Traffic Monitoring Report

2021

Cambridgeshire County Council

cambridgeshire.gov.uk

Contents

1 BACKGROUND

1.1 Purpose of the Traffic Monitoring Report

1.1.1 Cambridgeshire County Council (as Highway Authority) is responsible for all public roads within the county, except for the motorway and trunk road network, which is operated and maintained by National Highways. The County Council requires up to date information on vehicle flows, flow composition, vehicle occupancy and overall trends. This information is used:

- To identify and justify transport schemes
- To assist in the priority ranking of schemes
- For strategic planning
- For development control purposes
- In road maintenance assessments
- In road safety investigations
- In the environmental assessment of schemes
- For the monitoring of targets
- To provide a database of information.

1.1.2 This report examines traffic and travel trends for both rural and urban roads within the county. Where appropriate, trends are compared with national statistics.

1.2 Traffic Counts

1.2.1 Much of the information in this report is based on single-day, twelve-hour manual classified counts (MCC) collected on an annual basis.

1.2.2 Due to the variable nature of traffic flows, the number of vehicles recorded in these samples will fluctuate day-to-day even if counted under similar conditions. The associated variability is generally less pronounced as the number of vehicles increases so care should be taken, particularly for sites with lower flow volumes.

1.2.3 There is also a potential systematic variation due to differing circumstances when counts are carried out. Some examples are:

- Roadworks, collisions, or other incidents causing vehicle diversions
- Changes in travel mode due to weather
- Unusual events (e.g., sport or entertainment events) causing untypical traffic patterns

1.2.4 Care is taken to minimise the potential for systematic variation but there is no way to eliminate it altogether. Due to this, caution is advised when interpreting observed changes in traffic from one year to the next.

1.2.5 In previous years the River Cam Screenline and Cycle Route Monitoring counts have been conducted in the Spring and the Cambridge Radial and Market Town counts have been undertaken in the autumn. However, due to the COVID-19 pandemic, the River Cam Screenline and Cycle Route Monitoring counts were also undertaken

during the autumn in 2020 and 2021 to allow data to be collected outside of COVID-19 lockdown conditions.

1.3 COVID-19 Pandemic

1.3.1 Some of the survey data presented within the Traffic Monitoring Report was collected during periods of COVID-19 restriction and/or lockdown, as follows.

- **Spring 2020 Surveys**: River Cam Screenline (22nd & 29th April 2020) and Cycle Route Monitoring (6th May 2020) took place during the first national lockdown. Travel was limited to key workers and essential requirements only and schools were closed. Travel demand was therefore being supressed.
- **Autumn 2020 Surveys:** River Cam Screenline repeated (14th & 21st October 2020), Cycle Route Monitoring repeated (21st October 2020), Cambridge Radials (14th October 2020) and Town Monitoring (3rd November 2020). The original regional tier system was introduced 2 days before the Autumn 2020 surveys took place. The surveys concluded immediately before the second national lockdown which took place from 5th November to 2nd December 2020. Cambridgeshire was in the lowest tier (tier 1) at the time of the surveys which meant rule of 6 when meeting others, pubs and restaurants shutting at 11pm, working from home where possible, limited capacity at sporting events and hairdressers open. Travel demand was therefore still being supressed.

  Spring 2021 Surveys: River Cam Screenline (28th April & 5th May 2021) and Cycle Route Monitoring (12th May 2021). The Spring 2021 surveys took place during the third national lockdown which began on 4th January 2021. Restrictions gradually eased on 8th March (schools re-opened), 12th April (retail and hospitality re-opened) until 19th July 2021 when most remaining restrictions were lifted. The Spring 2021 surveys took place once schools, shops and outdoor-hospitality had re-opened but before international travel, indoor-hospitality or sporting events were permitted. Travel demand was therefore still being supressed.
- **Autumn 2021 Surveys:** River Cam Screenline repeated (6th & 13th October 2021), Cycle Route Monitoring repeated (20th October 2021), Cambridge Radials (6h October 2021) and Town Monitoring (3rd November 2021). Most remaining restrictions were lifted on 19th July 2021 so the Autumn 2021 surveys took place under low-restriction conditions (facemasks and isolation for those infected). Travel demand was therefore still being supressed although likely to a lesser degree than in 2020 or spring 2021.

1.3.2 On 24th February 2022 all COVID rules were removed in England and the Spring 2022 surveys are therefore anticipated to be conducted under restriction-free conditions. However, due to the prior two years of restrictions, longer term changes to behaviour (working from home, mode choice, reduced travel) may continue to be seen for many years to come.

2 Headlines

2.1 Cambridge

Cambridge City Radials

2.1.1 On Wednesday 6th October 2021, just under 187,000 movements were recorded crossing the Cambridge City boundary between 7am and 7pm. Of these movements, 93% were motorised vehicles (motorcycles, cars, LGVs, HGVs and buses), 5% were pedal cycles and 2% were pedestrians. The October 2021 volume is an increase of 8% compared to the level recorded in 2020 but represents a decrease of 14% compared to 2019 and a decrease of 6% compared to 2011. This indicates that volumes entering / exiting the city are lower than they were prior to the pandemic.

Cambridge River Cam Crossings

2.1.2 Movements crossing the River Cam were recorded during 2-days in April 2021 and 2-days during October 2021.

2.1.3 In April 2021, the average number of movements recorded crossing the river between 7am and 7pm was 94,983 of which 51% were motorised vehicles, 23% were pedal cycles and 26% were pedestrians. The April 2021 volumes represent an increase of 145% compared with April 2020, and a decrease of approximately 20% compared with April 2019 and April 2011.

2.1.4 In October 2021, 113,312 movements were recorded crossing the river between 7am and 7pm of which 45% were motorised vehicles, 27% were pedal cycles and 28% were pedestrians. The October 2021 volumes represent a total increase of 25% compared to October 2020, with a particularly notable increase in cyclists (+60%).

Park and Ride Journeys

2.1.5 There were over 1.4 million Park and Ride journeys in 2021, representing a decrease of 60% compared to pre-pandemic levels in 2019.

