

Uttlesford District Cycling Action Plan

Highways/Transport Planning

March 2018



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Executive Summary

Essex Highways was commissioned by Essex County Council to produce a Cycling Action Plan (CAP) for Uttlesford District, as part of a commitment in the Essex Cycling Strategy to create Cycling Action Plans for every Borough/ District.

The purpose of the Essex Cycling Strategy is to set out the key elements of a long term plan that will lead to a significant and sustained increase in cycling in Essex, establishing it in the public's mind as a 'normal or regular' mode of travel, especially for short A-to-B trips, and as a major participation activity and sport for all ages.

To help achieve this, Essex is committed to establishing a coherent, comprehensive and advantageous cycle network in every major urban area, utilising a combination of on-carriageway and off-carriageway cycle facilities. To enable this, each Borough/ District in Essex will have an up-to-date Cycling Action Plan (renewed every five years). These are seen as key elements of a long term plan that will lead to a significant and sustained increase in cycling in Uttlesford District and in Essex.

This Uttlesford CAP is targeted towards the specific needs of Uttlesford residents, which will assist Essex County Council (ECC) in tackling wider problems associated with poor health, pollution, traffic congestion and inequalities of opportunities for Uttlesford's youth population and people on low incomes.

The aims of this Action Plan are to:

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

Understanding current levels and conditions for cycling has been important in developing this CAP, which has involved analysis and consideration of 2011 Census data, the Active People Survey (by Sport England), the Essex Cycle Monitor database, Department for Transport count data, collision data, cycle crime statistics and topography.

In order to create an environment where cycling is normal for the residents of Uttlesford, it will be necessary to remove existing barriers to cycling and a series of cycle routes provided, with the aim of creating a connected cycle network over

time. Cycling infrastructure should provide for both key utility journeys and encourage leisure cycling.

The key recommendations and schemes are listed in Sections 6, 7 and 8 of this CAP and are summarised in Section 11 and below.

Key Recommendations

Considering the current barriers to cycling in Uttlesford District, commuter flow analysis and locations of committed development, the following key recommendations have been made for cycle enhancements in the District:

- A review of existing route signage and lighting;
- Maintenance of existing routes;
- Increase provision of useful cycle routes to town centres and railway stations in Saffron Walden, Great Dunmow and Stansted Airport, in particular;
- Consider an area-wide review of town centre one-way working in Saffron Walden, to identify opportunities for cycle contraflow to be implemented and thereby increase cycling permeability of and through the town centre;
- Review on-street car parking in and close to town centres, to identify opportunities to provide space for high quality cycle facilities;
- Provide new and improved cycle routes with a focus on satiating the considerable demand for commuter trips at railway stations;
- Fill obvious gaps in the existing cycle-route network (on alignments with cycle-friendly topography);
- Provide new infrastructure on key roads with cycle-friendly topography but no existing facilities;
- Produce a cycle map for Uttlesford to be updated every two years which takes on board innovation in cycle-map design, and promote it and disseminate it widely through a range of channels and outlets.
- Develop Flagship Routes through Feasibility Studies to Detailed Design; and
- Promote and market Flagship Routes with 'Cycle Superhighway' style branding and disseminating techniques.
- Encourage Stansted Airport to provide a series of staff pool e-bikes.

Next Steps

This is a draft Action Plan and, although the potential schemes have been developed in discussion with Council representatives, further consultation is required before the overall Action Plan can be finalised.

The character of the existing highway network has been taken into account, when developing potential cycle routes and schemes – in particular existing traffic levels. Broad costs of schemes have been identified, as well as broadly prioritising schemes against deliverability, directness, extension of the existing network and proximity to key attractors. However, the potential routes and schemes have not been constrained to a set budget and the feasibility and the precise cost of the routes can only be established through further study.

1 Introduction

1.1 Preamble

As part of the county-wide Essex Cycling Strategy, Cycling Action Plans are being developed for individual Boroughs and Districts of Essex, including one for the District of Uttlesford. This document provides an opportunity to develop and promote cycling in Uttlesford through improved infrastructure, together with the wider promotion of cycling by Active Essex, Essex County Council (ECC) and Uttlesford District Council (UDC), to establish it in the public's mind as a 'normal' mode of travel, especially for short a-to-b trips, and as a major participation activity and sport for all ages.

Two key commitments of the Essex Cycling Strategy are to:

- Establish a coherent, comprehensive and advantageous cycle network in every major urban area, utilising a combination of on-carriageway and off-carriageway cycle facilities; and
- Ensure each District has an up to date Cycling Action Plan (renewed every 5 years).

The Cycling Action Plans should help to identify high quality and well planned infrastructure which will be vital in encouraging cycling and improving safety. ECC will ensure that every urban area has a well-planned cycle network that:

- Connects key destinations;
- Supports a network of recreational routes; and
- Caters for all users and abilities.

Coherent cycle networks will ensure that:

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

In addition, Active Essex (County Sports Partnership) priority aims and how cycling helps achieve these aims are included in Table 1.1.

Table 1.1: Active Essex priority aims

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

1.2 Background

Uttlesford is a District in Essex with a population of around 86,000¹. The largest settlement is Saffron Walden to the north, with around 15,500 residents. The district also contains the large settlements of Great Dunmow and Stansted Mountfitchet, close to Stansted airport.

The district has several rail stations on the West Anglia mainline which runs north-south through the district, with Audley End station serving Saffron Walden around 3 km away. Stansted Mountfitchet, Stansted Airport, Elsenham, Newport, Audley End, and Great Chesterford stations also serve the district. These provide connections to London (Liverpool Street), Birmingham New Street, Cambridge, Cambridge North and Stansted Airport stations.

¹ Nomis, Labour Market Profile – Uttlesford, 2016

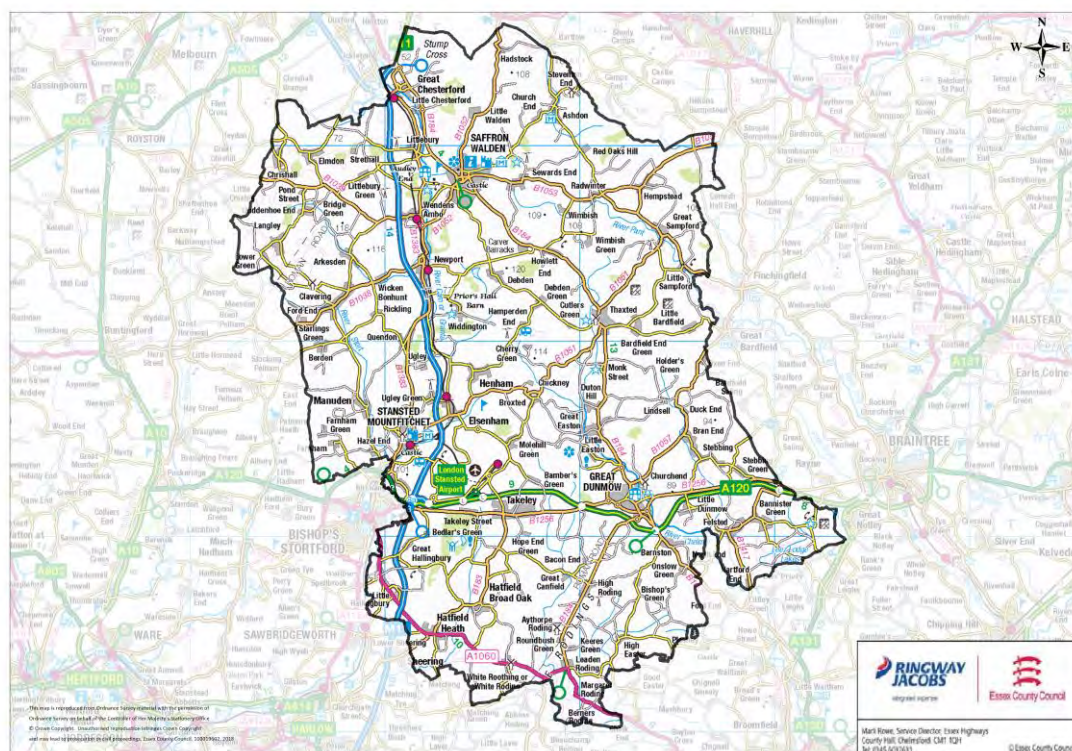


Figure 1.1 Uttlesford District Map

1.3 Aims of the Action Plan

Although Essex County Council (ECC) and Uttlesford District Council (UDC) have been promoting and facilitating cycling for many years, the lack of a planned and justifiable list of interventions aimed at widening the appeal of cycling within the District means that it has not always been prioritised.

The aims of the Action Plan are to:

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

This is a draft Action Plan and, although the potential schemes have been developed in discussion with Council representatives, further consultation is required before the overall Action Plan can be finalised.

1.4 Report Structure

The remainder of this Action Plan is set out as follows:

- Section 2 – Policy Review;
- Section 3 – Data Analysis;
- Section 4 – Existing Network Provision and Barriers;
- Section 5 – Uttlesford’s Cycling Potential;
- Section 6 – Potential Infrastructure Improvements;
- Section 7 – Prioritisation and Costings of Potential Schemes;
- Section 8 – Flagship Routes;
- Section 9 – Smarter Travel Measures;
- Section 10 – Delivery and Funding; and
- Section 11 – Key Recommendations.

2 Policy Review

2.1 Introduction

This section provides a summary of the relevant national, regional and local policies related to cycling. Relevant National, Regional and Local Policy contexts have been examined through consideration of the following documents: the UK Government's Cycling and Walking Investment Strategy (CWIS, 2017), the Essex Transport Strategy (2011) and the Uttlesford Cycle Strategy (2014)

These documents indicate that there is a great deal of support for cycling at all levels. At a national level, there is a long term vision for cycling to become the normal mode of choice for short journeys or as part of a longer journey. At a regional level, there is a particular emphasis on providing sustainable access and travel choice for Essex residents. It is recommended that cycling will be promoted as a way to reduce congestion within urban areas, to encourage healthier lifestyles, and as a valuable leisure and tourism opportunity that is important to the local economy.

At a local level, to support the planned growth in Uttlesford District and to enable more existing journeys to be made by bike, extending and upgrading the cycle networks is a key objective, along with promoting their use.

2.2 National Policy Context

2.2.1 Cycling and Walking Investment Strategy (CWIS)

Under the Infrastructure Act 2015, the UK Government is required to set a Cycling and Walking Investment Strategy (CWIS) for England. A Draft First CWIS was published at the end of March 2016, which set out the UK Government's ambition for creating a walking and cycling nation, the targets and objectives they are working towards, the financial resources available to meet their objectives, the strategy for delivering the objectives, and the governance arrangements that will review this delivery. Following consultation, a final version of the Strategy was published in 2017.

The final Cycling and Walking Investment Strategy states that the Government "wants to make cycling and walking the natural choices for shorter journeys, or as part of a longer journey". The aim is for more people to have access to safe, attractive routes for cycling and walking by 2040. By 2040, the ambition is to deliver:

Better Safety (a safe and reliable way to travel for short journeys), through:

- Streets where cyclists and walkers feel they belong, and are safe;
- Better connected communities;
- Safer traffic speeds, with lower speed limits where appropriate to the local area; and
- Cycle training opportunities for all children.

Better mobility (more people cycling and walking – easy, normal and enjoyable), through:

- More high quality cycling facilities
- More urban areas that are considered walkable;
- Rural roads which provide improved safety for walking and cycling;
- More networks of routes around public transport hubs and town centres; with safe paths along busy roads;
- Better links to schools and workplaces;
- Technological innovations that can promote more and safer walking and cycling;
- Behaviour change opportunities to support increased walking and cycling; and
- Better integrated routes for those with disabilities or health conditions.

Better streets (places that have cycling and walking at their heart), by:

- Places designed for people of all abilities and ages so they can choose to walk or cycle with ease;
- Improved public realm;
- Better planning for walking and cycling;
- More community-based activities, such as led rides and play streets where local places want them; and
- A wider green network of paths, routes and open spaces.

The document recognises that great progress has been made on cycling in the past six years. Cycling rates have increased in areas where dedicated funding has been made available and spend on cycling has risen from around £2 per person in 2010 to £6 per person in England in 2016-17. The Government want to build on these successes and to help achieve this have made over £1 billion of Government funding available to local bodies that may be invested in walking and cycling over the next five years. The £1.2 billion is allocated as follows:

- £50 million to provide cycling proficiency training for further 1.3 million children;
- £101 million to improve cycling infrastructure and expand cycle routes between the city centres, local communities, and key employment and retail sites;
- £85 million to make improvements to 200 sections of roads for cyclists;
- £80 million for safety and awareness training for cyclists, extra secure cycle storage, bike repair, maintenance courses and road safety measures;
- £389.5 million for councils to invest in walking and cycling schemes; and
- £476.4 million from local growth funding to support walking and cycling.

In addition, the government is investing an extra:

- £5 million on improving cycle facilities at railway stations;
- £1 million on Living Streets' outreach programmes to encourage children to walk to school; and
- £1 million on [Cycling UK's 'Big Bike Revival' scheme](#) which provides free bike maintenance and cycling classes.

By 2020, the objectives of the CWIS are to:

- Increase cycling activity, where cycling activity is measured as the estimated total number of cycle stages made;
Increase walking activity, where walking activity is measured as the total number of walking stages per person;
- Reduce the rate of cyclists killed or seriously injured on England's roads, measured as the number of fatalities and serious injuries per billion miles cycled; and
- Increase the percentage of children aged 5 to 10 that usually walk to school.

2.2.2 Cycling and Walking Infrastructure Plans (CWIP)

A National CWIP is being developed to inform the CWIS. This will include the identification of nationally significant locations/infrastructure. Six outputs are currently being developed (three national and three local outputs):

- The national outputs focus on identifying criteria for national significance and developing a pipeline of potential schemes; and
- The local outputs are focused on developing a Level of Service tool, and guidance to Local Authorities on developing their own local CWIP.

Local Cycling and Walking Infrastructure Plans (LCWIPs), as set out in the Government's Cycling and Walking Investment Strategy, are a new, strategic approach to identifying cycling and walking improvements required at the local level. They enable a long-term approach to developing local cycling and walking networks, ideally over a 10 year period, and form a vital part of the Government's strategy to increase the number of trips made on foot or by cycle.

While only focusing on cycling it is hoped that ECC's suite of Cycling Action Plans will contribute to the future development of an Essex CWIP by providing:

- A network plan for cycling which identifies preferred routes and core zones for further development;
- A prioritised programme of infrastructure improvements for future investment; and
- A report which sets out the underlying analysis carried out and provides a narrative which supports the identified improvements and network.

Highways England has also published recommendations for building cycle infrastructure for the strategic road network (SRN) in IAN195/16. The document is to ensure SRN infrastructure facilitates the convenient and safe movement of cycle traffic crossing or travelling along the SRN, where cycling is legally permitted, the document sets out how SRN infrastructure will support Highways England's objectives for cycle traffic.²

2.2.3 Essex Transport Policy

The Essex Transport Strategy (2011) seeks to achieve the following five broad outcomes:

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

² Standards for Highways, 2016
<http://www.standardsforhighways.co.uk/ha/standards/ians/pdfs/ian195.pdf>

- Provide sustainable access and travel choice for Essex residents to help create sustainable communities.

'Policy 14 – Cycling' states that Essex County Council will encourage cycling by:

- Promoting the benefits of cycling;
- Continuing to improve the cycling facilities within the main urban areas of Basildon, Chelmsford, Colchester and Harlow;
- Developing existing cycling networks in other towns where cycling offers an appropriate local solution;
- Working with schools and employers to improve facilities for cyclists;
- Improving access to local services by integrating the Public Rights of Way, walking and cycling networks to form continuous routes; and
- Providing training opportunities to school children and adults.

Cycling will be promoted as a way to reduce congestion within urban areas, to encourage healthier lifestyles, and as a valuable leisure and tourism opportunity that is important to the local economy.

Improving the safety of the cycling network is also a key concern within the *Essex Transport Strategy*. Policy 14 of the plan sets out Essex County Council's approach to encouraging cycling, which includes developing cycle networks within towns across Essex and improving access to local services and schools for cyclists.

The *Essex Transport Strategy* seeks to promote sustainable travel, by providing the infrastructure for sustainable travel and promoting the use of travel plans. With regard to cycling, the *Essex Transport Strategy* considers actions to improve access for cyclists and pedestrians in particular, and identifies the following improvements as essential:

- Addressing gaps in existing networks;
- Better linkages for walking and cycling routes within the Public Rights of Way network;
- Improving signing;
- Improving crossing facilities; and
- Ensuring that pedestrian routes are accessible for everyone.

Essex is a diverse county with different sub-areas that have different needs and issues with regards to continued and future transport provision. Uttlesford is included within the West Essex subgroup in the *Essex Transport Strategy*, where

priorities for promoting sustainable transport usage. The priorities which are specifically related to cycling for this area are:

- Improving cycling networks and walking routes and encouraging their greater use
- Improving access to Stansted Airport by low carbon forms of transport

The *Infrastructure Act 2015* includes a new legal requirement for the Government to produce a cycling and walking investment strategy. The DfT's *Cycling Delivery Plan (2014)* refers to a new national cycling target, to double the number of cycling stages (trips) nationally over a 10 year period. This new target will be adopted by Essex County Council as part of the *Essex Cycle Strategy (2015)*.

Additionally, the Government has introduced a £6bn Local Growth Fund for cycling and walking. It has also set a target of achieving an annual cycling spend of £10 to £20 per head of the population. In the District this could see between £1.8m and £3.6m per year spent on improving cycling provision.

2.2.4 Essex Cycle Strategy (2016)

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

- I. Establishing a coherent, comprehensive and advantageous cycle network in every major urban area, utilising a combination of on-carriageway and off-carriageway cycle facilities;
- II. Ensuring each Borough or District has an up to date cycling action plan (renewed every 5 years);
- III. Providing well placed and high quality cycle parking at key public destinations such as town centres, leisure facilities and railway stations;
- IV. Ensuring that all new housing includes secure and easily accessible cycle storage and that new secure cycle storage is facilitated in existing housing developments;

- V. Ensuring that cycling is prioritised over motorised transport in all new developments – making it easier to carry out short trips by bicycle than by car. Cycle routes within commercial and residential developments will be more direct and convenient than car routes and will connect in to existing cycling infrastructure on leaving the site;
- VI. Prioritising more frequent and good maintenance of our cycle network;
- VII. Providing a clear and consistent standard of good quality, well placed cycle signage – to an appropriate density, with provision of journey times as well as distances (to cater for all audiences) where possible;
- VIII. Continuing to improve cycle safety at sites with actual and perceived safety problems; and
- IX. Developing an improved mechanism for the reporting of safety issues.

2.3 Local Policy Context

2.3.1 Uttlesford Local Plan (2005) and Draft Local Plan (2017)

The current Uttlesford Local Plan was adopted in January 2005, with planning policies aimed at addressing local concerns relating to facility provision, crime, housing, environmental sustainability, public transport and access to services.

The Uttlesford Local Plan (2005) highlights that the district has above average levels of car ownership compared to both Essex and Great Britain, and highlights that better coordination of public transport is challenging due to the rural nature of the district. Furthermore, it is stated that new developments must be designed or located to encourage modes of transport other than the car.

This local plan will shortly be succeeded by the new Uttlesford Local Plan, currently in draft status. The draft Local Plan recognises that the Uttlesford District has low bus use and low cycle use, with limited cycling infrastructure and that this should be addressed by future investment. However, it notes challenges traditionally faced by strategies to reduce car usage across a predominantly rural area. Key development proposals contained in the draft Local Plan are summarised below.

2.3.1.1 Garden Community Proposals

The draft spatial strategy includes the provision of three new Garden Communities delivering around 4,600 new homes by 2033. Development of all three of the new Garden Communities is proposed to continue beyond the Local Plan's end date of 2033:

Easton Park – The whole garden community will comprise 10,000 new dwellings, of which a minimum of 1,800 homes will be built by 2033, and a range of local

employment opportunities and services and facilities including schools, health, retail and leisure. This garden community will take advantage of its proximity to London Stansted Airport both for employment and as a transport hub in the A120 corridor. There are opportunities for sustainable transport links to the Airport.

West of Braintree – This garden community will straddle the District boundary with Braintree District Council. The whole garden community, within both districts, will comprise 10,000 new dwellings, of which a minimum of 970 homes will be built by 2033, and a range of local employment opportunities and services and facilities including schools, health, retail and leisure. Located close to the A120 this garden community will be conveniently located close to Braintree and London Stansted Airport for employment opportunities. Uttlesford District Council proposes to work closely with Braintree District Council to ensure that this garden community is jointly master planned and delivered. Please see the Braintree Cycling Action Plan for strategic cycle network.

North Uttlesford – The whole garden community will comprise 5,000 new dwellings, of which a minimum of 1,900 homes will be built by 2033 and a range of local employment opportunities and services and facilities including schools, health, retail and leisure. This garden community will maximise opportunities for economic linkages with the Wellcome Genome Campus and Chesterford Research Park.

2.3.1.2 Market Town Proposals

Saffron Walden – Saffron Walden's function as the main centre of the District will be maintained and enhanced. In recognition of the air quality and traffic constraint on the growth of the town, 240 dwellings on new site allocations will be provided within the Local Plan period and no additional employment floor space. New retailing and open spaces will be provided. The town provides good opportunities for further walking and cycling.

Great Dunmow – Great Dunmow's function as an important centre for residents who live in the southern part of the District will be maintained and enhanced. 743 dwellings on new site allocations will be provided within the Local Plan period together with 21,000 square metres of employment development delivering a range of new jobs. A new secondary school and retailing will be delivered.

2.3.2 Uttlesford Cycle Strategy (2014)

The Uttlesford Cycle Strategy recognises the district's low uptake of cycling to work, and that it has the highest levels of car ownership in Essex. It identified new on and off road cycle schemes in the main Uttlesford towns, two of which were prioritised: Wenden Road scheme and Audley End cycle parking; and the Fritch

Way route. This Uttlesford Cycling Action Plan (2018) is intended to supersede the Uttlesford Cycle Strategy (2014).

2.4 Other Studies

2.4.1 Stansted Airport Local Employee Access Study (2017)

This was a report by Essex Highways which provided the initial review and research into sustainable transport to Stansted Airport which are available and suitable for its employees and those at adjacent sites. It reviewed existing, national, and local policies and strategies and their relevance in developing sustainable transport access, in particular cycling and bus travel to the airport.

In terms of cycling, it found that although the current level of cycling to Stansted by employees is low, with the right infrastructure provision, and incentives from employers at and around the airport, there is reason to believe that the mode share of cycling by employees could grow significantly. Taking this into account, a number of possible cycle routes from local areas to the airport have been identified and will be taken forward for further investigation, a number of indicative links have been identified linking the local villages and Bishops Stortford with new and existing areas of growth on the airport campus. These indicative links have been passed on for feasibility study.

