



Huntingdonshire Strategic Transport Study

Baseline Report

May 2017

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1 Introduction

1.1 Study Background

Mott MacDonald has been commissioned by Huntingdonshire District Council, with Cambridgeshire County Council, to deliver a Strategic Transport Study for Huntingdonshire. The study area is shown in Figure 1.

The purpose of this Study is to provide an evidence base of the baseline transport conditions in the area for preparation and examination of the Huntingdonshire Local Plan to 2036 which will:

- Identify and test the transport implications of committed development and four potential development scenarios
- Recommend the most sustainable development scenario in transport terms for delivering the 21,000+ homes required
- Highlight where there are opportunities for increasing the usage of sustainable transport modes
- Identify and cost where amended or additional transport infrastructure is required to mitigate the predicted impacts of each potential development scenario
- Form the basis of a district-wide transport strategy that mitigates the transport implications of the chosen development scenario

The Huntingdonshire Local Plan to 2036 is currently being prepared for submission in 2017. Following National Planning Policy Framework and National Planning Policy Guidance, it is important that local planning authorities develop a robust transport evidence base to support the preparation and review of their Local Plan.

Huntingdonshire and the wider Cambridgeshire region has a growing population, and targets are in place for the development of approximately 21,000 new homes and 19,000 new jobs between 2011 and 2036. This will be supported by the development of new employment sites, as well as retail and wider ancillary facilities.

Such development requires robust transport infrastructure in order to sustain development, keep traffic moving and enable further housing and economic growth and expansion of the District going forward.

1.2 Report Purpose and Approach

In order to develop and propose solutions to meet the objectives of this study it is necessary to understand how the study area performs in transport terms, both now and in the context of future growth.

The purpose of this report is therefore to provide a Baseline Review of the study area which covers the following topics:

- The main trip generating and attracting land uses within the District are reviewed in Section 2
- The function, use and performance of the District's highway network is reviewed in Section 3
- The connectivity and performance of the District's public transport network is reviewed in Section 4
- The connectivity and performance of the District's active mode network is reviewed in Section 5

- An overview of transport and land use policy within Huntingdonshire is reviewed in Section 6

The report concludes with a summary section which identifies the main themes and recommendations emerging from the above sections. Further supporting material is provided in the appendices.

Figure 1: Study Area



Source: Ordnance Survey

2 Land Use and Travel Demand

2.1 Introduction

This section focuses on demographics, the distribution of different land uses, and existing travel demand to and from Huntingdonshire (with specific regard to commuter trips). This does not include through-trips (e.g. trips that have neither an origin or a destination in Huntingdonshire but pass through the District).

2.2 Trip Generators

2.2.1 Population

Table 1 shows the population of market town settlements within Huntingdonshire (based on Office for National Statistics, 2015 mid-year population estimates). Approximately half of the Districts population lives in the four main towns of Huntingdon, St Neots, St Ives and Ramsey.

Table 1: Population of key settlements

| Settlement | Population | % of Huntingdonshire Population |
|--------------------------------------|----------------|---------------------------------|
| St Neots | 29,700 | 17% |
| Huntingdon (excluding Godmanchester) | 25,100 | 14% |
| St Ives | 16,900 | 10% |
| Ramsey | 14,800 | 8% |
| Huntingdonshire (all) | 175,000 | 100% |

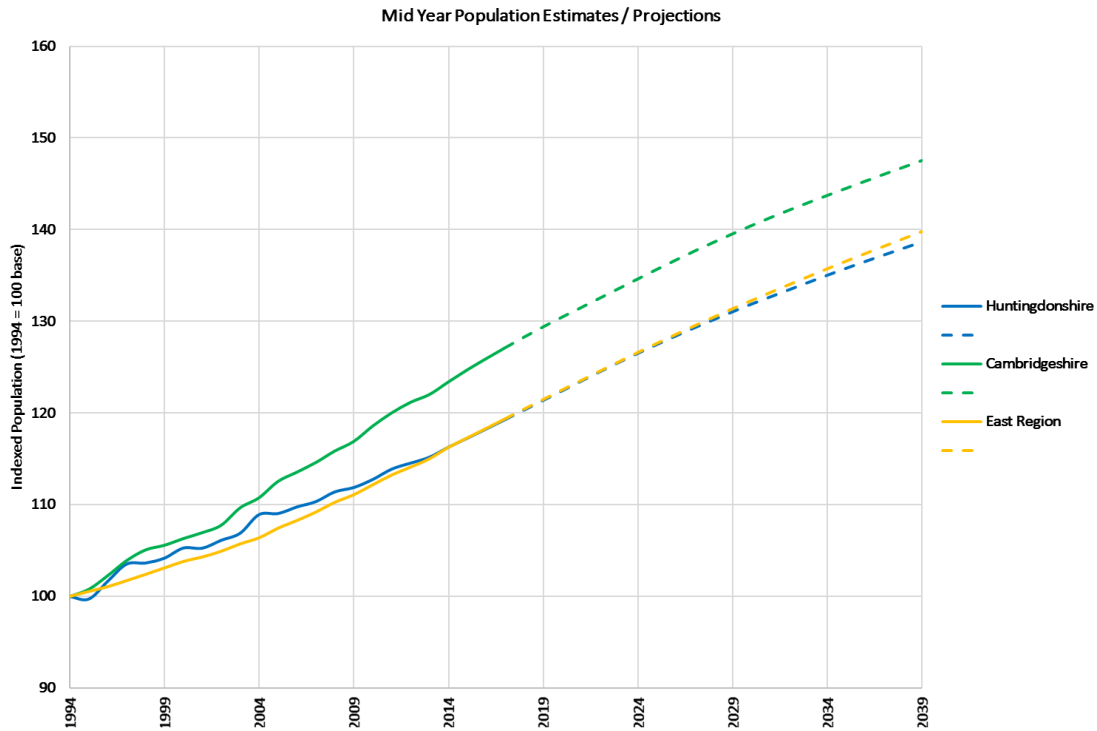
Source: ONS 2015 mid-year estimates (rounded to nearest hundred)

2.2.1.1 Population Growth

Figure 2 shows that since 1994, the rate of growth of Huntingdonshire's population was similar to that of wider Cambridgeshire until 2004, but subsequently declined to a lower rate of growth thereafter.

In terms of projected population growth, Huntingdonshire has a lower projected growth rate than the county and region of which it is located in.

Figure 2: Mid-Year Indexed Population Estimates and Projections 1994 – 2039

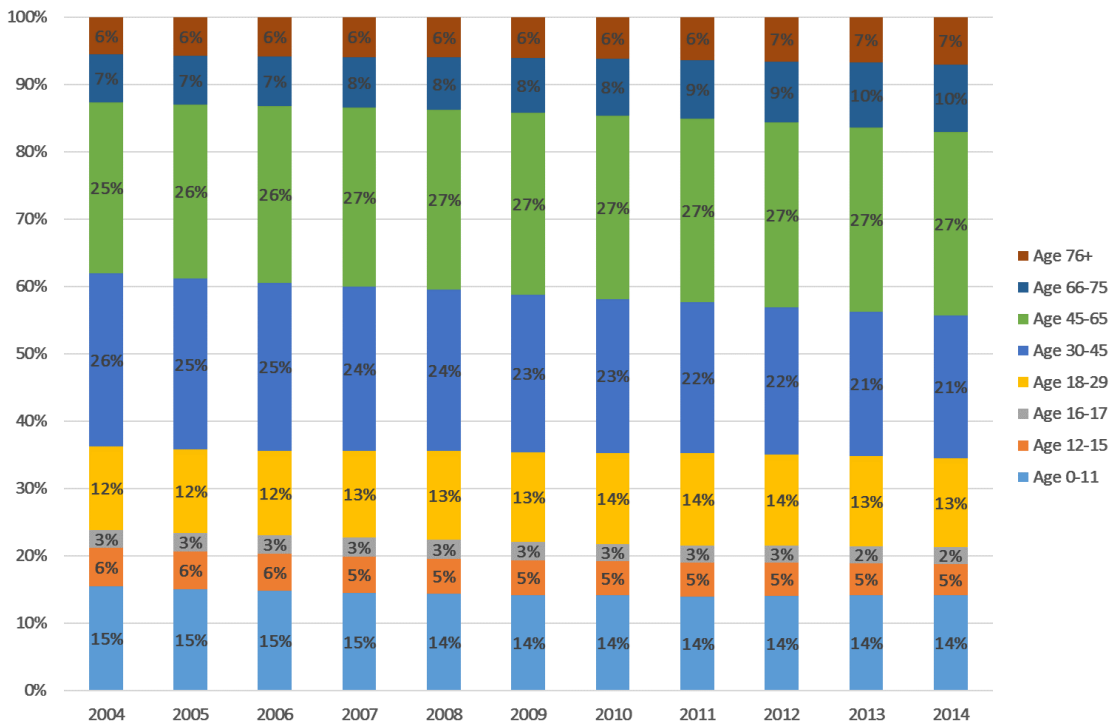


Source: Office for National Statistics mid-year estimates 1994 to 2014 and Office for National Statistics Population Projections 2014 - 2039

2.2.1.2 Age Distribution

Figure 3 shows that between 2004 and 2014, the age distribution of the population of Huntingdonshire has shown an increase in the older population (45 upwards) and a fall in the population of those aged between 30 and 45, a subset that is at the key working age. This is indicative of an ageing population within Huntingdonshire.

Figure 3: Age Distribution of Huntingdonshire population



Source: Office for National Statistics mid-year estimates 2004 to 2014

2.2.2 Car Ownership

Table 2 shows car ownership levels in Huntingdonshire as a whole and the four market towns.

Huntingdon has the lowest level of car ownership. Of the four market towns, Ramsey has the highest level of car ownership, likely due to its rural nature.

In regard to Huntingdonshire as a whole, car ownership levels are 1.5 cars per household. This is higher than the car ownership levels in the four identified market towns, which reflects the rural nature of the District and the greater reliance on cars in rural locations.

Table 2: Distribution of Car Ownership in Huntingdonshire

| | Average Cars per Household |
|-----------------|----------------------------|
| Huntingdon | 1.2 |
| St Neots | 1.3 |
| St Ives | 1.3 |
| Ramsey | 1.4 |
| Huntingdonshire | 1.5 |

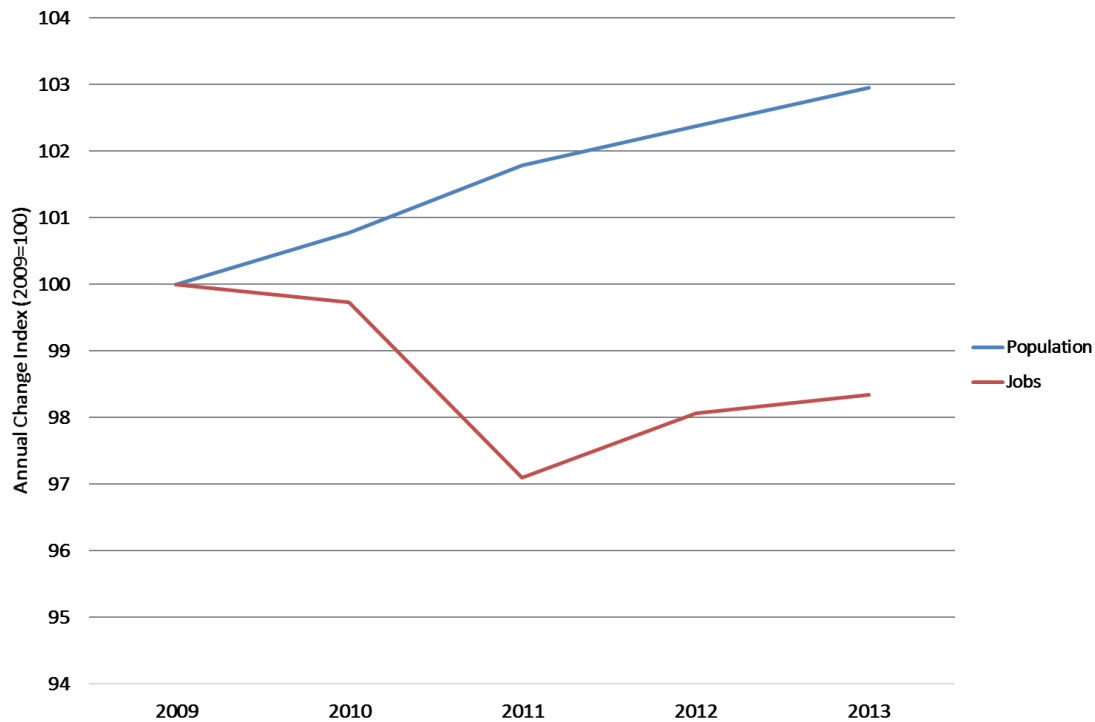
Source: Census 2011

2.2.3 Employment Growth

Figure 4 shows population and employment growth in Huntingdonshire between 2009 and 2013. Whilst the population increased steadily during this period, there was a steep decline in jobs in 2011 at the peak of the economic recession. There has been an overall 2% decrease in employment over the four-year period, equivalent to 300 jobs per year; yet this has been

accompanied by an estimated 3% increase in population during this time. This suggests that more people are commuting out of the district for work, given its location in the Cambridge sub-region.

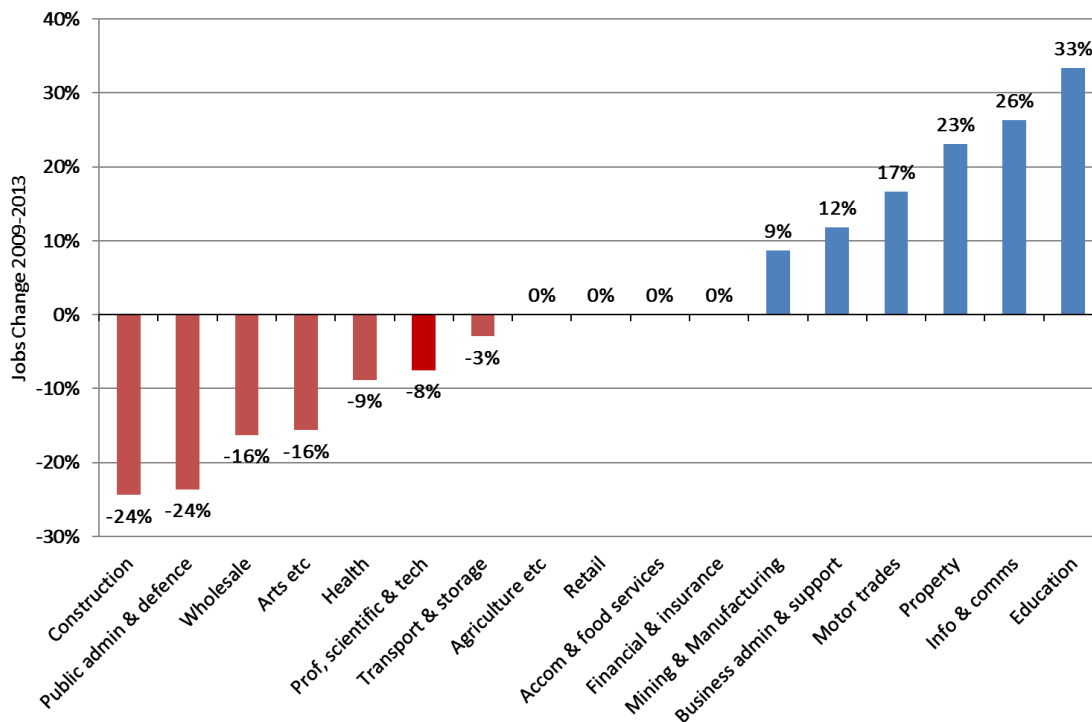
Figure 4: Indexed Growth of Population and Jobs in Huntingdonshire, 2009 – 2013



Source: Census 2011

Figure 5 shows how this growth was distributed across the different economic sectors. The economic sectors which have experienced the most significant employment growth between 2009 and 2013 include education (33%), information and communications (26%) and property (23%). The sectors which have seen the greatest decrease in jobs include construction (- 24%), public admin and defence (- 24%), wholesale (- 16%) and arts (-16%).

Figure 5: Change in Number of Jobs by Economic Sector in Huntingdonshire, 2009 to 2013



Source: Business Register & Employment Survey 2013

2.3 Trip Attractors

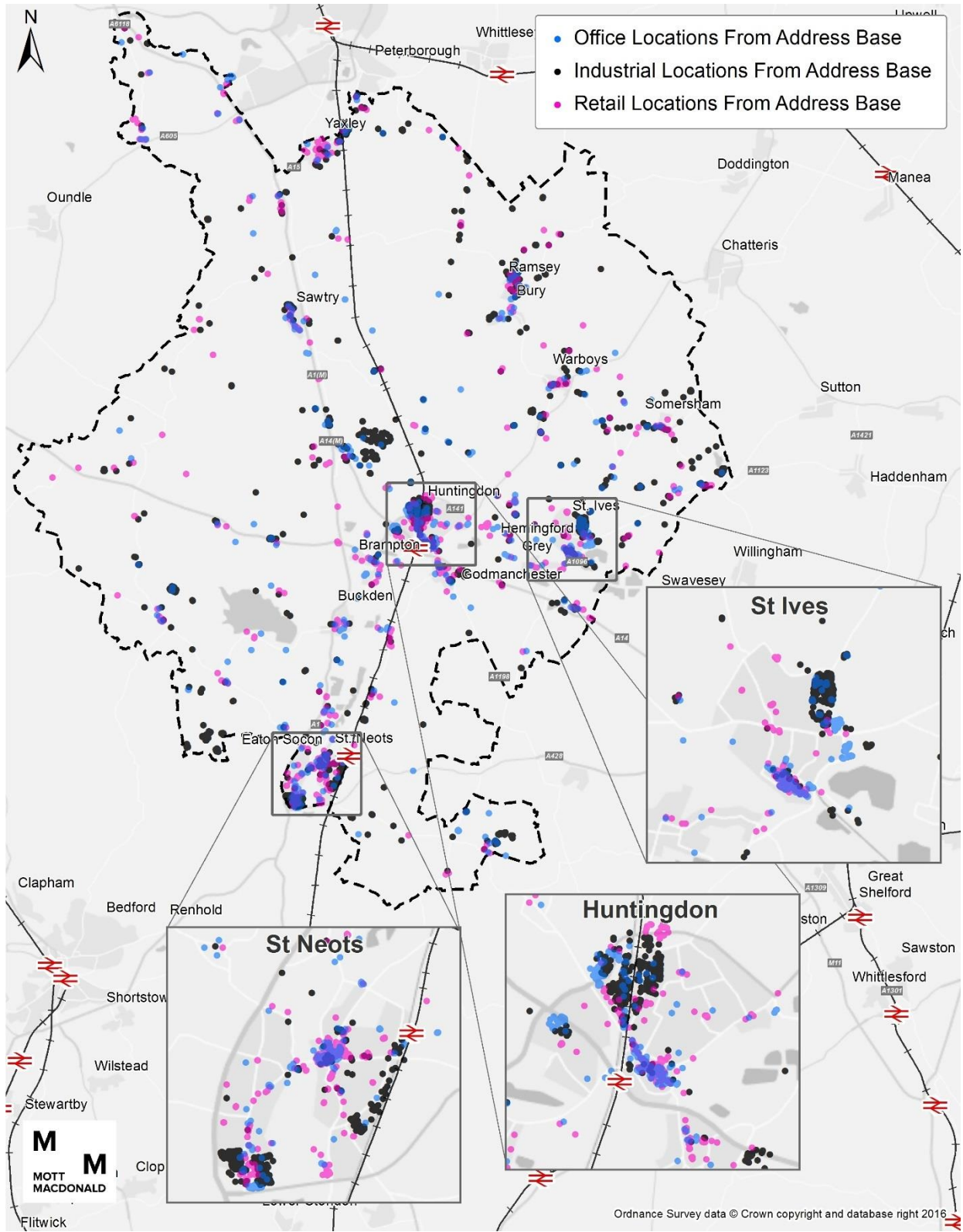
2.3.1 Attractor Distribution

Figure 6 shows the distribution of trip attracting land uses in Huntingdonshire based on 2015 Ordnance Survey data. Trip attracting land uses have been classified into office, industrial and retail locations. Land uses such as farmshops, cornershops, restaurants and pubs are also shown on the map within the categories as they cannot be disaggregated from the address base source data.

