



# Local Plan Site Promotion

<b>SUBJECT</b>	Land at Mill Lane, Sawston – Transport Technical Note		
<b>DATE</b>	30 January 2020	<b>CONFIDENTIALITY</b>	Public

## 1. INTRODUCTION

WSP has been appointed by Northwest Biotherapeutics (NW Bio) the landowner to provide highways and transportation access advice in relation to the proposed allocation of land at Mill Lane, Sawston, for residential use of up to 225 dwellings in the emerging Greater Cambridge Local Plan.

The proposed development site is approximately 6.8 hectares in size and lies approximately 1.2km west of the centre of the village of Sawston where various local services and facilities are located. The site is bounded by agricultural land to the north, Sawston Village College Playing Fields and residential dwellings to the east, Mill Lane to the south and the A1301 Cambridge Road to the west. It is located approximately 0.2km to the east of the former Sawston Spicer Factory on the opposite side of the A1301 Cambridge Road, where several emerging employment sites are planned to be located, and as such the site will provide a positive contribution to the housing need requirements to support employment growth in Greater Cambridge, and will also reduce the need to travel by private car.

The location of the proposed development site is enclosed in Figure 1, and Figure 2 shows the location of the site in the wider context of the surrounding area. A site boundary plan is enclosed in Appendix A. It should be noted that the site does not include the existing residential dwellings that are located on White Field Way.

## 2. GREATER CAMBRIDGE LOCAL PLAN SITE PROMOTION

South Cambridgeshire District Council and Cambridge City Council are in the process of preparing a new joint Local Plan, as set out in the adopted Greater Cambridge Local Development Scheme. The Councils carried out a 'Call for Sites' consultation in Spring 2019 where landowners, developers and communities were given the opportunity to comment on potential sites and broad locations for development in Greater Cambridge. They are now in the process of carrying out an 'Issues and Options' consultation where landowners, developers and communities are being asked to provide as much information and supporting evidence as possible on potential employment and housing sites for development in Greater Cambridge. As such this transport technical note provides information in relation to highway and transportation access advice to support the proposed allocation of land at Mill Lane, Sawston, for residential use of up to 225 dwellings in the emerging Greater Cambridge Local Plan, that was submitted as part of the 'Call for Sites' consultation in Spring 2019.

## 3. EXISTING TRANSPORT CONDITIONS

The following section provides a review of the existing transport conditions surrounding the proposed development site, including local travel to work patterns and local transport infrastructure provision.

### EXISTING TRAVEL PATTERNS

The travel patterns of future residents at the proposed development site can best be approximated based on travel patterns of existing residents of the study area, which has been obtained from 2011 Census Journey to Work data the details of which are outlined as follows.



### ***Local Resident Travel to Work by Mode***

The 2011 Census Journey to Work data contains journey to work by mode data for the existing residents of the study area, with the Mid-Layer Super Output Area (MSOA) South Cambridgeshire 015 covering the study area. Table 3.1 below summarises the journey to work by mode for MSOA South Cambridgeshire 015 which covers the study area. It should be noted that the resident population not in employment and those working from home have been excluded from the results as they do not make a journey to work on the surrounding highway network.

**Table 3.1 – 2011 Census Journey to Work by Mode**

<b>Mode</b>	<b>Mode Share</b>	
	<b>Number</b>	<b>Percentage</b>
Car Driver	2372	68%
Walk	280	8%
Car Passenger	161	5%
Bicycle	323	9%
Train	63	2%
Bus, Minibus, Coach	235	7%
Motorcycle, Scooter or Moped	53	2%
Underground, Metro, Light Rail or Tram	3	0%
Taxi or Minicab	1	0%
Other Method of Travel to Work	11	0%
<b>Total</b>	<b>3502</b>	<b>100%</b>

**Source: 2011 Census Data (January 2020)**

As can be seen in Table 3.1 the car driver is the main mode of travel to work for existing residents that travel to work from MSOA South Cambridgeshire 015 with a mode share of 68%, and that 5% of existing residents travel to work as passengers in a car. In addition, sustainable modes have a combined mode share of 26% with 8% of existing residents walking, 9% of existing residents cycling, and 9% of existing residents using public transport (which includes both bus and train). Although it is recognised that the car driver is the main mode of travel to work for existing residents of the study area, there is significant potential for future residents of the proposed development site to travel to work from the site by sustainable modes of transport such as walking, cycling and public transport.

### ***Local Resident Travel to Work by Destination and Mode***

The 2011 Census Journey to Work data contains journey to work by destination and mode data for the existing residents of the study area, with the Mid-Layer Super Output Area (MSOA) South Cambridgeshire 015 covering the study area. Table 3.2 below summarises the journey to work by destination and mode for MSOA South Cambridgeshire 015 which covers the study area.

**Table 3.2 – 2011 Census Journey to Work Destinations by Mode**

Destination	Mode					All Modes
	Car Driver	Train	Bus	Cycle	Walk	
Sawston	9.9%	0.0%	1.8%	30.4%	76.0%	16.8%
Babraham and Whittlesford	14.5%	0.0%	8.5%	19.1%	6.9%	13.8%
Great Shelford and Stapleford	4.8%	0.0%	3.6%	2.6%	0.7%	2.8%
North Cambridge	3.6%	0.0%	1.3%	1.0%	0.7%	2.8%
South Cambridgeshire	12.5%	1.7%	3.6%	5.8%	5.5%	10.3%
Cambridge	34.3%	5.0%	75.4%	37.5%	5.5%	34.7%
Uttlesford	4.9%	1.7%	1.3%	0.3%	1.1%	3.8%
Huntingdonshire	2.1%	0.0%	0.4%	0.0%	0.7%	1.5%
London	1.3%	80.0%	2.2%	0.6%	0.0%	2.7%
Other Destinations	12.2%	11.7%	1.8%	2.6%	2.9%	9.4%
Total	100%	100%	100%	100%	100%	100%

**Source: 2011 Census Data (January 2020)**

Table 3.2 shows that there is a relatively limited number of workplace destinations for existing residents that travel to work from MSOA South Cambridgeshire 015. The main workplace destinations by all modes is Cambridge with a mode share of 34.7%, Sawston with a mode share of 16.8%, Babraham and Whittlesford with a mode share of 13.8% and South Cambridgeshire with a mode share of 10.3%. In terms of modes the main workplace destination by car driver is Cambridge with a mode share of 34.3%, by train is London with a mode share of 80.0%, by bus is Cambridge with a mode share of 75.4%, by cycle is Cambridge with a mode share of 37.5%, and by walking is Sawston with a mode share of 76.0%. As such there is significant potential for future residents of the proposed development site to travel to the main workplace destinations from the site by sustainable modes of transport such as walking, cycling and public transport.

**ACCESS TO LOCAL SERVICES AND FACILITIES**

Table 3.3 below summarises the main existing local services and facilities within walking and cycling distance of the proposed development site, and shows that there are a wide range of day-to-day local services and facilities that will be available to future residents of the site which can be accessed by sustainable modes of transport such as walking, cycling and public transport.

**Table 3.3 – Existing Local Services and Facilities**

Land Use	Name	Distance	Walk Time	Cycle Time
Leisure	Sawston Sports Centre	0.7km	5-10 minutes	0-5 minutes
	Sawston and Babraham Cricket Club	0.7km	5-10 minutes	0-5 minutes
	Sawston Library	0.5km	5-10 minutes	0-5 minutes
	Jade Fountain Chinese Restaurant	1.1km	10-15 minutes	0-5 minutes
Shopping	Co-Op Convenience Store	1.1km	10-15 minutes	0-5 minutes
	Boots Pharmacy	1.1km	10-15 minutes	0-5 minutes
	Dorringtons Bakery	1.1km	10-15 minutes	0-5 minutes
	Spar Convenience Store	1.1km	10-15 minutes	0-5 minutes
	Cambridge Building Society	1.1km	10-15 minutes	0-5 minutes
	Butchers	1.1km	10-15 minutes	0-5 minutes
	Sawston Post office	1.1km	10-15 minutes	0-5 minutes
	Boswell Bakery	1.1km	10-15 minutes	0-5 minutes
Education	Sawston Village College	0.7km	5-10 minutes	0-5 minutes
	The Bellbird Primary School	1.3km	15-20 minutes	0-5 minutes
	The Icknield Primary School	1.9km	15-20 minutes	0-5 minutes
	William Westley C of E Primary School	1.9km	15-20 minutes	0-5 minutes
Health	High Street Dental Practice	1.1km	10-15 minutes	0-5 minutes
	Billson Opticians	1.3km	15-20 minutes	0-5 minutes
	Granta Medical Practice	1.9km	15-20 minutes	0-5 minutes
	Addenbrooke's Hospital	7.9km	NA	20-25 minutes
Employment	Vision Centre	0.5km	5-10 minutes	0-5 minutes
	Sawston Trade Park	2.1km	NA	5-10 minutes
	Wellcome Genome Campus	5.8km	NA	15-20 minutes
	Granta Park	5.9km	NA	15-20 minutes
	Cambridge Biomedical Campus	7.9km	NA	20-25 minutes

As can be seen in Table 3.3 there are a wide range of existing local services and facilities in Sawston which can be accessed from the proposed development site via the existing walking and cycling network without the need to use a car. The location of the existing local services and facilities surrounding is enclosed in Figure 3.

### **Schools**

The nearest secondary school to the site is Sawston Village College which is located on New Road approximately 0.7km to the east of the site, and is within a comfortable walking and cycling distance for future pupils and parents of the proposed development site using the existing walking and cycling network.

There are also several primary schools located in Sawston, including The Bellbird Primary School which is located on Link Road approximately 1.3km to the south east of the site, and The Icknield Primary School which is located on Lynton Road approximately 1.9km to the east of the site. In addition, William Westley Church of England Primary School is located in Whittlesford on Mill Lane approximately 1.9km to the south of the site. These primary schools are within a comfortable walking and cycling distance for future pupils and parents of the site using the existing walking and cycling network.



### ***Healthcare***

The nearest doctors' surgery to the site is Granta Medical Practice which is located on London Road approximately 1.9km to the south east of the site, which is within a comfortable walking and cycling distance for future residents of the site using the existing walking and cycling network.

The closest major hospital to the site is Addenbrooke's Hospital in Cambridge which is located on Hills Road approximately 7.8km north of the site. Although it is outside an accessible walking distance of the site it is within a comfortable cycling distance for future residents of the site. In addition, future residents of the site will also be able to access it via local bus services that operate from the centre of Sawston.

The nearest dental practice to the site is the High Street Dental Practice which is located on the High Street approximately 1.1km to the south east of the site, which is within a comfortable walking and cycling distance of the site for future residents of the site using the existing walking and cycling network.

The nearest opticians to the site is Billson Opticians which is located on the High Street approximately 1.2km south east of the site, which is within a comfortable walking and cycling distance of the site for future residents of the proposed development site using the existing walking and cycling network.

### ***Retail***

There are various local shops located on both sides of the High Street, with two convenience stores located on the High Street approximately 1.1km to the south east of the site, which is within a comfortable walking and cycling distance of the site for future residents of the site using the existing walking and cycling network. There are also two bakeries, a post office, a pharmacy, a bank and a butcher located on the High Street approximately 1.1km south east of the site, all of which are within a comfortable walking and cycling distance of the site for future residents of the proposed development site using the existing walking and cycling network.

### ***Employment***

There are several large employment sites located in the surrounding area including the Wellcome Genome Campus, which is located approximately 5.8km to the south of the site and Granta Park which is located approximately 5.9km to the south east of the site, which although are outside an accessible walking distance of the site they are within a comfortable cycling distance for future residents of the site. In addition, the Cambridge Biomedical Campus is located approximately 7.9km to the north of the site, which although is outside an accessible walking distance of the site is within a comfortable cycling distance for future residents of the site. It will also be possible for future residents of the site to access it via local bus services that operate from the centre of Sawston.

It should be noted that as previously outlined the proposed development site is located approximately 0.2km to the east of the former Sawston Spicer Factory on the opposite side of the A1301 Cambridge Road, where several emerging employment sites, including the NW Bio's Vision Centre and Huawei's Research and Development Campus are planned to be located, and as such the site will be within a short walking and cycling distance for future residents of the site.

## **WALKING ACCESSIBILITY**

A walking accessibility plot showing a 25-minute walking catchment of the proposed development site is enclosed in Figure 4, which shows that the majority of Sawston and its existing local services and facilities are located within a 25-minute walk of the site. The pedestrian infrastructure within the vicinity of the proposed development site is described as follows.

### ***Pedestrian Infrastructure***

#### ***Mill Lane***

Mill Lane has a footway along the north side of the road between the A1301 Cambridge Road and New Road adjacent to the southern boundary of the site, that is typically 1.5m wide and is generally in good condition. There is also a footway along both sides of Mill Lane between the junction of New Road to the High Street for its entire length, that is typically 2.2m wide and is generally in good condition with street lighting provided.



There is also a footway that runs in an east-west direction behind the residential dwellings on the north side of Mill Lane from approximately 46.4m east of the junction of New Road to Crampton Terrace, that connects through to Evans Way and Westmoor Avenue to the north and Mill Lane to the south. The footway is typically 2.0m wide and is generally in good condition with street lighting provided. Crampton Terrace continues in an east-west direction for approximately 160m where it connects at the junction of Butlers Way to a pedestrian link that is typically 2.5m wide and is generally in good condition with street lighting provided, that provides access to the High Street.

The footways along both sides of Mill Lane provide a direct pedestrian route from the proposed development site to the existing local services and facilities in the centre of Sawston including the local shops on the High Street, and as such will encourage future residents of the site to walk from the site to access the existing local services and facilities in the centre of Sawston.

It should be noted that as the development proposals progress consideration will need to be given to providing crossing facilities for pedestrians across the A1031 Cambridge at the western end of Mill Lane, and across the railway line on the opposite side of the A1301 Cambridge Road, which could improve connections between the proposed development site and the NW Bio's Vision Centre and Huawei's Research and Development Campus. Any proposed improvements will need to be discussed with the appropriate Development Management Engineer at CCC at the planning application stage, when they will consider any proposed improvements in relation to the proposed development site.

### ***New Road***

New Road has a footway along both sides of the road between Mill Lane and the A1301 Cambridge Road for its entire length, that is typically 2.2m wide and is generally in good condition, with street lighting provided. These footways provide a direct pedestrian route from the proposed development site to the existing local services and facilities in the centre of Sawston including the local shops on the High Street, and as such will encourage future residents of the site to walk from the site to access the existing local services and facilities in the centre of Sawston. They will also encourage future parents and pupils to walk from the site to access Sawston Village College on New Road.

### ***High Street***

High Street will be accessed on foot by future residents of the proposed development site via the footways along both sides of Mill Lane and New Road, providing access to the existing local services and facilities in the centre of Sawston including the local shops on the High Street. Footways are provided on both sides of the road for its entire length from New Road to Meadowfield Road, which are typically 2.2m wide and are generally in good condition with street lighting provided.

There are two pelican crossings on the High Street, one is located approximately 19.6m north of the junction with Mill Lane and the other is located approximately 30.2m north of the junction with Church Lane. Both provide safe movements across the road for future residents of the proposed development site to access the existing local services and facilities available on both sides of the road.

### ***Local Roads***

There is generally good footway provision on the local roads within Sawston, which provides pedestrian access to the existing services and facilities within Sawston surrounding the proposed development site. The existing pedestrian provision on the local roads is generally in good condition with street lighting provided, which will encourage future residents of the site to walk from the site to access the existing services and facilities within Sawston surrounding the proposed development site.

