatial options, Local Authorities can reasonably demonstrate that opportunities to encourage mode-shift to sustainable and/or active travel alternatives have been taken.

2. Sustainable Accessibility Appraisal

2.1 Identification of Cluster Sites

The following section of this technical report documents the methodology, outputs and findings of a sustainable accessibility mapping and appraisal study undertaken by Essex Highways.

The study assesses the levels of sustainable accessibility at 26 'cluster sites' identified across the district, comprising smaller sites put forward by developers and aggregated within a localised area, or representing large new settlements/garden communities such as Andrewsfield, Kings Dene and Pattiswick Hall Farm. These are shown in Figure 2-1 below.

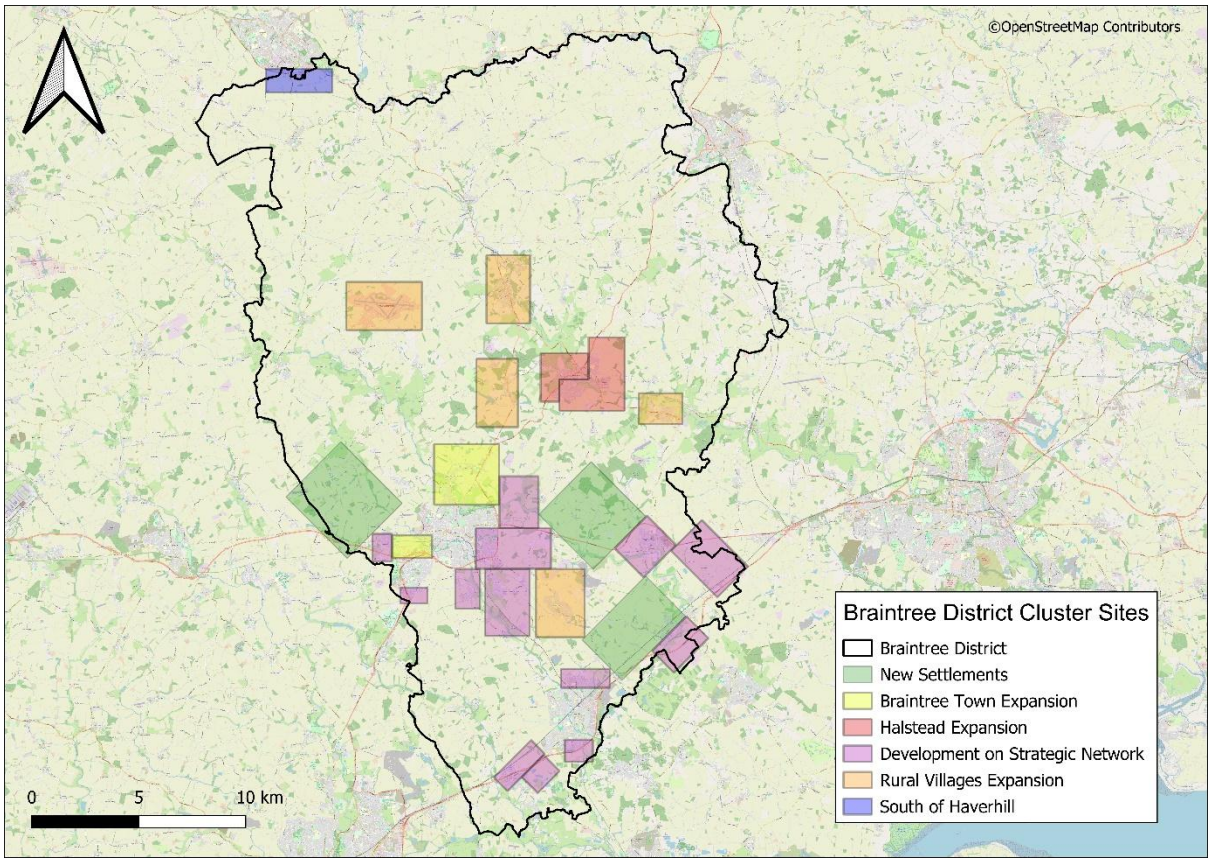

Figure 2-1: 'Cluster Sites'' within Braintree District

The identified cluster sites use non-defined geographic boundaries – a necessity when aggregating smaller sites into one area, and a simplification for large 'new settlements' in the absence of more detailed site information (at this stage). Whilst not fully defined, these simplified boundaries can be considered commensurate with the high-level nature of the appraisal, and sufficient in determining a broad set of conclusions on overall site accessibility.

To provide summary analysis within this report, the 26 cluster sites have been grouped into six 'settlement categories' with shared geographic/spatial characteristics. These are shown in Figure 2-1 above and listed in Table 2-1 below.

Table 2-1: Settlement Categories referenced in the Sustainable Accessibility Appraisal

Settlement Categories
1) New Settlements
2) Halstead Expansion
3) Key Rural Settlements
4) Settlements on Strategic Network
5) Braintree Town Extension
6) South of Haverhill

2.2 Sustainable Accessibility Mapping and RAG Analysis

2.2.1 Introduction

The following sections of this report detail the methodology and assumptions used to create the mapping and analysis for the Sustainable Accessibility Appraisal of cluster sites in Braintree District. Example maps have been presented in this technical report, whilst a complete package of maps and table outputs can be found in Appendix C.

2.2.2 Appraisal Criteria

Cluster sites have been assessed on their level of sustainable connectivity to key urban centres and public facilities via the local transport network. They have also been assessed on their level of digital connectivity as an indicator of the ability of residents to work from home, which has been shown to reduce the volume of peak hour journey-to-work trips on the local transport network.

Each cluster site has been given a RAG (Red (1 point), Amber (2 points) or Green (3 points)) score for each of the 13 appraisal criteria shown in Table 2-2 below.

Table 2-2: Sustainable accessibility appraisal criteria

Number	Criteria	Information Source
1	Walking and cycling connectivity to urban centres	Podaris
2	Public transport connectivity to urban centres	
3	Walking and cycling connectivity to key employment locations	
4	Public transport connectivity to key employment locations	
5	Walking and cycling connectivity to railway stations	
6	Public transport connectivity to railway stations	
7	Walking access to bus stops	
8	Access to high frequency bus services	Essex County Council (ECC)
9	Access to ultra-fast broadband	OFCOM
10	Access to healthcare	Google Maps/ Podaris
11	Access to nursery schools	
12	Access to primary schools	
13	Access to secondary schools	

The scoring reflects the quality of the connectivity demonstrated by the output maps and tables created for each criterion. Appendix A outlines the RAG criteria used.

Whilst there is no 'standardised' approach to undertaking sustainable accessibility appraisal for Local Plan evidence bases, the methodology adopted for this study follows a similar approach to that developed by Essex Highways in 2022 for the Chelmsford Local Plan[1].

The sustainable accessibility of employment locations has not been assessed for this study, which would otherwise require consideration of a different set of accessibility criteria. However, it would be reasonable to assume that employment locations in settlement areas with good access to passenger transport (bus and rail), for example, would score comparatively well.

2.2.3 Podaris Software

This study makes use of Podaris software to assess the extent of sustainable connectivity to each cluster site. The software provides multi-modal accessibility analysis using imported data to generate Origin-Destination (O-D) travel times and distances for several modes including: walking, cycling and public transport. Podaris has the capacity to calculate a large volume of origins and destinations at any one time, making it a useful tool in analysing transport accessibility to multiple key trip attractors at a district level.

Podaris creates contour and thematic maps to visually present and analyse results, displaying isochrone bands based on journey times and travel distances. Analysis follows the transport network rather than crow-fly routing to provide more robust analysis.

The tables in Appendix B provide more detail on the Podaris calculations used for this study: Tuesday 07:00 – 09:00 were the default time parameters used for calculations for public transport accessibility, as based on recommendations by the Department for Transport (DfT).

2.2.4 Connectivity Analysis – Criteria 1 to 7

Podaris has been used in the analysis of accessibility criteria 1 to 7 in Table 2-2, assessing connectivity to key trip attractors such as: urban centres, railway stations and employment locations - both within and in close proximity to Braintree District. The key trip attractors that were identified are shown in Table 2-3 below.

Table 2-3: Identification of key trip attractors

Urban Centres	Employment Locations	Railway Stations
Comprising cities and towns in the district with access to key public facilities including: banks, post offices and supermarkets. Also comprising urban centres lying outside of the district that would generate cross-boundary movements to / from settlement areas located near to the administrative border.	Comprising moderate-to-large sized industrial sites, business parks and service areas located within the district. Also comprising employment locations lying outside of the district that would generate cross-boundary movements to / from settlement areas located near to the administrative border.	Comprising all mainline and branch line railway stations located within the district. Also comprising railway stations lying outside of the district that would generate cross-boundary movements to / from settlement areas located near to the administrative border.

[1] https://www.chelmsford.gov.uk/media/hyggpokt/chelmsford-lp-sustainable-accessibility-technical-note-final.pdf

Mapped outputs have been produced for public transport, cycling and walking accessibility to key trip attractors.

The public transport networks used in the Podaris analysis cover both buses and National Rail with the latter excluded when creating outputs for public transport accessibility to railway stations. Appendix B provides additional detail regarding the Podaris parameters and assumptions used, along with a list of the urban centres, employment locations and railway stations mapped.

The isochrone maps include: 5-, 10- and 15-minute bands for cycling and walking accessibility to reflect the '15-minute neighbourhoods' or 'walkable cities' concept. Where people can access key locations and services via active modes in 15 minutes, they are more likely to travel sustainably. It was assumed that once development was in place with new roads and pedestrian footpaths provided, these would fall into the relevant time bands, and scoring is reflected as such.

For the public transport outputs, the isochrone bands have been expanded to 15, 30, 45 and 60 minutes to reflect the longer journey time tolerances associated with this mode. An example of the public transport Podaris mapping is shown in Figure 2-2 below.

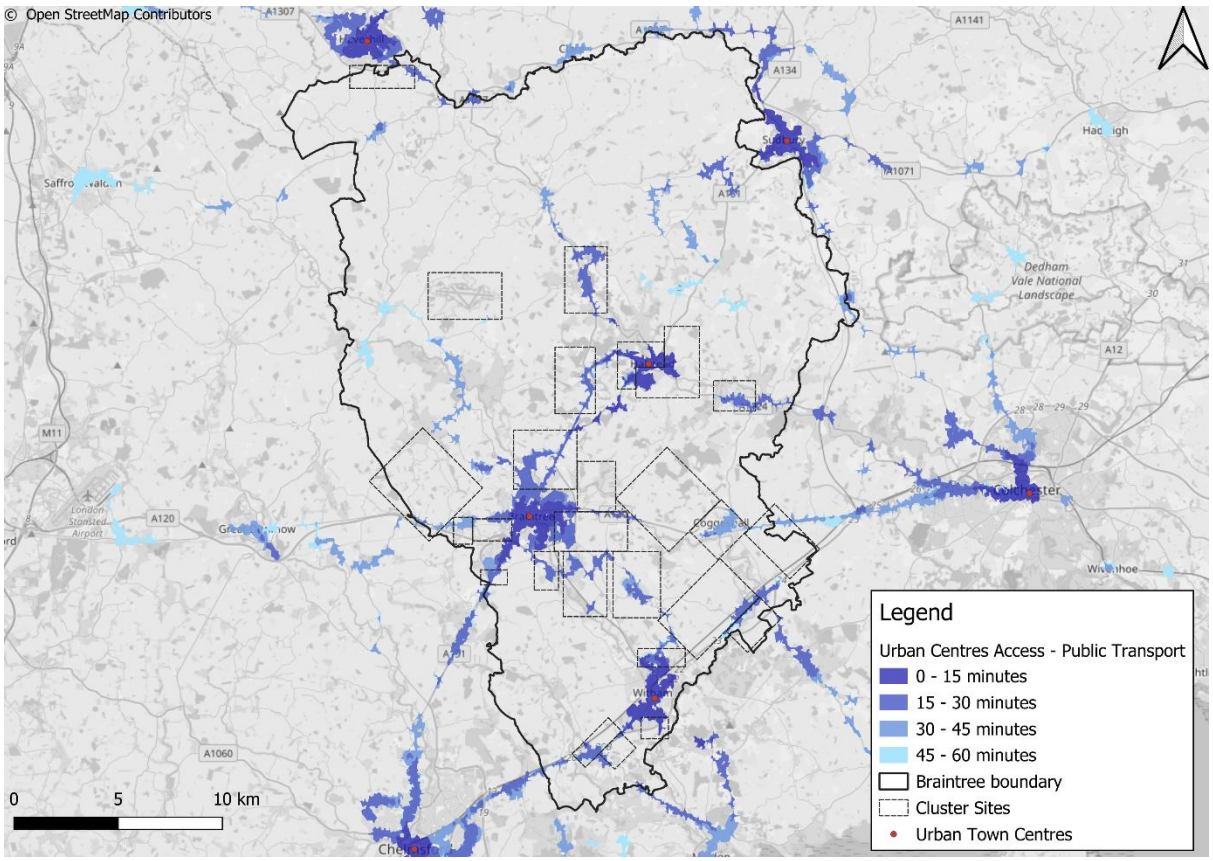

Figure 2-2: Podaris map illustrating accessibility to urban centres by public transport

Podaris software has also been used to calculate local accessibility to bus stops with a service frequency of one or more buses per hour. Where there are bus stops on the maps with no distance bands attributed to them, this is because these stops have less than one bus an hour.

The tables in Appendix B outline the parameters for this calculation, whilst the mapped output is presented in Figure 2-3 overleaf. The isochrone map includes distance bands of 200m,

400m, 600m and 800m for walking distances to a nearest bus stop. Bus stops not included in the analysis are those with infrequent services (not every hour) or where services do not operate within the chosen Podaris parameter of Tuesday, 7:00 - 9:00 AM.

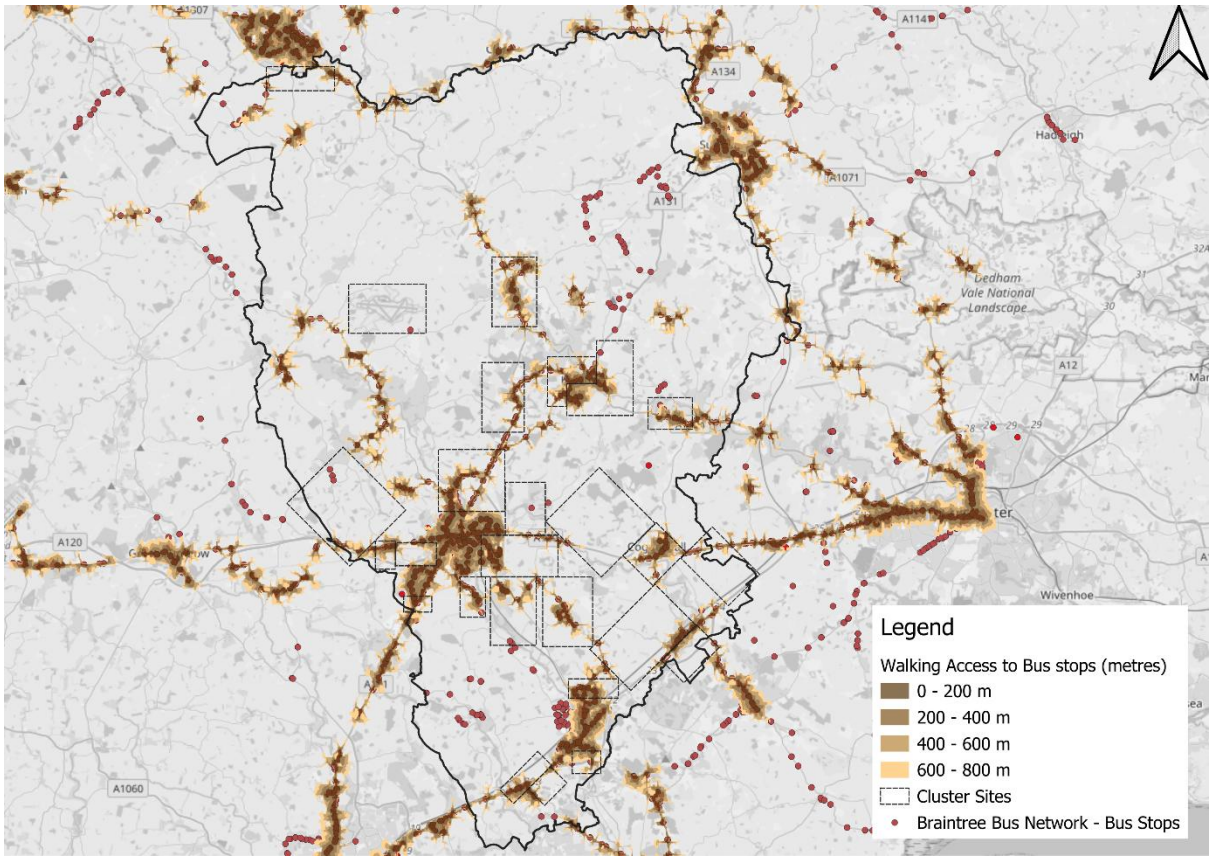

Figure 2-3: Podaris map illustrating walking distance to bus stops with more than 1 service per hour

Table 2-4 below summarises the RAG scoring used for each criterion covering accessibility from cluster sites to key trip attractors.

Table 2-4: RAG scoring for accessibility to key trip attractors

RAG Criteria	Green	Amber	Red
Accessibility to urban centres	Site within a 15 minute walk or cycle journey to an urban centre	Site within a 30 minute public transport journey to an urban centre	Site greater than a 30 minute public transport journey to an existing urban centre
Accessibility to employment locations	Site within a 15 minute walk or cycle journey to an employment location	Site within a 30 minute public transport journey to an employment location	Site greater than a 30 minute public transport journey to an employment location

RAG Criteria	Green	Amber	Red
Accessibility to railway stations (walking and cycling)	Site within a 15 minute walk or cycle journey to a railway station with >1 service in each direction (07:00 – 09:00 weekdays)	Site within a 15 minute walk or cycle journey to a railway station with any peak time railway service	Site greater than a 15 minute walk or cycle journey to a railway station
Accessibility to railway stations (public transport)	Site within a 30 minute public transport journey to a railway station with >1 service in each direction (07:00 – 09:00 weekdays)	Site within a 30 minute public transport journey to a railway station with any peak time railway service	Site greater than a 30 minute public transport journey to a railway station
Walking access to bus stops	Site within 400m of a bus stop	Site within 800m of a bus stop	Site over 800m from a bus stop

2.2.5 Access to high frequency bus services – Criteria 8

The latest available bus route frequency data provided by ECC's Integrated Passenger Transport Unit (IPTU) was for the week commencing November 15th 2021, as part of their Bus Service Improvement Plan. Whilst some routes and timetables would have potentially been affected by COVID-19 at this time, this is still the most recent data available in the format required for this analysis and it is unlikely that frequencies would have changed significantly enough to effect analysis.

Maps have been created to distinguish between routes with a high, medium, low, and limited frequency. The frequency criteria defined by ECC's bus enhanced partnership team is outlined in Appendix D. Individual maps have been created for the AM (07:00 - 11:00), Inter-Peak (IP) (11:00 - 16:00), PM (16:00 - 22:00) and night-time (NI) (20:00 - 07:00) periods for weekdays, Saturdays, and Sundays. These maps can be found in Appendix C, whilst an example is shown in Figure 2-4 overleaf.