The map shows that:

- Employment and residential land uses are closely linked
- There are clusters of office locations in Huntingdon, St Neots, St Ives and Eaton Socon
- Key industrial locations include St Neots, Eaton Socon, north-western Huntingdon and eastern St Ives
- Retail sites are mainly located around local centres and in the vicinity of key transport links
- Within Huntingdon there is a trip attracting cluster of land uses to the east of the railway station (generally office / retail) and a generally industrial cluster to the north
- Within St Neots there is a trip attracting cluster of land uses to the south of the railway station (generally industrial), to the west of the railway station (generally office and retail) and an industrial cluster directly east of the A1 in Eaton Socon

Figure 6: Distribution of Trip Attracting Land Uses



2.4 Total Resident and Employee Commuter Trips

2.4.1 Total Commuter Trips

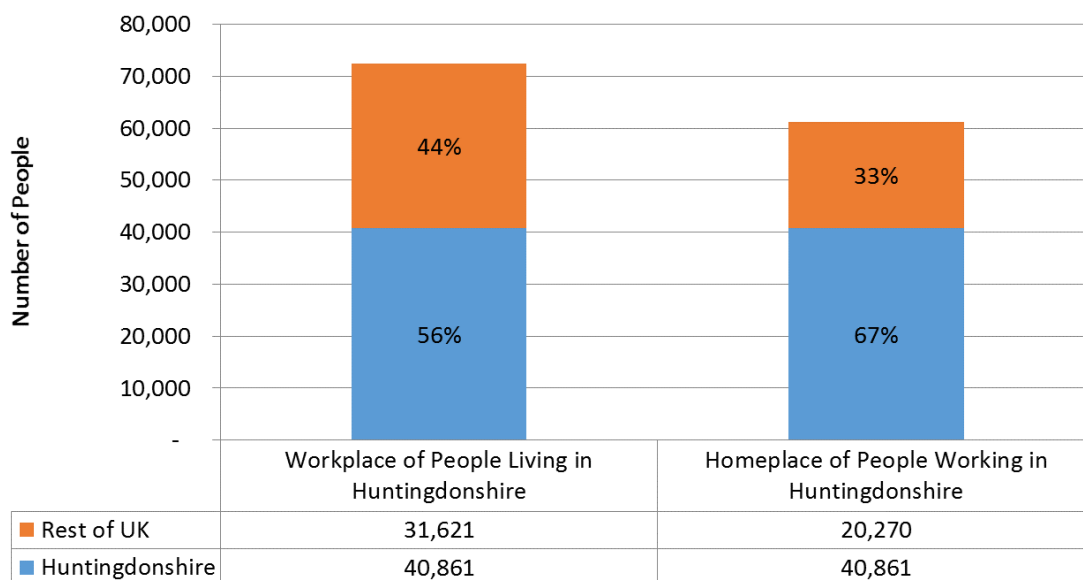
The 2011 census data has been used to quantify the total number of commuter trips into and out of Huntingdonshire. Figure 7 shows that of all residents who live in Huntingdonshire and commute regularly:

- 56% (40,861 residents) work within Huntingdonshire
- 44% (31,621 residents) work outside of Huntingdonshire

Figure 7 also shows that of the 61,131 people who commute to work within Huntingdonshire:

- 67% are residents in Huntingdonshire
- 33% commute into Huntingdonshire from outside

Figure 7: Workplace and Home Location Distribution of Huntingdonshire Residents and Employees



Source: Census 2011

2.4.2 Commuting Mode Shares – Origins

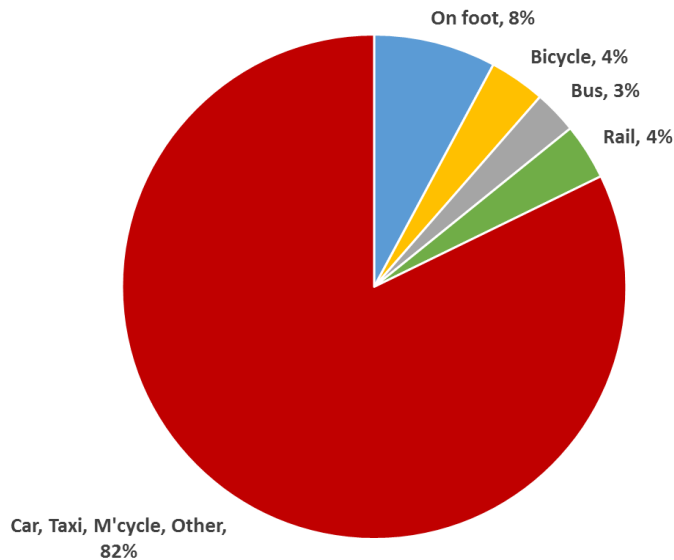
This section discusses the various transport modes that are used for travel to work within, to, and from Huntingdonshire. It uses 'method of travel to work' data sets from Nomis statistics (official labour market statistics provided by the Office for National Statistics), originating from the 2011 Census. These records cover all residents aged 16 and over in employment the week before the Census. The great advantage of this data set is that it records trips at the Middle Super Output Area¹ level of detail which enables a relatively detailed view on the modal split figures. However, the statistics do not include any other purposes of travel (education, leisure etc.) and focus only on those trips where employment is the main reason for travel.

Figure 8 shows the overall travel mode share of Huntingdonshire residents and employees for journeys to work. More than 80% of trips are made by motorised vehicles (including car, taxi,

¹ Geographical area used in the production of statistics collected via the UK Census

motorcycle, etc.) and less than 20% are made by sustainable modes including active travel and public transport.

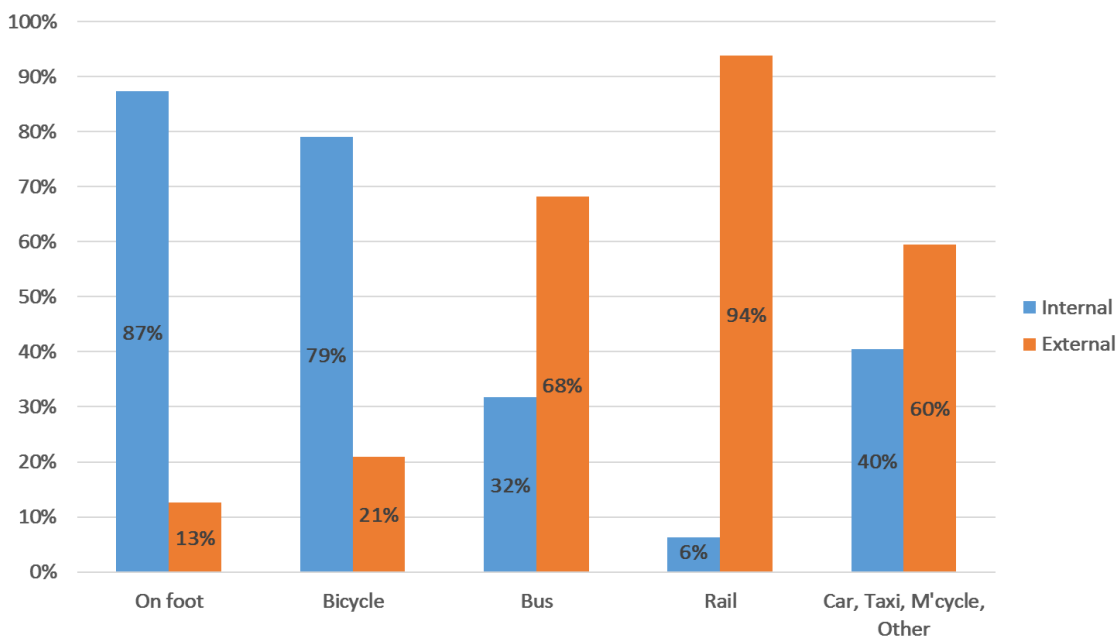
Figure 8: Mode Share Huntingdonshire Residents and Employees



Source: Census 2011 (Rounded to the nearest whole number %)

Figure 9 shows how modal use varies for internal and external trips. As would be expected, the majority of active travel trips start and end within Huntingdonshire, whereas the majority of public transport and motor vehicle trips end outside Huntingdonshire.

Figure 9: Mode Share of Commuting Trips Internal and External to Huntingdonshire



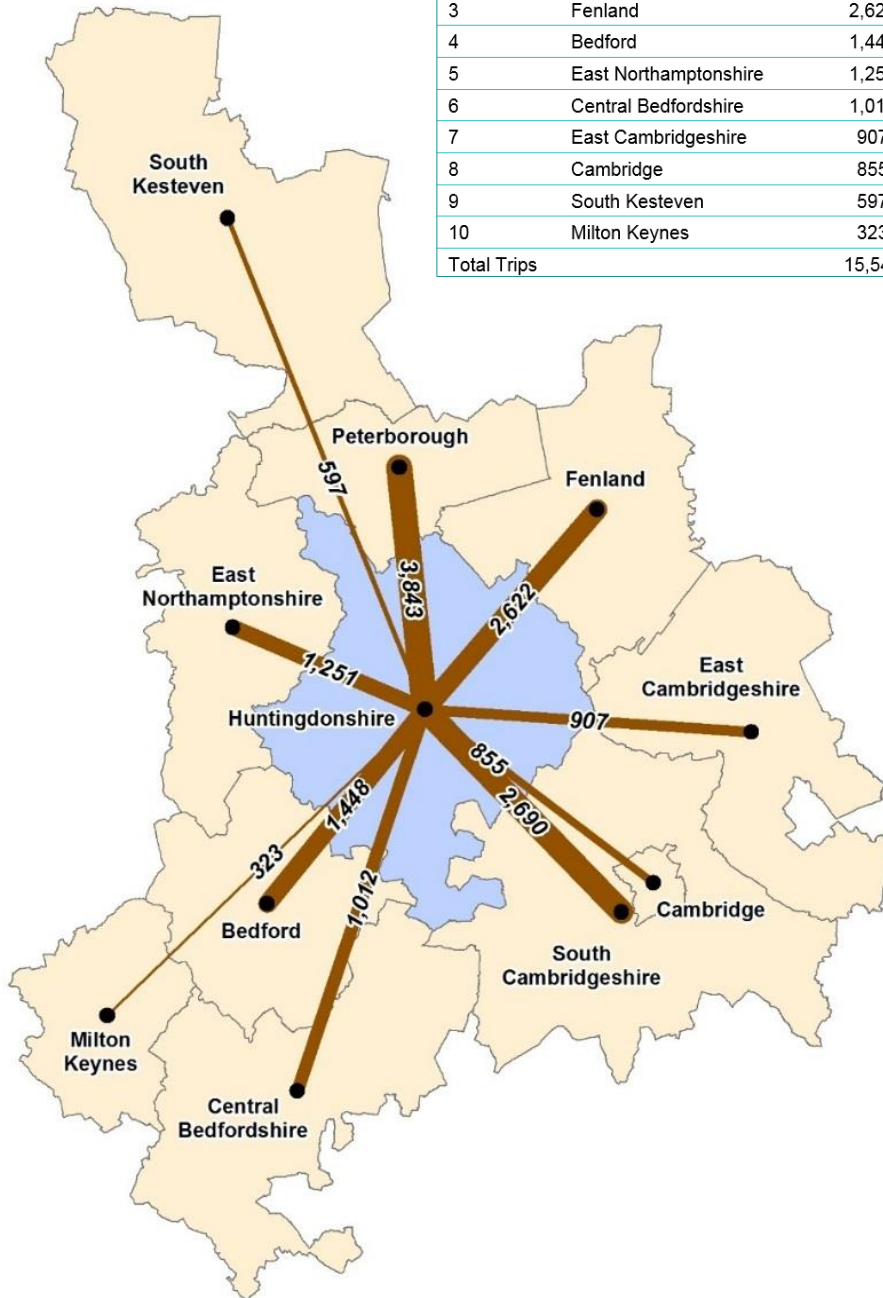
Source: Census 2011 (Rounded to nearest whole number %)

Figure 10 shows commuter flows based on the 2011 Census, providing the top ten origins of people working in Huntingdonshire. Outside of Huntingdonshire, the top ten external origins make up over three quarters of external commuter trips, with the most common origins being Peterborough (3,843 trips), followed by South Cambridgeshire (2,690 trips) and Fenland (2,622 trips). Other key origins include Bedford (1,448 trips) and Cambridge (855 trips).

Figure 10: Top Ten Inbound Commuter Flows to Huntingdonshire



| Ranking | Top 10 Inbound Commuter Flows | Total Trips by All Modes | Percentage |
|-------------|-------------------------------|--------------------------|------------|
| 1 | Peterborough | 3,843 | 25% |
| 2 | South Cambridgeshire | 2,690 | 17% |
| 3 | Fenland | 2,622 | 17% |
| 4 | Bedford | 1,448 | 9% |
| 5 | East Northamptonshire | 1,251 | 8% |
| 6 | Central Bedfordshire | 1,012 | 7% |
| 7 | East Cambridgeshire | 907 | 6% |
| 8 | Cambridge | 855 | 5% |
| 9 | South Kesteven | 597 | 4% |
| 10 | Milton Keynes | 323 | 2% |
| Total Trips | | 15,548 | 100% |



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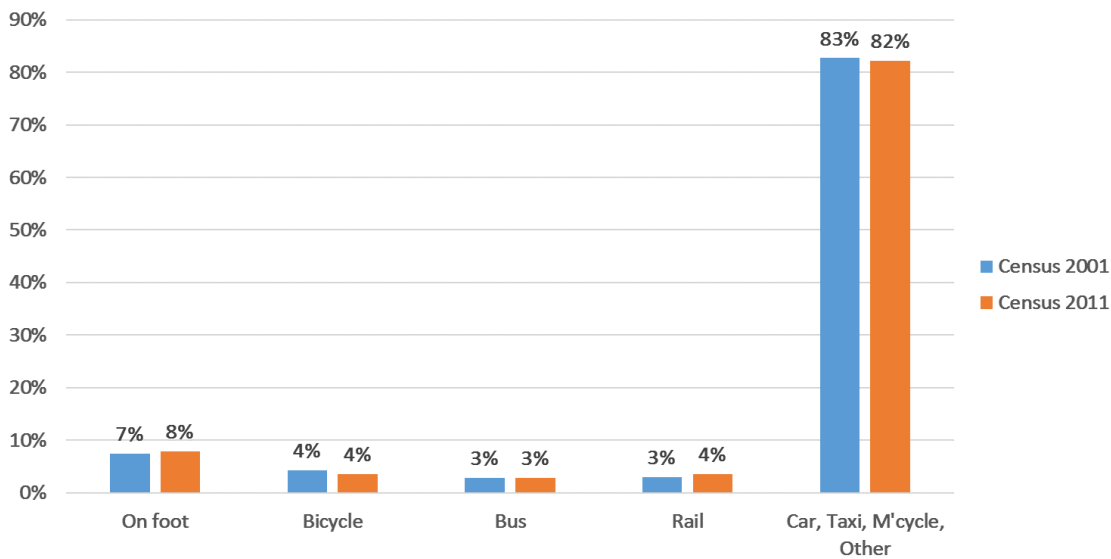
Source: Census 2011 & Ordnance Survey

2.4.2.1 Change in Commuting Mode Share – Origins

Figure 11 shows travel-to-work mode share for Huntingdonshire residents and employees from the 2001 and 2011 census (where slight changes from the equivalent 2011 results shown above are to allow comparison with the 2001 data).

Figure 11 also shows that modal split has remained almost constant during the ten-year period, with a clear domination of motor vehicles as a preferred mode of travel to work.

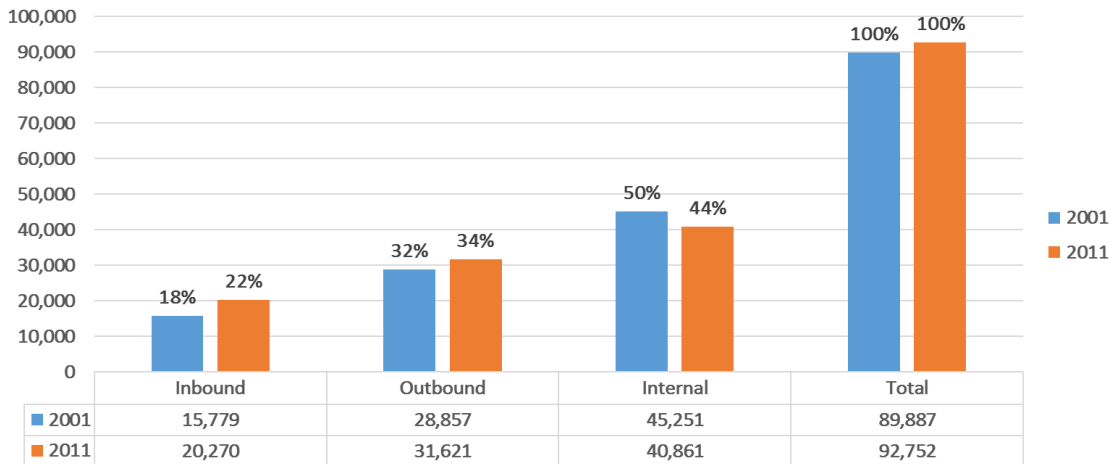
Figure 11: Travel to work mode share change Huntingdonshire residents and employees 2001 – 2011



Source: 2001 and 2011 Census

In order to understand how the above results may have changed over time, Figure 12 compares the data in Figure 11 with the results of the 2001 Census. Figure 12 shows an increase in the overall total travel-to-work trips by 2,865 (3%). Whilst the proportion of internal trips decreased by 6% between 2001 and 2011, external trips (inbound and outbound) increased by 6%. This may reflect the loss of jobs in the district during the recession, which increased net out-commuting.

Figure 12: Change of Commuting flows to, from or within Huntingdonshire 2001 – 2011



Source: 2001 and 2011 Census

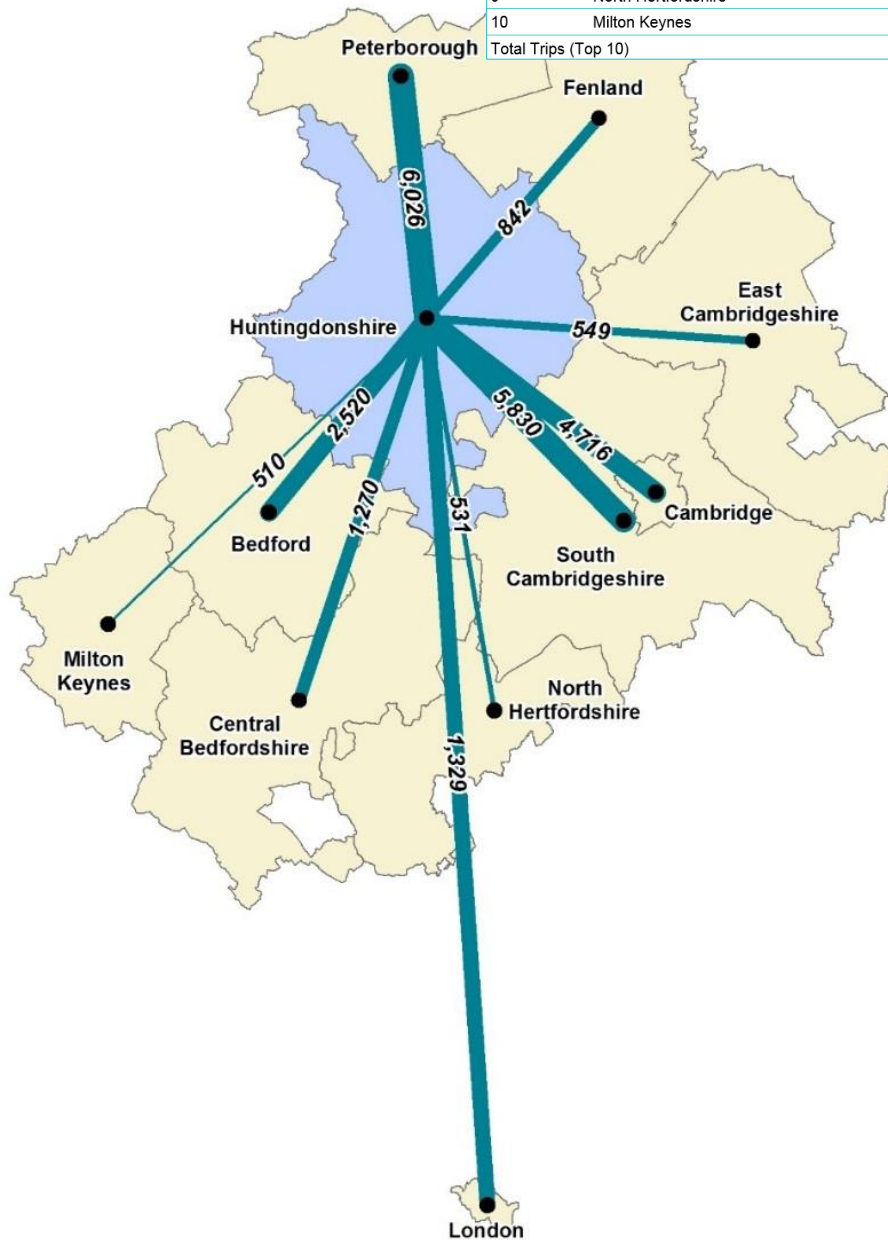
2.4.3 Commuting Mode Shares – Destinations

Figure 13 shows travel to work data at a district level based on the 2011 Census. It provides the top ten *external* commuter destinations for residents of Huntingdonshire based on the total number of trips. Outside of Huntingdonshire, the top ten destinations make up over 75% of commuter trips. The most common destination is Peterborough (6,026 trips), followed by South Cambridgeshire (5,830 trips) and Cambridge (4,716 trips).

Figure 13: Top Ten Daily Outbound Commuter Flows from Huntingdonshire



| Ranking | Top 10 Outbound Commuter Daily Flows | Total Trips By All Modes | Percentage |
|----------------------|--------------------------------------|--------------------------|------------|
| 1 | Peterborough | 6,026 | 25% |
| 2 | South Cambridgeshire | 5,830 | 24% |
| 3 | Cambridge | 4,716 | 20% |
| 4 | Bedford | 2,520 | 10% |
| 5 | London | 1,329 | 6% |
| 6 | Central Bedfordshire | 1,270 | 5% |
| 7 | Fenland | 842 | 3% |
| 8 | East Cambridgeshire | 549 | 2% |
| 9 | North Hertfordshire | 531 | 2% |
| 10 | Milton Keynes | 510 | 2% |
| Total Trips (Top 10) | | 24,123 | 100% |



Ordnance Survey data © Crown copyright and database right 2016

Source: Census 2011 & Ordnance Survey

2.5 Land Use and Travel Demand Summary

A summary of trip generators, trip attractors and commuting travel patterns is as follows:

- Trip Generators:
 - St Neots is the largest town in terms of population. Huntingdon is the second largest town in terms of population
 - The two largest towns in terms of population both have railway stations on the East Coast Mainline
 - Since 1994, the rate of growth of Huntingdonshire's population was similar to that of wider Cambridgeshire until 2004, but subsequently declined to a lower rate of growth thereafter
 - The percentage of the population aged over 45 is increasing, contributing to an aging population
 - There are high levels of car ownership due to rural nature of Huntingdonshire – a trend which we believe will continue with new growth
 - Huntingdon itself has a comparably low level of car ownership
 - There was a decline in employment between 2009 and 2013
- Trip Attractors:
 - Employment and residential land uses are closely linked, with clusters of office locations in Huntingdon, St Neots, St Ives and Eaton Socon
 - Key industrial locations include St Neots, Eaton Socon, north-western Huntingdon and eastern St Ives
- Commuter Travel Patterns:
 - Key outbound commuting destinations are Peterborough, Cambridge and South Cambridgeshire
 - Key inbound commuting origins are Peterborough, South Cambridgeshire, Fenland and Bedford
 - More people commute out of Huntingdonshire when compared to those that commute inbound

3 Highway Network

3.1 Introduction

Huntingdonshire has good connections to the national and regional strategic road network. The main strategic routes are shown in the location map in Figure 14.

