ATKINS

Member of the SNC-Lavalin Group

St Ives Transport Study

Existing Conditions Report

Cambridgeshire and Peterborough Combined Authority

21 July 2021

Final

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Contents

Tables

Figures

1. Introduction

Atkins has been commissioned by the Cambridgeshire and Peterborough Combined Authority (CPCA) to identify and assess transport interventions which will address current capacity issues and improve conditions in Huntingdon and St Ives. This follows on from previous work undertaken by Skanska on behalf of the CPCA.

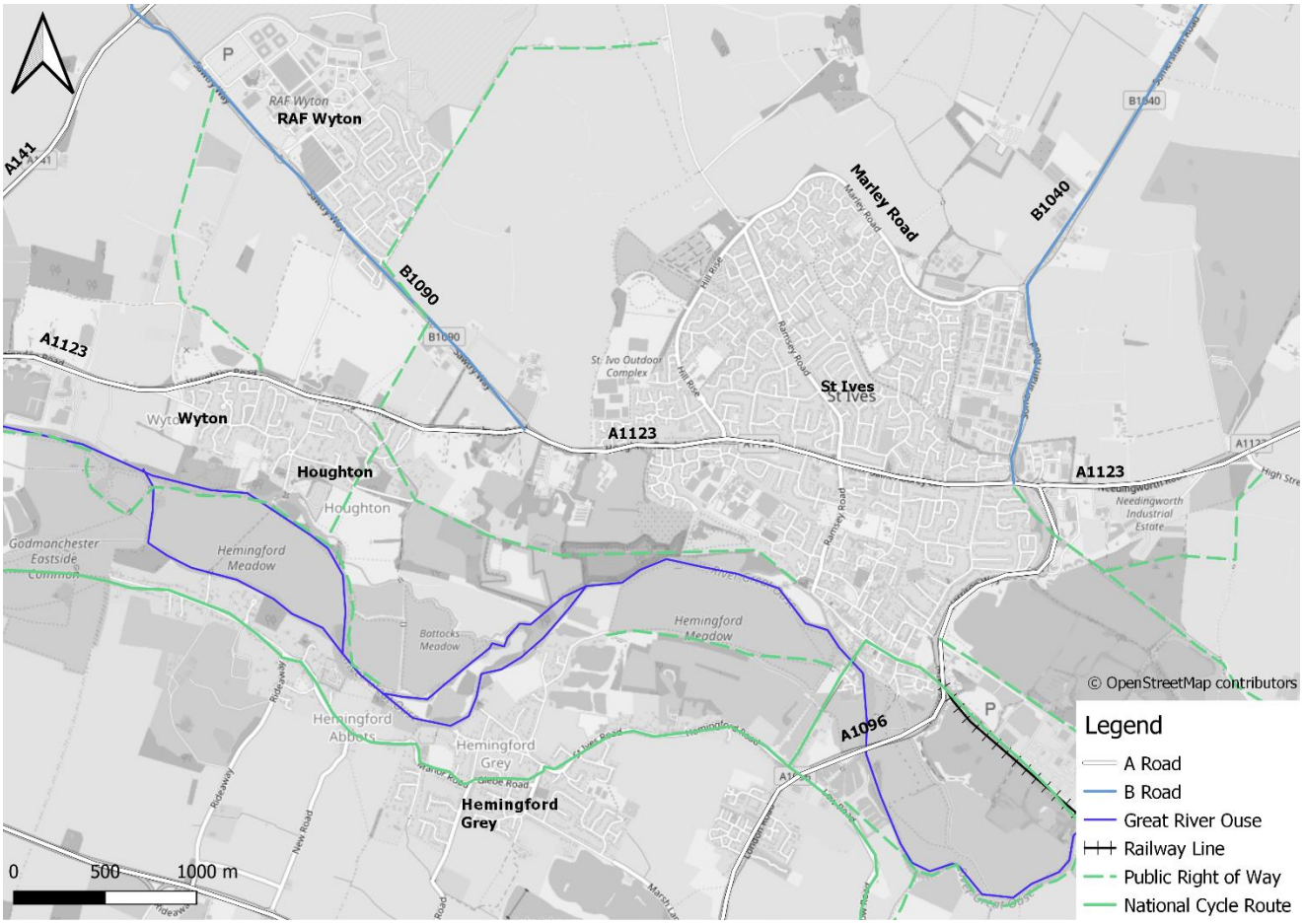
This Existing Conditions Report is one of two such reports, focusing here on an area including the whole of St Ives town, Houghton and Wyton, with the other report focussing on the A141 area to the north of Huntingdon. This report draws upon information and data from a variety of existing sources:

- Previous work undertaken by Skanska and Capita, namely the:
  - 'A141 and St Ives Transport Study Option Assessment Report' (July 2020), referred to in this Report as the Skanska A141 Stage 1 Report; and
  - The draft 'Stage 1: Existing Conditions and Data Collection Report' (April 2019), referred to in this report as the Skanska St Ives Stage 1 Existing Conditions Report;
- Huntingdonshire Local Plan to 2036 (adopted May 2019) and supporting evidence base including the Strategic Transport Study and Infrastructure Delivery Plan;
- The Cambridgeshire and Peterborough Local Transport Plan (2020);
- Cambridgeshire and Peterborough Independent Economic Review (CPIER) (September 2018);
- Cambridgeshire and Peterborough Local Industrial Strategy (July 2019);
- Cambridgeshire and Peterborough Skills Strategy (June 2019);
- Cambridgeshire and Peterborough Strategic Spatial Framework;
- Doubling Nature: A Vision for the Natural Future of Cambridgeshire and Peterborough in 2050 (Natural Cambridgeshire);
- Net Zero Cambridgeshire (Cambridgeshire County Council and CUSPE) (October 2019);
- Huntingdonshire Market Towns Programme: St Ives: A Prospectus for Growth (St Ives Masterplan);
- Magic Map, produced by the Department for Environment, Food and Rural Affairs (DEFRA); and
- National Planning Policy Framework (February 2019).

This report focusses on the town of St Ives and the surrounding area, including the A1123 towards Houghton, Wyton and Huntingdon, as shown in Figure 1-1, along with the key features of the transport network of particular relevance to this study.

Note: the A14 to the south of St Ives has recently been downgraded to the A1307 following the completion of the Huntingdon Southern Bypass as part of the A14 Cambridge to Huntingdon Improvement Scheme. This report refers to the A1307 throughout.

Figure 1-1 - Local Context Map



The remainder of this report sets out the existing conditions as follows:

- Chapter 2 sets out the local socio-economic and demographic profiles;
- Chapter 3 details the existing transport network including its performance. It also sets out the planned transport projects that are relevant to the study;
- Chapter 4 summarises the main environmental and physical constraints that will influence future option development;
- Chapter 5 considers future developments, constraints and the impact of growth on the transport network;
- Chapter 6 presents the policy context for the scheme; and
- Chapter 7 summarises this report and presents the case for change.

2. Socio-economic and Demographic Context

This chapter sets out the local socio-economic and demographic profiles relevant to the St Ives study. It illustrates the economic activity that the transport network supports, and economic and social challenges and opportunities that a transport investment could contribute towards addressing. This will in turn help to shape scheme development in response to those challenges and opportunities.

2.1. Overview

St Ives has a population of 16,000[1], the majority of whom live between Marley Road and the A1123, as shown in Figure 1-1. The town is in eastern Huntingdonshire, with villages such as the Hemingfords, Fenstanton and Needingworth to the south and east, villages and small towns such as Somersham, Warboys and Ramsey to the north, and the market town of Huntingdon to the west.

The small, connected villages of Houghton and Wyton lie between St Ives and Huntingdon, bordered north and south by the A1123 and the River Great Ouse respectively.

Huntingdonshire has a predominantly rural geography with a sparse population density (1.9 people per hectare[2] compared to a national average of 2.6 people per hectare[3]). The majority of the district's population are concentrated in the market towns of Huntingdon, St Neots, Ramsey and St Ives.

Recent housing growth has mainly been around the district's main towns, including St Ives. Huntingdonshire's population grew by 21% in the 20 years leading up to the 2011 Census[4] and is forecast to grow by a further 7% up to 2036. This suggests that future growth is predicted to be slower but is still likely to be significant. The population growth is mainly driven by housing pressures in and around Cambridge and London, leading to people seeking more affordable housing further afield[5].

The Cambridgeshire and Peterborough Independent Economic Review (CPIER) was produced by the Cambridgeshire and Peterborough Independent Economic Commission, on behalf of the CPCA and Cambridge Ahead. It provides an economic overview of the CPCA area[6] and sets out findings for the future of the district, framed by the CPCA's growth target of doubling Gross Value Added (GVA) over 25 years. For St Ives, this means increasing the area's output from £399m in 2017 to over £1bn per annum[7]. The CPIER shows that there has been more migration to Huntingdonshire from South Cambridgeshire, Hertfordshire and north London than there has migration from Huntingdonshire to these areas. However, as house prices increase in the district there is also net out-migration northwards[8].

2.2. Economic Profile

2.2.1. Economic Patterns

The Huntingdonshire Local Plan cites that 64%[9] of the district's economically active residents live and work within Huntingdonshire and identifies a requirement for 14,400 additional jobs by 2036 to accommodate predicted population growth (Policy LP1). Up to 600 of these jobs are identified for land at Gifford's Farm to the north east of St Ives.

The district has strong economic, and therefore commuter, relationships with Cambridge to the south east, Peterborough to the north and Bedford to the south-west. The Cambridgeshire Guided Busway in particular provides a strong transport link to Cambridge for St Ives. There are a number of strategic connections by road

[1] Huntingdonshire Local Plan to 2036 (page 13)
[2] Huntingdonshire Local Plan to 2036 (page 7; 2.3)
[3] Census 2011
[4] Census 2011 – Quoted in Huntingdonshire Local Plan to 2036 (page 7; 2.4)
[5] Huntingdonshire Local Plan to 2036 and CPIER
[6] CPCA area consists of Peterborough, Fenland, Huntingdonshire, East Cambridgeshire, South Cambridgeshire and Cambridge.
[7] Metro Dynamics – *St Ives: A Prospectus for Growth* (page 3)
[8] CPIER (Figure 8, page 29)
[9] Huntingdonshire Local Plan to 2036 (page 7; 2.4)

that make London and other employment hubs accessible. The closest rail station for such journeys from St Ives is Huntingdon Station.

DataShine Commute was used to understand the commuting locations to and from St Ives, using the location Huntingdonshire 013 as the point of destination (to St Ives) as this is where the majority of employment in St Ives is, close to the town centre. The point of origin used was Huntingdonshire 011, as this is the main residential area, and the data shows more movements from this point than Huntingdonshire 013.

Figure 2-1 shows the commuter trips made **to St Ives** for all modes.

Figure 2-1 - Commuter trips to St Ives (Huntingdon 013) by all modes[10]

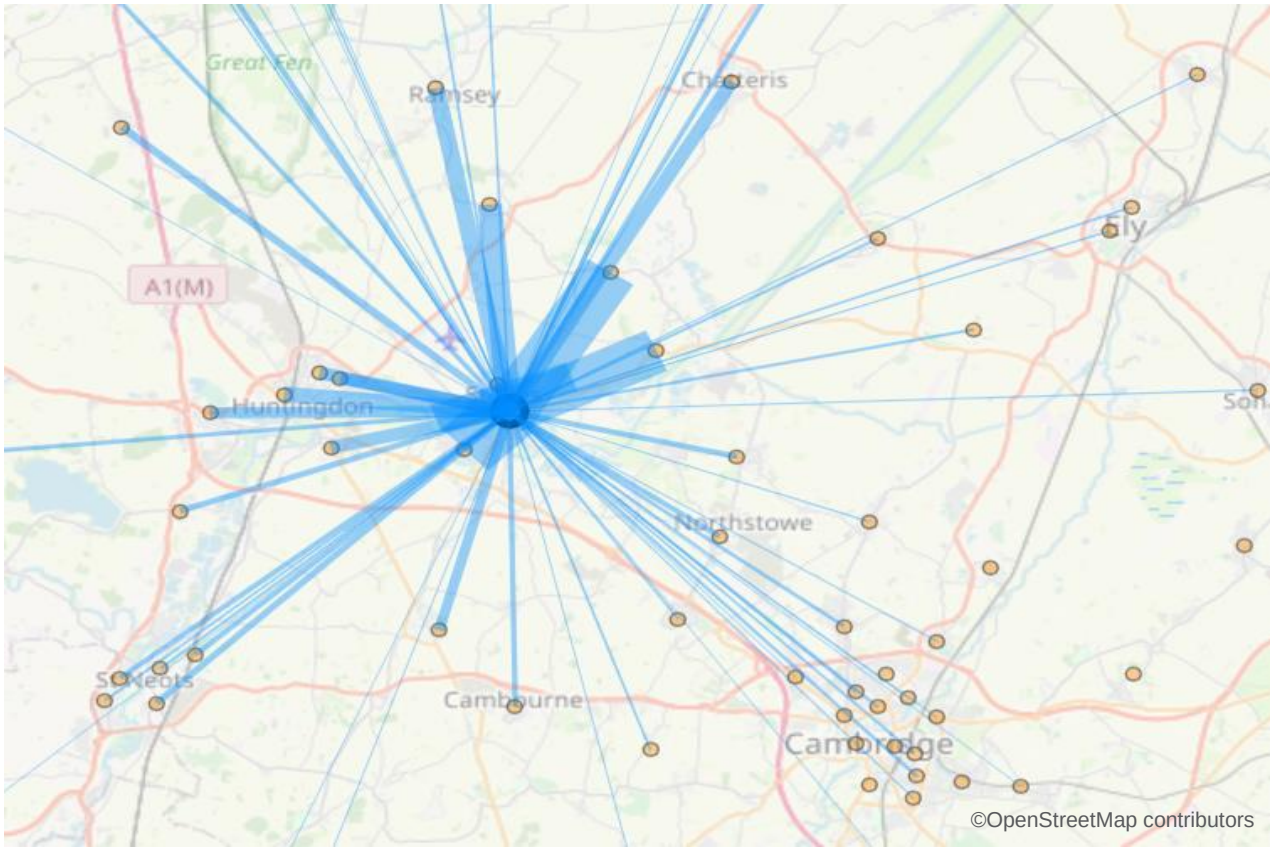


Figure 2-1 shows that trips to St Ives for work by all modes originate from across Cambridgeshire, Northamptonshire, Bedfordshire and north Hertfordshire. Similar patterns are seen when looking at commuting trips by car only. A large proportion of these trips, accessing St Ives by car, are likely to use: sections of the A1123 through St Ives and Wyton, the A1096, which runs north-south to the east of St Ives, the A141 around Huntingdon and the B1040 to the north, to access their final destination. A significant number of trips originate from the north east of Huntingdonshire and Fenland, including Ramsey, Chatteris and Warboys, and from further afield including Peterborough, March and Wisbech. Commuting trips from these origins are likely to use the A1307, A1123 and A1096 corridor to access St Ives.

Figure 2-2 shows the commuter trips made **from St Ives** for all modes.

[10] (Census 2011 via Datashine) Oliver O'Brien & James Cheshire (2016) Interactive mapping for large, open demographic data sets using familiar geographical features, Journal of Maps, 12:4, 676-683 DOI: 10.1080/17445647.2015.1060183; MSOA

Figure 2-2 - Commuter trips from St Ives (Huntingdon 011) by all modes[11]

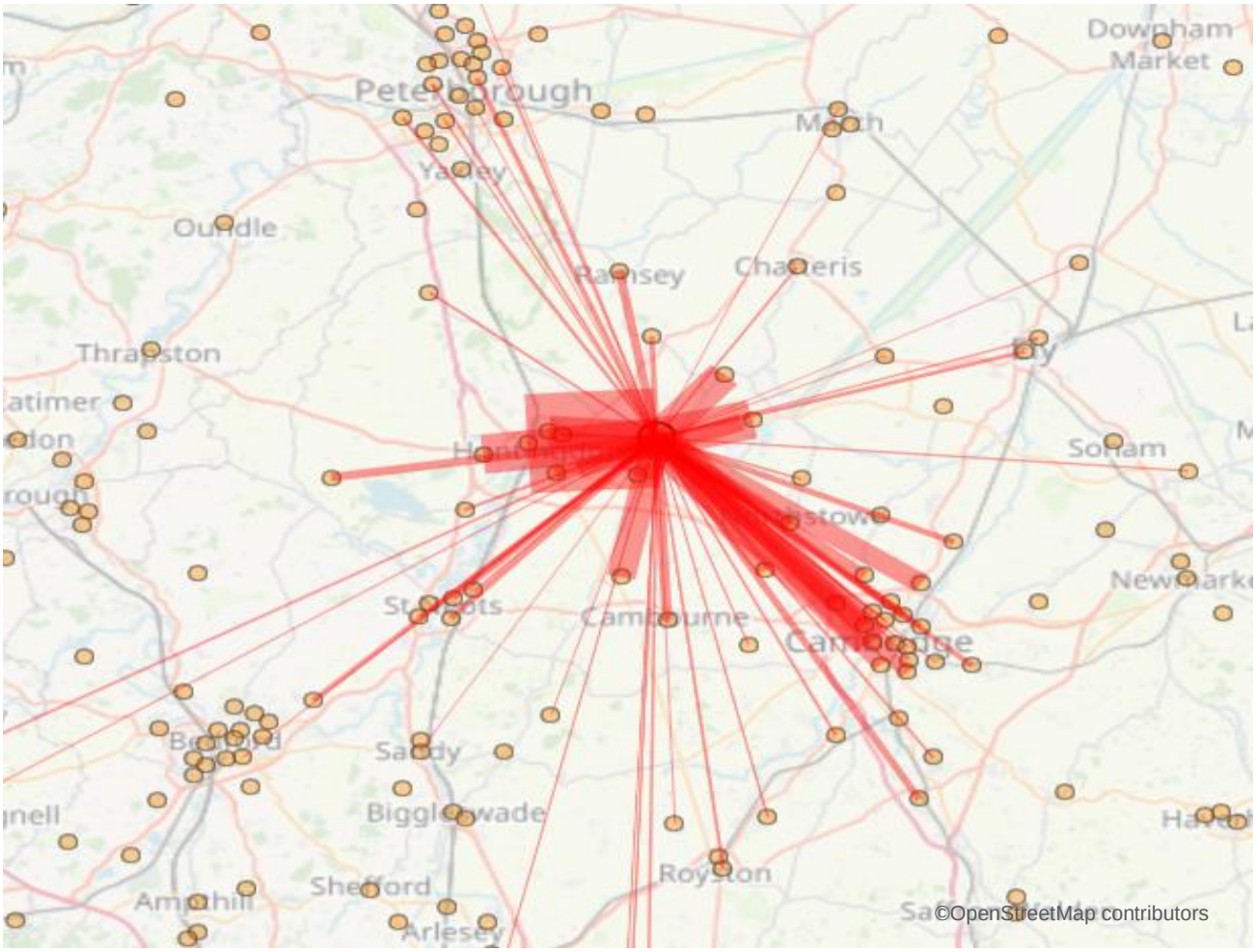
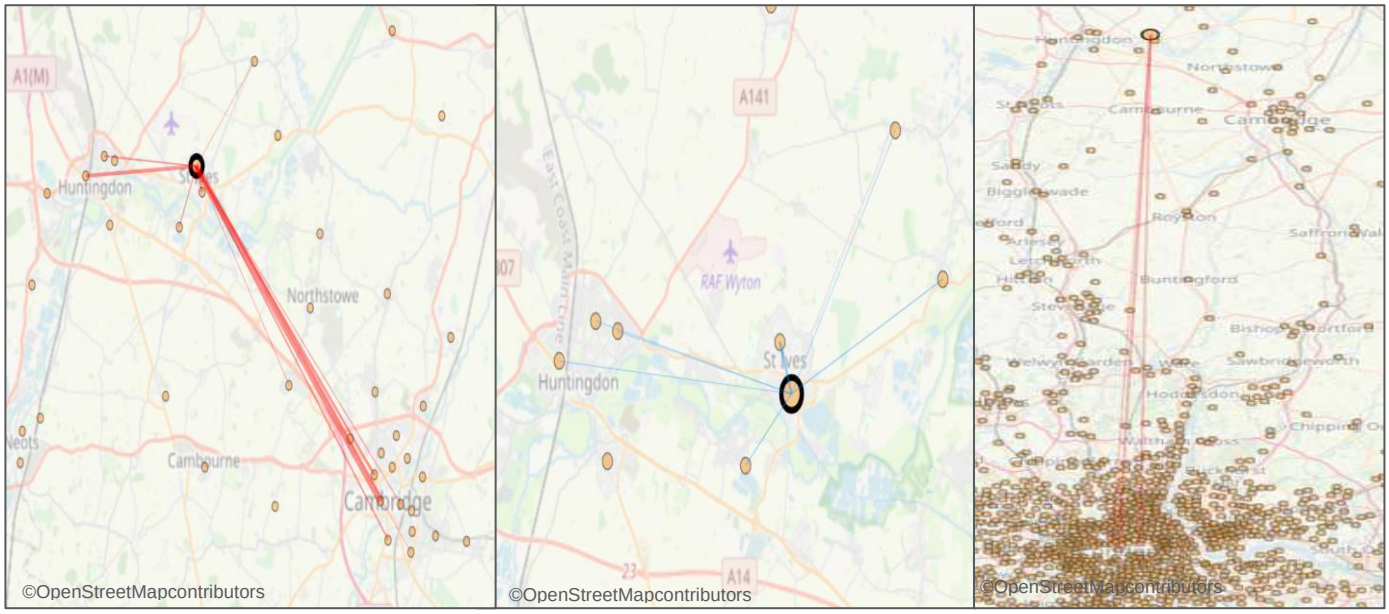


Figure 2-2 shows that trips from St Ives for work by all modes are to St Ives town centre, Huntingdon, Cambridge and South Cambridgeshire, Peterborough, London and other destinations within Huntingdonshire. This shows a similar pattern as with trips to St Ives, with the exception of a larger proportion of trips seen from St Ives to Cambridge. Trips to London are almost entirely undertaken by rail, and car journeys are most prevalent for all other destinations. A large proportion of these trips, originating from St Ives, are likely to use sections of the A1123 through St Ives, the A1096 to access the A1307, and the A141 around Huntingdon to access their final destination, particularly those accessing the north and west of Huntingdon and Brampton.

Figure 2-3 shows the commuter trips made **to and from St Ives** (Huntingdon 011 and Huntingdon 013) by public transport.

[11] (Census 2011 via Datashine) Oliver O'Brien & James Cheshire (2016) Interactive mapping for large, open demographic data sets using familiar geographical features, Journal of Maps, 12:4, 676-683 DOI: 10.1080/17445647.2015.1060183

Figure 2-3 - Commuter trips from and to St Ives by public transport [12]



Bus/Coach from St Ives | **Bus/Coach to St Ives** | **Rail from St Ives**

Figure 2-3 shows that a small number of commuter's travel from St Ives to Huntingdon and Cambridge for work by bus. Trips to St Ives by bus tend to be more local, from surrounding villages and towns including the northern part of St Ives, Huntingdon, Somersham, Bluntisham and Godmanchester.