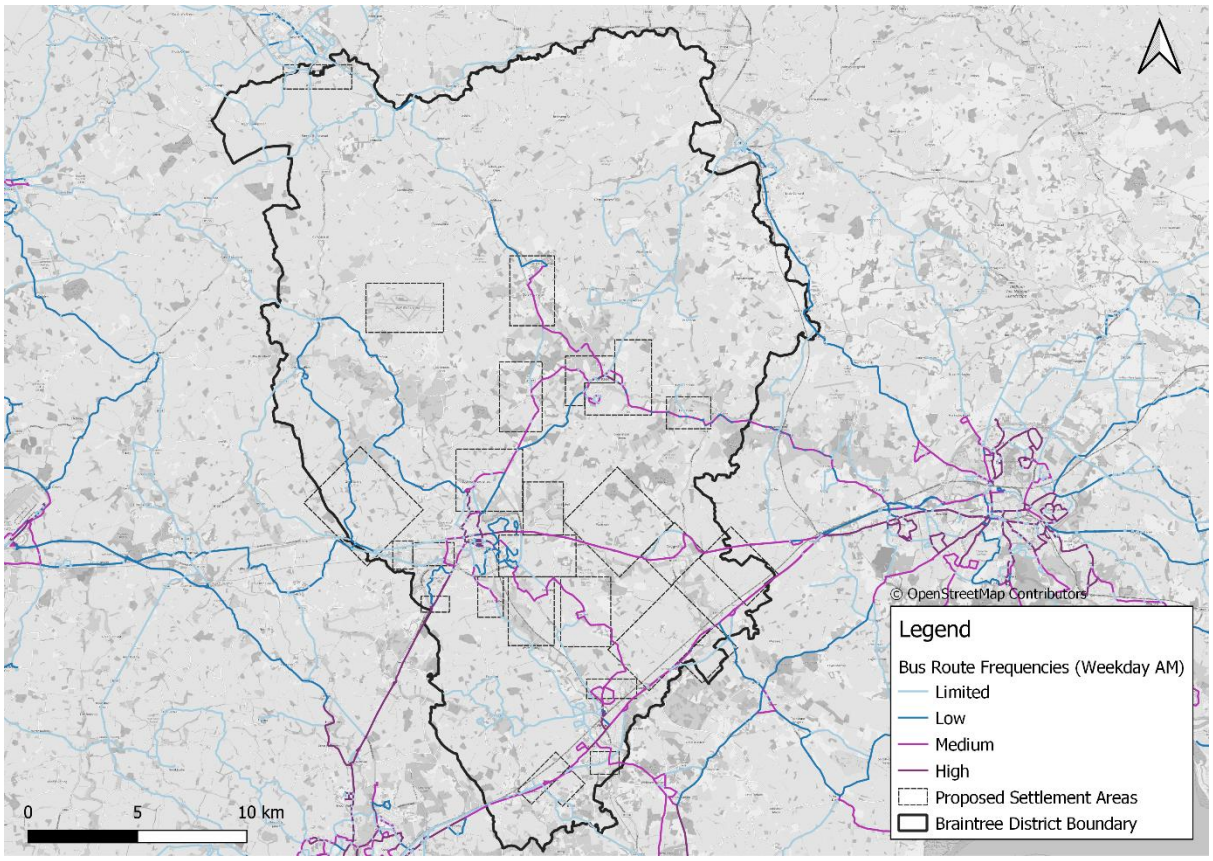

Figure 2-4: Map illustrating access to bus services in Braintree for the Weekday AM peak

The cluster sites have been given a RAG score based on their walking distance to weekday bus services (IP, AM, PM), Saturday services (AM, IP, PM) and out-of-hours services (Sunday AM, IP, PM and all NI periods). Sites score highly if a high frequency bus service falls within the site area or within a 500m crow-fly distance from the site's mapped centre point. Table 2-5 below summarises the RAG scoring used for each criterion covering accessibility to bus services.

Table 2-5: RAG scoring for access to high frequency bus services

RAG Criteria	Green	Amber	Red
Weekday bus services and frequency	High frequency bus service within the site or site within 500m* of a high frequency bus service	Medium frequency bus service within the site or site within 500m of a medium frequency bus service	Low / limited frequency bus service within the site or site within 500m of a low / limited frequency bus service
Saturday bus services and frequency	High frequency bus service within the site or site within 500m* of a high frequency bus service	Medium frequency bus service within the site or site within 500m of a medium frequency bus service	Low / limited frequency bus service within the site or site within 500m of a low / limited frequency bus service

RAG Criteria	Green	Amber	Red
Sunday and night (out of hours) bus services and frequency	High frequency bus service within the site or site within 500m* of a high frequency bus service	Medium frequency bus service within the site or site within 500m of a medium frequency bus service	Low / limited frequency bus service within the site or site within 500m of a low / limited frequency bus service

** Distance measured from the cluster site's centroid (centre point)*

2.2.6 Broadband connectivity – Criteria 9

Access to ultra-fast broadband (UFBB) is based on OFCOM data from Summer 2024 which has been displayed at a Middle layer Super Output Area (MSOA) scale as shown in Figure 2-5 below.

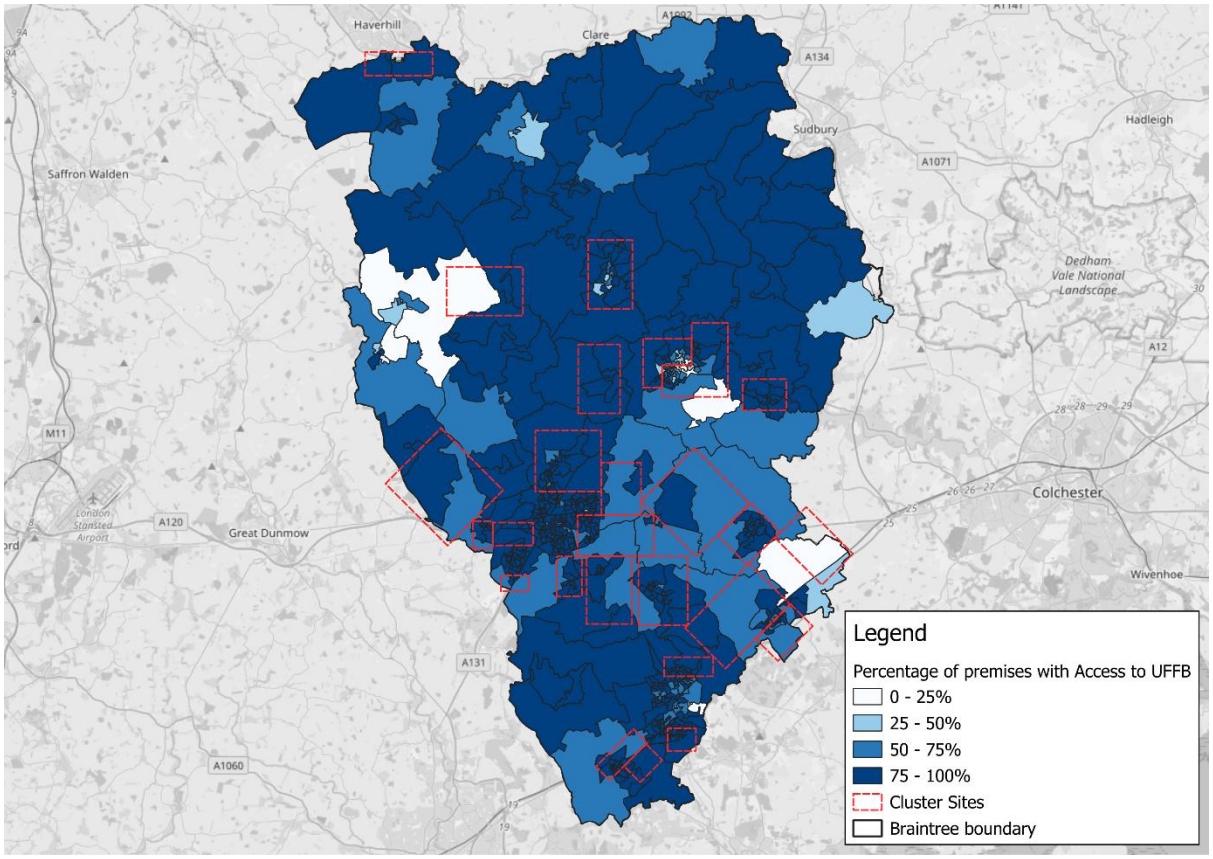

Figure 2-5: Map illustrating the percentage of premises with access to ultra-fast broadband.

Table 2-6 overleaf summarises the RAG scoring used for accessibility to broadband. The assessed cluster sites often span several output areas with different levels of broadband coverage. The given RAG score therefore reflects the level of broadband coverage that is visually more prominent in any given cluster site. This has increased the level of subjectivity involved in the RAG scoring, although it should still be of sufficient robustness for the wider appraisal.

Table 2-6: RAG scoring for connectivity to broadband

RAG Criteria	Green	Amber	Red
UFBB internet connectivity	Site contains at least 75% of premises that are able to receive UFBB	Site contains at least 50% of premises that are able to receive UFBB	Site contains less than 50% of premises that are able to receive UFBB

2.2.7 Access to Health and Education – Criteria 10 to 13

The locations of healthcare and education facilities within Braintree District have been plotted using Google Maps and overlaid onto a map of the cluster sites to assess their level of sustainable access. General practices and hospitals have been mapped for healthcare; however, specialist clinics have not been included due to their niche clientele.

Access to nurseries, primary schools (infants and juniors) and secondary schools has been assessed individually. Schools for students with learning difficulties and complex needs have not been included in the assessment as they account for a very small percentage of the student demographic.

No distinction has been made between public and private healthcare facilities, nor between public or private schools. Cluster sites score highly if a facility is located within the site area or within a set distance from its mapped centre point.

Table 2-7 below outlines the walking distance criteria used to assess each cluster site's accessibility. The walking distance has been increased for secondary schools to reflect their larger catchment areas and the longer commutes that students might typically make.

Table 2-7: RAG scoring for access to healthcare and education

RAG Criteria	Green	Amber	Red
Access to healthcare	Healthcare facility within the site or site within 1km* of a healthcare facility	Site within 1 - 4km of a healthcare facility	Site further than 4km from a healthcare facility
Access to nursery	Nursery within the site *or* site within 400m* of a nursery	Site within 400m - 1km of a nursery	Site further than 1km from a nursery

RAG Criteria	Green	Amber	Red
Access to primary schools	Primary school within the site *or* site within 400m* of a primary school	Site within 400m - 1km of a primary school	Site further than 1km from a primary school
Access to secondary schools	Secondary school within the site *or* site within 400m* of a secondary school	Site within 400m - 1.5km of a secondary school	Site further than 1.5km from a secondary school

** Distance measured from the cluster site's centroid (centre point)*

2.3 Assessment of Site Potential

Given the size of the proposed large (<2,000 homes) 'new settlements'/'garden villages' in Braintree District, it is expected that developers of these sites will make provision for on-site health, education and retail services as well as sustainable transport infrastructure within, and connecting to, the surrounding area. Therefore, it was felt appropriate to consider the potential levels of sustainable accessibility at these sites, accounting for on-site service provision and improved sustainable transport connections.

Assumptions adopted when assessing the sustainable accessibility potential of the large new settlements, were:

- New high frequency bus routes would be provided seven days a week
- Bus stops would be located throughout the development
- Walking and cycling infrastructure would be provided within the site and with connections to nearby towns
- A healthcare facility would be provided on-site
- A nursery would be provided on-site
- A primary school would be provided on-site

The above assumptions were tied to the largely distance-based sustainable accessibility criteria used in the site appraisal. For developments located on the periphery of urban settlements, there was felt to be a lower expectation and/or level of certainty around the provision of new public transport infrastructure, health and education facilities on site. At the same time, distances from urban extensions to potential on-site facilities were often shown to fall within the same accessibility bandings as those to existing facilities within the nearby town centres. Therefore, the decision was made to assess the potential sustainable accessibility of large new settlements/garden villages only.

As detail of facilities on proposed sites adjacent to existing settlements (e.g., Halstead, Braintree) becomes clearer, there may be a case for reviewing the potential levels of sustainable accessibility at these locations if additional facilities are to be provided within the new development areas. Under this scenario, it is possible that the scoring of potential accessibility for certain sites on urban peripheries could be higher than existing.

2.4 Sustainable Accessibility RAG Scoring Summary

2.4.1 Scoring Criteria

Scores applied to each of the 13 appraisal criteria using the RAG grading system are as follows:

- 1 point for **Red**,
- 2 points for **Amber**, and;
- 3 points for **Green**

An average score across all 13 appraisal criteria has been calculated for each individual site. Scores are detailed in Appendix E and are also documented in latter sections of this report for the sites comprising the spatial options assessed.

2.4.2 Settlement Category Average Scores

An average RAG score has also been calculated for each of the six settlement categories summarised in this report. These are shown in Table 2-8 below.

For the purposes of this appraisal, scoring definitions are suggested as follows:

1.00 - 1.49 : **Poor** level of sustainable accessibility

1.50 - 2.49 – **Limited** level of sustainable accessibility

2.50 - 3.00 – **Good** level of sustainable accessibility

It should be noted that Braintree District is largely rural in nature with existing levels of sustainable infrastructure provision that are typically lower than urban areas of Chelmsford and Colchester. The scoring associated with settlement categories in Braintree District reflect their rural nature.

Table 2-8: Average RAG score for each settlement category

Settlement Categories	Average Score for existing	Potential Score
1. New Settlements (Andrewsfield, Pattiswick Hall Farm, Kings Dene)	1.21	2.54
2. Halstead Expansion (Halstead East, Halstead West)	2.16	
3. Rural Villages Expansion (Silver End, Wethersfield, Earls Colne, Gosfield, Sible Hedingham)	1.49	
4. Development on Strategic Network (South Hatfield Peverel, North Hatfield Peverel, Coggeshall, Feering, Stisted, White Notley, East Braintree, Black Notley, Rayne, South Witham, North Witham, South Kelvedon, South Great Notley)	1.81	
5. Braintree Town Expansion (Bocking and Flitch Way)	2.04	
6. South of Haverhill	1.54	

There is an understandable correlation between site locations in closer proximity to urban centres and transport hubs (rail/bus stations), having higher levels of sustainable accessibility. Assessed sites within Halstead and Braintree Town Expansions are shown to have better

overall levels of sustainable accessibility, performing better across the various criteria considered. These sites are invariably located within walking or cycling distance to key trip attractors and close to higher frequency bus services.

Site locations on the strategic road network across the district have a mix of good-to-limited levels of sustainable accessibility across the criteria assessed. They typically have more limited off-peak bus services, whilst walking and cycling distances to key shops and services are likely to be prohibitive in some instances.

Settlement areas in more isolated, rural village locations are shown to have very limited overall levels of sustainable accessibility. This is perhaps understandable given their distance from key trip attractors, the provision of irregular peak hour bus services and a greater reliance on car use to access all but local shops and services.

Large greenfield sites proposed to accommodate new 'garden village' settlements would be expected to have poor levels of existing sustainable accessibility with little-to-no provision of public transport services or active mode infrastructure. However, with sizeable development located on these sites, there would be an expectation that public transport and active mode infrastructure would be introduced to boost overall levels of sustainable accessibility both within the sites and their connectivity to wider destinations. In addition, development at this scale would also be required to provide significant on-site commercial / retail, health and education facilities - all of which should be designed to encourage the internalisation of significant numbers of walking and cycling trips.

Should this be successfully funded and delivered by developers, the expectation would be for the larger proposed settlements to achieve good levels of sustainable accessibility.

2.5 Sustainable Accessibility Assessment of Spatial Options

2.5.1 Introduction

Following the identification of an initial Preferred Spatial Option and two alternative spatial options in November 2025, the sustainable accessibility appraisal was expanded to include an overall average score for each of the three spatial options. Scores were weighted to account for the allocation of housing and employment on sites within the cluster areas previously identified and assessed. Following the initial appraisal of cluster sites, a site in Finchingfield was added to the assessment, replacing an earlier site considered in Wethersfield.

The purpose of this expanded sustainable accessibility appraisal was to demonstrate the broad adherence of the Preferred Spatial Option to the sustainability requirements as laid out in National Planning Policy Framework (NPPF) guidance.

2.5.2 Preferred Spatial Option

Of the 26 cluster sites identified for the sustainable accessibility assessment, 16 had housing or employment allocations, or a combination of the two, in the Preferred Spatial Option. These 16 sites, and their assessed level of sustainable accessibility, are illustrated overleaf in Figure 2-6.

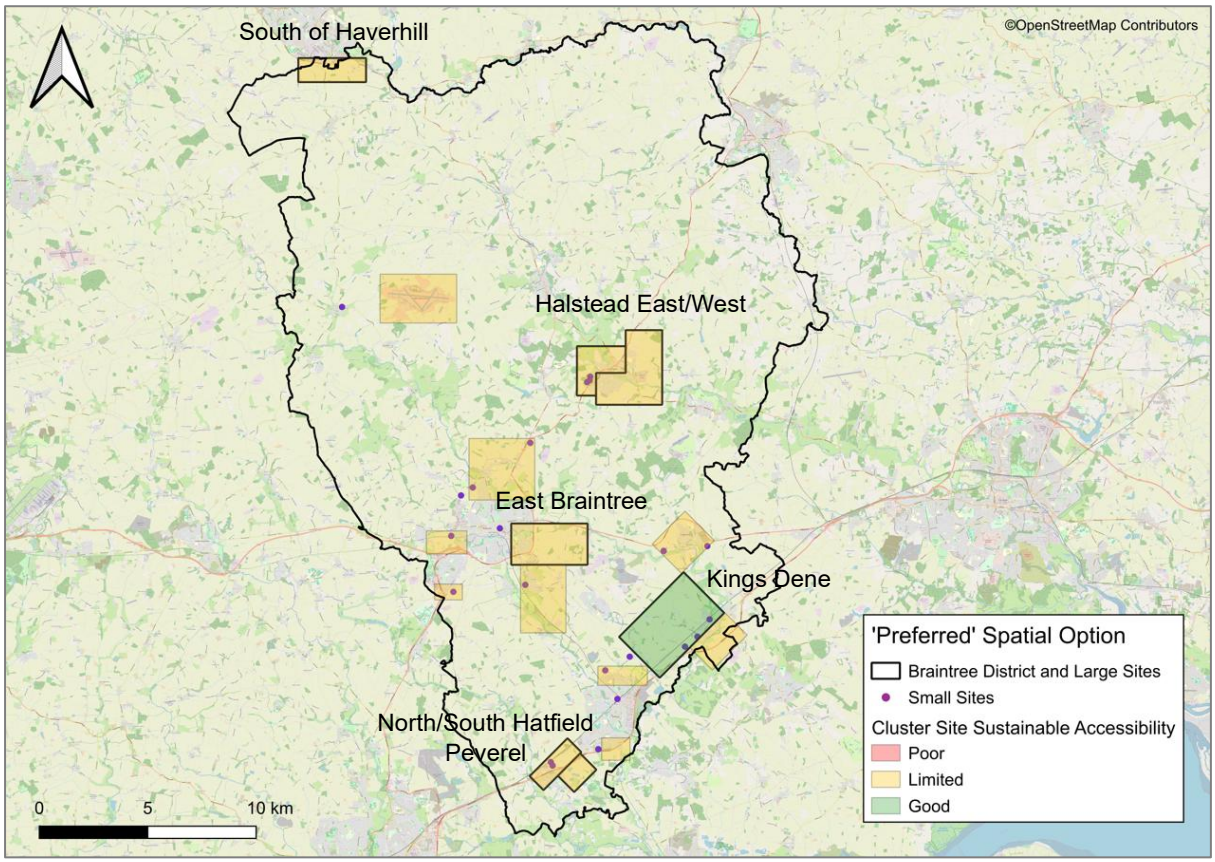

Figure 2-6: Preferred Spatial Option large and small development sites

The details of the housing and employment allocation, alongside each cluster site's sustainable accessibility score, can be seen below in Table 2-9.

Table 2-9: Preferred Spatial Option housing and employment allocations broken down by cluster site

Large Sites				
Location	**Housing Allocation**	**Employment Allocation (ha)**	**Combined Allocation Proportion**	**Average Score**
CS1c - Kings Dene – Existing	1,850	25.90	20.56%	1.31
CS1c - Kings Dene – Potential				2.62
CS2a - Halstead East	1,100	12.22	11.01%	2.00
CS2b - Halstead West	1,630	18.11	16.31%	2.31
CS4e - East Braintree	1,350		7.76%	1.69
CS4l - North Hatfield Peverel	450		2.59%	2.00
CS4m - South Hatfield Peverel	450		2.59%	2.00

CS6a - South of Haverhill	1,350		7.76%	1.54
Windfall	975		5.60%	1.82
Large Sites Total	9,155	56.23	74.17%	
Small Sites				
Location	**Housing Allocation**	**Employment Allocation (ha)**	**Combined Allocation Proportion**	**Average Score**
CS2b - Halstead West	158	5.50	3.02%	2.31
CS3a - Finchingfield	107		0.62%	1.69
CS4b - South Great Notley	480		2.76%	1.69
CS4d - White Notley	78	9.20	3.97%	2.23
CS4e - East Braintree	45		0.26%	1.77
CS4g - Coggeshall	280		1.61%	1.77
CS4i - South Kelvedon	190	9.41	4.70%	1.54
CS4j - North Witham	435	0.74	2.78%	2.08
CS4k - South Witham	32		0.18%	2.23
CS4l - North Hatfield Peverel	223		1.28%	2.00
CS5a - Bocking	269	7.00	4.23%	2.23
CS5b - Flitch Way	74		0.43%	1.85
Small Sites Total	2,371	31.85	25.83%	
Combined Total	**11,526**	**88.08**	**100%**	

To calculate a combined allocation proportion for housing and employment, it has been assumed that 200 dwellings and 3 hectares of employment both generate approximately 60 trips per hour and are therefore considered equal to one another.

Where no details around the employment allocation for the larger sites has been provided, it has been prorated in relation to the housing allocation using the total full-build out housing and employment allocations provided by BDC.

2.5.3 Alternative Spatial Option 1 – 'Alternative Urban Extensions'

Alternative Spatial Option 1 focuses on alternative urban extensions across Braintree District. 14 cluster sites from the original 26 identified in the sustainable accessibility assessment form the basis of the scoring, with all 14 having housing or employment allocations, or a combination of the two. These 14 sites, and their assessed level of sustainable accessibility, are illustrated in Figure 2-7 overleaf.