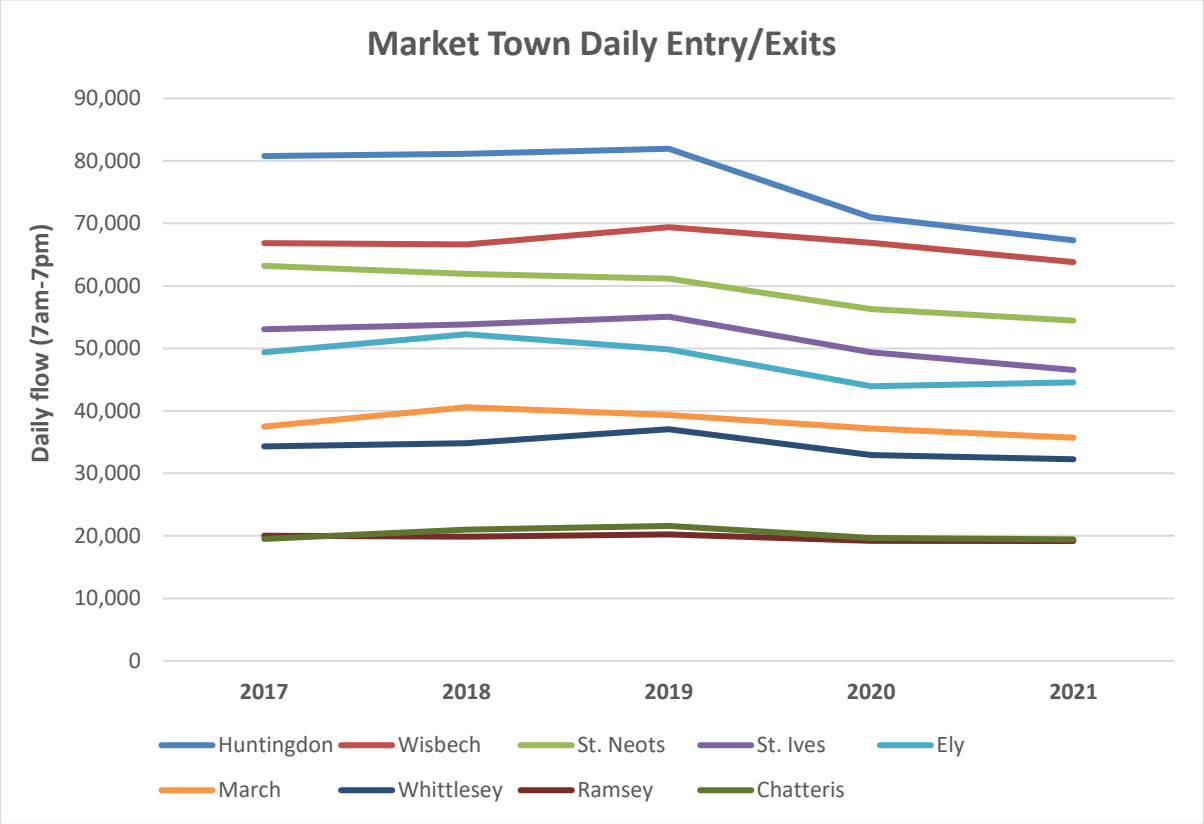
2.2 Other Urban Areas

2.2.1 In October 2021, the number of movements (motorised vehicles, cycles and pedestrians) recorded entering and leaving the nine market towns was lower than in 2019. Most towns also saw lower movements than the number recorded in 2020, as demonstrated in Table 1 and Figure 1.

Table 1: Daily flow entering and exiting each market town (October 2021)

Town	2021 weekday flow (7am-7pm)	Change compared to 2019	Change compared to 2020
Huntingdon	67,297	-18%	-5%
Wisbech	63,810	-8%	-5%
St. Neots	54,455	-11%	-3%
St. Ives	46,546	-15%	-6%
Ely	44,539	-11%	+1%
March	35,711	-9%	-4%
Whittlesey	32,259	-13%	-2%
Ramsey	19,171	-5%	0%
Chatteris	19,434	-10%	-1%

Figure 1: Daily flow entering and exiting each market town by year



2.3 Cycling

2.3.1 Based on the total number of cyclists counted across all traffic survey sites, the county saw a 68% increase in cycle trips in April 2021 compared with April 2020. However, this represents a decrease of 26% compared to April 2019 (pre-pandemic) or a decrease of 10% compared to April 2011 as presented in Table 18.

2.4 Guided Busway

2.4.1 During 2021 there were over 1.8 million passenger journeys on the Cambridgeshire Guided Busway, which represents an increase of 13% since 2020 but a decrease of 59% compared with pre-pandemic levels in 2019.

2.4.2 Further detail on guided busway maintenance track use by pedestrians and cyclists is provided in Section 6.

3 CAMBRIDGE CITY

3.1 Introduction

3.1.1 Traffic flows entering and travelling within Cambridge have been monitored comprehensively since 1978 using two screenlines.

3.1.2 The first screenline runs along the River Cam, with vehicles, pedestrians and cyclists crossing all bridges in the city being counted in the spring of each year (see Figure 2). During 2020 and 2021 this survey was also conducted during October due to the ongoing COVID-19 impacts.

The second screenline is a radial cordon, which captures vehicles, pedestrians and cyclists crossing the city boundary on every entry and exit route during the autumn each year (see Figure 5).