## **CYCLING ACCESSIBILITY**

A cycling accessibility plot showing a 25-minute cycling catchment of the proposed development site is enclosed in Figure 5, which shows that the entirety of Sawston and its local services and facilities are within a 5-minute cycle of the site, and the surrounding villages, along with the associated local services and facilities, are within a 25-minute cycle of the site. In addition, south Cambridge where the Cambridge Biomedical Campus is located is within a 25-minute cycle of the site. The cycling infrastructure within the vicinity of the proposed development site is described as follows.

## ***Cycling Infrastructure***

### ***Mill Lane***

There is no cycle specific infrastructure currently provided on Mill Lane between the A1301 Cambridge Road and New Road for its entire length. Mill Lane is subject to a 50mph speed limit to the west of New Road and a 30mph speed limit to the east of New Road, and varies in width between approximately 6.7m – 6.9m wide. There is some on-street parking demand mainly along the north side of the road, particularly towards the eastern end of the road. Although this on-street parking reduces the width of the carriageway it generally does not have an adverse impact on the traffic flow on the road as the road is currently relatively lightly trafficked.

The carriageway has sufficient space for vehicles to be able to safely overtake cyclists on Mill Lane, and as such it is likely to be an attractive cycle route to encourage future residents of the proposed development site to cycle to the existing local services and facilities in the centre of Sawston. In addition, Sustrans National Cycle Route 11 runs in an east-west direction through Sawston along Mill Lane and provides a sustainable connection between Sawston and Whittlesford, and as such it is likely to be an attractive cycle route to encourage future residents of the proposed development site to cycle to the existing local services and facilities in Sawston and Whittlesford and beyond.

It should be noted that as the development proposals progress consideration will need to be given to providing crossing facilities for cyclists across the A1031 Cambridge at the western end of Mill Lane, and across the railway line on the opposite side of the A1301 Cambridge Road, which could improve connections between the proposed development site and the NW Bio's Vision Centre and Huawei's Research and Development Campus. Any proposed improvements will need to be discussed with the appropriate Development Management Engineer at CCC at the planning application stage, when they will consider any proposed improvements in relation to the proposed development site

### ***New Road***

There is no cycle specific infrastructure currently provided on New Road between Mill Lane and the A1301 Cambridge Road for its entire length. New Road is subject to a 30mph speed limit, and varies in width between approximately 4.8m – 5.9m. There is some on-street parking demand mainly along the north side of the road, particularly between Belbin Way and Evans Way. Although this on-street parking reduces the width of the carriageway it generally does not have an adverse impact on the traffic flow on the road as the road is currently relatively lightly trafficked.

The carriageway has sufficient space for vehicles to be able to safely overtake cyclists on Mill Lane, and as such it is likely to be an attractive cycle route to encourage future residents of the proposed development site to cycle to the existing local services and facilities in the centre of Sawston. In addition, Sustrans National Cycle Route 11 runs in an east-west direction through Sawston along New Road and provides a sustainable connection between Sawston and Whittlesford, and as such it is likely to be an attractive cycle route to encourage future residents of the proposed development site to cycle to the existing local services and facilities in Sawston and Whittlesford and beyond.

### ***High Street***

There is no cycle specific infrastructure currently provided on the High Street between New Road to Meadowfield Road for its entire length. High Street is subject to a 20mph speed limit, and varies in width between 5.8m – 9.6m. There is limited on-street parking demand on both sides of the road, however it does occur towards the northern end of the road, although this is confined to allocated parking spaces, and the road is currently relatively lightly trafficked. It is noted that there are speed humps, raised tables and speed limit warning signs along with two pelican crossings as outlined above, resulting in low vehicle speeds along the High Street.

The carriageway has sufficient space for vehicles to be able to safely overtake cyclists on the High Street, and this along with the low vehicle speeds will mean that the High Street is likely to be an attractive cycle route to encourage future residents of the proposed development site to cycle to the existing local services and facilities available on both sides of the road.



## Local Roads

Although there is currently no specific cycle infrastructure provided on the local roads within Sawston there is a Sustrans National Cycle Route Link that runs in a north-south direction along the High Street, London Road and the A1301 Cambridge Road that connects to Sustrans National Cycle Route 11 at New Road in Sawston and New End Road in Hinxton. In addition, these roads are generally relatively lightly trafficked with low vehicle speeds and provide adequate space for vehicles to be able to safely overtake cyclists, and as such these local roads will be attractive to future residents of the proposed development site to cycle from the site to access the existing services and facilities within Sawston and Whittlesford and beyond.

## BUS ACCESSIBILITY

The nearest bus stops are located on the east and west sides of Cambridge Road approximately 0.9km to the east of the site, both of which are within an acceptable walking distance of the site and can be reached via the existing footways that run along the north side of Mill Lane and both sides of New Road from the site. The location of the bus stops on Cambridge Road and surrounding the site are enclosed in Figure 6. These bus stops provide access to Bus Services Citi 7 and 7A and are provided with shelters, timetables and bus stop flags along with Real Time Passenger Information (RTPI) display boards. Table 3.4 below summarises the details of the bus services that operate from the nearest bus stops on Cambridge Road.

**Table 3.4 – Existing Bus Services operating from bus stops on Cambridge Road**

Service	Bus Stop	Route	Operator	Weekday Frequency of Services	
				Daytime Frequency	Details of Services
Citi 7	Cambridge Road (west side of the road opposite Eccles Close)	Saffron Walden – Duxford – Sawston – Cambridge	Stagecoach in Cambridge	42 services	First service 06:20 and last service 23:20
	Cambridge Road (east side of road adjacent to Eccles Close)	Cambridge – Sawston – Duxford – Saffron Walden		46 services	First service 07:33 and last service 23:57
7A	Cambridge Road (west side of the road opposite Eccles Close)	Trumpington Park and Ride – Whittlesford – Trumpington Park and Ride	A2B Bus and Coach (Royston)	7 services	First service 09:17 and last service 19:02
	Cambridge Road (east side of road adjacent to Eccles Close)			7 services	First service 08:38 and last service 18:16

Source: Traveline (January 2020)

As can be seen in Table 3.4 there is a good bus service available from the nearest bus stops located on Cambridge Road, with Bus Service Citi 7 providing up to 46 services per day in both directions between Cambridge and Saffron Walden, and to Bus service 7A which provides 7 services per day in both directions between Trumpington Park and Ride and Whittlesford. As the bus stops for these bus services are within an acceptable walking distance of the proposed development site they are likely to be used by future residents of the site to access existing services and facilities in Sawston and the wider area surrounding the site.

## RAIL ACCESSIBILITY

The nearest railway station is Whittlesford Parkway Railway Station which is located on Station Road approximately 3.6km to the south west of the site. The railway station can easily be reached by private car via the A1301 Cambridge Road, the A505 and Station Road East and by bus via Bus Service 7A as outlined above that can be accessed at the nearest bus stops on Cambridge Road.

Although the railway station is not within a reasonable walking distance of the site, it is within an acceptable cycling distance of the site and can be reached via Sustrans National Cycle Route 11 which runs in an east-west direction along New Road and Mill Lane adjacent to the southern boundary of the site, and provides a shared off-road walking / cycling route between the A1301 Cambridge Road and Whittlesford. It connects to Station Road West via the surrounding local roads which are generally lightly traffic and as such are conducive to cycling. It should be noted that there is covered and secure cycle parking provided at Whittlesford Parkway Railway Station.



Train services from Whittlesford Parkway Station are operated by Greater Anglia and Cross Country with services to destinations such as Cambridge, Bishop’s Stortford and London Liverpool Street. Table 3.5 below summarises the services operating from Whittlesford Parkway Station with the number of trains operating in the AM and PM peak periods during the weekday.

**Table 3.5 – Rail Services from Whittlesford Parkway Railway Station**

Service	Weekday Peak Frequency of Services		
	AM Peak	PM Peak	Service Details
Whittlesford Parkway to Cambridge	10	10	First service 04:55 and last service 23:59
Cambridge to Whittlesford Parkway	9	9	First service 04:48 and last service 22:50
Whittlesford Parkway to Bishop’s Stortford	9	9	First service 04:55 and last service 23:00
Bishop’s Stortford to Whittlesford Parkway	8	8	First service 05:59 and last service 23:40
Whittlesford Parkway to London Liverpool Street	9	9	First service 04:55 and last service 23:00
London Liverpool Street to Whittlesford Parkway	10	10	First service 05:10 and last service 23:28

**Source: National Rail Enquiries (January 2020)**

As can be seen in Table 3.5 there are frequent train services available from Whittlesford Parkway Railway Station, which can be easily reached by private car and by bus, and is within an acceptable cycling distance of the site and as such is likely to be used by future residents of the proposed development site to access existing services and facilities in Cambridge and the wider area surrounding the site.

**LOCAL HIGHWAY NETWORK**

Mill Lane runs adjacent to the southern boundary of the proposed development site and connects to the High Street approximately 986.6m to the east of the site, and to New Road approximately 127.2m to the east of the site, which in turn also connects to the High Street. Both Mill Lane and New Road provide direct vehicular access from the proposed development site to the existing local services and facilities in Sawston, and as such they are likely to be used by future residents of the site to access the existing local services and facilities in Sawston and beyond to the wider highway network.

Mill Lane also connects to the A1301 Cambridge Road approximately 113.2m to the west of the site. The A1301 Cambridge Road in turn connects to the A505 approximately 2.7km to the south of the site, which connects to the A11 approximately 3.1km to the east and to the M11 approximately 2.8m to the west and beyond to wider highway network. The A1301 Cambridge Road also connects to the A1131 Trumpington Road approximately 6.2km to the north of site, which in turn provides a connection to Cambridge approximately 2.7km to the north and to the A10 and M11 approximately 1.3km to the south, and beyond to the wider highway network. As such they are likely to be used by future residents of the site to access the existing local services and facilities in Cambridge and beyond to the wider highway network. A plan showing the surrounding local highway network is enclosed in Figure 7.

**Traffic Flows**

In order to determine traffic volumes on Mill Lane an Automatic Traffic Counter (ATC) was installed approximately 96.2m east of the A1301 Cambridge Road within the vicinity of the proposed development site. The ATC was installed on Tuesday 15<sup>th</sup> January 2020 for a period of 7 days. The ATC data that was collected is enclosed in Appendix B, and a summary of the observed average 7-day traffic flows recorded at the ATC site on Mill Lane is provided in Table 3.6 below.

**Table 3.6 – Observed Average Traffic Flows on Mill Lane**

Direction	AM Peak Hour (08:00 - 09:00)	PM Peak Hour (17:00 – 18:00)
Eastbound	105	93
Westbound	147	78
Two-Way Flow	252	171

*Source: 360 TSL (January 2020)*

As can be seen in Table 3.6 there is an eastbound traffic flow of 105 vehicles and a westbound traffic flow of 147 vehicles, with two-way traffic flows of 252 vehicles in the AM peak hour. There is an eastbound traffic flow of 93 vehicles and a westbound traffic flow of 78 vehicles, with two-way traffic flows of 171 vehicles in the PM peak hour. Based on the above information it can be said that the traffic flows on Mill Lane in both the AM and PM peak hours are not significant, and as such it is considered that Mill Lane is a low trafficked road within the vicinity of the proposed development site.

### **Accident Data**

Accident record data for the latest available 5-year period from February 2014 and September 2019 was obtained from CCC for the local highway network comprising the roads within the vicinity of the proposed development site including Mill Lane, New Road, High Street and the A1301 Cambridge Road. The locations of the accidents are shown in Figure 8. The accident data that was obtained is enclosed in Appendix C, and is summarised in Table 3.7 below.

**Table 3.7 – Accident Data (February 2014 – September 2019)**

Road	Accident Severity			Total
	Slight	Serious	Fatal	
Hillside	3	1	1	5
Cambridge Road	1	0	0	1
New Road	1	0	0	1
Babraham Road	1	0	0	1
High Street	3	1	0	4
Church Lane	1	0	0	1
Mill Lane	1	0	0	1
A1301 Cambridge Road	7	1	0	8
<b>Total</b>	<b>18</b>	<b>3</b>	<b>1</b>	<b>22</b>

*Source: Cambridgeshire County Council (January 2020)*

As can be seen in Table 3.7 there were 18 slight, 3 serious and 1 fatal accident recorded within the vicinity of the proposed development site. The nearest accidents to the proposed development site were recorded at the junction of the A1301 Cambridge Road and Mill Lane to the west of the proposed development site, with 5 slight accidents and 1 serious accident being recorded at this location. There was also 1 slight accident recorded on New Road approximately 66.3m east of the junction of Westmoor Avenue, and 1 slight accident recorded on Mill Lane approximately 12.1m west of the junction of the High Street.

There were 9 accidents recorded on the High Street, with 6 slight accidents recorded between New Road and Church Lane, 1 serious recorded at the junction of Old Forge Road, 1 serious accident recorded at the junction of Church Lane, and 1 fatal accident recorded at the junction of Link Road. There was also 1 slight accident recorded on Church Lane approximately 43.2m east of the junction of the High Street, 1 slight accident recorded on Babraham Road approximately 46.4m east of the junction of the High Street, and 1 slight accident recorded on Cambridge Road approximately 18.1m north of the junction of New Road.



It should be noted that the accidents recorded on the local highway network surrounding the proposed development site occurred at a variety of times, in differing weather conditions, involving differing manoeuvres and vehicle types, and there is no evidence to suggest that the proposed development site will have an adverse impact on the safety of local highway network surrounding the proposed development site.

**4. PROPOSED TRIP GENERATION**

The following section outlines the assessment of the likely trip generation of the proposed development site for residential use for up to 225 dwellings.

**PERSON TRIPS**

In order to predict the person trip generation of the proposed development site the industry standard Trip Rate Information (TRICS®) 2019 v7.6.4 database was used. The TRICS® database has been interrogated for residential developments against the following selection criteria:

- Residential houses / privately owned;
- Site with between 150 – 300 dwellings;
- Edge of town locations; and
- England only excluding Greater London

Table 4.1 below summaries the AM and PM peak hour person trip rates per dwelling that were obtained and the predicted person trips likely to be generated by the proposed development site. The full TRICS® outputs obtained are enclosed in Appendix D.

**Table 4.1 – Predicted AM and PM Peak Hour Person Trip Generation**

	AM Peak Hour (08:00 – 09:00)			PM Peak Hour (17:00 – 18:00)		
	Arrivals	Departures	Total	Arrivals	Departures	Total
Trip Rate per Dwelling	0.222	0.820	1.042	0.658	0.295	0.953
Person Trips (225 dwellings)	50	185	234	148	66	214

**Source: TRICS® v7.6.4 Database (January 2020)**

As can be seen in Table 4.1 the proposed development site is predicted to generate 50 person trip arrivals and 185 person trip departures in the AM peak hour, or a total of 234 two-way person trip movements. The proposed development site is also predicted to generate 148 person trip arrivals and 66 person trip departures in the PM peak hour, or a total of 214 two-way person trip movements.

**PERSON TRIP GENERATION BY MODE**

The 2011 Census Journey to Work data for MSOA South Cambridgeshire 015 was used to determine the predicted person trip generation by mode likely to be generated by the proposed development site. Table 4.2 below summarises the AM and PM peak hour person trip generation mode predicted to be generated by the proposed development site.