3 Data Analysis

3.1 Introduction

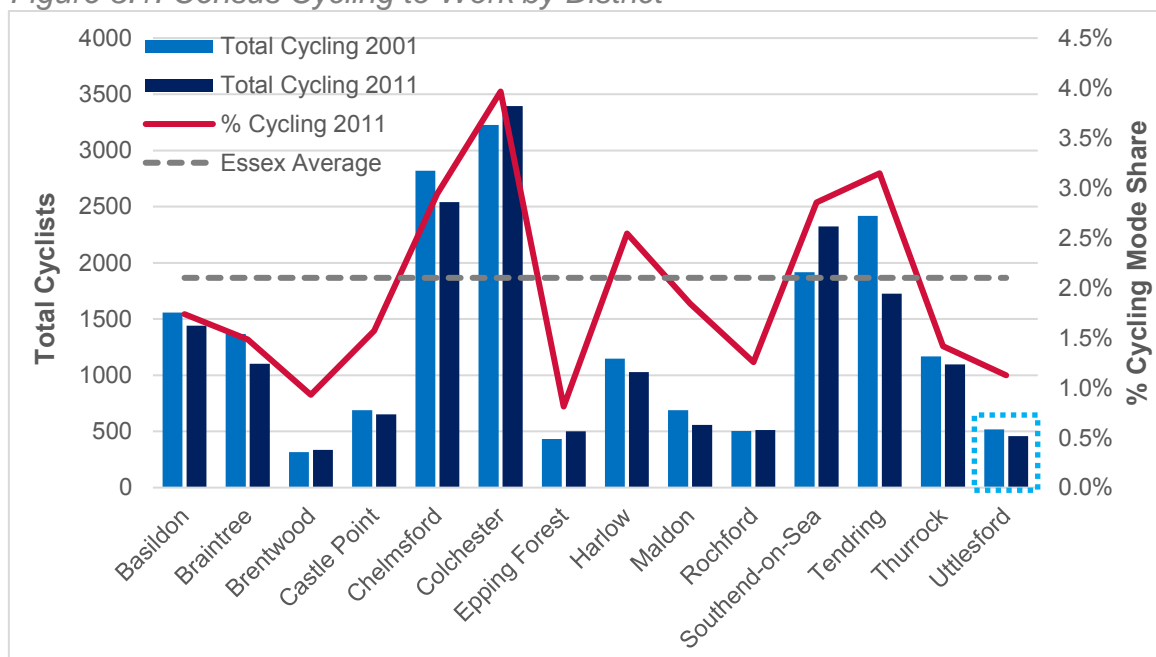
When planning for cycling infrastructure it is important to first understand current levels and conditions for cycling. This section includes analysis of:

- 2011 Census data;
- The Active People Survey (by Sport England);
- Collision data;
- Cycle crime statistics; and
- Topography.

3.2 Census Data

As part of the 10 year national census, respondents are asked to state their main mode of travel to work by distance. The 2011 Census results for Essex are shown in Figure 3-1 below.

Figure 3.1: Census Cycling to Work by District



As shown above, based on the 2011 Census data, Uttlesford has significantly low levels of cycling numbers when compared with other Essex Boroughs/ Districts, with approximately 500 people cycling to work every day (1% of all journeys to work) in 2011. In other words, 1% of the journeys to work in Uttlesford are made by bicycle, lower than the Essex average of 2.1%.

Cycling-to-work levels decreased marginally in the majority of Essex Districts between the 2001 and 2011 Census. This slight decline has been widely observed across many shire counties in England and Wales, despite the number of people cycling to work growing by 90,000 between 2001 and 2011, the proportion remained the same at 2.8%. The decline in cycling to work in Essex and many other shire counties has been attributed to failures in local policy and a lack of infrastructure³. Whereas, in urban areas, cycling to work increased due to the implementation of improved infrastructure, thus balancing the decline in rural areas.

Figures 3-2 to 3-4 show percentage cycling to work by origin in Stansted Mountfitchet, Saffron Walden, and Great Dunmow. Stansted Mountfitchet has very low levels of people cycling to work, with most of the town lying under the 0-1% category. There is an exception with the area immediately south of Stansted Mountfitchet Station, where there is a higher percentage, of 2-3% cycling to work.

In Saffron Walden there seems to be a 50/50 split between the North and North West side of the town and the South and South Eastern side. Residents in the North fall into the 2-3% category, while Southern areas are lower with 0-1%. In Great Dunmow all areas fall into the 0-2% category.

³ <http://www.sustrans.org.uk/press-releases/governments-must-get-times-cycling-work-levels-stagnate-over-10-years>

Figure 3.2 % Cycling to Work by Origin in Stansted Mountfitchet

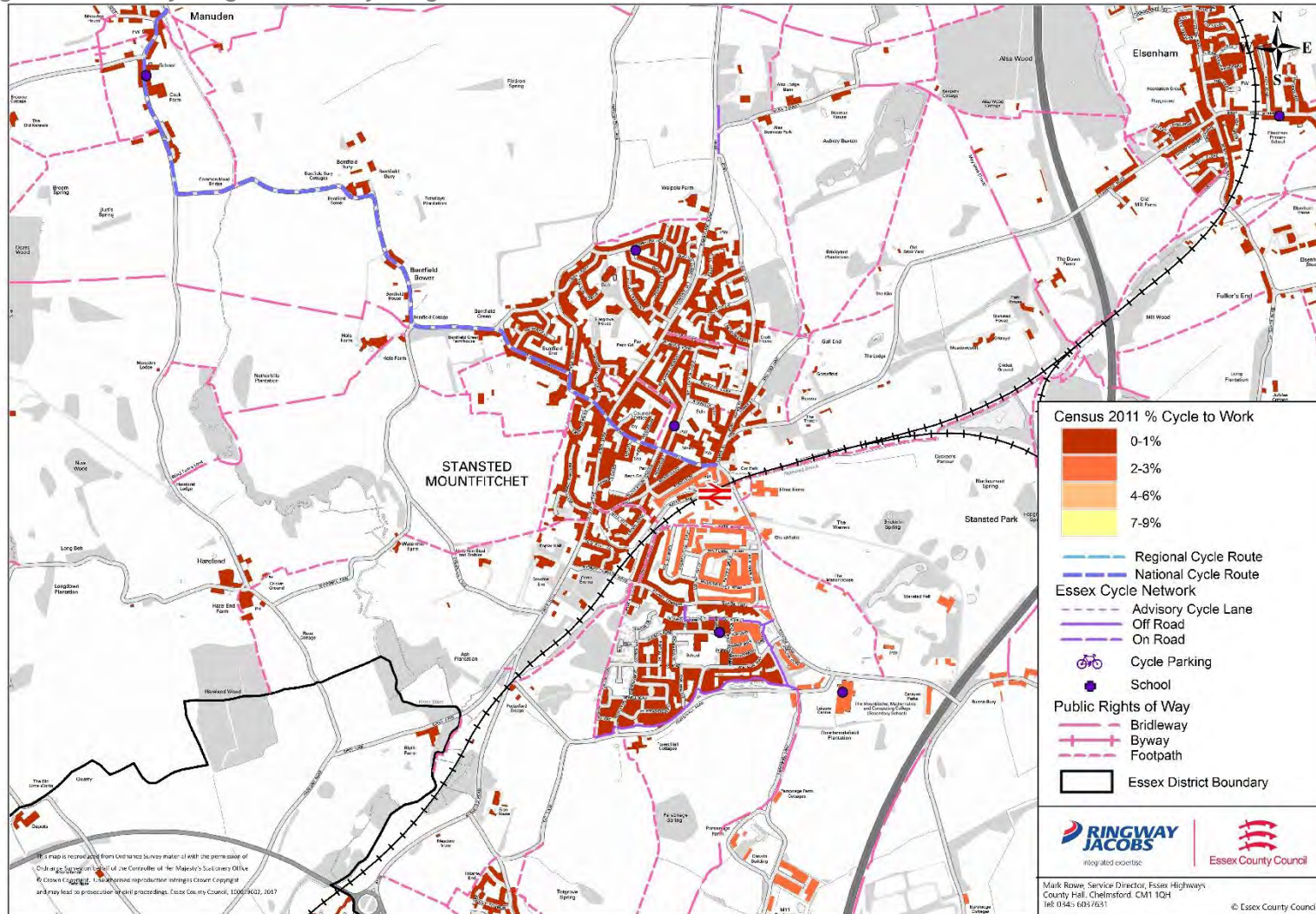


Figure 3.3 % Cycling to Work by Origin in Saffron Walden

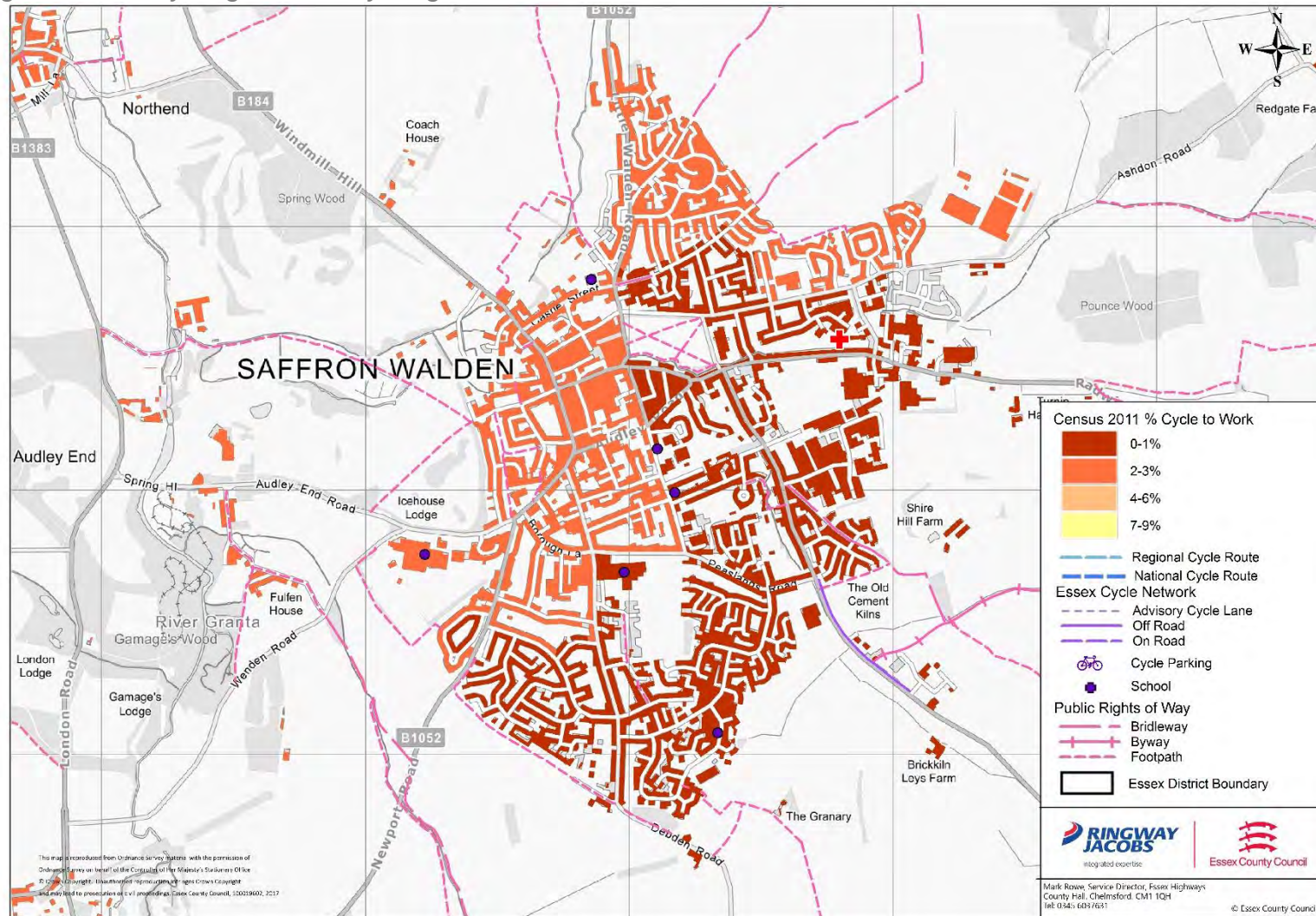
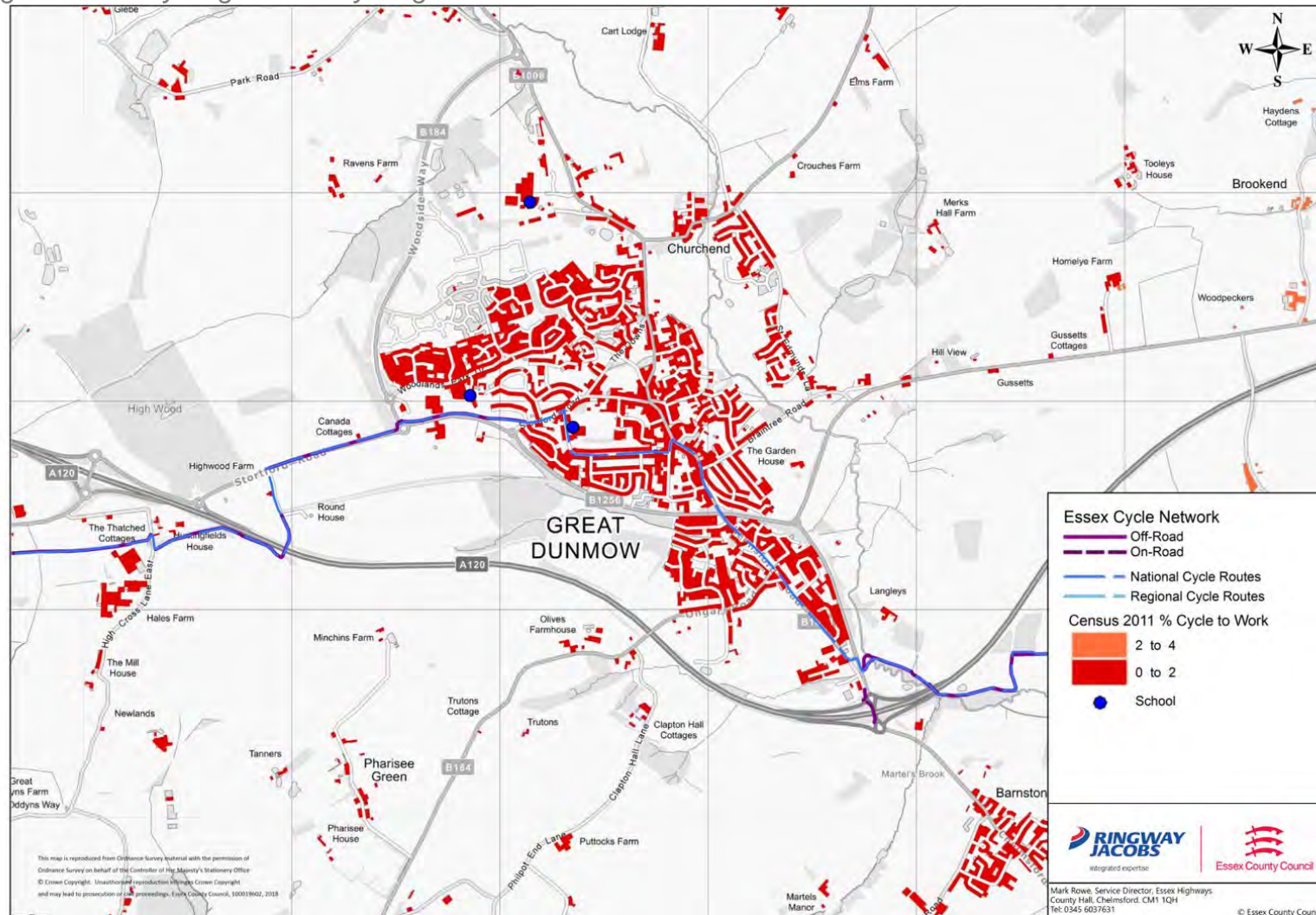


Figure 3.4 % Cycling to work by Origin in Great Dunmow

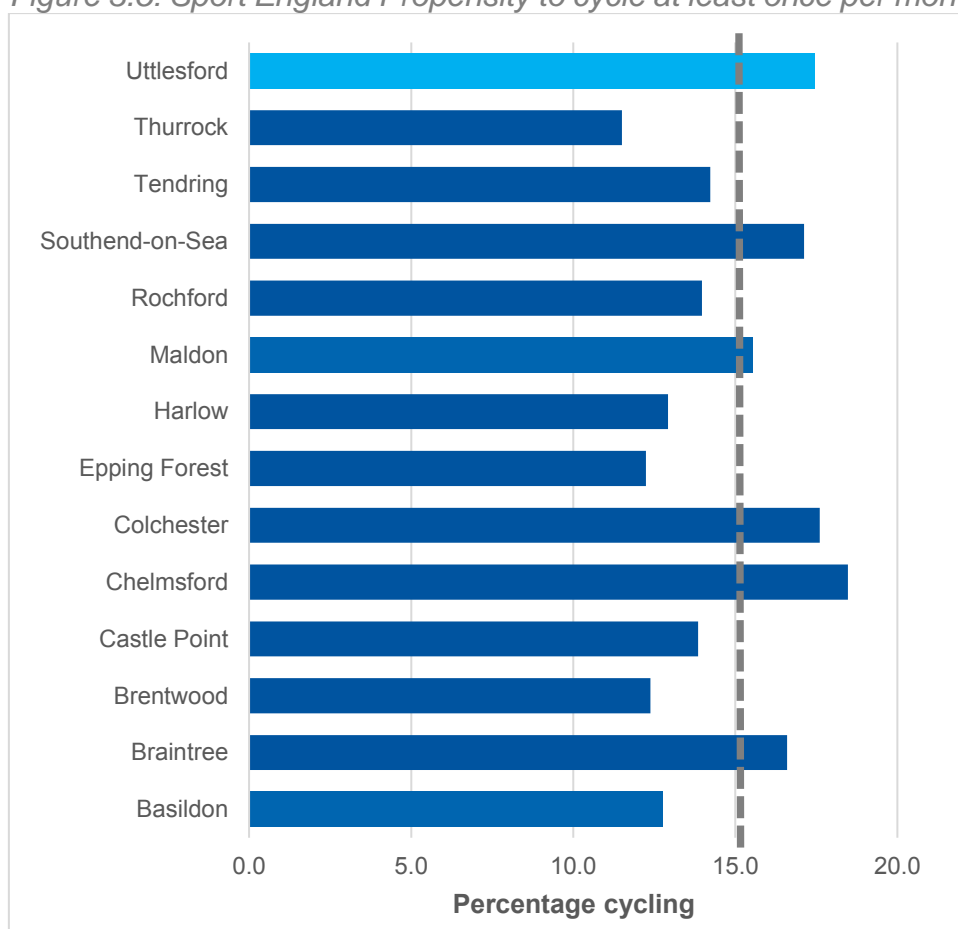


3.3 Sport England Active People Survey

Sport England carry out an Active People Survey annually, which involves interviewing 500 people from every District in England about their propensity to do physical activity. It is the largest survey of sport and active recreation in Europe.

Figure 3-5 shows 2010-2013 average propensity to cycle at least once per month for any purpose based on the Sport England data. The results show that across Essex, Uttlesford has a relatively high level of residents who cycle at least once per month, especially in comparison to the rest of the county.

Figure 3.5: Sport England Propensity to cycle at least once per month 2010-2013



3.4 Collision Data

Fear of personal injury is often cited as the biggest barrier to cycling but while this is an important issue, it is useful to use statistics rather than just perception to direct improvements to highway infrastructure to improve the cycling environment. The location of cycling personal injury collisions also serves to identify where cyclists are travelling in higher numbers which can be useful when deciding where to prioritise new infrastructure.

Table 3.1 shows the number of recorded personal injury collisions (PICs) involving cyclists by District for the 5-year period between August 2012 to July 2017. Also included are the number of casualties by severity. Figures below for 'Essex' exclude the Unitary Authorities of Southend and Thurrock, figures for 'Greater Essex' include these areas.

Table 3.1: Personal Injury Collisions involving Cyclists August 2012 to July 2017

District	Fatal	Serious	Slight	Grand Total	% of Total	Number cycling to work ⁴	% of total cycling to work in Greater Essex
BASILDON	0	37	135	172	8%	1412	8%
BRAINTREE	2	37	90	129	6%	1070	6%
BRENTWOOD	0	16	41	57	3%	320	2%
CASTLE POINT	0	24	69	93	5%	631	4%
CHELMSFORD	2	56	194	252	12%	2486	14%
COLCHESTER	0	72	227	299	15%	3310	19%
EPPING FOREST	1	36	105	142	7%	482	3%
HARLOW	2	13	60	75	4%	1018	6%
MALDON	1	15	42	58	3%	548	3%
ROCHFORD	1	25	63	89	4%	498	3%
SOUTHEND	1	63	266	330	16%	2260	13%
TENDRING	3	28	117	148	7%	1683	10%
THURROCK	0	35	101	136	7%	1078	6%
UTTLESFORD	0	18	41	59	3%	433	3%
ESSEX	12	412	1285	1709		13891	
GREATER ESSEX	13	475	1551	2039		17229	100%

Table 3.1 shows the total number of collisions involving cyclists for each district, classified into fatal, serious or slight, and also shows the total number of people

⁴ Office for National Statistics (2011) <https://www.ons.gov.uk/ons/rel/census/2011-census.../cycling-to-work/reftable.xls>

who cycle to work in each district and then the % corresponding to each district. For Uttlesford it shows that the district only accounts for 3% of the total number of people who cycle to work in Essex, and also only accounts for 3% of collisions. In comparison with the other Boroughs/Districts and Unitary Authorities of Essex, those which have a similar number of residents cycling, like Maldon and Rochford also display low numbers of collisions, although there is an exception with Epping Forest, which has a high number of collisions compared to the number of residents that cycle to work.

The number of collisions per cycle trips would be lower if it were to be compared with all cycle trips, as the figure is based on 2011 Census Journey to work data only, and does not include leisure trips, children cycling to school and people cycling part of their journey to work but this not being recorded as such. However, it is reasonable to assume that the relationship between cycling to work and all cycle trips is relatively consistent across Essex.

Figure 3.6, below, shows all of the collisions involving cyclists, between August 2012 and July 2017 across the District. It shows that a number of accidents (slight) occurred within Saffron Walden town, along the B1052. 5 (slight) accidents are shown along the length of the B1052, all in different locations. This CAP does not recommend cycling along this road, except for the E-W section along George Street (which will be subject to improvement as part of the Flagship scheme (which takes in schemes 7, 8 and 9 in this location)) but instead proposes potential N-S cycle movements along a parallel route (utilising potential schemes 5,6,15/16 and 11).