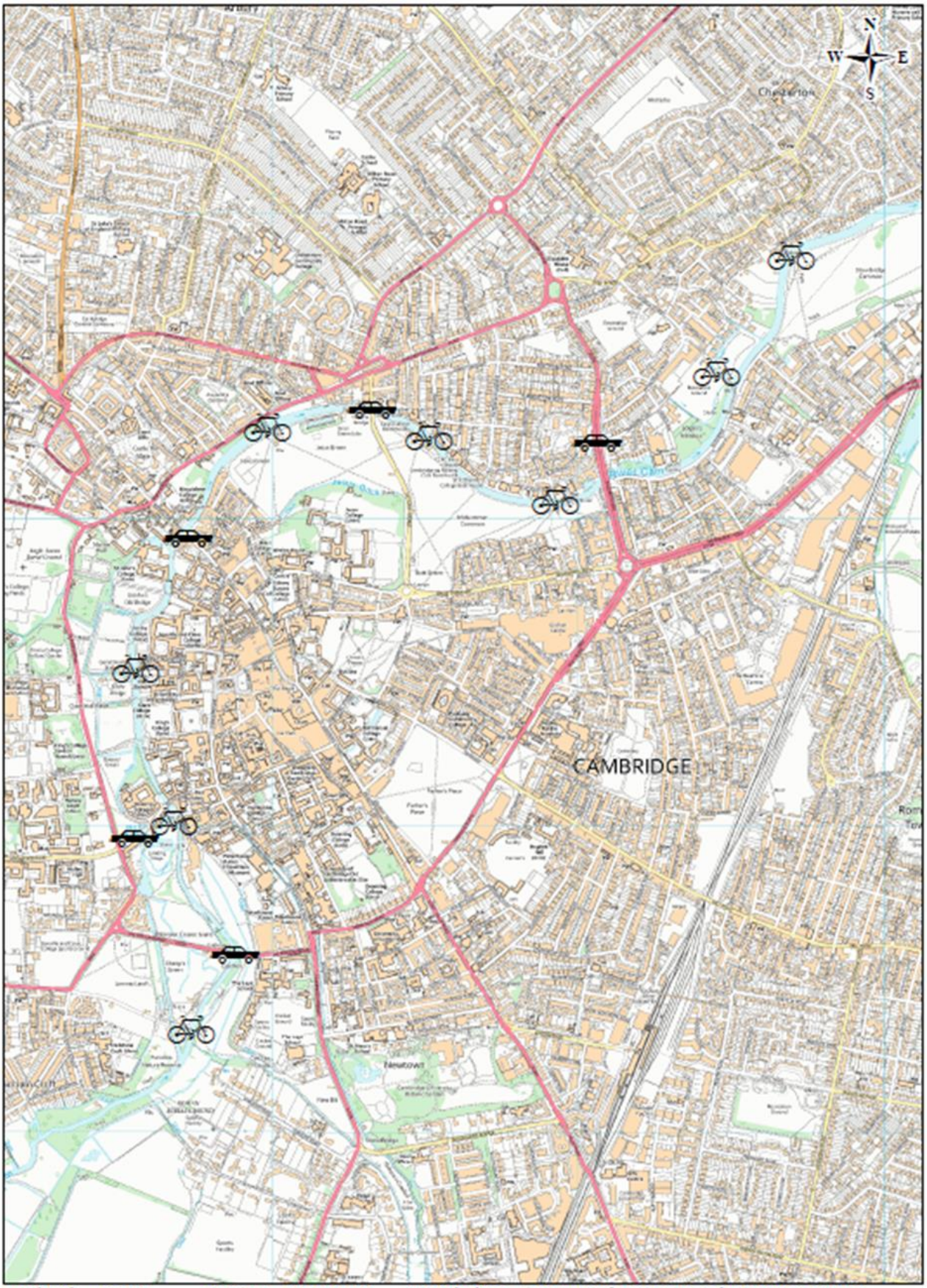
3.2 River Cam Screenline

3.2.1 To monitor the River Cam screenline, a total of 13 river crossings were counted (see Figure 2), including a number of cycle and foot bridges. Volumes of motor vehicles, cycles and pedestrians crossing the River Cam in April 2021 and October 2021 are shown in Table 2. Over half of the movements recorded crossing the river (55%) were undertaken by active modes (walking or cycling) in October 2021.

Table 2: Vehicles Crossing the River Cam (April 2021 and October 2021)

Vehicle Type	April 2021 12 Hour Flow	April 2021 vehicle type proportions	October 2021 12 Hour Flow	October 2021 vehicle type proportions
Motorcycles	1,825	2%	2,081	2%
Cars & Taxis	36,922	39%	40,485	36%
Light Goods	7,374	8%	6,742	6%
Heavy Goods	830	1%	800	1%
Bus & Coach	1,311	1%	1,336	1%
Motorised vehicles	**48,262**	**51%**	**51,443**	**45%**
Pedal cycles	21,837	23%	30,429	27%
Pedestrians	24,884	26%	31,441	28%
Total (All modes)	**94,983**	**100%**	**113,312**	**100%**

Figure 2: River Cam Screenline



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3.2.2 Trends in traffic volumes crossing the River Cam since 2017 are shown in Table 3.

Table 3: Traffic Growth Index on the Urban River Cam Screenline (Apr 2011 = 100)

Vehicle type	Apr 2011	Apr 2017	Apr 2018	Apr 2019	Apr 2020	Oct 2020	Apr 2021	Oct 2021
Motorcycles	100	78	116	150	89	158	205	233
Cars	100	96	91	92	28	74	73	80
Light Goods	100	106	103	95	50	96	107	98
Heavy Goods	100	109	77	121	43	114	85	82
Bus & Coach	100	94	86	88	26	72	74	76
MOTORISED VEHICLES	**100**	**97**	**93**	**94**	**32**	**78**	**79**	**85**
Pedal Cycles	100	131	121	135	31	72	83	116
Pedestrians	100	92	100	108	39	84	87	110
TOTAL	**100**	**103**	**101**	**107**	**33**	**78**	**82**	**98**

3.2.3 In April 2021, the number of movements crossing the River Cam was 145% more than in April 2020, indicating that flows have increased significantly since the initial phase of the COVID-19 pandemic. However, the April 2021 volumes were 23% lower than the April 2019 volumes, indicating that flows crossing the river have not returned to pre-pandemic levels, as presented in Table 4.

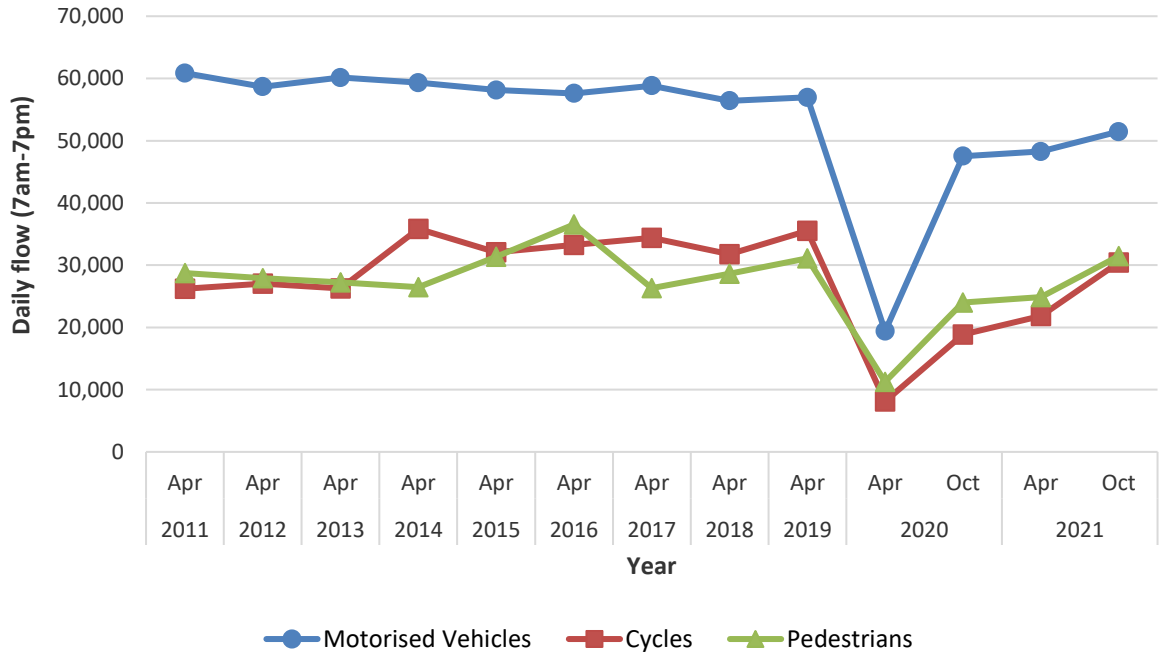
3.2.4 Volumes of all vehicle types have increased since the national lockdown in April 2020, as expected. The number of motorcycles and LGVs crossing the river in April 2021 has increased beyond pre-pandemic levels but other modes remain below pre-pandemic levels, particularly cycles and HGVs.

Table 4: Changes in River Cam Crossings pre/mid COVID-19 pandemic.