Trips from St Ives by rail are entirely to London. There were no trips by rail to St Ives. It is important to note that the 2011 Census data precedes the opening of the Cambridgeshire Guided Busway, which carries around 3 million trips per year and has likely had an impact on the volume of people travelling from Huntingdonshire to Cambridge by bus[13]. The 'Cambridgeshire Guided Busway Post-Opening User Research'[14] report from September 2012 presented results of guided busway passenger interviews and boarding/alighting counts and estimated that 551 busway trips originated at St Ives Park and Ride. The vast majority of these trips had destinations in Cambridge including within the City Centre (234), at Addenbrooke's (96) and at Cambridge Regional College (55). Since 2012 there has been a 25%[15] increase in frequency of services between St Ives and Cambridge during peak hours. Busway ticket sale data from January 2020 (Services A and B) shows a 75% increase in total ticket sales when compared to total sales in January 2012[16] (Services A, B and C).

Figure 2-4 and Figure 2-5 show commuter trips **to and from St Ives** (Huntingdon 011 and Huntingdon 013) by cycles and walking respectively.

[12] (Census 2011 via Datashine) Oliver O'Brien & James Cheshire (2016) Interactive mapping for large, open demographic data sets using familiar geographical features, Journal of Maps, 12:4, 676-683 DOI: 10.1080/17445647.2015.1060183

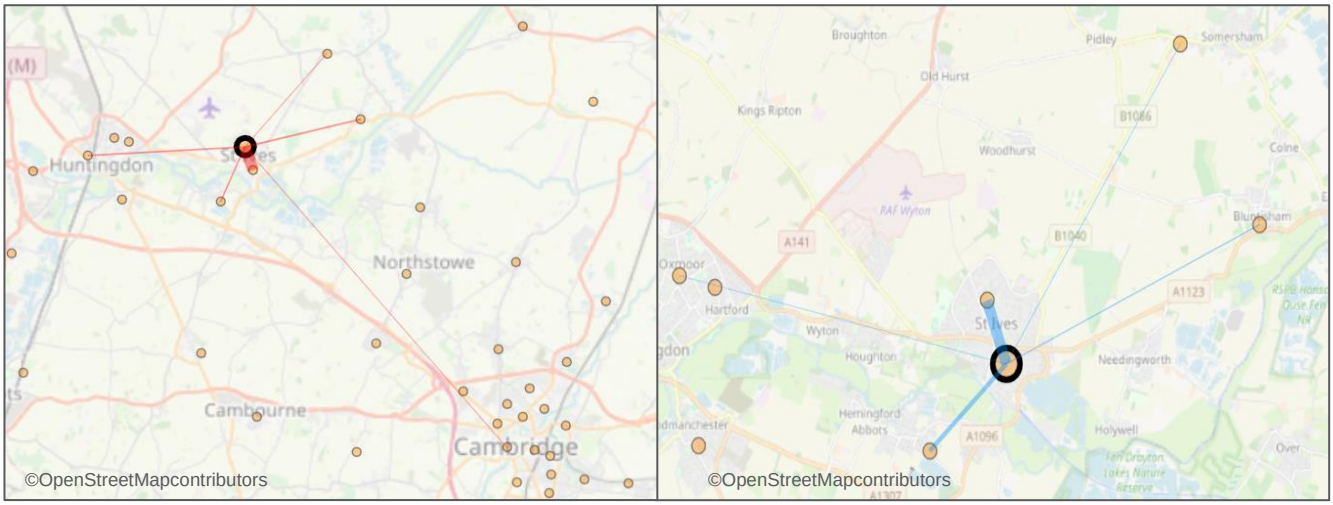
[13] *Greater Cambridge Mass Transit Options Assessment Report* (2018), https://cambridgeshirepeterborough-ca.gov.uk/assets/Combined-Authority/Item-2.1-Additional-report-Greater-Cambridge-mass-transit-options-assessment-report-January-2018.pdf

[14] Atkins (2012) 'Cambridgeshire Guided Busway Post-Opening User Research', Cambridgeshire County Council, Section 5.2, Table 12.

[15] Opening scheduled services compared to April 2021 timetabled services.

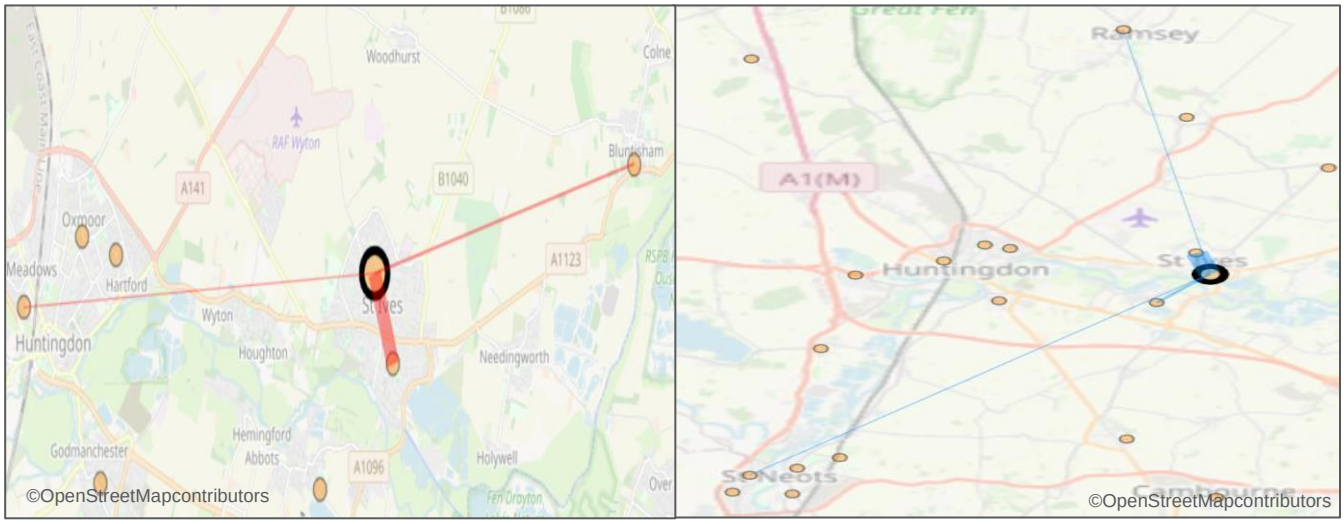
[16] Busway patronage data provided by Stagecoach

Figure 2-4 - Commuter trips from and to St Ives by Cycles [17]



Cycle from St Ives **Cycle to St Ives**

Figure 2-5 - Commuter trips from and to St Ives by Walking [18]



Walking from St Ives **Walking to St Ives**

Figure 2-4 and Figure 2-5 show the active mode trips to and from St Ives for work are concentrated within Huntingdon and St Ives, with some travelling further to Somersham, Bluntisham, St Neots and Ramsey. There are also a number of trips by cycle to Cambridge, which could have further increased following the opening of the Cambridgeshire Guided Busway in August 2011, however the majority of active travel trips are made locally.

[17] (Census 2011 via Datashine)Oliver O'Brien & James Cheshire (2016) Interactive mapping for large, open demographic data sets using familiar geographical features, Journal of Maps, 12:4, 676-683
DOI: 10.1080/17445647.2015.1060183
[18] (Census 2011 via Datashine)Oliver O'Brien & James Cheshire (2016) Interactive mapping for large, open demographic data sets using familiar geographical features, Journal of Maps, 12:4, 676-683
DOI: 10.1080/17445647.2015.1060183

2.2.2. Economic Challenges and Opportunities

The Huntingdonshire Local Plan identifies a number of key economic challenges and opportunities for the area over the next 15 years, as summarised in Table 2-1.

Table 2-1 - Economic Challenges and Opportunities

Challenges	Opportunities
Improvements to key transport infrastructure are critical to support economic growth. With the A14 improvements complete and the proposals for the A428 upgrade being developed, these schemes provide significant opportunity for the region by relieving congestion and providing valuable strategic connections to unlock economic growth. Effective local access to these routes is essential and at present, congestion is a significant challenge to this.	**Locally accessible strategic transport links** make Huntingdonshire an attractive location for business. Recent and planned improvements to these links, as well as local connections, will serve to further increase the attractiveness of the district.
More jobs are required in high value industry sectors. Diversification into professional and scientific sectors is required to attract highly skilled workers to the district.	**Economic success of Cambridge** and its proximity to the district presents opportunity to provide complementary services and strengthen the connection between the two districts. Huntingdonshire is already increasing its reach in the life sciences sector alongside the success of Cambridge[19].
Decline in working age population as a proportion of total population which is caused by an ageing, less economically active population.	**Expansion of high-speed broadband** enables more people to work where they live and therefore reduce the pressure on the transport network.

Adapted from the Huntingdonshire Local Plan to 2036 (page 20)

In summary, Huntingdonshire has a history of traditional industry which is starting to diversify, attracting more highly skilled workers and large businesses. Alconbury Enterprise Zone is proposed to accommodate 8,000 new jobs by 2036 with an emphasis on technology, innovation, advanced manufacturing and engineering and will provide space for small and medium sized businesses. This presents the opportunity to further strengthen industry connections to Cambridge. Good strategic transport connections, which have been strengthened by the completion of the A14 Huntingdon to Cambridge improvements, are further increasing the attractiveness of the district to live and work. However, further infrastructure improvements, to relieve congestion on already constrained sections of the network and provide local connections, are required to unlock sustainable economic growth.

2.3. Social Profile – Social Challenges and Opportunities

The Huntingdonshire Local Plan cites several social challenges and opportunities within the district. Those relevant to this study are summarised in Table 2-2.

Table 2-2 - Social Challenges and Opportunities

Challenges	Opportunities
20,100 new houses are required to meet population forecasts by 2036 (Policy LP1), including 400 homes at St Ives West With significant housing growth comes the challenges of accommodating additional travel demand on an already congested local network in a sustainable way.	**New development provides an opportunity for positive design**, creating a physical environment that: • Supports active lifestyles; and • Is accessible to all.

[19] Cambridge and Peterborough Combined Authority (2019) *Cambridgeshire and Peterborough Local Industrial Strategy* (page 29 and 30)

Challenges	Opportunities
Need for local infrastructure to support development including education, health and social facilities, and transport. Alongside site-specific Section 106 commitments, the Community Infrastructure Levy (CIL) has been adopted by Huntingdonshire which provides a mechanism to obtain funding from developers to ensure that infrastructure is provided alongside developments[20].	**Positive health impacts for the A14 upgrade** for key locations as a result of improved air quality will make the district a healthier place to live and work.
Social exclusion within rural villages as a result of lack of access to private and public transport. These people are often forced into car ownership as they feel they have little alternative to access employment and other key services.	n/a

Huntingdonshire Local Plan to 2036 (page 21/22)

The key social challenge for Huntingdonshire is to provide the housing required to accommodate population growth coupled with the infrastructure necessary to ensure that new developments are built in a sustainable way. Although a significant challenge, substantial housing growth also provides an opportunity to ensure that sustainable transport design is at the heart of new developments, making them accessible to all and providing healthy places to live and work.

2.4. Other trip attractors in St Ives

As well as being a significant trip attractor in Huntingdonshire for employment, St Ives also serves a wider social function within the district. Primary and secondary schools within the town are likely to attract trips both from within St Ives and the surrounding towns and villages, particularly from those settlements without education facilities.

St Ives is also likely to attract a significant amount of leisure trips whether that be for sports, shopping, sight-seeing or visiting friends. These are likely to be particularly concentrated in the historic town centre retail area and along the river front. Trips to St Ives for sports activities are likely to be concentrated in the west of the town both off Hill Rise and close to St Ivo Academy and St Ives Town Football Club.

Leisure trips from the surrounding Huntingdonshire District to Cambridge are also likely to access St Ives in order to use the Park and Ride services into Cambridge on the Cambridgeshire Guided Busway. This route is also well used by cyclists for leisure and commuting purposes who would travel through St Ives to access the busway cycle rate.

2.5. Socio-economic and Demographic Summary

This chapter has provided an overview of the socio-economic and demographic context for St Ives and Huntingdonshire. It has set the context and identified the challenges of growth ambitions over the next 25 years. St Ives has strong economic connections to Huntingdon, Peterborough and Cambridge, as well as the other market towns within Huntingdonshire including St Neots.

Car is the most dominant mode for commuting trips to and from St Ives. The dominance of car travel leads to congestion in the district, particularly on the A1123 corridor to the east and west of St Ives, the A1096 which runs north-south to the east of St Ives, and on the A141 into Huntingdon. This has been identified as a significant challenge to achieving the high growth ambitions for the district. The A1123 and A1096 as the main connections to the strategic road network in the district have a significant role to play in this.

The proposed housing and employment growth, particularly at Gifford's Farm and St Ives West, but also further afield at Alconbury Weald, provide an opportunity to develop a transport network, in advance of planned growth, that works both locally for residents of St Ives and Huntingdonshire but also on a wider scale for strategic connections beyond the district.

[20] CPIER (2018) (page 68)

3. The Transport Network

This chapter considers the existing transport network in St Ives and the surrounding area. An overview of the highway, public transport and active mode network is provided.

3.1. Transport Network Overview

3.1.1. Highway Network

A1123

The A1123 is the main road through St Ives, from the A141/B1514 (Hartford Road) roundabout in Huntingdon connecting to the A10 at Stretham and continuing to the A142 near Fordham. This is the main through route for those travelling from St Ives to Huntingdon. However, once the Huntingdon town centre links to the A1307 are completed they will provide an alternative option for car journeys between St Ives and Huntingdon and beyond to the north and west of Huntingdonshire.

At a local level, the A1123 is a distributor road running through the centre of St Ives from west to east. It connects St Ives to Huntingdon and local villages to the Strategic Road Network (via the A141). It also provides a connection between the east of St Ives (including traffic from Bluntisham and Earith) and the west towards Huntingdon (including traffic from Houghton, Wyton and RAF Wyton). The A1123 is congested during peak periods (See Section 3.2.1), particularly at the junction with Harrison Way (A1096) and the junction with the B1040. The speed limit varies along the A1123, however the main section through St Ives is subject to a 30mph limit.

A1096

The A1096 is the main route into St Ives from the south and the A1307, connecting those travelling from further afield to/from Cambridge with St Ives. There is a shared use path along the A1096 which runs from Elizabeth Crescent to the ESSO garage, before accessing St Ives town centre via London Road and St Ives Bridge, where it connects with the St Ives footpath and cycle network. A shared use path also runs between the guided busway junction and the Harrisons Way/Parsons Green junction. The speed limit varies along the A1096, from 40pmh to 60mph.

The St Ives Park and Ride is situated just off the A1096. A bus gate to the north of the River allows priority for the Cambridgeshire Guided Busway services to cross the A1096, to access the Park and Ride and guided busway. General traffic accesses the Park and Ride site from the Meadow Lane (east) arm of the A1096/Meadow Lane junction.

The CPCA recognise the importance of the A1096 in enabling growth in Huntingdonshire and specifically St Ives. The CPCA Local Transport Plan identifies capacity enhancements on the A1096 around St Ives as key to mitigating the impact of development[21].

B1040

The B1040 connects St Ives to the north of Huntingdonshire, including villages such as Warboys, Somersham and Pidley. There is a narrow path along the B1040 from the A1123 junction to Nuffield Road. The road is 40mph from the A1123 junction to the Marley Road junction and then the B1040 becomes 60mph until it reaches Pidley.

B1090

The B1090 connects the A1123 to the A141 near RAF Wyton and provides access to the RAF Base and Wyton on the Hill. It continues north to the A1 at Sawtry, through Abbots Ripton. There is a narrow path along the B1090 from the A1123 past RAF Wyton, but this stops before the junction with the A141 and would not be wide enough for cycles and pedestrians to pass comfortably.

A14 Improvement Scheme

The recently completed A14 Huntingdon Southern Bypass is now accessed via Brampton Hut Interchange to the west of Huntingdon, providing access to the Midlands and onward travel to the M1 and M6 motorways. The A14 Improvement Scheme was designed to increase the capacity of the highway between Cambridge and

[21] CPCA (2020) *The Cambridgeshire and Peterborough Local Transport Plan*. Page 112

Huntingdon and also the capacity of the strategic freight route which has a national role connecting the port of Felixstowe with the Midlands, its distribution centres, and much of the UK beyond.

The A1096 connects to the old A14, now named the A1307, however only local traffic going to St Ives, Fenstanton, Godmanchester and into Huntingdon town centre will be using the A1307.

The impact of opening the new section of the A14 on traffic flows in and around St Ives, and on this project, has not yet been fully reflected because the section around Huntingdon was fully opened (all lanes running) during the Covid-19 pandemic, which is known to have changed travel habits and the number of vehicles on the network. In addition, the new link roads in Huntingdon, to be delivered as part of the A14 scheme, have not yet been constructed.

3.1.2. Public Transport Network

This section reviews bus service provision, access constraints and operational performance in St Ives. St Ives is currently served by bus and guided bus, with numerous services to Huntingdon, surrounding Huntingdonshire villages and to Cambridge. The closest rail station to St Ives is Huntingdon, approximately 9km to the west of St Ives, which sits on the East Coast Mainline and serves stations between London and Edinburgh.

There is a policy goal to support economic growth and environmental objectives by maximising public transport where possible. The Local Transport Plan, for example, aims to '*connect all new and existing communities sustainably so all residents can easily access a good job in 30 minutes by public transport'*[22]*.*

Table 3-1 shows the bus, coach and guided busway services that serve St Ives.

Table 3-1 - Bus, Coach and Guided Busway Services Serving St Ives[23]

Service	Operator	Route Description
The Busway Route A	Stagecoach East	Ramsey, Warboys, St Ives, Huntingdon (via Hartford roundabout)
The Busway Route B	Stagecoach East	Connects both study areas via the A1123 (via the Hartford roundabout).
Orbital Route 22	Stagecoach East	St Ives bus station – Marley Road St Ives
Route 1A	Dews Coaches	St Ives to Bar Hull
Route 9	Dews Coaches	St Ives to Hilton
Route 15	Dews Coaches	St Ives to Over
Route 21	Dews Coaches	St Ives to Somersham and Ramsey.
Route 22	Dews Coaches	St Ives to Warboys
Route 45A	Dews Coaches	Route 45A St Ives to Houghton, Wyton and Huntingdon.
V1	Stagecoach East	St Ives to Ramsey
V2	Stagecoach East	St Ives to Chatteris
V3	Stagecoach East	St Ives to Somersham
V4	Stagecoach East	St Ives to Boxworth
902	Stagecoach East	Peterborough, Sawtry, The Stukeleys, Huntingdon, St Ives
904	Stagecoach East	St Ives to Huntingdon

[22] Cambridgeshire and Peterborough Combined Authority (2020) *The Cambridgeshire & Peterborough Local Transport Plan.* Page 11.
[23] St Ives, Cambs – bustimes.org and Skanska (May 2019) Stage 1: Existing Conditions and Data Collection Report, St Ives Area Transport Study, Table 4.11 page 44

Service	Operator	Route Description
VL14	Villager Community Bus (Beds & Bucks)	Felmersham to Huntingdon and St Ives

Busway routes A and B, that operate between Cambridge and Huntingdonshire, serve St Ives town centre directly. These provide segregated, fast, high frequency services along the Cambridgeshire Guided Busway. Figure 3-1 illustrates the busway routes serving St Ives and Huntingdon.

Figure 3-1 - Busway Routes Serving St Ives and Huntingdon[24]

Figure 3-2 shows the bus network within St Ives including the Busway services and the orbital bus route 22, operated by stagecoach servicing residential areas of St Ives via Ramsey Road and Marley Road. The Busway services route via the town centre with the A service continuing to Huntingdon and Ramsey or Somersham or Chatteris. Busway service B routes to Alconbury and Peterborough via Huntingdon and the A1123.

[24] https://www.thebusway.info/routes-times.shtml (cropped from original image)

Figure 3-2 - Bus Routes of Stagecoach Operated Services Within St Ives[25]

St Ives Park and Ride is located to the east of the Town and is accessed by general traffic from the Meadow Lane (east) arm of the A1096/Meadow Lane roundabout. It is served by the Busway services to/from Cambridge and Huntingdon. The Park and Ride has capacity for 1,000 vehicles and parking is free of charge. Due to its proximity to the town centre, the Park and Ride site is also used as parking by those visiting the town.

3.1.3. Active Travel Network

Overall, the walking and cycling infrastructure "*along the main corridors within St. Ives is fragmented with the odd section of poorly maintained marked cycle lane and sections of shared use footway. These routes are often fragmented with small sections of on road or shared footway cycling infrastructure, such as on sections of the A1123*" [26]. Pedestrian and cycle wayfinding signage around St Ives is limited and inconsistent. Poorly maintained or on-road cycle infrastructure is often perceived to be dangerous and in-direct routes, not on desire lines can lead to cycling being seen as less convenient than the private car, both of which can discourage use.

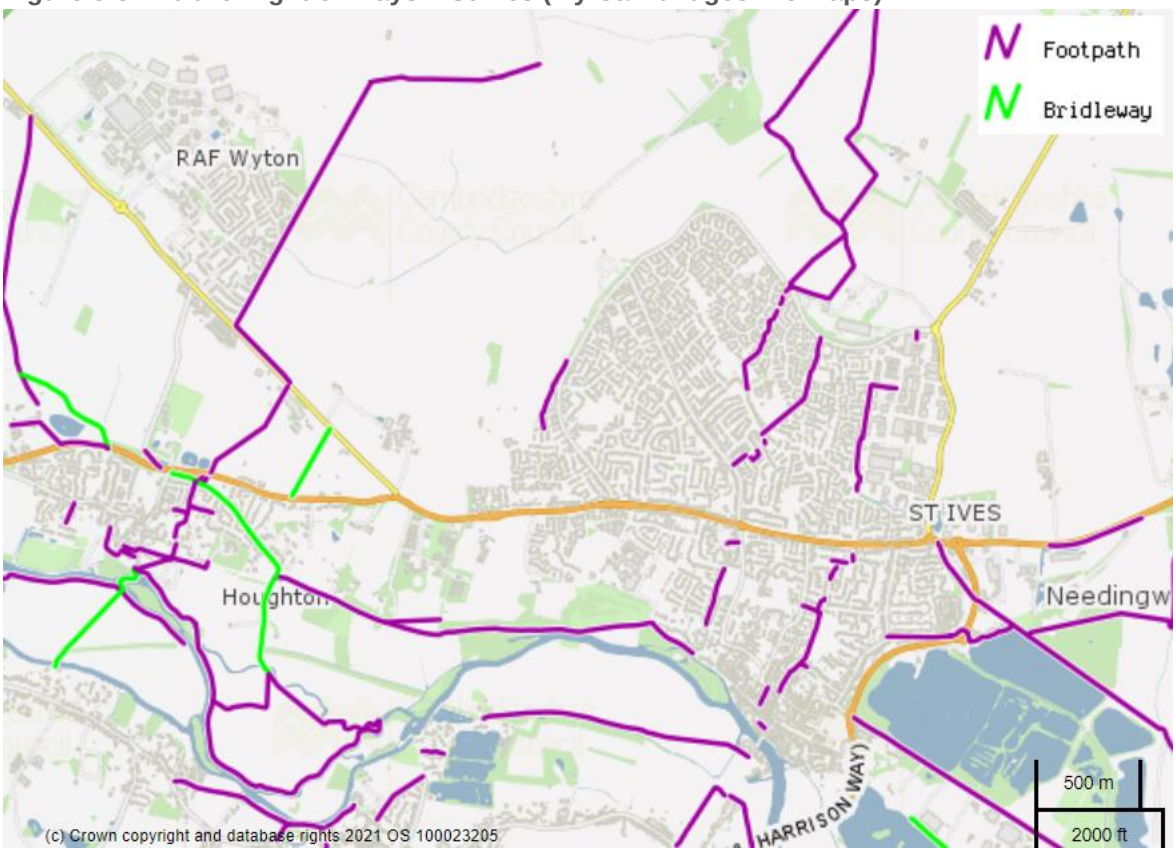
There are shared-use footways alongside the A1123 between the Harrison Way junction and Hill Rise to the west of St Ives which west towards Houghton and Huntingdon.