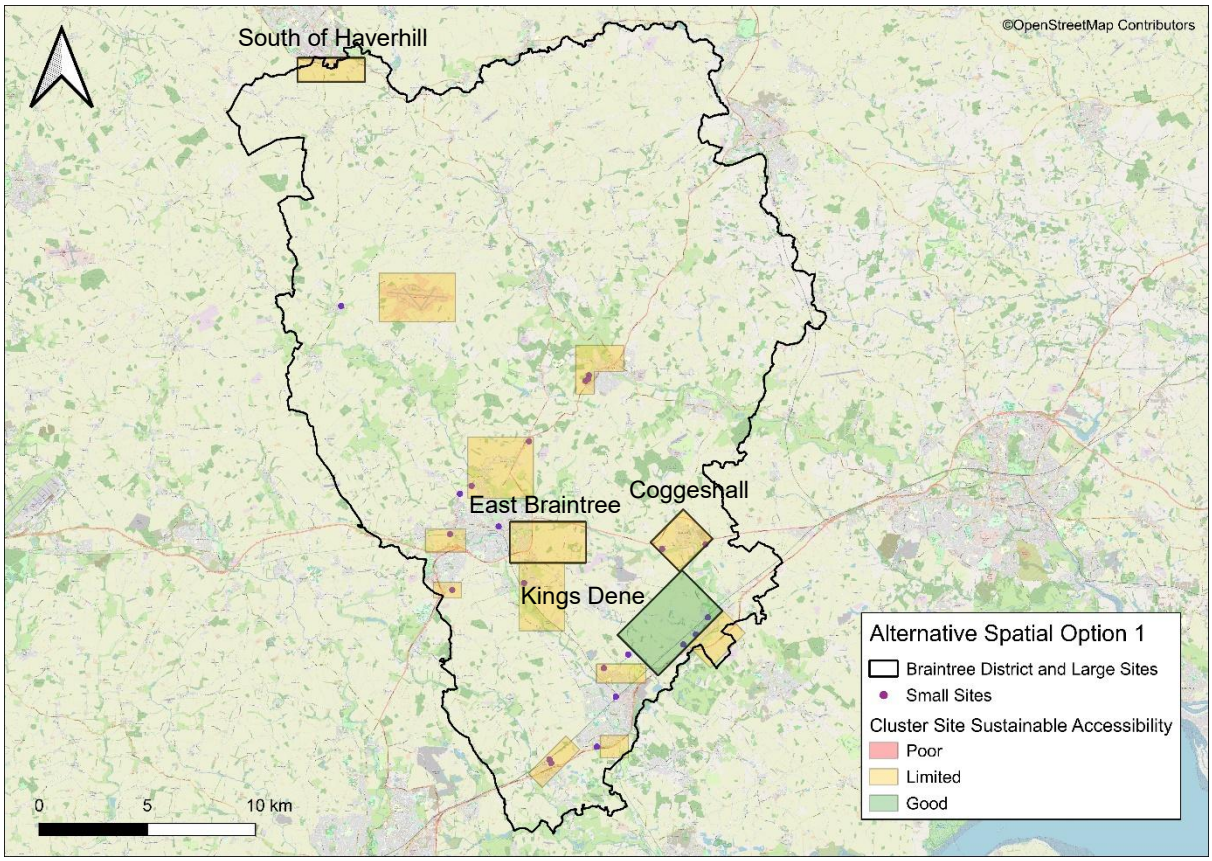

Figure 2-7: Alternative Spatial Option 1 large and small development sites

The details of the housing and employment allocation for Alternative Spatial Option 1, alongside each cluster site's sustainable accessibility score, can be seen in Table 2-10 below.

Table 2-10: Alternative Spatial Option 1 housing and employment allocations broken down by cluster site

Large Sites				
Location	**Housing Allocation**	**Employment Allocation (ha)**	**Combined Allocation Proportion**	**Average Score**
CS1c - Kings Dene – Existing	1,850	25.90	26.90%	1.31
CS1c - Kings Dene – Potential				2.62
CS4e - East Braintree	2,300		17.30%	1.69
CS4g - Coggeshall	600		4.51%	1.77
CS6a - South of Haverhill	1,350		10.15%	1.54
Windfall	975		7.33%	1.82
Large Sites Total	7,075	25.90	66.20%	
Small Sites				
Location	**Housing Allocation**	**Employment Allocation (ha)**	**Combined Allocation Proportion**	**Average Score**
CS2b - Halstead West	158	5.50	3.95%	2.31
CS3a - Finchingfield	107		0.80%	1.69
CS4b - South Great Notley	480		3.61%	1.69

CS4d - White Notley	78	9.20	5.20%	2.23
CS4e - East Braintree	45		0.34%	1.77
CS4g - Coggeshall	280		2.11%	1.77
CS4i - South Kelvedon	190	9.41	6.15%	1.54
CS4j - North Witham	435	0.74	3.64%	2.08
CS4k - South Witham	32		0.24%	2.23
CS4l - North Hatfield Peverel	223		1.68%	2.00
CS5a - Bocking	269	7.00	5.53%	2.23
CS5b - Flitch Way	74		0.56%	1.85
Small Sites Total	2,371	31.85	33.80%	
Combined Total	**9,446**	**57.75**	**100%**	

2.5.4 Alternative Spatial Option 2 – 'Stand Alone Settlements'

Alternative Spatial Option 2 allocates a large proportion of development in alternative 'garden village' settlements. Out of the 26 cluster sites identified in the sustainable accessibility assessment, 14 form this spatial option, with the cluster sites having either employment, housing, or a combination of the two proposed. The 14 sites for Alternative Spatial Option 2, and their assessed level of sustainable accessibility, are shown in Figure 2-8 below.

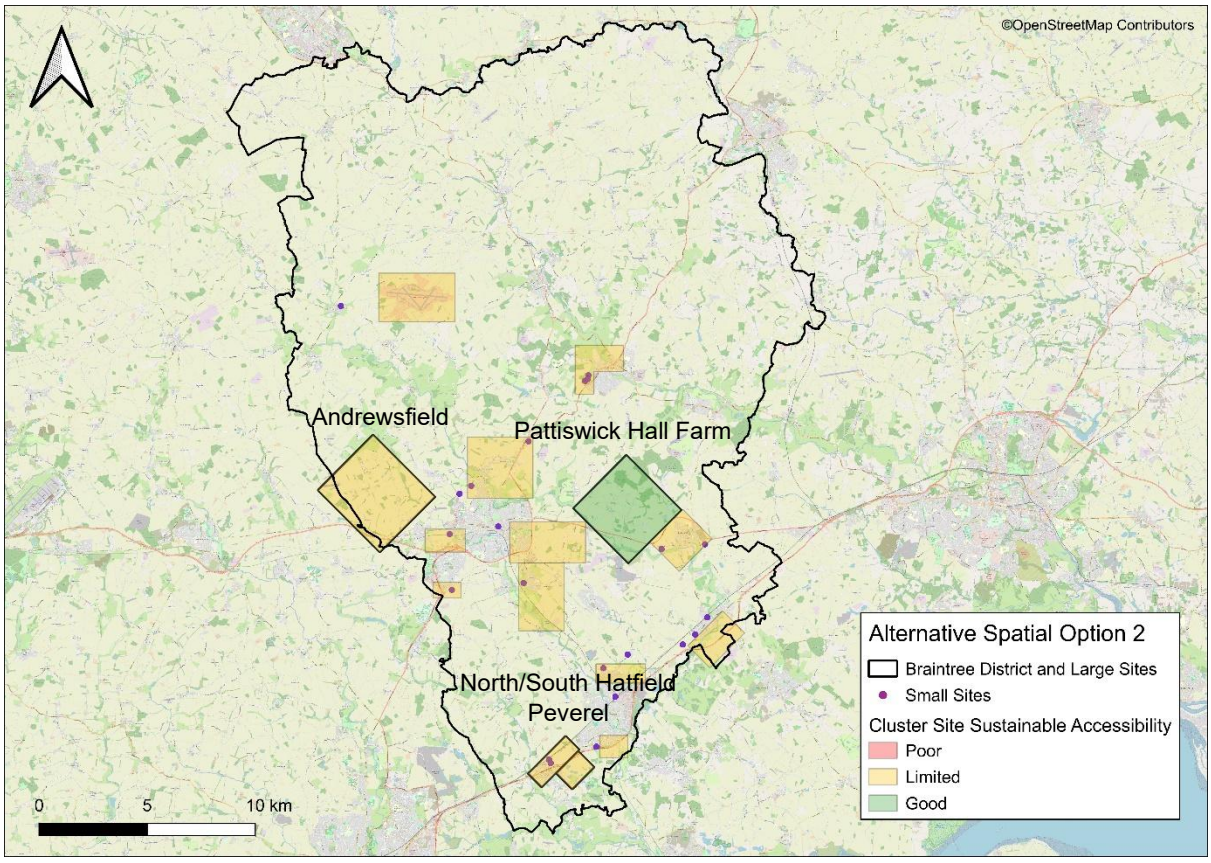

Figure 2-8: Alternative Spatial Option 2 large and small development sites

The housing and employment allocations for Alternative Spatial Option 2, alongside each relevant cluster site's sustainable accessibility score, are detailed in Table 2-11 overleaf.

Table 2-11: Alternative Spatial Option 2 housing and employment allocations broken down by cluster site

Large Sites				
Location	**Housing Allocation**	**Employment Allocation (ha)**	**Combined Allocation Proportion**	**Average Score**
CS1a - Andrewsfield – Existing	2,300	25.90	27.96%	1.15
CS1a - Andrewsfield – Potential				2.46
CS1b – Pattiswick Hall Farm – Existing	2,300		18.08%	1.15
CS1b – Pattiswick Hall Farm – Potential	600		4.51%	2.54
CS4l - North Hatfield Peverel	698		5.49%	2.00
CS4m - South Hatfield Peverel	697		5.48%	2.00
Windfall	975		7.66%	1.82
Large Sites Total	6,970	25.90	64.67%	
Small Sites				
Location	**Housing Allocation**	**Employment Allocation (ha)**	**Combined Allocation Proportion**	**Average Score**
CS2b - Halstead West	158	5.50	4.12%	2.31
CS3a - Finchingfield	107		0.84%	1.69
CS4b - South Great Notley	480		3.77%	1.69
CS4d - White Notley	78	9.20	5.43%	2.23
CS4e - East Braintree	45		1.00%	1.77
CS4g - Coggeshall	280		2.20%	1.77
CS4i - South Kelvedon	190	9.41	6.42%	1.54
CS4j - North Witham	435	0.74	3.81%	2.08
CS4k - South Witham	32		0.25%	2.23
CS4l - North Hatfield Peverel	223		1.75%	2.00
CS5a - Bocking	269	7.00	5.78%	2.23
CS5b - Flitch Way	74		0.58%	1.85
Small Sites Total	2,371	31.85	35.33%	
Combined Total	**9,341**	**57.75**	**100%**	

2.6 Summary Sustainable Accessibility Scores for Spatial Options

2.6.1 Preferred Spatial Option

The average sustainable accessibility scores of the small and large sites for the Preferred Spatial Option are seen in Table 2-12 with the weighted average scores further below in Table 2-13.

Table 2-12: Preferred Spatial Option average sustainable accessibility scores of the small and large sites

Location	Average Score	Weighted Proportion
Small Sites	1.96	25.83%
Large Sites (existing)	1.78	74.17%
Large Sites (potential)	2.15	

Table 2-13: Preferred Spatial Option weighted average sustainable accessibility scores.

Location	Average Score
Weighted Average (existing)	**1.83**
Weighted Average (potential)	**2.10**

The overall weighted average sustainable accessibility score for the Preferred Spatial Option has been determined to be 2.10 - assuming that the potential for large new sites in rural areas to improve sustainable access provision is realised.

Whilst the score fits firmly within the 'limited sustainable accessibility' bracket, it is important to view this in relative terms compared with the levels of accessibility determined for all assessed cluster sites across Braintree District. This has been visualised in Table 2-18 at the end of this chapter.

2.6.2 Alternative Spatial Option 1

The average sustainable accessibility scores of the small and large sites for Alternative Spatial Option 1, with a focus on urban extensions, are seen in Table 2-14 with the weighted average scores further below in Table 2-15.

Table 2-14: Alternative Spatial Option 1 average sustainable accessibility scores of the small and large sites

Location	Average Score	Weighted Proportion
Small Sites	1.96	33.80%
Large Sites (existing)	1.53	66.20%
Large Sites (potential)	2.06	

Table 2-15: Alternative Spatial Option 1 weighted average sustainable accessibility scores.

Location	Average Score
Weighted Average (existing)	**1.68**
Weighted Average (potential)	**2.03**

Alternative Spatial Option 1 has an overall weighted average sustainable accessibility score of 2.03, based on the assumption that large new rural sites will enhance sustainable access.

The score falls comfortably within the 'limited sustainable accessibility' category, but it should, again, be considered in relation to the accessibility levels of all assessed cluster sites across Braintree District, as shown in Table 2-18 at the end of this chapter.

2.6.3 Alternative Spatial Option 2

The average sustainable accessibility scores of the small and large sites for Alternative Spatial Option 2, which focuses a large proportion of development in alternative 'garden village' sites, are seen in Table 2-16 with the weighted average scores further below in Table 2-17.

Table 2-16: Alternative Spatial Option 2 average sustainable accessibility scores of the small and large sites

Location	Average Score	Weighted Proportion
Small Sites	1.96	35.33%
Large Sites (existing)	1.37	64.67%
Large Sites (potential)	2.33	

Table 2-17: Alternative Spatial Option 2 weighted average sustainable accessibility scores

Location	Average Score
Weighted Average (existing)	**1.58**
Weighted Average (potential)	**2.20**

The calculated weighted average sustainable accessibility score for Alternative Spatial Option 2 is 2.20, based upon the assumption that the development potential of new large settlements is fully leveraged to enhance sustainable access provision. This score is the highest across the three spatial options, partly due to the sizeable development allocation across two new large settlements in Andrewsfield and Pattiswick Hall Farm which both have high sustainable accessibility potential if the infrastructure to support sustainable transport is in place.

This score sits within the 'limited sustainable accessibility' bracket and can be compared to the other spatial options and cluster sites across Braintree District in Table 2-18 overleaf.

Table 2-18: Sustainable accessibility score of Preferred and Alternative Spatial Options in relation to the relevant cluster sites

	Scoring		Cluster Sites	Spatial Options
Level of Sustainable Accessibility ↑	Good	2.90		
		2.80		
		2.70		
		2.60	**Kings Dene (potential) - 2.62**	
		2.50	**Pattiswick Hall Farm (potential) - 2.54**	
	Limited	2.40	**Andrewsfield (potential) - 2.46**	
		2.30	**Halstead West** - 2.31	
		2.20	South Great Notley, Bocking and South Witham - 2.23	**Alternative Spatial Option 2 (potential) - 2.21**
		2.10	North Witham - 2.08	**Preferred Spatial Option (potential) - 2.10**
		2.00	**Halstead East**, and **North and South Hatfield Peverel** - 2.00	**Alternative Spatial Option 1 (potential) - 2.03**
		1.90	Flitch Way - 1.85	
		1.80	**Coggeshall** and White Notley - 1.77	**Preferred Spatial Option (existing) - 1.83**
		1.70	**East Braintree** and Finchingfield - 1.69	
		1.60	**South of Haverhill** and South Kelvedon - 1.54	**Alternative Spatial Option 1 (existing) - 1.66**
		1.50		**Alternative Spatial Option 2 (existing) - 1.56**
↓	Poor	1.40		
		1.30	**Kings Dene (existing) - 1.31**	
		1.20		
		1.10	**Andrewsfield and Pattiswick Hall Farm (existing) - 1.15**	

When compared with levels of sustainable accessibility determined at cluster sites across Braintree District, the score for the Preferred Spatial Option sits broadly amongst the upper half of all sites assessed. The two alternative spatial options receive similar scores, with Alternative Spatial Option 1 scoring slightly lower and Option 2 slightly higher than the Preferred Spatial Option.

The relative scoring performance of the spatial options is heavily influenced by the inclusion of large new 'garden village' development sites in the Preferred Option and Alternative Option 2, and based on an expectation that public transport and active mode infrastructure will be enhanced in these locations along with the provision of commercial, retail, health and education facilities to encourage trip internalisation.

Nevertheless, it should be acknowledged that there is risk attached to the prioritisation of 'garden village' developments in terms of a dependency on developers to provide the necessary levels of transport infrastructure within the site, as well as external connectivity – particularly in early phases of development - to help manage traffic impact on the local and strategic road network.

Whilst it might be reasonable to work to an expectation that large development sites will provide the infrastructure necessary to ensure they are sustainably accessible, it should nevertheless be noted that the Preferred Spatial Option performs better than the alternative options when considering existing levels of provision. This is largely due to the quantum of development proposed in Halstead, with relatively short-distance walking and cycling access to the town centre.

3. Review of Current Network Conditions & Travel Behaviours

3.1 Introduction

The Braintree Town Future Transport Strategy[2] was published in September 2023 and informed the selection of schemes and strategies within the Braintree and North Essex Implementation Plan found within Essex County Council's 2025 Local Transport Plan 4 (LTP4)[3]. As part of the Future Transport Strategy (FTS), a baseline review of existing transport conditions in Braintree district was undertaken.

This chapter revisits previous summary analysis presented in the FTS baseline report and is supplemented with new analysis using 2023-2024 traffic data to review existing levels of traffic congestion, journey times along key strategic corridors through the district, and traffic accident locations.

3.2 Braintree District - Summary

Braintree District is situated in the heart of Essex, surrounded by key regional centres including Cambridge, Colchester and Chelmsford, and with London Stansted Airport within a short commuting distance in neighbouring Uttlesford. The district is predominantly rural in nature, but contains three main urban centres: Braintree, Witham and Halstead, along with several smaller towns and rural villages. Of the total population, just over half live in the three largest towns, with the remainder residing in more rural areas.

Along with the nearby districts of Colchester and Tendring, Braintree makes up part of the Haven Gateway, and is a key strategic area benefiting economically from its southeast location. Southern portions of the district benefit from high-capacity rail links to London, Stansted Airport and ports to the east of the county. The district is served by a well-connected road network, with the A131 providing north-south connections to Chelmsford and London, and the A120 providing good east-west connections to Colchester and Harwich (to the east) and Bishops Stortford (to the west). The A131, leaving the north of Braintree provides an essential commercial link, via the A1017, onto the A14 and the M11.

Due to the rural nature of the district, car ownership is higher than the regional average, and cars are the predominant means of transport for most residents. As a result of high car usage, and a growing population, key routes within Braintree are already under significant strain, leading to increased congestion on local and strategic routes, poor journey time reliability and a decline in air quality in heavily trafficked and built-up areas. Impacts are also felt on other road users, with delays to bus services and adverse impacts on journeys made by walking or cycling.

[2] https://www.essexhighways.org/braintree-town-future-transport-strategy
[3] https://www.essexhighways.org/highway-schemes-and-developments/local-transport-plan

3.3 Historic Travel Patterns

The following analysis was originally presented in the FTS baseline review and utilises 2011 Census journey-to-work data. Despite the age of the data used, overall patterns shown for Braintree district are not expected to have significantly changed and can still be used to gain a broad understanding of current travel behaviours amongst the resident population.

Table 3-1: Journey to work modes based on location of work and residence (Census 2011)

Location	Internal (*Living and working internally*)	Internal to External (*Living internally & commuting externally*)	External to Internal (*Living externally & commuting into Braintree*)
All categories: Method of travel to work	26,964	23,514	13,810
Work mainly at or from home	0%	0%	0%
Underground, metro, light rail or tram	0%	0%	0%
Train	2%	4%	2%
Bus, minibus or coach	3%	3%	3%
Taxi	0%	0%	0%
Motorcycle, scooter or moped	1%	1%	1%
Driving a car or van	62%	86%	84%
Passenger in a car or van	7%	5%	6%
Bicycle	3%	1%	1%
On foot	22%	1%	2%
Other method of travel to work	0%	0%	0%

Table 3-1 above demonstrates the strong propensity for car travel amongst the local population, with around 90% of all journey-to-work trips to and from Braintree District being made by car or van either as a driver or passenger. Approximately 70% of trips within the district are also made by car, as a driver or passenger. Despite rail access in towns such as Braintree, Witham, Kelvedon and Hatfield Peverel, fewer than 5% of journey-to-work trips were made by train in 2011, whilst cycling is seen as a very niche mode of choice to access local jobs.

Table 3-2: Car-based trip length distribution (Census 2011)

Distance travelled by Car	% of Usual Residents
Less than 2km	11%
2km to less than 5km	11%
5km to less than 10km	12%
10km and above	53%
Other	13%

In terms of typical journey lengths in 2011, over half were over 10km, reflecting both the large, rural nature of Braintree District, and the significant volume of out-commuting to neighbouring districts, as shown in Figure 3-2 overleaf. However, around 20% of trips were shown to be within walking and/or cycling distance of destinations, demonstrating the potential for a proportion of car-based trips to switch to more active modes of travel – dependent on the provision and promotion of targeted and attractive cycling and pedestrian infrastructure.