Vehicle type	Apr 2021 vs Apr 2020	Apr 2021 vs Apr 2019
Motorcycles	+129%	+36%
Cars	+159%	-20%
Light Goods	+113%	+12%
Heavy Goods	+98%	-30%
Bus & Coach	+185%	-16%
Motorised vehicles	**+149%**	**-15%**
Pedal Cycles	+169%	-39%
Pedestrians	+121%	-20%
TOTAL	**+145%**	**-23%**

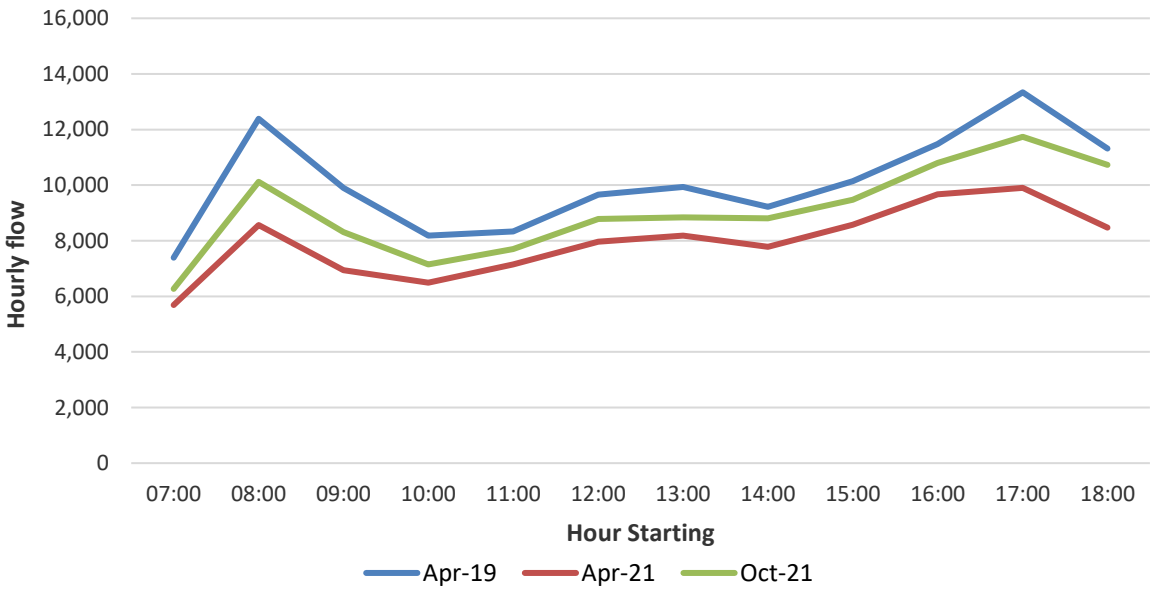
3.2.5 Figure 3 presents the volume of motor vehicles, cycles and pedestrians recorded crossing the River Cam during a single day over each of the last ten years. Volumes crossing the river had been relatively consistent up until the pandemic. Volumes during 2020 dropped in the spring and have continued to increase during each subsequent count.

Figure 3: Weekday Volume Crossing River Cam



3.2.6 Figure 4 shows total weekday flows (motorised vehicles, cycles and pedestrians) crossing the River Cam screenline by hour of day for a single day in April 2019 (pre-pandemic), April 2021 and October 2021. Recorded volumes in 2021 are 2,000-4,000 vehicles per hour lower than those recorded in 2019 indicating that flows have not returned to pre-pandemic levels. A similar profile of flows across the day can be seen across all three surveys but with slightly less pronounced peaks in the morning and evening in 2021.

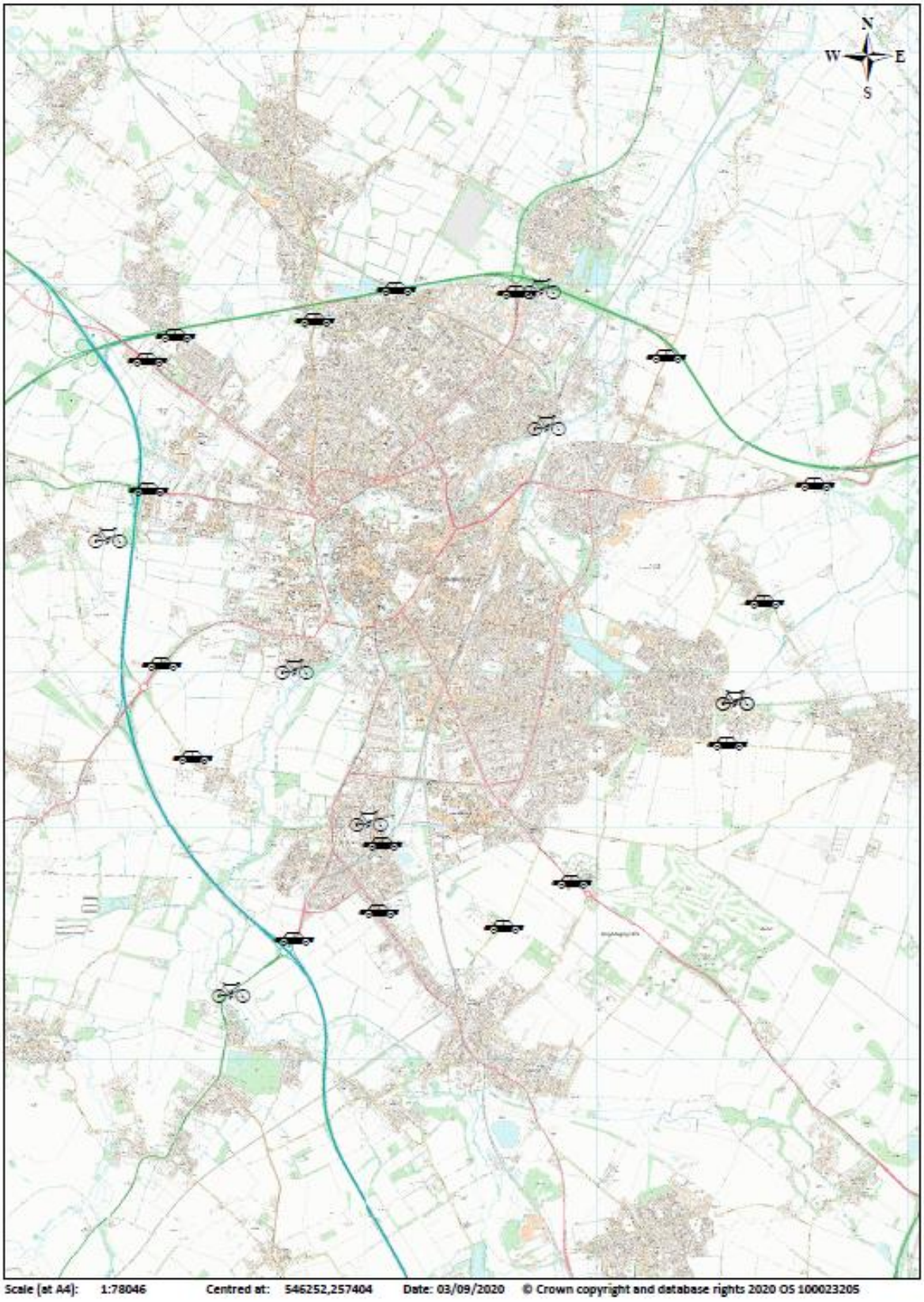
Figure 4: River Cam Screenline flows by Time of Day



3.3 Cambridge Radial Cordon

3.3.1 The Cambridge Radial cordon monitors flows entering and leaving the city boundary (see Figure 5) between 7am and 7pm and takes place in the autumn each year.