The guided busway from St Ives to Cambridge has a shared use path running adjacent to the track. This is part of The National Cycle Network (NCN) route 51 and users can follow it from St Ives to Cambridge off road. NCN route 24 runs from Fenstanton to St Ives joining part of NCN 51. These are shown in Figure 1-1. This route is particularly well used.

There are other Public Rights of Way in and around St Ives and these are shown below in Figure 3-3 .

[25] Skanska (May 2019) *Stage 1: Existing Conditions and Data Collection Report, St Ives Area Transport Study*, Figure 4.9
[26] Skanska (May 2019) *Stage 1: Existing Conditions and Data Collection Report, St Ives Area Transport Study*, section 4.5.3 page 38

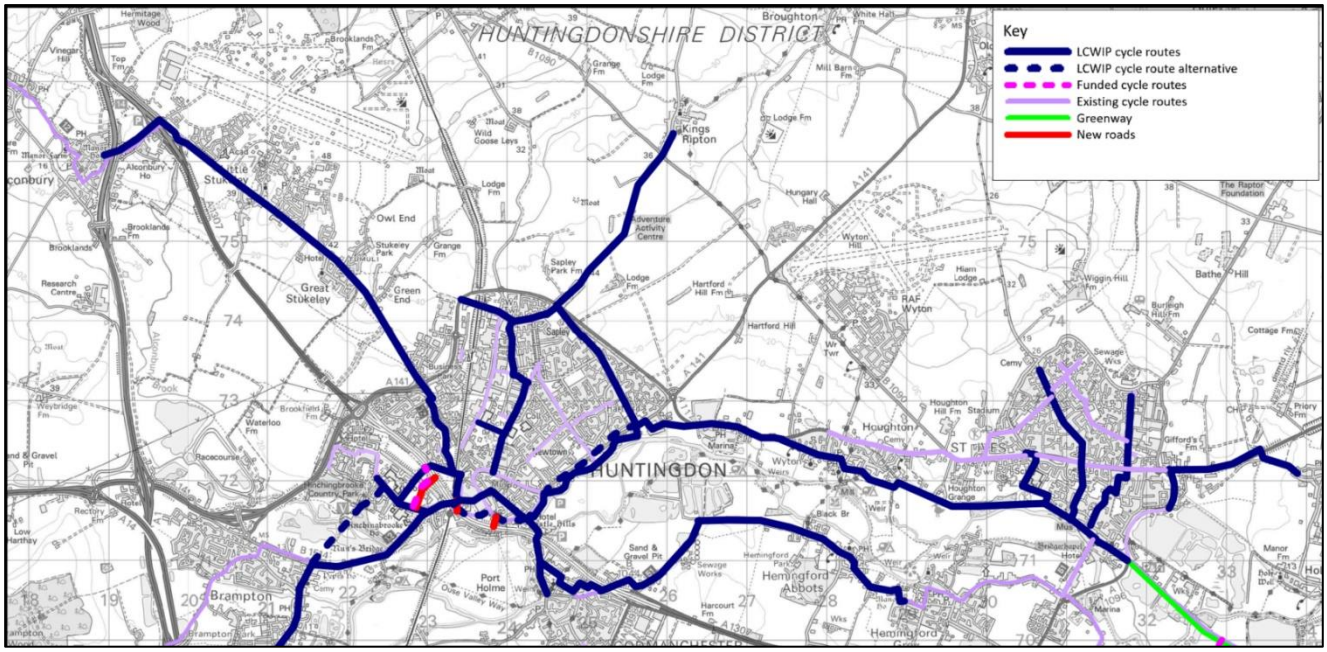
Figure 3-3 - Public Right of Ways – St Ives (My Cambridgeshire Maps)[27]



The Huntingdonshire Local Cycling and Walking Infrastructure Plan (LCWIP) is a strategic approach to developing high standard active travel routes across the district. There are 16 routes that Cambridgeshire County Council (CCC) are looking to improve of which five run through St Ives, as shown in Figure 3-4.

[27] My Cambridgeshire

Figure 3-4 - LCWIP Routes[28]



LCWIP cycle routes through St Ives, include:

- St Ives: Harrison Way/Parsons Green – Stocks Bridge Way/Compass Point business park;
- St Ives north to town centre;
- St Ives west to town centre;
- St Ives north east to town centre; and
- Stocks Bridge Way / Compass Point business park – Needingworth.

It is noted that the LCWIP typically considers main corridors for improvement and inevitably will not cover all routes, particularly the more rural links connecting smaller areas of population which do not to get assessed in CCC's propensity to cycle tool. CCC are likely to consult on the LCWIP routes in Spring 2021 but have already consulted with stakeholders including the districts and cycling groups.

Local policy also encourages active travel and considers it an opportunity to promote healthy lifestyles[29]. Future schemes, including those associated with the St Ives Transport Study should therefore seek to accommodate active travel infrastructure to support policy.

Pedestrian and Cycle Counts

As presented in the Skanska St Ives Stage 1 Existing Conditions Report, pedestrian and cycle count data was collected in 2017 for five sites in St Ives between 0700 and 1900. The sites are shown in Figure 3-5 and the data collected is presented in Table 3-2. [30]

[28] Cambridgeshire County Council (2020) *Huntingdon and St Ives Cycle Routes*
[29] Huntingdonshire District Council (2019) *Huntingdonshire's Local Plan to 2036.* Page 21.
[30] Skanska (May 2019) Stage 1: Existing Conditions and Data Collection Report, St Ives Area Transport Study. *Section 4.5.5 page 42*

Figure 3-5 - Cycle Count Locations in St Ives

Table 3-2 - Two-Way Traffic Count Data for Sites in St Ives, 0700-1900, 2017[31]

Map Reference	Count Location	Pedestrians	Pedal Cycles
1	A1123 Houghton Road	103	86
2	Marley Road	0	11
3	A1123 St. Audrey Lane	316	250
4	Meadow Lane	417	139
5	Bridge Terrace	1,764	625

Table 3-2 indicates that the highest pedestrian and cycle counts were recorded at Bridge Terrace in the centre of St Ives, which links to NCN 51 via London Road, over the traffic free St Ives Bridge. Footfall is also relatively high near St. Audrey Lane. This is likely to be as a result of the proximity of retail and other services in this location.

3.2. Existing Performance

Traffic Flows

The Skanska St Ives Stage 1 Existing Conditions Report collected data for nine key junctions and three key route corridors within St Ives, as shown in Figure 3-6 [32]. Junctions are labelled J to U in line with the Skanska St Ives Stage 1 Existing Conditions Report, following on from junctions A – I in the A141 Phase 1 Report.

[31] Source: CCC 2017
[32] Skanska (May 2019) Stage 1: Existing Conditions and Data Collection Report, St Ives Area Transport Study. *Section 3 Data Collection.*

Figure 3-6 - Data Collection Locations[33]

Available Manual Classified Turning Count data for the junctions in St Ives are presented in Table 3-3.[34] The MCTC data account for total inbound flow to the junction from all approach arms.

Table 3-3 - Junction Traffic Flows Between 0700 and 1900

Junction	Total Traffic Movements
Junction I: B1040/Marley Road Roundabout	12,345
Junction J: A1123/B1090 Priority Junction	18,346
Junction K: Hill Rise Signalised T-Junction	19,630
Junction L: Ramsey Road Signalised Crossroads	19,086
Junction M: A1123/ B1040 Somersham Road Roundabout	23,580
Junction M: A1123/A1096 Roundabout	26,888
Junction R: Meadow Lane Roundabout	25,389

[33] Skanska (May 2019) Stage 1: Existing Conditions and Data Collection Report, St Ives Area Transport Study. *Section 3 page 25.*
[34] Skanska (May 2019) Stage 1: Existing Conditions and Data Collection Report, St Ives Area Transport Study. Section 5.5, Road Network Traffic Volume.

Junction	Total Traffic Movements
Junction S: Guided Busway Signalised Crossroads	-*
Junction T: Hemingford Road Roundabout	23,170
Junction U: A14 Galley Hill (J26) Roundabout	-*

*Data not available for junctions S and U

Table 3-3 shows that junction M, the A1123/A1096 junction, was the busiest with 26,888 vehicle movements across the day. The A1123/B1040 Somersham Road Roundabout (which is the second roundabout located at junction M) facilitated over 3,000 less vehicles than the A1123/A1096 Roundabout. This suggests that there is significant demand between the A1123 east of St Ives and the A1096. Also, a proportion of this traffic is likely to be accessing the employment areas off Stocks Bridge Way.

Site visit observations conducted for Skanska St Ives Stage 1 Existing Conditions Report noted that "*traffic flow through the two roundabouts at Junction M remained busy during the Interpeak period as well as the AM and PM peak periods. This is likely to be due to the trip attractor of retail and food outlets which are located next to these junctions*".[35]

The B1040/Marley Road Roundabout (junction I) experienced 12,345 traffic movements across the 12-hour period. This is less than half of the total movements experienced at the A1123/A1096 Roundabout (junction M). This suggests that most of the traffic entering St Ives originates from the east (junction J) and the south (junction T) of the town, rather than from the north.

Traffic Composition

Traffic composition data from MCTCs for junctions I-U are shown in Table 3-4. These datasets were obtained for the purposes of the Skanska St Ives Stage 1 Existing Conditions Report, on a neutral weekday day in June 2018 and indicate traffic composition on a typical day.

[35] Skanska (May 2019) Stage 1: Existing Conditions and Data Collection Report, St Ives Area Transport Study. *Section 5*

Table 3-4 - Traffic Composition at Junctions in St Ives (2018) [36]

Junction	% Cars	% LGV	% OGV1	% OGV2	% PSV	% MC	% PC
Junction I: Marley Road Roundabout	83.04	12.27	2.16	0.95	0.46	1.00	0.11
Junction J: A1123/B1090 Priority Junction	83.27	10.48	1.91	1.70	0.98	0.98	0.23
Junction K: HA1123 Houghton Road/ Hill Rise Signalised T-Junction	84.13	10.32	1.87	1.65	0.95	0.91	0.18
Junction L: A1123 Houghton Road/ Ramsey Road Signalised Crossroads	83.22	10.22	1.99	1.67	1.25	0.78	0.87
Junction M: Somersham Road Roundabout	80.90	12.45	3.01	2.21	0.25	1.01	0.18
Junction M: A1123/A1096 Roundabout	80.07	11.82	2.93	3.80	0.20	0.88	0.30
Junction R: Meadow Lane Roundabout	78.86	11.44	3.08	5.19	0.32	0.85	0.25
Junction S: Harrison Way /Guided Busway Signalised Crossroads	-	-	-	-	-	-	-
Junction T: Harrison Way/Low Road Roundabout	78.39	12.39	3.27	4.55	0.31	0.89	0.20
Junction U: A14 Galley Hill (J26) Roundabout	-	-	-	-	-	-	-
Average Traffic Composition	**81.49**	**11.42**	**2.53**	**2.45**	**0.59**	**0.91**	**0.29**

As shown in Table 3-4, the highest proportion of vehicles passing through the junctions in St Ives are cars, ranging from 78% to 85% depending on the junction location. The average percentage of cars across the eight junctions was 81.49%, which is slightly higher than the national average for Great Britain at 78%[37]. This is likely to be as a result of the relatively high car ownership in Huntingdonshire.

HGVs make up approximately 5% of vehicles on the St Ives road network during the survey period, which is consistent with the national average for Great Britain. HGV volumes varied considerably across the junctions surveyed. The highest proportions were experienced at the Meadow Lane (junction R) and Harrison Way/Low Road (junction T) junctions, with 8.27% and 7.82% respectively. This is likely to be as a result of the A1096 providing connections to the strategic road network via the A1307 and the industrial land uses off Meadow Lane east. Lower proportions of HGVs were recorded at all other junctions, particularly Marley Road Roundabout (junction I), and the junctions along the A1123 (J, K and L). The latter is likely to be as a result of HGVs choosing to route via the A1307 as a more strategic east-west option than the A1123.

Public service vehicles (PSV), motorcycles and pedal cycles comprised, on average, less than 1% of the vehicles on the road network in St Ives during the survey period.

[36] Skanska (May 2019) Stage 1: Existing Conditions and Data Collection Report, St Ives Area Transport Study. Section 5.2 page 59
[37] Road Traffic Estimates: Great Britain 2019 (page 5)

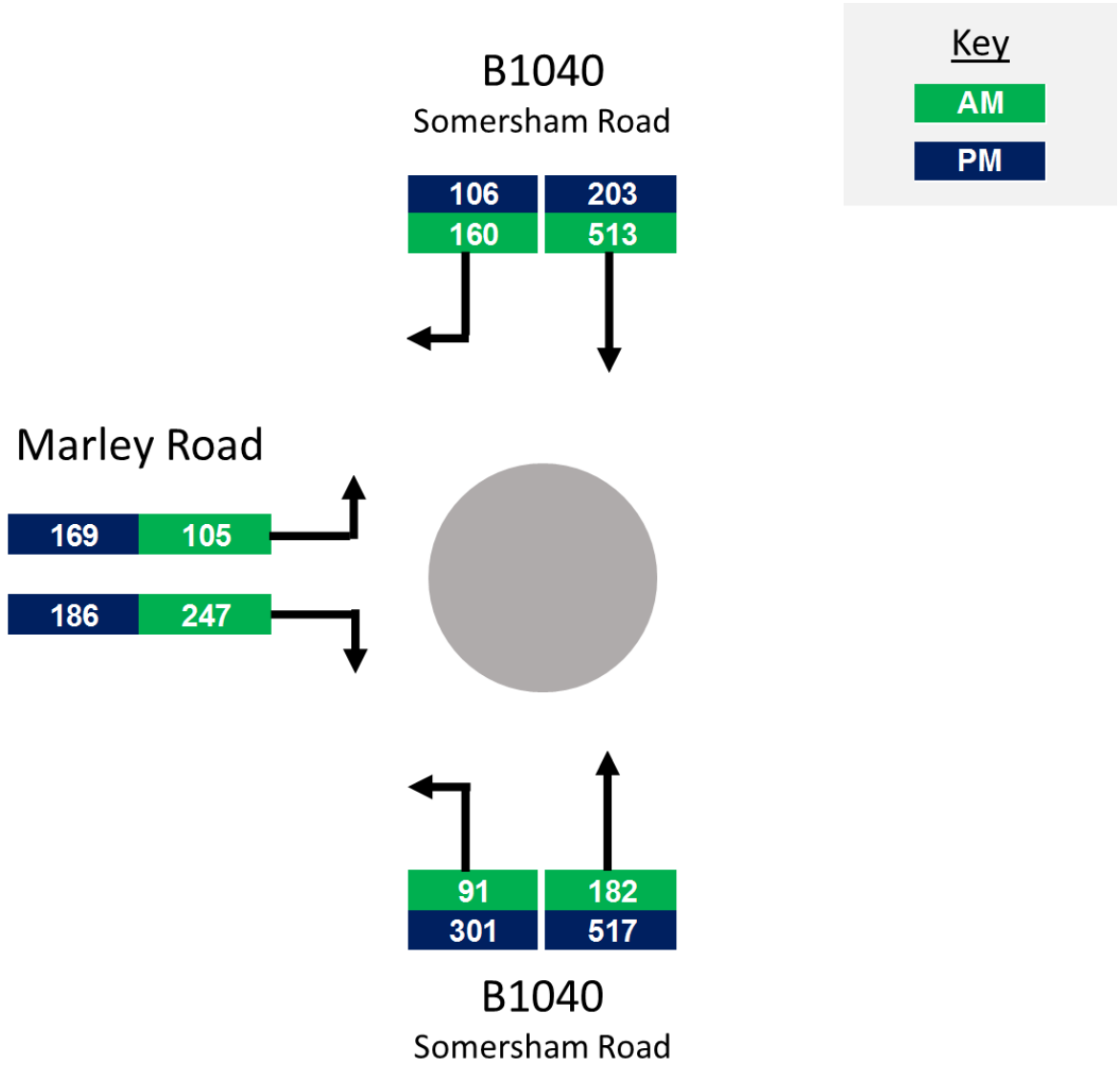
Peak Turning Data and Select Link Analyses[38]

Turning count diagrams and select link analysis[39] prepared for the Skanska St Ives Stage 1 Existing Conditions Report[40] and informed by MCTC data, Automatic Numberplate Recognition (ANPR) data and the Cambridge Sub Regional Model 2 (CSRM2) 2015 model, are summarised below for the St Ives junctions shown above. Note that the turning count diagrams show turning movements in the AM and PM peak hours for each junction individually, therefore the exact AM and PM peak hours vary between different junctions.

Junction I: B1040 Somersham Road / Marley Road Roundabout

Figure 3-7 shows the turning count diagram of the Marley Road Roundabout during the AM (0745-0845) and PM (1700-1800) peaks.

Figure 3-7 - Marley Road Roundabout Turning Count Diagram[41]



[38] Skanska (May 2019) *Stage 1: Existing Conditions and Data Collection Report, St Ives Area Transport Study*, Section 5.7 Trip Distribution Analysis
[39] Cambridge Sub-Regional Model (2015)
[40] Skanska (May 2019) *Stage 1: Existing Conditions and Data Collection Report, St Ives Area Transport Study*, Section 5.7 page 70.
[41] Skanska and Capita (2019) *St. Ives Area Transport Study: Stage 1: Existing Conditions and Data Collection Report.* Figure 5.10

For both the AM and PM peak, Figure 3-7 shows that the straight through movements on the B1040 carry the most traffic and that fewer vehicles originated or turned into the Marley Road arm of the roundabout. During the AM peak, the dominant flow was towards St Ives from the B1040, with the reverse pattern in the PM peak.

Select link analysis, undertaken as part of the Skanska St Ives Stage 1 Existing Conditions Report, showed that of those vehicles travelling southbound towards the roundabout in the AM peak hour, almost two thirds originated from Warboys. Approximately a quarter of all traffic through the junction was strategic and destined to the A1307 via Harrison Way.

During the PM peak hour, 60% of the northbound traffic is destined for Warboys and Somersham. Of the total traffic over 50% is considered strategic, originating from the direction of either the A1307 or Hilton.

Junction J: A1123/B1090 Sawtry Way Junction

Figure 3-8 shows turning count data for the A1123/B1090 junction during the AM (0745-0845) and PM (1700-1800) peak hours.

Figure 3-8 - Turning Count Diagram of the A1123/B1090 Junction[42]

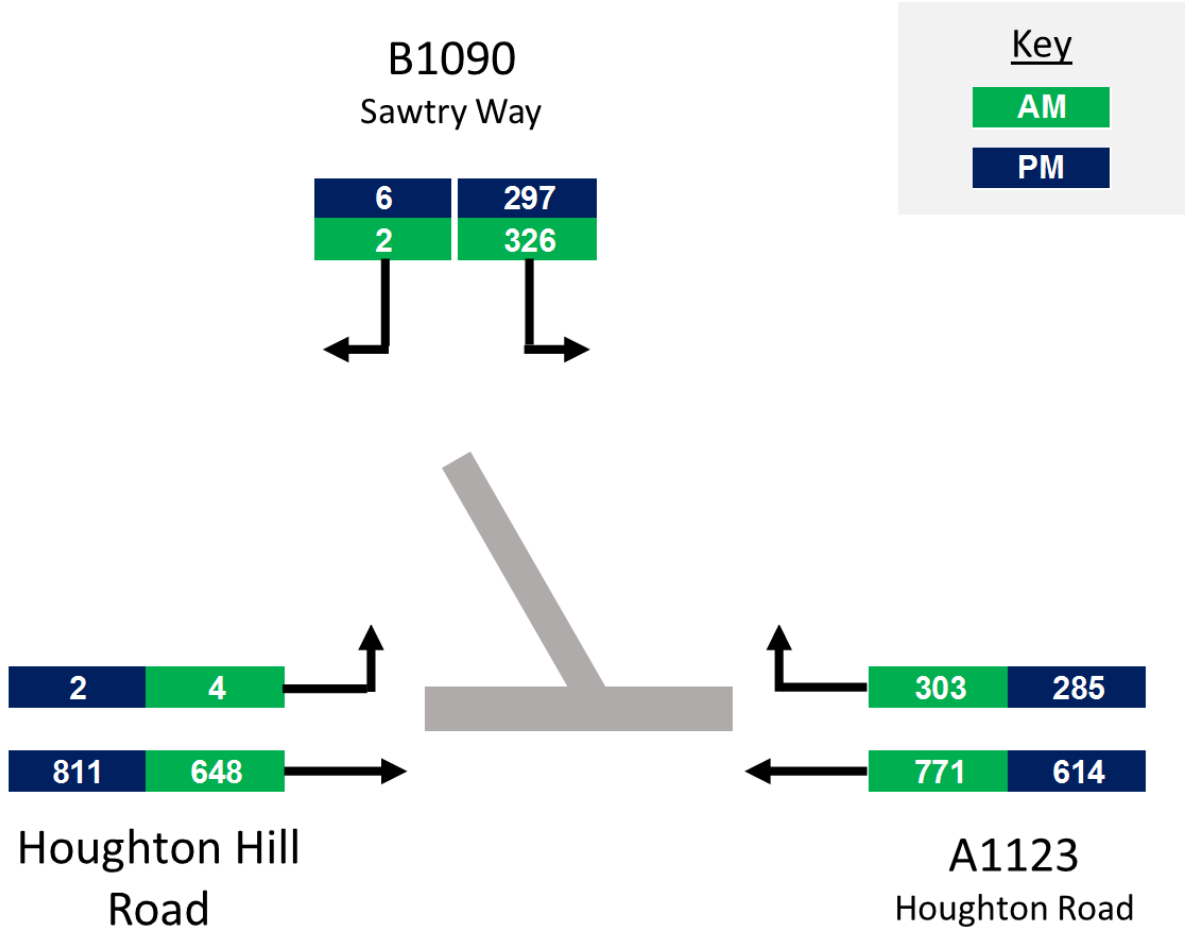


Figure 3-8 shows that, for both AM and PM peak hours, the predominant flow is between A1123 Houghton Hill Road and A1123 Houghton Road. There are very low levels of movements between Sawtry Way and Houghton Hill Road in both the AM and PM peak hours, however it is the role of this junction, and the Sawtry Way arm, to

[42] Skanska and Capita (2019) *St. Ives Area Transport Study: Stage 1: Existing Conditions and Data Collection Report.* Figure 5.11

serve traffic to/from St Ives and the A141 rather than Huntingdon. Therefore, the traffic using Sawtry Way is a significant movement in the local network, consisting of approximately 47% of traffic at the junction.