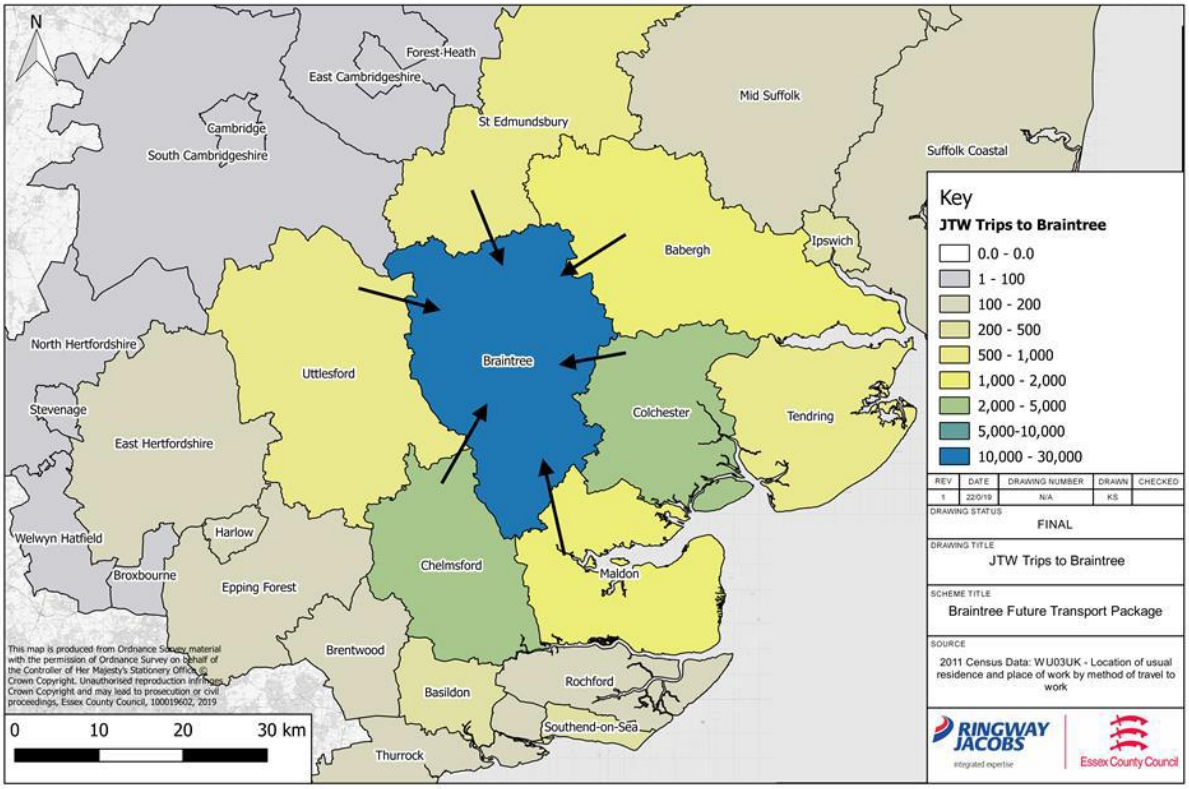

Figure 3-1: Journey-to-work trips into Braintree District (inc. internal journeys within Braintree)

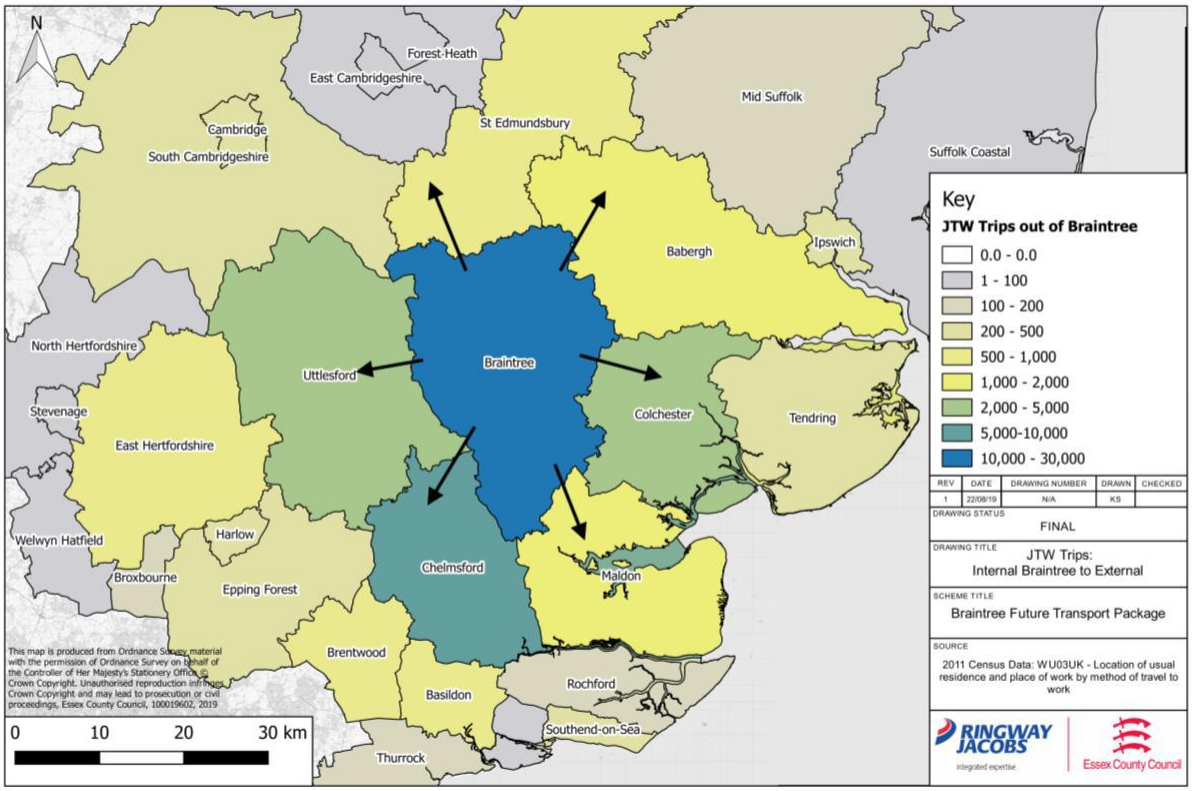

Figure 3-2: Journey-to-work trips away from Braintree District (inc. internal journeys within Braintree)

With significant proportions of journey-to-work trips being made to/from neighbouring authorities, focus on Local Plan impact should be focused particularly on strategic connector routes such as the A120 to Uttlesford and Colchester, and the A131 to Chelmsford.

3.4 Network Congestion

Department for Transport (DfT) sourced journey time data for the period January to December 2023 has been obtained for key strategic routes within Braintree District. The DfT database holds information collected from in-vehicle GPS (Global Positioning System) tracking devices and can be used to derive average speeds and journey time reliability.

Figure 3-3 and Figure 3-4 overleaf show AM and PM network delay respectively, calculated as a factor between peak hour and free-flow journey times.

Largest congestion 'hot-spots' are understandably to be found in towns and villages, where population density is higher. However, there are also pockets of peak hour congestion along key strategic routes across Braintree District, notably:

1) A120, B1018 & Cressing Road approach arms to Galleys Corner Roundabout
2) A120, A131 & Coggeshall Road approach arms to Marks Farm Roundabout
3) A131 through High Garrett – north-east of Braintree
4) A120 through Bradwell – east of Braintree
5) B1018 though Tye Green – south-east of Braintree
6) Sections of A12 in vicinity of junctions e.g. Witham, Silver End and Kelvedon

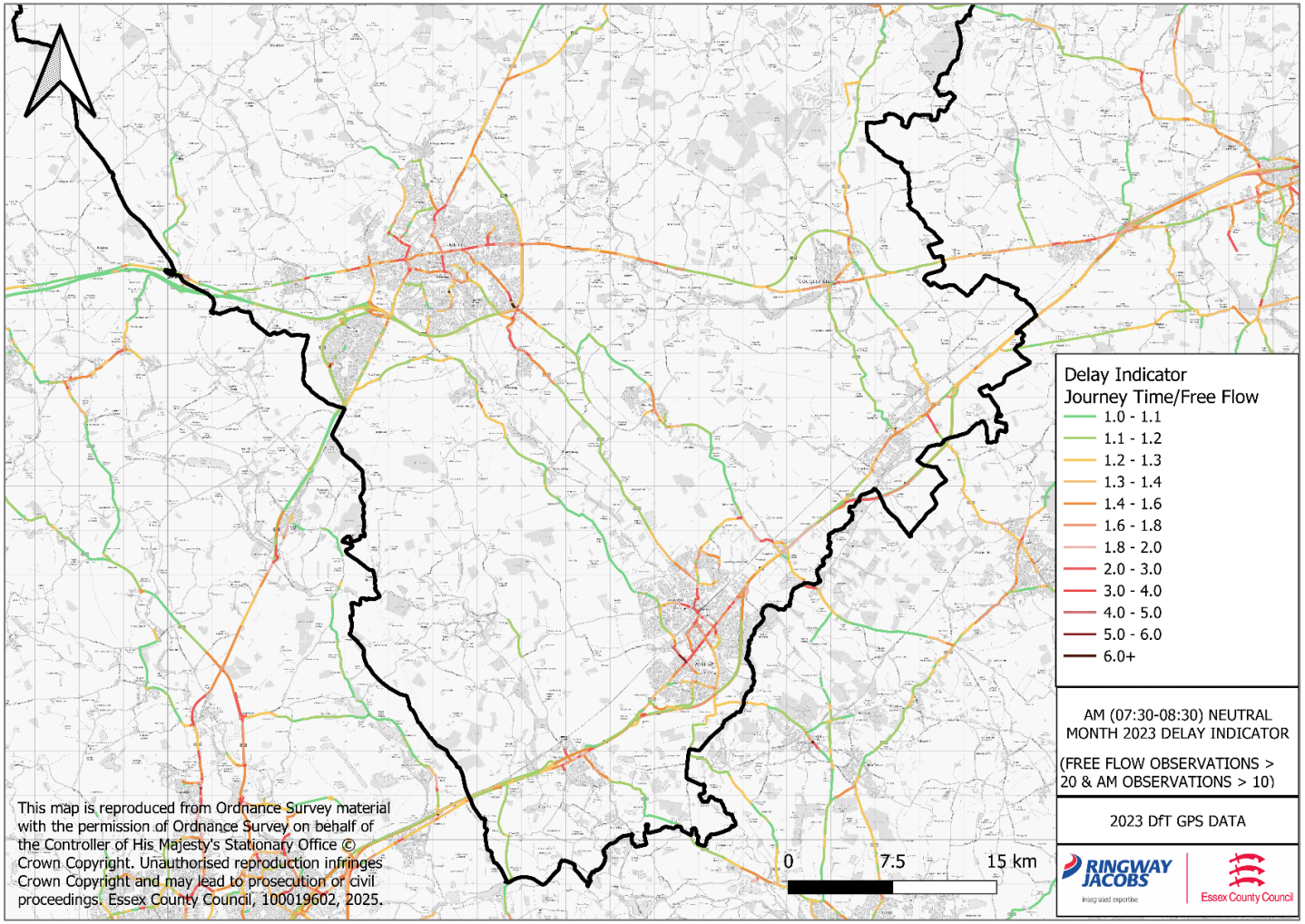

Figure 3-3: 2023 AM peak delay indicator plots for Braintree District

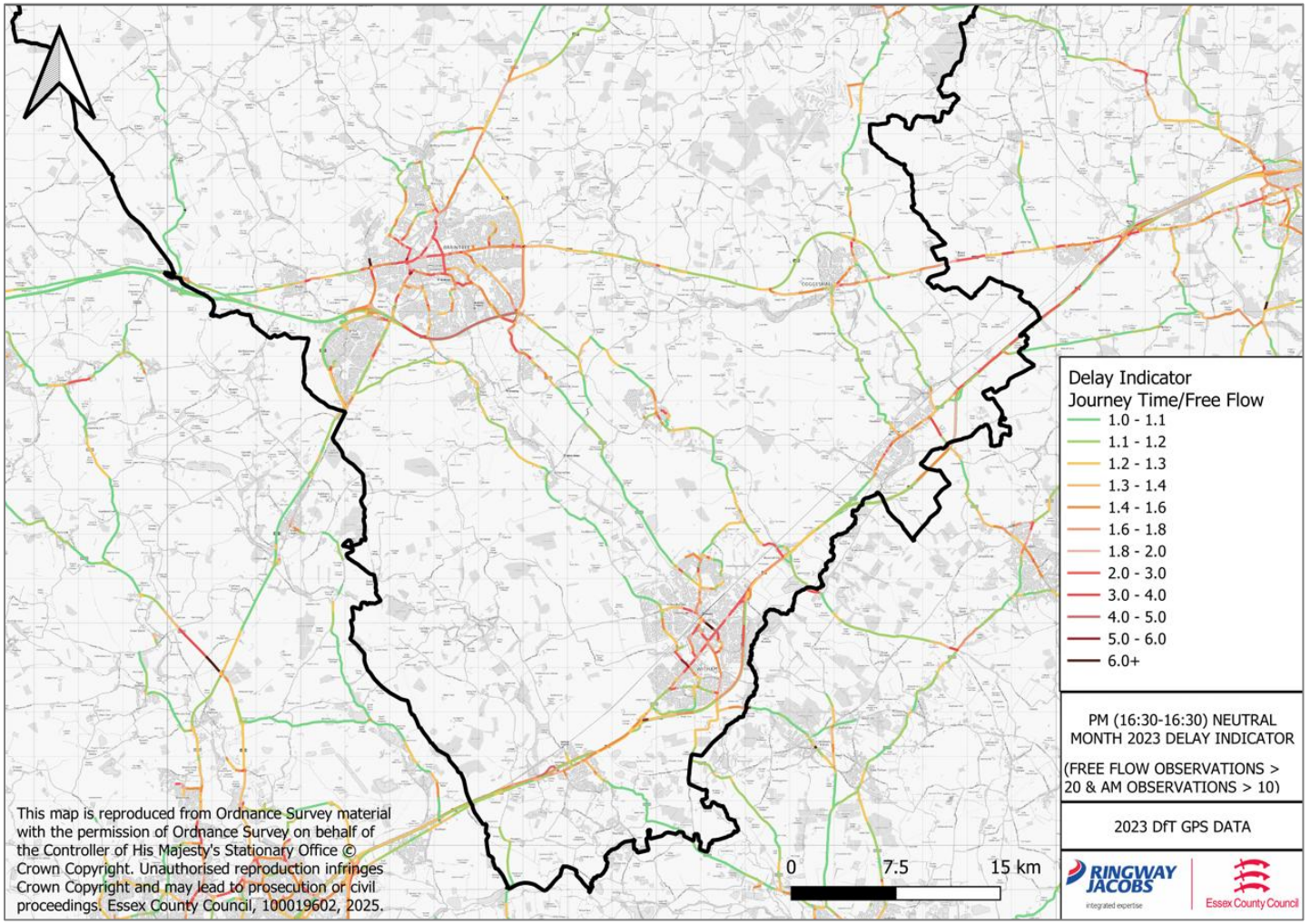

Figure 3-4: 2023 AM peak delay indicator plots for Braintree District

3.5 Journey Time Analysis

Ten journey time routes have been identified for the Local Plan appraisal following discussions with BDC. The routes comprise the key inter-urban strategic corridors through Braintree District, passing through the towns of Braintree, Witham, Hatfield Peverel, Kelvedon and Halstead en-route. The routes are shown in Figure 3-5 below.

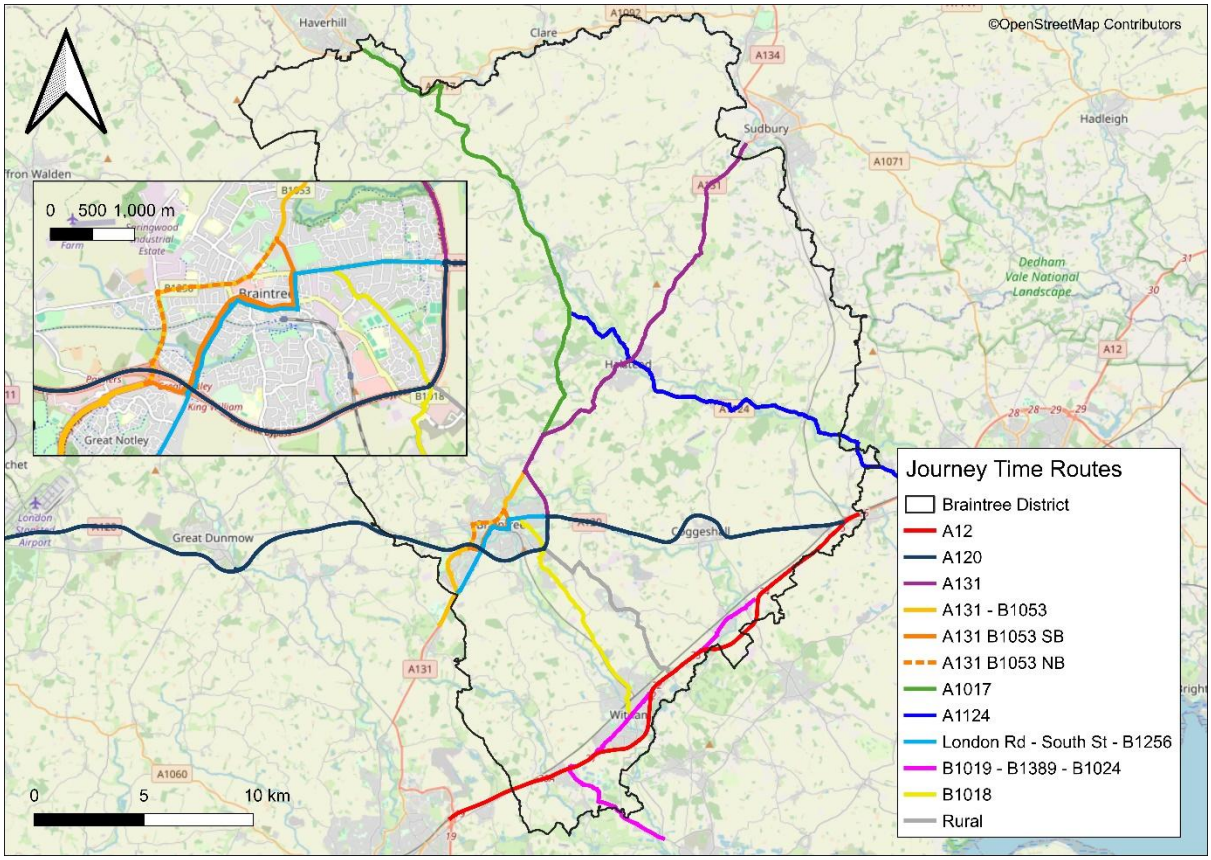

Figure 3-5: Journey time routes in Braintree District selected for appraisal

The following graphs show the directional cumulative journey times along selected routes – A120, A131 (north and south) and A12 based on 2023 DfT journey time data. Graphs for the remaining six routes can be found in Appendix F of this report without accompanying commentary.