Figure 5: Cambridge radial cordon count locations



3.3.2 Table 5 presents the number of vehicles crossing the Cambridge radial cordon in October 2021, the majority of which are motorised vehicles (93%). The proportion of motorised vehicles crossing the city boundary is notably higher than the proportion crossing the River Cam. This is likely due to the River Cam sites picking up a larger number of shorter distance trips internal to the city which can more readily be made by bicycle or on foot.

Table 5: Vehicles Crossing the Cambridge Radial Cordon - October 2021

Type	**Oct 2021 12 Hour Flow**	**Oct 2021 Modal Split**
Motorcycles	1,424	1%
Cars & Taxis	145,038	78%
Light Goods	22,561	12%
Heavy Goods	3,533	2%
Bus & Coach	1,627	1%
Motorised vehicles	**174,183**	**93%**
Pedal cycles	8,840	5%
Pedestrians	3,881	2%
Total (All modes)	**186,904**	**100%**

3.3.3 Table 6 presents the change in the daily volume of movements across the city boundary (7am-7pm) relative to a base of October 2011 (index 100). This demonstrates that most types of travel reduced during October 2020, as expected. It also demonstrates that as of October 2021, total volumes crossing the city boundary were lower than they were in October 2011. This is particularly true for motorcycle volumes which are 40% lower crossing the city boundary despite being over 100% higher crossing the river. Most modes crossing the city boundary are below the level recorded in 2011 with the exception of LGVs (+3%), pedal cycles (+1%) and pedestrians (+59%).

Table 6: Change in daily movements crossing the Cambridge Radial Cordon relative to 2011 (2011 = index 100).

Movement Type	**Oct 2011**	**Oct 2017**	**Oct 2018**	**Oct 2019**	**Oct 2020**	**Oct 2021**
Motorcycles	100	73	71	61	42	60
Cars	100	109	108	111	85	93
Light Goods	100	110	110	96	96	103
Heavy Goods	100	99	113	107	108	82
Bus & Coach	100	93	87	84	63	76
Motorised vehicles	**100**	**109**	**108**	**108**	**86**	**93**
Pedal cycles	100	117	128	128	93	101
Pedestrians	100	119	160	165	136	159
TOTAL	**100**	**109**	**109**	**110**	**87**	**94**

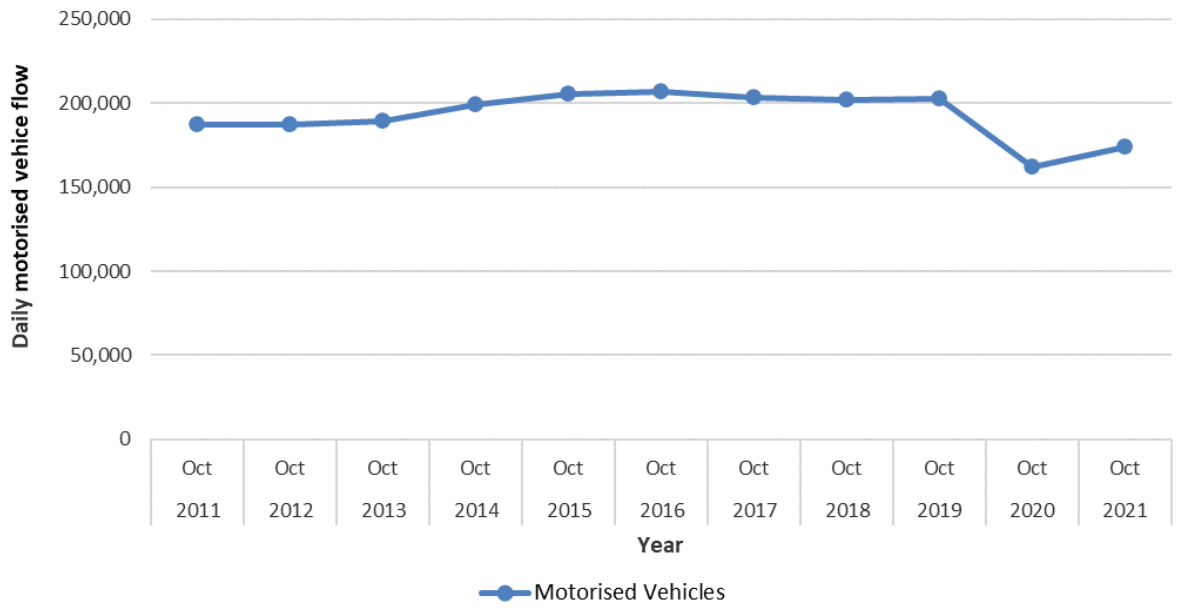
3.3.4 In October 2021, the number of movements crossing the city boundary was 8% more than in October 2020, indicating that flows have increased since the middle of the COVID-19 pandemic with the exception of HGVs, as presented in Table 7. However, the October 2021 volumes were 14% lower than the October 2019 volumes, indicating that flows have not returned to pre-pandemic levels with the exception of LGVs.

Table 7: Changes in City boundary crossings pre/mid COVID-19 pandemic.

Vehicle type	Oct 2021 vs Oct 2020	Oct 2021 vs Oct 2019
Motorcycles	+41%	-3%
Cars	+9%	-16%
Light Goods	+7%	+7%
Heavy Goods	-24%	-23%
Bus & Coach	+21%	-9%
Motorised vehicles	**+8%**	**-14%**
Pedal Cycles	+8%	-21%
Pedestrians	+17%	-4%
TOTAL	**+8%**	**-14%**

3.3.5 In terms of longer-term trends (see Figure 6), the number of motorised vehicles crossing the city boundary had been relatively stable from 2014 to 2019. This volume then reduced in 2020 to approximately 20% less than the 2019 volume and then increased in 2021 to 14% less than the 2019 volume.