Select link analysis, undertaken as part of the Skanska St Ives Stage 1 Existing Conditions Report, showed that most traffic travelled southbound (from Sawtry Way) towards St Ives on the A1123. Moreover, the analysis shows that some 10% of the traffic travels east of St Ives, either to the A1307 or Earith.

During the PM peak hour, 55% of traffic was destined for RAF Wyton, whilst Warboys, Kings and Abbots Ripton accounted for the remainder of northbound journeys. Of the total traffic, around 30% is considered longer distance, originating from the direction of either the A1307 or Hilton.

Junction K: A1123 Houghton Road / Hill Rise Junction

Figure 3-9 shows the turning count diagram of the A1123 Houghton Road/ Hill Rise signalised priority junction during the AM (0730-0830) and PM (1700-1800) peak hours.

Figure 3-9 - Turning Count Diagram of the Hill Rise Signalised T-Junction[43]

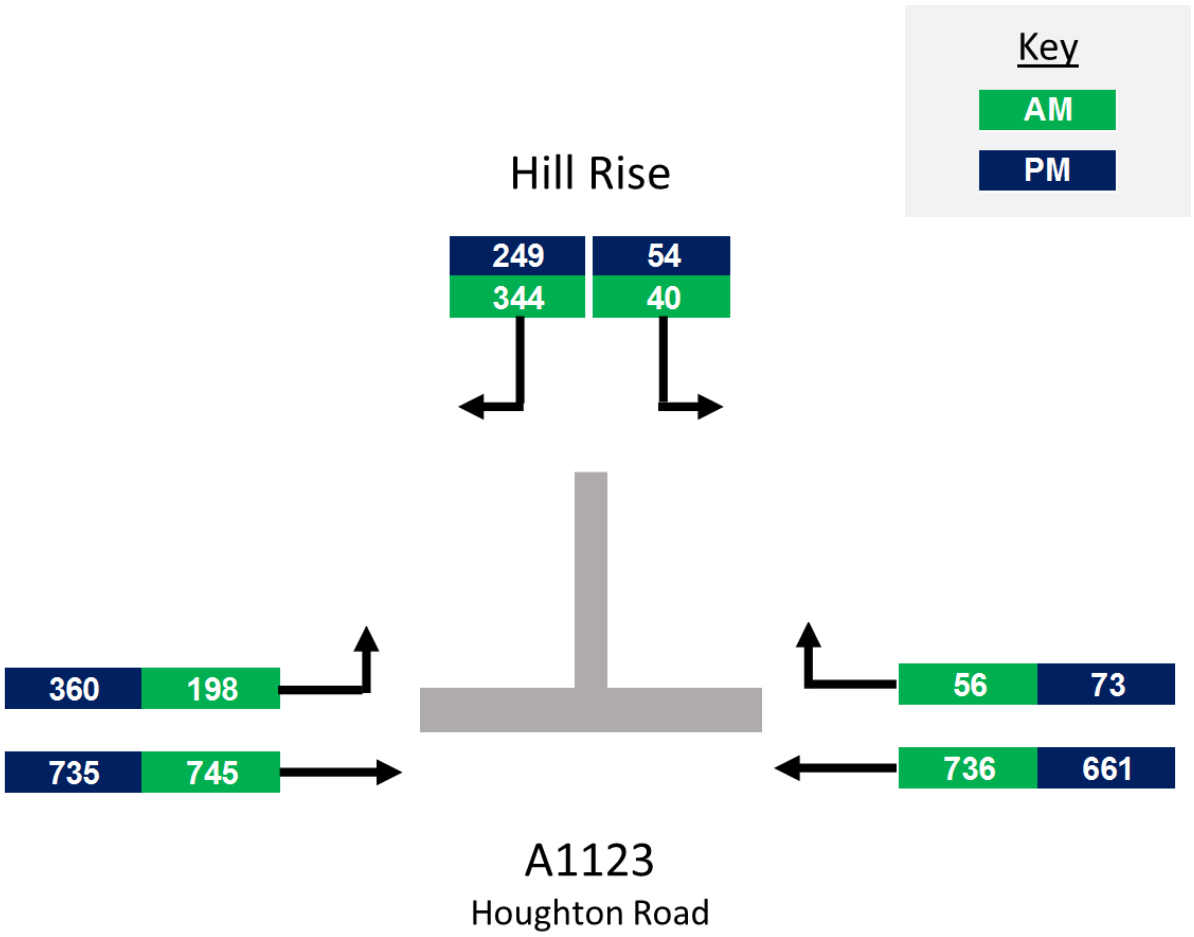


Figure 3-9 shows that the main movement at this junction in both the AM and PM peak hours is along the A1123 with most vehicles turning right (west) out of Hill Rise towards Huntingdon. In both peak hours, more vehicles turn left into Hill Rise than turn right.

During the AM peak hour, most vehicles (74%) travelling from the west originate from the Huntingdon area, of which 50% of trips travel to Hill Rise. Some 10% of the journeys are considered strategic, looking to join the A1307 further east or travelling eastwards via Earith.

The select link analysis which was undertaken as part of the Skanska St Ives Stage 1 Existing Conditions Report found that, during the PM peak hour, the majority of traffic (65%) were traveling to/from Huntingdon.

[43] Skanska and Capita (2019) *St. Ives Area Transport Study: Stage 1: Existing Conditions and Data Collection Report.* Figure 5.12

Around 20% of traffic was travelling from the south (via Ramsey Road and High Leys), and 30% of traffic came from the east via the A1123 via Earith.

Junction L: A1123 Houghton Road/Ramsey Road/St. Audrey Lane Crossroads

Figure 3-10 shows the turning count data on the Ramsey Road Crossroads during the AM (0730-0830) and PM (1700-1800) peak hours.

Figure 3-10 - Turning Count Diagram of the Ramsey Road Crossroads[44]

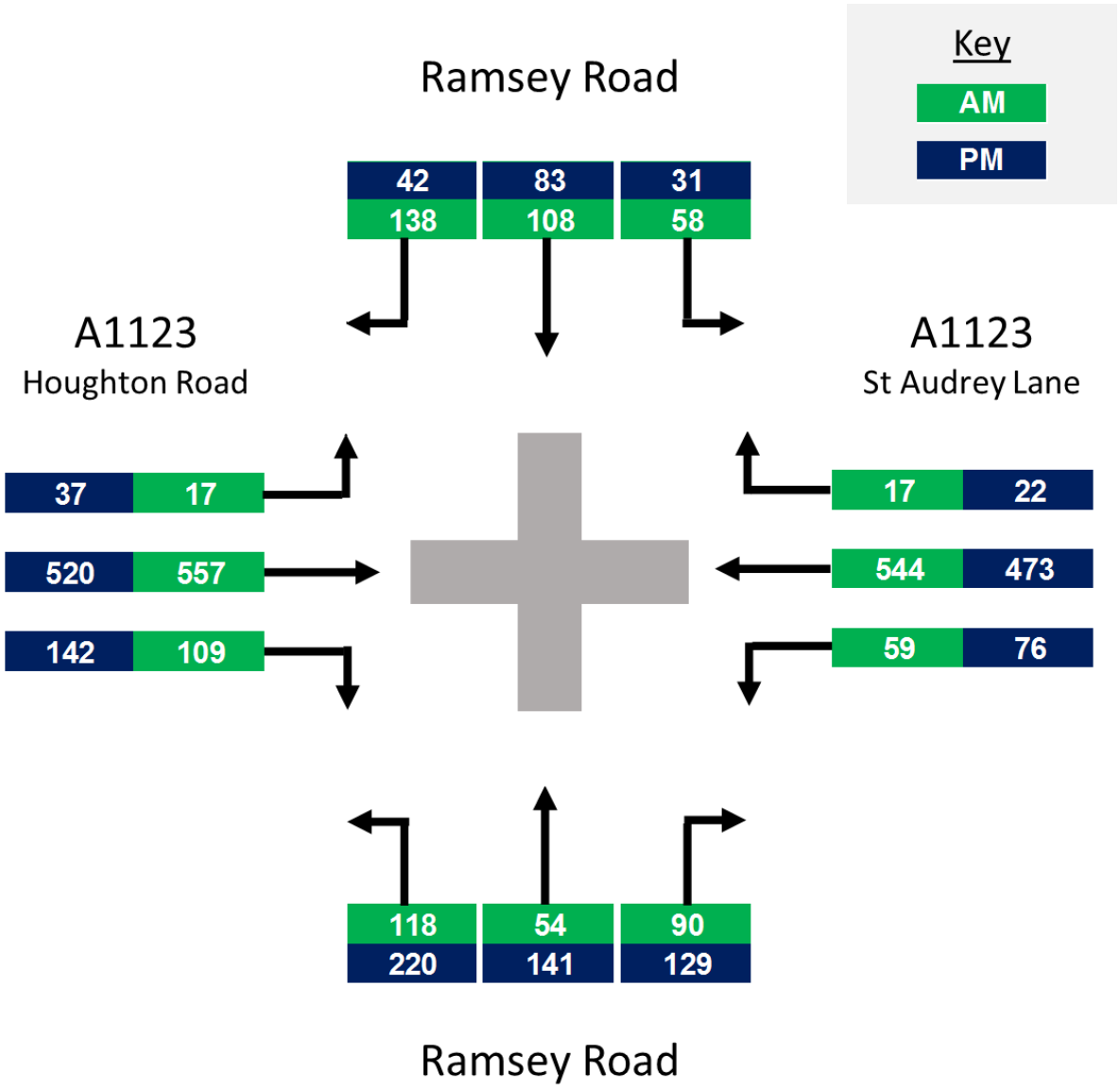


Figure 3-10 shows that, for both AM and PM peak hours, more vehicles travel through the junction along the A1123 between the Houghton Road arm and the St. Audrey Lane arm of the junction. There is an equal split of movements egressing Ramsey Road on both northern and southern sides, with slightly more vehicles travelling westbound. Trips from Houghton Road / St Audrey Lane into Ramsey Road (N) occur least frequently.

[44] Skanska and Capita (2019) *St. Ives Area Transport Study: Stage 1: Existing Conditions and Data Collection Report.* Figure 5.13

Analysis undertaken as part of the Skanska St Ives Stage 1 Existing Conditions Report showed that just over half (56%) of vehicles in the AM peak hour were travelling towards Huntingdon, whilst 20% of trips were travelling towards Harrison Way on the south eastern side of the town. There were very limited movements travelling towards the A1307 from here.

During the PM peak hour, around 70% of vehicles were undertaking long distance journeys having utilised Harrison Way once exiting the A1307 for onward travel towards Huntingdon in the west, and RAF Wyton and Kings Ripton in the north.

Junction M: A1123 / B1040 Somersham Road Roundabout

Figure 3-11 shows the turning count data for the Somersham Road Roundabout during the AM (0715-0815) and PM (1645-1745) peak hour.

Figure 3-11 - Turning Count Diagram of the Somersham Road Roundabout[45]

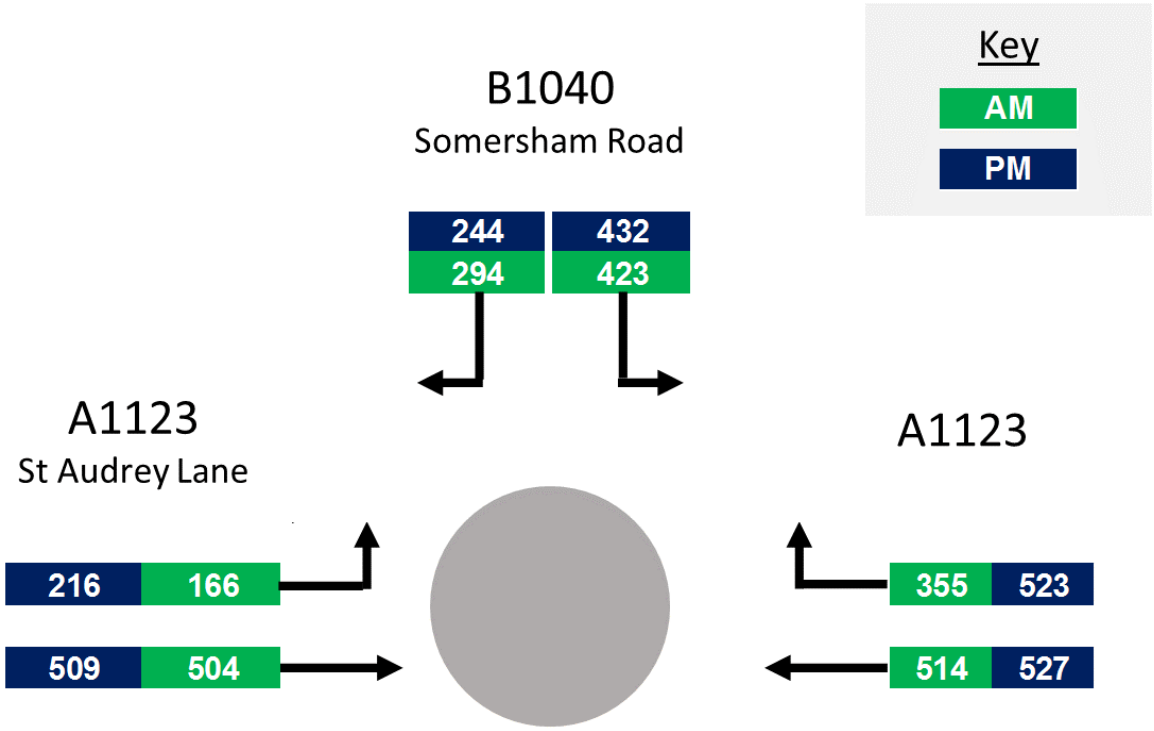


Figure 3-11 shows the biggest flow at the Somersham Road Roundabout are movements from the A1123 (east) travelling westbound into St Ives town centre. More vehicles turn left (east) from Somersham Road onto the A1123 in both the AM and PM peak hours. There are less movements travelling from St Audrey Lane to Somersham Road in both the AM and PM peak hours compared to other movements.

Select link analysis, undertaken as part of the Skanska St Ives Stage 1 Existing Conditions Report, showed that 52% of southbound trips were travelling to/from the A1307 meaning that over half of these trips are considered strategic.10% trips were to/from Earith via the A1123.

During the PM peak hour, traffic levels remained similar to the AM peak hour with 56% of traffic travelling north from the A1307 via Harrison Way being considered strategic. 15% trips were to/from Earith via the A1123.

[45] Skanska and Capita (2019) *St. Ives Area Transport Study: Stage 1: Existing Conditions and Data Collection Report.* Figure 5.14

Junction M: A1123/ A1096 Harrison Way Roundabout

Figure 3-12 shows a turning count diagram of the A1123/A1096 Roundabout during the AM (0815-0915) and PM (1700-1800) peak hours.

Figure 3-12 - Turning Count Diagram of the A1123/A1096 Roundabout[46]

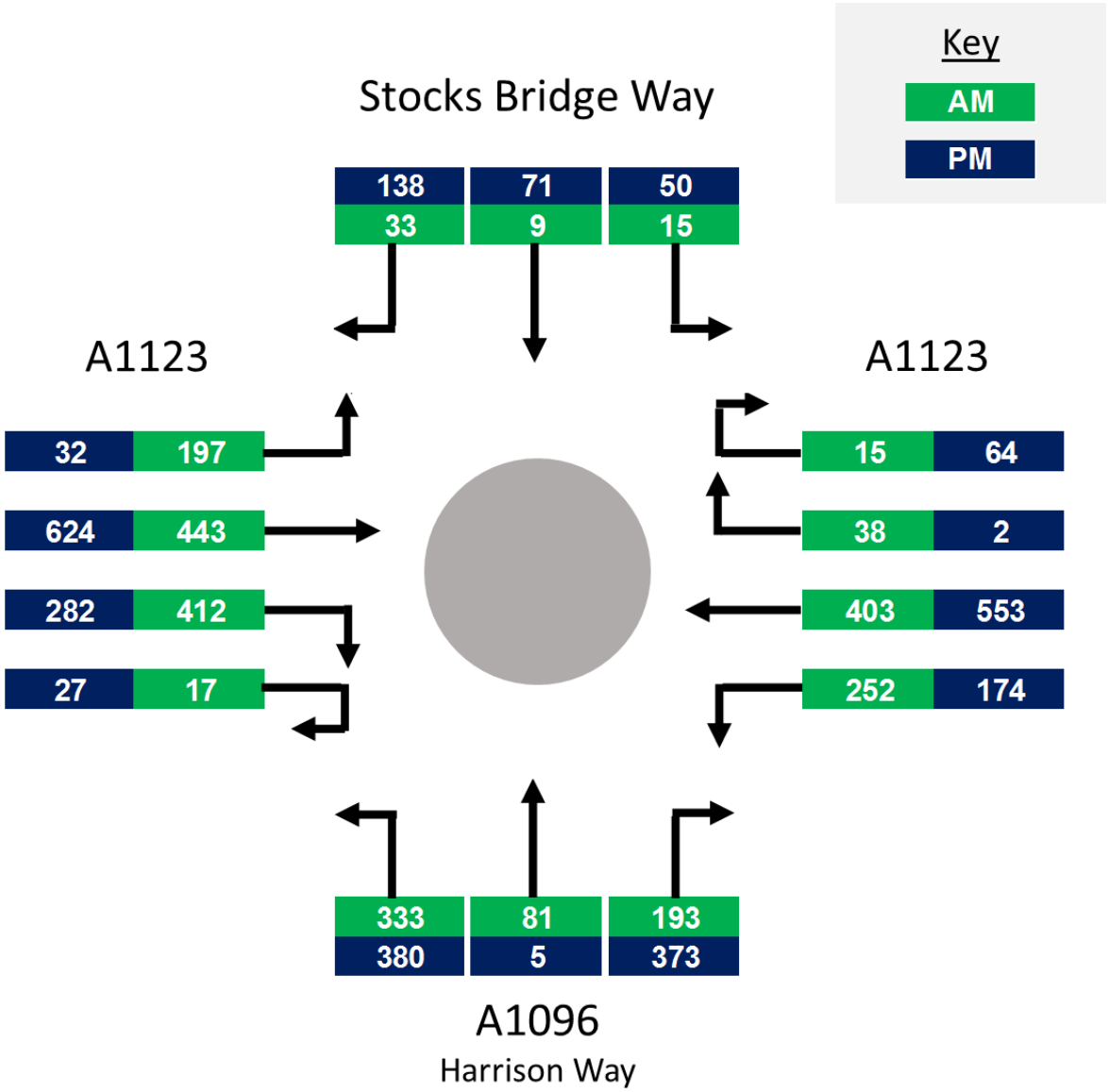


Figure 3-12 shows that the major movement on the A1123/A1096 Roundabout is the straight-ahead movement on the A1123. Harrison Way is the second busiest arm with some 673 trips from the other three arms during the AM peak hour and 906 trips from the other three arms in the PM peak hour.

During the AM peak hour, just over half of the trips (53%) originate from the east (Earith). Some 35% of the traffic using this junction are travelling towards the A1307 and are making strategic trips, whereas 14% are using this junction to travel to the A1307 further south.

A number of U-turning vehicles are recorded at this junction, to and from both arms of the A1123. This is likely to be as a result of the location of food retailers either side of the junction. There are also likely to be a number of U-turn vehicles travelling to/from the A1096 as a result of the one-way working of the McDonalds access[47].

[46] Skanska and Capita (2019) *St. Ives Area Transport Study: Stage 1: Existing Conditions and Data Collection Report.* Figure 5.15

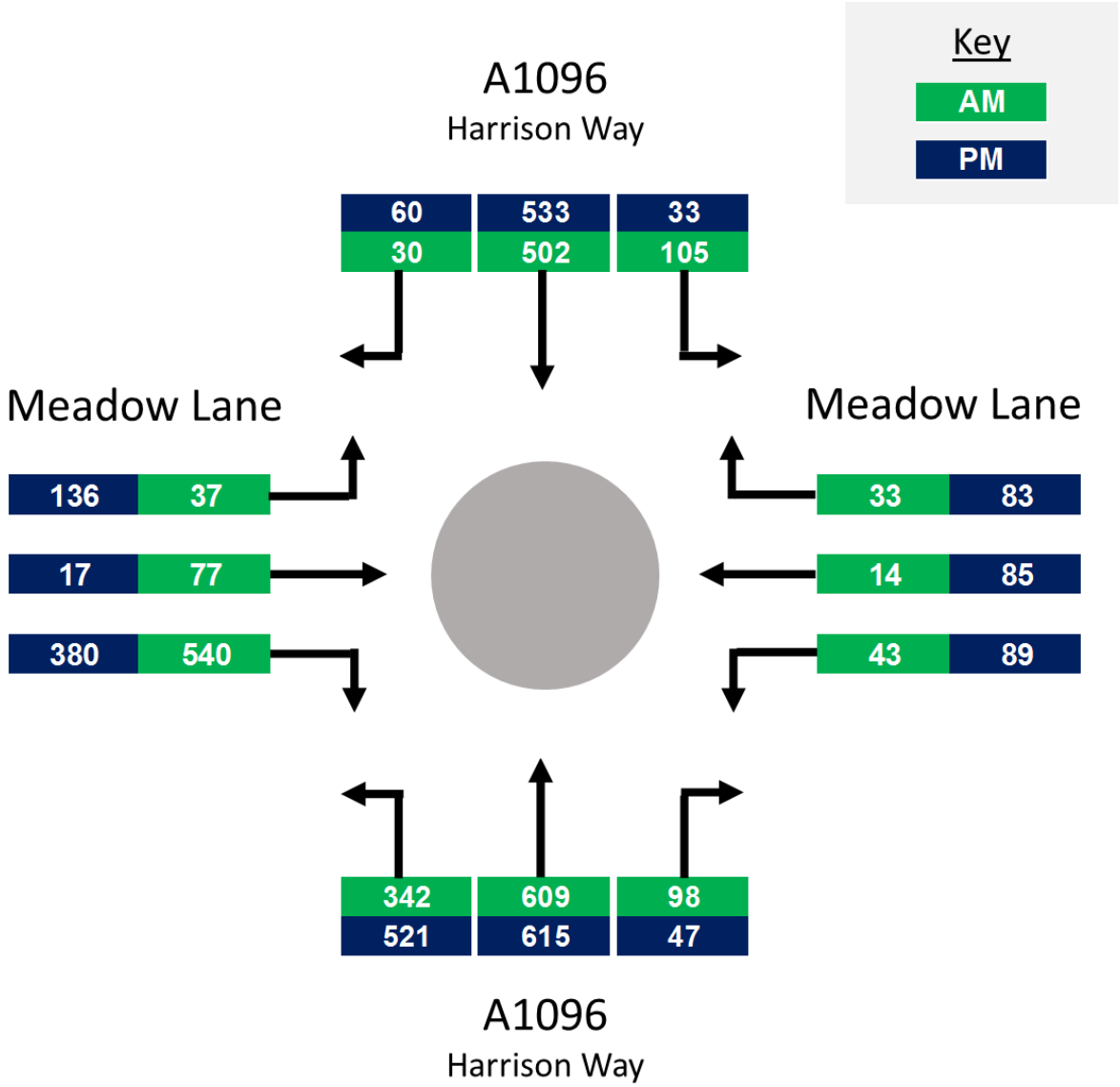
[47] This data was not available from the St. Ives Area Transport Study: Stage 1: Existing Conditions and Data Collection Report

Select link analysis, undertaken as part of the Skanska St Ives Stage 1 Existing Conditions Report, showed that in the PM peak hour, A1307 traffic accounts for 60% of all northbound movements i.e. from Harrison Way. 50% of long-distance traffic travels north (towards Somersham), whilst 45% of traffic travels east (towards Earith).