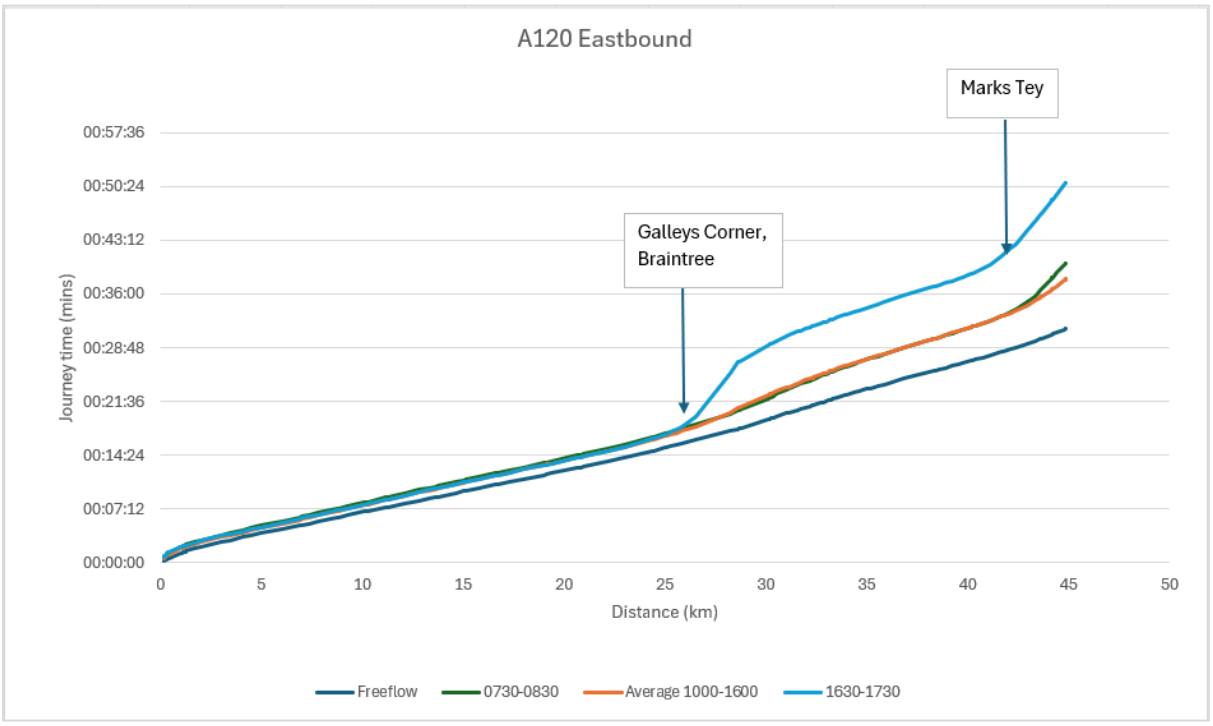

Figure 3-6: A120 eastbound from M11 J8 at Bishops Stortford to A12 J25 at Marks Tey

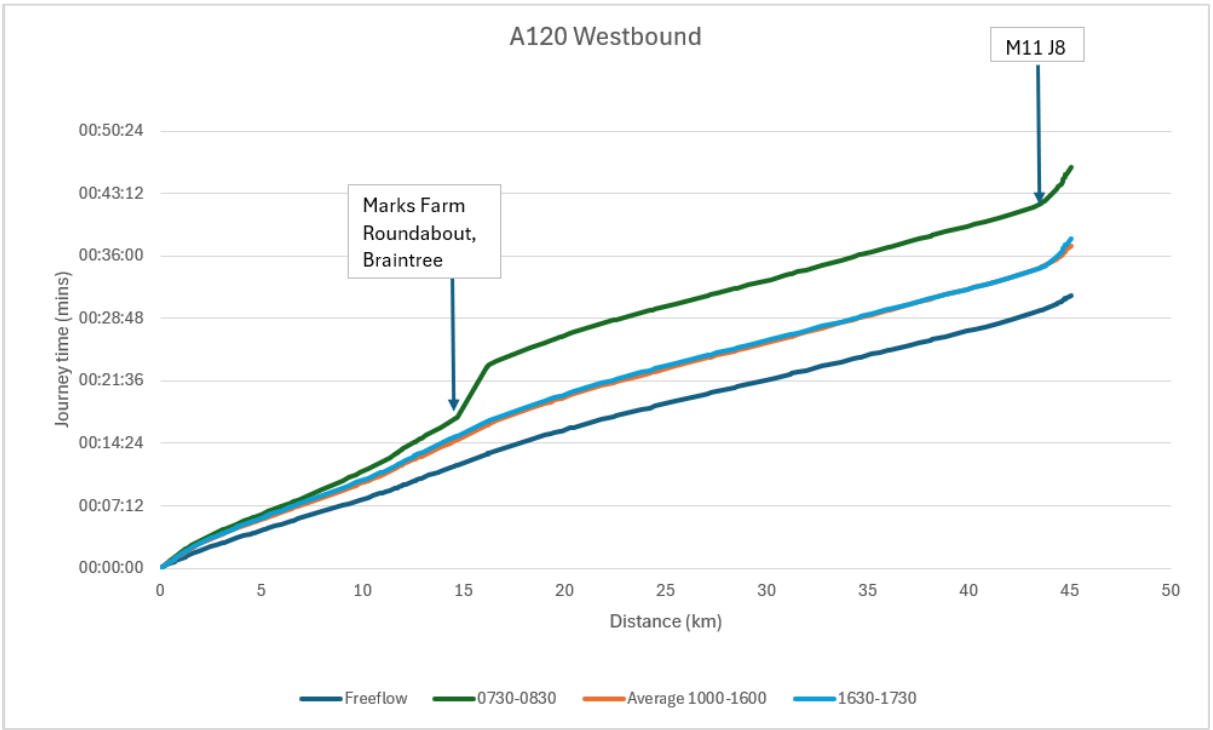

Figure 3-7: A120 westbound from A12 J25 at Marks Tey to M11 J8 at Bishops Stortford

The A120 journey time graphs illustrate the delays at Marks Farm Roundabout and Galleys Corner westbound in the AM peak and eastbound in the PM peak, with several minutes of delay incurred by trips routing through these junctions. This is shown by the divergence of the

peak hour graph lines from the free-flow. Delays are also shown on the approaches to M11 Junction 8 and Marks Tey (A12 J25) in both peak hours.

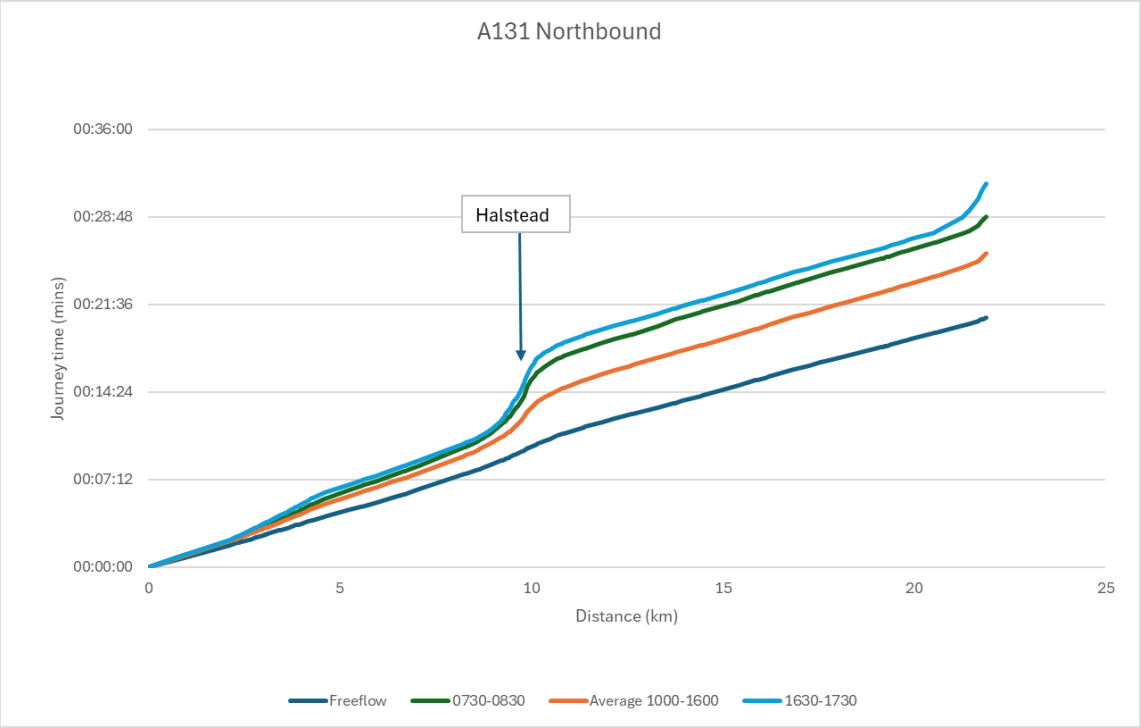

Figure 3-8: A131 northbound from A120 Marks Farm Roundabout to Sudbury

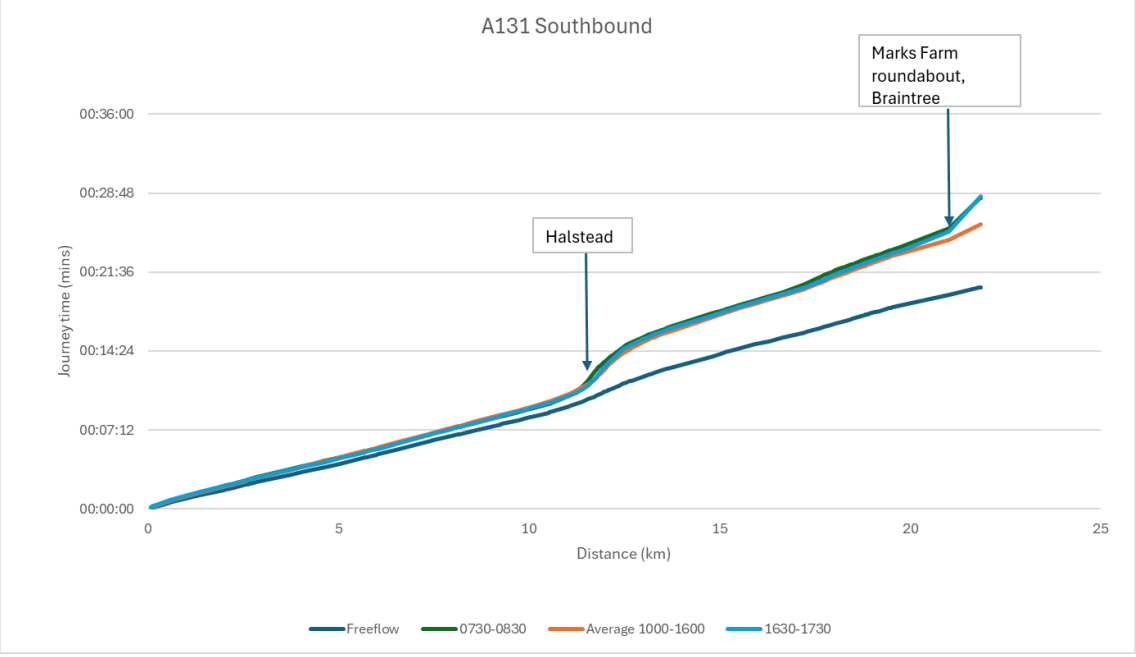

Figure 3-9: A131 southbound from Sudbury to A120 Marks Farm Roundabout

Delays along the A131 north-east of Braintree are shown to increase gradually through High Garrett in either direction in both peak hours, and then more significantly as the A131 passes

through Halstead. Peak hour delays are not typically shown along the rural section of the A131 between Halstead and Sudbury.

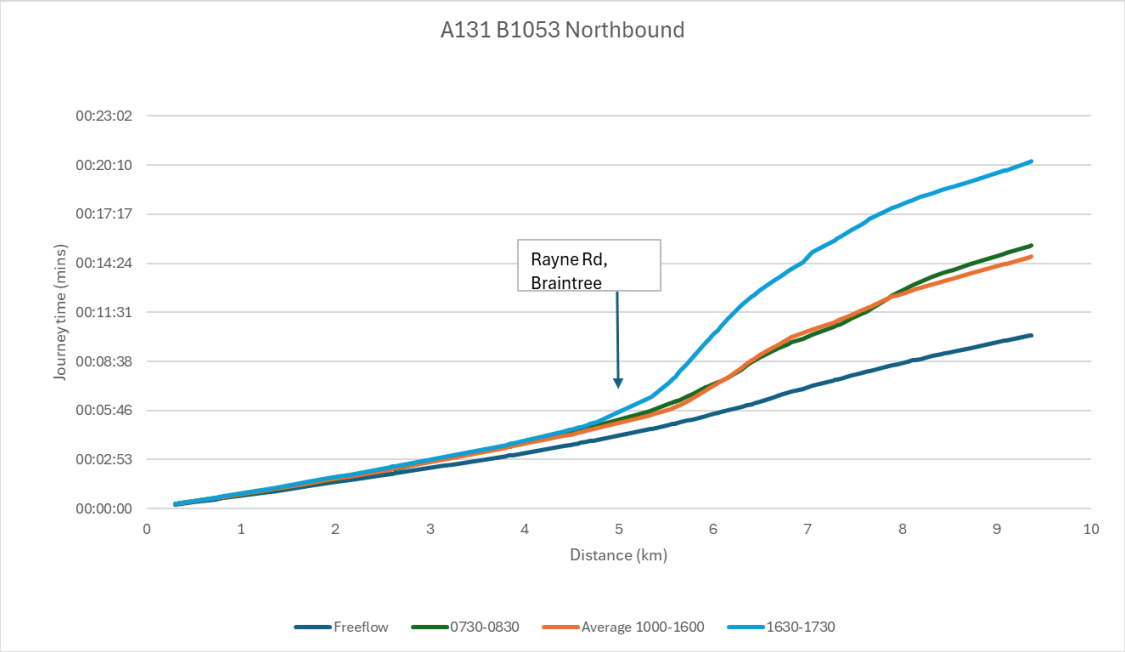

Figure 3-10: A131 northbound from Great Notley to B1053 Broad Road j/w A131, High Garrett

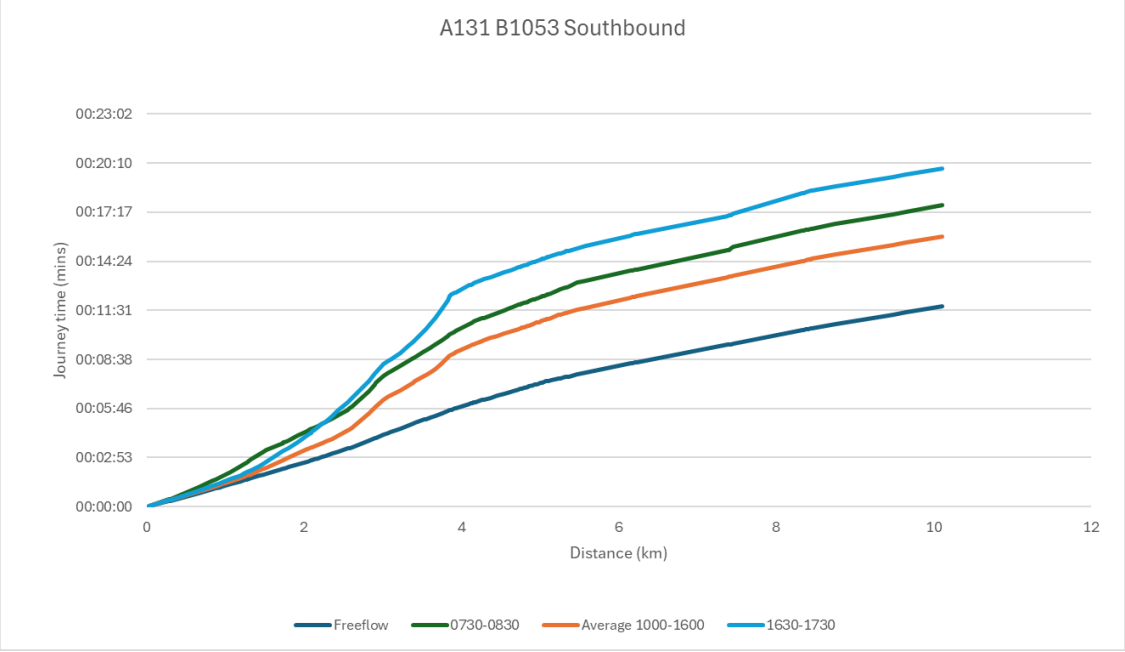

Figure 3-11: B1053 southbound from Broad Road j/w A131, High Garrett to A131 at Great Notley

Figure 3-10 and Figure 3-11 above illustrate the cumulative increase in journey time delays experienced through Braintree town along the B1053 in either direction. PM peak hour delays are shown to be typically higher than in the AM peak, and most notably in the northbound direction. The A130 south of Braintree around Great Notley is shown to experience little delay in the peak hours.

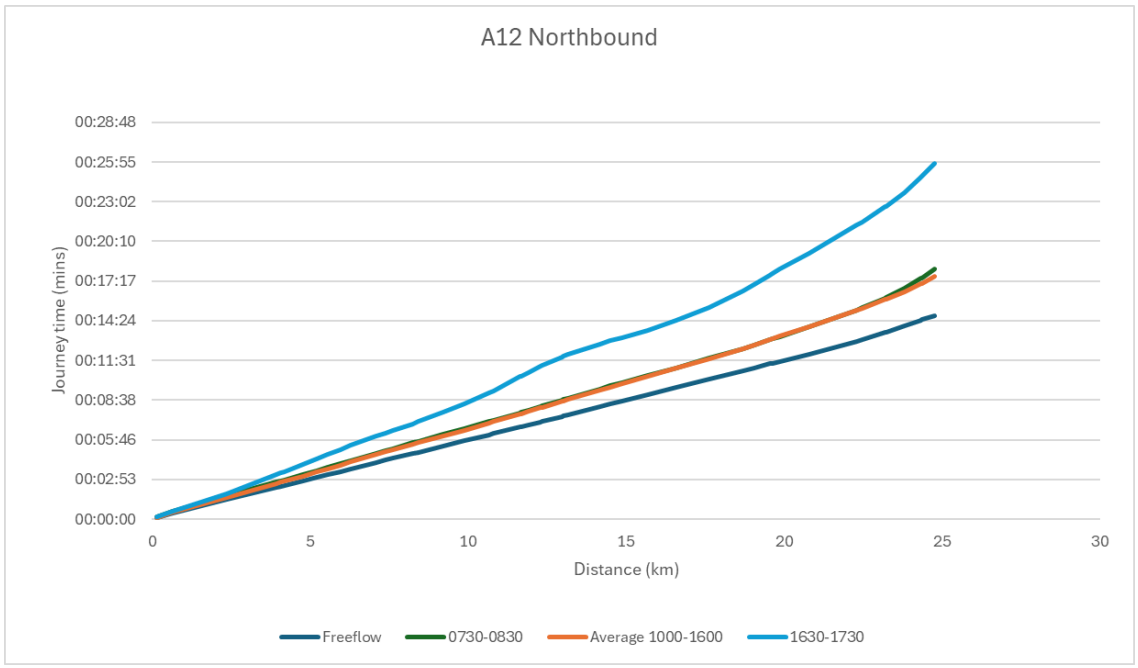

Figure 3-12: A12 northbound from J19 Boreham Interchange to J25 at Marks Tey

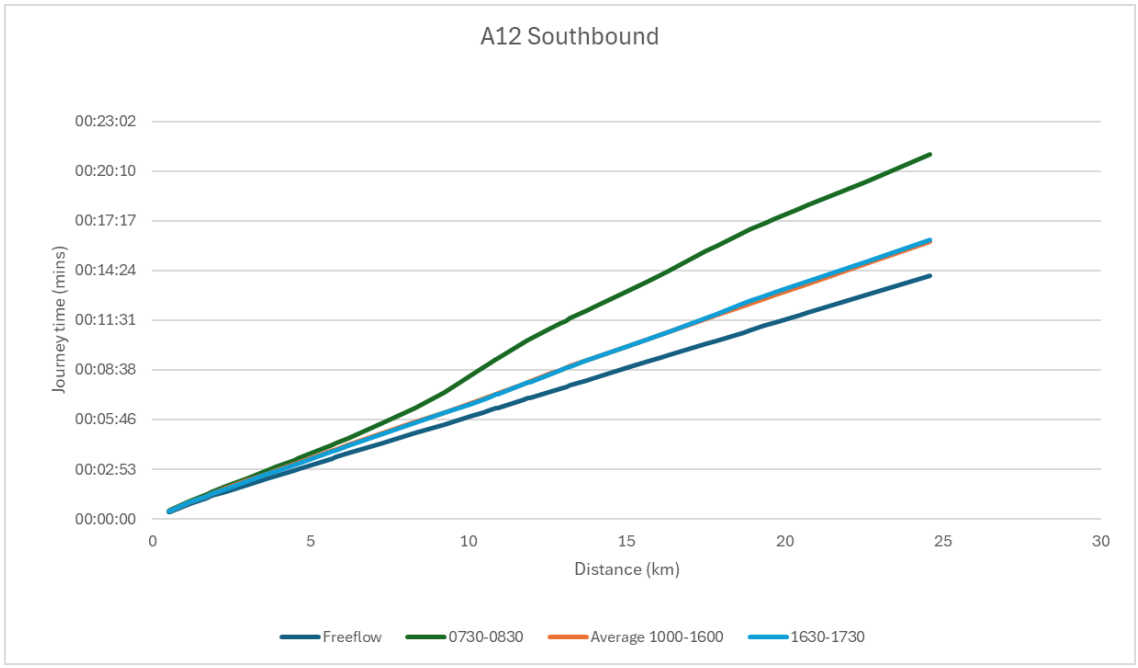

Figure 3-13: A12 southbound from J25 at Marks Tey to J19 Boreham Interchange

Without any single pinch-point on the A12, the high overall volume of peak hour traffic on the trunk road leads to a steady cumulative increase in journey time delay in both directions and in both peak hours. The route has a strong 'tidal flow' with higher volumes of traffic heading south towards London in the AM peak and higher volumes heading north away from London in the PM peak. This 'tidality' is reflected in the journey time delays experienced along the route through Braintree District, with greater delays southbound in the AM peak and northbound in the PM peak.

3.6 Accident Data Review

Essex Highways' road safety team have identified cluster sites in Braintree District that meet the criteria of three personal injury collisions in a 250-metre radius, of which one must be considered killed or seriously injured (KSI). Collisions occurred between 2021 and 2023. These cluster sites have been mapped alongside developments selected in the Local Plan preferred and alternative spatial options, and potential Local Cycling and Walking Infrastructure Plan (LCWIP) cycle routes.

There is a typical correlation between high traffic volumes and increased accident rates, with 'hotspots' expected at major junctions on the strategic road network. The analysis presented in the following section therefore places particular focus on the proximity of accident clusters to proposed Local Plan development sites and existing and potential active travel corridors into urban centres.