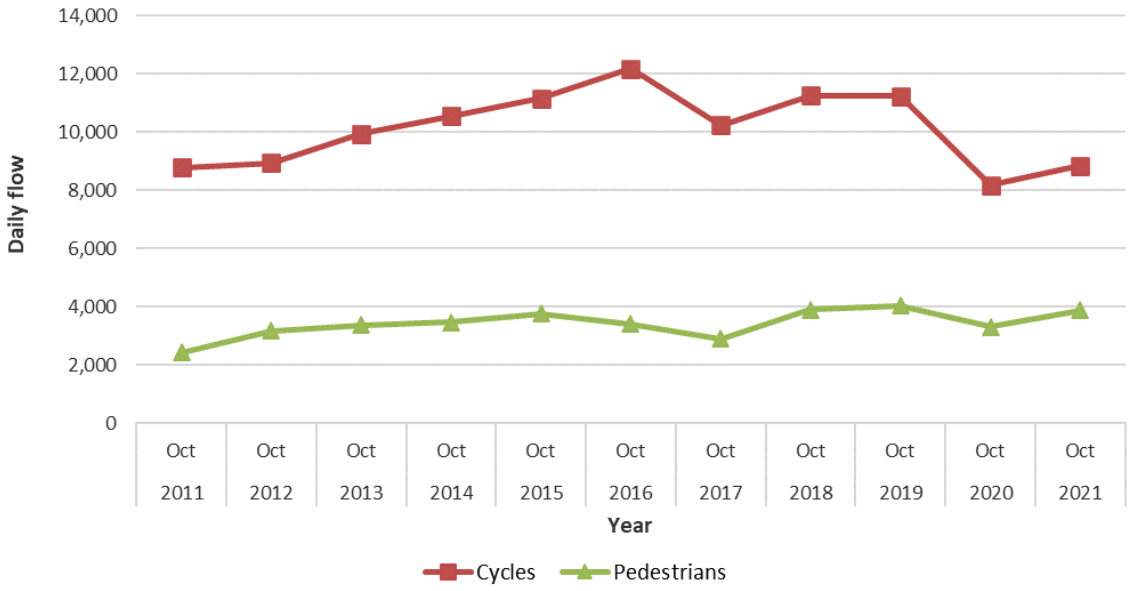
Figure 6: Motorised vehicle volumes crossing the City Boundary



3.3.6 The number of cycles and pedestrians crossing the city boundary is significantly lower than the number of motorised vehicles. The long-term trends (see Figure 7) show that cycle volumes remained relatively stable from 2014 to 2019 (10-12k per day) and pedestrian volumes followed a similar pattern (3-4k per day).

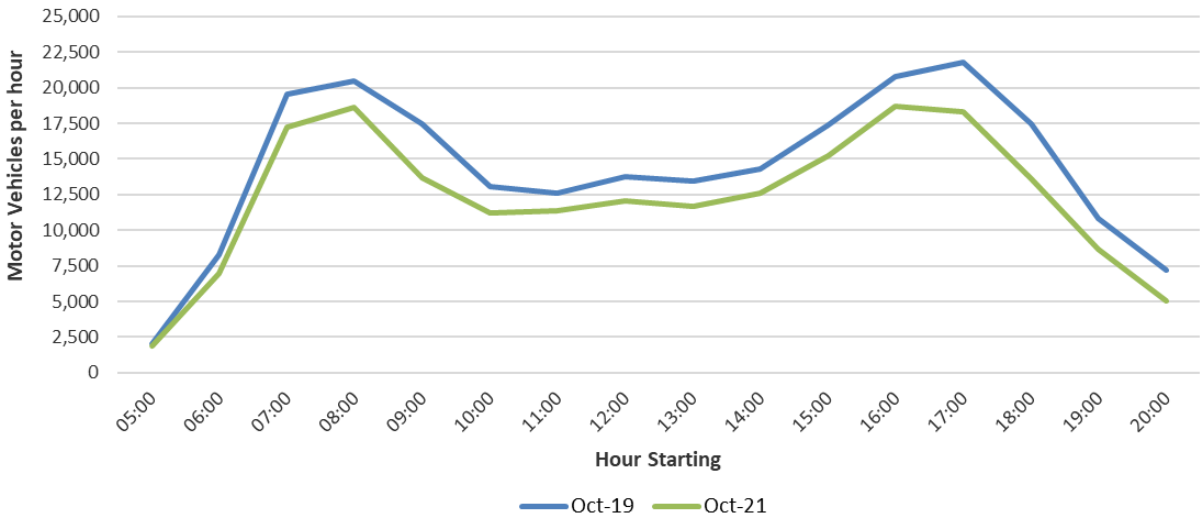
3.3.7 In October 2020, cycle volumes crossing the city boundary were found to be 27% lower (8k per day) than previously recorded in October 2019 and pedestrian volumes were 18% lower than 2019. In October 2021 volumes of cyclists had increased to 21% lower than 2019 and pedestrian volumes had increased to 4% lower than 2019. Active mode trips crossing the city boundary in October 2021 are therefore not back at pre-pandemic levels.

Figure 7: Active mode volumes crossing the City Boundary



3.3.8 Figure 8 shows motorised vehicle flows crossing the city boundary by time of day. The morning and evening peaks are more pronounced than on the River Cam Screenline (see Figure 4). The profile across the day is similar in October 2019 and 2021 albeit with 2021 volumes slightly lower than those in 2019 at all times of day.

Figure 8: Cambridge radial motorised traffic by time of day, October 2019 vs October 2021



3.4 Park and Ride

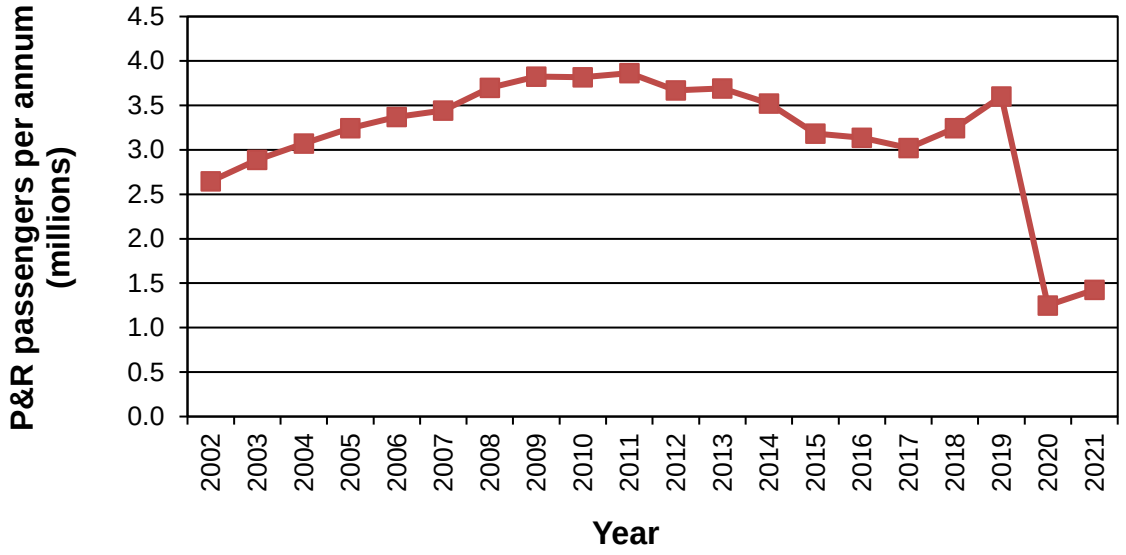
3.4.1 Park and Ride sites were introduced in Cambridge in the 1990s and there are currently five operational sites on the outskirts of the city.