**Table 4.2 – Predicted AM and PM Peak Hour Person Trip Generation by Mode**

Mode	Mode Split	AM Peak Hour (08:00 – 09:00)			PM Peak Hour (17:00 – 18:00)		
		Arrivals	Departures	Total	Arrivals	Departures	Total
Car Driver	68%	34	126	159	101	45	146
Walk	8%	4	15	19	12	5	17
Car Passenger	5%	3	9	12	7	3	11
Bicycle	9%	5	17	21	13	6	19
Train	2%	1	4	5	3	1	4
Bus, Minibus, Coach	7%	4	13	16	10	5	15
Motorcycle, Scooter or Moped	2%	1	4	5	3	1	4
Underground, Metro, Light Rail or Tram	0%	0	0	0	0	0	0
Taxi or Minicab	0%	0	0	0	0	0	0
Other Method of Travel to Work	0%	0	0	0	0	0	0
<b>Total</b>	<b>100%</b>	<b>50</b>	<b>185</b>	<b>234</b>	<b>148</b>	<b>66</b>	<b>214</b>

As can be seen in Table 4.2 the proposed development site is predicted to generate 34 car driver arrivals and 126 car driver departures in the AM peak hour, or a total of 159 two-way car driver trip movements, and is predicted to generate 101 car driver arrivals and 45 car driver departures in the PM peak hour, or a total of 146 two-way car driver trip movements.

In terms of the sustainable modes of transport the proposed development site is predicted to generate 4 walk trip arrivals and 15 walk trip departures in the AM peak hour, or a total of 19 two-way walk trip movements, and is predicted to generate 12 walk trip arrivals and 5 walk trip departures in the PM peak hour, or a total of 17 two-way walk trip movements. The proposed development site is also predicted to generate 5 cycle trip arrivals and 17 cycle trip departures in the AM peak hour, or a total of 21 two-way cycle trip movements, and is predicted to generate 13 cycle trip arrivals and 6 cycle trip departures in the PM peak hour, or a total of 19 two-way cycle trip movements.

As can be seen above a relatively small number of walking and cycling trips are predicted to be generated by the proposed development site based on the 2011 Census Journey to Work data for MSOA South Cambridgeshire 015. However, it should be noted that this is likely to be an underestimate of the walking and cycling trips that are likely to be generated by the proposed development site when considering the opportunities to walk and cycle to local services and facilities surrounding the proposed development site as outlined above.

**PROPOSED TRAFFIC IMPACT**

As outlined above, the proposed development site is predicted to generate 34 car driver arrivals and 126 car driver departures in the AM peak hour, or a total of 159 two-way car driver trip movements, and is predicted to generate 101 car driver arrivals and 45 car driver departures in the PM peak hour, or a total of 146 two-way car driver trip movements. As the ATC data has demonstrated the traffic flows on Mill Lane in both the AM and PM peak hour are not significant, and Mill Lane is a low trafficked road within the vicinity of the proposed development site, as such it is reasonable to assume that the additional car driver trip movements predicted to be generated by the proposed development site is unlikely to have a significant impact on the local highway network in terms of highway capacity. In addition, given the observed traffic flows on Mill Lane it is reasonable to assume that the additional car driver trip movements predicted to be generated by the proposed development site will likely be able to enter and exit the site from the local highway network without any significant delay.

In addition, as outlined above from the accident record data obtained from CCC it was determined that the nearest accidents to the proposed development site were recorded at the junction of the A1301 Cambridge Road and Mill Lane to the west of the proposed development site, with 5 slight accidents and 1 serious accident being recorded at this location. There was also 1 slight accident recorded on New Road approximately 66.3m east of the junction of Westmoor Avenue, and 1 slight accident recorded on Mill Lane approximately 12.1m west of the junction of the High Street. Therefore, it is reasonable to assume that there is a low level of risk associated with the additional car driver trip movements predicted to be generated by the proposed development site and as such the proposed development site is unlikely to have an adverse impact on the local highway network in terms of highway safety.

## 5. VEHICULAR SITE ACCESS ARRANGEMENTS

The following section outlines the assessment that has been undertaken in relation to the proposed vehicular site access arrangements on Mill Lane.

### PROPOSED VEHICULAR SITE ACCESS

It is proposed to provide vehicular access to the site from the north side of Mill Lane in the form of a simple priority junction. The proposed vehicular site access will consist of a 5.5m wide carriageway with 2.0m wide footways on either side of the road which will connect to the existing footway along the north side of Mill Lane adjacent to the southern boundary of the site. In addition, vehicular access to the site could also be provided at the northern end of White Field Way, although it is likely that the road would be more suitable as an emergency vehicular access to the site.

It should be noted that at this stage only a preliminary assessment of the proposed vehicular access options to the site has been undertaken, and that as the development proposals move forward to the submission of a planning application more detailed work will need to be undertaken. At the planning application stage, the proposed vehicular access options to the site will need to be discussed with the appropriate Development Management Engineer at CCC to consider the details of the proposed vehicular access options in relation to the proposed development site.

## 6. SUMMARY AND CONCLUSIONS

### SUMMARY

This transport technical note provides information in relation to highway and transportation access advice to support the proposed allocation of land at Mill Lane, Sawston, for residential use of up to 225 dwellings in the emerging Greater Cambridge Local Plan, that was submitted as part of the 'Call for Sites' consultation in Spring 2019.

#### *Existing Conditions*

- There are existing local services and facilities within walking and cycling distance of the site, with a range of day-to-day local services and facilities that will be available to future residents of the site which can be accessed by sustainable modes of transport such as walking, cycling and public transport;
- The majority of Sawston and its local services and facilities are located within a 25-minute walk of the site;
- The existing pedestrian provision on the local roads is generally in good condition with street lighting provided, which will encourage future residents of the site to walk from the site to access the existing services and facilities within Sawston;
- The entirety of Sawston lies and its local services and facilities are within a 5-minute cycle of the site, and the surrounding villages along with the associated local services and facilities, are within a 25-minute cycle of the site;
- The local roads are generally relatively lightly trafficked with low vehicle speeds and provide adequate space for vehicles to be able to safely overtake cyclists, which will encourage future residents of the site to cycle from the site to access the existing services and facilities within Sawston and beyond;
- The nearest bus stops are located on Cambridge Road within an acceptable walking distance of the site via the existing footways on Mill Lane and New Road, and provide access to Bus Services Citi 7 and 7A, and are likely to be used by future residents of the site to access existing services and facilities in Sawston and beyond;
- The nearest railway station is Whittlesford Parkway Railway Station which can easily be reached by private car and bus, and is within an acceptable cycling distance of the site, and likely to be used by future residents of the site to access existing services and facilities in Cambridge and the wider area surrounding the site; and
- There is no evidence to suggest that the site will have an adverse impact on the safety of surrounding local highway network



### ***Proposed Traffic Impact***

The traffic flows on Mill Lane are not significant and the road is considered to be lightly trafficked, and it is reasonable to assume that the proposed development site is unlikely to have a significant impact on the local highway network in terms of highway capacity. Based on the observed traffic flows on Mill Lane it is also reasonable to assume that the additional car driver trip movements predicted to be generated by the proposed development site will likely be able to enter and exit the site from the local highway network without any significant delay. In addition, it is reasonable to assume that there is a low level of risk associated with the additional car driver trip movements predicted to be generated by the proposed development site and as such the proposed development site is unlikely to have an adverse impact on the local highway network in terms of highway safety.

### ***Proposed Vehicular Site Access***

It is proposed to provide a vehicular access to the site from the north side of Mill Lane in the form of a simple priority junction, which will consist of a 5.5m wide carriageway with 2.0m wide footways on either side of the road which will connect to the existing footway along the north side of the Mill Road. In addition, vehicular access to the site could also be provided at the northern end of White Field Way, although it is likely that the road would be more suitable as an emergency vehicular access to the site. It should be noted that more detailed work will need to be undertaken at the planning application stage in relation to the proposed vehicular access options to the site, which will involve discussions with the appropriate Development Management Engineer at CCC at this time.

### **CONCLUSIONS**

Based on the above information it can be concluded that there are no highway and transportation access reasons why the proposed allocation on Land at Mill Lane, Sawston, should not be included in the emerging Greater Cambridge Local Plan for residential use of up to 225 dwellings.



## **ATTACHMENTS**

### **FIGURES**

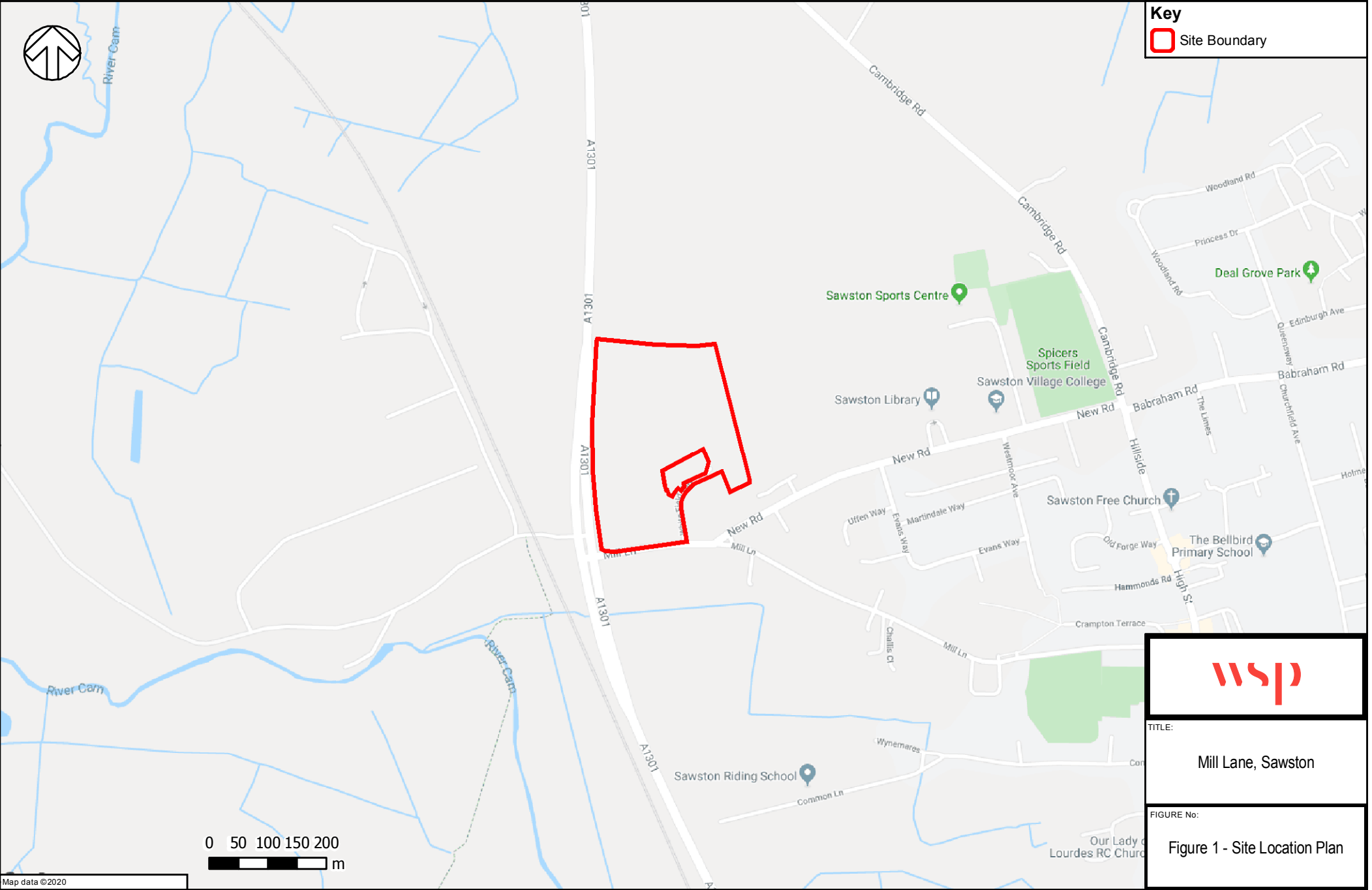
- Figure 1 – Site Location Plan
- Figure 2 – Wider Site Location Plan
- Figure 3 – Local Services and Facilities
- Figure 4 – Walking Accessibility Plot
- Figure 5 – Cycling Accessibility Plot
- Figure 6 – Bus Stop Location Plan
- Figure 7 – Local Highway Network
- Figure 8 – Accident Data

### **APPENDICES**

- Appendix A – Site Boundary Plan
- Appendix B – Traffic Survey Data
- Appendix C – Accident Data
- Appendix D – TRICS® Outputs

# Figures

## Figure 1 – Site Location Plan



**Key**

Site Boundary



TITLE:

Mill Lane, Sawston

FIGURE No:

Figure 1 - Site Location Plan



## Figure 2 – Wider Site Location Plan



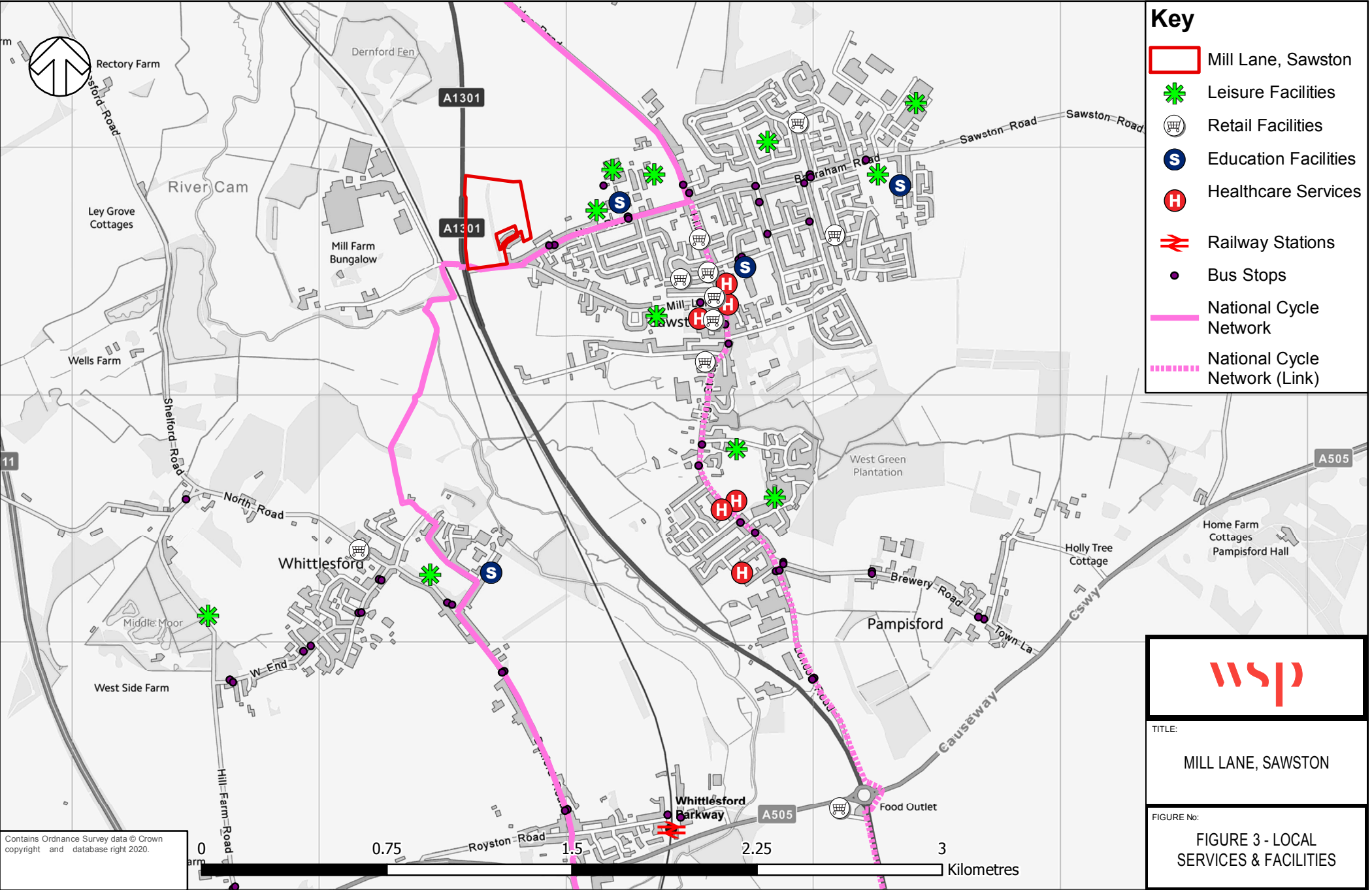
**Key**  
[Red Outline] Site Boundary



TITLE:  
Mill Lane, Sawston

FIGURE No:  
Figure 2 - Wider Site Location Plan

## Figure 3 – Local Services and Facilities



### Key

- Mill Lane, Sawston
- ★ Leisure Facilities
- Retail Facilities
- S Education Facilities
- H Healthcare Services
- 🚂 Railway Stations
- Bus Stops
- National Cycle Network
- National Cycle Network (Link)