3.2 Functionality

The main strategic routes in Huntingdonshire are:

- A1 and A1 (M) running to the west of Huntingdon and St Neots which provides a north-south link through the district to key locations such as Bedford via the A428 / A421 and Peterborough via the A1139, as well as wider national links to London and Scotland.
- A14 running to the south of Huntingdon and St Ives which provides an east-west link through the district to Cambridge as well as wider national links to the Midlands, the East Coast ports and destinations further afield via the national network.
- A141 running from Huntingdon to the north of Cambridgeshire, providing links to Chatteris, March and Wisbech.
- A1123 running from Huntingdon, through St Ives to the east of Cambridgeshire, providing links to Ely and Soham.
- A1096 running from St Ives to junction 26 of the A14.
- A1198 running from Huntingdon to the south of Cambridgeshire via the A428 Caxton Gibbet junction, providing links to Cambourne, Royston and beyond.
- A428 passing through the south of the district from Cambridge to Bedford via St Neots from where links to Milton Keynes and beyond are provided.
- A605 running in the north of the district between Elton and the A1, providing links to Peterborough and Whittlesey to the east and Oundle and the A14 to the west.

Whilst there are several strategic routes running through Huntingdonshire, many settlements including the market town of Ramsey have connections to the strategic network via minor roads and B roads. The following summarises the key local roads in Huntingdonshire:

- B1090 running from Wyton to the A1 near Sawtry provides links through Kings Ripton and Abbots Ripton
- B660 provides links from Ramsey St Mary's and Holme on the eastern side of the A1 to the A14 (via Old Weston, Winwick, Great Gidding and Glatton)
- B1043 split into two parts, provides a links between Godmanchester and St Neots (running parallel to the A1 on its eastern side), also providing a route parallel to the A1(M) between Alconbury and Norman Cross
- B645 running from St Neots to Tilbrook, carrying on towards Wellingborough
- B1040 from Waresley at the south of the district to Pondersbridge in the north (via Ramsey, Warboys and St Ives)

Figure 15 shows the speed limits on the identified strategic routes. The A1(M) and the A14 have speed limits of 70mph. The A1 has a 50mph speed limit around Buckden, increasing to 60mph south of the village. The Huntingdon bypass (A141) has a speed limit ranging from 50-60mph dependent on carriageway type and location.

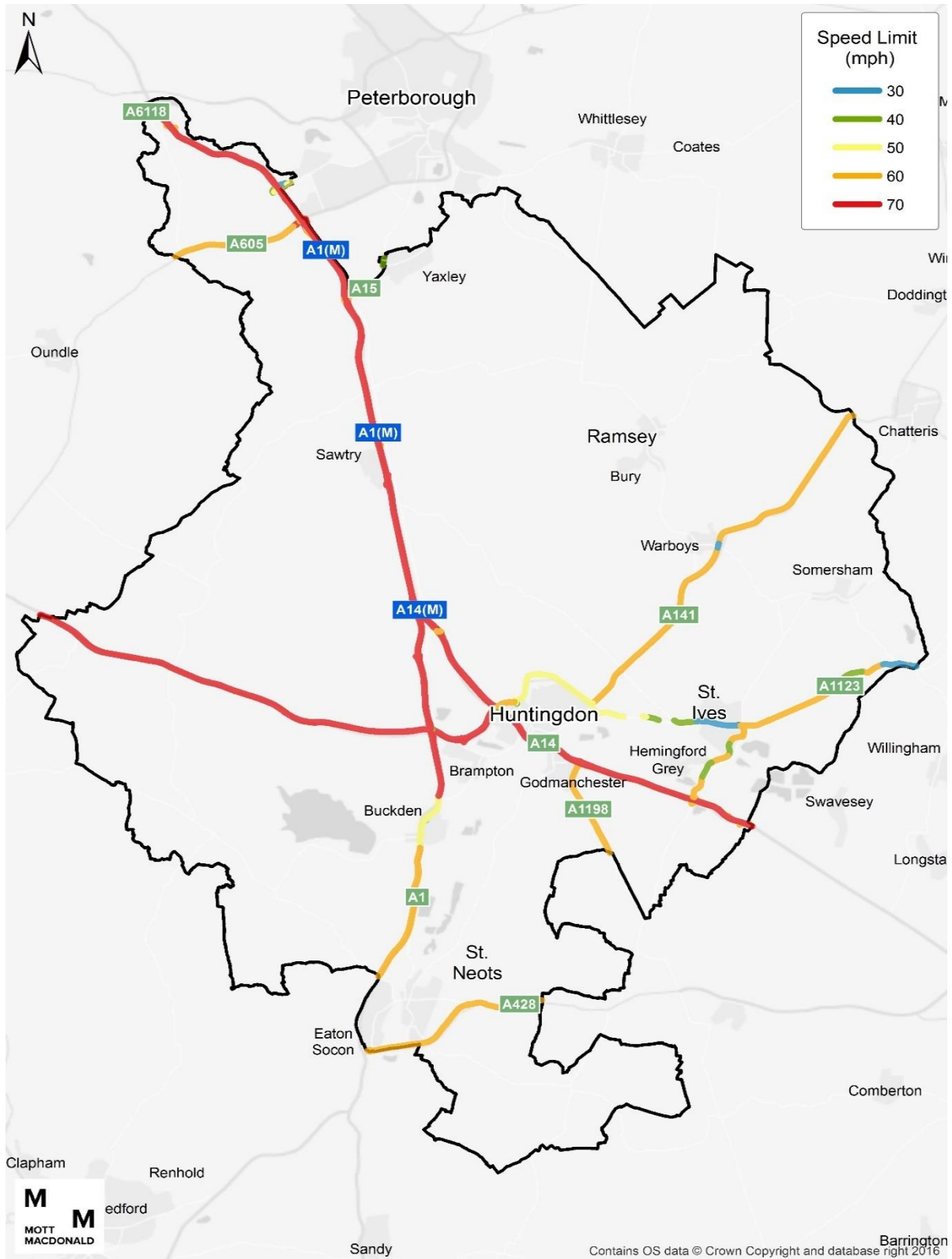
Figure 14: Highway Network



Ordnance Survey data © Crown copyright and database right 2016

Source: Ordnance Survey

Figure 15: Speed Limits Strategic Routes



3.3 Traffic Characteristics

Department for Transport traffic counts have been analysed on links within the area of study. Whilst it is recognised that junctions are key constraints on the highway network, available data limits this analysis to links only, with junctions being considered in subsequent analysis.

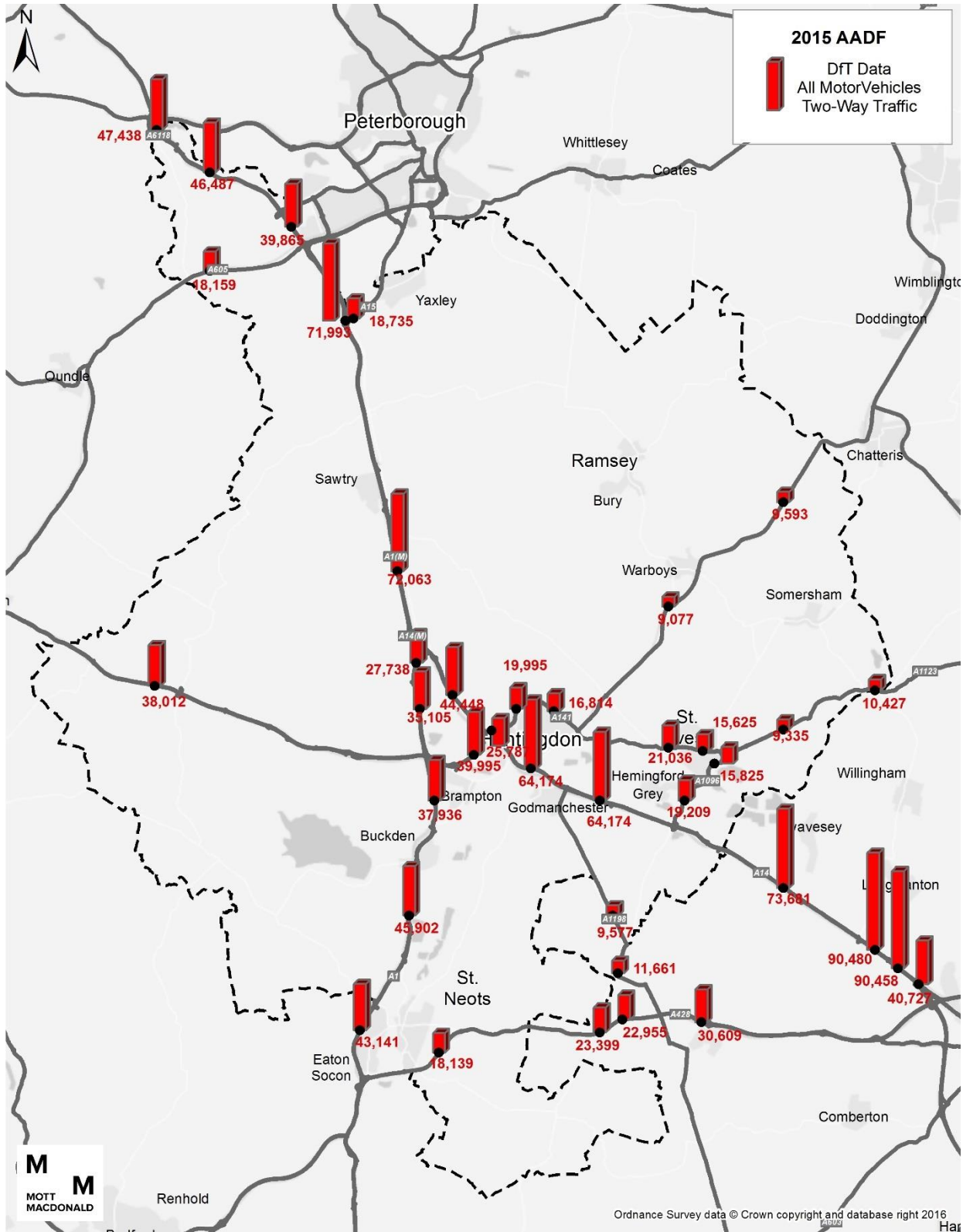
Figure 16 shows the two-way annual average daily flows in 2015. The highest flows can be observed on the A1(M) between Huntingdon and Peterborough, followed by the A14 between Huntingdon and the eastern district boundary. The highest count is observed on the A1(M) south of Sawtry (72,063 vehicles), whilst there are also high flows at the A1/ A15 Norman Cross junction (71,993 vehicles) and on the A14 near Godmanchester (64,174 vehicles).

Figure 17 shows the traffic composition across Huntingdonshire (based on Department for Transport traffic counts). This figure shows:

- High proportion HGVs on the A14 (up to 21% HGVs on A14, west of A1)
- Low proportion of HGVs on non-primary routes
- Up to 18% LGVs on identified road sections:
 - A1(M) near A14 spur
 - A112 to the east of St Ives
 - A141 to the west of Chatteris

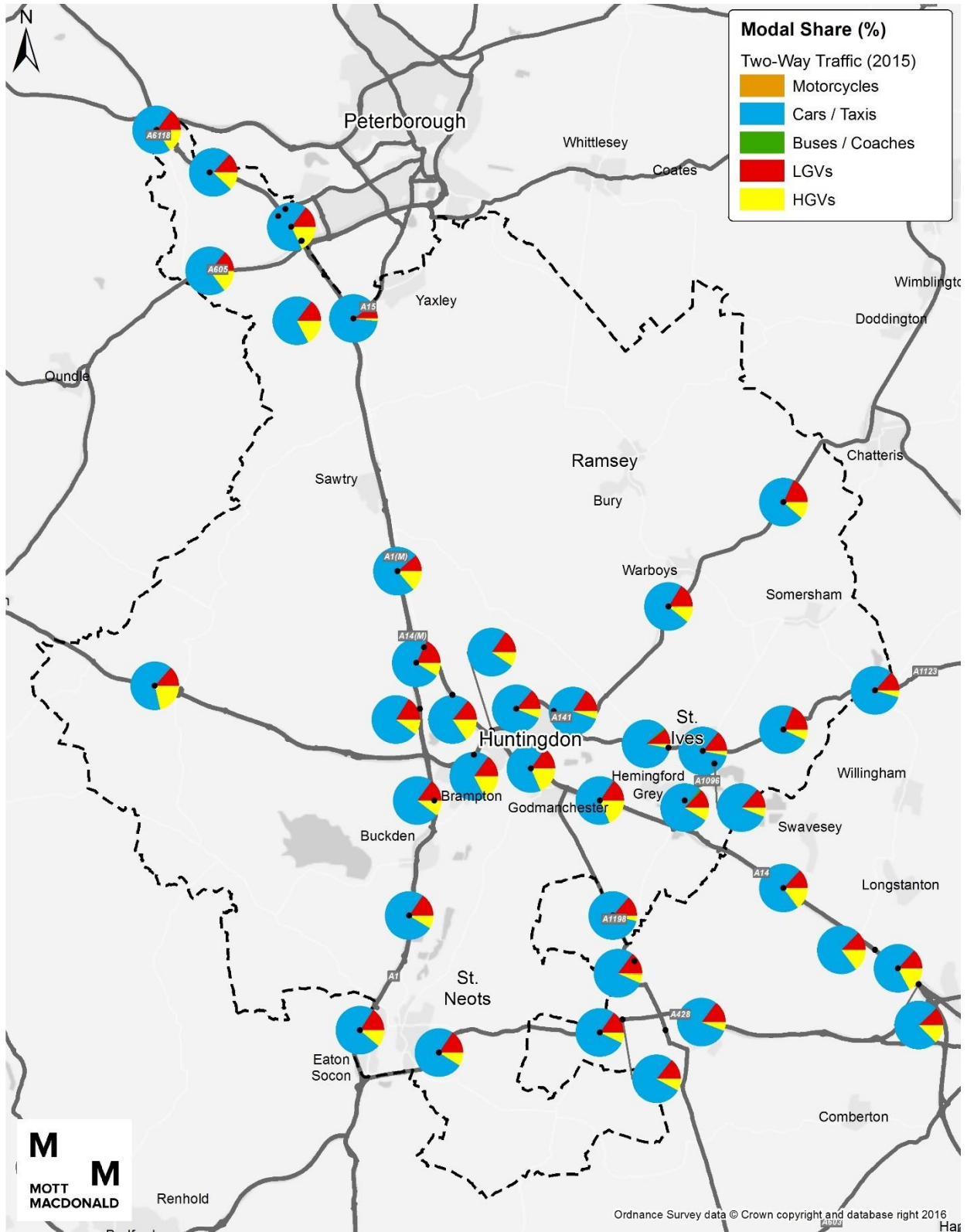
Figure 18 outlines the overall change in annual average daily flow between 2005 and 2015. The map shows that there has been a significant increase in vehicle traffic on the A14 and A1 west of Huntingdon (up to 40%). In addition, a high increase in vehicle traffic can be observed on the A1 and A428 around St Neots (up to 32%). There has also been a significant increase on the A1(M) in the north of the district south of Peterborough (up to 23%).

Figure 16: Two-Way Annual Average Daily Flow 2015



Source: Department for Transport Count Data

Figure 17: Traffic Composition



Source: Department for Transport Count Data

3.4 Traffic Delay

The following journey time delay data is based on the latest available Trafficmaster data from 2013/14, showing average journey time delay per km (measured relative to free-flow journey times) for the:

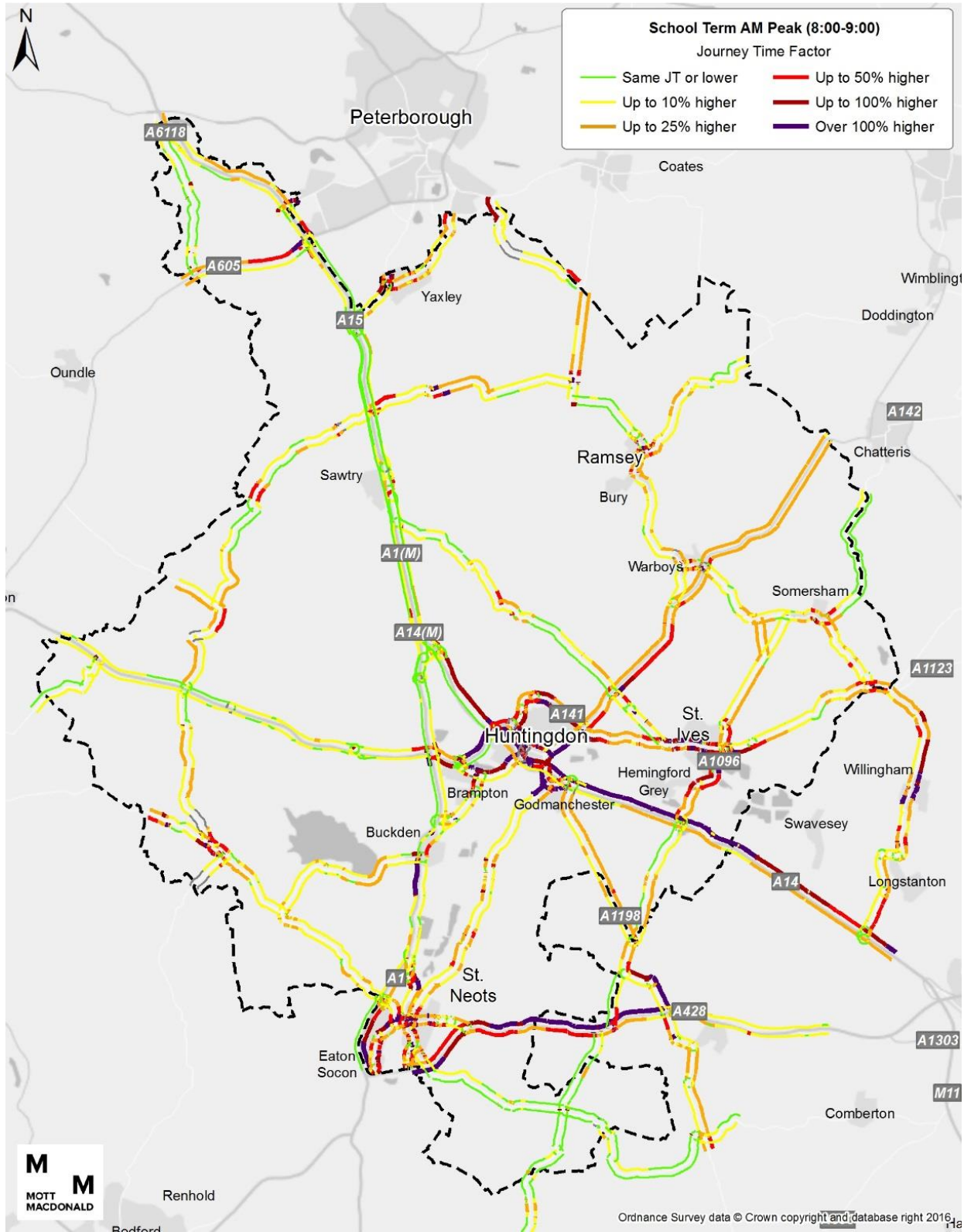
- School Term-Time AM Peak (08:00 – 09:00 – see Figure 19)
- School Term-Time PM Peak (17:00 – 18:00 – see Figure 20)

Performance is shown by comparing the peak hour journey time with the equivalent free-flow journey time, which is based on an average of journey times between 22:00 and 06:00, Monday to Sunday. The results therefore show how much longer journeys are in the peak hour than in uncongested, free-flow conditions.

Figure 19 shows the average increase in journey times in Huntingdonshire during the school term AM peak compared to under free-flowing traffic conditions. The biggest delays can be observed eastbound on the A14 (towards Cambridge, between Huntingdon and the district's eastern boundary), as well as on the A141 around Huntingdon and A1123 to St Ives. In addition, high levels of delay can be observed on the A428 between St Neots and the district's eastern boundary as well as on the A1096 and A605. The A1 (M) between Peterborough and Huntingdon is shown to operate with the same journey time or lower along much of its length.