3.4.2 Passenger numbers using the Park and Ride sites are shown in both Table 8 and Figure 9. There were over 1.4 million Park and Ride passenger journeys in 2021, which represents a 14% increase from 2020 but a decrease of 60% from pre-pandemic levels in 2019.

Table 8: Park and Ride passengers per annum

Site	2016	2017	2018	2019	2020	2021
Total (All Sites)	3,138,156	3,021,443	3,245,819	3,600,262	1,250,683	1,424,605

Figure 9: Park and Ride Passenger Journeys



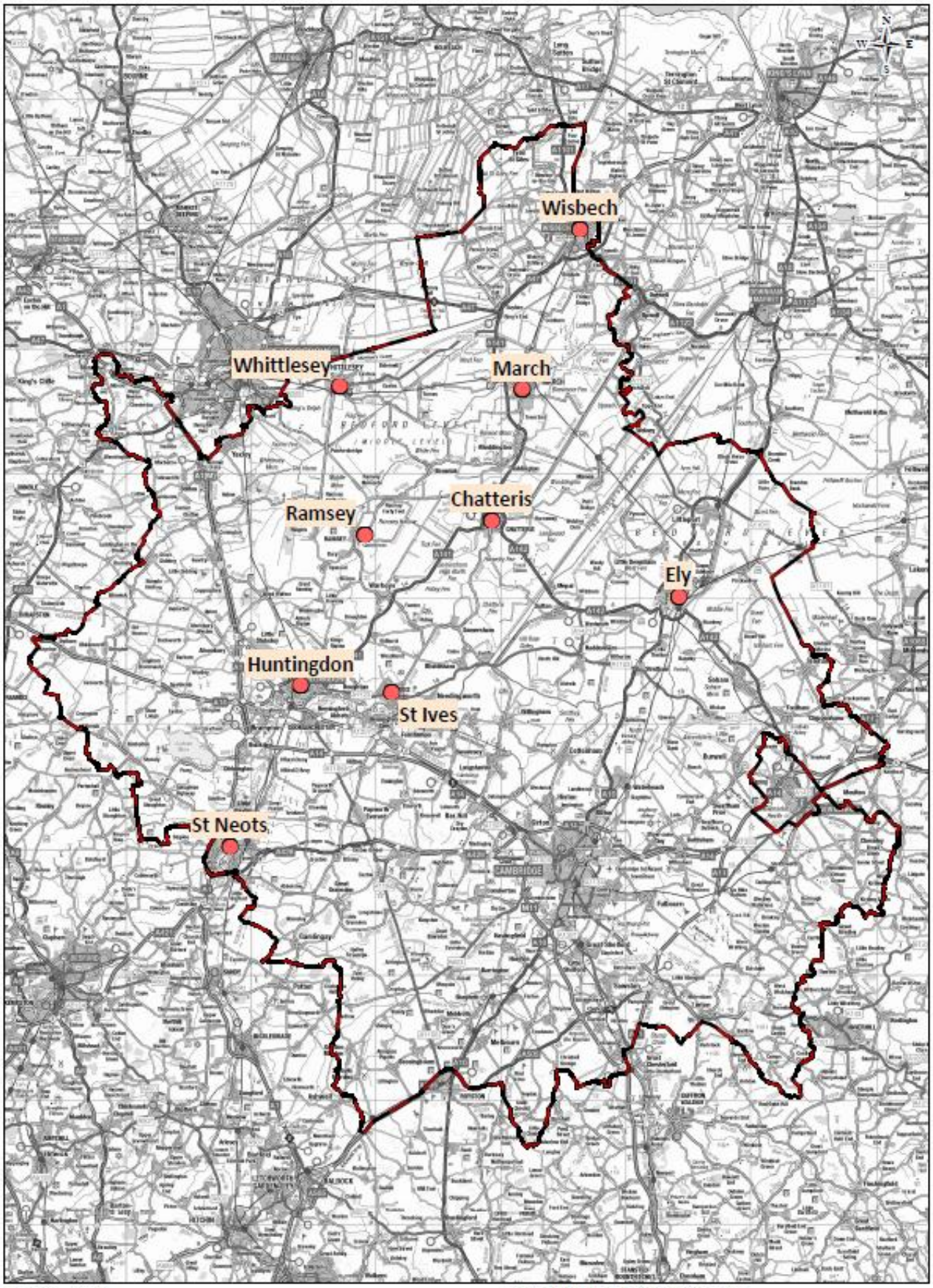
4 TOWN MONITORING

4.1 Introduction

4.1.1 The market town monitoring programme is conducted during the autumn on an annual basis and records motorised vehicle, cycle and pedestrian movements from 7am-7pm on a single weekday.

4.1.2 The town monitoring covers nine major settlements within the county (St Neots, Huntingdon, St Ives, Wisbech, March, Ely, Chatteris, Ramsey and Whittlesey) as shown in Figure 10. Each settlement has a defined cordon which is intended to estimate the total number of vehicles entering and exiting the settlement. Flows fluctuate day-to-day so the use of a single day count to monitor precise changes in flows over time is not recommended. The figures can, however, be used to provide an indication of general trends, noting that active mode flows are most likely to fluctuate day-to-day given their sensitivity to the weather and other external factors.

Figure 10: Map of market towns covered by the annual town monitoring



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4.2 St. Neots

4.2.1 The locations of the individual monitoring points that form the St Neots cordon are shown in Figure 12. The observed flows collected at these locations are summarised in Table 9 alongside indices that compare the flows for the last 5 years back to 2011 levels. Figure 11 presents the long-term monitoring of volumes entering and exiting this town.

4.2.2 Volumes of motorised vehicles entering/leaving St Neots held fairly steady from 2004-2011 with the number fluctuating around 50,000 per weekday (7am-7pm). This number then peaked towards 60,000 vehicles per weekday from 2012-2019 before dropping back down to just over 50,000 in 2020 and 2021 which is comparable to 2011 volumes.

4.2.3 Active mode travel in and out of St Neots has remained relatively stable over time and as of 2021 represents 7% of these movements.

Table 9: Vehicles Entering & Leaving St. Neots presented as indices where 2011 = index 100.