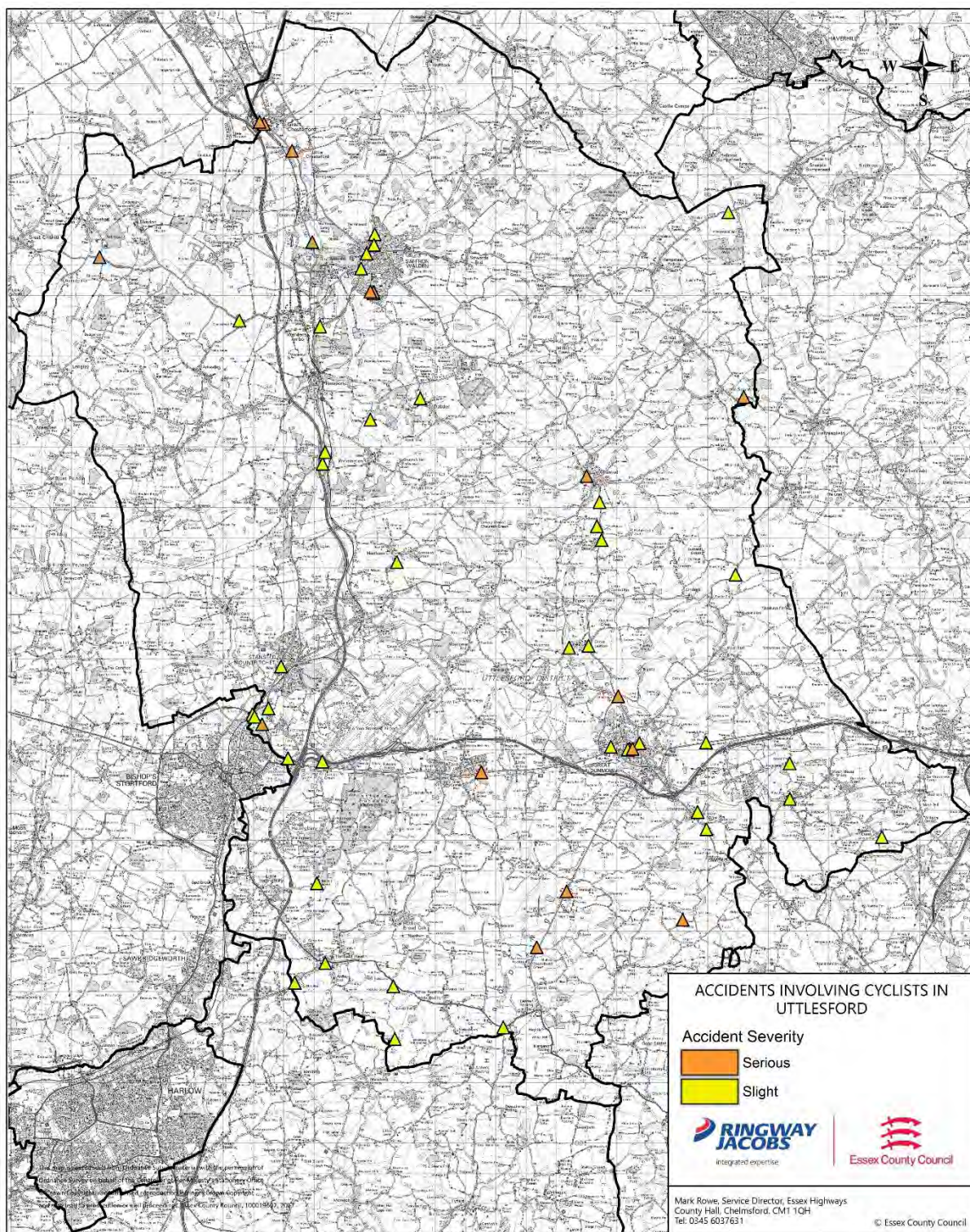
Figure 3.6 shows a grouping of serious accidents close to the Pleasant Valley/ Landscape View/ Cromwell Road junction, in the south of Saffron Walden town. The (2 serious and 1 slight) accidents which occurred at this location are not linked, did not occur in the same location and all had different causes. One was a cyclist, who was hit by a car as the car emerged from a parking area and the cyclist was riding along the pavement. One slight accident occurred as a car slowed approaching the mini roundabout and caused the cyclist to collide with the rear of the vehicle. The last serious accident occurred because the cyclist lost control of their cycle owing to mechanical failure, causing them to veer across the carriageway into the path of an oncoming vehicle. Potential schemes 12 and 14 meet at this junction and propose improvements/ infrastructure along Cromwell Road and Debden Road.

In Great Dunmow, 3 accidents are shown to occur along Stortford Road, close to the Rosemary Lane roundabout. The accidents (2 serious and 1 slight) which occurred at this location are not linked, did not occur in the same location and all

had different causes. One serious collision occurred on the roundabout itself, where a car did not see a cyclist to its right hand side and pulled out in front of them, causing the cyclist to collide with the car. The other serious collision occurred due to a cyclist riding on the pavement and a car pulling into a driveway in front of the cyclist causing a collision. The slight collision was caused by a car not giving a cyclist enough width when overtaking. Potential route 4 recommended in this CAP provides a mainly off-road alternative to cycling along Stortford Road.

There is cluster around the A120 slip roads near to Bishops Stortford, primarily due to drivers failing to look properly at roundabouts. There is not a scheme outlined in this CAP that addresses these roundabouts directly, but there are schemes described which will improve provision for cyclists from Bishops Stortford to Stansted Airport, as well as linking to schemes to Stansted Mountfitchet and Elsenham.

Figure 3.6 Location of accidents involving cyclists across the district



3.5 Cycle Crime

Cycle crime (mainly theft) is reported both to Essex Police and British Transport Police, although it should be noted that cycle thefts are generally considered to be under reported. Figures for both of these constabularies are combined by District in Table 3.2, below. Note that the figures for ‘Essex’ exclude the Unitary Authorities of Southend and Thurrock, figures for ‘Greater Essex’ include these areas.

Table 3.2: Reported cycle thefts by District

District	2013	2014*	Year ending June 2016	Year ending June 2017	% of all cycle thefts in Greater Essex (2017)	Annual number of cycle thefts per cycle commuter ²
Basildon	221	208	173	203	8%	0.15
Braintree	116	98	160	154	6%	0.15
Brentwood	63	59	34	71	3%	0.23
Castle Point	45	73	63	81	3%	0.13
Chelmsford	292	274	334	450	17%	0.19
Colchester	355	373	247	390	15%	0.12
Epping Forest	37	53	69	53	2%	0.12
Harlow	127	108	166	244	9%	0.25
Maldon	26	28	14	21	1%	0.04
Rochford	43	50	51	23	1%	0.05
Southend-on-Sea	450	326	403	467	18%	0.22
Tendring	180	167	124	160	6%	0.10
Thurrock	217	205	251	235	9%	0.23
Uttlesford	41	30	23	27	1%	0.07
Essex	1546	1521	1458	1877		0.14
Greater Essex	2213	2052	2112	2579	100%	0.16

*to Nov 20th only

2. Based on 2017 thefts and ONS Census 2011 Journey to work by cycle total for District/ Borough/ City (ONS Cycling to Work Summary Table, taken from Census Table CT0015EW)

Uttlesford accounted for only 1% of all cycle thefts in Essex in 2017, with a rate of 0.07 cycle thefts per cycle commuter. This is the third lowest rate of cycle crime in Essex.

Statistics from British Transport Police show that cycle crime at Newport and Stansted Mountfitchet stations has increased between 2015 and 2016 (Table

3.3). Audley End has also seen cycle crime increase, between 2010 and 2016, from 5 incidents to 13, although this included a reduction from the peak recorded crime in 2015 (of 17 thefts). Elsenham and Stansted Airport have seen no cycle crime.

Table 3.3: Cycle Crime at Essex Stations 2010-2016 (British Transport Police)

Station	2010	2011	2012	2013	2014	2015	2016
Basildon	12	25	17	18	13	14	14
Chelmsford	69	77	73	58	16	15	39
Colchester	26	25	21	31	31	35	31
Leigh on Sea	3	3	19	29	13	11	19
Harlow Town	8	36	18	26	16	15	14
Billericay	29	27	26	21	8	7	5
Grays	11	17	14	16	10	14	12
Southend Victoria	12	9	13	12	13	13	12
Stanford le Hope	5	10	11	12	5	5	7
Brentwood	\	\	\	\	\	6	11
Shenfield	\	\	\	\	\	2	4
Ingatestone	\	\	\	\	\	2	2
Audley End	5	6	7	11	8	17	13
Newport	\	\	\	\	\	1	7
Stansted							
Mountfitchet	\	\	\	\	\	1	2
Stansted Airport	\	\	\	\	\	0	0
Elsenham	\	\	\	\	\	0	0

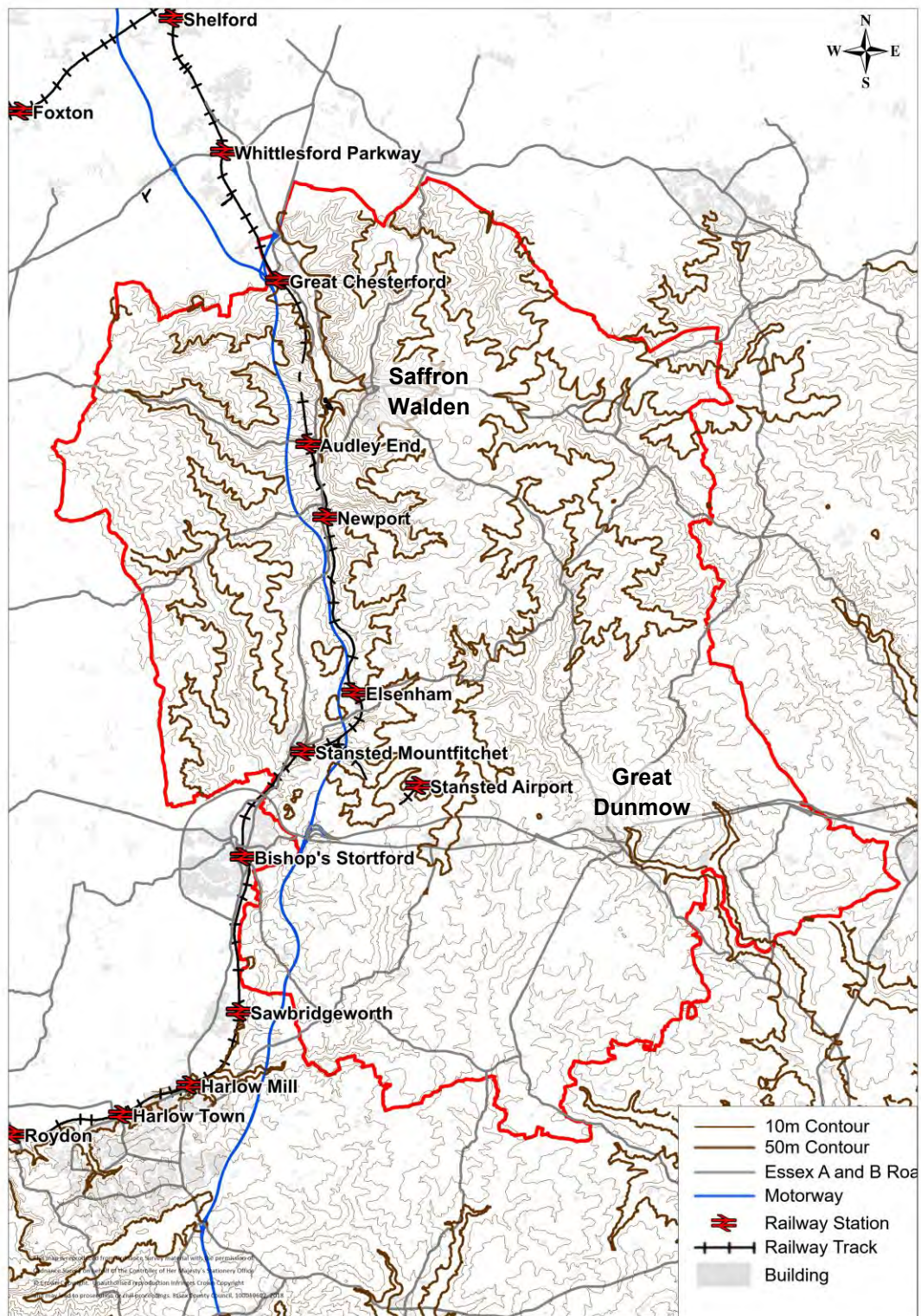
3.6 Topography

There are a number of factors which determine the popularity of cycling in any given area. Of the geographical factors, by far the most significant is topography, as identified in many research studies and policy statements. These include research carried out by leading UK cycling academic Professor John Parkin who concluded; 'hilliness was found to be, by far, the most significant determiner of the proportion that cycled to work in a District'⁵.

Uttlesford has quite a varied topography, with a maximum height of 148m and a low point of 23.5m above sea level. The corridor between Saffron Walden, Audley End and Newport is sufficiently flat for cyclists to utilise at high levels, as is the southern section of the district around Great Dunmow and Felsted around the river Chelmer. Although the airport is a large employer, the surrounding area is rather varied, reducing demand for utility cycling.

⁵ Parkin, J. Wardman, M and Matthew, P. (2008) *Estimation of the determinants of bicycle mode share for the journey to work using census data*. Transportation, 35 (1). pp. 93-109.

Figure 3.7 Topography of Uttlesford District



4 Existing Network Provision and Barriers

4.1 Introduction

Uttlesford is a District in Essex with a population of around 80,000. The largest settlements are Saffron Walden (population approximately 15,500), Great Dunmow (8,800) and Stansted Mountfitchet (6,400). Stansted Airport is a large trip attractor in the area, and employs around 11,000 people. It is the largest employer in the East of England on a single site, so is significant for the District.

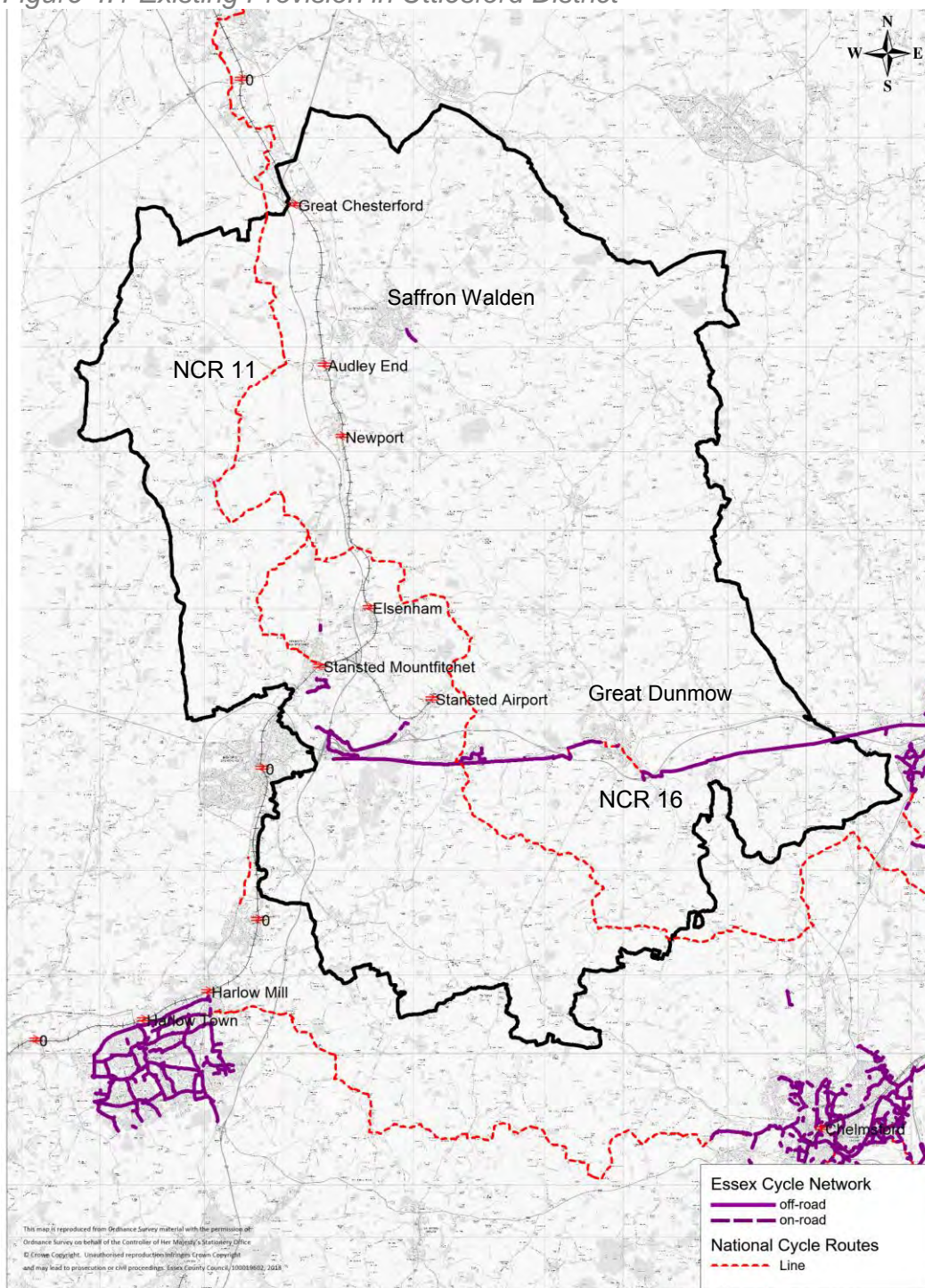
The District is crossed by two major roads, the A120 in the east-west direction, and the M11 in the north-south direction. The West Anglia Main Line runs north-south through the District and provides connections to London (Liverpool Street station), Cambridge and Stansted Airport. There are five stations located within Uttlesford at Stansted Mountfitchet, Stansted Airport, Elsenham, Newport, Audley End, and Great Chesterford.

4.2 Existing infrastructure

Uttlesford has low levels of cycling as a means of transport due to its mostly rural nature; the major settlements are also relatively hilly. Consequently, key local destinations including workplaces largely do not provide for cycling and cyclists. There is very little dedicated cycling infrastructure and though existing road layouts are not considered particularly hazardous for cycling, there is little to attract people to cycle. However, there is much that can be done to encourage and facilitate far higher cycling levels. National Cycle routes 11 and 16 already run through the District.

The following subsections describe the current cycling provision in the major settlements within the District.

Figure 4.1 Existing Provision in Uttlesford District



4.2.1 Great Dunmow

4.2.1.1 Flitch Way

The Flitch Way is a former railway line which is 15 miles long between Braintree and Bishop's Stortford. It is a flat, relatively straight and well surfaced route and is a shared-use unlit path used by cyclists, walkers, and horse riders.



Figure 4.2 Flitch Way (<http://www.visitparks.co.uk/places/flitch-way/>)

The building of the A120 resulted in a gap in the Flitch Way on the Eastern side of Great Dunmow. Cyclists and walkers wishing to re-join the track should currently travel along the National Cycle route 16 through the town and then access is regained south of the Dunmow Bypass.

The Flitch Way Action Group is working to create a multi user off road path reconnecting the Flitch Way through Dunmow to form a continuous definitive bridleway between Rayne and Bishops Stortford. This is identified by potential scheme 1 in this CAP.

4.2.1.2 National Cycle Route 16

Within Uttlesford, National Cycle Route (NCR) 16 extends from the eastern side of Uttlesford near to Felsted, and utilises a disused railway line until it reaches Great Dunmow, where instead of continuing along the railway alignment, it continues on-road along Chelmsford Road, before turning onto New Street and High Fields. The route continues along Stortford Road, and down Buttleys Lane until it joins the old railway track once again. The route continues south of Takeley before heading North West on bridle paths over the M11 to the village of Birchanger.

4.2.2 Saffron Walden

The only existing cycle routes in Saffron Walden are a shared footpath along Thaxted Road from the junction with Peaslands Road until the Aldi supermarket in Saffron Walden. The pavements look a sufficient width, and provide tactile paving at crossings with minor roads. There is also an existing on road route on Wenden Road which includes mandatory cycle lanes, traffic calming measures and contraflow cycling and an off-road shared use cycle track on the Southbound side of London Road until it reaches Station Road where the provision ends. There is a route which goes through The Common from the car park until the side next to Chaters Hill. This is on land that is owned by Saffron Walden Town Council. However, whilst providing a useful East-West traffic free route it does not align with current best practice guidance for basic cycle design principles.

4.2.3 Stansted Airport and environs

The current provision around Stansted Airport includes a route on Long Border Road from the junction with Taylors End Road to Birchanger. It begins at the junction with Taylors End Road with advisory cycle lanes and continues until an access road to Flightworx Aviation Ltd. At this point it continues off-road as a shared footway/cycleway on the northern side of the road, which continues over the northern arm of the roundabout with Round Coppice Road through an uncontrolled crossing point. The route then continues off-road from the North-West of the roundabout towards the M11 along the edge of the long stay parking. It makes use of an equestrian bridge over the M11 motorway meeting with NCR 16, which approaches from south of the A120 along the B1256. It then continues to Birchanger Lane where there is a Highways England scheme to improve signage, linking the route to the A120 from the Three Willows, while also improving the surfacing on the bridleway.

In Takeley, just east of the Airport there is a signed shared footpath/cycleway along Roding Drive, Fleming Road, Bennet Canfield, Honey Road, Stokes Road, and Burgattes Road. In addition there is a shared use footway conversion along Dunmow road from Roding Drive to just short of the junction with Parsonage Road. The Flitch Way/NCR16 also continues to the south of Takeley.

In Stansted Mountfitchet there is an existing shared use footway/cycleway to the north of the town on the B1383 Cambridge Road, which is around 200 metres in length.

In the southern area of the town there is a shared used path around Forest Hall Road, and along Palmer Close and Watson Way.

4.2.4 National Cycle Route 11

National Cycle Route 11 will connect Harlow in Essex with Wigginhall St Germans in Norfolk, via Cambridge and Ely. The section incorporating Harlow to Stansted Mountfitchet is still under development, along with a link to Saffron Walden. Within Uttlesford, the route currently begins at the roundabout with the B1051 (Chapel Hill), Lower Street and Church Road, continuing west along Chapel Hill, and straight over the crossroads onto Bentfield Road. It, then turns left onto Bentfield End Causeway and heads north onto Carters Hill, along Pinchpools Road, Brixton Lane and Brick Kiln Lane. It then continues onto Stortford Road, turning right onto Clatterbury Lane, then Royston Road, before turning left up a track leading to Bromley Barns. It then connects with Littlebury Green Road before heading north towards Catmere End on Coploe Road, where it meets the Cambridgeshire border. All segments of the route within Uttlesford are on-road.

4.3 Key Barriers

The Key Barriers to cycling in Uttlesford District can be summarised as follows:

- Lack of existing infrastructure provision generally in main populated areas.
- Some existing infrastructure is isolated and does not cater for cyclists when they reach either end.
- High traffic flows on main roads.
- Narrow streets in some town centres, making cycling conditions difficult.
- A series of one-way traffic restrictions in town centres, making access by bicycle difficult and cycle permeability relatively low.
- Lack of cycling infrastructure on rural roads, and poor awareness of all road user's needs in these areas.
- Varied topography, particularly in the area surrounding Stansted Airport (a major employer), which reduces demand for cycling.

5 Uttlesford's Cycling Potential

5.1 Introduction

This section provides a summary of existing travel behaviour within Uttlesford District as well as identifying the potential for cycling and how improvements should be prioritised.

5.2 Commuter Flow Analysis

The 2011 Census records how residents choose to travel to work, as well as the location of their workplace. The aim of analysing this information is to establish where the predominant local commuter movements exist that could feasibly be undertaken by bicycle. This data can then be used to assess the commuter cycle potential for an area.