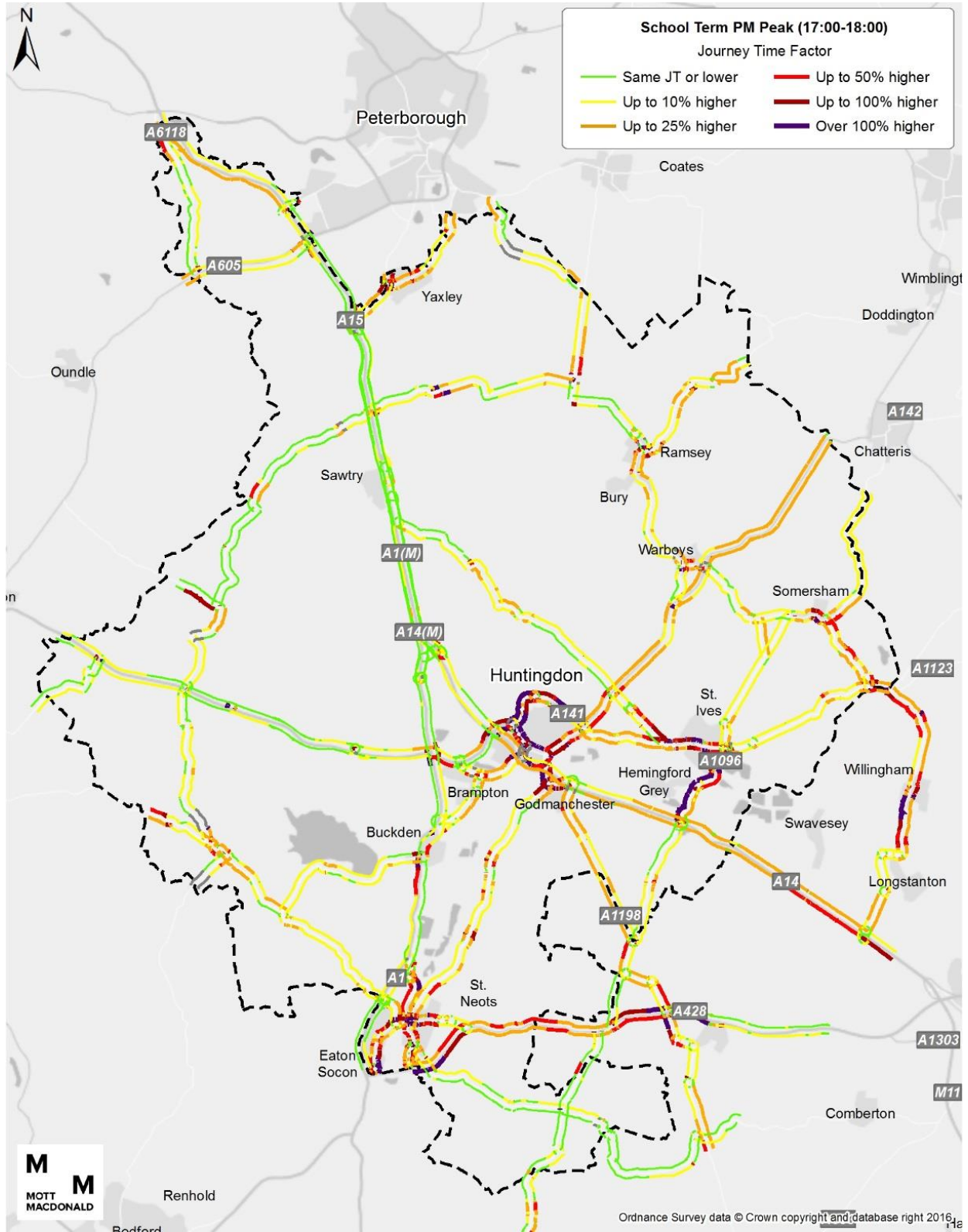
Figure 20 shows the average increase in journey times in Huntingdonshire during the school term PM peak compared to under free-flowing traffic conditions. As with the AM peak, the biggest delays can be observed on the A14 around Huntingdon and the A1123 to St Ives. High levels of delay can also be observed on the A428 close to St Neots, the A1 near Buckden, the A1096 near Hemingford Grey, the B1091 in Yaxley and the B1050 in Somersham. The A1 (M) between Peterborough and Huntingdon is shown to operate with the same journey time or lower along much of its length.

Figure 19: Huntingdonshire Average Journey Time Delay 2013/14: School Term-Time AM Peak



Source: Trafficmaster

Figure 20: Huntingdonshire Average Journey Time Delay 2013/14: School Term-Time PM Peak



Source: Trafficmaster

Using the TrafficMaster data shown in the diagrams above, Table 3 shows the two-way journey times and journey time factors for each Motorway, A Road and B Road in Huntingdonshire. The table has been colour coded as shown at the bottom of Table 3.

Table 3 shows no significant delays in journey time on the A1(M) in both peak periods, although increased delays are shown in the peak periods on the dualled section of the A1 between Alconbury and Eaton Socon.

Significant delays are experienced on the A14 in both peak periods, and the congestion hotspots along this route are shown in Figure 19 and Figure 20. The key congestion areas are between Huntingdon and Longstanton.

The link road between Huntingdon and Godmanchester (B1044, 2.6 miles in length) experiences significant congestion in both peak periods with journey times around double those in free-flow conditions.

Table 3: Trafficmaster Average Journey Times and Factors

| | Two-way length (miles) | Two-way free-flow time (mins) | Two-way AM peak time (mins) | Two-way PM peak time (mins) | AM Peak Journey Time Factor | PM Peak Journey Time Factor |
|--|------------------------|-------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| A1(M) – Alconbury to Peterborough | 32.1 | 30.6 | 31.3 | 30.4 | 1.02 | 1.00 |
| A1 – Alconbury to Eaton Socon | 36.7 | 39.6 | 54.1 | 43.4 | 1.37 | 1.09 |
| A1096 – St Ives to A14 link road | 6.2 | 10.7 | 16.9 | 21.8 | 1.58 | 2.03 |
| A1123 – Huntingdon to Soham (via St Ives) | 18.3 | 28.1 | 38.3 | 36.5 | 1.36 | 1.30 |
| A1198 – Huntingdon to Papworth | 23.3 | 28.6 | 38.3 | 34.9 | 1.34 | 1.22 |
| A14 | 64.1 | 73.1 | 92.2 | 79.2 | 1.26 | 1.08 |
| A141 – March to Huntingdon | 28.4 | 34.2 | 47.7 | 50.8 | 1.4 | 1.49 |
| A15 – Norman Cross to Yaxley | 3.6 | 5.7 | 7.6 | 7.4 | 1.32 | 1.28 |
| A428 – Eaton Socon to Cambourne | 25.4 | 27.8 | 44.2 | 37.6 | 1.59 | 1.35 |
| A605 – A1 Services to Elton | 8.9 | 12.1 | 15.2 | 12.6 | 1.25 | 1.04 |
| B1040 – Ramsey to Waresley | 57.5 | 87.7 | 95.3 | 95.6 | 1.09 | 1.09 |
| B1041 – St Neots to Little Paxton | 4.3 | 9.1 | 12.6 | 13.4 | 1.38 | 1.47 |
| B1043 – Norman Cross to Eaton Socon | 37.6 | 61.1 | 70.9 | 69 | 1.16 | 1.13 |
| B1044 – Huntingdon to Godmanchester | 5.2 | 9.1 | 17.4 | 18.3 | 1.91 | 2.02 |
| B1046 – St Neots to Great Gansden | 23.6 | 39.9 | 38.5 | 39.5 | 1.00 | 1.00 |
| B1048 – Link road in St Neots (A1 to B1428) | 2.1 | 4.5 | 6 | 5.1 | 1.33 | 1.14 |
| B1050 – Chatteris to Willingham | 30 | 44.4 | 52.8 | 54.8 | 1.19 | 1.23 |
| B1086 – Somersham to B1040 (north) | 4.7 | 8 | 8.7 | 9.6 | 1.09 | 1.20 |
| B1089 - Somersham to B1040 (south) | 1.8 | 2.4 | 2.5 | 2.4 | 1.04 | 1.01 |
| B1090 – Sawtry to St Ives | 23.4 | 36 | 36.8 | 37.4 | 1.02 | 1.04 |
| B1091 – through Yaxley | 5.8 | 11.4 | 13.3 | 13.3 | 1.16 | 1.16 |
| B1095 - Pondersbridge to A605 (Peterborough) | 7.7 | 9.3 | 10.6 | 9.9 | 1.13 | 1.06 |
| B1096 – Ramsey to Benwick | 8.5 | 14.2 | 15.5 | 15.8 | 1.09 | 1.11 |

| | | | | | | |
|---|------|------|------|------|------|------|
| B1428 – through Eaton Socon and St Neots | 7.4 | 18.1 | 27.9 | 30.4 | 1.54 | 1.68 |
| B1514 – A1 to Hartford Roundabout (includes Huntingdon ring-road) | 13.7 | 25 | 37.2 | 34.5 | 1.49 | 1.38 |
| B645 – Kimbolton to St Neots | 17.2 | 24.8 | 28.4 | 27.3 | 1.15 | 1.10 |
| B660 – Ramsey to Kimbolton (via Sawtry) | 45.4 | 61.3 | 67.9 | 64.4 | 1.11 | 1.05 |
| B661 - Buckden (A1) to Great Staughton | 9.7 | 13.1 | 14.4 | 14.4 | 1.10 | 1.10 |
| B662 - Wigsthorpe (A605) to Old Weston | 2.4 | 2.6 | 2.8 | 3.4 | 1.07 | 1.29 |
| B663 - Bythorn (A14) to Raunds | 5.4 | 8.5 | 8.9 | 8.8 | 1.05 | 1.04 |
| B671 – A605 (Elton) to Wansford | 8.4 | 12.7 | 13.2 | 14.2 | 1.04 | 1.11 |

Key

Same journey time or lower

Up to 10% higher

Up to 25% higher

Up to 50% higher

Up to 100% higher

Over 100% higher

Source: Trafficmaster

3.5 Road Safety

This section summarises accident data provided by Cambridgeshire County Council, and comparisons have been made with national statistics. A five-year period has been assessed (1 January 2011 to 31 December 2015).

3.5.1 Overview

Table 4 summarises the data provided by Cambridgeshire County Council and shows that:

- 83% of all traffic accidents were of slight severity, 15% serious and 2% fatal
- There were no fatal accidents involving cyclists
- Fatality rates for accidents involving pedestrians are higher than average (3.1% as opposed to a 1.5% average)

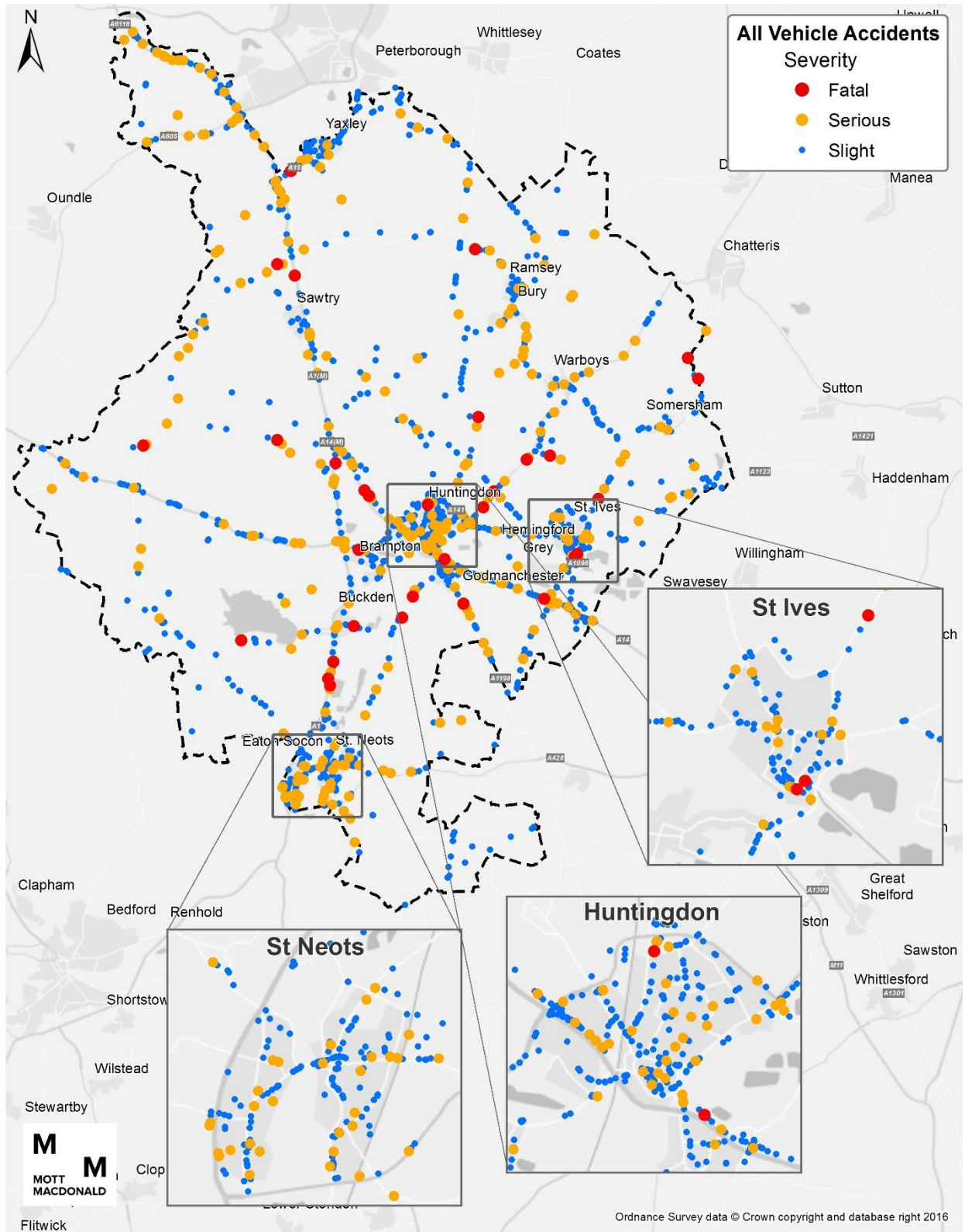
Table 4: Breakdown of accident type by severity in Huntingdonshire 2011-2015

| Severity | All Accidents | % Accidents | Accidents Involving Cyclists | % Accidents Involving Cyclists | Accidents Involving Pedestrians | % Accidents Involving Pedestrians |
|----------|---------------|-------------|------------------------------|--------------------------------|---------------------------------|-----------------------------------|
| Fatal | 31 | 1.5% | 0 | 0.0% | 5 | 3.1% |
| Serious | 313 | 15.4% | 43 | 19.8% | 26 | 16.3% |
| Slight | 1,683 | 83.0% | 174 | 80.2% | 129 | 80.6% |
| All | 2,027 | 100.0% | 217 | 100.0% | 160 | 100.0% |

Source: Cambridgeshire County Council

Figure 21 shows all vehicle accidents in Huntingdonshire between 2011 and 2015. The highest concentration of accidents can be observed around the urban areas of Huntingdon, St Ives and St Neots.

Figure 21: All vehicle accidents 2011-2015



Source: Cambridgeshire County Council

Table 5 shows all of the above accidents in Huntingdonshire between 2011 and 2015 compared with national statistics. The table shows that a higher percentage of accidents in Huntingdonshire are fatal or serious in comparison to the national average.

Table 5: All Accidents Compared to National Statistics

| Type | National | % | Huntingdonshire | % |
|---------|----------|--------|-----------------|--------|
| Fatal | 8,316 | 1.2% | 31 | 1.5% |
| Serious | 102,225 | 14.2% | 313 | 15.4% |
| Slight | 611,542 | 84.7% | 1,683 | 83.0% |
| All | 722,083 | 100.0% | 2,027 | 100.0% |

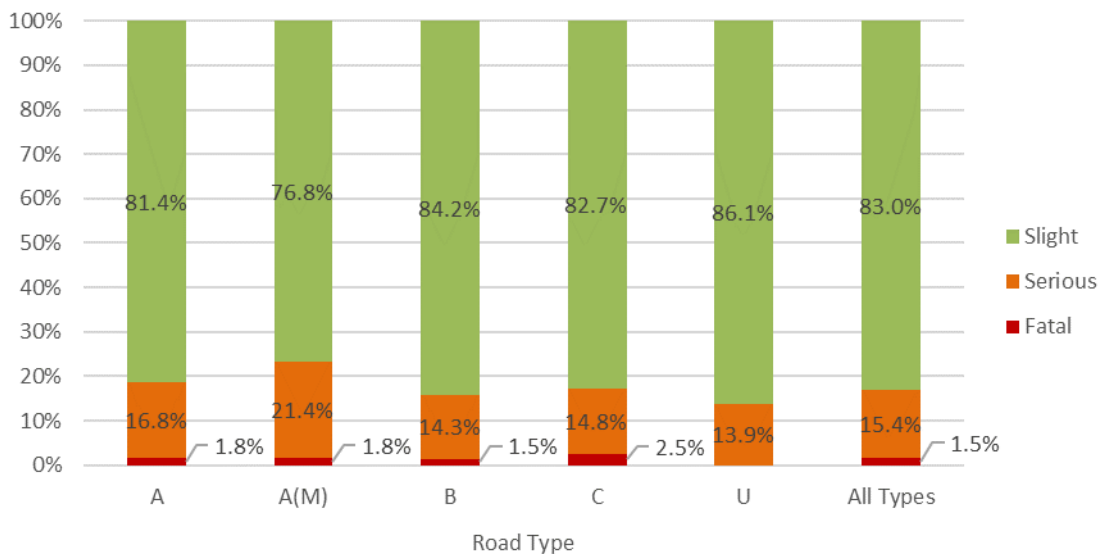
Source: Cambridgeshire County Council / Department for Transport

3.5.2 Accident Severity by Road Type

Figure 22 shows the distribution of accident severity by road type. This figure shows:

- A higher than average distribution of fatal accidents on A, A(M) and C roads
 - this is likely related to the higher speeds on A and A(M) roads
- A higher than average distribution of serious accidents on A and A(M) roads
 - again, this is likely related to the higher speeds on A and A(M) roads
- No fatal accidents on unclassified roads in the assessed period

Figure 22: Distribution of Accident Severity by Road Type



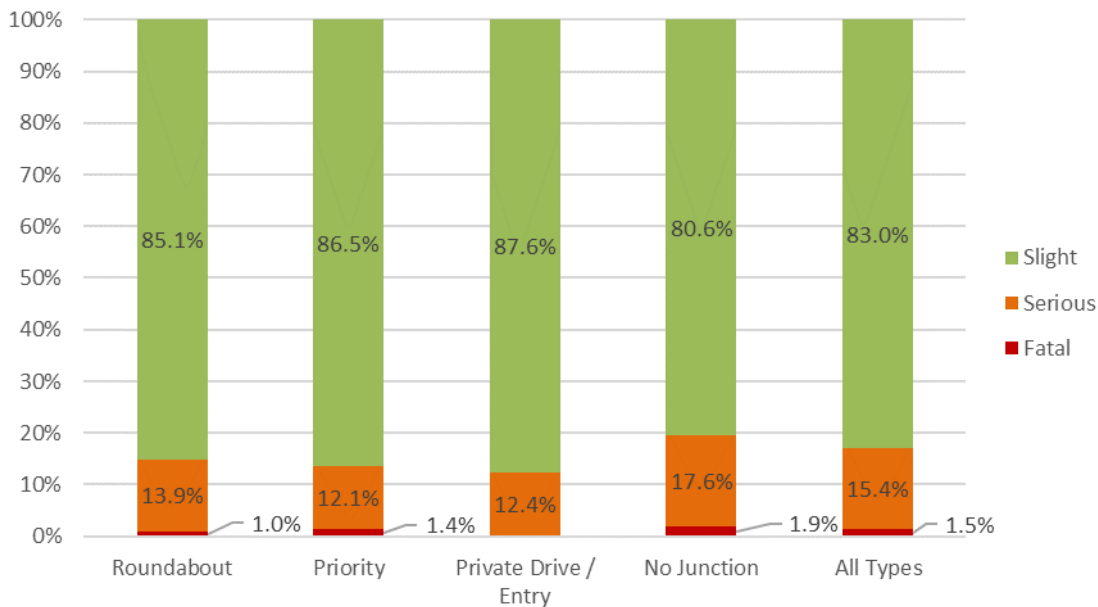
Source: Cambridgeshire County Council

3.5.3 Accident Severity by Junction Type

Figure 23 shows the distribution of accident severity by junction type. This figure shows:

- A higher than average distribution of fatal and serious accidents occur on links ('no junction')
 - this is likely to be related to the higher speeds which take place between junctions
- A lower than average distribution of fatal and serious accidents occur at roundabouts and priority junctions

Figure 23: Distribution of Accident Severity by Junction Type



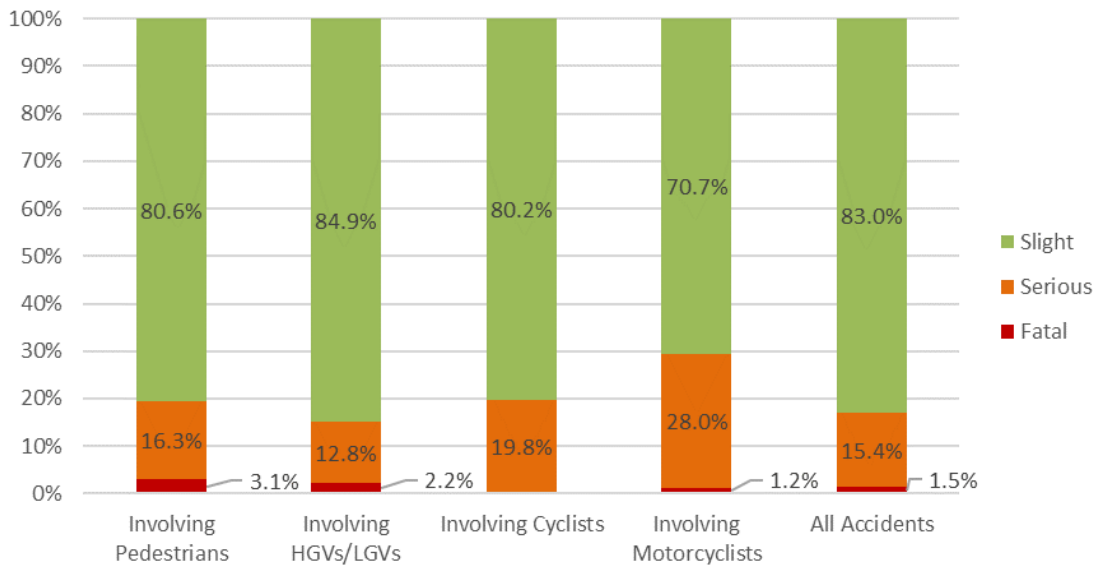
Source: Cambridgeshire County Council

3.5.4 Accident Severity by Vehicle Type

Figure 24 shows the distribution of accident severity by vehicle type involved. This chart shows:

- There were no fatal accidents involving cyclists
- Fatality rates for accidents involving pedestrians are higher than average (3.1% as opposed to a 1.5% average)
- Serious accident rates involving motorcyclists and cyclists are higher than average, showing their vulnerability as road users
- Fatality rates for accidents involving HGVs and LGVs are higher than average, though this level of severity is likely incurred by the other party

Figure 24: Distribution of Accident Severity by Vehicle Type Involved

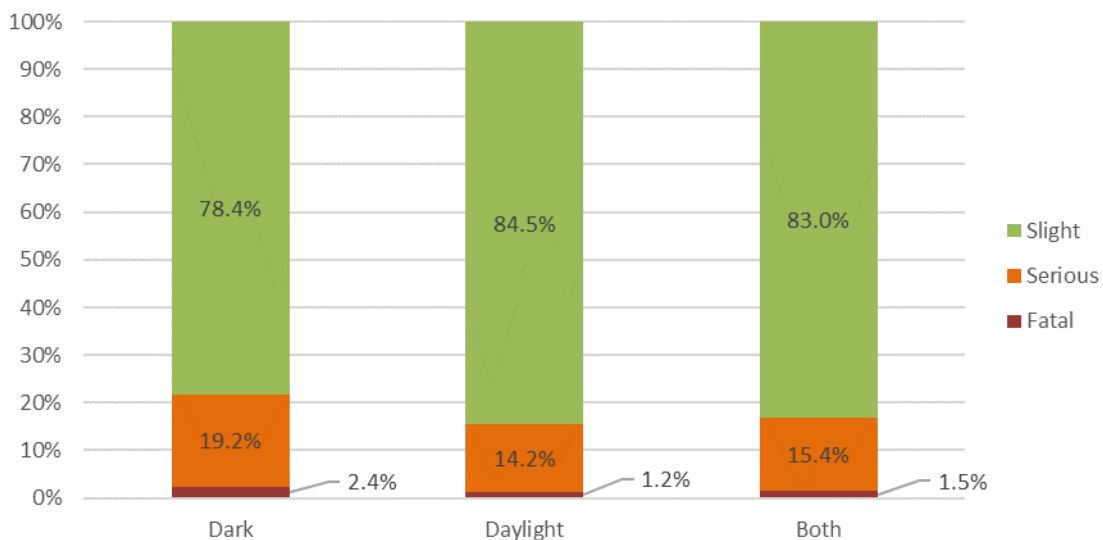


Source: Cambridgeshire County Council

3.5.5 Accident Severity by Light Conditions

Of the total accidents recorded (2,027), 76% occurred in daylight (1,537 accidents) and 24% in dark conditions (490 accidents). Figure 25 shows the distribution of accident severity by light conditions. This chart shows an increase in the average severity of accidents between daylight and night-time conditions.

Figure 25: Distribution of Accident Severity by Light Conditions



Source: Cambridgeshire County Council

3.6 Highway Network Summary

A summary of the highway network from this chapter is as follows:

- **Functionality**
 - Huntingdonshire is well connected to the national and regional strategic road network, mainly via the A1 (M), A1 and A14
 - The most rural parts of the district are reasonably remote from the main strategic road network, reducing their accessibility by personal and public transport
- **Traffic Flows**
 - The highest traffic flows are on the A1(M) between Huntingdon and Peterborough in the north of the district
 - The A14 south of Huntingdon carries high flows, as well as the A1 near St Neots
 - There is a very high concentration of HGVs on the A14 in particular
- **Traffic Delay**
 - The largest delays can be observed on the A14 eastbound towards Cambridge, on the A141 around Huntingdon and on the A1123 between Huntingdon and St Ives
 - Delays also occur on the A428 between St Neots and the district's eastern boundary as well as on the A1096 and A605
 - The B1044, B1428 and B1514 face particularly heavy delays in the AM and PM peak
- **Road Safety**
 - 11% of traffic accidents involved cyclists but 92% involved pedestrians
 - No accidents involving cyclists were fatal, five involving pedestrians were fatal
 - The largest concentrations of accidents occur in the main settlements, particularly Huntingdon, St Ives and St Neots
 - The highest proportion of serious accidents involved pedestrians or motorcyclists
 - 76% of accidents occurred in daylight and 24% in dark conditions, with a higher proportion of serious or fatal accidents in dark conditions

4 Public Transport Network

4.1 Introduction

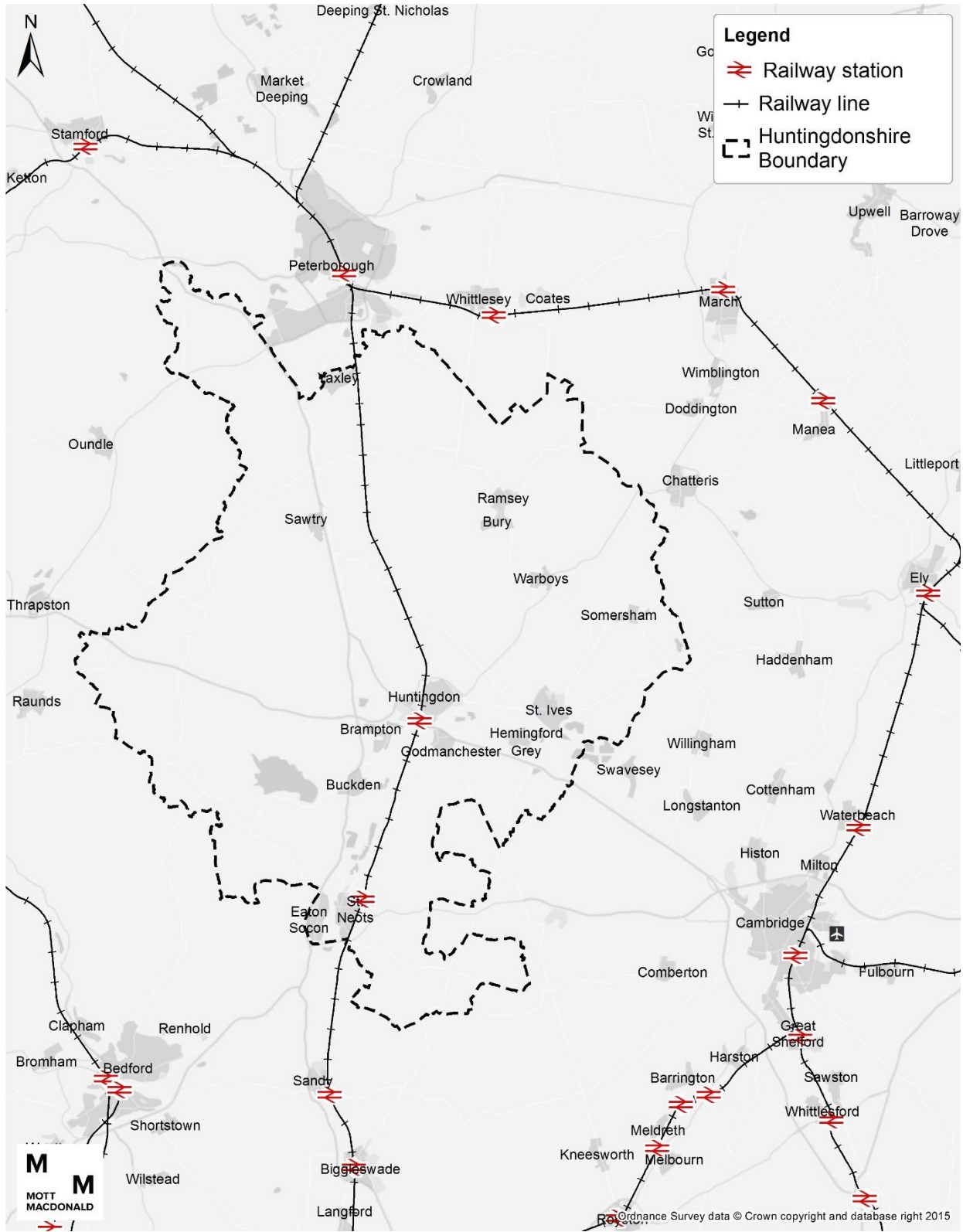
This section provides a review of the various public transport networks currently available in and around Huntingdonshire for trip options using existing facilities and services.

4.2 Rail

4.2.1 Overview

Huntingdonshire has two rail stations; Huntingdon and St Neots, as illustrated in Figure 26. Thameslink Great Northern operate services between Peterborough and London Kings Cross via the two stations, with further onward connections available by interchange, particularly at Peterborough. A summary of service frequency is provided in Table 6.

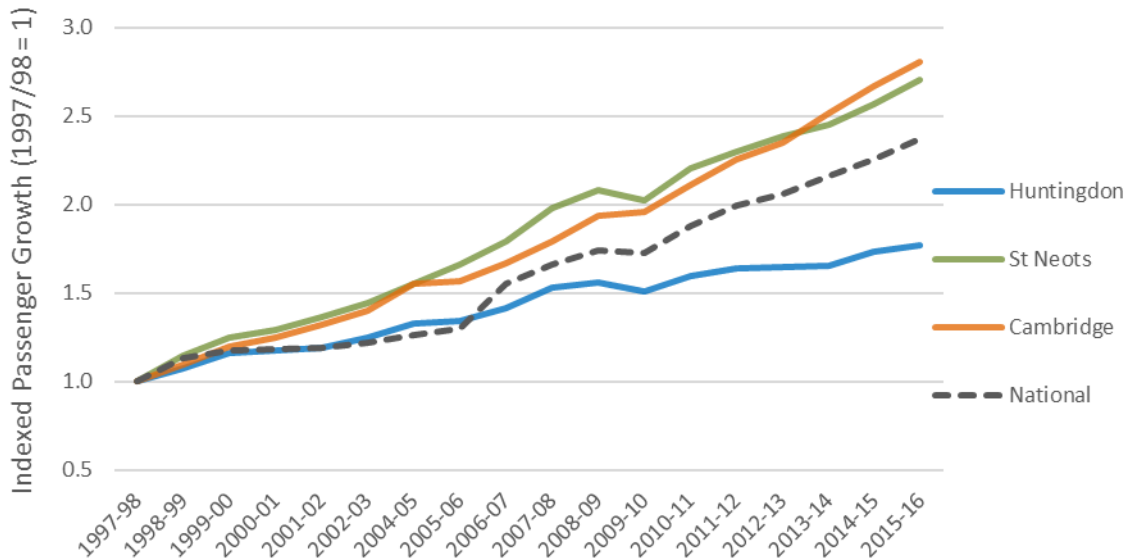
Figure 26: Regional Rail Network Huntingdonshire



Source: Mott MacDonald & Ordnance Survey, 2016

Using data provided by the Office of Rail and Road, Figure 30 summarises the station usage between the periods 1997/98 to 2015/16. The statistics compare all entries and exits to and from Huntingdon and St Neots railway stations, comparing these nationally and to Cambridge.

Figure 30: Indexed Growth in Rail Passenger Throughput



Source: <http://orr.gov.uk/statistics/published-stats/station-usage-estimates>

The data shows that there has been a significant increase in rail travel to and from St Neots in the assessed period. Passenger growth at Huntingdon though is lower than the national average. In the 2015/16 period, there were 1,805,500 and 1,340,500 passengers at Huntingdon and St Neots respectively.

Table 6 outlines the frequency of the rail services provided between Huntingdon / St Neots and Kings Cross / Peterborough. The table shows that a frequent service is operated on both routes on weekdays, and a less frequent service is operated on Saturdays and Sunday.

Table 6: Rail Services from Huntingdon and St Neots

| Route | Frequency | | |
|--------------------------------------|--|------------------|------------------|
| | Mon-Fri | Sat | Sun |
| Huntingdon / St Neots – Kings Cross | Up to 5 services per hour at peak times (2 services per hour off-peak) | Every 30 minutes | Every 60 minutes |
| Huntingdon / St Neots - Peterborough | Up to 3 services per hour at peak times (2 services per hour off-peak) | Every 30 minutes | Every 60 minutes |

Source: Thameslink Great Northern/ National Rail website

Table 7 shows the journey times from Huntingdon and St Neots to key destinations via rail. The journey time of around an hour to London from the two stations in Huntingdonshire makes London accessible as a commuting location, as shown in Figure 13 (1,329 people commute to London from the District).

Table 7: Summary of Timetabled Rail Journey Durations

| From | To | Journey Time ² |
|------------|--------------------|---------------------------|
| Huntingdon | London Kings Cross | 1 hour 3 minutes |
| Huntingdon | Peterborough | 16 minutes |
| St Neots | London Kings Cross | 55 minutes |
| St Neots | Peterborough | 24 minutes |

Source: Thameslink Great Northern/ National Rail website

4.2.2 Huntingdon Station Connectivity

Huntingdon station is located south-west of the main town centre and is fully accessible with lifts to both platforms. It is well connected to the local road network via the B1514. The station currently provides extensive car parking in the form of a station car park (which currently provides 742 spaces) and private parking to the north. It should be noted that proposed highway improvements related to the A14 will result in part of the existing car park being removed. No further provision has been identified at this stage but this is understood to be subject to ongoing discussions.

There is a bus stop available at the station which provides an interchange between bus and rail. Bus services are available from directly outside the station to Cambridge, Godmanchester and St Ives. Bus services include Busway A and B, 35, 45, 66, 400, 401, 476, 477.

The station provides storage for 212 bicycles, some of which is sheltered and is in close proximity to Strategic Cycle Routes 12 and 51. Local cycle routes around Huntingdon station are shown in Appendix B.

A taxi rank is provided outside the station.

4.2.3 St Neots Station Connectivity

St Neots station is located to the east of the town and is fully accessible with lifts to all platforms. The station is in close proximity to the B1428 which connects to the town centre. The station is well connected by road, being within a five-mile radius of the A1 and A428. The station provides extensive parking for 349 vehicles and storage for 152 bicycles (some of which is sheltered).

Two bus stops are also located close to the station, providing services to the town centre, Eaton Ford, Eaton Socon, Loves Farm, Cambridge and Eynesbury. Bus services provided include the 61, 63, 150 and S14. Further to this, the X5 service operated by Stagecoach runs from Cambridge to Oxford via key locations including St Neots (with a stop on Cambridge Street, 600m south of the railway station).

A taxi rank is also provided at the main access to the station. There are no Strategic Cycle Routes located in the vicinity of the station, although local traffic-free cycle routes connect to Strategic Cycle Route 12 (see Appendix B).

4.2.4 Onward Connections

Important interchange options are available at Peterborough from where longer distance connectivity via other routes is possible. This includes north-south destinations via the East Coast Main Line, and east-west services including to Birmingham and beyond via Cross-Country services.

² Based upon fastest train to destination (National Rail)

4.3 Busway

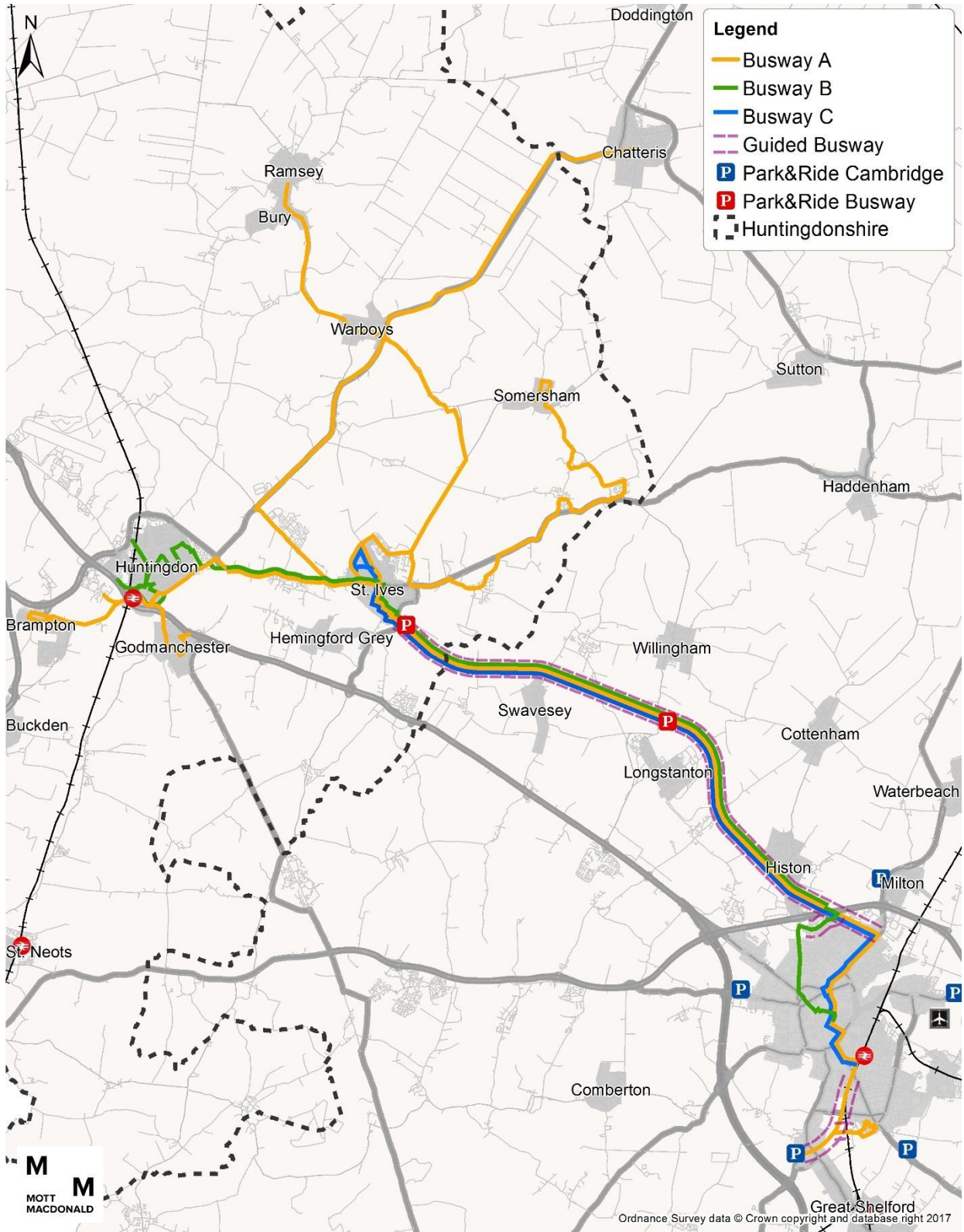
Three guided busway services operate in Huntingdonshire. The guided busway network is a fast, high quality public transport route that provides excellent connections from Huntingdonshire, as illustrated in Figure 31. Two guided sections make up 16 miles of the guided busway network, with services operating on-highway on the rest of the highway network. The guided section most relevant to Huntingdonshire operates between St Ives Park and Ride site and Milton Road (Cambridge North rail station) in Cambridge.

Key destinations along the busway include:

- Huntingdon and Huntingdon railway station (on highway)
- Somersham (on highway)
- St Ives (on highway)
- St Ives Park and Ride (guided section)

There were 3.65 million bus passenger journeys on the busway during 2015, a 3% increase compared to 2014 (Cambridgeshire County Council, 2015).

Figure 31: Busway Services



Source: Mott MacDonald / www.thebusway.info

Table 8 provides a summary of the Busway service timetable for services operating to and from Huntingdonshire.