TITLE:

MILL LANE, SAWSTON

FIGURE No:

FIGURE 3 - LOCAL SERVICES & FACILITIES

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## Figure 4 – Walking Accessibility Plot



### Key

★ Mill Lane, Sawston

### Walking Accessibility

Walk Speed: 4.8kph

- 0-5 minutes (0m-400m)
- 5-10 minutes (400m-800m)
- 10-15 minutes (800m-1,200m)
- 15-20 minutes (1,200m-1,600m)
- 20-25 minutes (1,600m-2,000m)



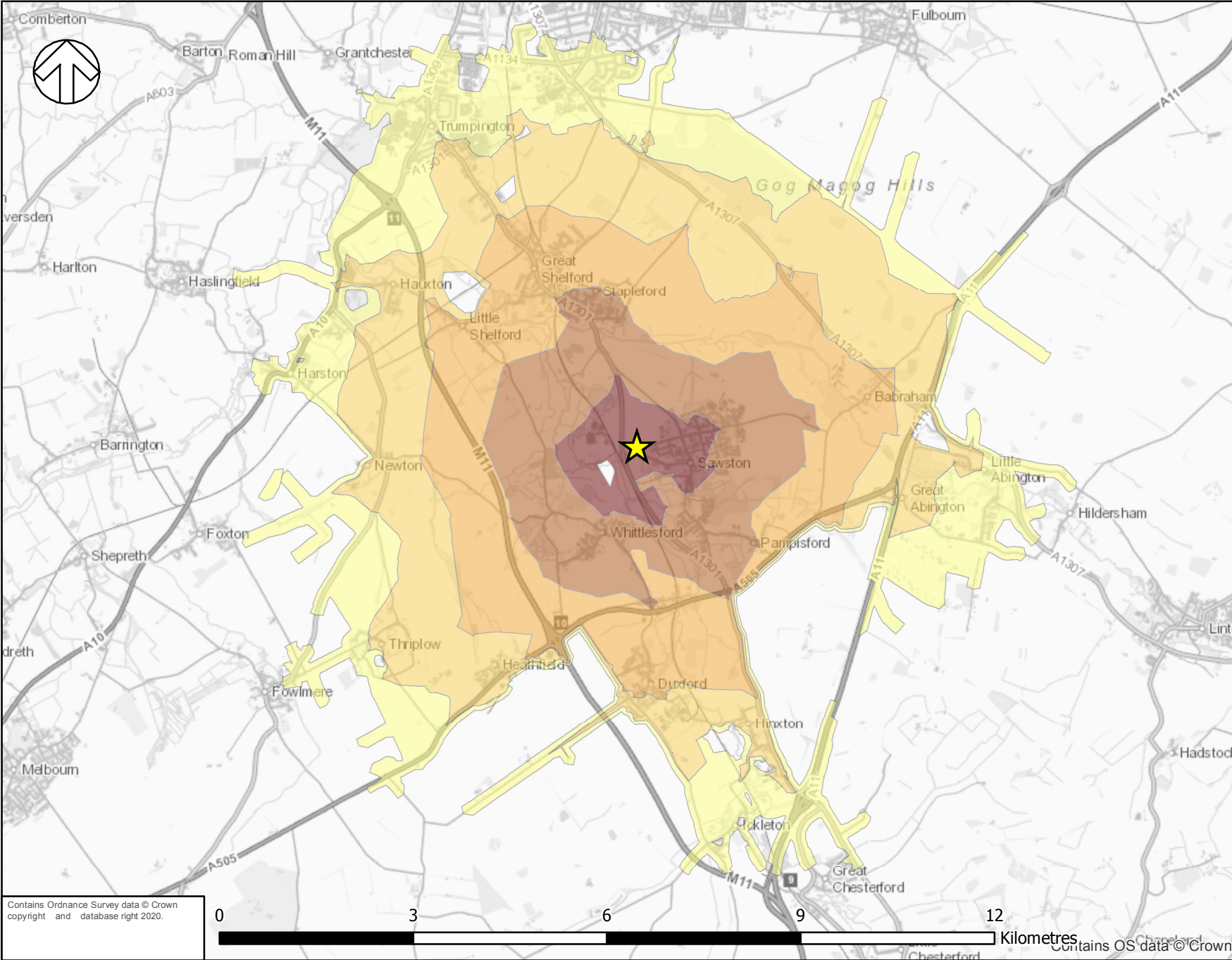
TITLE:  
MILL LANE, SAWSTON

FIGURE No:  
FIGURE 4 - WALKING ACCESSIBILITY PLOT

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## Figure 5 – Cycling Accessibility Plot



**Key**

★ Mill Lane, Sawston

**Cycling Accessibility**

**Cycle Speed: 19.2kph**

Dark Red	0-5 minutes (0m-1,600m)
Brown	5-10 minutes (1,600m-3,200m)
Orange	10-15 minutes (3,200m-4,800m)
Light Orange	15-20 minutes (4,800m-6,400m)
Yellow	20-25 minutes (6,400m-8,000m)

**wsp**

TITLE:  
MILL LANE, SAWSTON

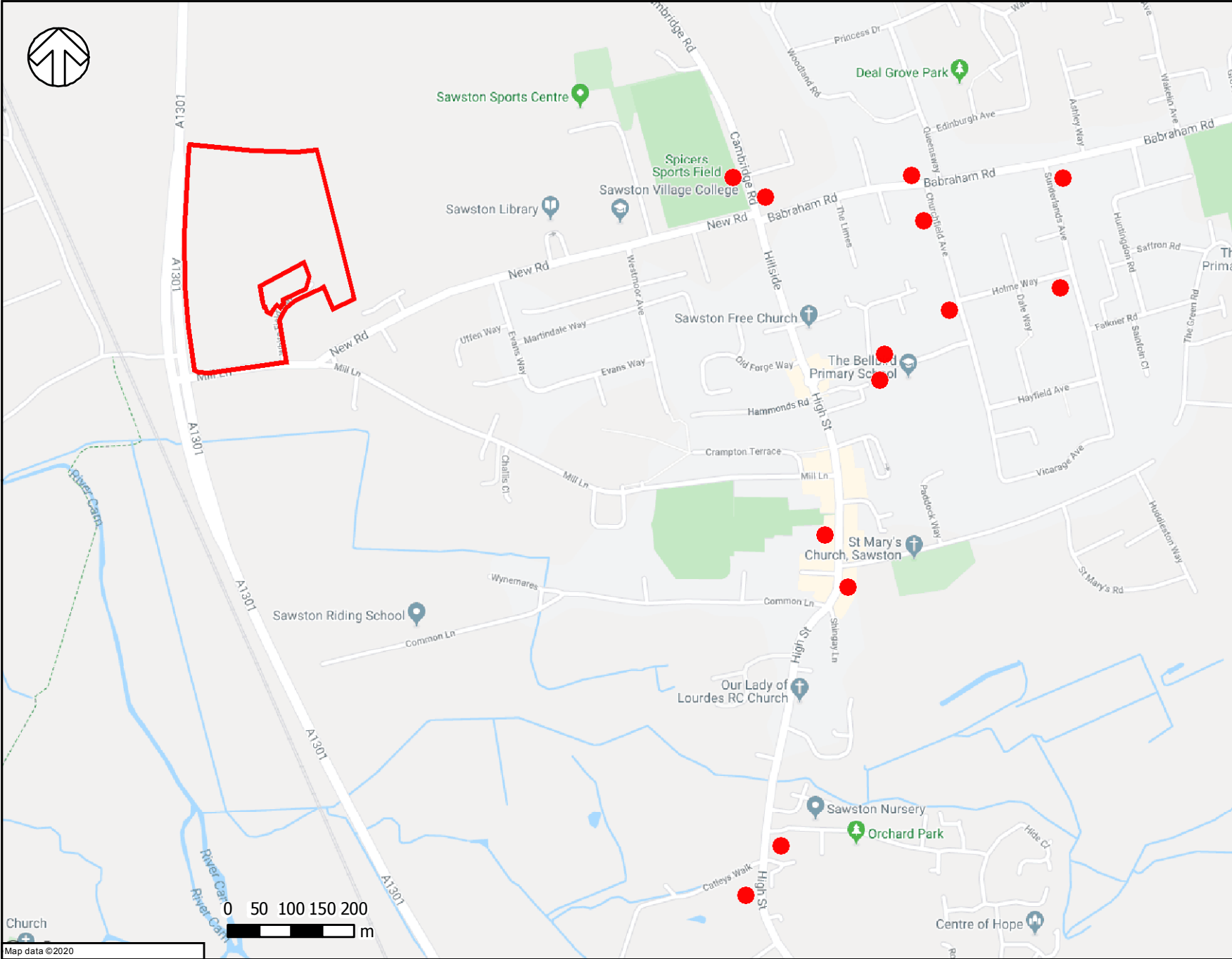
FIGURE No:  
FIGURE 5 - CYCLING ACCESSIBILITY PLOT

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## Figure 6 – Bus Stop Location Plan