Junction R: A1096 Harrison Way/ Meadow Lane Roundabout

Figure 3-13 shows turning count data for the Meadow Lane Roundabout during the AM (0745-0845) and PM (1615-1715) peak hour.

Figure 3-13 - Turning Count Diagram of the Meadow Lane Roundabout[48]



For both the AM and PM peak hours, Figure 3-13 shows that the straight ahead movements on Harrison Way carry the most traffic and that few vehicles travel on Meadow Lane, particularly from the east. During both peak hours, there are large flows between Harrison Way (S) and Meadow Lane (W).

During the AM peak hour, a third of traffic travelled to the A1307. The results from the select link analysis also show that just under half of all traffic utilises local roads within St Ives, including Needingworth Road and North Road/Ramsey Road.

[48] Skanska and Capita (2019) *St. Ives Area Transport Study: Stage 1: Existing Conditions and Data Collection Report.* Figure 5.16

Select link analysis, undertaken as part of the Skanska St Ives Stage 1 Existing Conditions Report, showed that during the PM peak, the majority of flows (77%) would be strategic journeys from the south (A1307). Just under half (45%) of the flows are likely to use the A1123 eastwards and 33% turning west.

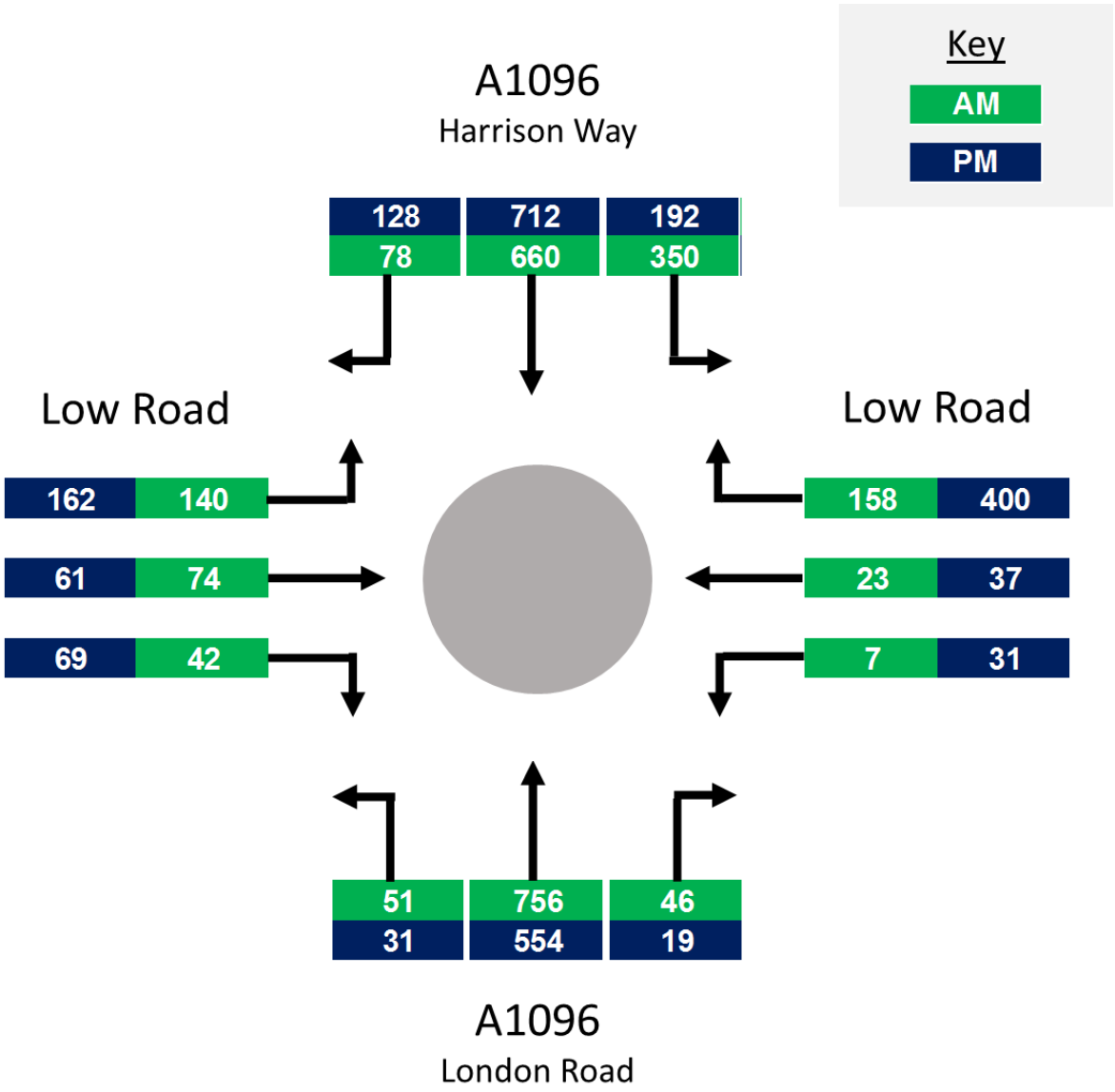
Junction S: A1096 Harrison Way / Guided Busway Crossroads

Turning count data was not collected for this signalised junction, given that all vehicles – except buses – are obliged to continue along the A1096 Harrison Way.

Junction T: A1096 Harrison Way / Low Road Roundabout

Figure 3-14 shows turning count data for the A1096 Harrison Way / Low Road Roundabout during the AM (0745-0845) and PM (1645-1745) peak hours.

Figure 3-14 - Turning Count Diagram of the Low Road Roundabout[49]



[49] Skanska and Capita (2019) *St. Ives Area Transport Study: Stage 1: Existing Conditions and Data Collection Report.* Figure 5.17

For both the AM and PM peak, Figure 3-14 shows that the straight through movements on A1096 (London Road and Harrison Way) carry the most traffic, but traffic on Low Road (both east side and west side) turning north onto A1096 onto Harrison Way is particularly busy during the PM peak hour.

Select link analysis, undertaken as part of the Skanska St Ives Stage 1 Existing Conditions Report, showed that during the AM peak, around half the traffic came from the north via Somersham Road and the B1040 north of St Ives. Relatively low amounts of traffic (20%) were travelling towards the A1307 (eastbound).

During the PM peak, there are no strong trends with regard to strategic trips. Relatively few trips come from St Ives, with half of trips coming from either the A1123 (20%) or the Marley Road area (around 33%).

Junction U: A1307 Junction 26 Galley Hill

The A1307 junction 26 at Galley Hill experiences similar AM and PM peak traffic volumes with a tidal flow to the A1307 in the morning and from the A1307 in the evening.

During the AM peak, 48%[50] of traffic heads westbound whilst 21% heads eastbound. 34% of these trips come from the A1123 (via Earith), 20% come from St Ives north area and 15% from the Warboys area.

During the PM peak, 49% of traffic comes from A1307 north and 38% from Hilton. The majority of this traffic is comprised of long distance trips, with 41% of trips travelling north to St Ives on the B1040, whilst 35% travel eastwards on the A1123 via Earith.

Automatic Traffic Counts (ATC)

ATC data was also collected for Skanska St Ives Stage 1 Existing Conditions Report, at four locations situated on the three strategic routes in St Ives, shown in Figure 3-6. Strategic route 1 consisted of two ATCs along the A1123, one just before the junction with the B1090 and the other in St Ives between Hill Rise and Ramsey Road. Strategic route 2 consisted of a single ATC on the B1040 between Nuffield Road and Harding Way. Strategic route 3 consisted of a single ATC on the A1096 just north of Marsh Lane. A summary of the data is shown in Table 3-5.

Table 3-5 - Weekday Average Total Traffic in St Ives (ATC)[51]

ATC Location	Eastbound	Westbound	Combined
East of A1123/B1090	11,699	10,700	22,399
A1123 between Hill Rise and Ramsey Road	9,256	8,372	17,628
B1090 between Nuffield Road and Harding Way	7,734	7,661	15,395
A1096 north of Marsh Lane	9,043	9,004	18,047

The ATC data identified that the busiest areas of the road network in St Ives, prior to the opening of Huntingdon Southern Bypass, were the A1123, East of the B1090 junction, the A1123 between the B1090 at Hill Rise and Ramsey Road, and the A1096 between the Marsh Lane and Low Road.

It was found strategic route 1 and strategic route 3 are used by more than 2,000 additional vehicles than Strategic route 2. This suggests that east-west flows are more dominant along the A1123 and that north-south traffic along the A1096 tends not to continue north beyond the A1123.

[50] Skanska (May 2019) Stage 1: Existing Conditions and Data Collection Report, St Ives Area Transport Study, page 83 – Data for the AM and PM peak at Junction U.

[51] Skanska (May 2019) Stage 1: Existing Conditions and Data Collection Report, St Ives Area Transport Study, page 66 Figure 5.5

Automatic Number Plate Recognition (ANPR) Counts

An ANPR survey was undertaken to inform the St Ives Skanska Stage 1 Existing Conditions Report, specifically to ascertain the level of traffic routing through St Ives to access the A1307 rather than along the A1123 and A1096 Harrison Way.

The ANPR analysis showed a potential rat running route via *"Ramsey Road, through St Ives town centre to access the A1096 Harrison Way and avoid the congestion junctions along the A1123 St. Audrey Road, especially at the junction with the A1096 Harrison Way (junction M)"*[52]. Analysis showed that, during the AM peak, approximately 22% of traffic turning into Ramsey Road from the A1123 is travelling to the A1096, possibly to access the A11307 further east. The reverse pattern is shown in the PM peak. The presence of rat running through the town centre demonstrates that there is congestion elsewhere on the network which is deterring drivers from using the most direct route through St Ives, via the A1123 and A1096. The rat running in turn leads to congestion for both cars and public transport vehicles in the town centre, specifically around East Street, West Street, The Quadrant and Meadow Lane, and consequently increased journey times and reliability issues for public transport services[53].

3.2.1. Journey Times

As outlined in the Skanska A141 Stage 1 Report[54] journey time data analysis showed that journey times on the A1123 Houghton Road to the west of the St Ives road network and the A1096 were more than double the journey times experienced in free-flow conditions. On the B1040 during the AM peak hour, journey times can be up to 50% higher than in free-flow conditions. During the PM peak hour, journey times on this stretch of road are between 10% and 25% longer than they would be on an uncongested network. Congestion

The Skanska St Ives Stage 1 Existing Conditions Report presented congestion heatmaps of the St Ives road network from the St Ives and Huntingdon Paramics Model. Figure 3-15 and Figure 3-16 show heatmaps at 08:30 (during the AM peak) and 17:15 (during the PM peak), respectively. These show the highway conditions on typical weekday prior to the opening of the Huntingdon Southern Bypass[55].

[52] Skanska (May 2019) Stage 1: Existing Conditions and Data Collection Report, St Ives Area Transport Study, page 76.
[53] Skanska (May 2019) Stage 1: Existing Conditions and Data Collection Report, St Ives Area Transport Study, page 45/46.
[54] Skanska (2020) *A141 and St Ives Transport Study Option Assessment Report, Section 2.3.*
[55] Skanska (May 2019) *Stage 1: Existing Conditions and Data Collection Report, St Ives Area Transport Study*, Section 5.6.2 Congestion on the St Ives Road Network.

Figure 3-15 - Congestion on the St Ives Road Network at 0830 on a Typical Weekday[56]

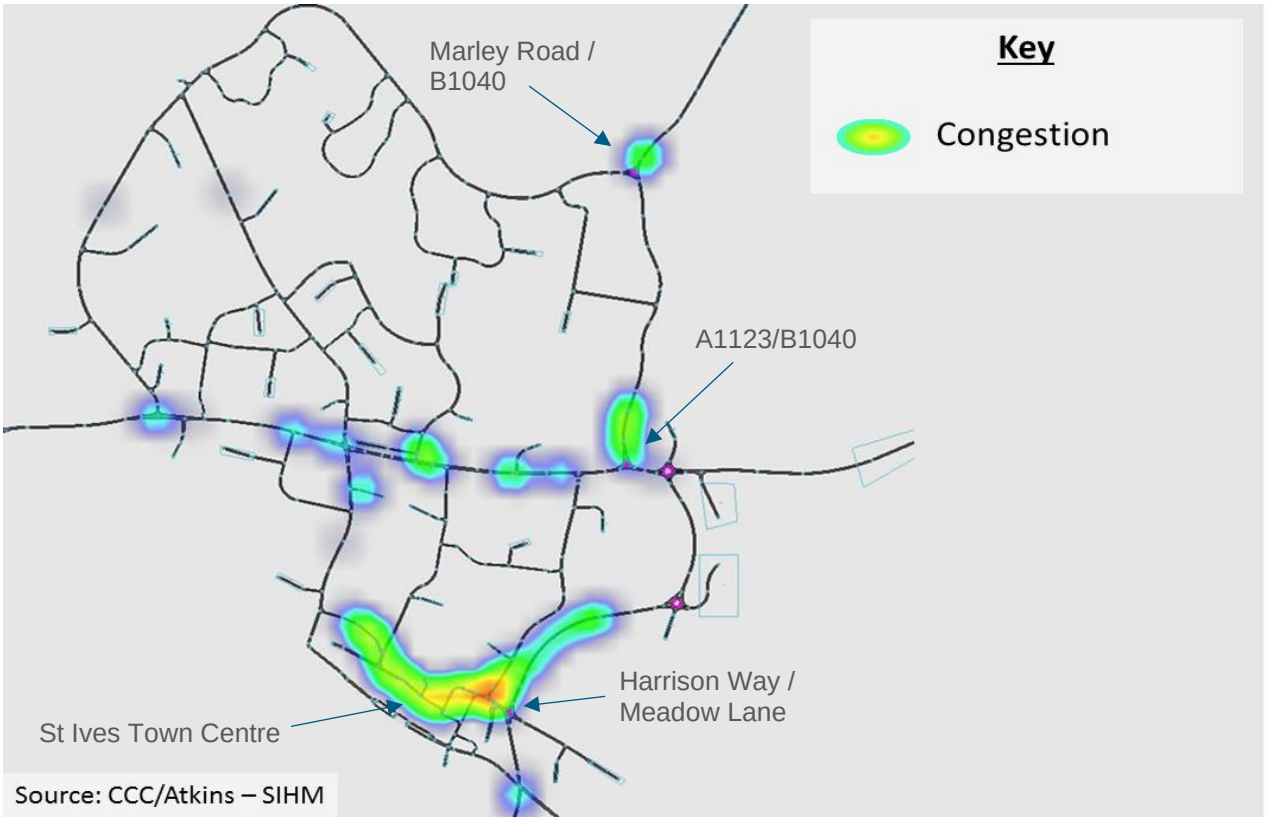
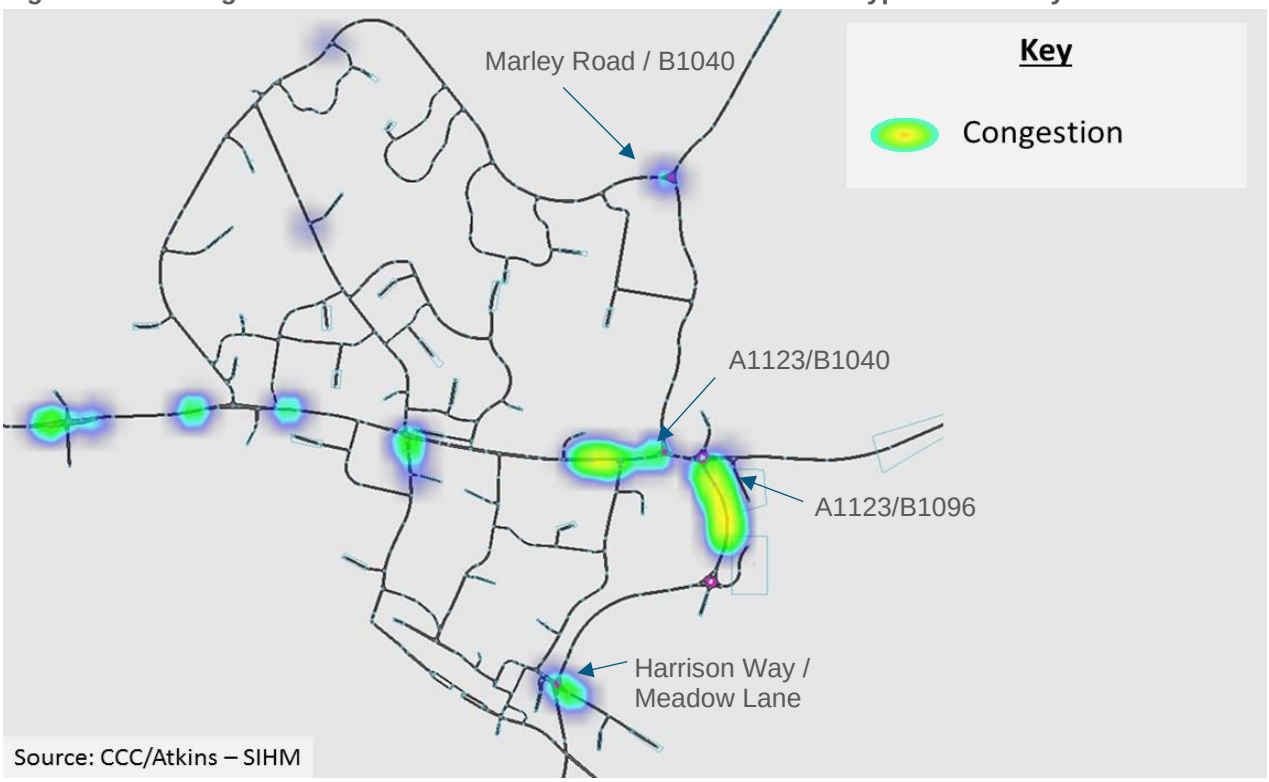


Figure 3-16 - Congestion on the St Ives Road Network at 1715 on a Typical Weekday[57]



[56] Skanska (May 2019) *Stage 1: Existing Conditions and Data Collection Report, St Ives Area Transport Study*, Section 5.6.2 page 69
[57] Skanska (May 2019) Stage 1: Existing Conditions and Data Collection Report, St Ives Area Transport Study, Section 5.6.2 page 70

Figure 3-15 and Figure 3-16 show the following congestion hotspots:

- Severe congestion in St Ives town centre during the AM peak hour in the vicinity of The Quadrant, East Street, Globe Place and North Road;
- Congestion at the A1096 Harrison Way / Meadow Lane junction during the AM and PM peak hours;
- Severe congestion on the northbound approach to the A1123 / A1096 Harrison Way roundabout in the PM peak hour;
- Severe congestion on the eastbound approach to the A1123 / B1040 Somersham Road roundabout in the PM peak hour; and
- Congestion at the B1040 Somersham Road / Marley Road roundabout in the PM peak hour and severe congestion during the AM peak hour.

The hotspot mapping echoes the findings of the ANPR analysis and supports the conclusion that rat running occurs through St Ives town centre during the peak hours to avoid congestion on main routes, particularly on the approach to the A1123 / B1040 Somersham Road and A1123 / A1096 Harrison Way roundabout.

3.2.2. Road Safety

Collision data has been provided by Cambridgeshire County Council for the purposes of this study. Data provided covers the period from January 2015 to February 2021. Figure 3-17 shows the location of collisions within St Ives by severity.

Figure 3-17 - Collisions recorded in and around St Ives (January 2015 - February 2021)

A total of 276 collisions occurred within the St Ives area between 2015 and February 2021, of which 218 were classified as 'slight', 50 were classified as 'serious' and 8 were fatal. A large number of these collisions occurred on the A1307. Of the fatal collisions, one occurred within the built up area of St Ives, at the junction of Meadow Lane and Needingworth Road and it involved two vehicles. The collision occurred in wet weather conditions when road works were in place however no direct causation factors are identifiable from the dataset. Two fatal collisions occurred on the A1123 between the B1090 (Sawtry Way) junction and Hartford Roundabout, and a further two fatal collisions occurred at the B1040/Wheatsheaf Road crossroads to the north of St Ives, one of which involved 20 casualties. No particular causation factors were provided for these incidents.

Table 3-6 – Collisions recorded on selected roads in St Ives (2015-Febraury 2021) [58]

Road Number	Severity			
	Fatal	Serious	Slight	TOTAL
A1096 Harrison Way / London Road	0	10	39	49
A1123 Houghton Road / St. Audrey Lane	2	9	28	39
Station Road	0	0	6	6
Market Road	0	1	0	1
East Street	0	2	1	3
Meadow Lane	1	0	1	2
TOTAL	3	22	75	100

Table 3-6 shows that the A1096 recorded the most incidents, followed by the A1123. This is likely due to these being the busiest roads within the St Ives highway network.

Figure 3-18 shows the incidents that occurred on the St Ives Road network that involved pedestrians or cyclists.

[58] Skanska (May 2019) Stage 1: Existing Conditions and Data Collection Report, St Ives Area Transport Study, Section 4.8 page 51

Figure 3-18 - Collisions on the St Ives Road network involving pedestrians and cyclists

Figure 3-18 shows that the majority of the incidents involving pedestrians and cyclists in St Ives occurred within the built up area of the town, particularly along and to the south of the A1123 (St Audrey Lane), along the Ramsey Road corridor and within the town centre. No particular causation factors were provided for these incidents.

3.3. Covid-19 Impact

Traffic flows since March 2020 have been significantly reduced nationally as the general public has been urged to work and stay at home due to the Covid-19 pandemic. This will also have been the case around St Ives and the pandemic is likely to continue to affect travel behaviours well into 2021, particularly in the short-term.

Whilst data for St Ives was not available, statistics for nearby Huntingdon[59] show that on average (between February and April 2021), public transport use was down approximately 40% prepared to an early 2020 baseline[60]. Access to workplaces and recreation and retail were both down by over 40% during the same period. Pedestrian footfall in Huntingdon in May 2021 was 25% lower than during the same month in 2019, but 129% higher than during May 2020 at the height of the Pandemic[61]. ANPR motor vehicle counts in Huntingdonshire showed that in the seven days leading up to the 16th May 2021, traffic counts were 8% lower than in October 2020[62].