Table 8: Busway Services

| Route | Operator | Frequency |
|--|----------------------------|---|
| Route A: Trumpington, Cambridge, St Ives, Huntingdon, Brampton, Buckden, Wyton, Ramsey, Godmanchester, St Ives, Chatteris, Somersham | Stagecoach in the Fens Ltd | Mon – Sat: every 15-30 minutes (although more limited service in some locations, e.g. Brampton, Buckden and Godmanchester) Sunday: no services |
| Route B: Cambridge, St Ives, Godmanchester, Huntingdon, Sawtry, Peterborough | Stagecoach in the Fens Ltd | Mon – Sat: every 15-60 minutes Sun: every 20 minutes |
| Route C: St Ives, Cambridge Regional College, Central Cambridge, Cambridge rail station | Whippet Coaches Ltd | Mon – Sat: every 20-30 minutes at peak morning hour and every 60 minutes thereafter Sun: every 60 minutes |

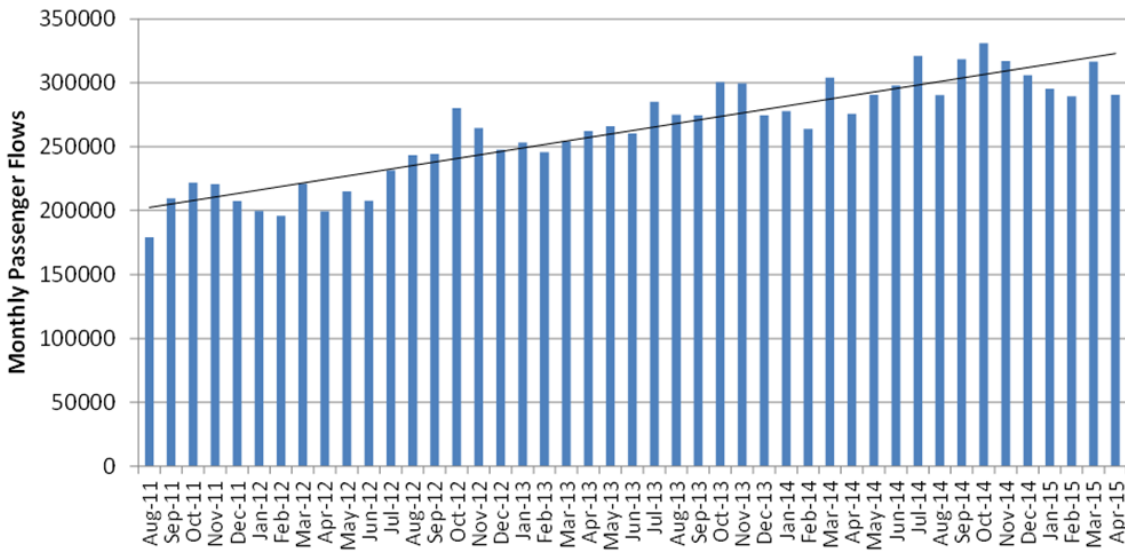
Source: www.thebusway.info

Based upon the routes identified in Table 8, timetabled journey times between key destinations are as follows:

- Between Huntingdon Rail Station and St Ives Park and Ride: from 40 minutes
- Between Huntingdon Rail Station and Central Cambridge (New Square stop): from 1 hour 12 minutes
- Between St Ives Town Centre (Marley Road stop) and Central Cambridge (New Square stop): from 45 minutes
- Between St Ives Park and Ride and Central Cambridge (New Square stop): from 30 minutes

In terms of patronage, 3.65 million passengers used the guided busway in Cambridgeshire in 2015 (Cambridgeshire County Council, 2015). Figure 33 shows the total monthly patronage of Stagecoach services on the busway since the service began in August 2011. There has been a steady growth in patronage, with average patronage flows in 2015 over 50% higher than when the service opened, and a 3% increase in patronage between 2014 and 2015. However, it should be noted that only four months' worth of data for 2015 is shown in Figure 33. Services are also operated by Go-Whippet in addition to those provided by Stagecoach.

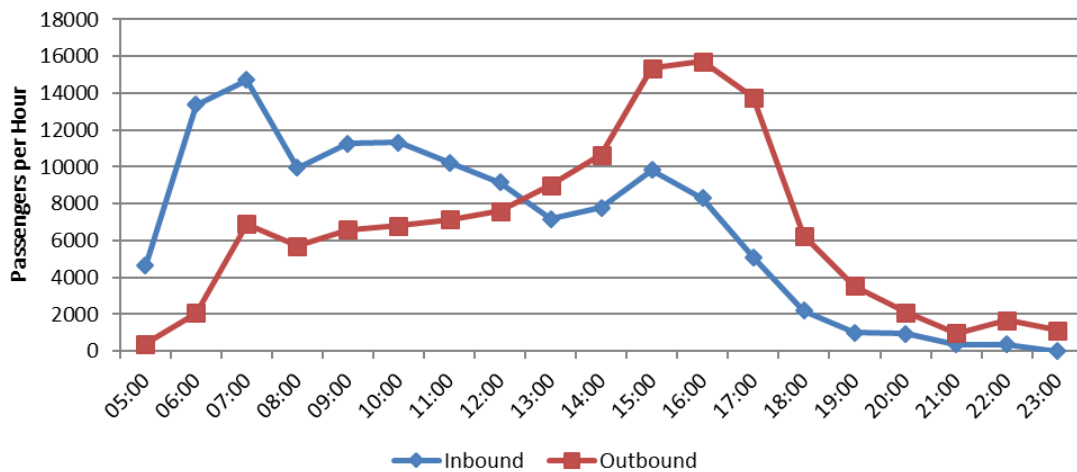
Figure 33: Busway Monthly Patronage, August 2011 to April 2015



Source: Stagecoach / Cambridgeshire County Council data

Figure 34 shows the average daily profile for busway usage, where inbound refers to services towards Cambridge City Centre. As would be expected, demand is tidal with the greatest demand inbound (towards Cambridge City Centre) in the AM peak and the greatest outbound is in the PM peak from Cambridge City Centre towards Huntingdonshire.

Figure 34: Total Monthly Inbound / Outbound Trips by Time-Period



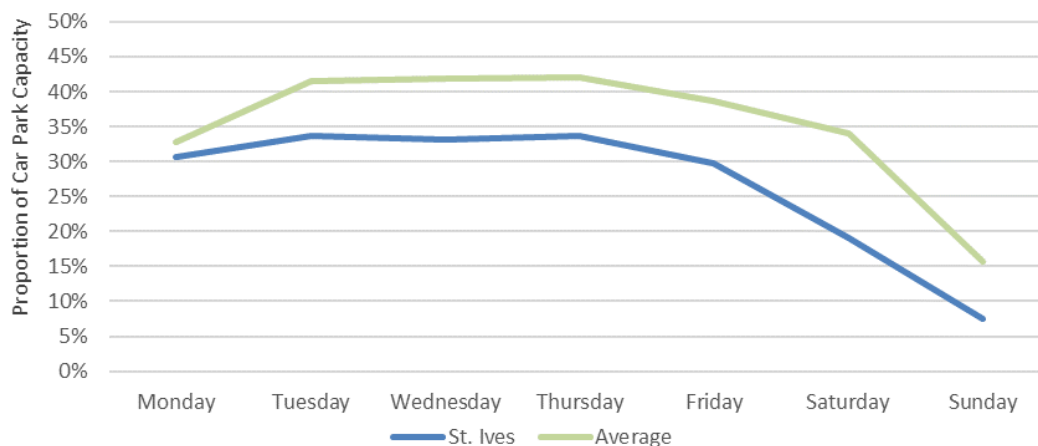
Source: Stagecoach / Cambridgeshire County Council data

4.4 Park & Ride

A significant sized car park is provided at St Ives from where connections via the Cambridgeshire Guided Busway are available. The site has 1,000 spaces, including a number with electric vehicle charging points.

Figure 35 below shows the average maximum car park occupancy per day of the week at St Ives P&R site, and an average of the seven P&R sites across Cambridgeshire³. The St Ives site has significant reserve capacity, with a maximum of 30-34% utilisation during the week and as low as 7% at the weekend (Sunday). This under-utilisation means there is headroom for further growth at the St Ives P&R site.

Figure 35: Average Maximum Car Park Occupancy (April, 2016)



Source: Stagecoach / Cambridgeshire County Council data

4.5 Bus / Coach

Huntingdonshire is served by a local bus network with services providing a range of destinations and frequencies. The main operators within Huntingdonshire are Stagecoach and Go Whippet, and route maps are shown in Appendix A.

Stagecoach also operates the 'X5' service which runs from Cambridge to Oxford via key locations including St Neots (serving stops on Cambridge Road near the Station Road junction and within the town centre on High Street).

Further to the local and regional bus services operating within Huntingdonshire, National Express operate coach services from Huntingdon Bus Station. These are summarised as follows:

- 349 – Stansted Airport to Nottingham
- 448 – Hull to London

Table 8 outlines the bus services that are provided in Huntingdonshire and their frequency. In summary, there are a number of local bus services operating in the area; however, many of them are infrequent and only operate on specific days. The exceptions are:

- X5 - Cambridge – Bedford – Milton Keynes – Oxford (daily 15 – 30 minutes 06:20-23:30)
- 477 – Huntingdon – Godmanchester (Mon – Sat: every 30 to 60 minutes 09:27-18:05)
- 16 – Huntingdon - Oxmoor Circular (Mon - Fri: every 30 minutes 09:30-14:00)
- 61/63 - Eynesbury - St Neots - Eaton Socon Circular (Mon – Fri: every 30 – 60 minutes 09:00-19:19, Sat: four services 09:13-16:13)

³ Seven sites include: Babraham, Maddingley, Milton, Newmarket, Trumpington, Longstanton and St Ives

The most frequent services are to the key service centres of Huntingdon and St Neots, whilst there is also good connectivity to Cambridge from St Ives (both via regular buses and the guided bus).

Bus services to St Ives and Ramsey have been identified from to be in need of improvement. In particular, there are large service gaps in rural areas, with many services only running once or twice daily (although the whole District benefits from Community Transport coverage and at least one service per day between Monday and Friday). This is mirrored in the high figures for car ownership in the most rural parts of Huntingdonshire.

Table 9: Bus Services in Huntingdonshire

| Service | Operator | Frequency |
|--|---|--|
| 1 – Cambourne – Papworth – Fenstanton – St Ives | Whippet Coaches Ltd | Mon-Fri: one service @ 12:58 Sat: one service @ 08:35 |
| 1A – Cambridge - St Ives | Whippet Coaches Ltd | Mon – Sat: every 60 minutes 10:15-19:05 |
| 3 – Cambridge - Papworth Everard - Huntingdon | Whippet Coaches Ltd | Mon – Sat: every 60 minutes 09:05-18:20 |
| 5 – St Ives – Hemingford Grey – Hemingford Abbots | Whippet Coaches Ltd | Mon – Sat: four services 07:25-18:00 |
| 6 - St Neots - Papworth Everard - Hilton | Whippet Coaches Ltd | Mon-Fri: one service @ 13:25 |
| 9 – St Ives – Conington - Elsworth | Whippet Coaches Ltd | Mon-Fri: one service @ 12:10 |
| 12 – St Ives Town Circular | Whippet Coaches Ltd | Mon – Fri: every 60 minutes 09:55-13:55 |
| 15 – St Ives – Swavesey - Over | Whippet Coaches Ltd | One service Monday and Friday @ 12:15 |
| 16 – Huntingdon - Oxmoor Circular | Whippet Coaches Ltd | Mon - Fri: every 30 minutes 09:30-14:00 |
| 21 – St Ives – Earith – Somersham - Ramsey | Whippet Coaches Ltd | Mon – Fri: three services 12:05-17:05 |
| 22 – St Ives – Warboys | Dews Coaches Ltd | Mon – Fri: two services @ 11:00 and 13:00 Sat: two services @ 11:45 and 14:45 |
| 28 – St Neots - Cambourne - Gamlingay | Hunts Association for Community Transport | Mon – Sat: two services @ 15:50 and 17:26 |
| 30 – Huntingdon - Ramsey | Stagecoach in the Fens Ltd | Mon – Sat: every 40 to 70 minutes 08:20-17:45 |
| 31 – Peterborough – Whittlesey - Ramsey | Stagecoach Ltd | Mon – Fri: seven services 06:35-18:20 Sat: six services 10:05-18:05 |
| 35 – March - Chatteris - Huntingdon | Stagecoach in the Fens Ltd | Mon – Sat: every 60 to 135 minutes 06:47-16:07 |
| 45 - Huntingdon - St Ives | Whippet Coaches Ltd | Mon-Fri: once daily @ 18:50 |
| 45A – Huntingdon – Houghton – St Ives | Whippet Coaches Ltd | Mon – Fri: every 120 minutes 10:00-14:00 |
| 46A – Hampton - Stilton - Sawtry - The Alconburys - Huntingdon | Hunts Association for Community Transport | Mon – Sat: every 150 minutes 10:55-15:55 |
| 61/63 - Eynesbury - St Neots - Eaton Socon Circular | Whippet Coaches Ltd | Mon – Fri: every 30 – 60 minutes 09:00-19:19 Sat: four services 09:13-16:13 |
| 62 - Eynesbury - St Neots - Eaton Socon Circular | Whippet Coaches Ltd | Mon – Fri: six services 10:00-15:55 Sat: four services 10:10-15:10 |
| 65 – St Neots – The Offords - Buckden | Hunts Association for Community Transport | Mon – Fri: three services 09:19-12:14 |
| 66 – Huntingdon - St Neots | Stagecoach in the Fens Ltd | Mon – Sat : every 60 minutes 07:15-17:30 |
| 150 - St Neots - Kimbolton - Tilbrook | Hunts Association for Community Transport | Mon – Sat: four services 09:14-17:24 |

| Service | Operator | Frequency |
|--|---|---|
| 400 – Huntingdon - Catworth - Grafham | Whippet Coaches Ltd | Mon-Fri: four services 10:40-17:40 |
| 401 – Huntingdon - Spaldwick - Grafham | Whippet Coaches Ltd | Mon-Fri: two services @ 09:00 and 12:30 |
| 476 – Godmanchester - Huntingdon - Ermine Business Park | Whippet Coaches Ltd | Mon-Fri: two morning and two evening services 06:58-19:08 |
| 477 – Huntingdon - Godmanchester - Huntingdon | Whippet Coaches Ltd | Mon – Sat: every 30 to 60 minutes 09:27-18:05 |
| RH2 – Upwood - Ramsey | Ramsey and District Community Bus Association | Fri: one service @ 08:43 |
| RH3 – Huntingdon - Upwood | Ramsey and District Community Bus Association Ltd | Thurs: one service @ 08:50 |
| RH5 – Ramsey – Ramsey Forty Foot | Ramsey and District Community Bus Association | Fri: one service @ 11:20 |
| VILLAGER – Felmersham – Huntingdon – St Ives | Villager Community Minibus | Third Monday of every month: one service @ 08:50 |
| C2 - St Neots - Longstowe - Orwell - Arrington - Croydon - The Hatleys | C G Myall & Son | Thurs: one service @ 13:00 |
| S14 – Sandy – Eaton Socon – St Neots – Little Paxton | Safford's Coaches | Mon-Fri: one service @ 17:20 |
| X3 – Cambridge - Papworth Everard - Huntingdon | Whippet Coaches Ltd | Mon – Fri: every 60 minutes 09:05-18:20 Sat: every 60 to 120 minutes 10:05-18:20 |
| X5 – Cambridge – Bedford – Milton Keynes - Oxford | Stagecoach Ltd | Every day: 15 – 30 minutes 06:20-23:30 |

Source: https://www.cambridgeshire.gov.uk/site/custom_scripts/bus_timetable_by_service.aspx

4.6 Public Transport Network Summary

The main findings of this section of the report are as follows:

- Frequent rail connections are available from Huntingdon and St Neots (between Peterborough and London Kings Cross) with interchange onto the wider national rail network from nearby Peterborough
- Busway services connect Huntingdon and St Ives with Cambridge and wider Cambridgeshire
- Large park and ride site available at St Ives which has significant reserve capacity throughout the week
- A mixed pattern of bus service provision ranging from reasonably high frequencies in the main settlements to relatively infrequent provision in many of the more rural areas of the District
- Limited accessibility to alternative modes of transport for those living in rural areas but better provision in, to and from, the market towns
- Bus services are subject to traffic delays as identified in Section 3.4 (the guided busway is generally subject to less delay although there are delays at junctions and where running takes place on the highway network)

5 Active Modes Network

5.1 Introduction

Huntingdonshire benefits from being home to several cycling routes which connect the key towns and villages, such as National Cycle Routes 12, 51 and 53, as shown in Figure 38. However, there is no cycling facility connecting Huntingdon and Wyton. National Cycle Route 12 is under development and when fully complete will run from Enfield Lock in north London to Spalding via Stevenage, St Neots and Peterborough. It currently connects Huntingdon and St Neots through a part traffic-free and part on-road cycle route.

Cyclists and Pedestrians also use the busway maintenance track for access to Cambridge and intermediate locations.

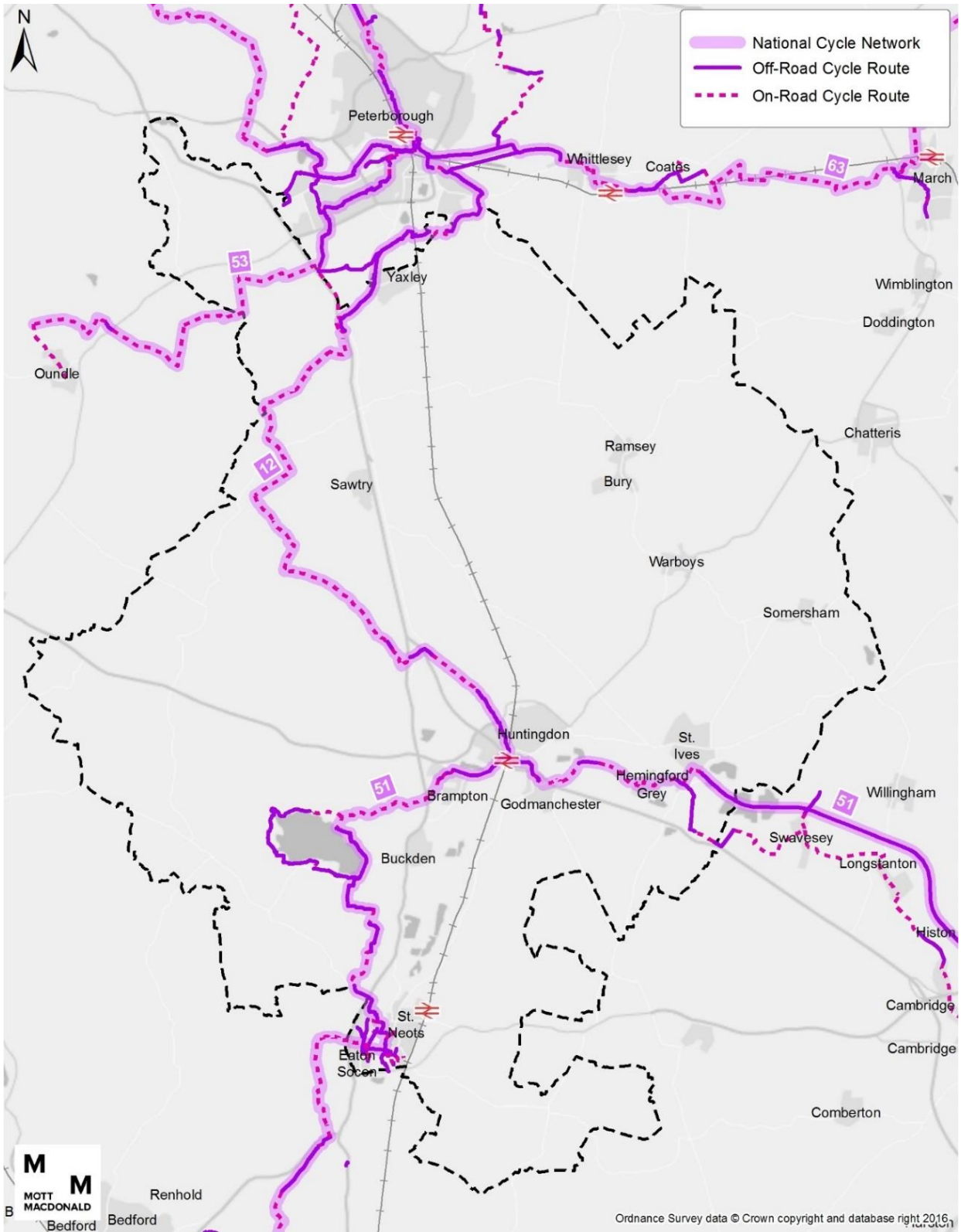
5.2 Active Modes Networks

Figure 38 shows the strategic cycle network in Huntingdonshire. It is acknowledged that the strategic cycle network will serve only *some* of any potential cycle catchment area. Local provision and connectivity can be key to facilitating more sustainable travel patterns, particularly as many cycle trips tend to be under 5 miles in length. However, extracts from County Council mapping are shown in Appendix B for information.