**Key**

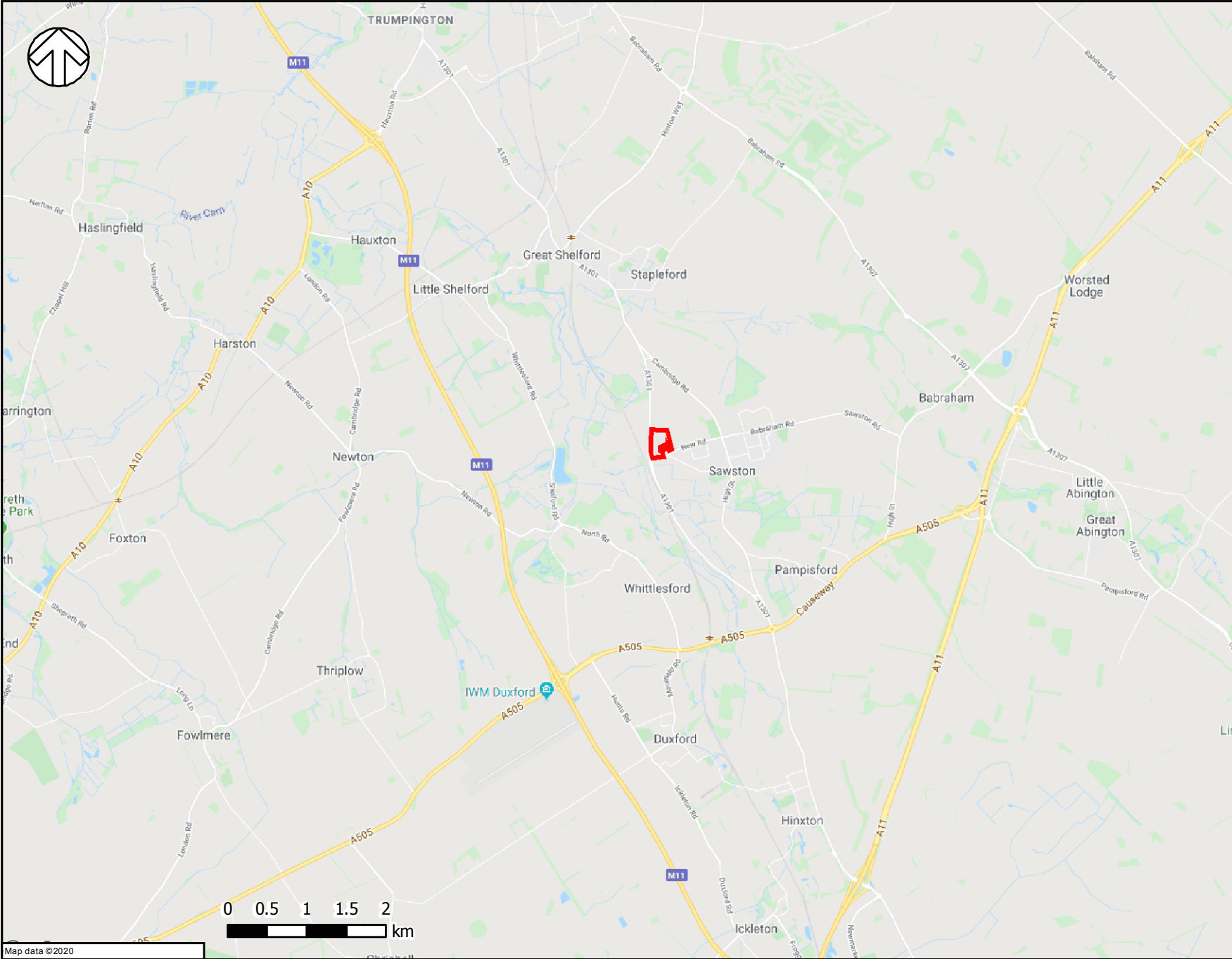
- Site Boundary
- Bus Stops



TITLE:  
 Mill Lane, Sawston

FIGURE No:  
 Figure 6 - Bus Stop Location Plan

## Figure 7 – Local Highway Network

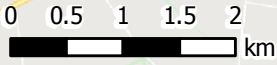


**Key**  
 Site Boundary

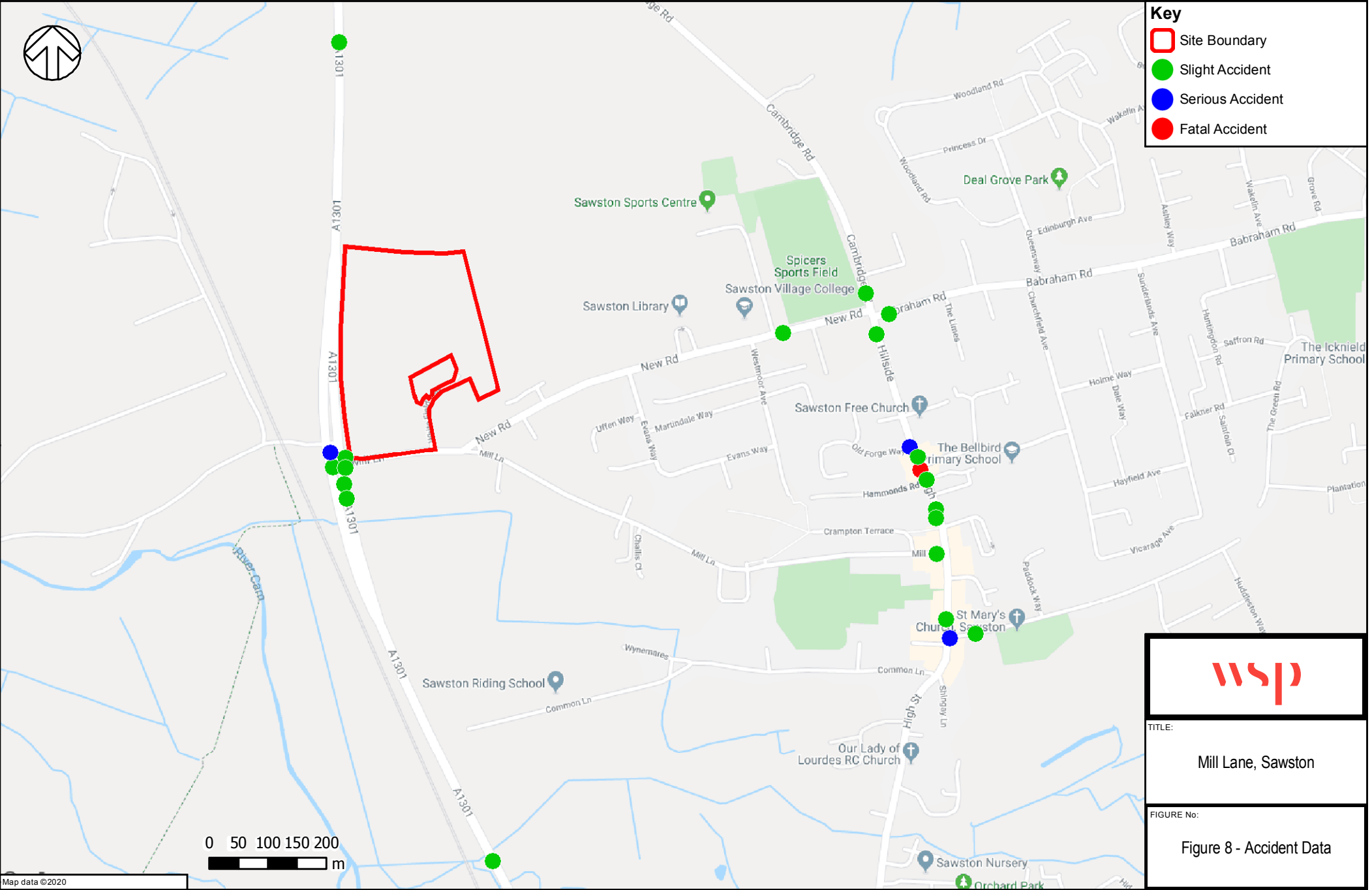


TITLE:  
 Mill Lane, Sawston

FIGURE No:  
 Figure 7 - Local Highway Network



## Figure 8 – Accident Data



**Key**

- Site Boundary
- Slight Accident
- Serious Accident
- Fatal Accident



TITLE:  
**Mill Lane, Sawston**

FIGURE No:  
**Figure 8 - Accident Data**

# Appendices

# Appendix A – Site Boundary Plan



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## Appendix B – Traffic Survey Data

# Sawston ATC, Mill Lane

## Channel 1 - Westbound

15/01/2020	Vehicle Classes													TOTAL
Hr Ending	1	2	3	4	5	6	7	8	9	10	11	12	13	
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	1	0	0	0	0	0	0	0	0	0	0	0	1
4	3	1	0	0	0	0	0	0	0	0	0	0	0	4
5	7	1	0	0	0	0	0	0	0	0	0	0	0	8
6	10	2	0	0	0	0	0	0	0	0	0	0	0	12
7	36	5	0	0	0	0	0	0	0	0	0	0	0	41
8	112	16	0	0	0	0	0	0	0	0	0	0	0	128
9	189	9	2	1	0	0	0	0	0	0	0	2	0	203
10	69	4	1	1	0	0	0	0	0	0	0	1	0	76
11	63	7	1	0	0	0	0	0	0	0	0	1	0	72
12	71	7	0	0	0	0	1	0	0	0	0	0	0	79
13	73	7	0	0	0	0	0	0	0	0	0	0	0	80
14	66	5	0	0	0	0	0	0	0	0	0	0	0	71
15	58	3	0	1	0	0	0	0	0	0	0	1	0	63
16	123	4	4	1	0	0	0	0	0	0	0	2	0	134
17	103	7	0	0	0	0	0	0	0	0	0	0	0	110
18	68	5	0	0	0	0	0	0	0	0	0	0	0	73
19	70	4	0	0	0	0	0	0	0	0	0	0	0	74
20	81	0	0	0	0	0	0	0	0	0	0	0	0	81
21	48	6	0	0	0	0	0	0	0	0	0	0	0	54
22	54	0	0	0	0	0	0	0	0	0	0	0	0	54
23	14	1	0	0	0	0	0	0	0	0	0	0	0	15
24	5	1	0	0	0	0	0	0	0	0	0	0	0	6
7-19	1065	78	8	4	0	0	1	0	0	0	0	7	0	1163
6-22	1284	89	8	4	0	0	1	0	0	0	0	7	0	1393
6-24	1303	91	8	4	0	0	1	0	0	0	0	7	0	1414
0-24	1323	96	8	4	0	0	1	0	0	0	0	7	0	1439

## Channel 2 - Eastbound

15/01/2020	Vehicle Classes													TOTAL
Hr Ending	1	2	3	4	5	6	7	8	9	10	11	12	13	
1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	2	0	0	0	0	0	0	0	0	0	0	1	0	3
4	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7	9	6	0	0	0	0	0	0	0	0	0	0	0	15
8	50	5	0	0	0	0	0	0	0	0	0	1	0	56
9	129	9	1	0	0	0	0	0	0	0	0	3	0	142
10	47	7	0	0	0	0	0	0	0	0	0	2	0	56
11	47	12	1	0	0	0	0	0	0	0	0	0	0	60
12	42	5	0	0	0	0	0	0	0	0	0	0	0	47
13	60	3	0	0	0	0	1	0	0	0	0	0	0	64
14	55	6	0	1	1	0	0	0	0	0	0	0	0	63
15	72	8	1	1	0	0	0	0	0	0	0	0	0	82
16	91	7	0	0	0	0	0	0	0	0	0	0	0	98
17	83	12	0	0	1	0	0	0	0	0	0	0	0	96
18	105	5	0	0	0	0	0	0	0	0	0	0	0	110
19	89	4	0	0	0	0	0	0	0	0	0	0	0	93
20	82	6	0	0	0	0	0	0	0	0	0	0	0	88
21	40	2	0	0	0	0	0	0	0	0	0	0	0	42
22	27	2	0	0	0	0	0	0	0	0	0	0	0	29
23	16	2	0	0	0	0	0	0	0	0	0	0	0	18
24	10	1	0	0	0	0	0	0	0	0	0	0	0	11
7-19	870	83	3	2	2	0	1	0	0	0	0	6	0	967
6-22	1028	99	3	2	2	0	1	0	0	0	0	6	0	1141
6-24	1054	102	3	2	2	0	1	0	0	0	0	6	0	1170
0-24	1059	103	3	2	2	0	1	0	0	0	0	7	0	1177

# Sawston ATC, Mill Lane

## Channel 1 - Westbound

16/01/2020	Vehicle Classes													TOTAL
Hr Ending	1	2	3	4	5	6	7	8	9	10	11	12	13	
1	2	1	0	0	0	0	0	0	0	0	0	0	0	3
2	4	1	0	0	0	0	0	0	0	0	0	0	0	5
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	3	0	0	0	0	0	0	0	0	0	0	0	0	3
5	7	1	0	0	0	0	0	0	0	0	0	0	0	8
6	14	2	0	0	0	0	0	0	0	0	0	0	0	16
7	44	8	0	0	0	0	0	0	0	0	0	0	0	52
8	104	13	0	0	0	0	1	0	0	0	0	0	0	118
9	172	7	3	0	0	0	0	0	0	0	0	2	0	184
10	83	4	0	0	0	0	0	0	0	0	0	1	0	88
11	71	5	0	0	0	0	0	0	0	0	0	1	0	77
12	76	10	0	0	0	0	0	0	0	0	0	1	0	87
13	67	8	0	0	0	0	0	0	0	0	0	0	0	75
14	69	4	1	0	0	0	0	0	0	0	0	0	0	74
15	60	6	0	1	0	0	0	0	0	0	0	1	0	68
16	110	7	3	1	0	0	0	0	0	0	0	4	0	125
17	95	5	0	0	0	0	0	0	0	0	0	0	0	100
18	97	2	0	0	0	0	0	0	0	0	0	0	0	99
19	96	5	0	0	0	0	0	0	0	0	0	0	0	101
20	94	1	0	0	0	0	0	0	0	0	0	0	0	95
21	53	2	0	0	0	0	0	0	0	0	0	0	0	55
22	36	0	0	0	0	0	0	0	0	0	0	0	0	36
23	20	0	0	0	0	0	0	0	0	0	0	0	0	20
24	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7-19	1100	76	7	2	0	0	1	0	0	0	0	10	0	1196
6-22	1327	87	7	2	0	0	1	0	0	0	0	10	0	1434
6-24	1349	87	7	2	0	0	1	0	0	0	0	10	0	1456
0-24	1379	92	7	2	0	0	1	0	0	0	0	10	0	1491

## Channel 2 - Eastbound

16/01/2020	Vehicle Classes													TOTAL
Hr Ending	1	2	3	4	5	6	7	8	9	10	11	12	13	
1	2	1	0	0	0	0	0	0	0	0	0	0	0	3
2	2	0	0	0	0	0	0	0	0	0	0	0	0	2
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5	2	0	0	0	0	0	0	0	0	0	0	0	0	2
6	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7	11	3	0	0	0	0	0	0	0	0	0	0	0	14
8	47	10	0	0	0	0	0	0	0	0	0	1	0	58
9	107	8	4	0	0	0	0	0	0	0	0	2	0	121
10	46	9	0	0	0	0	0	0	0	0	0	0	0	55
11	63	12	0	0	0	0	0	1	0	0	0	0	0	76
12	42	9	0	0	0	0	0	0	0	0	0	0	0	51
13	43	9	0	0	0	0	0	0	0	0	0	0	0	52
14	61	2	3	0	0	0	0	0	0	0	0	1	0	67
15	63	9	1	1	0	0	0	1	0	0	0	0	0	75
16	117	13	0	0	0	0	0	0	0	0	0	1	0	131
17	98	14	0	0	0	0	0	0	0	0	0	0	0	112
18	123	5	0	0	0	0	0	0	0	0	0	0	0	128
19	107	10	0	0	0	0	0	0	0	0	0	0	0	117
20	61	0	0	0	0	0	0	0	0	0	0	0	0	61
21	38	1	0	0	0	0	0	0	0	0	0	0	0	39
22	22	3	0	0	0	0	0	0	0	0	0	0	0	25
23	21	0	0	0	0	0	0	0	0	0	0	0	0	21
24	5	1	0	0	0	0	0	0	0	0	0	0	0	6
7-19	917	110	8	1	0	0	0	2	0	0	0	5	0	1043
6-22	1049	117	8	1	0	0	0	2	0	0	0	5	0	1182
6-24	1075	118	8	1	0	0	0	2	0	0	0	5	0	1209
0-24	1084	119	8	1	0	0	0	2	0	0	0	5	0	1219

# Sawston ATC, Mill Lane

## Channel 1 - Westbound

17/01/2020	Vehicle Classes													TOTAL
Hr Ending	1	2	3	4	5	6	7	8	9	10	11	12	13	
1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	2	0	0	0	0	0	0	0	0	0	0	0	0	2
5	4	5	0	0	0	0	0	0	0	0	0	0	0	9
6	4	2	0	0	0	0	0	0	0	0	0	0	0	6
7	44	6	0	0	0	0	0	0	0	0	0	0	0	50
8	117	12	0	0	1	0	0	0	0	0	0	0	0	130
9	162	9	3	0	0	0	1	1	0	0	0	2	0	178
10	69	9	0	0	0	0	0	0	0	0	0	0	0	78
11	80	6	0	0	0	0	0	0	0	0	0	0	0	86
12	96	7	0	0	0	0	0	0	0	0	0	1	0	104
13	61	10	0	0	0	0	0	0	0	0	0	1	0	72
14	72	7	1	1	1	0	0	0	0	0	0	0	0	82
15	67	8	0	0	1	0	0	0	0	0	0	0	0	76
16	133	6	5	1	0	0	0	0	0	0	0	2	0	147
17	119	8	0	0	0	0	0	1	0	0	0	0	0	128
18	97	5	0	0	0	0	0	0	0	0	0	0	0	102
19	89	4	0	0	0	0	0	0	0	0	0	0	0	93
20	40	4	0	0	0	0	0	0	0	0	0	0	0	44
21	32	0	0	0	0	0	0	0	0	0	0	0	0	32
22	27	2	0	0	0	0	0	0	0	0	0	0	0	29
23	11	0	0	0	0	0	0	0	0	0	0	0	0	11
24	10	1	0	0	0	0	0	0	0	0	0	0	0	11

7-19	1162	91	9	2	3	0	1	2	0	0	0	6	0	1276
6-22	1305	103	9	2	3	0	1	2	0	0	0	6	0	1431
6-24	1326	104	9	2	3	0	1	2	0	0	0	6	0	1453
0-24	1338	111	9	2	3	0	1	2	0	0	0	6	0	1472

## Channel 2 - Eastbound

17/01/2020	Vehicle Classes													TOTAL
Hr Ending	1	2	3	4	5	6	7	8	9	10	11	12	13	
1	4	0	0	0	0	0	0	0	0	0	0	0	0	4
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4	1	1	0	0	0	0	0	0	0	0	0	0	0	2
5	1	2	0	0	0	0	0	0	0	0	0	0	0	3
6	5	1	0	0	0	0	0	0	0	0	0	0	0	6
7	13	3	0	0	0	0	0	0	0	0	0	1	0	17
8	55	7	0	0	0	0	0	0	0	0	0	0	0	62
9	123	11	4	0	0	0	0	0	0	0	0	3	0	141
10	61	7	0	0	0	0	0	0	0	0	0	1	0	69
11	48	11	0	0	0	0	0	0	0	0	0	0	0	59
12	50	7	0	0	0	0	0	0	0	0	0	1	0	58
13	49	7	0	1	0	0	0	0	0	0	0	0	0	57
14	64	7	1	0	0	0	0	0	0	0	0	0	0	72
15	63	6	0	0	0	0	0	0	0	0	0	0	0	69
16	85	7	0	0	0	0	0	0	0	0	0	0	0	92
17	88	9	0	0	0	0	0	0	0	0	0	1	0	98
18	91	5	0	0	0	0	0	0	0	0	0	0	0	96
19	68	11	0	0	0	0	0	0	0	0	0	0	0	79
20	65	3	0	0	0	0	0	0	0	0	0	0	0	68
21	31	1	0	0	0	0	0	0	0	0	0	0	0	32
22	26	0	0	0	0	0	0	0	0	0	0	0	0	26
23	19	0	0	0	0	0	0	0	0	0	0	0	0	19
24	11	1	0	0	0	0	0	0	0	0	0	0	0	12