[59] 2021-04-10_GB_Cambridgeshire_Mobility_Report_en-GB.pdf (gstatic.com) (accessed April 2021)
[60] 3 January – 6 February 2020
[61] Footfall Report (huntingdonfirst.co.uk) (accessed June 2021)
[62] May 2021 Cambridgeshire County Council Restart Dashboard

3.4. Transport Network Summary and Key Conclusions

This chapter has summarised the existing transport network including the current infrastructure provision and performance of key junctions. The A1123 forms the main east-west link through St Ives and connects to the A141 at Hartford Roundabout. To the east, the A1123 connects to Earith and local quarries. The A1096 (Harrison Way/London Road) forms the main north-south route, from the A1307 (formerly A14 at junction 26) through St Ives and is aligned on the eastern side of the town. It connects with the A1123, which provides access to the B1040 and the north of Huntingdonshire.

Overall, the existing highway network provides good connectivity, however the A1123 and A1096 in particular are busy routes with peak time congestion, which evidence suggests leads to rat running through St Ives town centre and an increase in congestion on town centre routes. The A1096 has a greater HGV proportion than other routes in St Ives, particularly around the Meadow Lane roundabout as a result of the industrial uses to the east of St Ives.

The busiest junction in St Ives is the A1123/B1040 junction, closely followed by the adjacent A1123/A1096 junction. These two roundabouts, located in close proximity, are where all traffic from the north, east, south and west converge, leading to congestion during peak hours.

Public transport in St Ives is centred around the bus network, as the closest rail station in Huntingdon is approximately 9km to the west. The Cambridgeshire Guided Busway serves St Ives Park and Ride to the east of the town and provides fast and frequent high-quality public transport journeys to Cambridge. The Busway services also serve St Ives before continuing to Huntingdon, Alconbury, Peterborough, Chatteris and Somersham, depending on the service pattern. Local bus services also connect the residential areas to the north of the town with the town centre. Rat running through the town centre leads to reliability constraints for bus and guided bus services which could make them less attractive than private car alternatives.

Walking and cycling connectivity is mixed within St Ives. National cycle network route 51 provides strategic connections, however local provision is fragmented and varies in nature and quality. Wayfinding for pedestrians and cyclists varies and there are considered to be gaps in provision. Local policy encourages active travel and considers it an opportunity to promote healthy lifestyles[63]. CCC are supporting this policy by implementing a Huntingdonshire LCWIP which would result in upgrades to existing walking and cycling routes in St Ives and across Huntingdonshire.

[63] Huntingdonshire District Council (2019) Huntingdonshire's Local Plan to 2036. Page 21.

4. Physical and Environmental Constraints

This chapter identifies the existing environmental, physical and planning constraints pertinent to the study.

4.1. Environmental Context

Initial consideration of environmental constraints was provided in the Skanska St Ives Stage 1 Existing Conditions Report[64] and the Skanska A141 Stage 1 Report[65]. This section summarises the findings that are relevant to this study, plus subsequent air quality information.

Air Quality

Huntingdonshire District Council produced an Air Quality Annual Status Report[66] for the year 2019 in June 2020. The report states that Nitrogen Dioxide (NO_2) continues to be the only pollutant that currently exceeds the objective level within the district and as such, monitoring of NO_2 levels are ongoing.

The report suggests that this is likely to be as a result of vehicle emissions. However, the A14 was identified as the major contributor to NO_2 production with the A1 also contributing, although to a lesser degree. The A14 Development Consent Order Environmental Statements suggested that air quality changes in St Ives, as a result of the scheme, were likely to be negligible in 2020 and 2035[67]. Traffic in market towns are also recognised as causing some localised elevated levels.

There are no Air Quality Management Areas in St Ives.

Ecology

The Skanska St Ives Stage 1 Existing Conditions Report provided a summary of Ecological searches undertaken during Stage 1 of the study. The areas identified for further consideration are summarised as follows:

- River Great Ouse, including surrounding floodplain and grassland habits;
- Pockets of woodland and tree lined roads throughout St Ives; and
- Waterbodies including gravel pits, lakes, ponds, ditches and streams.

Waterbodies and the River Great Ouse are likely to be significant ecological constraints to consider when identifying transport solutions for this study.

As part of the Skanska St Ives Stage 1 Existing Conditions Report, a data search request to Cambridgeshire and Peterborough Environmental Records Centre (CPERC) was made which provided information on designated sites and protected species within a 5km radius of the study area. The search identified a number of designations, including one International Designated Site of Conservation Importance at Portholme Meadows Special Area of Conservation, which lies 2km south of the study area and is designated as a grassland habitat.

There are three other statutory designated sites of nature conservation importance (Site of Special Scientific Interest (SSSIs)) within 2km of the study area at:

- Houghton Meadows;
- Godmanchester Eastside Common; and
- Hemingford Grey Meadow.

The designations identified will be considered during the option assessment process for this study, following which more detailed assessments will be undertaken if necessary. The Huntingdonshire Local Plan identifies enhancements to biodiversity as an opportunity which can be achieved through careful planning[68].

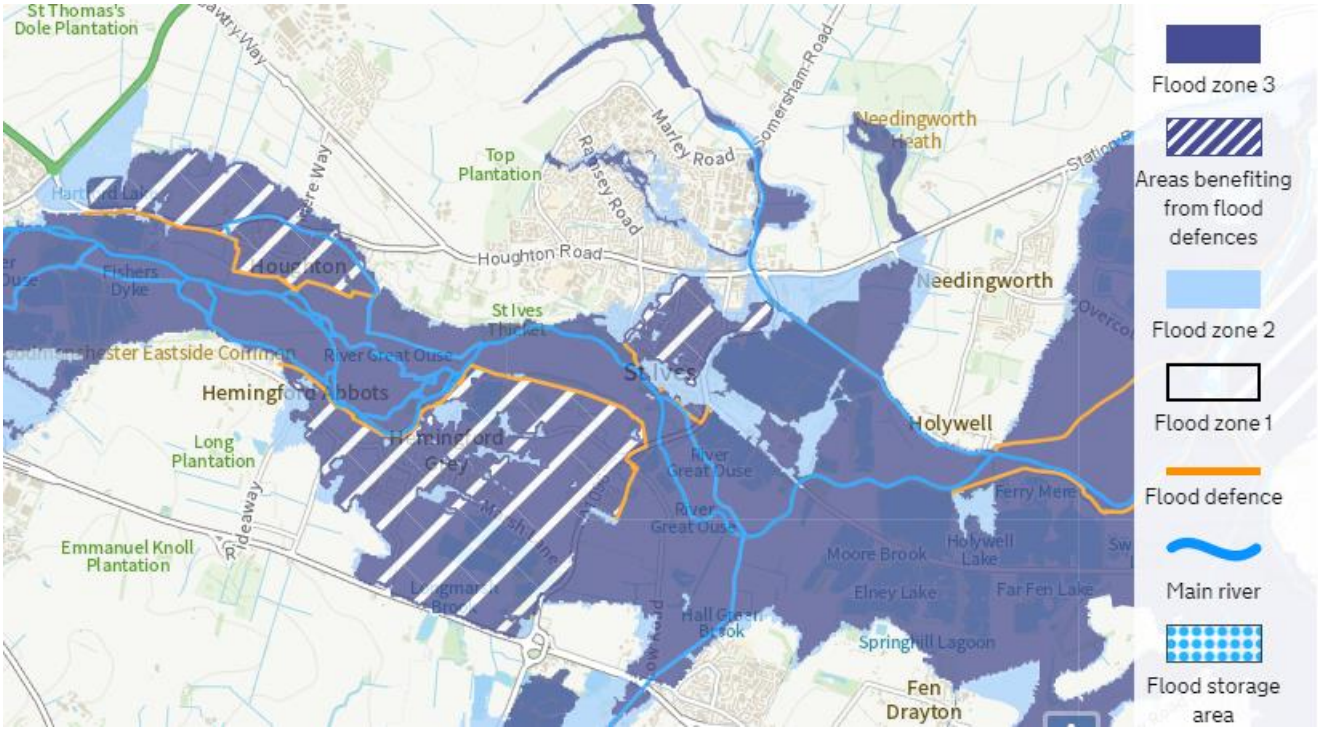
[64] Skanska (May 2019) *Stage 1: Existing Conditions and Data Collection Report, St Ives Area Transport Study*, Section 6.5, 6.6. and 6.7
[65] Skanska (2020) *A141 and St Ives Transport Study Option Assessment Report.* Section 6.6.
[66] Air Quality Annual Status Report 2019 (huntingdonshire.gov.uk)
[67] Microsoft Word - A14-JAC-ZZ-XX-RP-V-00001 (planninginspectorate.gov.uk) (Section 8.5.34)
[68] Huntingdonshire District Council (2019) *Huntingdonshire's Local Plan to 2036*. Page 21

Water Environment

The Huntingdonshire Local Plan has identified flooding as a key challenge for the local area going forward[69] and highlights settlements along the River Great Ouse are most likely at risk of flooding. This is supported by a high level assessment of the water environment, undertaken for the Skanska A141 Stage 1 Report. This found that river flooding is the dominant flood risk in the area with areas of flood zone within, and south, of St Ives. There is a '*significant area of functional flood plain (Flood Zone 3b) between Huntingdon and St Ives which can be inundated fairly regularly during winter or high flows[70]'.*

Figure 4-1 is an extract from the Government's 'Flood Map for Planning' Tool, which shows the areas of flood zone in the St Ives area.

Figure 4-1 - St Ives Flood Map[71]



Cultural Heritage

Figure 4-2 shows the Listed Buildings and Scheduled Monuments in St Ives town centre.[72] There are a large number of Listed Buildings within St Ives town centre and along Old London Road. Outside St Ives, there are concentrations of Listed Buildings in the Hemingfords, Houghton and Wyton. There is one Scheduled Monument in Hemingford Grey.

The Huntingdonshire Local Plan states that a key challenge is to conserve the historic environment. As such, schemes should seek to avoid identified areas where possible[73].

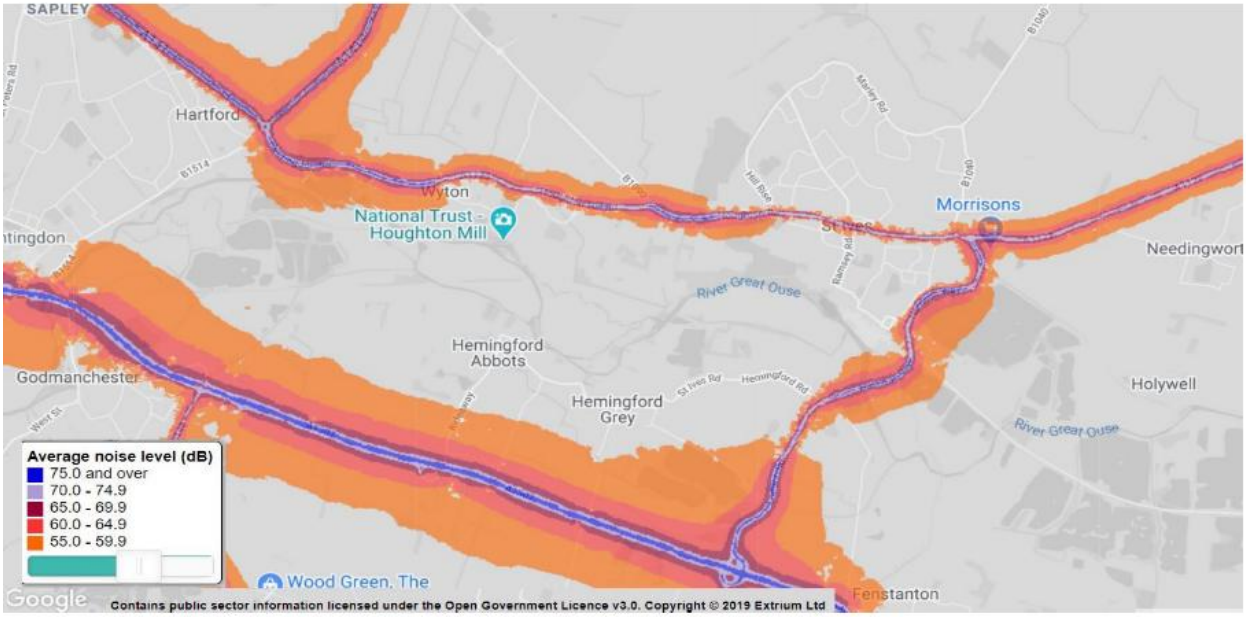
[69] Huntingdonshire District Council (2019) *Huntingdonshire's Local Plan to 2036.* Page 21.
[70] Skanska (2020) *A141 and St Ives Transport Study Option Assessment Report*. Section 6.6.12 – Page 305.
[71] Flood map for planning - GOV.UK (flood-map-for-planning.service.gov.uk)
[72] Search the List - Map Search | Historic England
[73] Huntingdonshire District Council (2019) *Huntingdonshire's Local Plan to 2036.* Page 21.

Figure 4-2 - Cultural Heritage Sites[74]

Noise

Figure 4-3 shows the noise levels arising from road traffic as published in the most recent strategic noise maps of 2017.[75]

Figure 4-3 - Noise Important Areas and Road Traffic Noise Levels Arising from Major Roads[76]



[74] Search the List - Map Search | Historic England
[75] Skanska (May 2019) Stage 1: Existing Conditions and Data Collection Report, St Ives Area Transport Study, Section 4.10.
[76] Extrium > England Noise and Air Quality Viewer

Figure 4-3 shows that the A1123 and the A1096 are the major noise corridors in St Ives. The A1307 is also a major noise corridor, however this is likely to have changed since the opening of the new Huntingdon Southern Bypass, which has reduced traffic levels from those used to derive the 2017 noise assessment presented.

Any future development and/or scheme will need to consider its impact on the noise levels along the A1123 corridor, particularly close to Houghton, and along the A1096 to the east of the town.

4.2. Physical Constraints

Physical constraints include existing features that a future scheme would have to avoid or mitigate the impact upon. These features can be either man-made (also known as human physical constraints), such as existing roads and railways, or natural barriers such as waterways and topography.

4.2.1. Human Physical Constraints

Housing and Development

To the north of the A1123, there are mostly residential properties, with an Industrial Estate to the west of Somersham Road (B1040). Further business and industrial land uses are located to the east of Harrison Way, off Parsons Green, and to the north of the A1123 at Compass Point.

To the south of the A1123 is further residential development and St Ives town centre. To the south of the town centre is the River Great Ouse. The area north and east of St Ives is mostly agricultural.

Transport Network

A key consideration for this study will be how a new transport scheme interacts with the existing infrastructure. The A1123, B1090 and B1040 all provide access to the built-up area from surrounding towns and villages. Marley Road also acts as a ring-road of the northern residential areas of St Ives, between the A1123 and the B1040.

Figure 1-1 shows there are a number of existing Public Right of Way routes in and around St Ives, including across the River Great Ouse and NCN routes run through St Ives town centre.

Any future transport scheme would need to consider how it were to interact with these routes to ensure that access is at least maintained and preferably enhanced.

4.2.2. Natural Physical Constraints

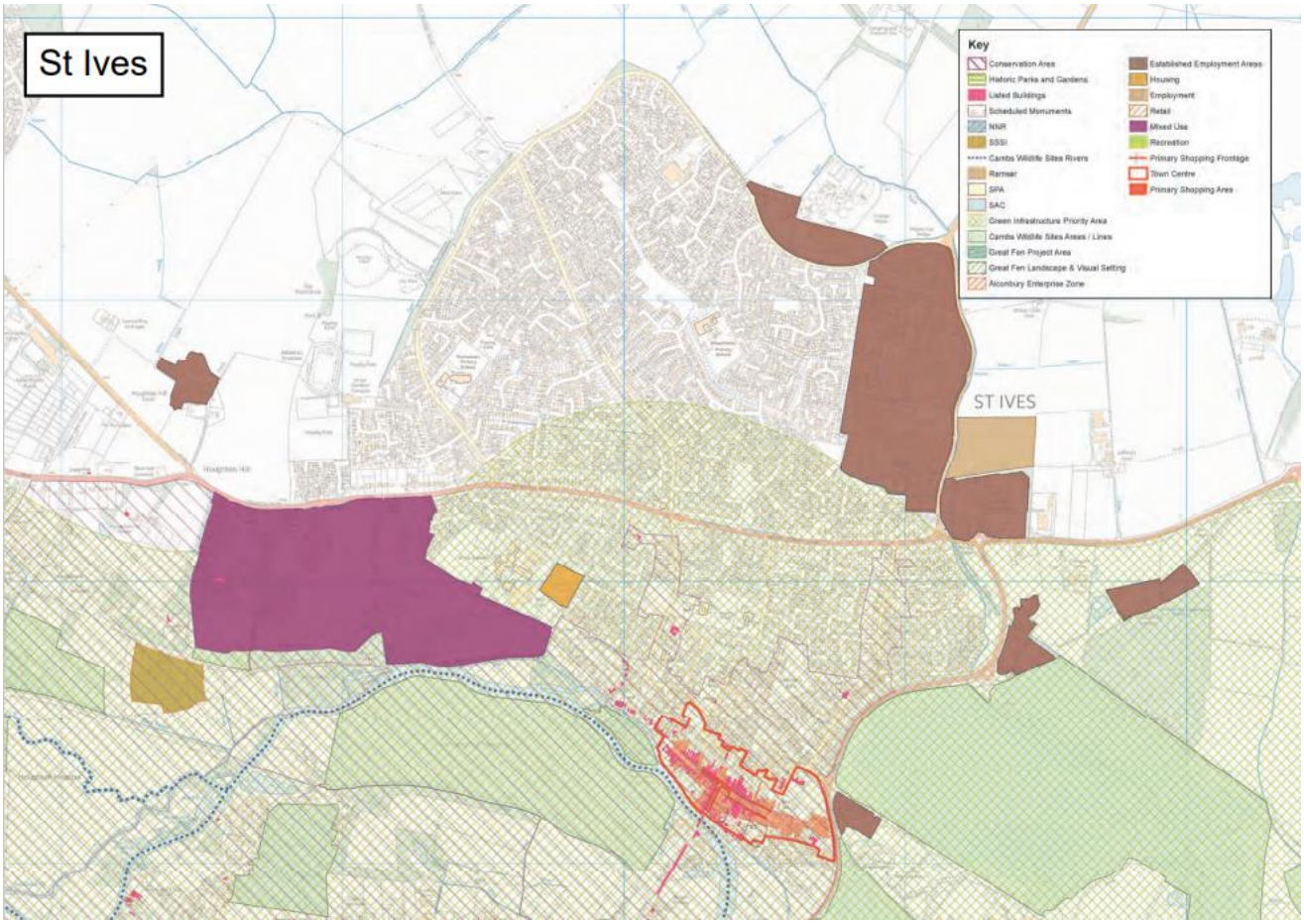
The main natural constraint is the River Great Ouse that flows west to east just south of St Ives town centre. As shown in Figure 4-1, the majority of the area immediately south of St Ives sits within Flood Zone 3. There are also several lakes to the east of St Ives. Fields surrounding the town are typically separated by drains rather than hedgerows.

4.3. Planning Constraints

Figure 4-4 is an extract from the Huntingdonshire Local Plan Policies Map which shows a large area to the west of St Ives, near Houghton, is allocated for mixed use development. The Huntingdon Local Plan suggests approximately 400 homes are proposed for this area[77]. The area to the north east of the town is established employment and further planned employment at Giffords Farm is allocated within the Local Plan. Further detail on the planned development and growth within St Ives is included in Section 5.1.

[77] Huntingdonshire's Local Plan to 2036

Figure 4-4 – St Ives Local Plan Policies Map (extract)



4.4. Constraints Summary and Key Conclusions

Local and regional policy, including the Huntingdonshire Local Plan and CPCA Local Transport Plan focus on the environmental impact of development and highlight a need to '*deliver a transport network that protects and enhances our natural, historic and built environments'*[78].

There are several environmental constraints within and around St Ives which need to be considered within future assessments, most of which are situated around the town centre and along the River Great Ouse. There are also a number of SSSIs south and west of St Ives.

A large area to the west of St Ives is allocated in Huntingdonshire's Local Plan for housing. An extension is also allocated to the existing employment area to the north east of the town. Any transport scheme in this area would need to be cognisant of development plans and work with developers to find the best solution.

[78] Cambridgeshire and Peterborough Combined Authority (2020) *The Cambridgeshire & Peterborough Local Transport Plan.* Page 11.

5. The Future

5.1. Local Plan Growth

As identified in Table 2-2, Huntingdonshire Local Plan identifies the need for an additional 20,100 new houses to meet population forecasts between 2011 and 2036, coupled with 14,400 additional jobs. There are several allocations in St Ives and the surrounding area. Those that have been identified as of most relevance to this study are as follows[79]:

- St Ives West (SI 1) – 400 homes;
- Giffords Farm (SI 3) – floorspace for up to 600 jobs;
- Strategic Expansion Location at Alconbury Weald consisting of:
  - Former Alconbury Airfield and Grange Farm (SEL 1.1) – 5,000 homes and at least 290,000m2 of employment floorspace;
- RAF Alconbury (SEL 1.2) – 1,680 homes.

Huntingdonshire Local Plan allocated development sites relevant to this study are shown in Figure 5-1.

Figure 5-1 - Huntingdonshire Local Plan Allocated Development Sites

[79] This is not an exhaustive list of Huntingdonshire Local Plan allocated sites but includes those that are likely to have the most significant impact on the A141 corridor.

At this stage, connections from these planned developments to the local transport network are not defined. However, the following assumptions were applied for the purposes of CSRM2 modelling for the Skanska A141 Stage 1 Report[80]:

- St Ives West – junctions on the A1123/ Garner Drive and A1123/ High Leys;
- Giffords Farm - a new roundabout on the existing A1123 east of the Harrison Way/A1123 roundabout;
- RAF Alconbury – connections via A1307 and Ermine Street; and
- Alconbury Airfield and Grange Farm – a new roundabout on the existing A141.

5.2. Impact of Local Plan Growth on the Road Network Within St Ives

Section 2.5 of the Skanska A141 Stage 1 Report summarises the future forecast year (2036) road network conditions, including the Local Plan Growth and the completed A14 Cambridge to Huntingdon Improvements.[81]

The 2036 projections are based on CSRM2 outputs, which predict traffic volume increases on Harrison Way of up to 56% travelling southbound in the PM peak hour. Traffic flows are also predicted to increase on the B1040 Somersham Road and the A1123 St Audrey Lane, with as much as a 74% increase on the A1123 St Audrey Lane eastbound in the AM peak hour. This would result in increased demand at key junctions within St Ives.

Table 5-1 presents the predicted 2036 junction performance, assessed using CSRM2, with Local Plan growth, compared to the 2015 base model junction performance.