The predominant commuter flows for Uttlesford District have been calculated based on travel between Lower Super-Output Areas (LSOAs) from the DfT's Propensity to Cycle tool, which uses 2011 Census data. It has been assumed that commuters would choose the same route and mode of travel to work (in the AM) as they do to return from work (in the PM).

5.2.1 Cycle trips

Figures 5.1-5.3 show the predominant commuter flows for journeys to work by bicycle within Uttlesford⁶, separated into Stansted Airport area, Great Dunmow, and Saffron Walden.

The top three LSOAs for cycling in the area are shown on the map, and then from these LSOAs the top 2 movements were identified, which is why the total number of journeys shown on the map as "originating" will not match the number "leaving". If there is a LSOA with less than 2 journeys originating from there then the journey was deemed too insignificant to map.

The number of cycling trips to work are generally low across the District. In the Stansted area currently 5 people stated that they live and cycle to work in the LSOA incorporating Stansted Airport, It could be assumed that they work at the airport and that improving cycling links to there would be beneficial. Stansted Airport has a target of increasing the percentage of staff commuting to work by bicycle to 0.5% by 2019, and Essex Highways have recently examined the

⁶ Data from <http://pct.bike/m/?r=essex>

potential for new and improved cycling facilities to enable this modal shift. As a result, potential routes have been proposed for the surrounding areas to improve cycle access to the airport and will feature in this report.

According to Census data, in the LSOA directly north of the airport, including villages such as Henham, 14 cycle to work trips are made by bicycle, which are mainly made to Elsenham or stay locally in the LSOA. There is an area to the north of Stansted Airport and to the West of Thaxted where there are 70 internal cycling trips. This is likely to be related to The Carver Barracks which is a British Army base on the former site of RAF Debden. Soldiers living in their nearby Army Quarters can easily access their place of work by bike. When looking at the map for this area it is clear that cycling needs to be encouraged in the town of Stansted Mountfitchet, which does not appear to have any significant Journey to Work trips at present, despite having existing provision.

In Saffron Walden the highest Cycle to Work journeys originate in the town centre with the top two journeys going to the North East of the town, potentially to a number of places to work in the area such as the Ashdon Road Commercial Centre. Furthermore, 3 people cycle within the zone, highlighting that improved provision is needed within the town centre. Additionally, 15 people cycle from residential areas to the West of the town, 4 of which cycle into the town centre, and 6 to an area to the South of the town, where there are a couple of shops and Katherine Semar Junior School. There are 12 cycle trips from the North East of the town which potentially are travelling to employment centres such as the Shire Hill industrial estate, and the Saffron Walden Community Hospital.

In Great Dunmow cycling propensity is very poor. The largest cycling trips originate in the south of the town where several trips are taken to the North of the town potentially to The Helena Romanes School and Sixth Form and Great Dunmow Leisure Centre. Additionally 8 cyclists travel from Flich Green to the surrounding area and on to Felsted.

Figure 5.1 Predominant commuter flows for Journeys to Work by Bicycle in Stansted

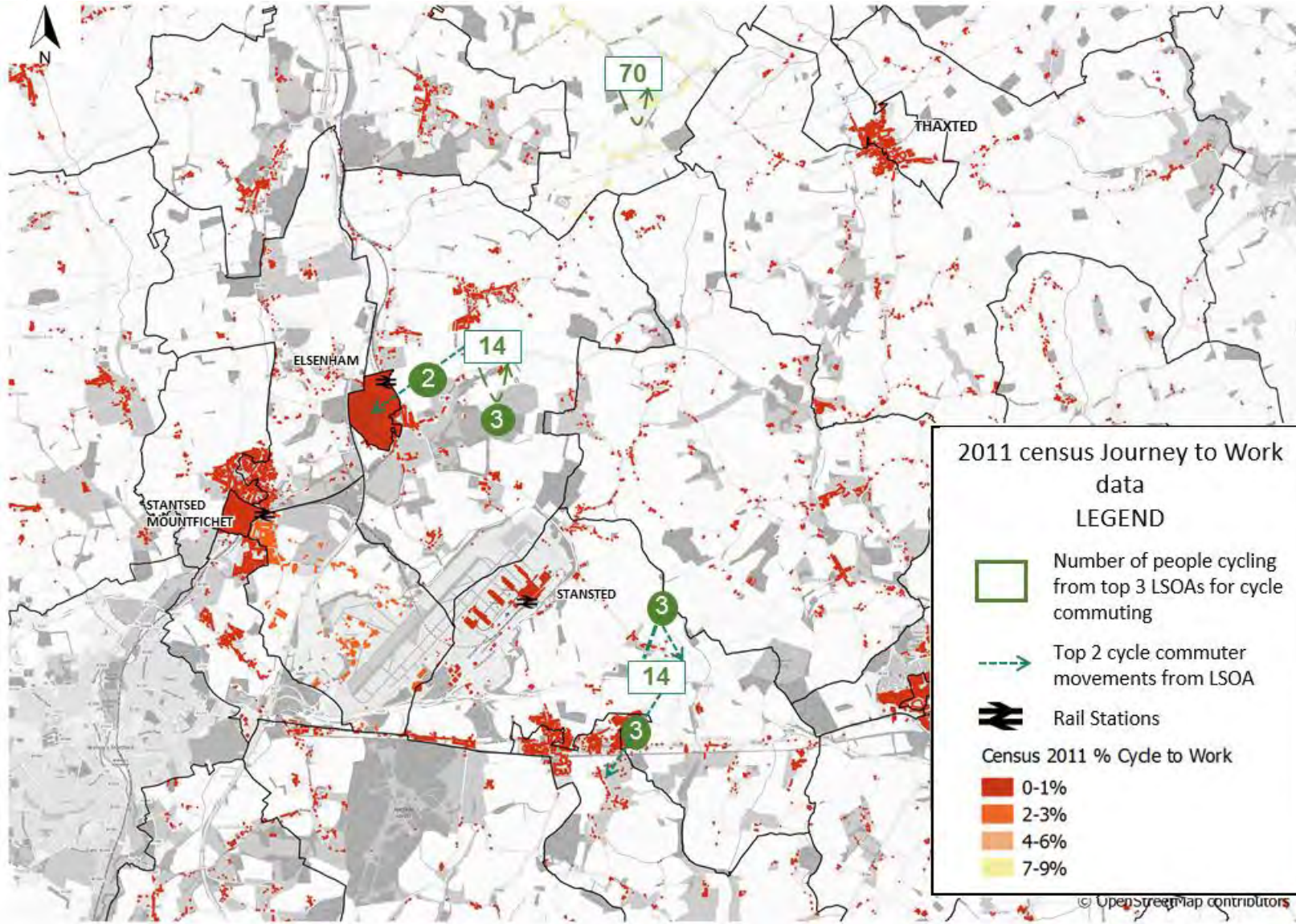


Figure 5.2 Predominant commuter flows for Journeys to Work by bicycle in Saffron Walden

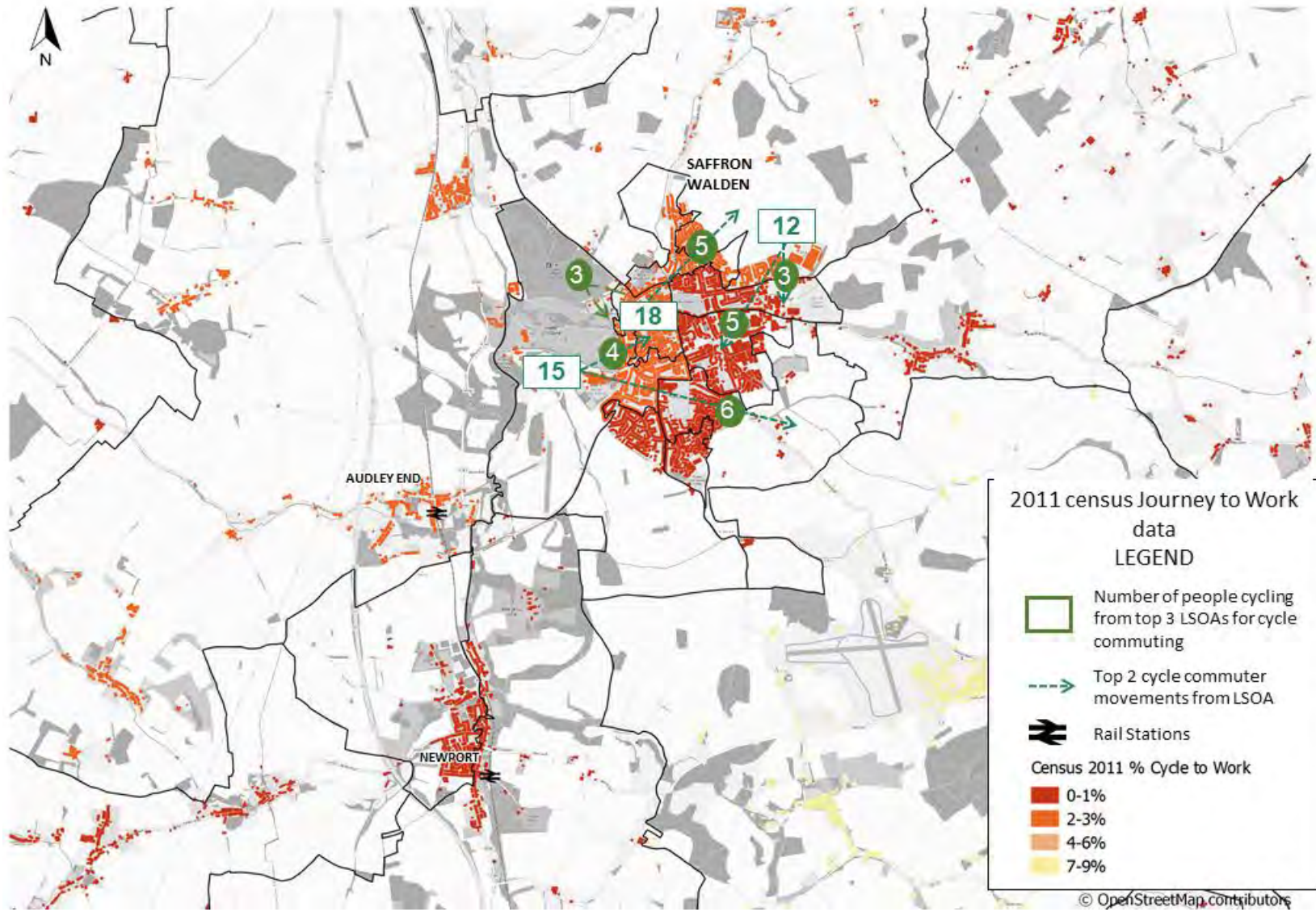
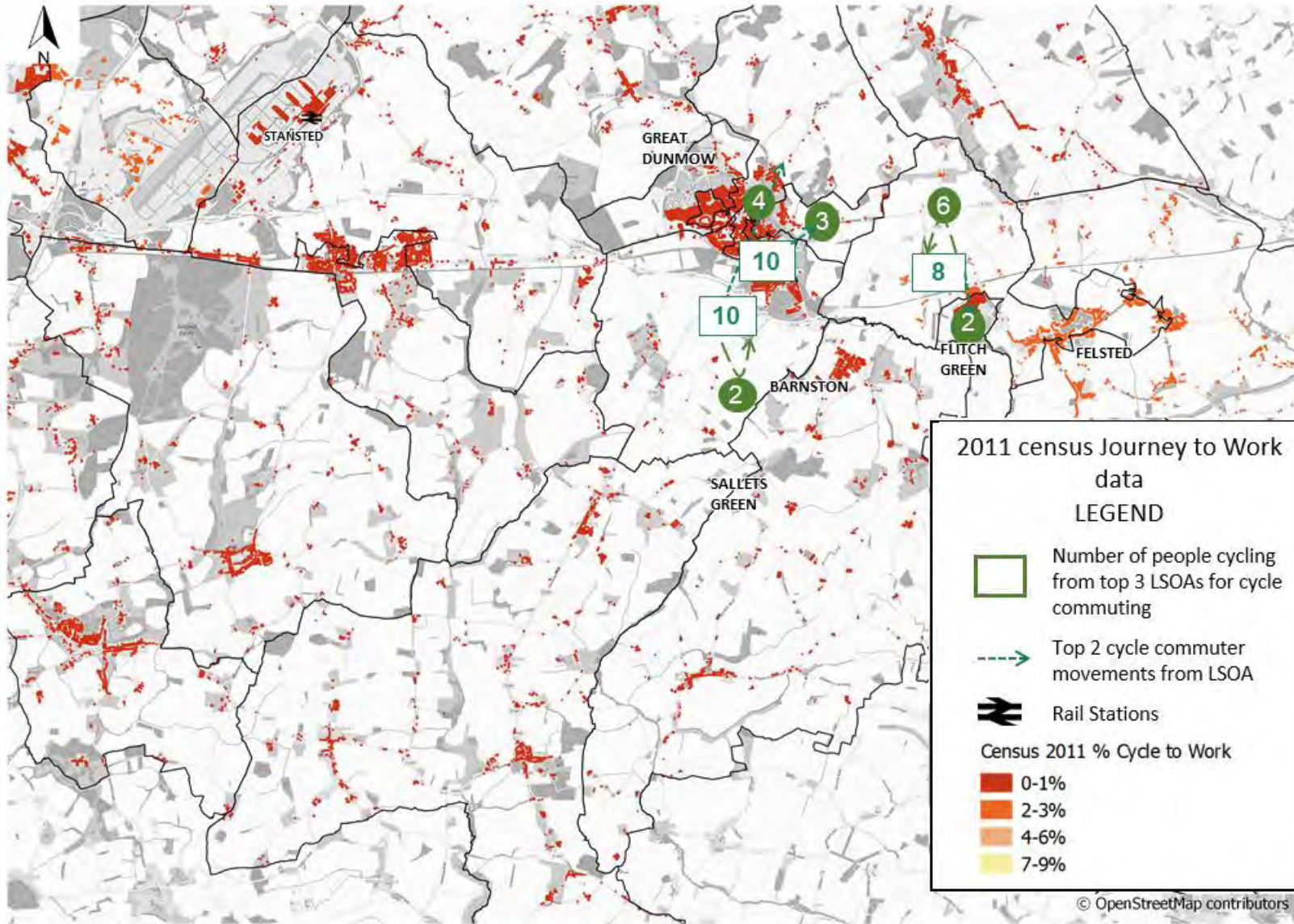


Figure 5.3 Predominant Commuter flows for Journeys to Work by Bicycle in Great Dunmow



5.2.2 Car trips

Shown in Figures 5.4, 5.5, and 5.6 are the internal car trips, from one Uttlesford LSOA to another Uttlesford LSOA. Trips shown are from the origin LSOAs with three largest total car trips and then the three largest OD trips. For example, for the zone which incorporates parts of Stansted Mountfitchet, there are 219 car trips originating here and travelling to another Uttlesford LSOA. Of these 219 car trips, the largest movement is 75 trips towards Stansted Airport, These trips were shown as short car trips that could potentially see a mode shift to cycling. Additionally in Stansted Mountfitchet 22 car trips are being made to nearby Birchanger, and 20 are staying within the vicinity.

In the rest of the Stansted Airport area there are a high number of short car trips to work. In the LSOA where the Airport itself is situated there are 627 car journeys being made to surrounding areas, most notably 119 are staying within the immediate area, presumably to the Airport, which indicates that these are potential trips which could switch to cycle if the right infrastructure were in place. 110 are travelling south to some areas within Takely and Canfield, and 55 onto Great Dunmow. 372 car trips are travelling from the areas North East of Elsenham, with 51 travelling towards the Airport, 30 towards Stansted Mountfitchet, and 30 towards Elsenham. Additional car trips to the airport (by employees) could be captured through the use of pool e-bikes. This would enable less confident cyclists to cycle with less effort and would help to remove some of the barrier of topography.

In Saffron Walden a number of people are driving to work within the town itself. 548 car trips are being made from the North West of the town 54 of which are travelling to the South Eastern areas where there is an employment area, 51 are travelling to the South of the town, and 48 to the East. From Western residential areas 385 trips are being made with 31 to Southern Saffron Walden, 32 to South Eastern areas and 37 to the East. From outlying villages to the West of Saffron Walden, including Littlebury, 30 car trips are going to the town centre and 31 to the East. This analysis highlights an opportunity to encourage a modal shift to cycling by providing cycling infrastructure in order to allow people to travel by bike across Saffron Walden. The potential Flagship Route is attempting to facilitate cycle trips across the town centre.

In Great Dunmow 429 car trips are made from the South West areas in and out of the town, 59 trips go west to Stansted Airport, 36 trips go to the Northern areas, possibly to the Helena Romanes School and Sixth Form, and 37 trips go East. 411 trips originate from Central-Eastern areas where 77 car trips are heading

west towards the Airport, 40 trips are heading north, and 34 travelling south towards southern residential and employment areas of the town or southern villages. Finally 227 trips originate from the Eastern areas of Great Dunmow with 51 trips going to Stansted, and 28 to Northern areas of Great Dunmow.

Figure 5.4 Predominant Commuter Flows for Journeys to work by Car in Stansted

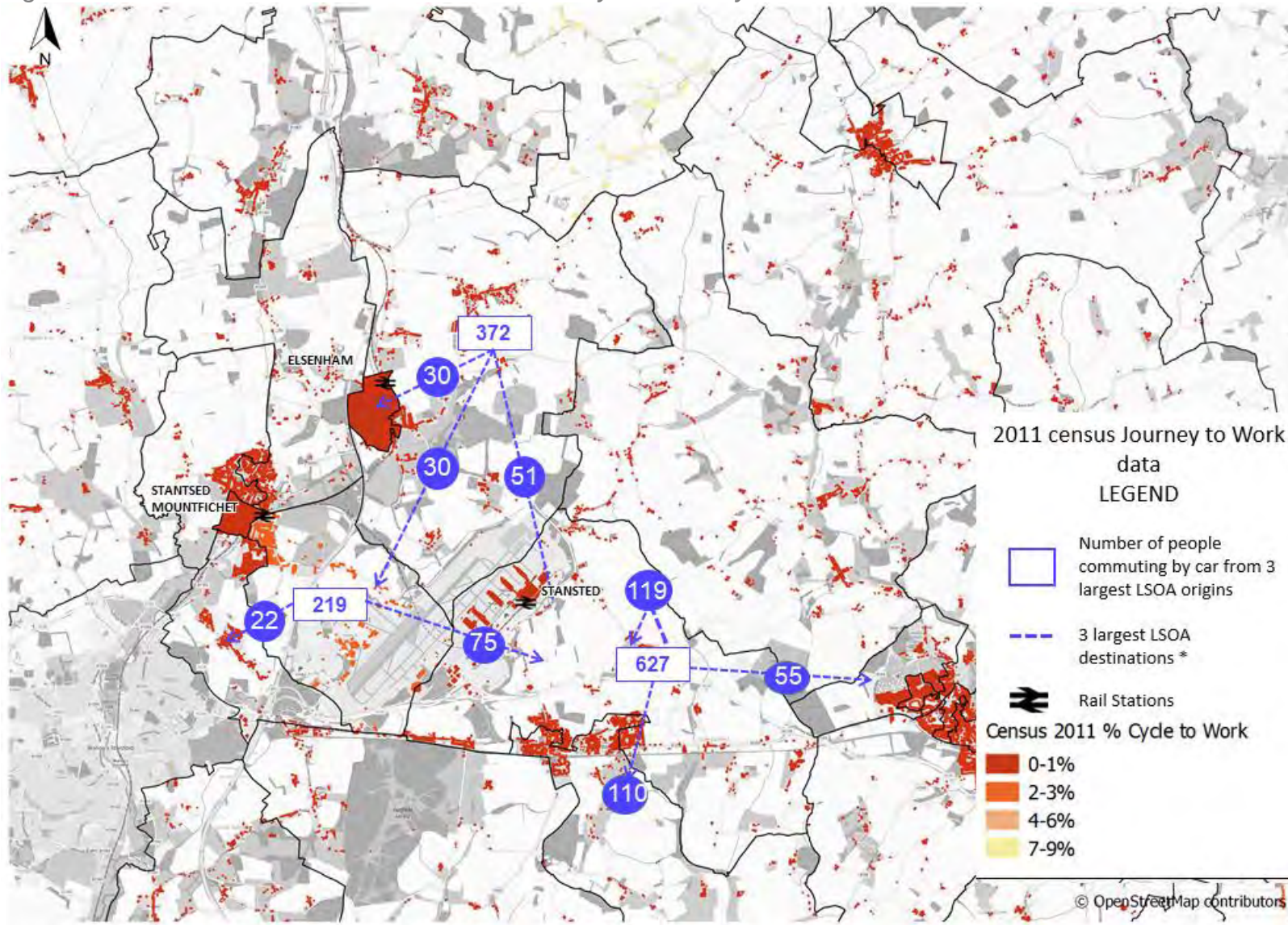


Figure 5.5 Predominant Commuter Flows for Journeys to work by Car in Saffron Walden