7-19	845	95	5	1	0	0	0	0	0	0	0	6	0	952
6-22	980	102	5	1	0	0	0	0	0	0	0	7	0	1095
6-24	1010	103	5	1	0	0	0	0	0	0	0	7	0	1126
0-24	1022	107	5	1	0	0	0	0	0	0	0	7	0	1142





# Sawston ATC, Mill Lane

## Channel 1 - Westbound

20/01/2020	Vehicle Classes													TOTAL
Hr Ending	1	2	3	4	5	6	7	8	9	10	11	12	13	
1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	2	0	0	0	0	0	0	0	0	0	0	0	0	2
5	6	2	0	0	0	0	0	0	0	0	0	0	0	8
6	12	2	0	0	0	0	0	0	0	0	0	0	0	14
7	45	3	0	0	0	0	0	0	0	0	0	0	0	48
8	115	13	1	0	0	0	0	0	0	0	0	0	0	129
9	188	8	0	0	0	0	0	0	0	0	0	1	0	197
10	101	7	1	0	0	0	0	0	0	0	0	0	0	109
11	62	10	0	0	0	0	0	0	0	0	0	0	0	72
12	67	7	0	0	0	0	0	0	0	0	0	0	0	74
13	84	8	0	0	0	0	0	0	1	0	0	0	0	93
14	53	5	0	0	0	0	0	0	0	0	0	1	0	59
15	64	8	0	0	0	0	0	0	0	0	0	0	0	72
16	130	6	5	0	0	0	0	0	0	0	0	2	0	143
17	136	9	0	0	0	0	0	0	0	0	0	0	0	145
18	82	2	0	0	0	0	0	0	0	0	0	0	0	84
19	84	2	0	0	0	0	0	0	0	0	0	0	0	86
20	59	2	0	0	0	0	0	0	0	0	0	0	0	61
21	33	4	0	0	0	0	0	0	0	0	0	0	0	37
22	42	1	0	0	0	0	0	0	0	0	0	0	0	43
23	8	0	0	0	0	0	0	0	0	0	0	0	0	8
24	2	1	0	0	0	0	0	0	0	0	0	0	0	3

7-19	1166	85	7	0	0	0	0	0	1	0	0	4	0	1263
6-22	1345	95	7	0	0	0	0	0	1	0	0	4	0	1452
6-24	1355	96	7	0	0	0	0	0	1	0	0	4	0	1463
0-24	1376	100	7	0	0	0	0	0	1	0	0	4	0	1488

## Channel 2 - Eastbound

20/01/2020	Vehicle Classes													TOTAL
Hr Ending	1	2	3	4	5	6	7	8	9	10	11	12	13	
1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	2	0	0	0	0	0	0	0	0	0	0	0	2
6	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7	11	3	0	0	0	0	0	0	0	0	0	0	0	14
8	48	7	1	0	1	0	0	0	0	0	0	0	0	57
9	120	14	3	1	0	0	0	0	0	0	0	1	0	139
10	58	7	0	0	0	0	0	0	0	0	0	1	0	66
11	49	7	0	0	0	0	0	0	0	0	0	0	0	56
12	50	6	0	0	1	0	0	0	0	0	0	0	0	57
13	44	7	0	0	0	0	0	0	1	0	0	0	0	52
14	46	11	0	0	0	0	0	0	0	0	0	0	0	57
15	65	13	1	0	0	0	0	0	0	0	0	0	0	79
16	77	10	0	0	0	0	0	0	0	0	0	0	0	87
17	94	15	0	0	0	0	0	0	0	0	0	1	0	110
18	106	7	0	0	1	0	0	0	0	0	0	0	0	114
19	121	9	0	0	0	0	0	0	0	0	0	0	0	130
20	57	6	0	0	0	0	0	0	0	0	0	0	0	63
21	36	5	0	0	0	0	0	0	0	0	0	0	0	41
22	22	1	0	0	0	0	0	0	0	0	0	0	0	23
23	5	1	0	0	0	0	0	0	0	0	0	0	0	6
24	2	0	0	0	0	0	0	0	0	0	0	0	0	2

7-19	878	113	5	1	3	0	0	0	1	0	0	3	0	1004
6-22	1004	128	5	1	3	0	0	0	1	0	0	3	0	1145
6-24	1011	129	5	1	3	0	0	0	1	0	0	3	0	1153
0-24	1015	131	5	1	3	0	0	0	1	0	0	3	0	1159

# Sawston ATC, Mill Lane

## Channel 1 - Westbound

21/01/2020	Vehicle Classes													TOTAL
Hr Ending	1	2	3	4	5	6	7	8	9	10	11	12	13	
1	6	0	0	0	0	0	0	0	0	0	0	0	0	6
2	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	3	0	0	0	0	0	0	0	0	0	0	0	0	3
5	3	1	0	0	0	0	0	0	0	0	0	0	0	4
6	14	1	0	0	0	0	0	0	0	0	0	0	0	15
7	45	3	0	0	0	0	0	0	0	0	0	0	0	48
8	136	8	0	0	0	0	0	0	0	0	0	1	0	145
9	176	7	2	0	0	0	0	0	0	0	0	1	0	186
10	68	5	0	0	1	0	0	0	0	0	0	0	0	74
11	57	4	0	0	2	0	0	0	0	0	0	0	0	63
12	65	7	1	0	1	0	0	0	0	0	0	0	0	74
13	80	10	0	0	0	0	0	0	0	0	0	1	0	91
14	68	2	0	0	1	0	0	0	0	0	0	0	0	71
15	57	11	1	0	3	0	0	0	0	0	0	1	0	73
16	123	7	3	0	0	0	0	0	0	0	0	1	0	134
17	114	8	0	0	0	0	0	0	0	0	0	0	0	122
18	90	4	0	0	0	0	0	0	0	0	0	0	0	94
19	69	3	0	0	0	0	0	0	0	0	0	0	0	72
20	96	3	0	0	0	0	0	0	0	0	0	0	0	99
21	47	2	0	0	0	0	0	0	0	0	0	0	0	49
22	22	0	0	0	0	0	0	0	0	0	0	0	0	22
23	15	0	0	0	0	0	0	0	0	0	0	0	0	15
24	6	0	0	0	0	0	0	0	0	0	0	0	0	6

7-19	1103	76	7	0	8	0	0	0	0	0	0	5	0	1199
6-22	1313	84	7	0	8	0	0	0	0	0	0	5	0	1417
6-24	1334	84	7	0	8	0	0	0	0	0	0	5	0	1438
0-24	1361	86	7	0	8	0	0	0	0	0	0	5	0	1467

## Channel 2 - Eastbound

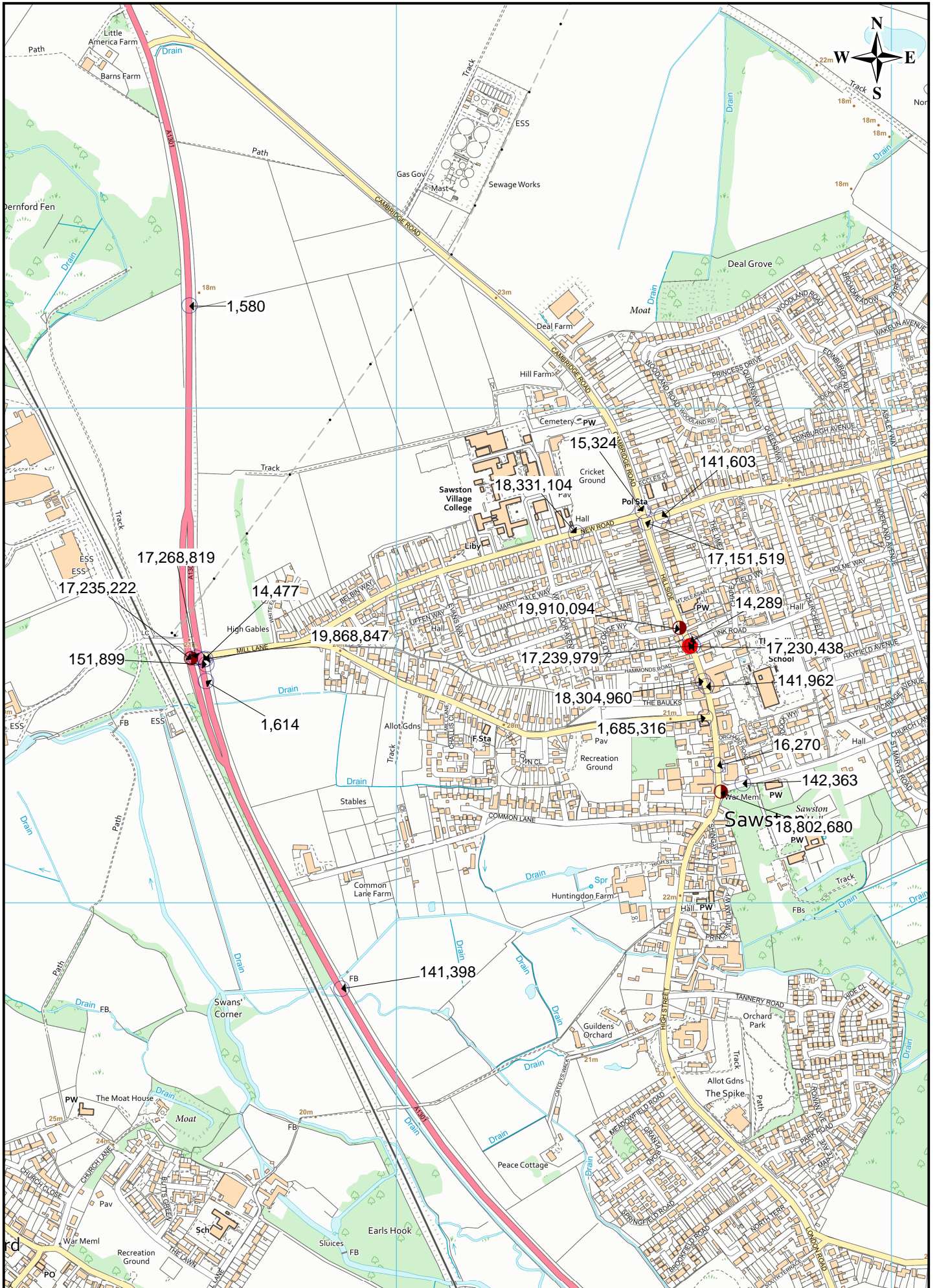
21/01/2020	Vehicle Classes													TOTAL
Hr Ending	1	2	3	4	5	6	7	8	9	10	11	12	13	
1	4	0	0	0	0	0	0	0	0	0	0	0	0	4
2	3	0	0	0	0	0	0	0	0	0	0	0	0	3
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5	2	0	0	0	0	0	0	0	0	0	0	0	0	2
6	4	0	0	0	0	0	0	0	0	0	0	0	0	4
7	12	1	0	0	0	0	0	0	0	0	0	0	0	13
8	51	5	0	0	0	0	0	0	0	0	0	0	0	56
9	116	10	1	0	0	0	0	0	0	0	0	2	0	129
10	64	5	0	0	0	0	0	0	0	0	0	1	0	70
11	39	6	0	0	2	0	0	0	0	0	0	0	0	47
12	28	9	0	0	2	0	0	0	0	0	0	1	0	40
13	34	4	0	0	0	0	0	0	0	0	0	1	0	39
14	76	8	1	0	0	0	0	0	0	0	0	0	0	85
15	78	9	2	0	3	0	0	0	0	0	0	0	0	92
16	80	15	0	0	1	0	0	0	0	0	0	0	0	96
17	110	15	0	0	0	0	0	0	0	0	0	0	0	125
18	100	8	0	0	0	0	0	0	0	0	0	1	0	109
19	113	3	0	0	0	0	0	0	0	0	0	0	0	116
20	49	6	0	0	0	0	0	0	0	0	0	0	0	55
21	30	1	0	0	0	0	0	0	0	0	0	0	0	31
22	31	1	0	0	0	0	0	0	0	0	0	0	0	32
23	20	5	0	0	0	0	0	0	0	0	0	0	0	25
24	8	0	0	0	0	0	0	0	0	0	0	0	0	8

7-19	889	97	4	0	8	0	0	0	0	0	0	6	0	1004
6-22	1011	106	4	0	8	0	0	0	0	0	0	6	0	1135
6-24	1039	111	4	0	8	0	0	0	0	0	0	6	0	1168
0-24	1053	111	4	0	8	0	0	0	0	0	0	6	0	1182

## Appendix C – Accident Data

Date	Police_ref	Eastings	Northing	Severity	Road_cond	Visibility	Casualties	Pedestrian	Cycles	P2W	OAPs	Children	Manoeuvre	Time	Vehicles	Roadclass1	Roadnum1	Road_Type	Speed_Lim	Junct_det	Junct_ctrl
20140217	14289	548594	249528	3. Slight	1. Dry	4. Darkness: street lights present and lit	1	1	0	0	0	0	0 2. Right turn	20:20	1	5. C	249	1. Roundabout	30	1. Roundabout	4. Give way or Uncontrolled
20140325	14477	547610	249491	3. Slight	2. Wet/Damp	1. Daylight	1	0	1	0	0	0	0 1. Left turn	09:10	2	3. A	1301	6. Single carriageway	60	6. Crossroads	4. Give way or Uncontrolled
20140819	141398	547889	248827	3. Slight	1. Dry	6. Darkness: no street lighting	1	0	0	1	0	0	0 0. No turn	02:33	1	3. A	1301	6. Single carriageway	60	0. Not within 20m of junction	. Not applicable
20141006	141603	548537	249781	3. Slight	2. Wet/Damp	1. Daylight	1	0	1	0	0	0	0 0. No turn	08:00	2	6. Unclassified	0	6. Single carriageway	30	0. Not within 20m of junction	. Not applicable
20141101	141962	548626	249437	3. Slight	1. Dry	4. Darkness: street lights present and lit	1	0	0	0	1	0	0 0. No turn	17:40	3	5. C	249	6. Single carriageway	20	0. Not within 20m of junction	. Not applicable
20141216	142363	548700	249241	3. Slight	2. Wet/Damp	4. Darkness: street lights present and lit	1	0	0	1	0	0	0 0. No turn	15:30	2	6. Unclassified	0	6. Single carriageway	30	8. Pri Drive	4. Give way or Uncontrolled
20150124	1580	547582	250206	3. Slight	1. Dry	1. Daylight	2	0	0	0	0	0	0 0. No turn	13:00	2	3. A	1301	6. Single carriageway	60	0. Not within 20m of junction	. Not applicable
20150210	15324	548498	249792	3. Slight	2. Wet/Damp	1. Daylight	1	1	0	0	0	0	0 2. Right turn	07:17	1	5. C	249	6. Single carriageway	30	6. Crossroads	2. Automatic traffic signal
20151019	151899	547616	249482	3. Slight	1. Dry	1. Daylight	2	0	0	0	0	0	0 1. Left turn	06:45	2	3. A	1301	6. Single carriageway	30	3. T & Stag Jct	4. Give way or Uncontrolled
20160104	1614	547615	249448	3. Slight	2. Wet/Damp	1. Daylight	1	0	0	0	0	0	0 1. Left turn	07:50	2	3. A	1301	6. Single carriageway	50	0. Not within 20m of junction	. Not applicable
20160224	16270	548649	249277	3. Slight	1. Dry	1. Daylight	1	0	1	0	0	0	0 0. No turn	08:40	2	5. C	249	6. Single carriageway	30	0. Not within 20m of junction	. Not applicable
20160526	1685316	548624	249374	3. Slight	1. Dry	1. Daylight	1	0	1	0	1	0	0 0. No turn	11:55	2	5. C	249	6. Single carriageway	30	3. T & Stag Jct	4. Give way or Uncontrolled
20170119	17151519	548503	249769	3. Slight	1. Dry	1. Daylight	1	0	1	0	0	0	0 0. No turn	08:25	2	5. C	249	6. Single carriageway	30	3. T & Stag Jct	4. Give way or Uncontrolled
20170930	17230438	548593	249518	1. Fatal	1. Dry	1. Daylight	1	0	1	0	1	0	0 2. Right turn	13:00	2	5. C	249	1. Roundabout	20	2. Mini roundabout	4. Give way or Uncontrolled
20171012	17235222	547585	249493	2. Serious	1. Dry	1. Daylight	1	0	0	1	0	0	0 0. No turn	07:35	2	3. A	1301	3. Dual carriageway	60	3. T & Stag Jct	4. Give way or Uncontrolled
20171012	17239979	548599	249520	3. Slight	1. Dry	1. Daylight	1	0	1	0	0	0	0 1. Left turn	07:15	2	5. C	249	1. Roundabout	20	2. Mini roundabout	4. Give way or Uncontrolled
20171130	17268819	547595	249495	3. Slight	3. Snow	4. Darkness: street lights present and lit	1	0	0	0	0	0	0 2. Right turn	17:40	3	3. A	1301	6. Single carriageway	60	3. T & Stag Jct	4. Give way or Uncontrolled
20180615	18304960	548620	249448	3. Slight	1. Dry	1. Daylight	1	0	1	0	0	0	0 0. No turn	08:15	2	6. Unclassified	0	6. Single carriageway	30	0. Not within 20m of junction	. Not applicable
20180919	18331104	548363	249748	3. Slight	1. Dry	1. Daylight	1	1	0	0	0	1	0 0. No turn	15:16	1	6. Unclassified	0	6. Single carriageway	30	0. Not within 20m of junction	. Not applicable
20181123	18802680	548656	249223	2. Serious	2. Wet/Damp	4. Darkness: street lights present and lit	1	0	1	0	0	0	0 1. Left turn	05:10	2	6. Unclassified	0	6. Single carriageway	30	3. T & Stag Jct	4. Give way or Uncontrolled
20190802	19868847	547614	249493	3. Slight	1. Dry	1. Daylight	1	0	0	0	0	0	0 1. Left turn	17:10	1	6. Unclassified	0	6. Single carriageway	30	3. T & Stag Jct	4. Give way or Uncontrolled
20190917	19910094	548572	249553	2. Serious	1. Dry	1. Daylight	1	0	1	0	1	0	0 1. Left turn	08:15	2	6. Unclassified	0	6. Single carriageway	30	3. T & Stag Jct	4. Give way or Uncontrolled