Table 5-1 - RFC at Junctions in St Ives Study Area (2036)[82]

		AM Peak		PM Peak	
Map Ref.	Junction	2036	Change from Base 2015	2036	Change from Base 2015
J	A1123 Houghton Road / B1090 Sawtry Way	55%	+12%	62%	+2%
K	A1123 Houghton Road / Hill Rise	63%	+12%	65%	-1%
L	A1123 Houghton Road / Ramsey Road	34%	0	38%	-7%
M	A1123/ B1040 Somersham Road Roundabout	59%	+17%	68%	+13%
M	A1123 Needingworth Road / A1096 Harrison Way	75%	+21%	85%	+21%
R	A1096 Harrison Way Meadow Lane	66%	+12%	71%	+18%
S	A1096 Harrison Way / Guided Busway	56%	+7%	62%	+13%
T	A1096 Harrison Way / Low Road	67%	+9%	78%	+22%
X	B1040 Somersham Road / Marley Road	50%	+11%	61%	+12%

The performance of eight out of the nine junctions is predicted to worsen between 2015 and 2036 in the AM peak hour, although none are predicted to operate at, or over, capacity. The A1123/A1096 and A1123/B1040 roundabouts are the worst affected, with increases of 21 and 17 percentage points respectively. Chapter 3 has shown that these are the busiest junctions in the St Ives transport network in the baseline situation and this is likely to continue in the future as a result of planned growth, particularly as the Gifford's Farm development is located close to these junctions. This in turn has the potential to increase rat running through the town centre, as car drivers aim to avoid the congestion that occurs during peak hours.

[80] Skanska (2020) *A141 and St Ives Transport Study Option Assessment Report.* – Section 5.3.17 onwards
[81] Skanska (2020) *A141 and St Ives Transport Study Option Assessment Report.* – Section 2.5
[82] Skanska (2020) *A141 and St Ives Transport Study Option Assessment Report. Table 2.5* – Page 39

In the PM peak hour, eight of the nine junctions are predicted to perform worse in 2036 and the average increase in RFC is greater than the AM. The A1096/Low Road junction and the A1123/A1096 junction are most affected, with increases of 22 percentage points and 21 percentage points respectively. This is likely to be because of the increase in traffic travelling from the A1307 to or through St Ives as a result of growth in the area. Similarly to the AM peak, the Ramsey Road and Hill Rise junctions along the A1123 Houghton Road are predicted to perform slightly better in 2036 than 2015. This could be as a result of the opening of Huntingdon Southern Bypass, reducing congestion on the A1307 and therefore leading to a reducing in rat running through Huntingdon and St Ives that was previously avoiding congestion.

Figure 5-2 presents the journey time routes for which data is provided in the Skanska A141 Stage 1 Report. Predicted journey time changes from 2015 to 2036 on routes through the study area are shown in Table 5-2.

Figure 5-2 - Skanska A141Stage 1 Report Journey Time Routes

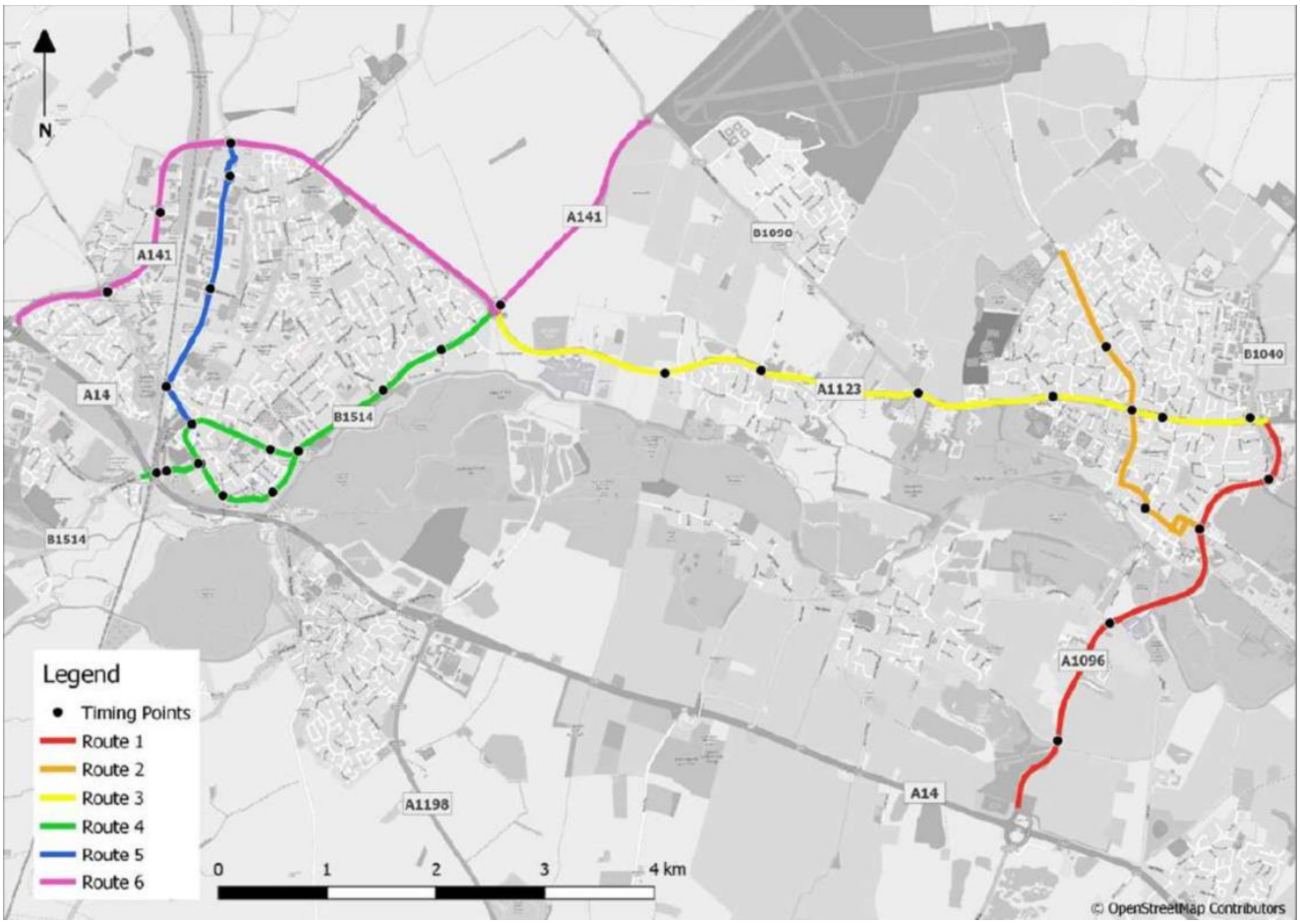


Table 5-2 - St Ives Study Area Journey Time Changes Between 2015 and 2036 (mm:ss)[83]

Route	Direction	AM Peak (08:00-09:00)	PM Peak (17:00-18:00)
1 – A1096	NB	1.9% (+00:38)	38.1% (+09:08)
	SB	13.3% (+04:02)	7.3% (+01:45)
2 – Ramsey Road	NB	1.4% (+00:20)	-0.3% (-00:04)
	SB	0.4% (+00:17)	0.4% (+00:06)
3 – A1123	EB	-8.8% (-02:18)	-0.3% (-00:05)
	WB	7.5% (+02:18)	5.5% (+01:19)

[83] Skanska (2020) *A141 and St Ives Transport Study Option Assessment Report. Table 2.6*– Page 41

Table 5-2 shows that between 2015 and 2036 journey times in St Ives are predicted to increase along most routes. The most significant increase is forecast to be along the A1096, with expected increases during the AM peak of over 4 minutes in a southbound direction and during the PM peak of over 9 minutes in a northbound direction. The forecasts for the A1123 eastbound predict an improvement in journey time between 2015 and 2036 and reflect the RFC results in Table 5-1, showing an improvement in junction capacity as a result of the opening of Huntingdon Southern Bypass, reducing congestion on the A1307 and therefore leading to a reducing in rat running.

The results presented in this section show the importance of ensuring that transport infrastructure is provided in advance of planned growth, to ensure that growth can continue sustainably and to avoid any adverse impacts on the local transport network. Failure to this would exacerbate the adverse impacts on the transport network in terms of journey increased and junction capacity constraints. This is therefore something that will be considered when identifying options are part of the next phase of the study.

5.3. Higher Growth Aspirations

The devolution settlement between Central Government and the CPCA is based on the commitment for the CPCA to double the size of the economy over the next 25 years. The CPIER, published in September 2018, recognised that to achieve this, the area would need to go beyond where it has before and above the levels of growth currently envisaged in the Local Plans.

The CPIER recommended that housing requirements across the Combined Authority should be reviewed "*based on the potential for higher growth in employment than currently forecast by the EEFM*[84]"[85]. The report stresses the importance of assessing the impact of the Cambridge – Milton Keynes – Oxford Arc and using this to set new housing targets for the region.

Based on this, the CPCA has an ambition to deliver higher growth than is currently set out in the Huntingdonshire Local Plan. Two scenarios, High Growth and High Growth Plus are currently being considered:

- High Growth:
  - 4,500 dwellings at Wyton Airfield (north west of St Ives); and
  - 2,200 dwellings at Giffords Farm (to the east of St Ives).
- High Growth Plus:
  - 4,500 dwellings at Wyton Airfield (north east of Huntingdon);
  - 2,200 dwellings at Giffords Farm (to the east of St Ives); and
  - An additional 4,500 dwellings to the north of Huntingdon.

At this stage, connections from these potential sites are not defined.

5.4. Other Planned/New Developments

5.4.1. Live Planning Applications

There are currently a number of live planning applications[86] in progress in the area of St Ives, Houghton and Wyton as follows:

- Broad Leas St Ives (20/02033/FUL) – 10 no. 1 and 2 bed apartments with associated landscape, parking and access arrangements – status: in progress;
- Columbus House Compass Point Business Park St Ives (20/01904/FUL) – Erection of 2 block comprising 8 units for B1 (business)/ B2 (general industrial)/ B8(storage or distribution) employment use together with car parking and service areas – status: in progress;
- Former Car Showroom London Road St Ives (18/02726/FUL) – Phased residential development of 62 dwellings with access, parking, landscaping and associated works – status: in progress; and
- Land North of 6 Old Houghton Road Hartford (18/02239/OUT) – Outline application for residential development with new access, open space and infrastructure (27 dwellings) – status: in progress.

[84] EEFM – East of England Forecasting Model
[85] CPIER Key recommendation #5 (Page 12)
[86] As of 2nd April 2021

The site layouts within these and subsequent applications will be considered during option development.

5.4.2. Approved Developments

An application (17/02325/FUL) for a housing development with 186 dwellings on the Land at Former Golf Course Houghton Road St Ives was approved on 3rd November 2017. The site is currently under construction, forming part of the St Ives West site allocated in the Huntingdonshire Local Plan.

5.5. Recent and Planned Transport Schemes

5.5.1. A14 Cambridge to Huntingdon Improvement Scheme

Following the completion of the main A14 Cambridge to Huntingdon Improvement Scheme in May 2020[87], construction works on the A1307 are planned to be completed in 2022 and include improvements and new links to and from Huntingdon as follows and shown on the plan in Appendix A:

- Pathfinder Link Road, to tie the Huntingdon Ring Road to the A1307 in the area to the west of the Mill Common underpass;
- Mill Common Link Road to join Edison Bell Way junction to the new Pathfinder Link Road;
- Views Common Link Road to connect Hinchingbrooke Park Road to the A1307, via a roundabout, to the north of the police and fire headquarters; and
- A new public transport hub at Huntingdon Railway Station, removal of the A1307 viaduct and provision of a new access from Mill Common Link Road to the train station car park.

5.6. Summary of the Future Situation

Chapter 5 has set out the future situation in terms of allocated, planned and aspirational growth in St Ives as well as recent and planned changes to the local transport network. A significant development site allocated within the HDC Local Plan to 2036 is located on the outskirts of St Ives. Local plan growth, without significant transport intervention is predicted to lead to worsening highway network performance and an increase in journey times. This shows the importance of ensuring that transport infrastructure is provided in advance of planned growth to ensure that growth can continue sustainably and to avoid any adverse impacts on the local transport network.

Higher growth aspirations have been set out by the CPCA via the CPIER, over and above those identified within the HDC Local Plan.

The A14 Huntingdon to Cambridge Improvement scheme was completed in May 2020 and works on the A1307 around Huntingdon are proposed to be completed in 2022.

[87] About the scheme - Highways England (accessed 19/04/2021)

6. Policy Context

This report has been informed by several local and regional policy documents (as outlined in Chapter 1). Relevant local policies have been referenced throughout this report; therefore, this chapter sets out the remaining policy context for the St Ives Transport Study and picks up on areas of the policy documents not specifically referenced in the chapters above. Although not a policy document in itself, this chapter also sets out the work undertaken by Skanska to inform the Skanska A141 Stage 1 Report.

6.1. National Planning Policy Framework

The National Planning Policy Framework (NPPF)[88] sets out planning policies for England and how they should be applied. At the heart of the framework is a 'presumption in favour of sustainable development'[89] which includes the need for development plans to seek to meet the development needs of their area and to be flexible to rapid change.

Chapter 2 'Achieving Sustainable Development' identified three overarching objectives for the planning system to achieve:

- the economic objective – to build a strong, responsive and competitive economy;
- the social objective – to support strong, vibrant and healthy communities; and
- the environmental objective – to contribute to protecting and enhancing our natural, built and historic environment.

Whilst these are all independent of one another they need to be mutually supportive for development to be sustainable. These three policy objectives are echoed throughout the CPCA and Huntingdonshire Regional and Local planning policy documents, as demonstrated in the sections below, and therefore also need to be at the centre of any future proposals in the St Ives study area.

Chapter 9 'promoting sustainable transport' states that transport proposals should be identified from the earliest possible stage so that opportunities originating from existing or proposed infrastructure are realised and therefore capitalised on. Furthermore, early identification allows the full environmental impact of infrastructure to be identified, assessed and considered in emerging proposals.

6.2. Huntingdonshire Local Plan to 2036 (Adopted May 2019)

The Huntingdonshire Local Plan provides a framework for sustainable development up to 2036 and identifies strategic development sites to help meet housing and employment targets. The development sites relevant to this study have been identified previously in this report.

The Local Plan supporting documents, including the Strategic Transport Study (May 2017) and Infrastructure Delivery Plan (June 2017) identify transport and infrastructure measures to facilitate and enable the growth outlined in the Local Plan.

The Strategic Transport Study[90] consists of three reports as follows:

- Baseline Report (May 2017);
- Development Scenario Comparative Assessment (May 2017); and
- Addendum Development Scenario 6 – prepared by Cambridgeshire County Council (November 2017).

The Baseline Report identified that the most significant highway delays on the road network in Huntingdonshire are on the A1307 eastbound, the A141 around Huntingdon and the A1123 to St Ives.

The Development Scenario Comparative Assessment summarises the modelling and analysis undertaken to assess the highway implications of a variety of development scenarios in Huntingdonshire, to recommend a

[88] Ministry of Housing, Communities and Local Government (2019) National Planning Policy Framework https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf (Accessed 18/11/2020)
[89] Ministry of Housing, Communities and Local Government (2019) National Planning Policy Framework – page 5
[90] undertaken by Mott Macdonald on behalf of Cambridgeshire County Council and Huntingdonshire District Council.

preferred growth scenario for the Local Plan. The growth scenarios tested as part of the Strategic Transport Study are:

- Core Scenario - 13,166 new dwellings as defined in Appendix A of the Development Scenario Comparative Assessment; and
- Development Scenarios 1-4 – 13,166 new dwellings as in the Core Scenario plus varying combinations of additional development including at Wyton Airfield, Alconbury Weald, RAF Alconbury and Ermine Street among others.

A full list of sites within each development scenario can be found in Section 2.2.1 of the Development Scenario Comparative Assessment[91].

Model testing in CSRM2 found that all development scenarios would require the introduction of some mitigation to support the proposed increased development levels (scenarios 1-4). For St Ives, this included localised capacity enhancements in the form of local junction improvements. In addition to localised improvements, other mitigation measures were considered and tested which were considered to have the potential to alleviate specific impacts of the development scenarios:

- Improvements and capacity increases on the A141 corridor north of Huntingdon;
- A third river crossing of the River Great Ouse; and
- The closure of the B1044 river bridge between Huntingdon and Godmanchester.

While none of the three identified mitigation schemes are in the St Ives study area, all would have an impact on connectivity to/from, and congestion in, St Ives. The Local Plan notes that '*approval has been given for further consideration of […] a Huntingdon strategic river crossing'*[92] and to consider capacity improvements to the A141.

Assessment of the development scenarios with several mitigation packages showed that the "*only mitigation packages which restore the network to core scenario levels of performance in both peak hours are those which involve significant infrastructure measures such as a Third River Crossing or complete upgrades to the A141*"[93]. The assessment concluded that none of the development scenarios were deliverable in terms of the level of infrastructure spend required to mitigate their impact.

Therefore, a fifth development scenario was developed, including RAF Alconbury and Ermine Street sites, which consisted of a low level of development but still meets the required housing targets. Assessment of this scenario showed that some mitigation was still required consisting of local junction improvements. Therefore, development scenario 5 was recommended as the preferred growth scenario in transport terms.

An Addendum to the Transport Study was provided by Cambridgeshire County Council in November 2017. This presented development scenario 6 which was based upon development scenario 5 but with an intensification of development at Alconbury Weald, bringing the total number of dwellings at that site to 6,500. It concluded that the increase in dwellings at Alconbury Weald does not lead to the triggering of significant new highway infrastructure, therefore the level of mitigation required was likely to be in line with the level of development proposed[94] in the original report.

6.3. The Cambridgeshire and Peterborough Local Transport Plan

The Local Transport Plan sets out policies and interventions to help enable growth to occur in a sustainable way. The Local Transport Plan objectives are grouped under three themes: Economy, Society and Environment, as shown in Figure 6-1. These objectives include a commitment to reduce emissions to 'net zero' by 2050, to minimise the impact of transport and travel on climate change, and to deliver a network that protects and enhances our natural, historic and built environments. This means ensuring that all transport initiatives and schemes improve, rather than damage, the natural environment based on guidance from DEFRA which includes biodiversity and environmental net gain principles.

Specifically related to the St Ives study, the Local Transport Plan states in and around St Ives '*both highway and public transport projects are planned to mitigate the impact of development and connect the area's key residential and employment centres sustainably*' The specified projects include:

- *'Capacity enhancements to the A1096 around St Ives;*

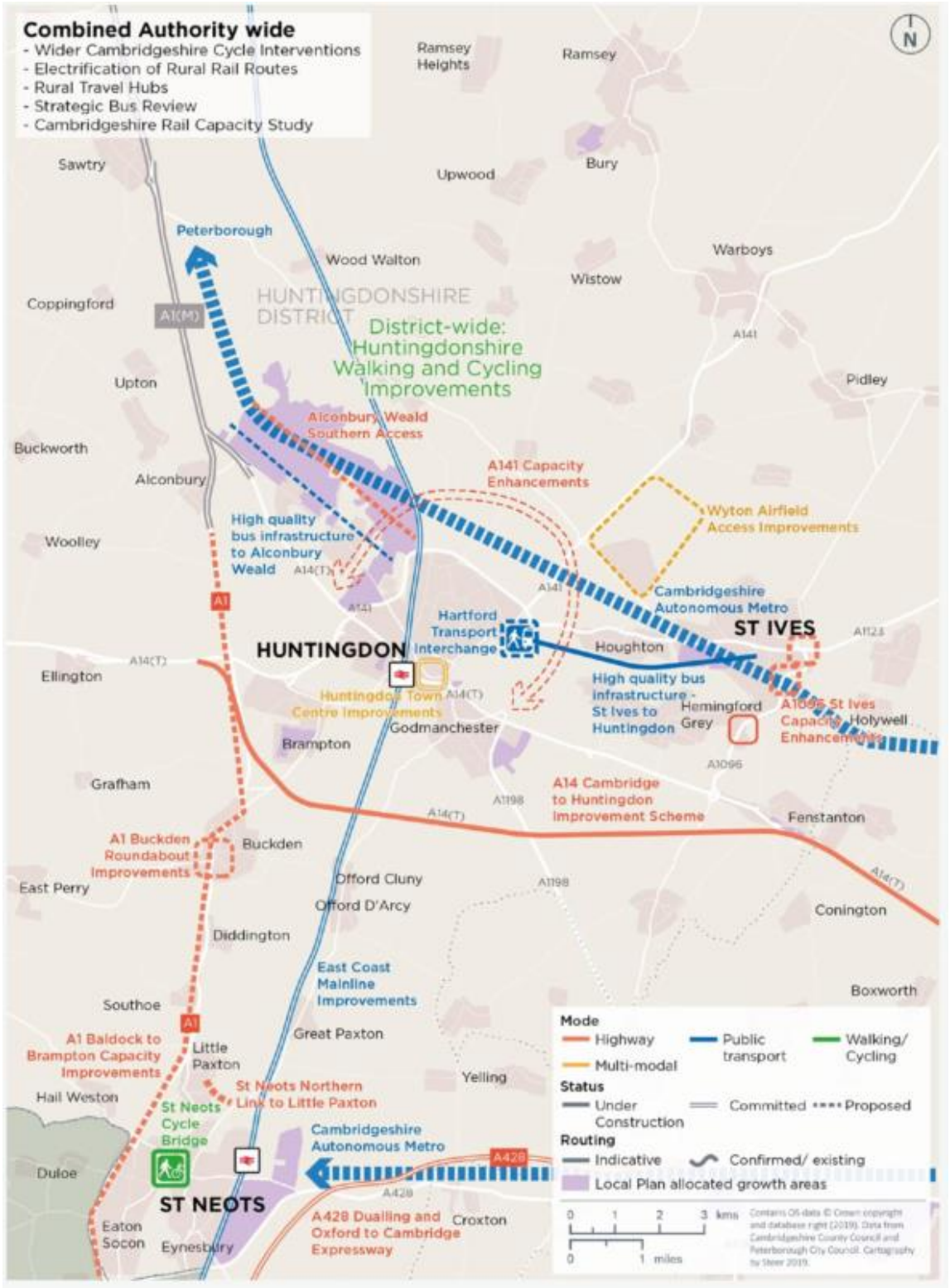
[91] Mott Macdonald (2017) *Development Scenario Comparative Assessment* – Section 2.2.1
[92] Huntingdonshire Local Plan to 2036 (page 42; 4.53)
[93] Mott Macdonald (2017) *Development Scenario Comparative Assessment* – Page 91
[94] Cambridgeshire County Council (2017) *Addendum Development Scenario 6* – page 3

- *A transport interchange at Hartford, which would be the focal point of a high-quality bus infrastructure connecting St Ives (Busway) with Huntingdon, Alconbury Weald and potentially Wyton Airfield in the long-term;*
- *'Capacity studies for the Huntingdon and St Ives areas'* (including this study)' [95]

Figure 6-1- Local Transport Plan Objectives[96]

[95] CPCA (2020) *Adopted Local Transport Plan* (Section 3.116 page 112)
[96] CPCA (2020) *Adopted Local Transport Plan* (Table I; page 11)

Figure 6-2- Local Transport Plan Key Projects in Huntingdonshire[97]



[97] CPCA Adopted Local Transport Plan (Figure 3.3; page 111)

6.4. Cambridgeshire and Peterborough Independent Commission on Climate

The Cambridgeshire and Peterborough Independent Commission on Climate was formed by the CPCA to "*provide authorities recommendations on the options available to Cambridgeshire and Peterborough to decarbonise the economy, mitigate and adapt to the impacts of climate change*"[98]. The Independent Commissions published their first report on initial recommendations in March 2021, based on the four themes of transport, buildings, energy and peat.