The local cycle maps shown in Appendix B and the national cycle routes shown in Figure 38 can be summarised as follows:

- Huntingdon / Godmanchester
 - Good local cycle routes connecting the railway station, residential areas and some of the trip-attracting land uses shown in Figure 6
 - A number of traffic free routes within Huntingdon (including much of the national cycle route which runs through Huntingdon)
 - National cycle route 51 goes through Huntingdon, Godmanchester, Brampton, Alconbury and St Ives Park and Ride (busway)
 - Local route through Wyton, although no identified route to RAF Wyton site
- St Neots
 - Good local cycle routes connecting the railway station, residential areas and some of the trip-attracting land uses shown in Figure 6
 - A number of traffic free routes within St Neots and Eaton Socon
 - Routes further afield link St Neots to other settlements such as Buckden, Little Paxton and Great Paxton
- St Ives
 - Access to national cycle network (51) at St Ives Park and Ride Site
 - Local cycle network within St Ives links many residential areas to the town centre and to the Park and Ride site
 - Traffic free local cycle route to Needingworth
- Ramsey
 - As shown in Appendix B and in Figure 38, cycle provision here is limited and there is no access to the national cycle network

Figure 38: Strategic Cycle Network in Huntingdonshire



5.3 Active Modes Performance

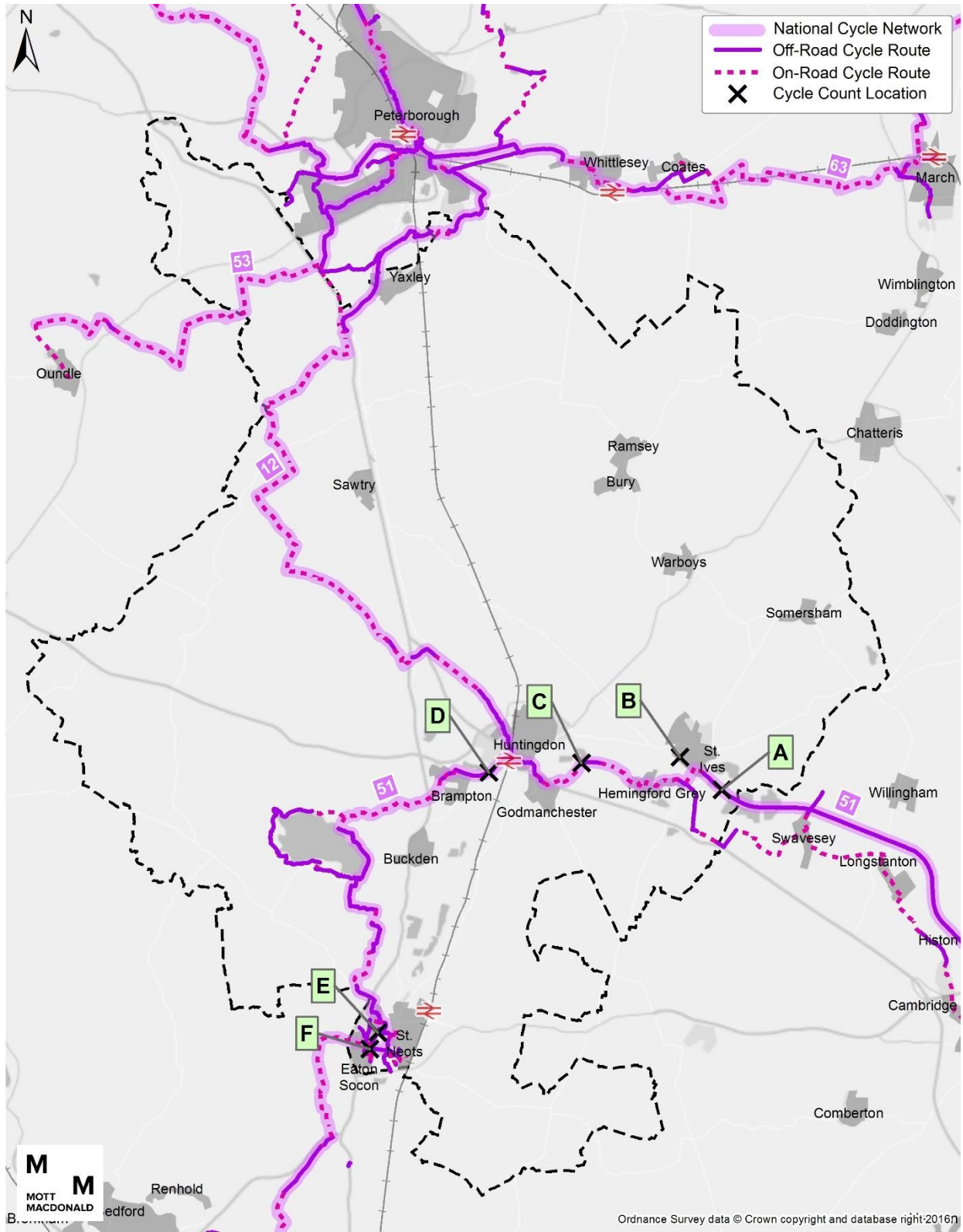
5.3.1 Cycle Flows

Figure 8 shows that 3,322 residents and employees in Huntingdonshire (4%) cycle based on Travel to Work data from the 2011 Census compared to the average for England (3%).

Data from the Department for Transport shows that 11.6% of adults in Huntingdonshire cycled at least once a week in 2013 to 2014 and 3.6% cycled at least five times per week.

Cambridgeshire County Council maintain a number of Automatic Cycle Counter (ACC) sites in Huntingdonshire and around the wider county, with the locations of the Huntingdonshire ACC sites shown in Figure 39.

Figure 39: Cycle Network and Cycle Counter Sites

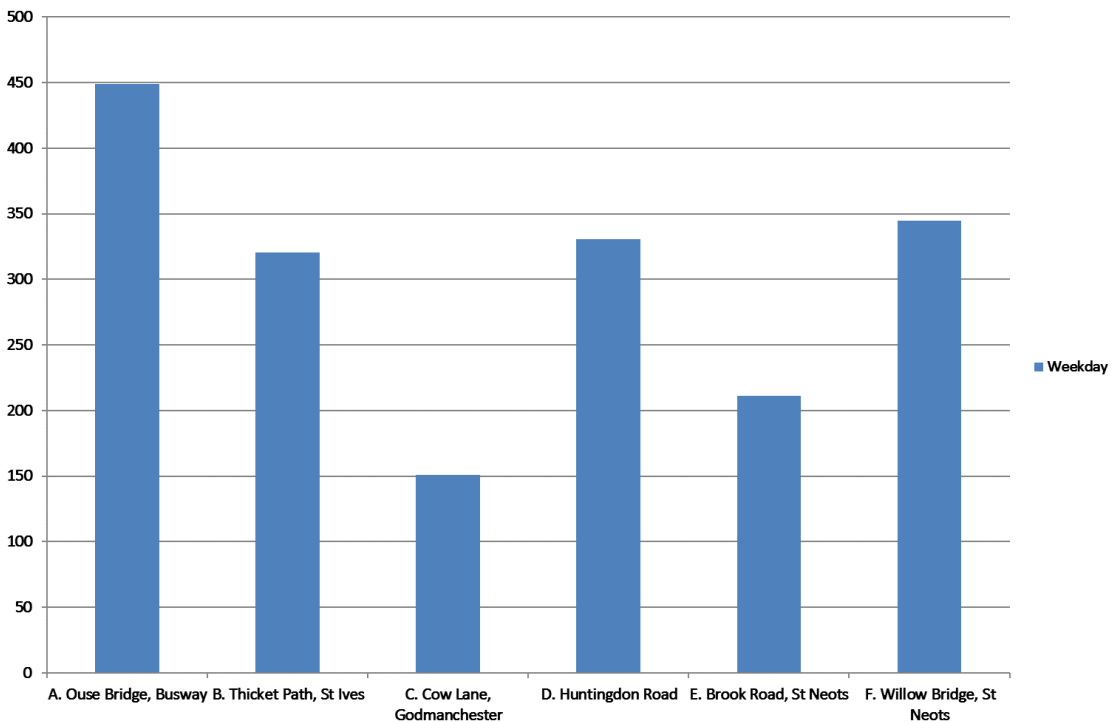


Source: Cambridgeshire County Council Data from May 2016

Figure 40 provides a breakdown of the flows registered by each counter in May 2016. The site with the largest cycle flow is at Ouse Bridge (located along the busway).

It must be noted that due to the location of the Automatic Cycle Counter on Huntingdon Road (Site D), it only counts cyclists from the village of Brampton to the west, rather than the assumed largest flow to Hinchingbrooke school (which will be from Huntingdon to the east).

Figure 40: Total weekday two-way 24 hour cycle flows (daily)



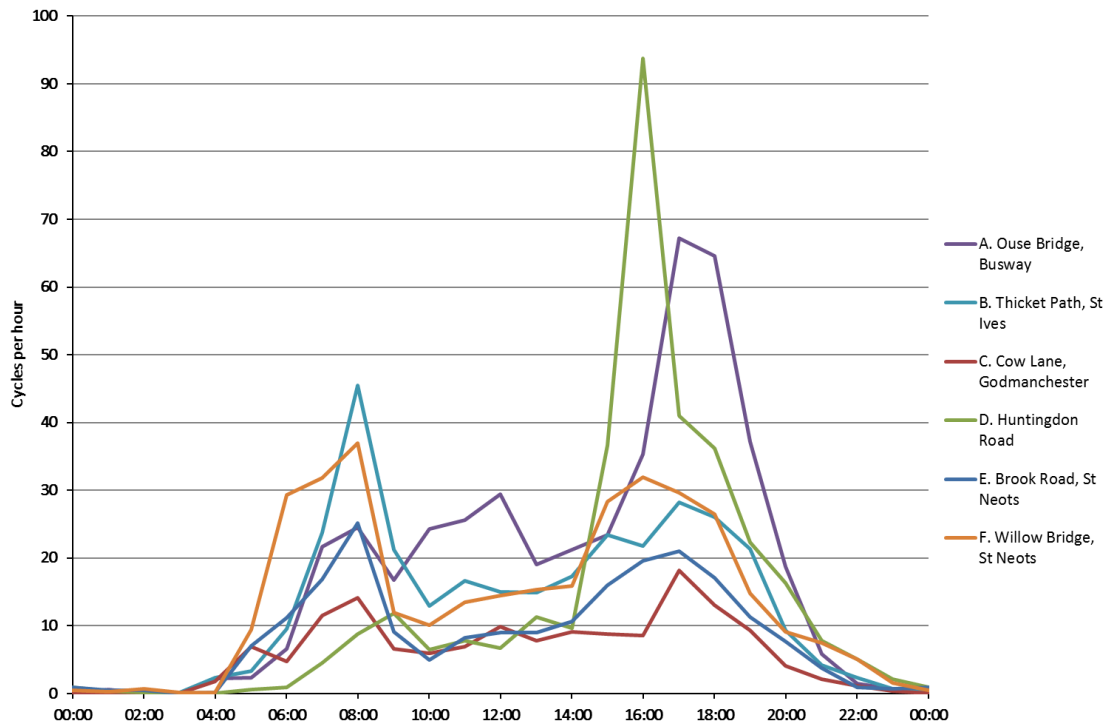
Source: Cambridgeshire County Council Data from May 2016

Figure 41 provides an outline of the hourly profile of the registered flows during the weekdays, these being the days when the transport networks are under greatest pressure and hence most important for Local Plan development. Two peaks can be observed from the figure; 06:00-08:00 and 16:00-18:00; suggesting that people are cycling to and from work at these times.

The highest count can be observed on the Huntingdon Road (D) around 16:00 when over 90 cyclists were registered.

This data gives no more than a snapshot of use at specific locations but does suggest that, where if there is direct provision for cyclists in locations and where there is potential demand, higher levels of use can potentially be achieved.

Figure 41: Automatic Cycle Counts – Weekday Hourly Profile



Source: Cambridgeshire County Council Data from May 2016

5.3.2 Cycle Safety

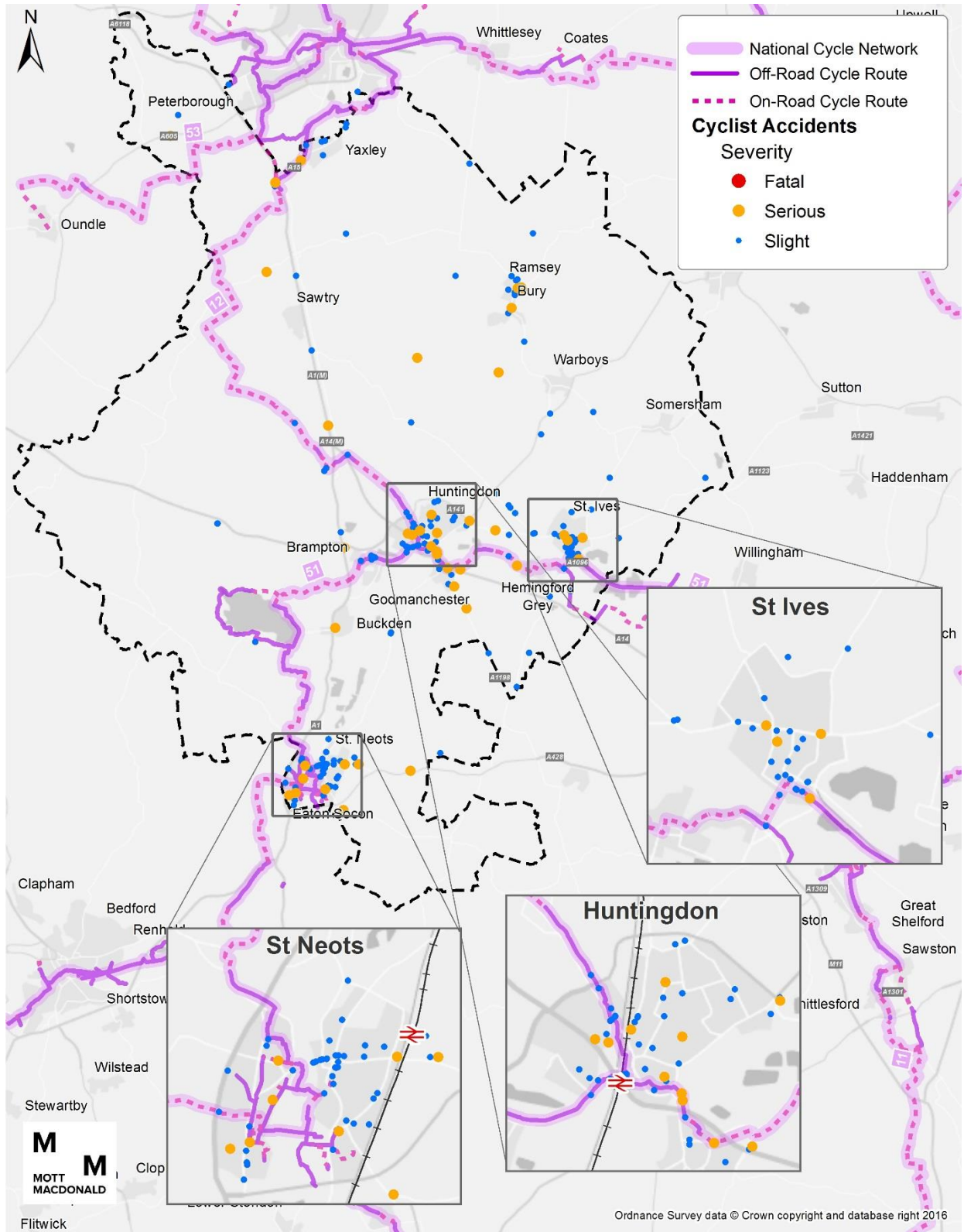
Figure 42 shows the location of all cycle accidents in Huntingdonshire between 2011 and 2015 and Table 10 shows these accidents in comparison to national statistics. No fatal accidents occurred in the area during this time period, but similar to the vehicle accidents, a high concentration of serious and slight accidents can be observed around the market towns.

Table 10: Cycle Accidents Compared to National Statistics

| Type | National | % | Huntingdonshire | % |
|---------|----------|--------|-----------------|--------|
| Fatal | 600 | 0.6% | - | 0.0% |
| Serious | 17,151 | 17.0% | 43 | 19.8% |
| Slight | 83,308 | 82.4% | 174 | 80.2% |
| All | 101,059 | 100.0% | 217 | 100.0% |

Source: Cambridgeshire County Council / Department for Transport

Figure 42: Cycle Accidents 2011-2015



Source: Cambridgeshire County Council Data

5.3.3 Pedestrian Safety

Figure 43 shows the location of all pedestrian accidents in Huntingdonshire between 2011 and 2015, and Table 11 shows these accidents in comparison to national statistics. It can be observed that a higher proportion of fatal pedestrian accidents occurred in comparison to the national statistics.

One of the fatal accidents occurred in St Ives, one in Huntingdon and none in St Neots. As shown on the Huntingdon inset, one fatal pedestrian accident occurred on the A14.

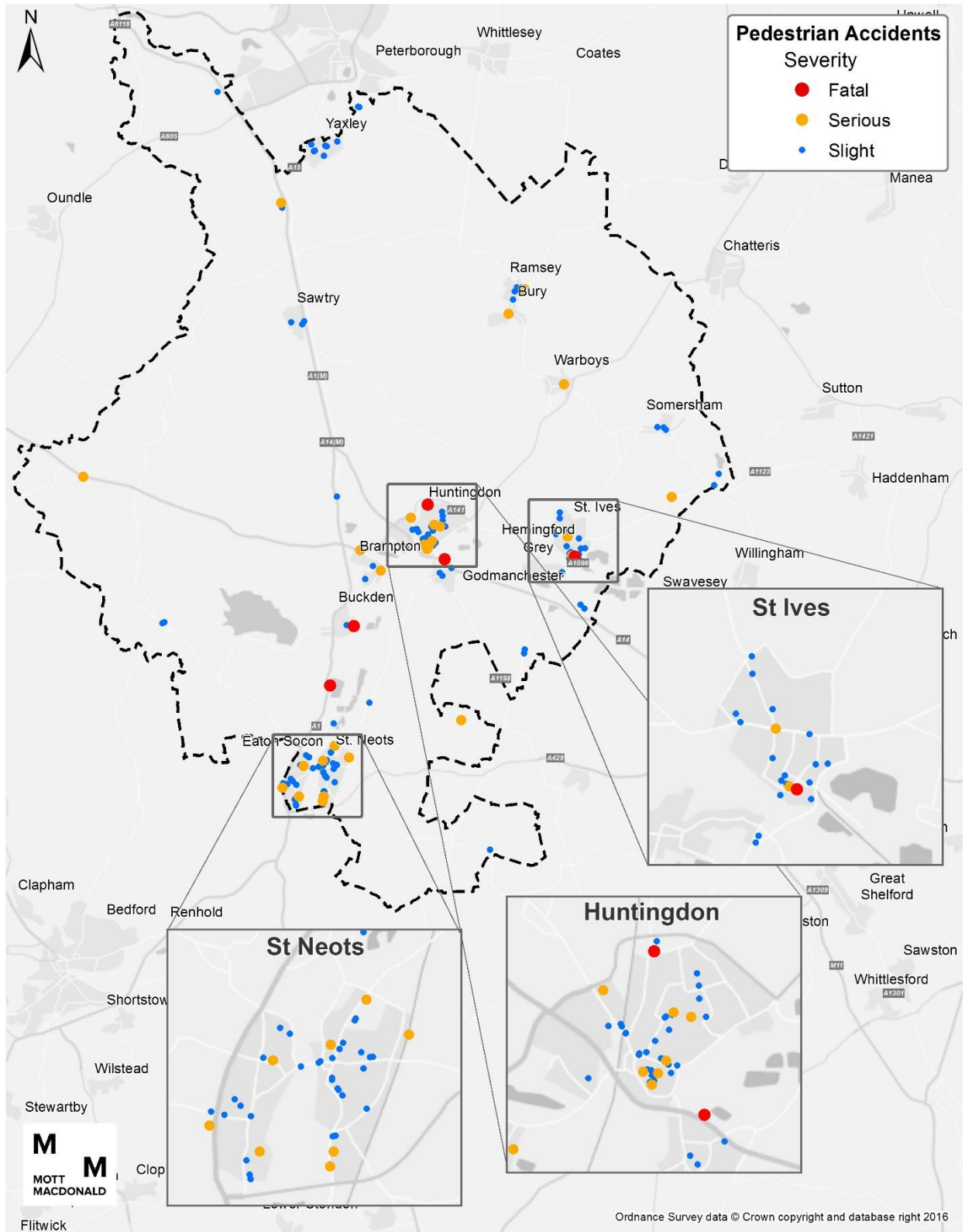
Further to this, one of the fatal accidents occurred on the A1 between Buckden and St Neots, with the other occurring within Buckden itself.

Table 11: Pedestrian Accidents Compared to National Statistics

| Type | National | % | Huntingdonshire | % |
|---------|----------|--------|-----------------|--------|
| Fatal | 2,125 | 1.7% | 5 | 3.1% |
| Serious | 26,014 | 20.9% | 26 | 16.3% |
| Slight | 96,119 | 77.4% | 129 | 80.6% |
| All | 124,258 | 100.0% | 160 | 100.0% |

Source: Cambridgeshire County Council Data / Department for Transport

Figure 43: Pedestrian Accidents 2011-2015



5.4 Active Modes Network Summary

- Active Mode Networks:
 - The Strategic Cycle Route Network connects St Neots, Huntingdon and St Ives with the northern part of the district up to Yaxley
 - Much more extensive local cycle route network, as shown in Appendix B. This shows a number of local cycle routes within Huntingdon and St Neots, with links to local villages
 - Cycle provision in Ramsey is limited and there is no immediate access to the national cycle network
- Active Mode Performance:
 - Percentage of fatal or seriously injured cyclists lower than national rate
 - Higher proportion of pedestrian accidents resulted in fatalities when compared to national levels
 - The vast majority of accidents involving active modes occur in the market towns of Huntingdon, St Ives and St Neots

6 Baseline Summary

6.1 Study Background

- The District is well-placed with respect to the strategic rail network with stations available at Huntingdon and St Neots from where access to London and Peterborough, providing interchange for a wide range of other destinations, is possible.
- The District is also generally well-placed with respect to the strategic highway network with the A428 and A14 providing east-west connectivity and the A1/ A1(M) providing north-south links with the national networks. The north east of the District is less well connected to the trunk road network.
- The District has a current population of 175,000. The population increased steadily between 2009 and 2013 at a rate greater than the East of England region as a whole but the rate of growth has more recently reduced to around the regional average.
- The majority of jobs in the District are located in the market towns. The number of jobs in the District declined by more than 2% between 2010 and 2011. This coincided with an estimated 3% increase in population over the same period.
- Car ownership levels are high across the District. Car ownership levels in the four market towns are lower than the District's average.

6.2 Function and Performance Summary by Mode

6.2.1 Demand

- Motorised vehicles dominate travel in the District with less than 20% of journeys to work being made by sustainable travel modes (active travel and public transport).
- The District-wide modal shares have remained constant between 2001 and 2011 with little net change over this period. However, there has been a trend of reduced car mode shares for journey to work trips originating in, and destined for, central Huntingdon.
- Although rail accounts for around 4% of journey to work trips to/from the District, there has been significant growth in travel via both Huntingdon and St Neots stations over the past 10 years.
- A significant proportion of Huntingdon residents work outside the District with Peterborough, South Cambridgeshire, and Cambridge being key job locations.
- There is also an important, but lower scale demand, for inbound commuting trips into the District with around one third of jobs within Huntingdon being occupied by residents from elsewhere; Peterborough, South Cambridgeshire and Fenland are the most important external home locations.
- There is a mixed pattern of trip attractors across the District but, as would be expected, office, industrial and retail provision is concentrated in the market towns.