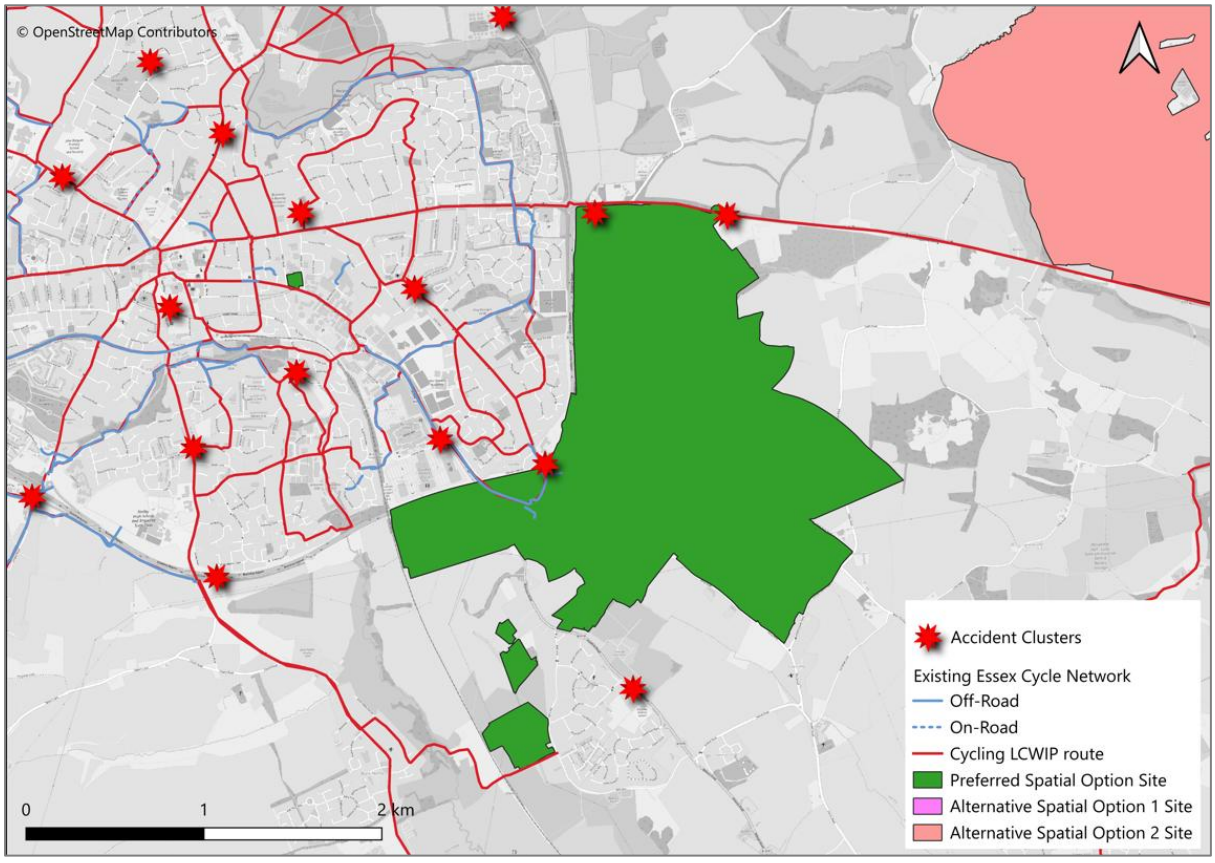

Figure 3-14: Accident clusters to the east of Braintree alongside proposed LCWP cycling routes

Figure 3-14 shows the accident clusters observed to the east of Braintree, overlaid with potential cycling routes proposed as part of ECC's LCWIP for the town.

There are two significant accident cluster sites at Galleys Corner roundabout and Marks Farm roundabout; however, only the former had a collision involving a non-motorised user. Further towards the town centre on the proposed walking routes there are clusters at Millennium Way outside Braintree Village shopping centre and a cluster on Bartram Avenue which included three pedestrian casualties.

With a sizeable allocation of housing proposed to the east of Braintree town centre in the Local Plan Preferred Spatial Option, emphasis will be on ensuring safe walking and cycling connectivity to the town centre and Braintree Village, acknowledging potential conflict points between vehicles and cyclists/pedestrians and reviewing the provision of crossing facilities and safe off-road segregated cycling routes as part of any package of sustainable mitigation measures, including LCWIP proposals, considered for the Local Plan.

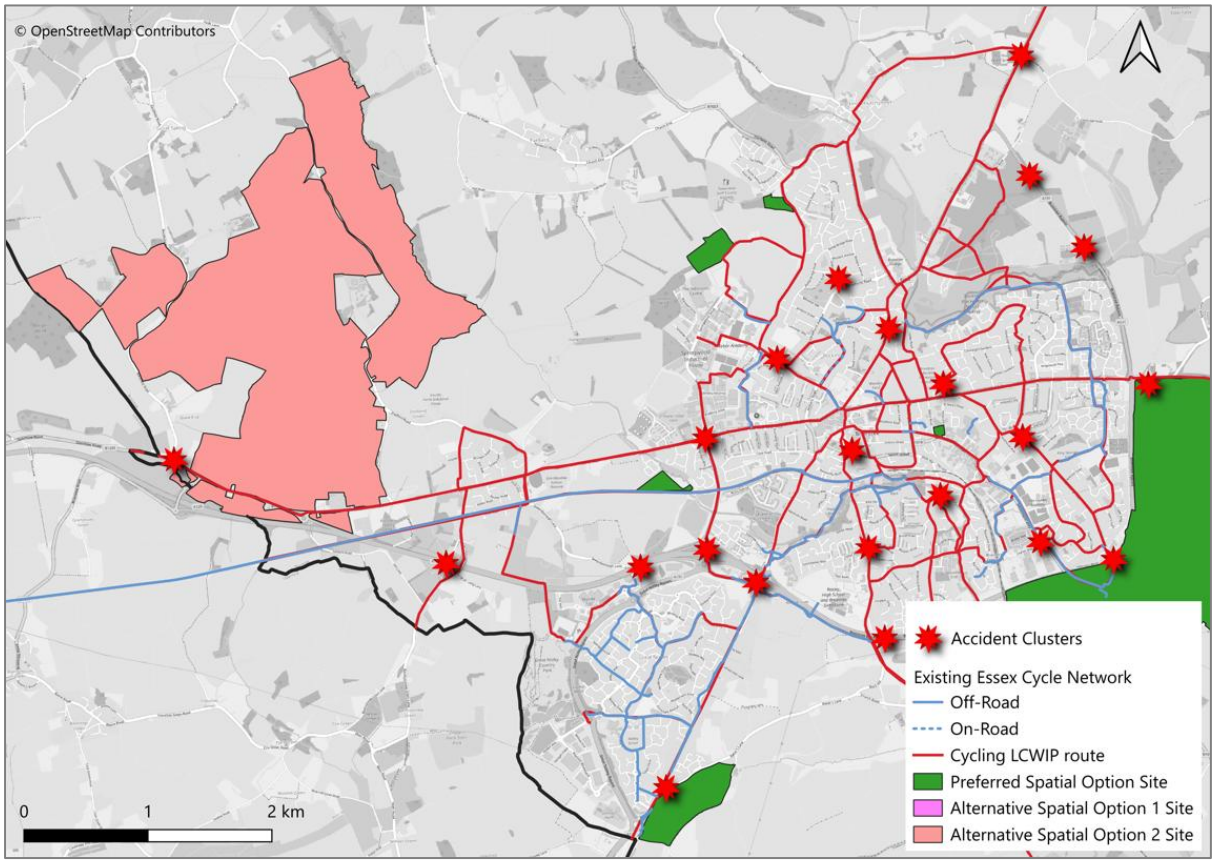

Figure 3-15: Accident clusters west of Braintree alongside proposed LCWP cycling routes

Figure 3-15 shows the accident clusters observed to the west of Braintree, overlaid with potential cycling routes proposed as part of ECC's LCWIP for the town.

There are accident clusters at the Rayne Road junction with Pods Brook Road involving three cycling casualties and two pedestrian casualties. To the north, there is an accident cluster on Panfield Lane (a potential cycling route to the town centre for development to the north) with two fatal collisions, five serious and seven slight accidents, including two cycle casualties. An accident cluster site in Great Notley included three fatalities, six serious and nine slight, with one pedestrian casualty.

With a number of smaller developments to the west of Braintree within the Preferred Spatial Option and a significant allocation of housing proposed at Andrewsfield in Alternative Spatial Option 2, emphasis will be on ensuring safe pedestrian and cyclist access to the town centre, acknowledging potential conflict points between vehicles and cyclists/pedestrians and reviewing the provision of crossing facilities and safe off-road segregated cycling routes as part of any package of sustainable mitigation measures, including LCWIP proposals, considered for the Local Plan.

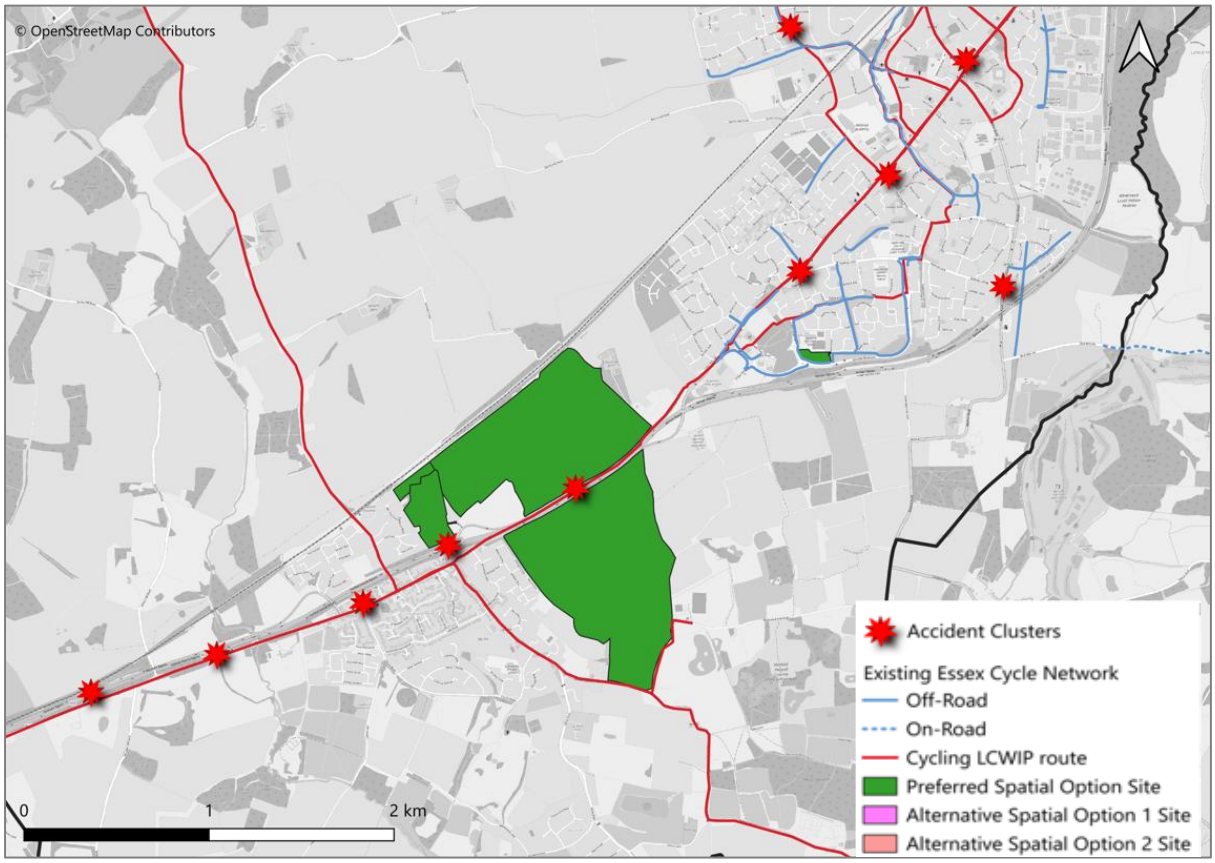

Figure 3-16: Accident clusters in Hatfield Peverel and Witham (south) alongside proposed LCWP cycling routes

Figure 3-16 shows the accident clusters observed in Hatfield Peverel and Witham (south), overlaid with potential cycling routes proposed as part of ECC's LCWIP for the town.

There is an accident cluster on Cressing Road which includes three serious and five slight injury accidents, along with a single pedestrian fatality. Additionally, there is an accident cluster on Braintree Road which includes seven serious and eight slight accidents, including two that involved pedestrians.

There is an additional accident cluster on The Street in Hatfield Peverel, where one fatal, seven serious and eight slight collisions have occurred, with one involving a cyclist.

With a number of smaller Local Plan development sites proposed in Witham and a larger allocation of housing located between Witham and Hatfield Peverel, a requirement for safe walking and cycling connectivity within and between the two settlements will again be important when considering sustainably-led Local Plan mitigation.

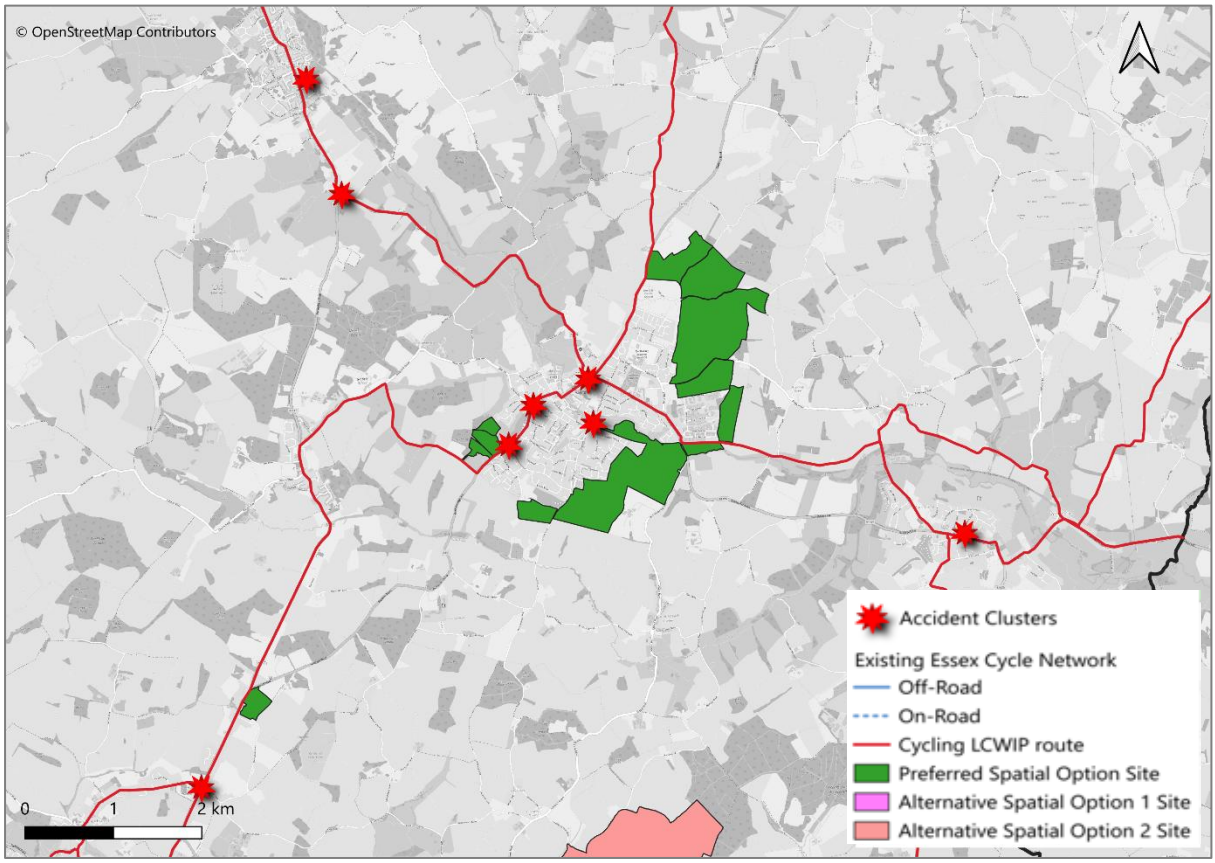

Figure 3-17: Accident clusters in Halstead alongside proposed LCWIP cycling routes

Figure 3-17 shows the accident clusters observed in Halstead, overlaid with potential cycling routes proposed as part of ECC's LCWIP for the town.

There are three accident clusters towards Halstead town centre on the A131. Adjacent to a proposed development site is a cluster where four serious and four slight collisions have occurred, two of which involved cyclists. Further towards the town centre near Trinity Road there was one fatal, seven serious and eight slight collisions, with four involving cyclists. On Head Street in the town centre there have been two fatal, 13 serious and 15 slight collisions, of which six involved cyclists. These clusters are along the A131 which is a locally important route for vehicles travelling from Braintree to Halstead and onto Sudbury.

With a sizeable allocation of housing proposed to the east of Halstead in the Local Plan Preferred Spatial Option, within close walking and cycling distance of the town centre, particular emphasis should be placed on ensuring safe pedestrian and cycling connectivity to the town centre. Given the large number of cyclist incidents recorded in the town centre in recent years, measures to tackle the conflict points between vehicles, cyclists and pedestrians should be at the forefront of any package of sustainable mitigation measures considered for the Local Plan.

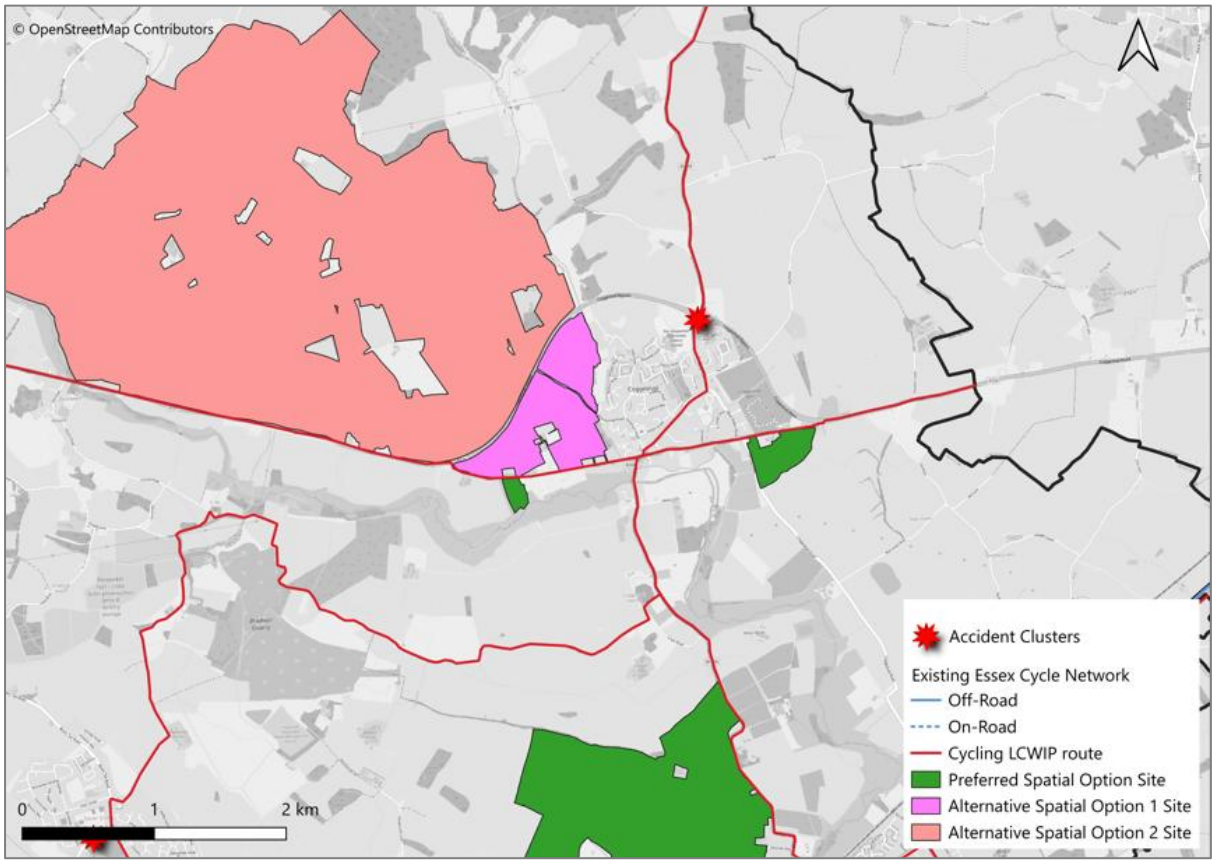

Figure 3-18: Accident clusters in Coggeshall alongside proposed LCWIP cycling routes

Figure 3-18 shows the accident clusters observed in Coggeshall, overlaid with potential cycling routes proposed as part of ECC's LCWIP for the town.

North of the village, there is a collision cluster on the A120 at the junction with Colne Road. There have been 13 serious and 13 slight collisions at this junction; none involving pedestrians or cyclists due to the strategic nature of the route. The A120 is however, part of a proposed LCWIP cross-district cycling route.