The report identifies that greenhouse gas emissions in the CPCA area are approximately 25% higher per person than the national average[99], and that the region is particularly susceptible to the risks associated with climate change including water shortages and flooding. For this reason, the report stresses that action is needed now and that the CPCA have a significant role to play give their powers related to planning and transport.

Focussing on the transport element, findings suggest that emissions from transport in the CPCA area make up 44% of all CO_2 emissions, compared to the UK average of 37%[100], which reflects the relatively high level of car ownership in the region. The report makes four key recommendations related to transport in the form of targets:

1) *"A complete phase-out of the use of cars running on fossil fuels by 2050 within the CPCA area;*
2) *All buses and taxis operated within the CPCA area, and Council owned and contracted vehicles, should be zero emissions by 2030;*
3) *Reduction in car miles driven by 15% to 2030 relative to baseline:*
    a. *Major new developments (>1000 homes) should be connected to neighbouring towns and transport hubs through shared, public transport and/or safe cycling routes;*
    b. *100% of homes and businesses to have access to superfast broadband by 2023;*
    c. *CPCA to undertake a trial of electric on-demand buses to increase accessibility and connectivity*
    d. *Development and implementation of the Strategic Bus Review to prioritise affordability and reliability of services;*
    e. *CPCA to work with major employers, employment hubs and Liftshare to encourage car-sharing, public transport, walking and cycling for commuting and Councils to take a lead in respect of their own employees;*
    f. *CPCA, with relevant authorities, to explore options to improve cycling infrastructure both within urban areas, and to encourage the use of e-bikes for longer trips to and from market towns and cities;*
    g. *Alternatives to road investment to be prioritised for appraisal and investment – from active travel and public transport options, to opportunities for light rail and bus rapid transit or options to enhance rail connections;*
4) *Diesel vans and trucks to be excluded from urban centres by 2030 and local zero emissions options pursued"*[101].

A full report will be published by the Independent commission later in 2021 which will provide details on the timing and prioritisation of measures, and to look in more detail at other sources of emissions including waste and water.

[98] Independent Commission on Climate | Cambridgeshire & Peterborough Combined Authority (cambridgeshirepeterborough-ca.gov.uk) (accessed 15/04/2021)
[99] Cambridgeshire and Peterborough Independent Commission on Climate (March, 2021) *Initial Recommendations Report* (page 8)
[100] Cambridgeshire and Peterborough Independent Commission on Climate (March, 2021) *Initial Recommendations Report* (page 54)
[101] Cambridgeshire and Peterborough Independent Commission on Climate (March, 2021) *Initial Recommendations Report* (page 12/13)

6.5. CPCA Strategic Spatial Framework (Non-Statutory) Phase 1

The CPCA Strategic Spatial Framework aims to support delivery of growth across Cambridgeshire to 2036, outlined in the Local Plans, and beyond to 2050. The key principle that the CPCA will employ to support local planning authorities to meet their targets, specifically relevant to the St Ives study, is to "*ensure that investment in strategic infrastructure demonstrably supports economic growth, including for the most deprived communities within the area*"[102]. Strategic Spatial Objective 7 states that "*The Combined Authority will develop and maintain a long-term investment programme of infrastructure projects, including projects it seeks national support to deliver. It will work with the highway authorities and national agencies to ensure timely and effective interventions to deliver strategic transport solutions*"[103].

Phase 2 of the Strategic Spatial Framework will engage with key stakeholders and partners to develop a development strategy through to 2050.

6.6. CPCA Cambridgeshire and Peterborough Local Industrial Strategy (July 2019)

The CPCA Local Industrial Strategy presents an evidence base to support industry across the Combined Authority Area to achieve its goals of an "*inclusive, prosperous, and productive economy*"[104] and an enhanced position "*as a global leader in knowledge and innovation, further developing its key sectors including life sciences, information and communication technologies, creative and digital industries, clean tech, high-value engineering and agri-business*"[105]. The Local Industrial Strategy is closely aligned with the Devolution Deal and its ambition to double economic output over the next 25 years. It is framed as a response to CPIER and recognised that to achieve desired levels of growth, current patterns of growth must change.

The strategy is linked to three other strategies across the Oxford – Cambridge Arc (the Arc) with priorities sitting across all four strategies but also CPCA specific objectives. Of specific relevance this study is the aim to "*Improve the long-term capacity for growth in Greater Cambridge by supporting the foundations of productivity"*[106]*.* Critically, and of relevance to the St Ives study, this relates to reducing the risk of stalling growth by investing in housing, supporting supply chain development and delivering transformational transport and infrastructure. A survey of businesses undertaken for the Local Industrial Strategy highlighted poor infrastructure as key risk to enabling growth. In order to alleviate this risk, the Local Industrial Strategy states that its Partners will:

- *"progress key infrastructure priorities, for example, establishing in-principle viability of a Cambridgeshire Autonomous Metro (CAM), which could support sustainable growth in and beyond Cambridge City;*
- *Complete the Cambridgeshire and Peterborough Strategic Bus Review, on the basis of which a Bus Task Force is being established to examine opportunities for an improved future service; and*
- *Work with government to develop a shared evidence base for the current and future energy needs of the Arc, including through the identification of opportunities to test new energy policies or approaches within the Arc."*[107]

Huntingdonshire is identified as a key part of the region for the acceleration in the growth of the advanced manufacturing sector and the life sciences sector. There is a need for this area to be increasingly connected to the existing life sciences hub in Cambridge as well as wider connections across the Arc.

6.7. CPCA Skills Strategy Framework Final

Similar to the Local Industrial Strategy, the Skills Strategy responded to the CPCA Devolution Deal and the subsequent findings of the CPIER. It was produced through engagement with 60 businesses across the region.

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[102] Cambridgeshire and Peterborough Strategic Spatial Framework (page 19)
[103] Cambridgeshire and Peterborough Strategic Spatial Framework (page 28)
[104] Cambridge and Peterborough Combined Authority (2019) *Cambridgeshire and Peterborough Local Industrial Strategy* (page 4)
[105] Cambridge and Peterborough Combined Authority (2019) *Cambridgeshire and Peterborough Local Industrial Strategy* (page 4/5)
[106] Cambridge and Peterborough Combined Authority (2019) *Cambridgeshire and Peterborough Local Industrial Strategy* (page 8)
[107] Cambridge and Peterborough Combined Authority (2019) *Cambridgeshire and Peterborough Local Industrial Strategy* (page 11)

The overall vision of the Skills Strategy is "an inclusive world-class local skills eco-system that matches the needs of our employers, learners and communities"[108]. The Skills Strategy has helped inform the Local Transport Plan as shown in Figure 1.1 of the Local Transport Plan.

6.8. Huntingdonshire Market Towns Programme: St Ives: A Prospectus for Growth

The St Ives Masterplan, produced by Metro Dynamics, was commissioned by HDC and funded by CPCA to contribute to the bold growth ambitions of the region by enabling towns to grow their economies. In line with the NPPF, the masterplan identifies several interventions that should be "*accountable for imposing minimal long-term impact to the environment and development should be embedded in climate change resilience with emphasis on future-proofing our communities*"[109].

The masterplan identifies an Action Plan to deliver the prospectus for growth. Of relevance to this study are:

- Improve connectivity across the River Great Ouse by improve traffic flow on the roundabout where the A1096 meets the A1123;
- A connected town with strong east-west links: A seamless guided bus connection as a pre-cursor to the Cambridgeshire Autonomous Metro (CAM); and,
- More effective use of Wyton Airfield, as a key employment and residential site.

6.9. Doubling Nature: A Vision for the Natural Future of Cambridgeshire and Peterborough in 2050

Natural Cambridgeshire are a local nature partnership for Cambridgeshire and Peterborough consisting of a variety of organisations including district councils, the Wildlife Trust, National Trust and the RSPB. Their vision is that "*by doubling the area of rich wildlife habitats and natural green space, Cambridgeshire and Peterborough will become a world-class environment where nature and people thrive, and businesses prosper*"[110]. The vision aligns with the growth aspirations identified by the CPCA through the CPIER and stresses the importance of putting nature at the heart of the aspirations.

One of the key objectives of the vision relevant to the St Ives study, is that development should contribute to strategic scale nature gains both on and off-site, in order to double the rich wildlife habitats and green space from 8.5% to 17%, and that all new developments achieve net gains for nature.

6.10. Net Zero Cambridgeshire – CUSPE Policy Challenge (October 2019)

The Net Zero Cambridgeshire Policy Challenge provides a baseline for which Peterborough and Cambridgeshire can measure their performance against the 2050 target for net zero UK Greenhouse Gas emissions. For this region the target means reducing current emissions from 6.1 million tonnes of CO^2 equivalent to zero[111]. Transport has a significant role to play in achieving net zero as it currently accounts for 39% of all emissions in Cambridgeshire and this level has remained constant for the last decade. The policy challenge identifies that to meet net zero there is a requirement for 100% of cars, LGVs, motorcycles and buses, and 91% of HGVs to be electric by 2050[112]. However, this alone will not solve the issue, with additional mode shift towards sustainable modes needed.

6.11. A141 and St Ives Transport Study – Stage 1: Existing Conditions and Data Collection Report

The A141 and St Ives Transport Study Existing Conditions Report (April 2019) documents the structure and performance of the existing A141 and St Ives network using a variety of data sources, with the purpose of building a foundation of knowledge from which to design future schemes. The report covered the same study

[108] CPCA (2019) *Skills Strategy* (page 2)
[109] Metro Dynamics - *Huntingdon: A Prospectus for Growth* (page 3)
[110] Natural Cambridgeshire – Doubling Nature: A vision for the natural future of Cambridgeshire and Peterborough 2020 (page 3)
[111] CUPSE (October 2019) *Net Zero Cambridgeshire* (page 2)
[112] CUPSE (October 2019) *Net Zero Cambridgeshire* (page 2)

area as this report, and some of the analysis used within the Skanska A141 Stage 1 Report has been reproduced here.

6.12. A141 and St Ives Transport Study – Option Assessment Report (July 2020)

The A141 and St Ives Transport Study Option Assessment Report documents the methodology and outcomes of the identification and assessment of options to provide improvements to the highway, public transport and active travel network in St Ives. Options for a Huntingdon Third River Crossing were also considered as an alternative but not taken forward.

Option identification and subsequent sifting identified a shortlist of three options for St Ives as follows:

1. Mitigate congestion on A1123/A1096;
2. Restricting through traffic in St Ives town centre; and
3. Improving town centre accessibility.

The options were assessed using the St Ives and Huntingdon Model (SIHM), which is a traffic microsimulation model in the Paramics Discovery software. Assessment was undertaken for a 2036 forecast year, including the full build out of Huntingdonshire Local Plan growth and the A14 Cambridge to Huntingdon Improvement Scheme, including the new link roads in Huntingdon. As well as a series of junction priority amendments in St Ives the main interventions tested were:

- Bus gate on East Street;
- Bus gates on East Street and Needingworth Road;
- A 20-mph zone within the town centre; and
- A 10-mph zone within the town centre.

Results showed that a 20mph zone in the town centre was the best performing option as '*it reduced a moderate number of through trips, without significantly compromising the surrounding road network, and had a positive impact on bus journey times*'[113], and it was assessed alongside a set of mitigations and priority changes at junctions in St Ives.

The following package of options was assessed to offer the most benefits:

- Reduce town centre speeds to 20mph;
- Signalisation of the western half of the A1123/B1040 junction;
- Ban the right turn movement from Needingworth Road onto the A1123; and
- Priority changes at:
  - Ramsey Road / North Road;
  - North Road / Globe Place / Broad Leas; and
  - Globe Place / East Street.

This package of St Ives interventions was included in subsequent modelling to consider the impact of additional growth in the area to assess changes to the A141 north of Huntingdon.

6.13. St Ives Bus Service Accessibility Review (Skanska, March 2020)

The St Ives Bus Service Accessibility Review consisted of an infrastructure audit of the 51 bus stops currently in use in St Ives. The audit used the Pedestrian Environment Review System (PERS) methodology to identify recommendations for improvement. A summary of key findings is as follows:

- *"12 bus stops (24%) are in a good condition;*
- *16 bus stops (31%) are in a satisfactory condition;*
- *23 bus stops (45%) are in a poor condition. These bus stops lack basic provision such as bus service timetables and route information, seating, and adequate waiting areas;*
- *13 bus stops currently have digital Real Time Passenger Information (RTPI) displays installed, located on routes served by at least one high frequency busway service;*
- *16 bus stops (31%) have seating provided and 15 stops have a shelter;*

[113] Skanska (2020) *A141 and St Ives Transport Study Option Assessment Report,* Section 5.4.

- *14 bus stops (27%) do not have an up to date timetable on display;*
- *The audit of the two hail and ride zones[114] identified that both are not clearly visible for bus users; and*
- *Redundant bus stop infrastructure was identified in eight locations in St Ives"[115]*

The audit recommended prioritisation of improvement to the 22 bus stops with the poorest audit scores at an approximate cost of £150,000. The approximate cost for upgrading the remaining non-priority bus stops is reported at £107,000.

6.14. St Ives Pedestrian and Cycling Wayfinding Audit (Skanska, February 2020)

The St Ives Pedestrian and Cycling Wayfinding Audit identifies insufficient, fragmented or inconsistent provision of wayfinding signage across the St Ives pedestrian and cycling network. The report identifies recommendations for improvements in the form of a Signage Strategy that:

- *"Addresses the lack of wayfinding signage on the traffic free routes in the north of St Ives;*
- *Addresses the lack of wayfinding signage at key route entry and decision points;*
- *Maintain existing signage including the relining/refresh of share use path wayfinding markings;*
- *Increases legibility of public footpaths (e.g. the Thicket Path, Ouse Valley Way); and*
- *Highlights issues where damaged or weathered signage infrastructure should be removed"*[116]*.*

A cost estimate was provided for an update in signage across the network in line with the Signage Strategy at £16,000. The audit also noted that "several of the pedestrian and cycling routes in St Ives are of a poor standard"[117] and recommends that the general quality of provision is improved to encourage use of these modes an alternative to the private car.

6.15. St Ives Town Centre Parking Review (Skanska, April 2020)

The St Ives Town Centre Parking Review undertook an on-street parking review to ascertain highway pinch points which contribute to congestion and lead to an increase in journey times. The study focuses on areas in St Ives town centre, namely, North Road, East Street, The Quadrant, Cromwell Place, Oliver Road and Station Road. Feedback from Stagecoach and Whippet suggested that AM peak congestion on North Street and East Street often leads to delays for Cambridge bound services of over 20 minutes[118]. Findings and recommendations for each of these areas are summarised below:

North Road:

- Findings:
  - Parking adjacent to Woodland Court narrows the carriageway;
  - Parking near Broad Leas and Globe Place narrows the carriageway;
  - Delivery vans parked illegally cause congestion;
- Recommendations:
  - Widening of the carriageway at the two pinchpoints identified;
  - Replace single yellow lines with double yellow lines at Woodland Court;
  - Change the priority of the Ramsey Road/North Road junction;
  - Change the priority at the North Road/Broad Leas/Globe Place junction;
  - Change the priority at the West Street/North Road/Broad Leas/East Street junction;

East Street/The Quadrant:

- Findings:
  - The location of two bus stops opposite each other leads to congestion;
  - Various on-street parking bays narrow the carriageway;

[114] on Needingworth Road and Marley Road
[115] Skanska (2020) *St Ives Bus Service Accessibility Review*, page 1
[116] Skanska (2019) *St Ives Pedestrian and Cycling Wayfinding Audit*, page 30/31
[117] Skanska (2019) *St Ives Pedestrian and Cycling Wayfinding Audit*, page 37/38
[118] Skanska (2020) *St Ives Town Centre Parking Review*, page 9

  - Servicing activity with vehicles parking;
  - On-street parking on The Quadrant heavily used;
  - No evidence of a Residents Parking Scheme;
  - Sunken pavement on the corner of Oliver Road and The Quadrant – likely to be as a result of tight geometry causing buses to mount the kerb;
  - Bus passenger access to bus stop issues due to parking;
- Recommendations:
  - Replace single yellow lines with double yellow lines;
  - Removal of the two-vehicle on-street bay outside of the dentist surgery;
  - Liaise with businesses to coordinate deliveries outside of peak hours;
  - Residents parking permits on The Quadrant and Cromwell Place;

Station Road:

- Findings:
  - Evidence of illegal parking close to bus stops;
  - Narrow carriageway due to parking on both sides of the road between Waitrose and the A1096 bus gate;
- Recommendations:
  - Shortening of the parking bays on the western side of the road opposite Waitrose;
  - Enforcement of parking restrictions.

A cost estimate was provided to implement the recommendations identified at £413,000.

7. Summary and Case for Change

7.1. Summary

This report has presented the existing conditions for the St Ives, Houghton and Wyton area and commented on the future conditions following significant planned growth. It sets out the strategic context and existing evidence base for the scheme.

As a key town in Huntingdonshire, St Ives has and will continue to be a focus for housing, job and infrastructure growth. The town has strong economic connections to Huntingdon, Peterborough and Cambridge, as well as the other market towns within Huntingdonshire.

The most dominant mode for travel to work in St Ives is the car, and this dominance leads to congestion in the town and wider district. In particular, the A1123 and A1096 through the town are very busy routes with peak time congestion, leading to rat running through St Ives town centre. This in turn increases congestion and compromises bus services in this area. However, St Ives' position at the northern end of the Cambridgeshire Guided Busway provides a good opportunity to strengthen the town's connectivity through public transport. Implementation of the Huntingdonshire LCWIP will result in upgrades to existing walking and cycling routes in St Ives and across Huntingdonshire.

7.2. Case for Change

Local policy documents identify the need to ensure that town centres retain their roles as the focus for local communities[119]. Congested conditions on main roads through St Ives cause rat running, congestion and delays in St Ives town centre. These delays to travellers and goods make it harder for people to get around, increase costs to businesses, and reduce the area's attractiveness to investment.

Significant development is proposed around Huntingdonshire up to 2036, particularly at Alconbury Weald, St Ives West and Gifford's Farm, increasing the demand for transport in the area. In addition to this, the region has ambitious economic growth plans, centred around doubling the size of the Cambridgeshire and Peterborough economy over 25 years[120].

St Ives clearly has a significant role to play in delivering growth in both housing and the economy. Improving transport connections and capacity will support growth in the region and provide greater opportunity to capitalise on the city's successful technology economy.

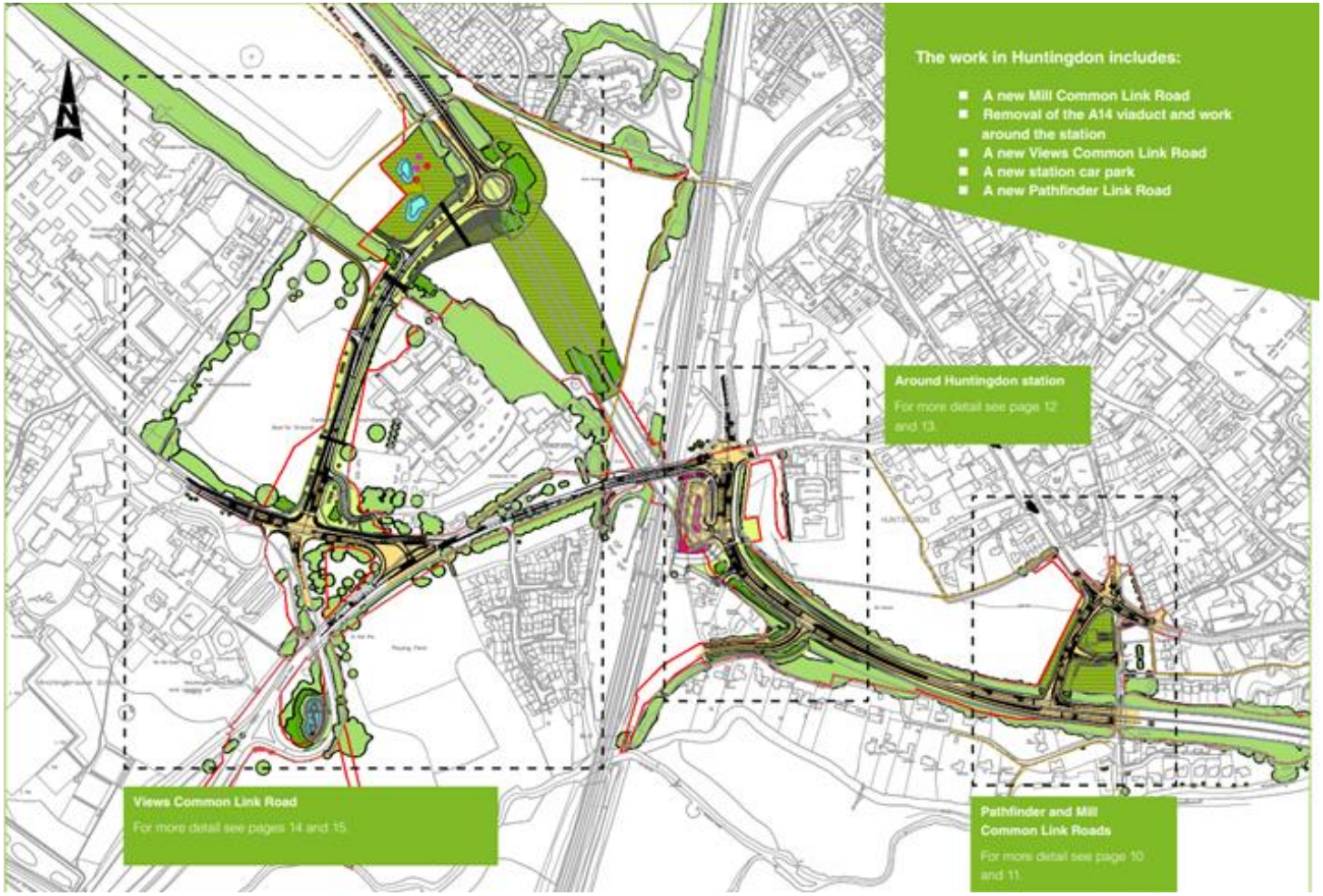
This report, and work undertaken as part of Stage 1, has identified that interventions will be needed to unlock further growth beyond that identified within the Local Plan. Section 5.2 of this report shows that Local Plan growth can be accommodated on the local transport network through local junction improvements coupled with the A14 Cambridge to Huntingdon scheme. However, there are ambitions for growth beyond this and there is the possibility of further major development sites becoming available, including RAF Wyton and Gifford's Farm, which would require further infrastructure measure to allow this growth to occur.

[119] Huntingdonshire Local Plan – page 88; 6.33
[120] CPIER – Section 2.1

Appendices

Appendix A. Huntingdon Southern Bypass: Huntingdon Works[121]

[121] A14+Huntingdon+improvements+-+What's+happening+in+Huntingdon+brochure+Aug+2019(2).pdf /(highwaysengland.co.uk) (page 8-9) (accessed 19/04/2021)


The work in Huntingdon includes:
A new Mill Common Link Road
Removal of the A14 viaduct and work around the station
A new Views Common Link Road
A new station car park
A new Pathfinder Link Road
Around Huntingdon station
For more detail see page 12 and 13.
Views Common Link Road
For more detail see pages 14 and 15.
Pathfinder and Mill Common Link Roads
For more detail see page 10 and 11.

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