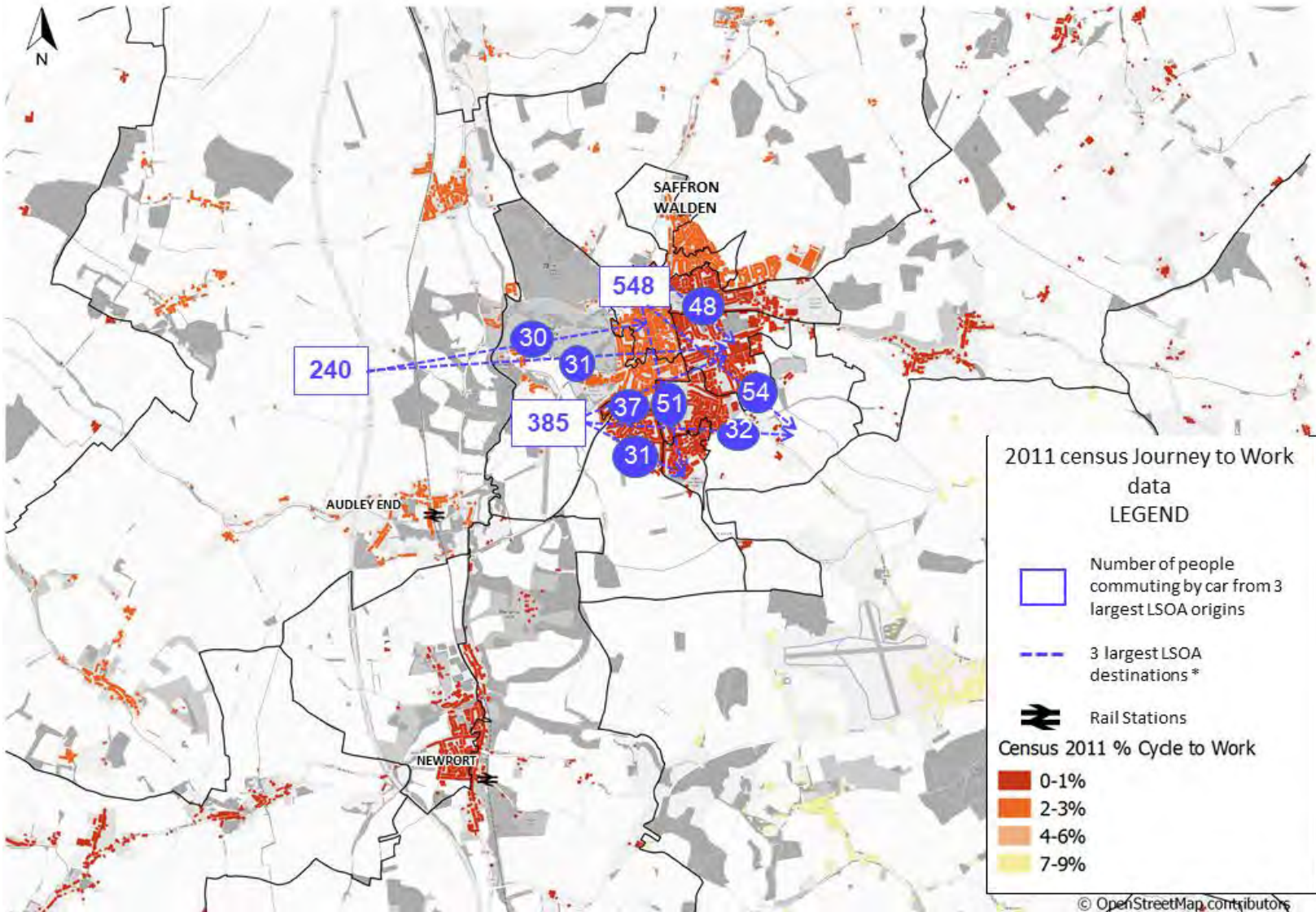
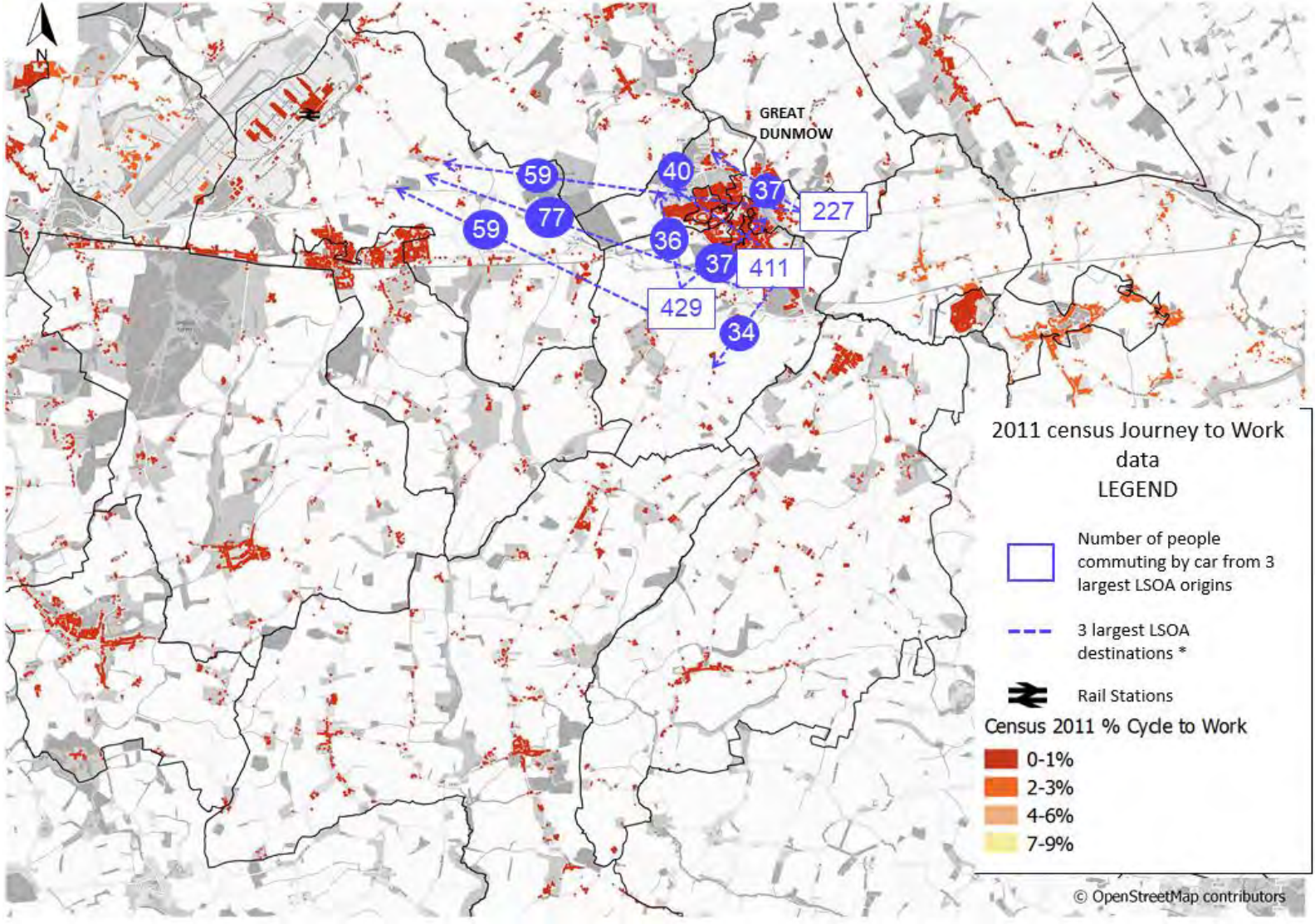


Figure 5.6 Predominant Commuter Flows for Journeys to work by Car in Great Dunmow



5.2.3 Access to Rail Stations

Stansted Airport, Stansted Mountfitchet, and Elsenham all have their own railway stations on the same London Liverpool Street line as Bishops Stortford. It takes approximately 50-60 minutes to get to London Liverpool Street. There are also services from Stansted Airport train station to Cambridge, Peterborough, Leicester and Birmingham.

As shown in Figures 5.7-5.9 there are a high number of commuters that travel by train in Uttlesford particularly in the area surrounding the Airport, Stansted Mountfitchet, and Elsenham (Figure 5.7) where there are stations nearby, therefore efforts should be made to make cycling a real option when travelling to the station, as in potential schemes 22 and 23.

In Saffron Walden (Figure 5.8) there are also a significant number of people who travel by train. There is not a train station in Saffron Walden itself, but there is one in nearby Audley End. There is existing cycling provision along Wenden Road which gives cyclists a route from Saffron Walden to Audley End Station, however there is currently no provision either end of this road to get into the station itself, or into Saffron Walden. This is addressed by potential schemes 5 and 6 in this CAP.

In Great Dunmow (Figure 5.9), fewer people travel by train and there is not a train station in proximity to the town. Commuters would have to get the train either at Stansted/Bishops Stortford, or Braintree. As Stansted Airport train station is located 7 miles from Great Dunmow, this may be too far to capture an average commuter and transfer their trip to the station to bicycle.

5.2.4 'Rail' Heading

In many cases, cycling can form a key part of commuter rail journeys. The 2011 Census only records main mode by distance, therefore assumptions must be made when analysing journeys that would be multi-modal. Therefore where commuters have stated their main mode of travel to work to be by rail, it has been assumed that rail commuters would predominantly choose the closest station to them, unless a main line station is located within a similar proximity. In such a case, it is assumed the preference would be the main line station. In Figures 5.7 to 5.9, the total number of people travelling from a LSOA for their journey to work by rail is shown, along with the location of railway stations.

Figure 5.7 Predominant Commuter Flows for Journeys to Work by Train in Stansted

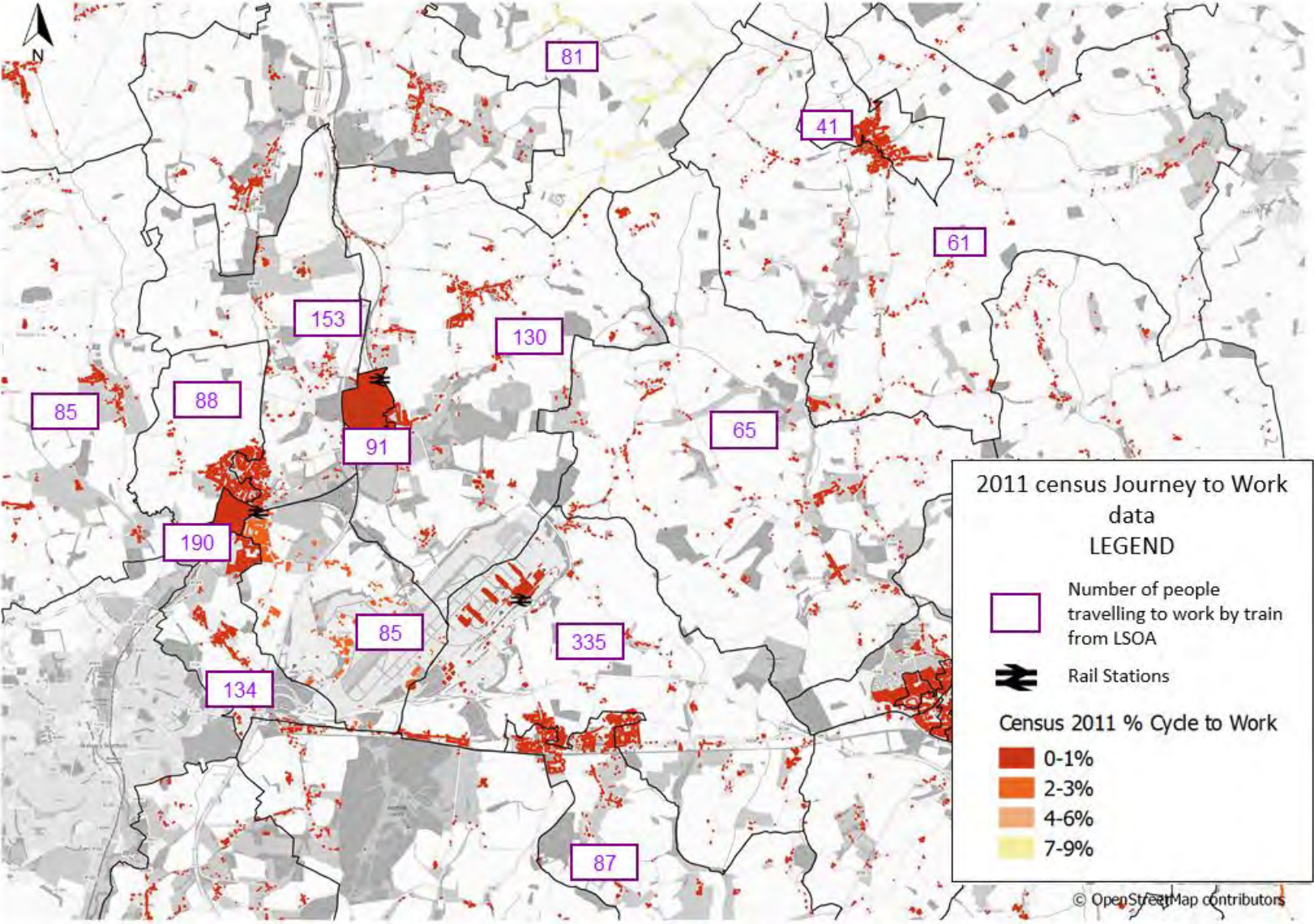


Figure 5.8 Predominant Commuter Flows for Journeys to work by Train in Saffron Walden

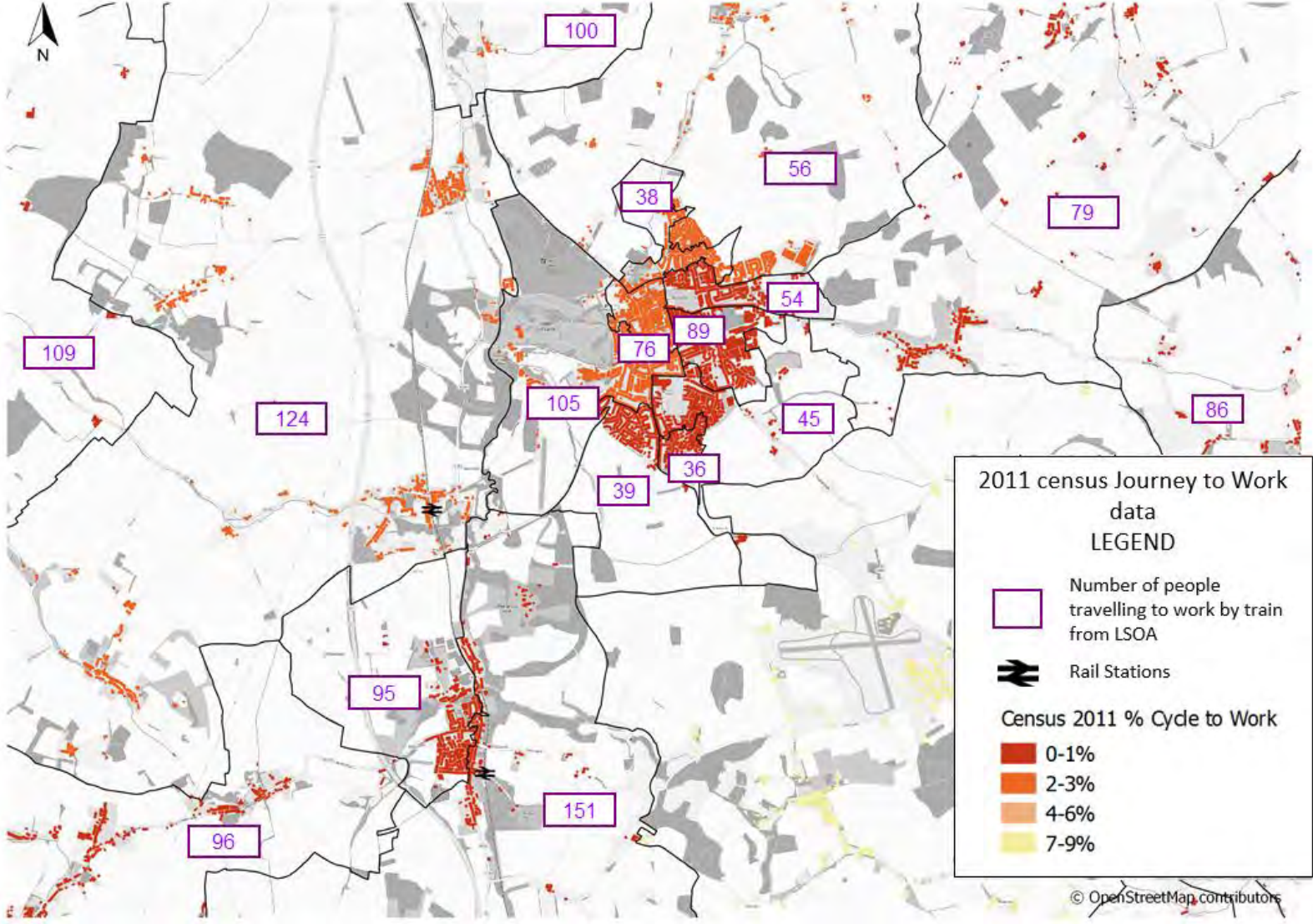
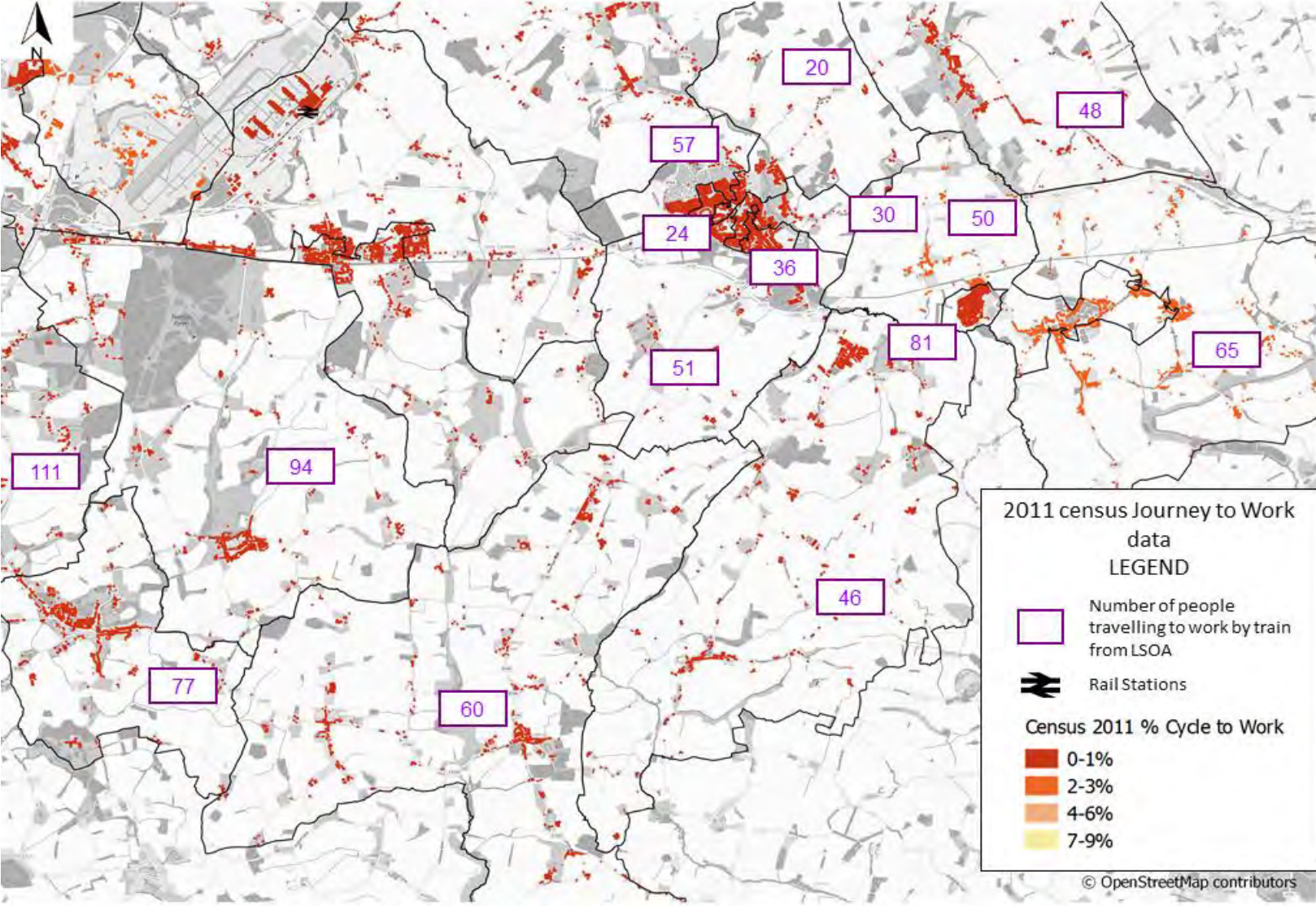


Figure 5.9 Predominant Commuter Flows for Journeys to Work by Train in Great Dunmow



5.3 Propensity to Cycle Tool

In previous Cycling Action Plans, the MOSAIC Propensity to Cycle has been examined to help target areas of opportunity to best increase mode share and assist in increasing trips. This, however, has now been superseded by the Propensity to Cycle Tool. This has already been referred to in Section 3. The four scenarios examined here are:

- Government target – this represents a doubling of the level of cycling in line with the government’s target to double the number of ‘stages’ (legs of a trip using a single mode) cycled by 2025⁷. This is not uniform and at the local level being studied here will not be exactly doubled. For example, in an area with many short, flat trips and below-average levels of cycling, it may be projected to have more than doubled⁸.
- Gender equality – this represents the increase in cycling levels that would occur if women were as likely as men to cycle a given trip.
- Go Dutch – this represents what would happen should English people were as likely as Dutch people to cycle a trip of a given distance and level of hilliness. This would be if England had the same infrastructure and cycling culture as the Netherlands but retained their hilliness and commute distance patterns.
- Ebikes – this represents the additional increase in cycling that would be achieved through the widespread uptake of electric cycles (‘ebikes’). This is generated by taking the baseline propensity to cycle and applying both the Dutch scaling factors from the Go Dutch scenario and applying Ebike scaling factors, which takes account of the fact that electric cycles enable longer journeys and reduce the barrier of hills.

⁷ Department for Transport, 2014, Cycling as transport,
<http://www.tandfonline.com/doi/full/10.1080/01441647.2015.1114271>

⁸ Lovelace *et al.* 2016, The Propensity to Cycle Tool: An open source online system for sustainable transport planning, <https://www.jtlu.org/index.php/jtlu/article/view/862/859>

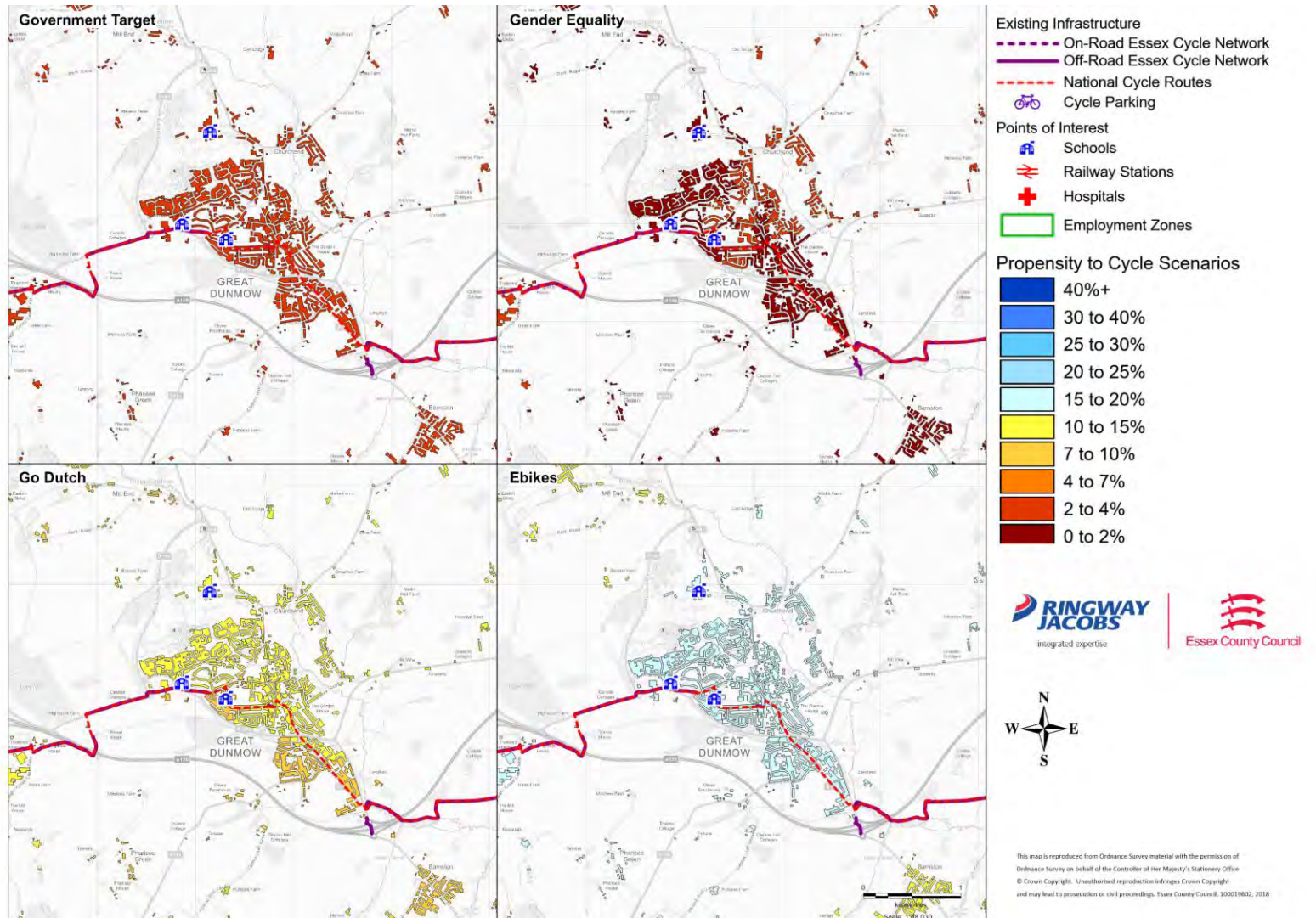
5.3.1 Propensity to Cycle Analysis of Great Dunmow

Across Great Dunmow, the Government Target scenario is between 2-4% of the population cycling (see Figure 5-10). The Gender Equality scenario shows the lowest levels across all four scenarios with the majority of Great Dunmow falling under 0-2%. Central and North Eastern areas of the town fall into the 2-4% propensity.