Roadclass2	Roadnum2	Cross_ctrl	Cross_fac	Weather	SpCond	Carr_haz	Day	Location	Local_Auth	ReportedAt
6. Unclassified	0	0. None	0. None within 50m	1. Fine without high winds	4	0. None	2. Monday	LINK RD 10M WEST OF HIGH ST SAWSTON	E07000012	1. Yes
6. Unclassified	0	0. None	0. None within 50m	2. Raining without high winds	4	0. None	3. Tuesday	A1301 AT JUNCTION WITH MILL LANE SAWSTON	E07000012	1. Yes
. Not applicable	0	0. None	0. None within 50m	1. Fine without high winds	0	0. None	3. Tuesday	A1301 WHITTLESFORD DUXFORD EXACT LOC UNKNOWN	E07000012	1. Yes
. Not applicable	0	0. None	0. None within 50m	1. Fine without high winds	0	0. None	2. Monday	BABRAHAM RD SAWSTON	E07000012	2. No - accident was reported 'over the counter'
. Not applicable	0	0. None	4. Pelican, puffin, toucan etc.	1. Fine without high winds	0	0. None	7. Saturday	HIGH ST OUTSIDE 29 BUDGENS SAWSTON	E07000012	1. Yes
6. Unclassified	0	0. None	0. None within 50m	1. Fine without high winds	4	0. None	3. Tuesday	CHURCH LANE 40M EAST OF HIGH ST SAWSTON	E07000012	1. Yes
. Not applicable	0	0. None	0. None within 50m	1. Fine without high winds	0	0. None	7. Saturday	A1301 SAWSTON AT LAYBY	E07000012	1. Yes
6. Unclassified	0	0. None	5. Ped. phase at traffic signal junction	1. Fine without high winds	2	0. None	3. Tuesday	CAMBRIDGE RD NEW RD SAWSTON OS POLICE STATION	E07000012	1. Yes
6. Unclassified	0	0. None	0. None within 50m	1. Fine without high winds	4	0. None	2. Monday	MILL LANE JUNCTION A1301 SAWSTON	E07000012	1. Yes
. Not applicable	0	0. None	0. None within 50m	1. Fine without high winds	0	0. None	2. Monday	A1301 SAWSTON BYPASS 50M SOUTH OF MILL LANE SAWSTON	E07000012	1. Yes
. Not applicable	0	0. None	0. None within 50m	9. Unknown	0	0. None	4. Wednesday	HIGH ST SAWSTON EXACT LOCATION OR DIRECTIONS NOT KNOWN NOT PROVIDED	E07000012	2. No - accident was reported 'over the counter'
6. Unclassified	0	0. None	4. Pelican, puffin, toucan etc.	1. Fine without high winds	4	0. None	5. Thursday	MILL LANE 10 METRES WEST OF JUNCTION WITH HIGH STREET	E07000012	1. Yes
6. Unclassified	0	0. None	0. None within 50m	1. Fine without high winds	0	0. None	5. Thursday	BABRAHAM ROAD 20 METRES WEST OF CHURCHFIELD AVENUE	E07000012	1. Yes
6. Unclassified	0	0. None	0. None within 50m	1. Fine without high winds	0	0. None	7. Saturday	HIGH STREET AT JN WITH LINK ROAD	E07000012	1. Yes
6. Unclassified	0	0. None	0. None within 50m	1. Fine without high winds	0	0. None	5. Thursday	MILL LANE A1301 AT JN WITH MILL LANE	E07000012	1. Yes
6. Unclassified	0	0. None	0. None within 50m	1. Fine without high winds	0	0. None	5. Thursday	HIGH STREET	E07000012	2. No - accident was reported 'over the counter'
6. Unclassified	0	0. None	0. None within 50m	3. Snowing without high winds	0	0. None	5. Thursday	SAWSTON BYPASS A1301	E07000012	1. Yes
. Not applicable	0	0. None	0. None within 50m	1. Fine without high winds	0	0. None	6. Friday	HIGH STREET OUTSIDE BUDGEONS	E07000012	2. No - accident was reported 'over the counter'
. Not applicable	0	0. None	0. None within 50m	4. Fine with high winds	0	0. None	4. Wednesday	NEW ROAD	E07000012	1. Yes
6. Unclassified	0	0. None	0. None within 50m	1. Fine without high winds	0	0. None	6. Friday	HIGH STREET AT JUNCTION WITH CHURCH LANE	E07000012	2. No - accident was reported 'over the counter'
3. A	1301	0. None	0. None within 50m	1. Fine without high winds	0	0. None	6. Friday	MILL LANE NEAR JUNCTION WITH SAWSTON BYPASS (A1301)	E07000012	1. Yes
6. Unclassified	0	0. None	0. None within 50m	1. Fine without high winds	0	0. None	3. Tuesday	HIGH STREET AT JUNCTION WITH OLD FORGE WAY.	E07000012	1. Yes



## Appendix D – TRICS® Outputs

Calculation Reference: AUDIT-100314-200129-0133

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL  
 Category : A - HOUSES PRIVATELY OWNED  
 MULTI-MODAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	1 days
	HF HERTFORDSHIRE	1 days
	KC KENT	2 days
	SC SURREY	1 days
	WS WEST SUSSEX	3 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
06	WEST MIDLANDS	
	ST STAFFORDSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NE NORTH EAST LINCOLNSHIRE	1 days
11	SCOTLAND	
	FA FALKIRK	1 days
13	MUNSTER	
	WA WATERFORD	1 days
17	ULSTER (NORTHERN IRELAND)	
	AN ANTRIM	2 days

*This section displays the number of survey days per TRICS® sub-region in the selected set*

Secondary Filtering selection:

*This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.*

Parameter: Number of dwellings  
 Actual Range: 151 to 288 (units: )  
 Range Selected by User: 150 to 300 (units: )

Parking Spaces Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/11 to 23/09/19

*This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.*

Selected survey days:

Monday	4 days
Tuesday	4 days
Wednesday	4 days
Thursday	3 days

*This data displays the number of selected surveys by day of the week.*

Selected survey types:

Manual count	15 days
Directional ATC Count	0 days

*This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.*

Selected Locations:

Edge of Town Centre	1
Suburban Area (PPS6 Out of Centre)	2
Edge of Town	11
Neighbourhood Centre (PPS6 Local Centre)	1

*This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.*

Selected Location Sub Categories:

Residential Zone	13
Village	1

*This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.*

Secondary Filtering selection:

Use Class:

C3 15 days

*This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.*

Population within 1 mile:

1,001 to 5,000	3 days
5,001 to 10,000	4 days
10,001 to 15,000	5 days
20,001 to 25,000	3 days

*This data displays the number of selected surveys within stated 1-mile radii of population.*

Population within 5 miles:

5,001 to 25,000	3 days
25,001 to 50,000	1 days
50,001 to 75,000	2 days
75,001 to 100,000	4 days
100,001 to 125,000	1 days
125,001 to 250,000	4 days

*This data displays the number of selected surveys within stated 5-mile radii of population.*

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	10 days
1.6 to 2.0	3 days

*This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.*

Travel Plan:

Yes	6 days
No	9 days

*This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.*

PTAL Rating:

No PTAL Present	15 days
-----------------	---------

*This data displays the number of selected surveys with PTAL Ratings.*

LIST OF SITES relevant to selection parameters

1	AN-03-A-08 BALLINDERRY ROAD LISBURN	HOUSES & FLATS	ANTRIM
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 204 <i>Survey date: TUESDAY 29/10/13</i>		
2	AN-03-A-09 SLOEFIELD DRIVE CARRICKFERGUS	DETACHED & SEMI-DETACHED	ANTRIM
	Edge of Town No Sub Category Total Number of dwellings: 151 <i>Survey date: WEDNESDAY 12/10/16</i>		
3	ES-03-A-03 SHEPHAM LANE POLEGATE	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total Number of dwellings: 212 <i>Survey date: MONDAY 11/07/16</i>		
4	FA-03-A-02 ROSEBANK AVENUE & SPRINGFIELD DRIVE FALKIRK	MIXED HOUSES	FALKIRK
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 161 <i>Survey date: WEDNESDAY 29/05/13</i>		
5	HF-03-A-03 HARE STREET ROAD BUNTINGFORD	MIXED HOUSES	HERTFORDSHIRE
	Edge of Town Residential Zone Total Number of dwellings: 160 <i>Survey date: MONDAY 08/07/19</i>		
6	KC-03-A-07 RECVLVER ROAD HERNE BAY	MIXED HOUSES	KENT
	Edge of Town Residential Zone Total Number of dwellings: 288 <i>Survey date: WEDNESDAY 27/09/17</i>		
7	KC-03-A-08 MAIDSTONE ROAD CHARING	MIXED HOUSES	KENT
	Neighbourhood Centre (PPS6 Local Centre) Village Total Number of dwellings: 159 <i>Survey date: TUESDAY 22/05/18</i>		
8	NE-03-A-03 STATION ROAD SCUNTHORPE	PRIVATE HOUSES	NORTH EAST LINCOLNSHIRE
	Edge of Town Centre Residential Zone Total Number of dwellings: 180 <i>Survey date: TUESDAY 20/05/14</i>		

LIST OF SITES relevant to selection parameters (Cont.)

9	NF-03-A-06 BEAUFORT WAY GREAT YARMOUTH BRADWELL Edge of Town Residential Zone Total Number of dwellings: <i>Survey date: MONDAY</i>	MIXED HOUSES      275 23/09/19	NORFOLK       <i>Survey Type: MANUAL</i>
10	SC-03-A-05 REIGATE ROAD HORLEY  Edge of Town Residential Zone Total Number of dwellings: <i>Survey date: MONDAY</i>	MIXED HOUSES      207 01/04/19	SURREY       <i>Survey Type: MANUAL</i>
11	ST-03-A-07 BEACONSIDE STAFFORD MARSTON GATE Edge of Town Residential Zone Total Number of dwellings: <i>Survey date: WEDNESDAY</i>	DETACHED & SEMI-DETACHED      248 22/11/17	STAFFORDSHIRE       <i>Survey Type: MANUAL</i>
12	WA-03-A-04 MAYPARK LANE WATERFORD  Edge of Town Residential Zone Total Number of dwellings: <i>Survey date: TUESDAY</i>	DETACHED      280 24/06/14	WATERFORD       <i>Survey Type: MANUAL</i>
13	WS-03-A-04 HILLS FARM LANE HORSHAM BROADBRIDGE HEATH Edge of Town Residential Zone Total Number of dwellings: <i>Survey date: THURSDAY</i>	MIXED HOUSES      151 11/12/14	WEST SUSSEX       <i>Survey Type: MANUAL</i>
14	WS-03-A-08 ROUNDSTONE LANE ANGMERING  Edge of Town Residential Zone Total Number of dwellings: <i>Survey date: THURSDAY</i>	MIXED HOUSES      180 19/04/18	WEST SUSSEX       <i>Survey Type: MANUAL</i>
15	WS-03-A-09 LITTLEHAMPTON ROAD WORTHING WEST DURRINGTON Edge of Town Residential Zone Total Number of dwellings: <i>Survey date: THURSDAY</i>	MIXED HOUSES & FLATS      197 05/07/18	WEST SUSSEX       <i>Survey Type: MANUAL</i>

*This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.*

WSP GROUP STREET NAME TOWN/CITY

Licence No: 100314

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	204	0.072	15	204	0.271	15	204	0.343
08:00 - 09:00	15	204	0.143	15	204	0.391	15	204	0.534
09:00 - 10:00	15	204	0.151	15	204	0.192	15	204	0.343
10:00 - 11:00	15	204	0.129	15	204	0.159	15	204	0.288
11:00 - 12:00	15	204	0.133	15	204	0.156	15	204	0.289
12:00 - 13:00	15	204	0.180	15	204	0.159	15	204	0.339
13:00 - 14:00	15	204	0.168	15	204	0.178	15	204	0.346
14:00 - 15:00	15	204	0.194	15	204	0.213	15	204	0.407
15:00 - 16:00	15	204	0.278	15	204	0.174	15	204	0.452
16:00 - 17:00	15	204	0.281	15	204	0.174	15	204	0.455
17:00 - 18:00	15	204	0.371	15	204	0.181	15	204	0.552
18:00 - 19:00	15	204	0.294	15	204	0.197	15	204	0.491
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			2.394			2.445			4.839

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

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#### Parameter summary

Trip rate parameter range selected: 151 - 288 (units: )  
 Survey date range: 01/01/11 - 23/09/19  
 Number of weekdays (Monday-Friday): 15  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys automatically removed from selection: 0  
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