With the potential for a significant quantum of housing proposed at Pattiswick Hall Farm to the west of Coggeshall in Alternative Spatial Option 1, emphasis will be on ensuring safe cycling and pedestrian links to the village, providing suitable crossing facilities over the A120 and possible segregated cycle lanes along the strategic route, where required as part of any package of sustainable mitigation measures for the Local Plan.

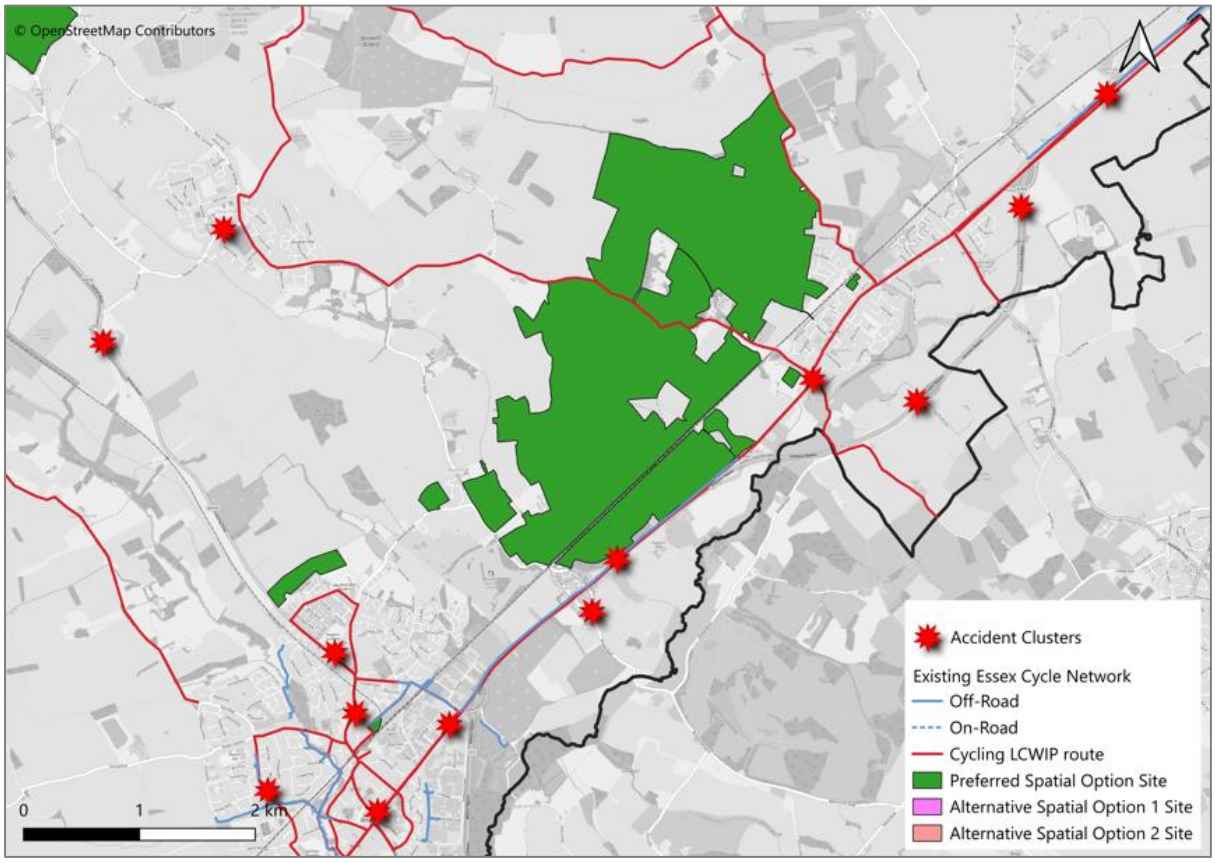

Figure 3-19: Accident clusters in Kelvedon and Witham (north) alongside proposed LCWIP cycling routes

Figure 3-19 shows the accident clusters observed in Kelvedon and Witham (north), overlaid with potential cycling routes proposed as part of ECC's LCWIP for the town.

There is an accident cluster in Kelvedon High Street, with three serious and three slight collisions, one including a cyclist casualty. Within Witham, there are collision clusters on both Cressing Road and Braintree Road, one of which involved a cyclist casualty.

With a large allocation of housing proposed at King's Dene in the Local Plan Preferred Spatial Option, safe walking and cycling links to both Witham town centre and Kelvedon should be considered, addressing potential conflict points between vehicles and cyclists on the B1024 London Road, in particular, as part of any package of sustainable Local Plan mitigation.

4. Review of Existing Policies and Strategies

4.1 Introduction

This chapter of the report summarises potential transport schemes and measures highlighted in various Braintree District and ECC policies and strategies, and then provides an outline of scheme affordability and deliverability – commensurate with an early-stage Regulation 18 review of costs and funding opportunities.

4.2 Summary of Policies and Strategies

Several policies and strategies relevant to Braintree District, as detailed in Table 2-12 below, were reviewed to identify potential active travel, public transport and highway schemes.

Table 4-1: Policies and strategies utilised to identify transport schemes

Policy / Strategy	Publication Date	Source
Braintree District Local Plan	Section 1: 2013 Section 2: 2021/22	Braintree Local Plan Section 1 Braintree Local Plan Section 2
Braintree District Infrastructure Delivery Plan	2017 and 2021	Braintree Infrastructure Delivery Plan (2017) Braintree Infrastructure Delivery Plan (2021)
Braintree Town Future Transport Strategy	2022 - 2025	Braintree Town Future Transport Strategy
Local Transport Plan 4	2025	Implementation Plan: Braintree and North Essex
Local and Countywide Cycling & Walking Infrastructure Plans	2022 (Local) and 2025 (Countywide)	Local Cycling and Walking Infrastructure Plans Countywide Cycling Infrastructure Map
Bus Service Improvement Plan	2021	Bus Service Improvement Plan
Bus Network Review	2022	Bus Network Area Reviews
Essex Electric Vehicle Charge Point Strategy	2023 – 2025 (Phase 1)	Essex Electric Vehicle Charge Point Strategy
Braintree Climate Change Strategy	2024 - 2025	Braintree Climate Change Strategy
Braintree Cycling Strategy	2021	Braintree Cycling Strategy

4.2.1 Braintree District Local Plan & Infrastructure Delivery Plan (IDP)

The Braintree District Local Plan comprises two sections: Section 1 (2013 to 2033) sets out a strategic vision for growth, sustainability and infrastructures across the North Essex authorities, while Section 2 (2021/22) updates commitments specific to Braintree to 2033.

Section 1 identifies Garden Communities as key growth locations, integrating housing, employment and sustainable transport, with a strong emphasis on modal shift – prioritising

walking, cycling and public transport over car dependency. Strategic corridors, including the A12, A120 and rail services are highlighted for capacity improvements.

Section 2 provides detailed policies for Braintree District, covering site allocations and development management. These policies aim to enhance public transport accessibility, reduce congestion, and expand cycling networks. They support transport-oriented development near Braintree and Witham rail stations and require travel plans and sustainable transport measures for new developments. Strategic priorities include regeneration around Braintree town centre and station, growth in Witham and Halstead, and employment sites along the A120 corridor to maximise connectivity.

Each of these sections are accompanied by an Infrastructure Delivery Plan, to set out the required infrastructure to unlock the land use allocations.

4.2.2 Braintree Town Future Transport Strategy & Local Transport Plan 4 (LTP4)

The Braintree Town Future Transport Strategy (BTFTS) examines travel patterns, transport challenges and opportunities within Braintree Town. Its vision is to make Braintree and attractive, safe, and sustainable place to live, work, study, and enjoy – supported by a high-quality, innovative transport system that addresses climate change and enhances connectivity, accessibility, and growth.

The strategy prioritises sustainable travel, such as walking and cycling, to improve connectivity, reduce pollution, and create healthier environments. It promotes greener transport through enhanced infrastructure and integrated network planning.

To deliver this vision, the BTFTS adopts a zonal approach, with each zone addressing specific transport priorities. This supports both short local trips and longer journeys for both residents and commuters.

The three zones as shown in Figure 4-1 overleaf are:

- Zone 1: Active travel investment within the town centre
- Zone 2: 20mph schemes in residential areas and Local Cycling and Walking Investment Plan (LCWIP) proposals
- Zone 3: Strategic network improvements linking the town centre with surrounding urban and rural areas.

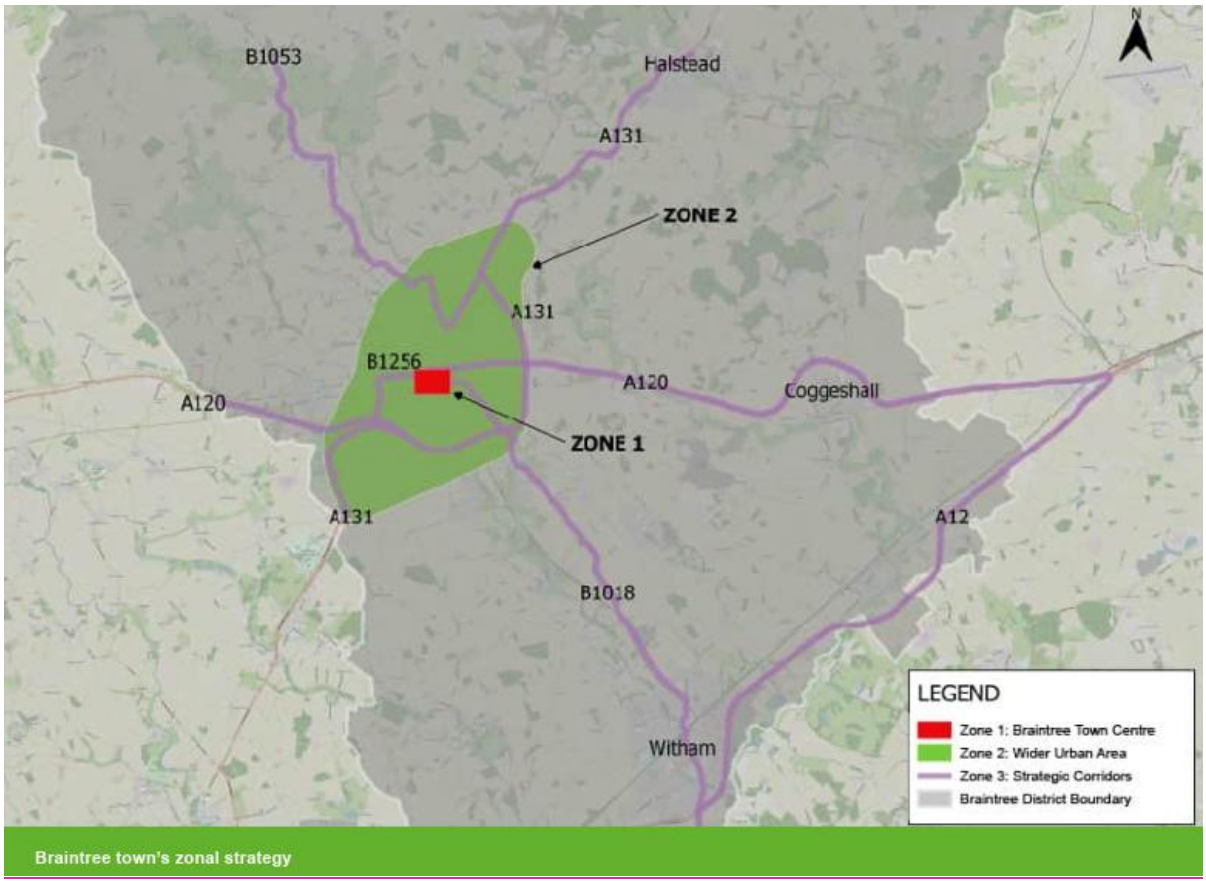

Figure 4-1: Braintree Future Transport Strategy zone-based approach to prioritising transport interventions (source: Braintree Future Transport Strategy)

The BTFTS has since been merged with the Local Transport Plan 4 (LTP 4), which acts as the ECC's guiding transport document with a bespoke Implementation Plan for Braintree and North Essex.

The Essex Local Transport Plan 4 - 'A Better Connected Essex' covers all travel and transport in Essex as required under the Local Transport Act 2008. This is a statutory document which guides the work of the council, its organisations and local communities. The LTP4 is currently under consultation, with specific infrastructure plans for each Essex district. The plan aims to promote active and sustainable transport, encouraging walking, cycling and public transport as primary modes of travel. It also aims to support economic growth by improving connectivity and enabling efficient movement of people and goods. Additionally, the strategy prioritises measures to enhance safety and protect the environment, reducing road casualties, improving air quality, and minimising carbon emissions.

The specific challenges highlighted in Braintree include:

- High car dependency – Over 70% of residents drive to work due to limited public transport options
- Poor public transport access – rural areas have infrequent or no bus services; rail services are limited and vulnerable to disruption
- Health issues – high inactivity and obesity rates; poor air quality and limited access to green spaces
- Congestion – key routes like the A120, A12 and A131 face delays

- Infrastructure needs – growing population requires sustainable transport solutions and resilient infrastructure

Braintree and North Essex's Infrastructure Plan set out a range of proposed solutions to support the plan goals, with specific focus on Braintree town, Witham and Halstead:

- **Public Transport Improvements**
  - Expand Digi-go
  - Increase bus frequency, affordability, and coverage
  - Develop Rapid Transit Systems connecting towns
  - Improve bus stops and corridors
- **Cycling and walking enhancements**
  - Build new cycle routes
  - Improve existing networks
  - Add cycle parking and pedestrian friendly infrastructure
- **Road and rail upgrades**
  - Dual the A120 between Braintree and the A12 at Marks Tey
  - Improve key routes like A131 and B1018
  - Add passing loops to the Braintree Branch Line railway, for more frequent services
- **Sustainable development**
  - New housing and employment sites with integrated transport
  - Secure funding for infrastructure to support growth
  - Expand electric vehicle charging points
- **Safety measures**
  - Introduce traffic calming and 20mph zones
  - Enhance bus stop safety with better lighting, CCTV, and real-time information
  - Improve walking and cycling safety, especially near rail stations
- **Environmental protection**
  - Reduce carbon emissions by promoting zero emission buses and active travel
  - Minimise noise and air pollution
  - Expand green spaces and protect natural habitats

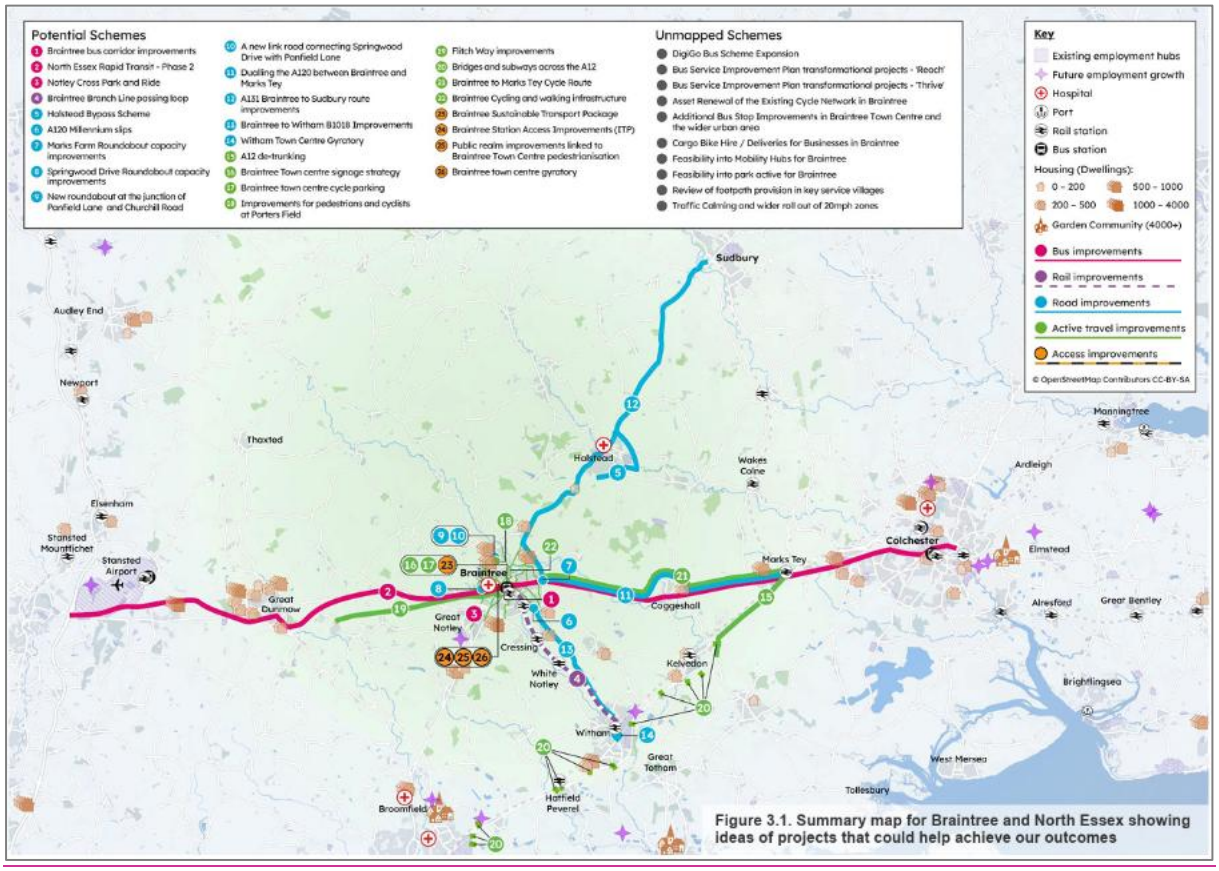

Figure 4-2: Summary map for Braintree and North Essex showing ideas of projects stated in the LTP4 Implementation Plan (source: LTP4 Braintree & North Essex Implementation Plan)

4.2.3 Local and Countywide Cycling & Walking Infrastructure Plans (LCWIPs) & Braintree Cycling Strategy

In 2021, BDC consulted and adopted the Braintree Cycling Strategy, to help make cycling safer, more convenient and a desirable choice to all of those living, working and visiting the district. The aim was to develop a better-connected network of high-quality cycling routes, taking specific advantage of the opportunities new developments offer.

By 2031, the strategy aim is to double the number of cycling trips on monitored routes and key corridors, supported by a cultural shift that makes cycling an enjoyable everyday choice for short journeys. It aims to broaden participation across all demographics, increasing user confidence and improving access to jobs. This requires the extension of cycle access into rural areas and to key sites across the district.

The strategy's implementation plan is structured around seven key priorities and interventions:

1) Creating coherent cycle networks – by developing strategic network plans, updating LCWIP plans and enhancing safety measures.

2) Securing funding opportunities – using funding such as developer contributions, S106 agreements, and transformational funding applications.

3) Promoting cycling facilities – schemes such as mapping cycle networks, promoting leisure cycling and tourism, and developing behaviour change communications.

4) Governance and partnership – schemes such as embedding cycle promotion and development into council operations by collaborating with public health organisations, public transport providers, parish councils, voluntary groups, businesses and external cycling specialists.

5) Encouraging behavioural change – schemes such as marketing campaigns, school and workplace travel plans, adult cycle coaching, and Bikeability programmes.

6) Promoting electric and cargo bikes – schemes such as partnerships with e-cycle providers and marketing campaigns.

7) Monitoring and evaluation – schemes such as annual surveys, air quality monitoring, active travel plan reviews, and cycle counter installations.

To support priority one of the Cycling Strategy, the LCWIP for Braintree was refreshed to reflect developments in active travel at both national and county levels. This update utilised the methodology set out by the Department for Transport (DfT). These plans are designed to identify strategic, essential improvements for cycling and walking in the local area, they include filling gaps in the existing network infrastructure, providing new infrastructure along identified desire lines, incorporate local guidance, knowledge and needs, as well as delivering wider streetscape enhancements.