For the Go Dutch scenario most of the town rises to 10-15% propensity should Dutch style infrastructure be implemented. However southern areas of the town near Great Dunmow Primary School, and the areas near the employment area on Chelmsford Road only show 7-10% propensity.

The Ebike scenario shows the greatest potential out of the four scenarios with 15-20% propensity throughout Great Dunmow.

Figure 5.10 Propensity to Cycle tool scenarios for Great Dunmow



5.3.2 Propensity to Cycle Analysis of Saffron Walden

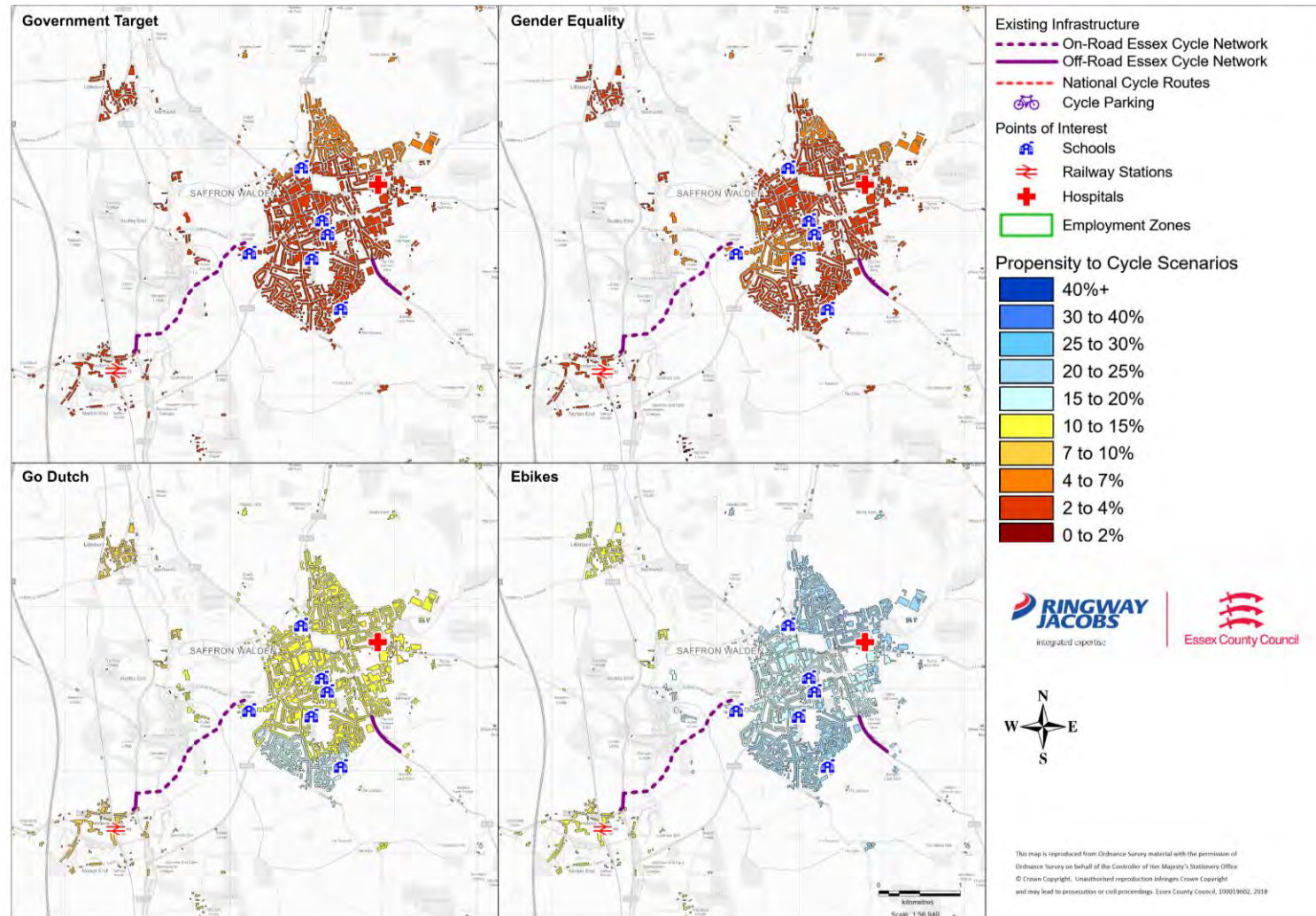
Across southern Saffron Walden the Government target propensity is 2-4%, this also includes the villages of Wendens Ambo (where Audley End Station is located) and Littlebury. In the northern residential areas north of the hospital, the government target rises to 4-7%.

In the Gender Equality scenario most areas of Saffron Walden remain the same on 2-4%, with the exception of an area in the west of the town near the Uttlesford District Council offices, and Saffron Walden County High School which have now increased to 4-7%.

For the Go Dutch Scenario, the majority of Saffron Walden falls under the 10-15% category, with the exception of the southern-most area of the town near Katherine Semar Junior School which is higher at 15-20%. The outlying villages of Littlebury and Wendens Ambo rise to 7-10%.

For the Ebike scenario the propensity of central Saffron Walden is 15-20%, this includes the areas around the main shopping areas and Saint Thomas More Catholic Primary School, RA Butler infant and Junior School, and St Mary's C of E Primary School. Northern and southern areas of Saffron Walden rose to 20-25%. Littlebury and Wendens Ambo rose to 10-15%.

Figure 5.11 Propensity to Cycle took for Saffron Walden



5.3.3 Propensity to Cycle Analysis of Stansted Airport and Environs

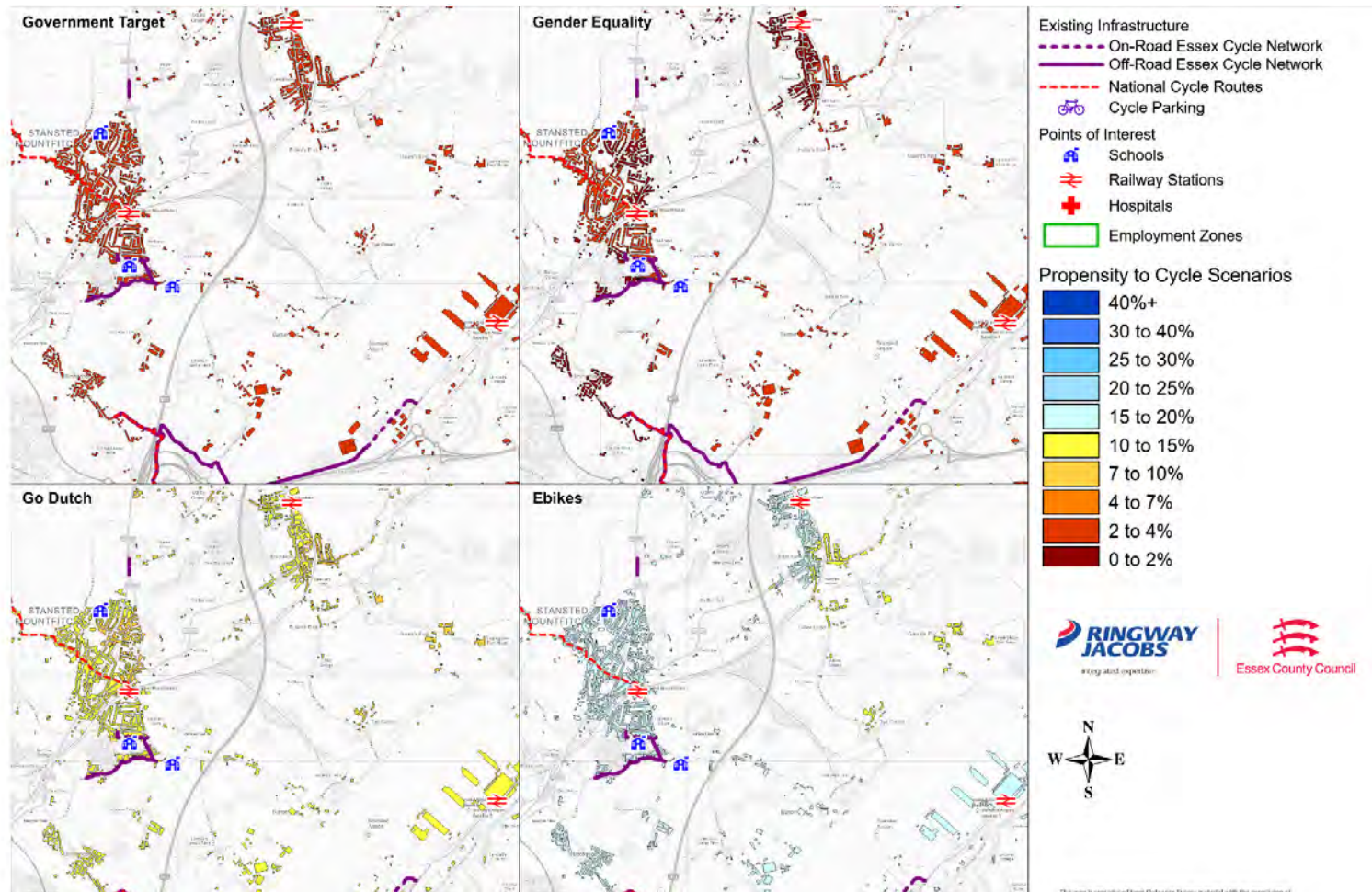
In the area surrounding Stansted Airport (Stansted Mountfitchet, Elsenham, and Birchanger) the Government Target is universal at 2-4%.

When the scenario is showing the Gender Equality scenario, Birchanger Elsenham and North East Stansted Mountfitchet are 0-2%, the rest of the area is 2-4%.

In the Go Dutch scenario, the vast majority of the area falls into the 10-15% area, with the exception of North East Stansted Mountfitchet, and Western Elsenham which drop to the 7-10% category.

In the Ebike scenario the area was mostly in the 15-20% category with the exception of South Eastern Elsenham and Gaunts End, which fall into the category below on 10-15%.

Figure 5.12 Propensity to Cycle tool for Stansted Airport



5.4 Summary of Potential in Uttlesford

Generally, levels of cycling to work within the urban areas of the District are low. Propensity to cycle is shown to increase significantly, however, under the Go Dutch scenario – from around 0-2% in most urban areas to 7-15%. Therefore, improving the cycle permeability of urban areas could encourage a large number of people to cycle to and through urban areas for work. Of course, this infrastructure would also benefit leisure cyclists wishing to access the shops and services of the urban centres. Saffron Walden shows relatively high levels of car trips to the town centre for work, so it makes sense that some of these trips could be transferred to cycle with the implementation of good cycle infrastructure. The census analysis highlighted an opportunity to encourage a modal shift to cycling by providing cycling infrastructure in order to allow people to travel by bike across Saffron Walden.

There are a relatively high number of internal car trips within the Stansted airport zone. Improving cycle infrastructure in the vicinity of the airport and between it and key origins would assist in a transfer of employee journey to work trips by car to bike. Notable origins for employee journey to work at the airport include: Takeley, Canfield, Great Dunmow, Elsenham, Henham and Stansted Mountfitchet.

The potential for e-bikes to be encouraged, or an e-bike pool scheme to be implemented at a major employer in the area, in conjunction with implementation of good cycle infrastructure, could result in a significant uptake of cycling to work as it would reduce the barrier of topography and distance, which can be off-putting to less-experienced cyclists. The scale of Stansted airport, in terms of its number of employees would be an ideal location to facilitate this kind of infrastructure.

6 Potential Infrastructure Improvements

6.1 Background

In order to remove barriers to cycling and provide suitable infrastructure, it is essential that all new developments in the District have good quality, cycle-friendly routes to key services, railway stations and areas of employment. To this end, all potential developments associated with the Uttlesford Local Plan should contribute towards creating a wider network of cycle-friendly routes with provision along key corridors and desire lines.

A coordinated approach should be taken, whereby development planning and highway scheme delivery in Uttlesford is linked with infrastructure provision, complemented by soft measures that promote cycling as part of a range of alternatives to single-occupancy car travel.

This CAP is identifying a network of strategic cycle routes including the routes around Stansted Airport, identified in the Stansted Airport Local Employee Access Study (Essex Highways, on behalf of ECC, 2018), as well as, within this, specific Flagship Routes. These Flagship Routes for the District of Uttlesford are described later in this report, in Section 8.

6.2 Potential cycle routes

Potential new cycle routes have been identified to help create a step-change in cycling conditions across the District. These might include signed routes (with journey times and surface markings), networks of interconnected cycle routes on quiet residential streets, filtered permeability (e.g. convenient cut-throughs and contraflows) and, where appropriate, 2nd generation cycling infrastructure, such as Dutch, Danish or light segregation. Infrastructure improvements have been considered for the three urban areas of Saffron Walden, Great Dunmow and the area around Stansted Airport. The potential new routes are illustrated in Figures 6.2 to 6.5, below.

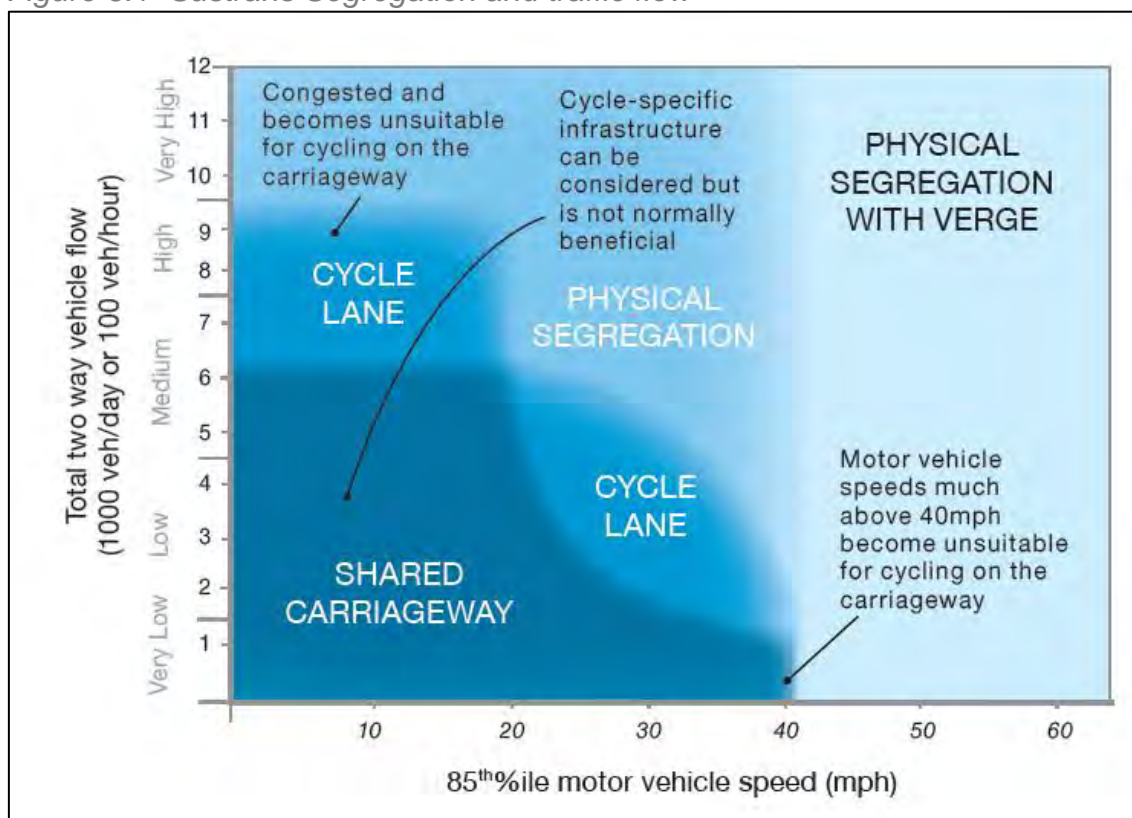
6.3 Methodology Statement

The potential routes have not, at this stage, been subject to detailed scheme design or feasibility, they are the result of an initial scoping study which is recommending a strategic network. Local knowledge, obtained through Stakeholder Consultation, has been used to inform this process. Where possible, the Sustrans Design Manual has been used to inform provision, particularly with

regard to the acceptable provision related to traffic speed and volume conditions in specific locations.

Where traffic volume and speed data is available, the potential schemes have been subjected to Sustrans design principles, which recommend the type of scheme that should be considered under those conditions (Figure 6.1). Traffic volume and speed may influence the decision on the need to segregate cyclists from other traffic. For example, where low speeds and traffic volumes are evident, there is no need to segregate cycle and other traffic and a shared carriageway is acceptable. As traffic speeds and volumes increase, cycle lanes are found to be more desirable, until the threshold is reached whereby physical segregation is required. Beyond this point, where 85 percentile traffic speeds exceed 40mph, and/ or volumes exceed 9500 vehicles/ day (or 950 vehicles/ hour), conditions become unsuitable for cycling on the carriageway and physical segregation with a verge is necessary. Where traffic volume and speed data are not currently available, it may be necessary to undertake a traffic survey to determine the provision that is required.

Figure 6.1 Sustrans Segregation and traffic flow⁹



In some locations, it has been noted that cycle-friendly crossings will be required. In most instances, further work and traffic surveys will be required to enable the exact type of crossing provision to be determined.

*There are some examples where footway/ footpath conversions to shared use have been identified. The conversion of footpaths and footways to permit bicycle use is not regarded as a general or area-wide remedy, but has been confined to specific links and locations. It is recommended that where footpaths conversion and/ or footway conversion to shared use is considered then further studies are undertaken to demonstrate that alternative options have been discounted and that clear benefits can be derived. In such situations, it is vital that the benefits to the cyclist are balanced against the increased risk and inconvenience to pedestrians.

ECC aims to limit the use of footway conversion/ shared use paths and Engineers and Designers should first consider alternative options.

⁹ Sustrans Design Manual. Handbook for cycle-friendly design, Sustrans, April 2014

6.4 Construction Design and Management (CDM)

The potential new cycle routes identified in this CAP all require further feasibility assessment before they can be finalised or confirmed. In some cases, the alignment of the routes may need to be amended to ensure that the safest scheme design, in terms of operation, construction design and management, is identified. In some cases, a route might need to be deleted entirely, if it is determined that CDM risks cannot be reasonably mitigated through early design stages.

Some of the potential routes are alongside or cross features such as high speed roads, water courses or railway lines and may either require a new structure or widening of an existing structure in order to be implemented. It is recognised that these features raise the potential for significant risk (and indeed cost) during construction and operational management and they will need to be given particular consideration during the feasibility assessment.