WSP GROUP STREET NAME TOWN/CITY

Licence No: 100314

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TAXIS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	204	0.002	15	204	0.002	15	204	0.004
08:00 - 09:00	15	204	0.004	15	204	0.004	15	204	0.008
09:00 - 10:00	15	204	0.002	15	204	0.002	15	204	0.004
10:00 - 11:00	15	204	0.001	15	204	0.001	15	204	0.002
11:00 - 12:00	15	204	0.003	15	204	0.003	15	204	0.006
12:00 - 13:00	15	204	0.002	15	204	0.002	15	204	0.004
13:00 - 14:00	15	204	0.002	15	204	0.002	15	204	0.004
14:00 - 15:00	15	204	0.003	15	204	0.003	15	204	0.006
15:00 - 16:00	15	204	0.005	15	204	0.005	15	204	0.010
16:00 - 17:00	15	204	0.005	15	204	0.005	15	204	0.010
17:00 - 18:00	15	204	0.002	15	204	0.001	15	204	0.003
18:00 - 19:00	15	204	0.001	15	204	0.002	15	204	0.003
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.032			0.032			0.064

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

WSP GROUP STREET NAME TOWN/CITY

Licence No: 100314

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL OGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	204	0.001	15	204	0.001	15	204	0.002
08:00 - 09:00	15	204	0.003	15	204	0.003	15	204	0.006
09:00 - 10:00	15	204	0.005	15	204	0.003	15	204	0.008
10:00 - 11:00	15	204	0.003	15	204	0.003	15	204	0.006
11:00 - 12:00	15	204	0.002	15	204	0.002	15	204	0.004
12:00 - 13:00	15	204	0.003	15	204	0.004	15	204	0.007
13:00 - 14:00	15	204	0.002	15	204	0.001	15	204	0.003
14:00 - 15:00	15	204	0.002	15	204	0.003	15	204	0.005
15:00 - 16:00	15	204	0.002	15	204	0.003	15	204	0.005
16:00 - 17:00	15	204	0.002	15	204	0.002	15	204	0.004
17:00 - 18:00	15	204	0.002	15	204	0.000	15	204	0.002
18:00 - 19:00	15	204	0.002	15	204	0.002	15	204	0.004
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.029			0.027			0.056

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

WSP GROUP STREET NAME TOWN/CITY

Licence No: 100314

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL PSVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	204	0.001	15	204	0.001	15	204	0.002
08:00 - 09:00	15	204	0.002	15	204	0.002	15	204	0.004
09:00 - 10:00	15	204	0.001	15	204	0.001	15	204	0.002
10:00 - 11:00	15	204	0.001	15	204	0.001	15	204	0.002
11:00 - 12:00	15	204	0.001	15	204	0.001	15	204	0.002
12:00 - 13:00	15	204	0.001	15	204	0.001	15	204	0.002
13:00 - 14:00	15	204	0.001	15	204	0.001	15	204	0.002
14:00 - 15:00	15	204	0.001	15	204	0.001	15	204	0.002
15:00 - 16:00	15	204	0.001	15	204	0.001	15	204	0.002
16:00 - 17:00	15	204	0.001	15	204	0.001	15	204	0.002
17:00 - 18:00	15	204	0.001	15	204	0.001	15	204	0.002
18:00 - 19:00	15	204	0.000	15	204	0.000	15	204	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.012			0.012			0.024

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

WSP GROUP STREET NAME TOWN/CITY

Licence No: 100314

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	204	0.003	15	204	0.008	15	204	0.011
08:00 - 09:00	15	204	0.006	15	204	0.016	15	204	0.022
09:00 - 10:00	15	204	0.001	15	204	0.003	15	204	0.004
10:00 - 11:00	15	204	0.004	15	204	0.004	15	204	0.008
11:00 - 12:00	15	204	0.003	15	204	0.003	15	204	0.006
12:00 - 13:00	15	204	0.004	15	204	0.005	15	204	0.009
13:00 - 14:00	15	204	0.002	15	204	0.003	15	204	0.005
14:00 - 15:00	15	204	0.004	15	204	0.005	15	204	0.009
15:00 - 16:00	15	204	0.009	15	204	0.005	15	204	0.014
16:00 - 17:00	15	204	0.013	15	204	0.009	15	204	0.022
17:00 - 18:00	15	204	0.012	15	204	0.007	15	204	0.019
18:00 - 19:00	15	204	0.010	15	204	0.008	15	204	0.018
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.071			0.076			0.147

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

WSP GROUP STREET NAME TOWN/CITY

Licence No: 100314

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL VEHICLE OCCUPANTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	204	0.086	15	204	0.423	15	204	0.509
08:00 - 09:00	15	204	0.185	15	204	0.693	15	204	0.878
09:00 - 10:00	15	204	0.196	15	204	0.283	15	204	0.479
10:00 - 11:00	15	204	0.167	15	204	0.238	15	204	0.405
11:00 - 12:00	15	204	0.179	15	204	0.228	15	204	0.407
12:00 - 13:00	15	204	0.252	15	204	0.226	15	204	0.478
13:00 - 14:00	15	204	0.241	15	204	0.253	15	204	0.494
14:00 - 15:00	15	204	0.278	15	204	0.300	15	204	0.578
15:00 - 16:00	15	204	0.472	15	204	0.252	15	204	0.724
16:00 - 17:00	15	204	0.471	15	204	0.264	15	204	0.735
17:00 - 18:00	15	204	0.587	15	204	0.260	15	204	0.847
18:00 - 19:00	15	204	0.462	15	204	0.301	15	204	0.763
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			3.576			3.721			7.297

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

WSP GROUP STREET NAME TOWN/CITY

Licence No: 100314

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL PEDESTRIANS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	204	0.015	15	204	0.027	15	204	0.042
08:00 - 09:00	15	204	0.030	15	204	0.081	15	204	0.111
09:00 - 10:00	15	204	0.027	15	204	0.037	15	204	0.064
10:00 - 11:00	15	204	0.026	15	204	0.034	15	204	0.060
11:00 - 12:00	15	204	0.024	15	204	0.028	15	204	0.052
12:00 - 13:00	15	204	0.030	15	204	0.025	15	204	0.055
13:00 - 14:00	15	204	0.025	15	204	0.032	15	204	0.057
14:00 - 15:00	15	204	0.030	15	204	0.036	15	204	0.066
15:00 - 16:00	15	204	0.061	15	204	0.043	15	204	0.104
16:00 - 17:00	15	204	0.060	15	204	0.032	15	204	0.092
17:00 - 18:00	15	204	0.047	15	204	0.025	15	204	0.072
18:00 - 19:00	15	204	0.037	15	204	0.048	15	204	0.085
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.412			0.448			0.860

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

WSP GROUP STREET NAME TOWN/CITY

Licence No: 100314

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED  
MULTI-MODAL BUS/TRAM PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	204	0.000	15	204	0.009	15	204	0.009
08:00 - 09:00	15	204	0.001	15	204	0.018	15	204	0.019
09:00 - 10:00	15	204	0.001	15	204	0.007	15	204	0.008
10:00 - 11:00	15	204	0.003	15	204	0.003	15	204	0.006
11:00 - 12:00	15	204	0.002	15	204	0.003	15	204	0.005
12:00 - 13:00	15	204	0.002	15	204	0.004	15	204	0.006
13:00 - 14:00	15	204	0.003	15	204	0.004	15	204	0.007
14:00 - 15:00	15	204	0.002	15	204	0.002	15	204	0.004
15:00 - 16:00	15	204	0.017	15	204	0.006	15	204	0.023
16:00 - 17:00	15	204	0.008	15	204	0.004	15	204	0.012
17:00 - 18:00	15	204	0.009	15	204	0.002	15	204	0.011
18:00 - 19:00	15	204	0.012	15	204	0.004	15	204	0.016
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.060			0.066			0.126

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

WSP GROUP STREET NAME TOWN/CITY

Licence No: 100314

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED  
MULTI-MODAL TOTAL RAIL PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	204	0.002	15	204	0.005	15	204	0.007
08:00 - 09:00	15	204	0.000	15	204	0.008	15	204	0.008
09:00 - 10:00	15	204	0.000	15	204	0.004	15	204	0.004
10:00 - 11:00	15	204	0.000	15	204	0.002	15	204	0.002
11:00 - 12:00	15	204	0.000	15	204	0.001	15	204	0.001
12:00 - 13:00	15	204	0.000	15	204	0.002	15	204	0.002
13:00 - 14:00	15	204	0.001	15	204	0.001	15	204	0.002
14:00 - 15:00	15	204	0.001	15	204	0.000	15	204	0.001
15:00 - 16:00	15	204	0.004	15	204	0.001	15	204	0.005
16:00 - 17:00	15	204	0.003	15	204	0.001	15	204	0.004
17:00 - 18:00	15	204	0.003	15	204	0.002	15	204	0.005
18:00 - 19:00	15	204	0.005	15	204	0.001	15	204	0.006
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.019			0.028			0.047

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

WSP GROUP STREET NAME TOWN/CITY

Licence No: 100314

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL COACH PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	204	0.000	15	204	0.000	15	204	0.000
08:00 - 09:00	15	204	0.000	15	204	0.003	15	204	0.003
09:00 - 10:00	15	204	0.000	15	204	0.000	15	204	0.000
10:00 - 11:00	15	204	0.000	15	204	0.000	15	204	0.000
11:00 - 12:00	15	204	0.000	15	204	0.000	15	204	0.000
12:00 - 13:00	15	204	0.000	15	204	0.000	15	204	0.000
13:00 - 14:00	15	204	0.000	15	204	0.000	15	204	0.000
14:00 - 15:00	15	204	0.001	15	204	0.000	15	204	0.001
15:00 - 16:00	15	204	0.002	15	204	0.000	15	204	0.002
16:00 - 17:00	15	204	0.000	15	204	0.000	15	204	0.000
17:00 - 18:00	15	204	0.000	15	204	0.000	15	204	0.000
18:00 - 19:00	15	204	0.000	15	204	0.000	15	204	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.003			0.003			0.006

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

WSP GROUP STREET NAME TOWN/CITY

Licence No: 100314

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED  
 MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	204	0.002	15	204	0.014	15	204	0.016
08:00 - 09:00	15	204	0.001	15	204	0.028	15	204	0.029
09:00 - 10:00	15	204	0.002	15	204	0.011	15	204	0.013
10:00 - 11:00	15	204	0.003	15	204	0.005	15	204	0.008
11:00 - 12:00	15	204	0.002	15	204	0.004	15	204	0.006
12:00 - 13:00	15	204	0.002	15	204	0.005	15	204	0.007
13:00 - 14:00	15	204	0.003	15	204	0.005	15	204	0.008
14:00 - 15:00	15	204	0.004	15	204	0.002	15	204	0.006
15:00 - 16:00	15	204	0.022	15	204	0.007	15	204	0.029
16:00 - 17:00	15	204	0.011	15	204	0.005	15	204	0.016
17:00 - 18:00	15	204	0.011	15	204	0.004	15	204	0.015
18:00 - 19:00	15	204	0.017	15	204	0.005	15	204	0.022
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.080			0.095			0.175

*This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.*

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP\*FACT. Trip rates are then rounded to 3 decimal places.*

WSP GROUP STREET NAME TOWN/CITY

Licence No: 100314

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	204	0.106	15	204	0.472	15	204	0.578
08:00 - 09:00	15	204	0.222	15	204	0.820	15	204	1.042
09:00 - 10:00	15	204	0.224	15	204	0.334	15	204	0.558
10:00 - 11:00	15	204	0.199	15	204	0.282	15	204	0.481
11:00 - 12:00	15	204	0.208	15	204	0.263	15	204	0.471
12:00 - 13:00	15	204	0.289	15	204	0.261	15	204	0.550
13:00 - 14:00	15	204	0.272	15	204	0.293	15	204	0.565
14:00 - 15:00	15	204	0.316	15	204	0.342	15	204	0.658
15:00 - 16:00	15	204	0.564	15	204	0.306	15	204	0.870
16:00 - 17:00	15	204	0.555	15	204	0.310	15	204	0.865
17:00 - 18:00	15	204	0.658	15	204	0.295	15	204	0.953
18:00 - 19:00	15	204	0.526	15	204	0.362	15	204	0.888
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			4.139			4.340			8.479

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

WSP GROUP STREET NAME TOWN/CITY

Licence No: 100314

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL CARS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	204	0.047	15	204	0.197	15	204	0.244
08:00 - 09:00	15	204	0.093	15	204	0.265	15	204	0.358
09:00 - 10:00	15	204	0.090	15	204	0.119	15	204	0.209
10:00 - 11:00	15	204	0.080	15	204	0.102	15	204	0.182
11:00 - 12:00	15	204	0.085	15	204	0.093	15	204	0.178
12:00 - 13:00	15	204	0.100	15	204	0.093	15	204	0.193
13:00 - 14:00	15	204	0.098	15	204	0.100	15	204	0.198
14:00 - 15:00	15	204	0.114	15	204	0.133	15	204	0.247
15:00 - 16:00	15	204	0.181	15	204	0.102	15	204	0.283
16:00 - 17:00	15	204	0.191	15	204	0.106	15	204	0.297
17:00 - 18:00	15	204	0.240	15	204	0.104	15	204	0.344
18:00 - 19:00	15	204	0.214	15	204	0.127	15	204	0.341
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			1.533			1.541			3.074

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

WSP GROUP STREET NAME TOWN/CITY

Licence No: 100314

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL LGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	204	0.015	15	204	0.019	15	204	0.034
08:00 - 09:00	15	204	0.017	15	204	0.022	15	204	0.039
09:00 - 10:00	15	204	0.024	15	204	0.022	15	204	0.046
10:00 - 11:00	15	204	0.019	15	204	0.018	15	204	0.037
11:00 - 12:00	15	204	0.015	15	204	0.021	15	204	0.036
12:00 - 13:00	15	204	0.024	15	204	0.018	15	204	0.042
13:00 - 14:00	15	204	0.022	15	204	0.022	15	204	0.044
14:00 - 15:00	15	204	0.020	15	204	0.020	15	204	0.040
15:00 - 16:00	15	204	0.020	15	204	0.020	15	204	0.040
16:00 - 17:00	15	204	0.018	15	204	0.019	15	204	0.037
17:00 - 18:00	15	204	0.026	15	204	0.015	15	204	0.041
18:00 - 19:00	15	204	0.015	15	204	0.015	15	204	0.030
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.235			0.231			0.466

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

WSP GROUP STREET NAME TOWN/CITY

Licence No: 100314

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL MOTOR CYCLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	204	0.000	15	204	0.002	15	204	0.002
08:00 - 09:00	15	204	0.000	15	204	0.002	15	204	0.002
09:00 - 10:00	15	204	0.000	15	204	0.001	15	204	0.001
10:00 - 11:00	15	204	0.000	15	204	0.000	15	204	0.000
11:00 - 12:00	15	204	0.000	15	204	0.001	15	204	0.001
12:00 - 13:00	15	204	0.000	15	204	0.000	15	204	0.000
13:00 - 14:00	15	204	0.001	15	204	0.001	15	204	0.002
14:00 - 15:00	15	204	0.002	15	204	0.001	15	204	0.003
15:00 - 16:00	15	204	0.001	15	204	0.001	15	204	0.002
16:00 - 17:00	15	204	0.002	15	204	0.002	15	204	0.004
17:00 - 18:00	15	204	0.002	15	204	0.001	15	204	0.003
18:00 - 19:00	15	204	0.002	15	204	0.001	15	204	0.003
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.010			0.013			0.023

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.