6.2.2 Highway Network

- As noted above, the District is well located with respect to the strategic highway network with the A14 providing east-west connectivity and the A1 providing north-south connectivity. The north east of the District is less well connected to the trunk road network with many settlements, including the market town of Ramsey, having connections to the strategic network via B roads and minor roads.

- There are significant traffic flows in the District, particularly on the trunk road network with daily flows of 60-70,000+ vehicles observed on both the A1 and the A14.
- There has been a significant increase in vehicle traffic on the A14 and A1 west of Huntingdon (up to 40% between 2005 and 2015). In addition, a high increase in vehicle traffic can be observed on the A1 and A428 around St Neots (up to 32%).
- Significant delays can be observed on the A14 eastbound towards Cambridge (particularly in the AM Peak), on the A141 around Huntingdon and on the A1123 between Huntingdon and St Ives.
- There is a high proportion of HGVs on the A14 (up to 21% HGVs on A14, west of A1) and generally a low proportion of HGVs on non-primary routes.

6.2.3 Public Transport Network

- Frequent rail connections are provided by Thameslink Great Northern from Huntingdon and St Neots between Peterborough and London Kings Cross with further onward connections available by interchange at those two stations.
- The Cambridgeshire Guided Busway operates in Huntingdonshire and provides three, frequent and high quality, services into and out of Cambridge. Elsewhere in the District, bus services are relatively infrequent with provision being focussed on the market towns, and via the X5 longer distance Cambridge to Oxford service serving St Neots in the south of the District.
- Due to the commercial nature of many bus operations, obtaining data on patronage levels can be difficult; however, bus patronage on the Cambridgeshire Guided Busway as a whole has increased by 50% from opening in 2011 to 2015 (the most recent period for which data is available).
- The most frequent bus services are to the key service centres of Huntingdon and St Neots.

6.2.4 Active Modes Network

- Huntingdonshire is home to several national cycling routes which connect the key towns and villages, such as National Cycle Routes 12, 51 and 53.
- A number of local cycle routes are provided within Huntingdon and St Neots, with a more limited network in St Ives. All three settlements though have good connections onto the strategic cycle network.
- Cycle provision in Ramsey is limited and there is no access to the national cycle network
- A higher proportion of pedestrian accidents that occurred in Huntingdonshire resulted in fatalities when compared to national levels.
- No fatal accidents involving cyclists occurred over the assessed period.

6.3 Conclusion

This baseline report provides an overview of transport issues in Huntingdonshire. The report has examined how the transport network in Huntingdonshire operates and performs, looking at sustainable transport availability and connectivity, together with details of the District's highway network including usage, congestion and accidents.

This analysis provides important transport context for the development of the Local Plan and has been used to support the further model-based analysis undertaken to assess development options.

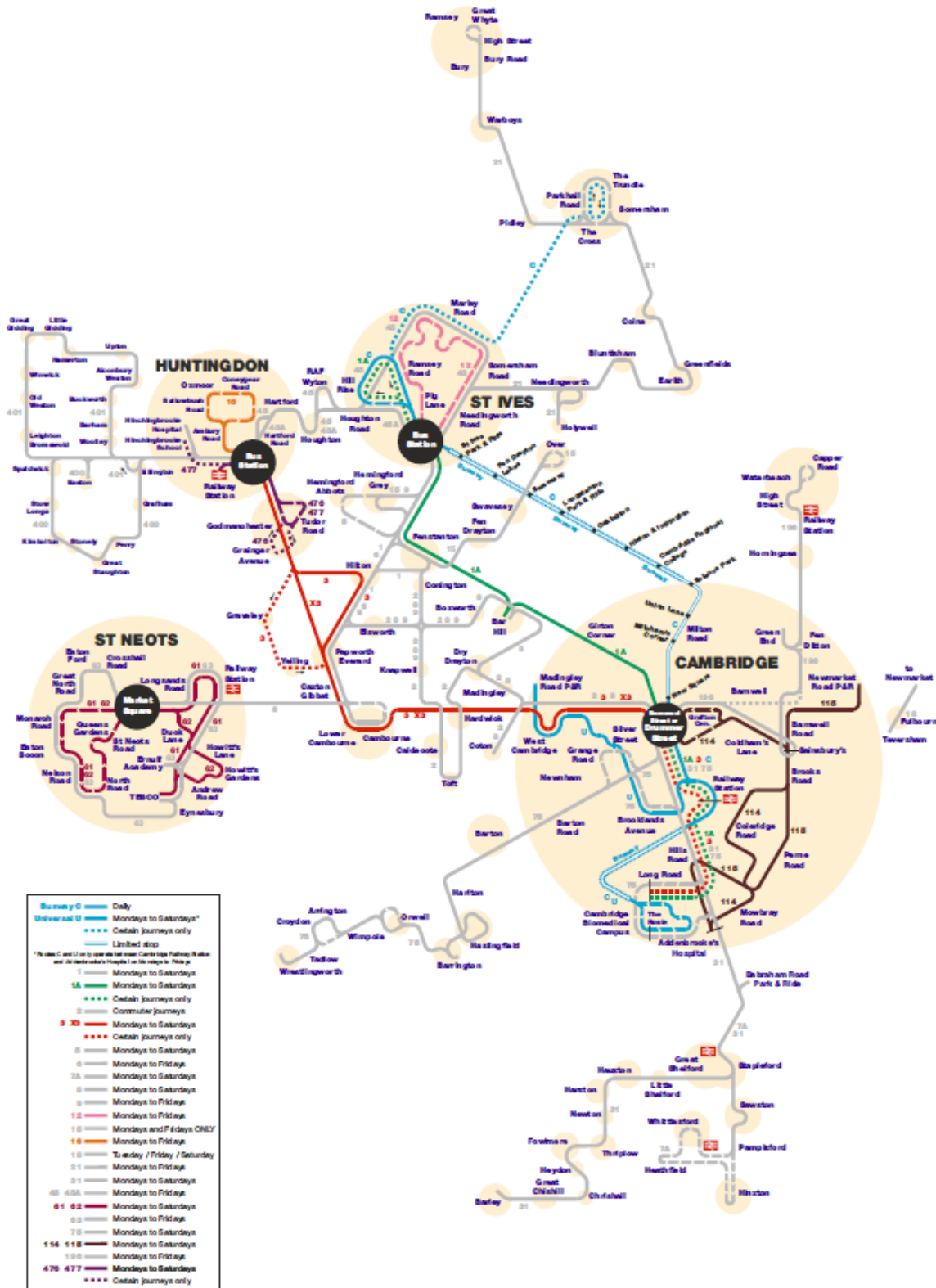
This report has identified that whilst improvements to the public transport offer in Huntingdonshire have helped increase patronage (e.g. improved rail services and the introduction of the guided busway in 2011), the impacts of this are generally limited to the main centres. Due to the limited accessibility to public transport in the east / north east of the District, and due to much of Huntingdonshire's rural nature, there are high levels of car ownership across much of the district with more than 80% of commuting trips within the District being made by car.

Appendices

| | | |
|----|------------------|----|
| A. | Bus Route Maps | 60 |
| B. | Local Cycle Maps | 63 |

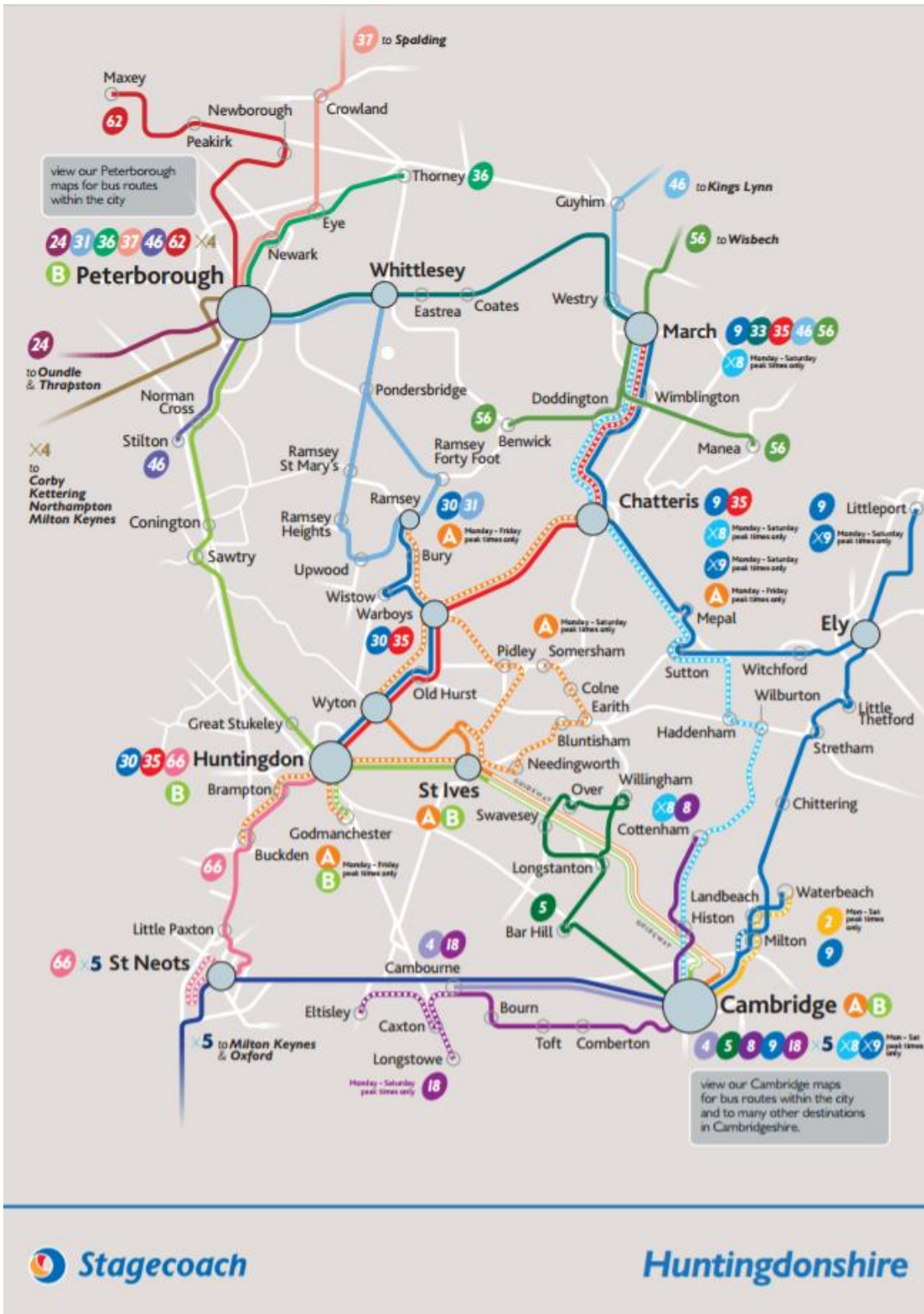
A. Bus Route Maps

Figure 36: Go-Whippet Bus Map



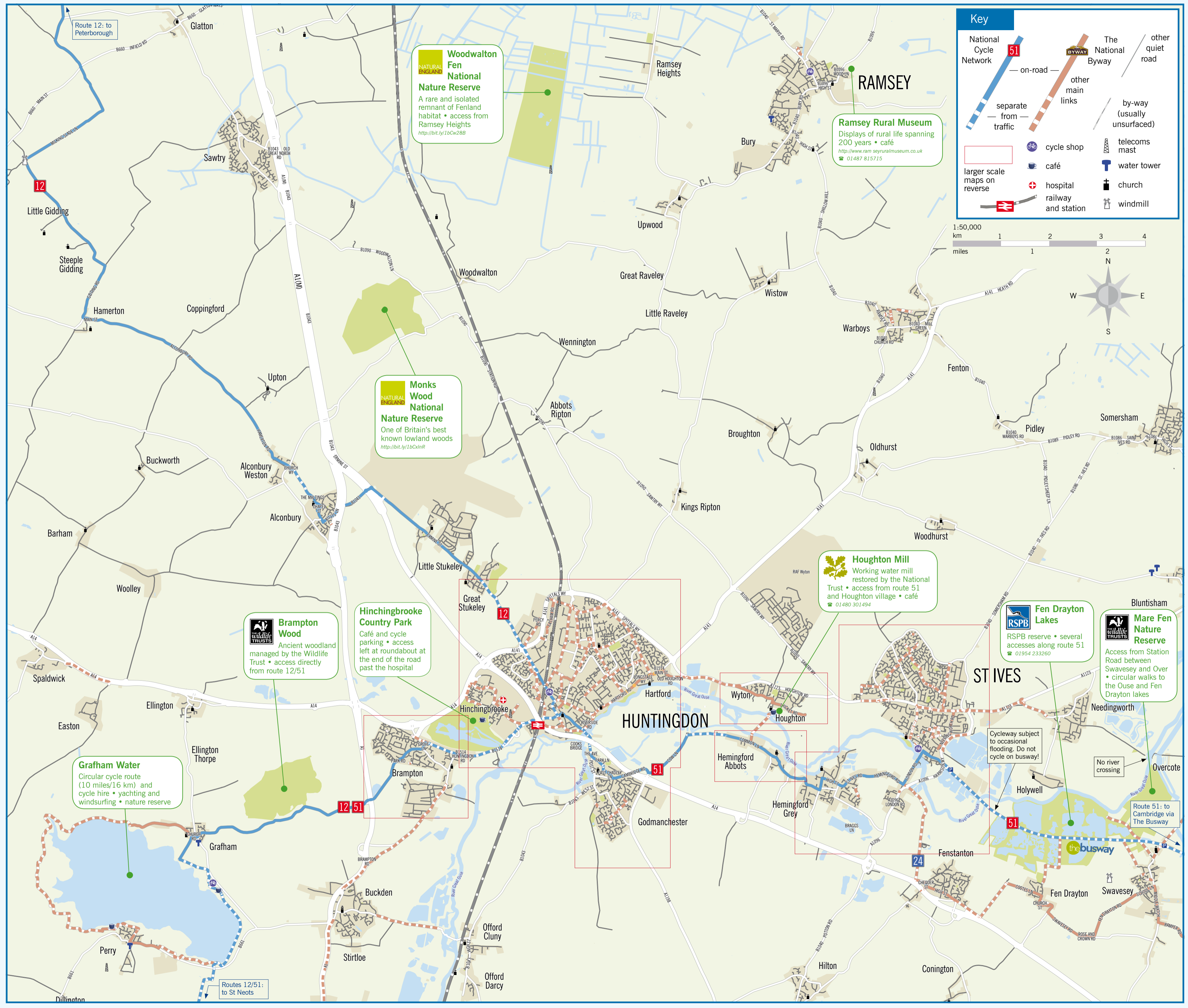
Source: www.go-whippet.co.uk, November 2016

Figure 37: Stagecoach Bus Map



Source: <https://www.stagecoachbus.com/maps>

B. Local Cycle Maps



Woodwalton Fen National Nature Reserve
 A rare and isolated remnant of Fenland habitat • access from Ramsey Heights
<http://bit.ly/1bCw28B>

Monks Wood National Nature Reserve
 One of Britain's best known lowland woods
<http://bit.ly/1bCxlR>

Brampton Wood
 Ancient woodland managed by the Wildlife Trusts • access directly from route 12/51

Hinchingsbrooke Country Park
 Café and cycle parking • access left at roundabout at the end of the road past the hospital

Grafham Water
 Circular cycle route (10 miles/16 km) and cycle hire • yachting and windsurfing • nature reserve

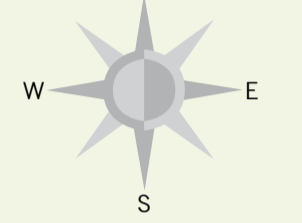
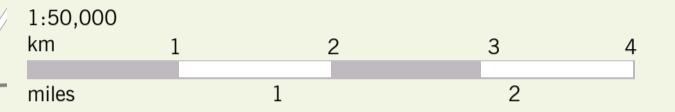
Houghton Mill
 Working water mill restored by the National Trust • access from route 51 and Houghton village • café
 01480 301494

Fen Drayton Lakes
 RSPB reserve • several accesses along route 51
 01954 233260

Mare Fen Nature Reserve
 Access from Station Road between Swavesey and Over • circular walks to the Ouse and Fen Drayton lakes

Key

- National Cycle Network 51
- on-road
- separate from traffic
- larger scale maps on reverse
- cycle shop
- café
- hospital
- railway and station
- The National Byway
- other main links
- by-way (usually unsurfaced)
- telecoms mast
- water tower
- church
- windmill
- other quiet road

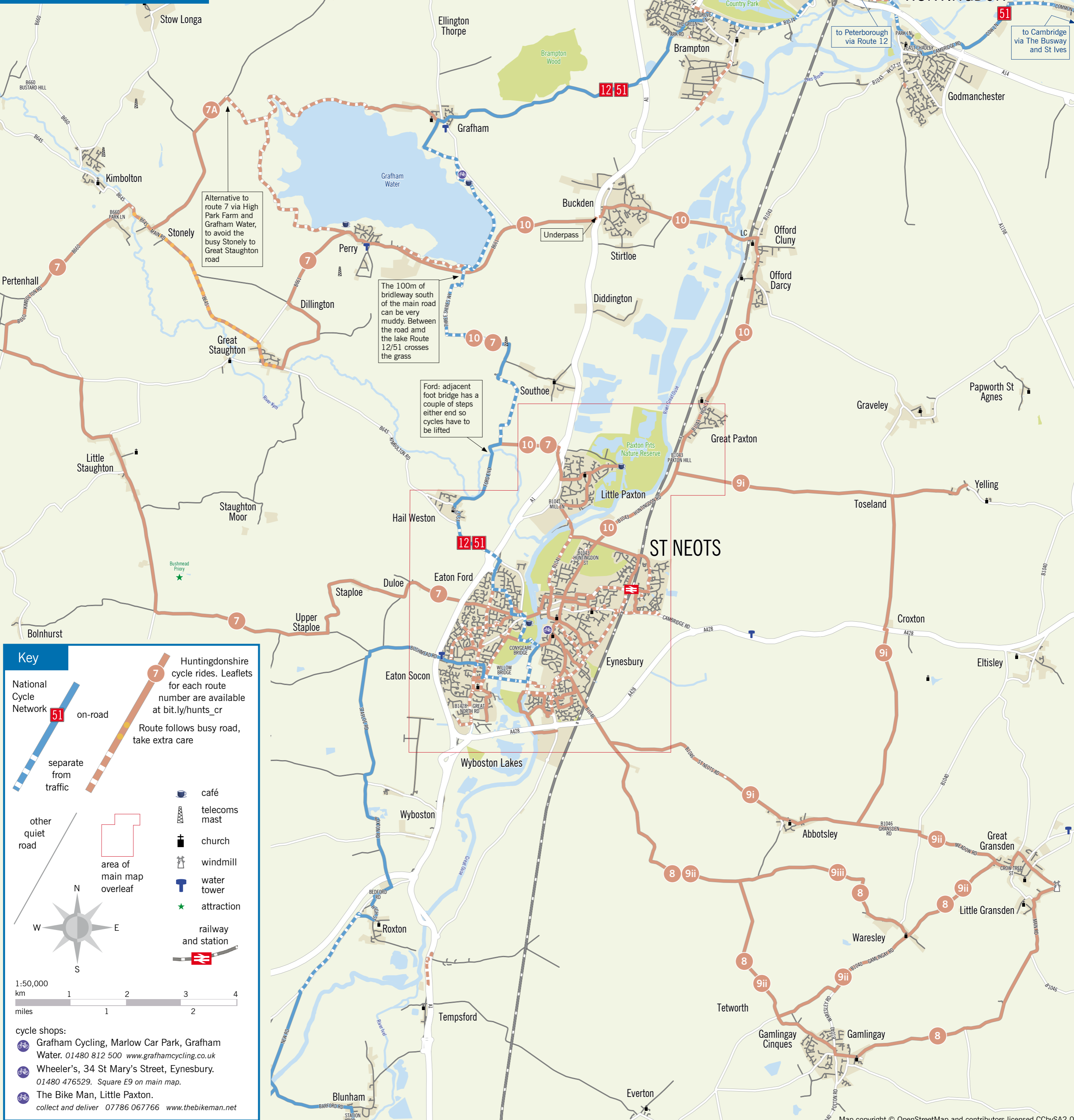


Routes 12/51: to St Neots

Cycleway subject to occasional flooding. Do not cycle on busway!
 No river crossing

Route 51: to Cambridge via The Busway

Leisure routes around St Neots



Alternative to route 7 via High Park Farm and Grafham Water, to avoid the busy Stonely to Great Staughton road

The 100m of bridlway south of the main road can be very muddy. Between the road and the lake Route 12/51 crosses the grass

Ford: adjacent foot bridge has a couple of steps either end so cycles have to be lifted

Key

- National Cycle Network **51** on-road
- separate from traffic
- other quiet road
- area of main map overleaf
- Huntingdonshire cycle rides. Leaflets for each route number are available at bit.ly/hunts_cr
- Route follows busy road, take extra care
- café
- telecoms mast
- church
- windmill
- water tower
- attraction
- railway and station

1:50,000
 km 1 2 3 4
 miles 1 2

cycle shops:
 Grafham Cycling, Marlow Car Park, Grafham Water. 01480 812 500 www.grafhamcycling.co.uk
 Wheeler's, 34 St Mary's Street, Eynesbury. 01480 476529. Square E9 on main map.
 The Bike Man, Little Paxton. collect and deliver 07786 067766 www.thebikeman.net