Figure 6.2 Potential Schemes in Saffron Walden

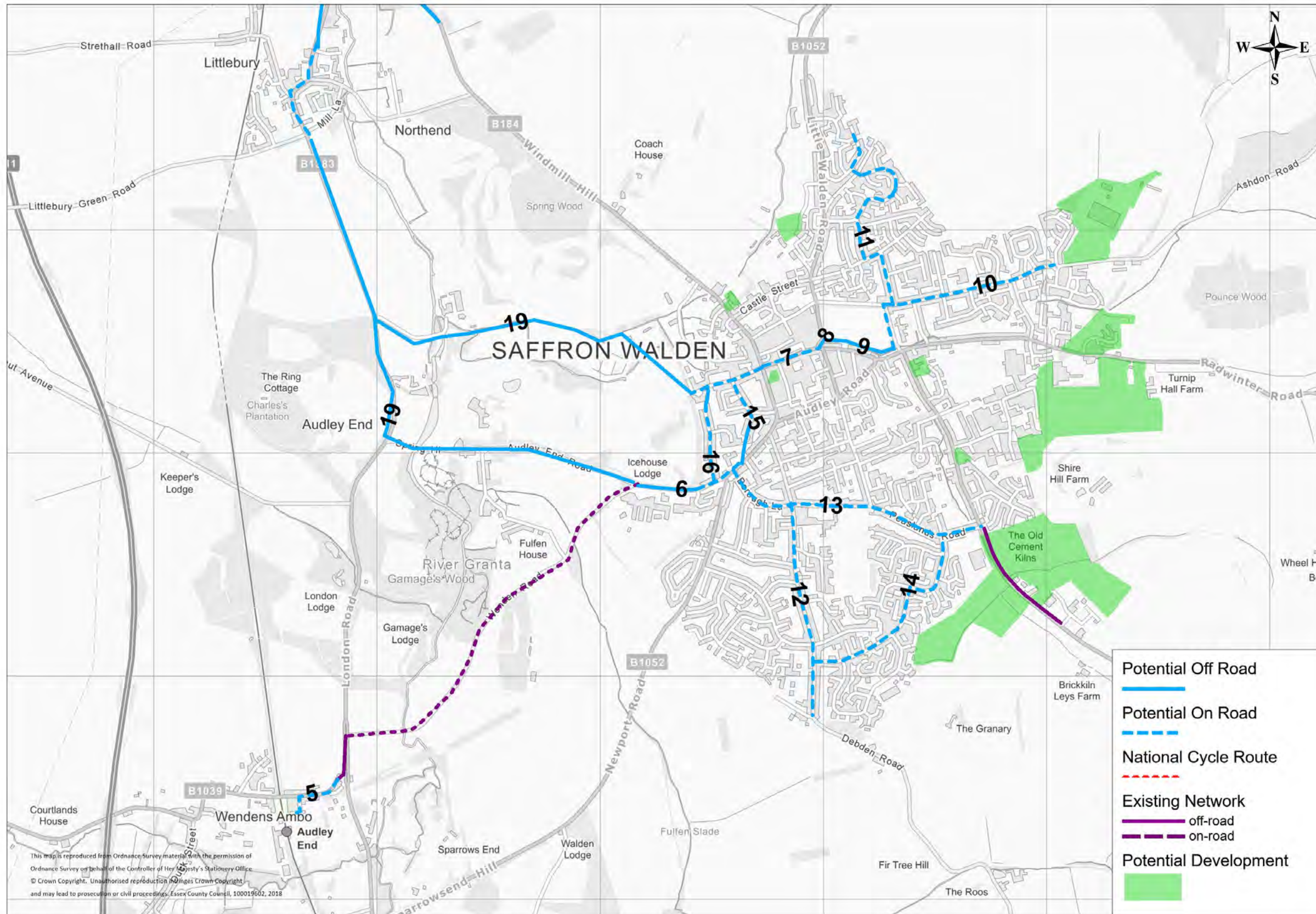


Figure 6.3 Potential Schemes in Great Chesterford

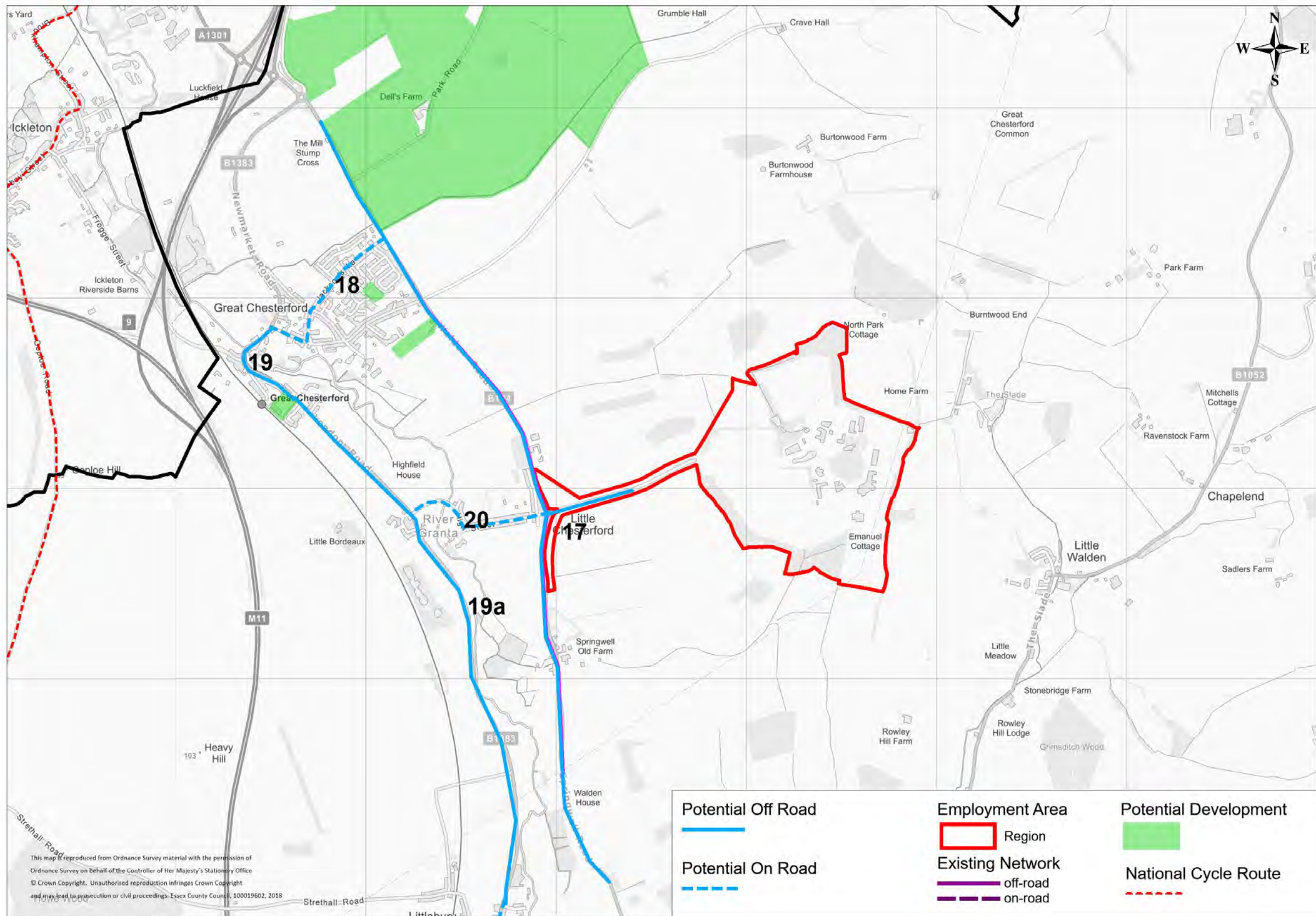
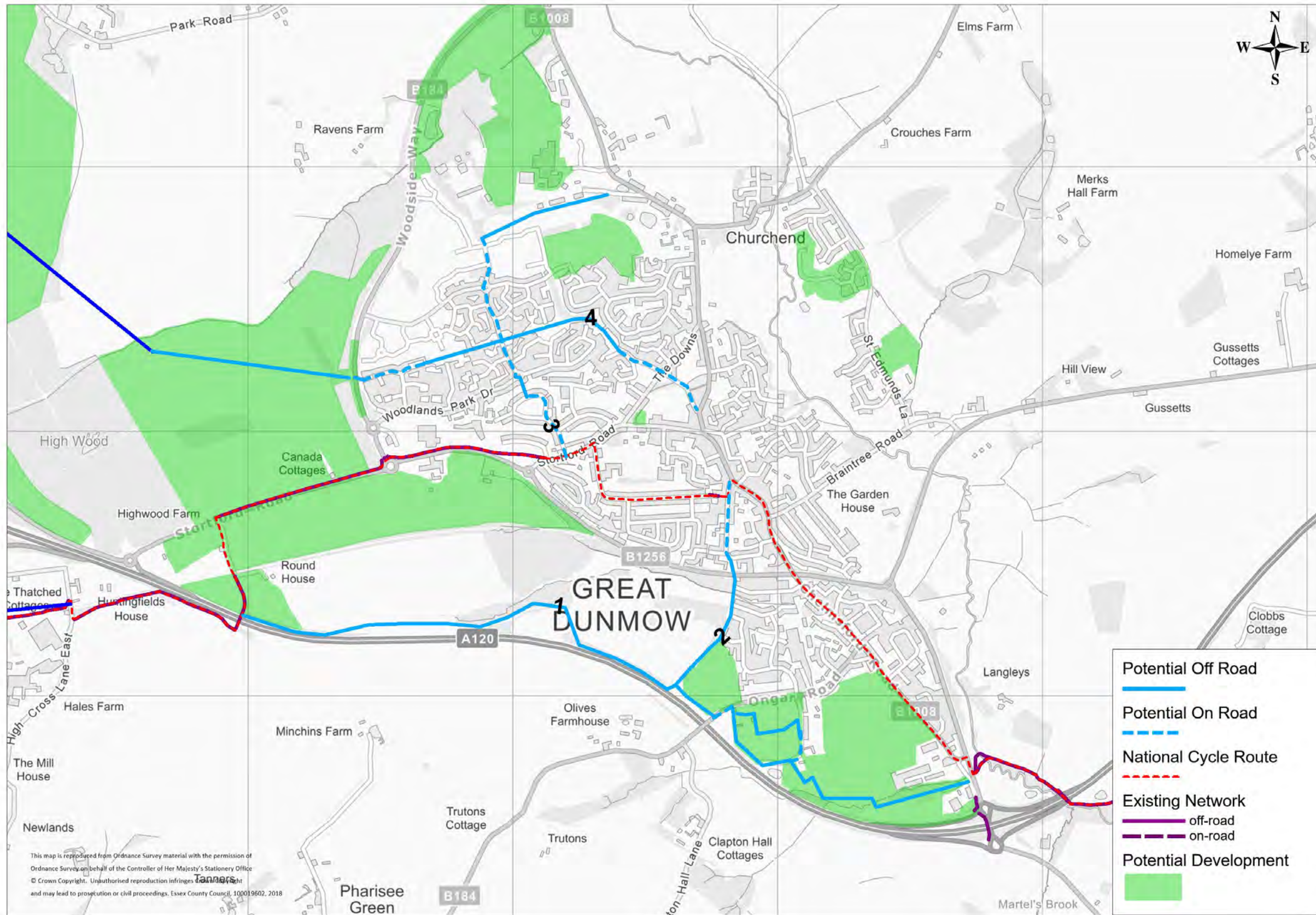
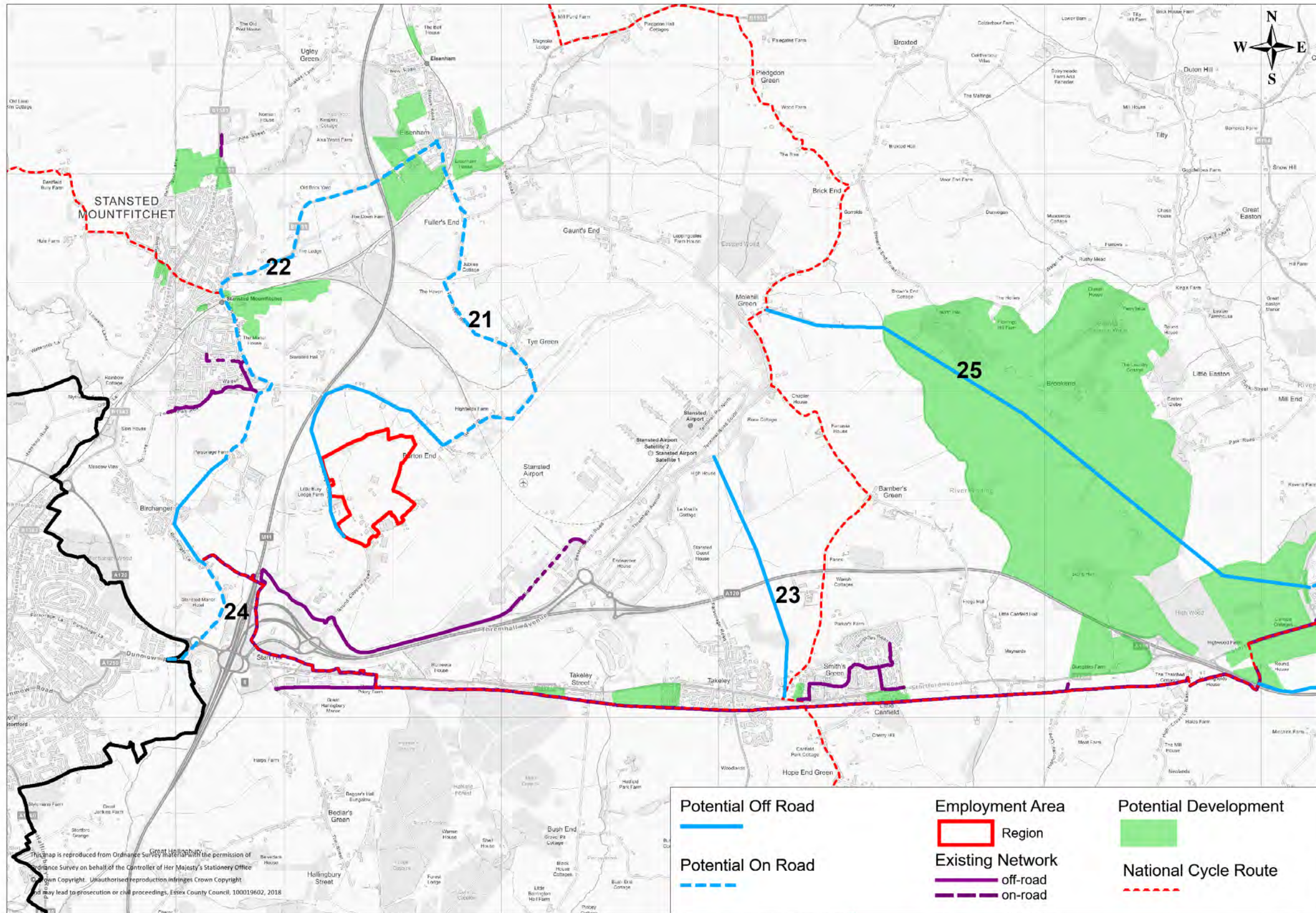


Figure 6.4 Potential Scheme in Great Dunmow



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Figure 6.5 Potential Schemes around Stansted Airport



7 Prioritisation and Costings of Potential Schemes

7.1 Prioritising Schemes

The potential schemes have been prioritised according to four criteria of their design:

- Deliverability;
- Directness;
- Extension of existing network; and
- Key attractors.

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

7.2 Deliverability

The deliverability of a scheme has been assessed according to land ownership issues, which will determine how easy the scheme will be to deliver:

- H: High being a scheme that lies wholly within the highway boundary, straightforward to deliver, with no land ownership issues.
- M: Medium being any route that requires conversion of Public Rights of Way (PROW); and
- L: Low being any scheme which is likely to encounter private land ownership issues, or requires a singular large expense, such as a bridge.

7.3 Directness

The directness of the route is considered in terms of where it is proposed to provide access to, for instance a town centre or a railway station:

- H: High being a scheme that provides direct access, using as short a distance as reasonably possible, or could provide a real improvement on the corresponding car journey time;
- M: Medium being a link route, providing access to the main radial cycle route(s);
- L: Low being indirect routes, which are routed along relatively longer distances.

7.4 Extension of existing network

The extent to which a potential route extends the existing network is considered against this criteria:

- H: High being a route which extends, or fills a gap in, the existing network;
- L: Low being a route which is isolated and/ or unlinked to the existing network.

It should be noted that in some urban areas, for example Billericay, there is little or no existing network to connect to, so most of the potential schemes will achieve a low score in this case.

7.5 Key attractors

Under this criteria, the number of key attractors that a route connects is considered. Key attractors include town centres, other urban areas, railway stations, secondary schools/ education facilities, employment (including hospitals), and leisure destinations (parks, sports centres, etc.). The scoring is undertaken as follows:

- H: High being a route which connects to three attractors;
- M: Medium being a route which connects to two of these attractors; and
- L: Low being a route which connects to none (or just a leisure destination) of these attractors.

Within this criteria, town centres and railway stations are considered to be the most important attractors, so if a route connects to both it is likely to score high rather than medium. On the converse, leisure destinations are considered to be less important, so may attract a lower score.

7.6 Overall prioritisation

Once a score has been obtained for each of the four criteria (Deliverability, Directness, Extension of Existing Network and Key Attractors), its overall prioritisation can be determined, giving an overall score of low (L), medium (M) or high (H). As a general rule, the most frequent score obtained across the four criteria will be the resulting overall score. Where there are an equal number of different scores, there may be some element of subjective judgement used to decide the overall result.

The resulting prioritisation for each of the potential schemes is shown in Table 7.1.

7.7 Estimated costs of potential schemes

As with the prioritisation, the costs of the potential schemes are rated on a low (L), medium (M), high (H) and exceptionally High (H+) scale. The cost estimates relate to the following broad ranges:

- L: Low being less than £100,000;
- M: Medium being within the range £100,000 to £500,000;
- H: High being within the range £500,000 to £1,000,000; and
- H+: Exceptionally High being more than £1,000,000.

The outline costs are indicative of a feasibility proposal stage costing, prior to detailed surveys being undertaken for design and construction. Costs exclude the following:

- VAT (costs are exclusive of VAT);
- Inflation beyond 2015 or significant changes to markets;
- Land costs, legal fees, Highways consultation;
- Construction on contaminated land;
- Diversion of services;
- Landscaping; and
- Access roads for construction.

Realistic unit costs have been derived for each of the elements that are identified in the potential schemes and they have been applied to a length of route where appropriate and as a series of elements to enable the overall cost of each scheme to be built up. The resulting estimated cost for each scheme is included in Table 7.1.

Table 7.1 Costs and Prioritisation of Potential Uttlesford Cycle Schemes

Route ID	Route Name	Opportunity	Potential Solution	Overall Prioritisation	Est.Cost
-	One Way Systems		A review of all one way streets in each town to identify whether there is scope for area wide cycling contra-flows, or site specific cycling contra-flow.	-	-
Great Dunmow					
1	Flitch Way in Great Dunmow	To continue the Flitch Way via an off road route	<p>The Flitch Way Action Group (FWAG) have proposed that the current route of the Flitch Way be taken out of town from National Cycle Network Route 16, and follow a similar route to that previously used, along the A120, which currently forms part of PROW 18_54/18_32. Potential land ownership issues in the first section near the Travelodge Hotel.</p> <p>FWAG have 3 proposed phases:</p> <p>1: Buttleys Lane to Ongar Road – Landowner issues – planning inspectorate to decide/ Redrow development likely by 2019.</p> <p>2: Ongar Road to Chelmsford Road, Pegasus crossing for bridleway on Chelmsford Road.</p> <p>3: Chelmsford Road to byway 57 (Grange Lane track) ECC to upgrade footpath to bridleway, requires replacement bridge over the River Chelmer. Byway 57 requires surfacing improvements.</p> <p>Make an all year round route along the whole of the Flitch Way to accommodate for increased numbers of homes along the route.</p>	M	H+
2	Flitch Way to Great Dunmow Centre	Provide a link to/from Great Dunmow High Street from the Flitch Way connecting villages/ leisure riders to the centre of Great Dunmow	Footpath conversion of PROW18_55 to shared use. At the moment the path would present width issues, but there is potential to widen the footpath to meet standards. Existing bridge over the stream will need to be replaced and upgraded to a wider bridge. Existing footbridge over B1256 requires upgrade (widening and parapets) for cycle use. There could be width issues when entering New Street from the footpath but there could potentially be scope to widen one side of the fence (study into land ownership required). New signed and marked quietway up through New Street until High Street, meeting with National Cycle Route 16. A feasibility study is required.	H	M
3	Green Lane to Woodlands Park Drive to Hawthorn Way	Residential Networks in the North of Great Dunmow	Making use of footway conversion* to shared use of PROW18_18 to link Stortford Road and the existing network on NCN 16 with Woodlands Walk potential route 4 and continue north as new signed and marked on-road quietway to reach the potential development site to the North of Great Dunmow. Route could form a quietway initially up Green Lane until it reaches PROW18_18 in between the houses. (Potential width issues, determine landownership, when on site it was apparent that this had been widened from how it appears on Google Streetview in 2010, still may need a study). Then through to the roundabout on Willow Road/Woodlands Park Drive (study required on how to get onto the road safely), route continues north on road in the form of a signed and marked quietway up Woodlands Park Drive, and meets with potential route 4 on Woodlands Walk, route will continue along Woodlands Park Drive. The route will look to go as far north and incorporate, when built, the proposed development in the north as set out in the Draft Local Plan, potentially via conversion of *PROW18_87.	M	M
4	Woodlands Walk to High Street	Providing a link to the High Street from northern residential areas	Could incorporate cycling into the existing East-West footpath via a conversion* to shared use (PROW18_89) across Northern residential areas of Great Dunmow. There could be brief width issues in between the houses, but for the rest of the route an upgrade and conversion* to shared use could ensure width standards are met. This will connect down through to 'The Downs' and Star Lane via an upgrade of the existing Zebra Crossing to a Tiger Crossing. Star Lane already has an "Access Only" restriction to motor vehicles, therefore could form a quietway route to the High Street. At the Western point of the Woodlands Walk, would transfer to the road as a new signed and marked quietway. An access could be made from the end of Larch Way through a current grassed area (land ownership check required) onto the B184 where potential development is outlined, and connecting to the conceptual Stansted route 7 which could run through Easton Park Garden Community and link to Stansted Airport. This will provide a quiet E-W link through Great Dunmow and a useful alternative to Stortford Road, which has seen a few cycle collisions over the last 5 years.	H	M

Saffron Walden					
5	Existing Network from Wenden Road to Audley End Station	Connecting the train station to the existing network	Need to connect the existing cycling network, which currently ends at the junction of B1383/B1039, to Audley End railway station. From junction of B1383/B1039, implement new advisory cycle lanes to mini roundabout, then a quietway link onto Audley End Station access road. Consideration to be given to providing safe cycle access through station car park/ forecourt. Potential to reallocate carriageway space (purchase additional land – land ownership issues?) to bring cyclists safely off of the B1383 and enable them to wait to cross the road safely into the B1039. Alternatively, a new Tiger crossing could be provided in this location.	H	L
6	Wenden Road Existing Provision to Saxon Way	Connecting Saffron Walden to the train station	2 options: 1) Implement new advisory cycle lanes from the junction on Audley End Road to the existing provision on Wenden Road until Saxon Way where it would link to potential scheme 16. 2) Potential for an off road shared use or segregated track or segregated track on the south side of Audley End Road, with Tiger Crossings of a) Audley End Road to link to Saxon Way to connect to scheme 16 and b) Newport Road to link with Borough Lane. Part of potential N-S alternative route to B1052, allowing cyclists to avoid the busier, faster road (a cycling collision hotspot).	H	M
7	George Street/Hill Street	Review of one way workings and contraflow	Potential for a contraflow westbound along George Street. Parking to be rationalised to enable contra-flow cycle lane to be implemented between High Street and Common Hill. Gives a cycle link to the Cycling Café on Hill Street and access to the High Street from the North East and Eastern parts of town. Greatly improves cycling permeability of town centre. George Street forms part of the B1052, which has experienced 5 cycle collisions over the last 5 years. Any future scheme design should be mindful of cyclists' safety and visibility.	H	-
8	Common Hill		Gap in the Flagship Route. Requires a feasibility study. Forms part of the B1052, which has experienced 5 cycle collisions over the last 5 years. Any future scheme design should be mindful of cyclists' safety and visibility.	H	-
9	The Common		Off road route through The Common (owned by Saffron Walden Town Council) which utilises a footway conversion* of PROW44_62 from The Common Car Park to Chaters Hill. This is an existing cycle scheme, recently implemented by Saffron Walden Town Council, however, whilst providing a useful East to West traffic free route, it does not align with current best practice guidance for basic cycle design principles, so to form a part of a Flagship Route, it would require improvements, particularly with regards to widening of the path (a recommendation will be need to be placed to Saffron Walden Town Council to widen this footpath should this scheme progress). Signing and safe transition with the highway needs to be ensured with Chaters Hill. This route, in conjunction with onward links to potential scheme 11, would provide a useful traffic-free route and assist cyclists in avoiding using the B1052, which has been identified as a potential collision hotspot.	H	M
10	Chaters Hill/Ashdon Road	Review of one way workings and contraflow.	Potential for a contraflow system on Chaters Hill until Ashdon Road, rationalise on street parking and consider how to safely link to existing Common cycle route (feasibility study required). Route then requires a traffic management scheme along Ashdon Road, potentially making this road access only in order to reduce speeds to 20mph and create an environment safe enough for shared use, while keeping parking allowances for residents. Existing through traffic could be rerouted down Elizabeth Way. For the rest of Ashdon Road, advisory cycle lanes could be provided to give access to the proposed new development. Alternatively, through a TRO make Ashdon Road a one way street and reallocate the carriageway to enable sufficient width to provide a contraflow cycle lane. Feasibility Study required.	H	L
11	Quietway network: Highfields/ Sheds Lane/ Castle Cross and surrounding roads	Residential Network	Series of quietways to give northern residential areas improved cycle access to the town centre and onwards to Audley End railway station. Together, they provide a useful N-S link through northern parts of Saffron Walden, a safer alternative to the B1052 in the urban area.	L	-
12	Debden Road	Mandatory cycle lanes	Provide a new signed and marked mandatory cycle lanes along Debden Road, south of the junction with Borough Lane/ Mount Pleasant Road. Data from nearest available traffic counts indicate that physical segregation would be needed, but as the collection point was north of the Borough Lane/ Mount Pleasant road junction it has been assumed that applies to that northern section of road that links to the town centre, and that a lot of traffic has moved off to Borough Lane or Mount Pleasant road. Further	L	L