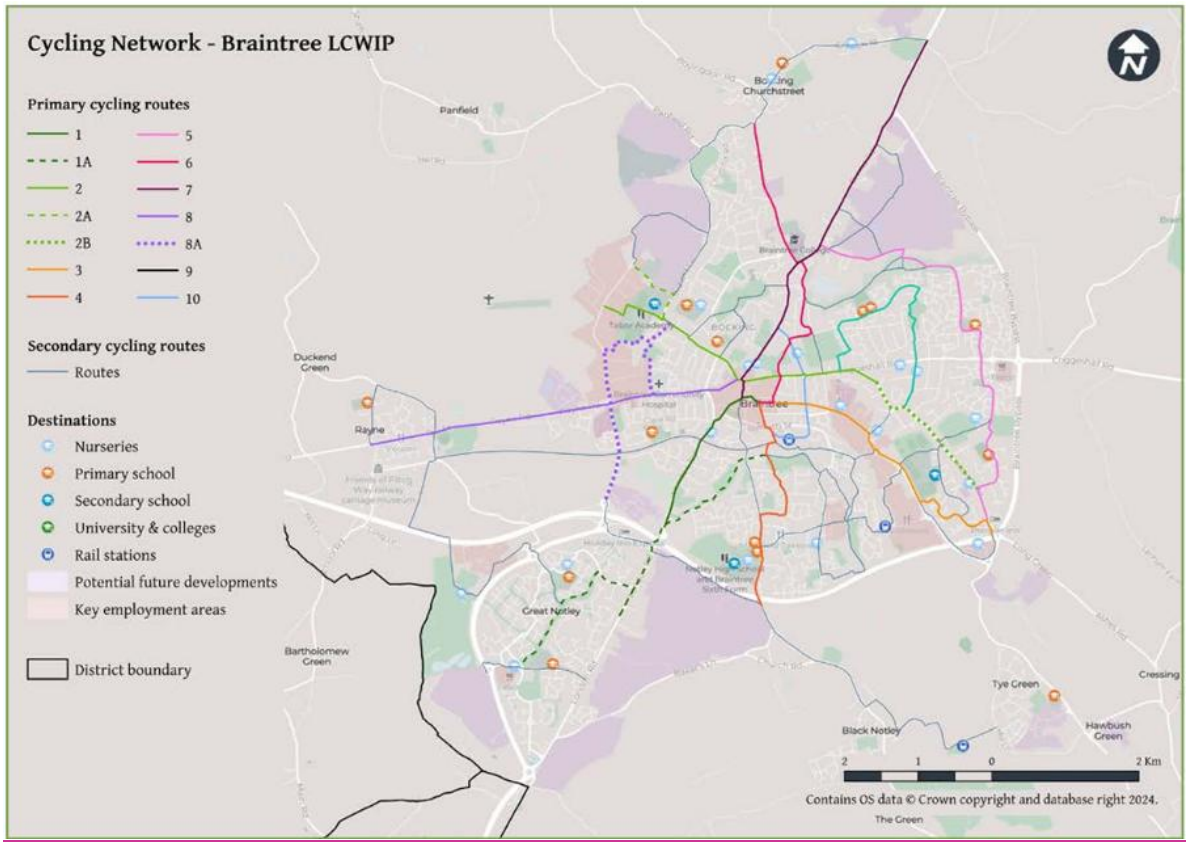

Figure 4-3: Braintree LCWIP cycling network proposals (source: Summary of Braintree cycling and walking plans, ECC, September 2024)

Potential walking and cycling routes have also been identified and refined in Witham through stakeholder and public engagement, as documented in the published ECC report: 'Local Cycling and Walking Infrastructure Plans – Witham, July 2025'[4]. The report presents analysis of the data collected from the LCWIP consultation process, and evaluates the level of support for cycling and walking in Witham through people's stated attitudes and priorities.

4.2.4 Bus Service Improvement Plan & Bus Network Review

Bus Service Improvement Plans (BSIPs) are a key part of the strategy set by Bus Back Better, the Government's national bus strategy published in March 2021. They set out the local issues relating to the bus network and how local authorities will tackle them.

Following the development of the county-wide BSIP, focused network reviews of each district were undertaken in 2021, to ensure bus operations in the districts align with the three BSIP targets, focused on journey time reliability, passenger satisfaction and patronage. The review provided an in-depth look at how bus services currently operated in Braintree District, identifying opportunities for network improvements and how to tailor bus provision to reflect local characteristics.

Following the release of BSIP, ECC, in collaboration with bus operators, entered into an Enhanced Partnership in June 2021, in parallel to the area review being undertaken. The Enhanced partnership were consulted on the proposals set out within the network reviews, with the operators able to feed in their ideas and aspirations for the network.

The core bus connectivity corridors identified within the Braintree network review were:

- A12 Kelvedon & Witham (Colchester to Chelmsford) – serving Feering, Kelvedon, Witham and Hatfield Peverel
- Witham Station – serving Witham Station, Newlands Shopping Centre, The Public Hall Witham and the supermarket
- Halstead East-West – serving Bluebridge Industrial Estate, supermarket, Halstead Heritage Museum and Halstead Hospital
- Halstead North-South – serving Colne Valley Postal History Museum and supermarket
- Braintree to Great Notley – serving Notley Green, Youngs End and the Braintree border onwards to Chelmsford Racecourse
- Braintree to Deanery Hill – serving the residential area, Glebe Hall and local retail
- Braintree Town Centre – serving the urban retail area, bus station and railway station
- East Braintree Town – serving the supermarket, Flagfinders coach depot, residential area and local retail

[4] letstalkessexsustainabletravel.co.uk/35552/widgets/112064/documents/90049

- Braintree Town to Bradford Street – serving Bocking Arts Theatre, local retail and the Colchester Institute Braintree Campus
- A120 Braintree to Colchester – serving Coggeshall and Bradwell
- Witham to Braintree – serving Cressing, Lanham Green, Silver End and Rivenhall
- Braintree to Halstead – serving High Garrett and Thistley Green
- A1124 Halstead to Colchester – serving White Colne and Earls Colne
- A131 Halstead to Sudbury – serving rural areas

A future bus network was envisaged for the district, aligning operations to proposed minimum and preferred standards, with the aim to increase level of service along key routes and connecting trip attractors with the right frequency levels and the right times of day.

The identified supporting and low accessibility corridors were identified, to be upgraded into the core network as part of this aspirational network to enhance the accessibility

- B1256 & Springwood New Development – serving Springwood Industrial Estate, Great Notley and the Skyline 120 employment area
- Church Lane – added to the Braintree Town to Bradford Street corridor to enhance local accessibility to healthcare facilities
- Northeast Braintree New Development – serving the newly built residential area
- Southeast Braintree – serving Braintree Freeport, Braintree Retail Park, Alec Hunter Humanities College and the residential area
- Hedinghams and Sturmer, Great Yeldham to Chapel Street – serving Falcon Road Industrial Estate, local and rural retail, Theaseldown School, Hedingham School and Sixth form and the Colne Valley Railway

Following this assessment a series of interventions were developed along each of the corridors to overcome some of the issues and leverage opportunities. these interventions included bus stop upgrades, bus priority measures, timetable changes and new routes.

4.2.5 Essex Electric Vehicle Charge Point Strategy & Braintree Climate Change Strategy

Electric Vehicle (EV) infrastructure is a key consideration for a future proofed transport network. There is need to integrate EV's with sustainable transport and future mobility solutions to improve travel choices.

The Essex Electric Vehicle Charge Point Strategy outlines the county's approach to developing a reliable, accessible, and fairly priced electric vehicle charging network to support

the transition to net zero carbon emissions by 2050. The strategy focuses on immediate actions up to 2025 while considering long-term goals aligned with emerging technologies and policies. By 2030, Essex aims to deliver "The Right Charger in the Right Place," creating a comprehensive, accessible, and sustainable EV charging network that supports the county's net zero goals, reduces car travel, and integrates with broader transport solutions.

Essex is in the early stages of EV adoption, with over 11,680 battery electric vehicles (BEVs) and 8,925 plug-in hybrid electric vehicles (PHEVs) registered as of 2023. There are over 300 public charge points, including 100 rapid/ultra-rapid chargers. However, 36% of households in Essex have limited or no access to off-street parking, higher than the UK average, which creates challenges for EV charging. EV ownership in the county is expected to grow to 50,000 BEVs by 2025 and 220,000 by 2030, requiring a minimum of 1,500 public charge points by 2025, increasing to 6,000 by 2030.

Braintree is identified as one of the areas with potential demand for residential on-street, destination, and on-route public EV charging infrastructure by 2025.

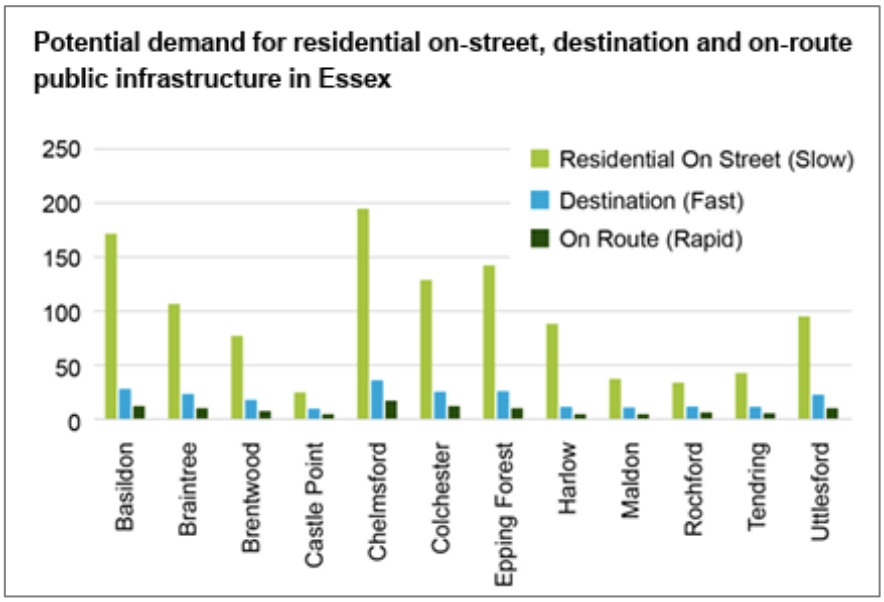

Figure 4-4: Potential demand for EV charging infrastructure in Essex per district (source: Essex Electric Vehicle Charge Point Strategy 2023-2025)

Braintree has a purpose built GRIDSERVE electric forecourt, which is part of the existing charge point infrastructure in the district and an example of charging infrastructure along key routes, which is highly valued for top-up charging. This was the first charging forecourt of its type in the UK, showing Braintree's intention and role in current and future EV infrastructure in Essex.

The DigiGo electric shared public transport service operating in Braintree walks-the-walk in terms of utilising EVs. Each of the vehicles are EV powered, reducing emissions as they serve the rural communities in Braintree District.

BDC declared a Climate Emergency in July 2019 and updated its Climate Change Strategy, originally developed in 2015, to set a clear aim for carbon neutrality. The strategy aims to empower communities and businesses to reduce climate impacts.

A key component of the vision is transforming transport systems to support sustainable growth and climate resilience. Delivering this vision will require major investment in infrastructure, including new sustainable transport networks and the electrification of vehicles and public transport.

To achieve this, the Council will work closely with energy providers to help meet future electricity demand for EVs and EV powered public transit. Securing funding is critical, and the strategy emphasises demonstrating cost savings from carbon reduction initiatives to strengthen business cases. Success depends on collaboration across local authorities, businesses, and community groups to implement sustainable transport measures and influence national policy.

4.3 Deliverability and Affordability

As part of this early-stage appraisal, high-level information has been documented below to support the evaluation of the deliverability and affordability of Local Plan transport mitigation. Evidence to be submitted at Regulation 19 consultation will cover targeted mitigation measures to accommodate Braintree Local Plan development in more detail, with outline cost estimates provided for each. Scheme deliverability and affordability will be set out in Braintree District's Infrastructure Delivery Plan (IDP) and Viability Assessment as well as site promoters' own determination of scheme costs and delivery mechanisms within their planning applications.

4.3.1 Outline Examples of Scheme Costs

Large-scale infrastructure schemes such as Millennium Way Slips[5] – a proposed grade-separated junction on the A120 immediately west of Galley's Corner in the vicinity of Braintree Garden Village – are likely to cost in the tens of millions (of pounds). A recent 2022 evaluation of the cost of the scheme to support a Levelling Up Round 2 funding bid was estimated to be between £20-25m.

Based on recent examples of schemes delivered in Colchester, smaller-scale junction redevelopment might be expected to cost in the region of £5-10m, with minor capacity upgrades to existing layouts, including signalisation, potentially costing between £2-5m.

Estimated high-level costs for 'typical' walking and cycling routes, mobility hubs and secure cycle parking have been provided in Table 4-2 below. These are provided for guidance at this stage of appraisal, with more robust estimates requiring the consideration of topography, statutory utilities, environmental constraints etc. Estimates and costs could notably be higher '£ per KM' dependant on the location, particularly within existing urban corridors with existing constraints, services and infrastructure that require additional mitigation and construction work to achieve LTN1/20 compliance.

Table 4-2: Active travel mitigation outline costs

Active Travel Mitigation	Per km or Unit Cost
Walking Route	£750,000 - £1m
Cycling Route	£1.5m – £2m
Mobility Hub	£500,000
Secure Cycle Parking	£20,000

The following sections of this report highlight the various sources of funding available to help in the evaluation of scheme affordability and deliverability, once scheme costs have been fully determined.

[5] https://www.essexhighways.org/a120-millennium-way

4.3.2 Developer S106 Contributions

Delivery of the transport strategy will involve several sources of funding, of which developer contributions will form a significant part.

Paragraph 35 of the NPPF states that: "Plans should set out the contributions expected from development," and this would be expected to vary based on the size of development proposed. Smaller developments of up to 100 units might be capable of attracting Section 106 contributions of between £10,000 to £20,000 per unit whilst larger sites could attract contributions in excess of £60,000 per unit - particularly those on larger greenfield sites that benefit from economies of scale and higher market values.

For a preferred spatial option of around 11,500 homes in Braintree District:

- Assuming Plan delivery of predominantly smaller sites, a Section 106 contribution of **£10,000** and a travel planning allowance of £1,600 per house built, would equate to a contribution of around **£115m** to be spent, in part, on transport mitigation, and £18.4m specifically allocated for travel planning measures.
- Assuming Plan delivery through a mix of larger and smaller sites, a Section 106 contribution of **£30,000** per house would equate to an overall developer contribution of around **£345m**.
- Assuming Plan delivery of predominantly larger sites, a Section 106 contribution of **£50,000** per house would equate to an overall developer contribution of around **£575m**.

At the same time, developers would be expected to fund on-site walking and cycling measures and other placemaking ventures to encourage sustainable means of travel for trips within their developments.

4.3.3 Alternative Sources of Funding

Given fiscal pressure on local budgets, a diversified funding strategy will be needed to support Local Plan growth in Braintree District, that blends national grants and settlements, locally controlled allocations, developer contributions and, where appropriate, private finance.

The following funding streams represent key opportunities for consideration:

- **Housing Infrastructure Fund (HIF) and Homes England Funding** – HIF has historically provided capital investment to unlock housing sites by funding critical infrastructure. Homes England's 2025 investment roadmap indicates an expanding opportunity – introducing a National Housing Bank (subject to HM Treasury's approval) to deploy debt, equity and guarantees, with scope to support mixed-use schemes and enable infrastructure to unlock homes and economic growth. For Braintree District this can complement developer contributions on strategic growth corridors or large new communities, especially where upfront costs or viability gaps constrain delivery.

- **Local Transport Grant (LTG)** – From 2026/27 this will be delivered as a multi-year settlement, with formula allocations based primarily on population and deprivation. LTG can fund public transport enhancements, zero-emission buses, accessibility, congestion relief, safety, and active travel schemes. This is likely to be well aligned to Local Plan mitigation and place making packages within Braintree District.

- **Bus Service Improvement Plan (BSIP) and Bus Service Operators Grant (BSOG)** – The government has released revenue and capital funding support to Local Transport Authorities to implement BSIPs. In 2025/26 combined allocations were confirmed for the East of England authorities. These can underwrite bus priority measures, network reshaping to serve new sites, fare initiatives and frequency upgrades – which are key to supporting modal shift assumptions in Local Transport Plan evidence.

- **Active Travel Funding** - Active Travel England has confirmed multi-year support and is reforming the local funding model, including capability-based allocations. This supports high-quality cycling and walking networks, school streets, design and engagement, which is instrumental in delivering sustainable access to new developments and town centre regeneration.

- **Major Road Network (MRN) and Large Local Majors (LLM)** – These are Department for Transport programmes for significant local road schemes and large schemes addressing capacity, reliability, and growth. These dovetail with Local Plan access strategies where bottlenecks on the MRN constrain housing delivery. Based on historic funding allocations the types of interventions that have been funded include junction upgrades, relief links, and bus pinch-point schemes.

- **National Highways Structures Fund and Road Investment Strategy (RIS)** – Where Local Plan growth depends on strategic junction capacity or resilience (e.g. links to the A120 and A12 corridors), joint working with National Highways has the potential to unlock co-funding for infrastructure delivery. The start of the next five-year Road Investment Period (RIS3) will begin in April 2026. A draft RIS3 was published in August, outlining the key role the RIS has in supporting the enhancement, renewal and maintenance of the strategic road network, and in supporting the Government's housing delivery goals. The draft RIS3 set out the public funds available for the period (April 2026 to March 2031) of £24.983 billion. RIS3 is due to be published in March 2026.

- **Levelling Up Fund (LUF), Towns Fund and UK Shared Prosperity Fund** – These funds can package public realm and transport measures that reinforce Local Plan town centre and transport corridor policies and proposals.

- **Public-Private-Partnerships (PPP)** – UK private equity is increasingly backing transport sector assets, and showing interest in UK roads, EV charging networks, and ITS schemes, leveraging long-term, stable cash flows. The government's 10-year infrastructure strategy champions PPPs selectively for projects with revenue streams and clear risk structures.

5. Summary and Conclusions

5.1 Summary Review of Spatial Options

The concluding section of this report provides a summary evaluation of the three Local Plan spatial options to help inform the next stage of Regulation 18 appraisal. This has been presented in the form of opportunities and challenges identified for each option from the baseline and strategy review and sustainable accessibility analysis and findings.

5.1.1 Preferred Option

Opportunities

- Places a focus of development at Kings Dene which scores well in the sustainable accessibility appraisal – based on an assumption of high trip internalisation and developer funding of public transport and walking/cycling infrastructure.

- Kings Dene, as well as sites in Hatfield Peverel, are located close to the Great Eastern Main Line (GEML) with good regional commuting links by train.

- Proposed development in Halstead is in walking and cycling distance of key shops and services in the town.

- The East Braintree site is close to the Braintree Branch Railway Line, part of the strategic road network in the A120, and key shops and services in Braintree town.

- East Braintree is an area of the district where transport strategies have focused attention on improving future network performance – through provision of LCWIP connectivity into the town centre, to consideration of notable highway capacity improvement schemes such as Millennium Way slips. S106 contributions could be used to help deliver several proposals which have already been subject to feasibility studies.

- Of the three spatial options considered, the Preferred Spatial Option performs best in terms of existing levels of sustainable accessibility. In theory, this presents a lower risk in terms of dependency on developer provision of sustainable transport infrastructure to help manage traffic impact on the local road network.

Challenges

- The proposed Kings Dene and Hatfield Peverel sites currently have little to no sustainable infrastructure in place while also being close to the A12 – which currently experiences notable journey time delay along sections of the route in the peak hours.

- Development in Halstead does not have access to rail services and would be expected to increase traffic along congested sections of the A131 through High Garrett, as well as channelling additional vehicle flows through to the congested junctions along the A120.

- Proposed development to the east of Braintree town is positioned close to key network pinch-points on the A120 at Galleys Corner and Marks Farm Roundabout. It would be expected that a significant proportion of car trips from the proposed development would directly access these junctions for onward journeys.

- Despite the location of the proposed East Braintree development being close to the Braintree Branch Railway Line, the site currently suffers from severance due to the positioning of the A120.

5.1.2 Alternative Option 1

Opportunities

- Alternative Option 1 shares the same opportunities as the Preferred Spatial Option for development in Kings Dene and East Braintree.

- A higher proportion of development in East Braintree places additional emphasis on opportunities for providing active travel links to Braintree town centre, connections to the Braintree Branch Railway Line, and securing funding for infrastructure improvements to the surrounding road network.

Challenges

- Of the three spatial options assessed, Alternative Option 1 has the lowest potential sustainable accessibility score, with development proposed to the north of Coggeshall having lower relative levels of accessibility than sites in Halstead for example).

- Alternative Option 1 shares the same challenges as the Preferred Spatial Option for development in Kings Dene and East Braintree.

- A higher proportion of development in East Braintree places additional emphasis on the challenges associated with a higher volume of development trips accessing the local road network in the vicinity of congested junctions along the A120.

5.1.3 Alternative Option 2

Opportunities

- Places a focus of development at Andrewsfield and Pattiswick Hall Farm, which score well in the sustainable accessibility appraisal – based on an assumption of high trip internalisation and developer funding of public transport and walking/cycling infrastructure.

- The proposed sites in Hatfield Peverel, are located close to the GEML with good regional commuting links by train.

- Of the three spatial options considered, Alternative Option 2 performs best in terms of potential levels of sustainable accessibility, due to the focus of development on large new 'garden village' development sites.

Challenges

- Conversely, both the Andrewsfield and Pattiswick Hall Farm sites currently have little to no sustainable infrastructure in place while also being close to the A120 – which currently experiences notable journey time delay along sections of the route and at key junctions in the peak hours.

- Sites at Hatfield Peverel are also located close to congested sections of the A12.

- Of the three spatial options considered, the Alternative Spatial Option 2 is outperformed in terms of existing levels of sustainable accessibility. The option may be associated with a higher risk in terms of dependency on developer provision of transport infrastructure – particularly in early phases of development - to help manage traffic impact on the local and strategic road network.