			information required to determine exact provision in this location. Potential cycle collision hotspot at Debden Road/ Pleasant Valley/ Cromwell Road junction which will need to be considered in any future design of this junction.		
13	Borough Lane/Mount Pleasant Road/ Peasland Road	Advisory lanes	Implement new advisory cycle lanes along Borough Lane/ Mount Pleasant Road and Peasland Road. At the junction with Thaxted Road bring the cycle lane on the path to create a new footway conversion* to shared use and implement a Tiger crossing to connect with existing provision on Thaxted Road. Due to recent parking restrictions on this road being lifted, the 85 th percentile speeds of the vehicles may have increased, therefore speed management techniques may need to be implemented in order for advisory lanes to be feasible. Further data required to determine exact provision.	M	L
14	Cromwell Road/ Winstanley Road	Residential Network	Provide new advisory cycle lanes on Cromwell Road and Winstanley Road. On surrounding roads, implement a new signed and marked quietway network. Potential collision hotspot at Cromwell Road/ Debden Road/ Pleasant Valley junction which will need to be considered in any future design of this junction.	L	-
15	London Road to Gibson Gardens		Conversion* of existing footpath (PROW44_58) north east of Uttlesford District Council Offices (currently prohibited for cyclists) to shared footway/ cycle use (potential width issues by garage), connecting London Road to Gibson Gardens, which could become a quietway through road-markings and signage. Provide Cycle parking provision alongside the car parking spaces at the meeting with Abbey Lane to allow cyclists to park here when accessing the town centre. Quietway link to continue along Abbey Lane as a contraflow. Would be desirable for a road closure at the end of Abbey lane to stop traffic for this section of Abbey Lane. A feasibility study will need to be conducted for the entire route and will also be required in order to determine a suitable cycle friendly crossing of the High Street junction onto George Street (potential Scheme 7). Part of potential alternative to N-S High Street route, B1052, which has been identified as a cycle collision hotspot. This route allows cyclists to avoid the significantly busier road.	M	L
16	Audley End Road to Abbey Lane		New signed and marked quietway along Saxon Way, then around to Beck Road meeting with the current footpath. Conversion* and widening to 3 metres of existing footpath (PROW55_56), to shared footway/cycle use, connecting Audley End Road to Abbey Lane. Part of potential alternative to N-S High Street route, B1052, which has been identified as a cycle collision hotspot. This route allows cyclists to avoid the significantly busier road.	H	L
Great Chesterford					
17	Walden Road		Off road segregated track connecting the North Uttlesford Garden Village to Chesterford Science Park (potential land ownership issues). Could continue to Saffron Walden. Feasibility Study Required.	M	H
18	Jackson's Lane		New signed and marked on-road quietway link, connecting potential scheme 17 to Church St. Then connects with the potential Great Chesterford Cycle Route (potential scheme 19)	H	L
19	The Great Chesterford Cycle Route		19: Starting from Church Street connecting the village and scheme 18 with the railway station. Reallocation of road space, and due to high traffic volumes, footway widening and conversion to shared used. Scheme design is currently being undertaken by Essex Highways. 19a: Cycling provision linking Great Chesterford, Little Chesterford, Littlebury, and Saffron Walden. Essex Highways route scoping completed, but further feasibility work required along entire length.	H	-
20	Chesterford Research Park to Great Chesterford Cycle Route		New signed and marked on road quietway through the High Street in Little Chesterford. Link to potential scheme 20 from potential scheme 18. May need to bring 30mph speed limit forward to safely facilitate. Implement a Toucan crossing across the northern arm of the roundabout on Walden Road to enable access to The Great Chesterford Science Park.	H	L
Stansted					
21	Elsenham to Stansted Airport		Provision of a new, signed and marked, shared carriageway provision (Quietway or advisory cycle lanes) along Robin Hood Road. Note, that the carriageway is very narrow in places. It is currently possible to walk across the railway line using a pedestrian level crossing. However, this route utilises a proposed underpass under the railway line (potential land ownership issues), continuing along Tye Green Road (carriageway width issues), Claypit Hill. Belmer Road and Bury Lodge Lane. From Bury Lodge Lane the route becomes Off-Road provision along a new alignment (subject to land ownership investigations/	H	H

			negotiations) and connects into existing and proposed cycling infrastructure around the Airport's perimeter		
22	Stansted Mountfitchet to Stansted Airport		New signed on-road advisory cycle lanes along Church Road (requiring centre line removal and possible traffic speed reduction measures – feasibility study required), heading south through residential areas of the village before heading across the country along Watson Way, Palmer Close and Parsonage Lane. From Parsonage Lane, route continues along bridleway (PROW 45_27) towards Birchanger (potentially requiring resurfacing and improvements). Once in Birchanger it utilises a footpath conversion* (PROW 6_14) and a section of National Cycle Route 16 to cross the M11 before connecting to existing and proposed cycling infrastructure around the Airport's perimeter.	H	H
23	Takeley to Stansted Airport		The Takeley corridor heads across country (land ownership issues) to the west of Parsonage Road and utilises a proposed cycle bridge to cross the A120. The corridor then follows into existing Public Rights of Way (PROW 48_45 and PROW 48_17) (footpath conversions*) which will be upgraded before connecting into existing and proposed cycling infrastructure around the Airport's perimeter. Another option could be to implement a link along Parsonage Road, due to 85 th percentile traffic speeds off 44.8mph Sustrans would only recommend physical segregation with verge. (option shown as indicative line on the map)	H	H
24	Bishops Stortford to Stansted Airport		Intended to connect into infrastructure proposed in Hertfordshire that links to Bishop Stortford. This corridor would connect into the Birchanger route via Stansted Road. The route is shown to follow the alignment of the A1250 and Birchanger Lane, although this would be subject to a feasibility study to ensure suitable provision for cyclists is possible. Suitable cycle crossings of the A120 roundabout would be necessary and must be investigated. There is potential to shorten the route by utilising Duck End and cutting through private land but this would obviously be subject to negotiations with landowners.	H	
25	Easton Park Garden Village		Indicative route connecting the potential Easton Park Garden Village to Stansted Airport, and linking to Great Dunmow.	-	-

8 Flagship Routes

8.1 Introduction

A Flagship Cycle Route is a key corridor providing safer, faster and more direct access to one or more key attractors (town centres, employment sites, education establishments, transport hubs, visitor attractions and existing/proposed developments). The routes will be on high demand corridors, be able to meet demand (both existing and potential), encourage a focus on innovation/design best practice and will include continental standard facilities, where appropriate.

It is hoped that a county-wide suite of Flagship Routes will be a focus for future funding, high quality infrastructure, design best practice and innovation.

8.2 Potential Flagship Routes in Uttlesford District

It is proposed that a Flagship route for Uttlesford District is created in Saffron Walden. An East/West Flagship Route, linking residential areas to the town centre and providing access to Audley End station in the South West. The potential Flagship Route is shown in Figure 8.1.

8.3 East/West Flagship Route (FR1)

Audley End Station is the nearest station to Saffron Walden and is on the West Anglia mainline. There is currently cycling provision on Wenden Road, but it does not link up to the station or Saffron Walden. Therefore this flagship route hopes to complete connections to the station, the town centre and link in residential areas.

An East/West Flagship Route can be delivered by implementing on road provision in the form of advisory cycle lanes from Audley End Station to the junction of B1039/B1383 with a crossing upgrade in order to get cyclists to the existing provision on the other side of the road. On the other side of the existing provision on Audley End Road there is scope to either

- Implement new advisory cycle lanes from the junction on Audley End Road to the existing provision on Wenden Road until Saxon Way. Or;
- Potential for an off road shared use or segregated track or segregated track on the south side of Audley End Road, with Tiger Crossings of a) Audley End Road to link to Saxon Way to connect to scheme 16 and b) Newport Road to link with Borough Lane.

Once the route gets to Saxon Way a couple of potential options are considered for how to get to the other side of the road, this will come down to the land ownership of the northern side footpath and whether there is potential here to widen this footpath, or bring cyclists across nearer to Saxon Way. Both of these options will require Tiger Crossings. Next, the route will form a quietway along Saxon Way until an entrance to 'The Ditches' on Beck Road, conversion* and widening of existing footpath (PROW55_56) to shared footway/cycle use connecting to Abbey Lane. Then a potential contraflow system along Abbey Lane, exploring an option to implement bollards to prevent through traffic, although a study will be required to investigate this, as well as the best option to cross the High Street junction which is currently signalised. This is an important challenge for the Flagship Route. Whilst it is beneficial to enable cyclists to reach the High Street, there are further benefits that could be achieved by facilitating continuous east-west provision, enabling them to cross the High Street without dismounting.

The Flagship Route continues, utilising a new cycling contraflow system along George Street/Hill Street which will link to 'Bicicletta Con Velo' – a cycling café, as well as other shops and attractions. When the route reaches Common Hill there will need to be a feasibility study in order to determine what is best for this stretch of road before it switches to off road through The Common Car Park and through the southern side of The Common utilising a footpath conversion of PROW44_62. This is an existing cycle scheme, recently implemented by Saffron Walden Town Council, however, whilst providing a useful E-W traffic free route, it does not align with current best practice guidance for basic cycle design principles, so to form part of this Flagship Route would require improvements, particularly with regards widening of the path (a recommendation will need to be placed to Saffron Walden Town Council to widen this footpath should this scheme progress). Once this footpath has been expanded then Essex Highways can promote this as a key link within the Flagship Route. There is an additional challenge which must be addressed with regards how this route will connect further into the highway network, as it emerges at the eastern end of the Common onto a one-way northbound road (Chaters Hill). Feasibility Study required to determine how this connection can be safely made in both directions, for all road users.

A traffic management scheme along Ashdon Road, through a TRO making it a one-way street, would enable sufficient width to provide a contraflow cycle lane. Feasibility Study required.

This Flagship Route will effectively connect residents in the North of Saffron Walden, and the new development planned, to the Town Centre and also completes a connection from Saffron Walden to Audley End Railway Station.

There are some key challenges along the route which will need to be addressed. In summary, these include:

- Exploration into best means to bring cyclists between Audley End Road and Saxon Way and continue effectively existing cycle network;
- Potential Abbey Lane closure;
- How to get cyclists across High Street/ George Street and determine whether they can be incorporated into signal phasing at this junction;
- How to connect the Common cycle route safely into the wider highway network, to provide best connectivity and continuity; and
- Investigation into whether and how the gap at Common Hill can be addressed.

If these challenges can be overcome, the Flagship Route would provide a step-change for cycle provision and connectivity in Uttlesford. It would enable cyclists to access the town centre from residential areas, as well as providing onward connections to the railway station and potentially other cycle routes identified in this CAP.

8.4 Prioritisation of Flagship Routes

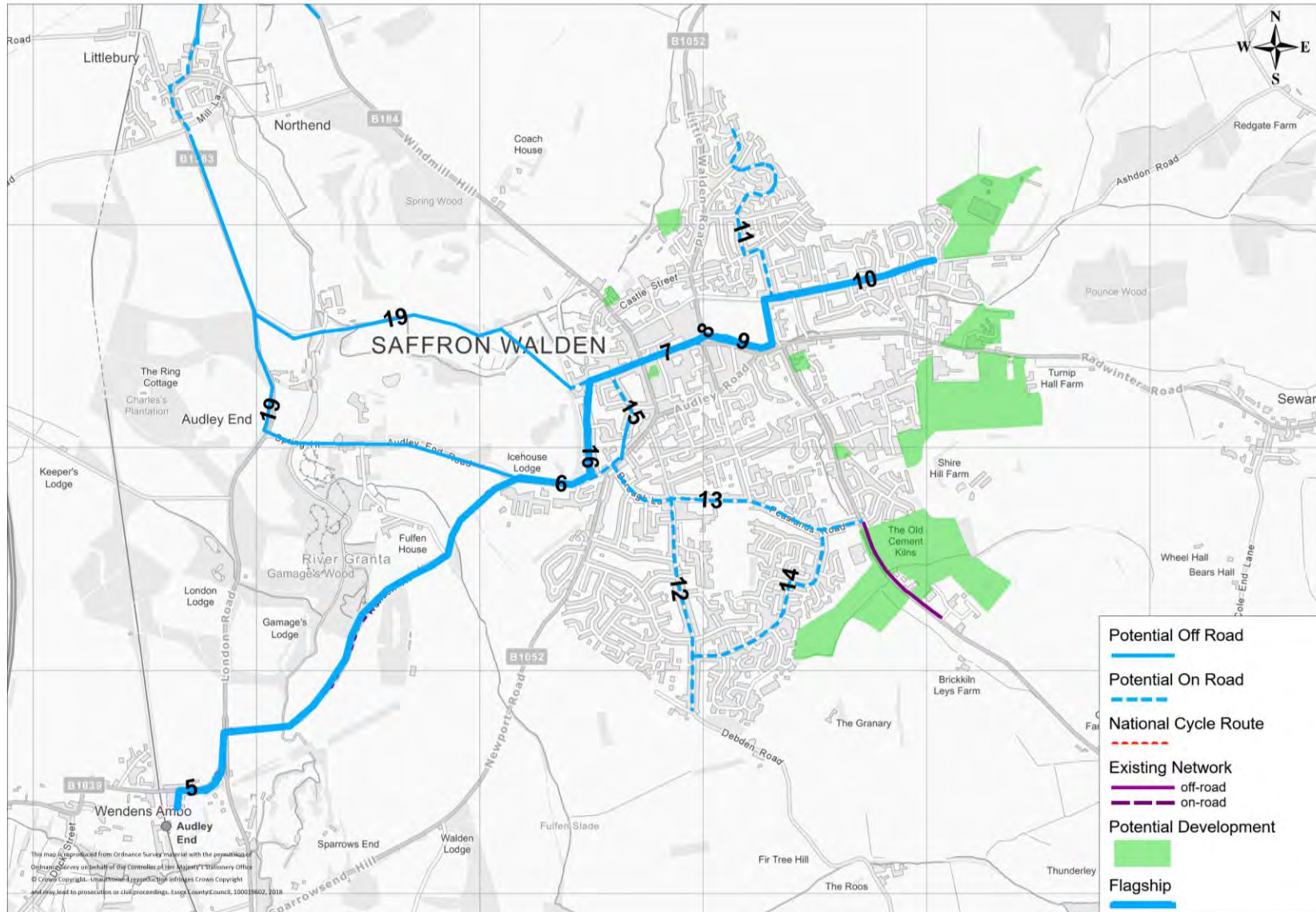
The Flagship Route has been considered against the four prioritisation criteria, as per the other potential schemes:

- Deliverability;
- Directness;
- Extension of existing network; and
- Key attractors.

For the Flagship Route proposed it was found that it

The inference from the prioritisation exercise is that it supports the basis for identifying the Flagship Route in the first instance, in that it is a key corridor, providing important benefits for cycling in Uttlesford and should therefore be considered a high priority going forward.

Figure 8.1 Potential Flagship Routes for Uttlesford District



9 Smarter Travel Measures

9.1 Introduction

To ensure the potential for cycling is fully realised, new infrastructure must be accompanied by targeted promotion and events.

Local promotion of cycling should be increased to convince residents that cycling is a normal and accessible activity for all as well as highlighting the health benefits of cycling.

In addition, cycling has the potential to alleviate congestion by persuading people to replace a local car journey by cycling. This could include workplace travel planning in the town centres within the District.

9.2 Marketing and promotion

The Essex Cycling Strategy sets out a number of overarching themes for marketing and promoting cycling which are as follows:

9.2.1 Cycle Essex

ECC are committed to running high profile campaigns under the “Cycle Essex” umbrella which aim to change the image of cycling in Essex, break down perceptual barriers, communicate a safety message and tie in with existing organisations such as Active Essex.

9.2.2 High profile events

Essex has been successful in attracting high profile cycling events to the County that have been well attended by the public, such as hosting Stage 3 of the 2014 Tour de France. ECC would like people to continue to support these events but also give cycling a try through further mass event, car free days in town centres and bike festivals.

9.2.3 Support for local initiatives

ECC recognise that Local initiatives are particularly effective at engaging with people on a personal level. Therefore they aim to empower Boroughs / Districts to promote cycling locally, support community providers / charities, support cycling clubs and ensuring that secondary schools, large employers, large council offices and major hospitals have up to date travel plans.

9.2.4 Cycling Maps

Cycling maps (digital and on paper) aid in navigation and are an effective marketing tool for raising the profile of cycling. If the maps are legible, well

designed and effectively disseminated, they can be the nudge that is needed to motivate the 'near market' to start making some trips by bike.

In addition, in order to maximise the benefits of cycling maps, future cycling maps for Uttlesford should be designed with the following principles in mind:

- The maps should be prepared under the same design guidelines as the promotion of 'Cycle Essex'. This will help to raise their profile and visibility;
- Information included in the maps should correspond with the signage by the roadside;
- Include more information about local points of interest. This might encourage leisure cycling, local tourism and increase patronage to local attractions; and
- Widely distribute the maps (if more than one) in a bundle and on as many online and physical outlets as possible.

Furthermore, official and unofficial routes are also available through mobile phone apps, social media and specialised websites such as *mapmyride.com* and *strava.com*, which allows people to track their routes whilst cycling and share them on various platforms.

For example, there is some interest in cycling at a community level in Uttlesford as demonstrated by the website *mapmyride.com* displaying over 2,000 routes recommended in the local area by its users.

9.3 Potential Local Considerations

Local considerations, improvements and factors that may have an effect on encouraging cycling in Uttlesford District include:

- Provide a cycle map of Uttlesford to include isochrones and mode-switch motivational information
- Cycle access – promoting access to bicycles through the cycle to work scheme, cycle hire, provision of subsidised bikes,
- Target large employers to provide access for employees to pool e-bikes.
- National Bike Week events to include a commuter challenge where people using different modes make the same journey in the morning peak – would normally show the advantageousness of cycle travel in the peak time) and a cycle commuter's breakfast where free refreshments are laid on at a central location for all those who arrive by bike.

10 Delivery and Funding

10.1 Delivery

The recent Infrastructure Act (February 2015) places a commitment on the Government to produce a Cycling and Walking Investment Strategy. The strategy would specify the objectives to be achieved and the financial resources available. This new bill shows a change in the government's thinking and a clear commitment to providing for cycling as well as accepting responsibility for targets and funding.

The Department for Transport's Cycling Delivery Plan (October 2014) refers to a new national cycling target, to double the number of cycling stages (trips) nationally over a 10 year period. This new target will be adopted by Essex as part of this strategy.

The Government has also set a target of achieving an annual cycling spend of £10 to £20 per head of the population. In Essex this would equate to approximately £17million to £34million per year spent on cycling.

A step change in the provision of cycling infrastructure and promotion will require an increase in funding over and above the current level of funding for cycling in Essex. Essex County has committed to:

- Ensuring a consistent level of revenue and capital funding to support the delivery of this strategy;
- Increasing the level of funding in Essex from its current level of £2 - £3 per head of population to £10 per head of population by 2025;
- Increasing the utilisation and prioritisation of other funding sources such as developer contributions and central Government grants/allocations; and
- Developing a clear and cohesive methodology for the allocation of cycle funding across Essex Districts.

This will ensure that new proposals are not frustrated by a lack of funding and designers and promoters are set free to develop measures that will lead to a consistent growth in cycling numbers, frequency and safety.

10.2 Funding Options

There are a range of funding sources available for the potential schemes identified in the Cycling Action Plans which are as follows:

- Local Highways Panels (LHPs);
- South East Local Enterprise Partnership (SELEP) funding;
- DfT Access Fund;
- Local Growth Funds (LGFs);
- Section 106 (S106) monies.

10.3 Funding for Uttlesford

The delivery of the potential schemes, soft measures and smarter travel measures will require additional funding and so for this Cycling Action Plan to be successful, it is imperative that funding is provided and sustained over a number of years.

ECC Local Highway Panels are a source of capital funding for local highway schemes and are an appropriate way for new cycle infrastructure to be funded.

Planning contributions from new developments are an important source of finance and can either provide funding towards new or improved cycle infrastructure in Uttlesford District or, if in the vicinity, actually construct schemes as part of the development.

Current UK Government spending is £2.50 per person per year; the aim is to increase this to at least £10 per person per year by 2020/2021. Essex will also aim to spend £10 per person per year, with an initial increase to £5 by 2017.

The Government has a £6 billion Local Growth Fund for cycling and walking and wishes to reduce the administrative budget Local Authorities have to use in bidding for funding.

Other sources of funding also become available from time to time such as from the DfT. Therefore it is important that there are schemes readily available to be put forward for funding, should such opportunities arise.

In addition to the above, other possible funding options include:

- As part of road safety schemes;
- As part of health and safety schemes;
- Sustrans;
- Local growth funds;
- Network Rail and/or rail operating companies;
- Active Essex / Essex Health;
- SELEP Local Growth Funds for local sustainable transport programme;
- European Union funding (e.g. European Regional Development Fund and Rural Development Programme); and
- Acquire and investigate corporate sponsorship opportunities for any high profile public schemes/events.

11 Key Recommendations

In order to create an environment where cycling is normal for the residents of Uttlesford, existing barriers to cycling should be removed and a series of cycle routes provided with the aim of creating a connected cycle network over time. Cycling infrastructure should provide for both key utility journeys and encourage leisure cycling.

Analysis was undertaken to assess existing travel patterns, not only for cyclists but rail and car commuters as well. Alongside this, the propensity to cycle was also analysed to assess whether there were similarities between those that commute by other methods of travel and the areas where there is a high propensity to cycle.

The existing cycle networks in Uttlesford District should be developed and the following key recommendations can be made for cycle enhancements:

- A review of existing route signage and lighting;
- Maintenance of existing routes;
- Increase provision of useful cycle routes to town centres and railway stations in Saffron Walden, Great Dunmow and Stansted Airport, in particular;
- Consider an area-wide review of town centre one-way working in Saffron Walden to identify opportunities for cycle contraflow to be implemented and thereby increase cycling permeability of and through the town centre;
- Review on-street car parking in and close to town centres, to identify opportunities to provide space for high quality cycle facilities;
- Provide new and improved cycle routes with a focus on satiating the considerable demand for commuter trips at railway stations;
- Fill obvious gaps in the existing cycle-route network (on alignments with cycle-friendly topography);
- Provide new infrastructure on key roads with cycle-friendly topography but no existing facilities;
- Produce a cycle map for Uttlesford to be updated every two years which takes on board innovation in cycle-map design, and promote it and disseminate it widely through a range of channels and outlets.
- Develop Flagship Routes through Feasibility Studies to Detailed Design; and

- Promote and market Flagship Routes with 'Cycle Superhighway' style branding and disseminating techniques.
- Encourage Stansted Airport to provide a series of staff pool e-bikes.