Type	2011	2017	2018	2019	2020	2021	2021 12 Hour Flow	2021 Modal Split
Motorcycles	100	129	140	163	105	108	196	0%
Cars & Taxis	100	118	117	117	104	101	42,735	78%
Light Goods	100	107	98	95	105	93	6,321	12%
Heavy Goods	100	98	147	160	95	90	782	1%
Bus & Coach	100	59	53	54	76	75	365	1%
Motorised Vehicles	**100**	**116**	**114**	**114**	**104**	**100**	**50,399**	**93%**
Pedal cycles	100	123	113	97	88	100	807	1%
Pedestrians	100	194	164	134	161	168	3,249	6%
Total (All modes)	**100**	**119**	**116**	**115**	**106**	**102**	**54,455**	**100%**

Figure 11: Vehicles Entering & Leaving St. Neots

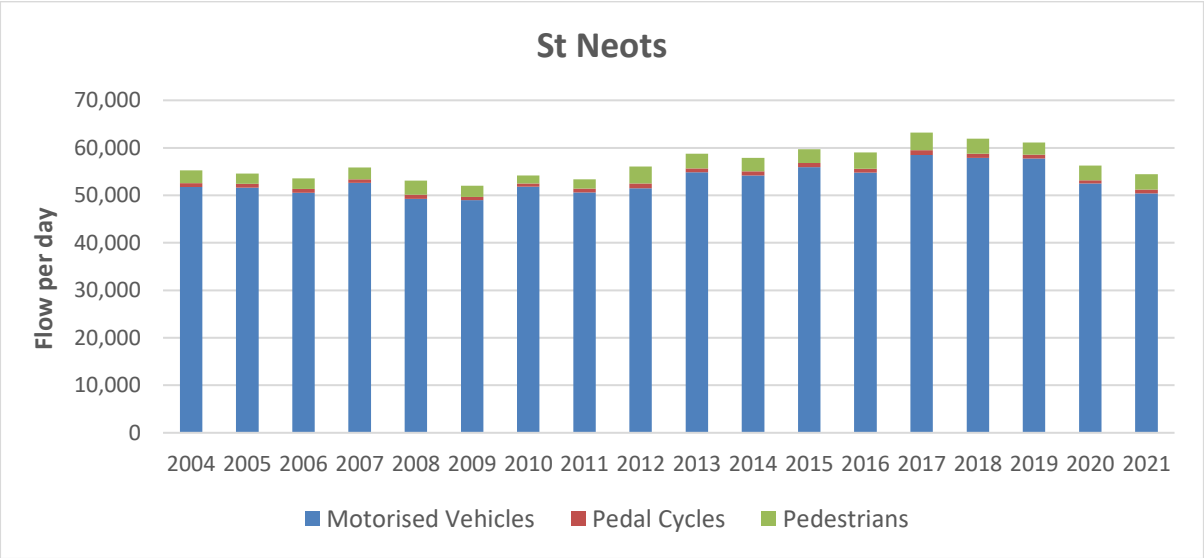
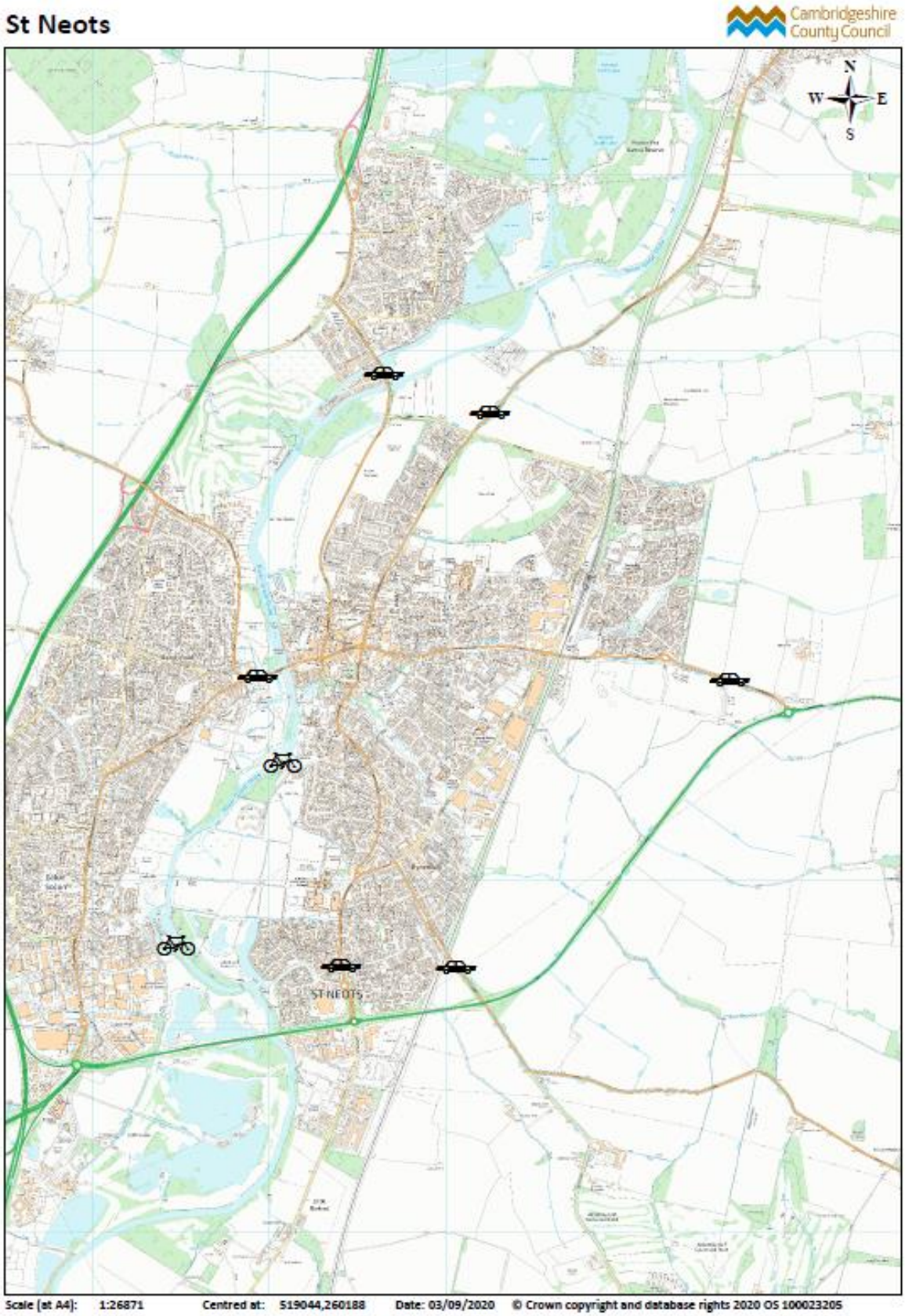


Figure 12: St Neots town monitoring sites



4.3 Huntingdon

The locations of the individual monitoring points that form the Huntingdon cordon are shown in Figure 14. The observed flows are summarised in Table 10 alongside indices that compare the flows for the last 5 years back to 2011 levels. Figure 13 presents the long-term monitoring of volumes for this town.

4.3.1 Volumes of motorised vehicles entering/leaving Huntingdon held fairly steady from 2004-2019 with the number fluctuating at or under 80,000 per weekday (7am-7pm). This number then dropped down to 65-70,000 in 2020 and 2021, the lowest recorded volumes between 2004 and 2021.

4.3.2 Active mode travel in and out of Huntingdon has remained fairly stable and as of 2021 represents 5% of these movements.

Table 10: Vehicles Entering & Leaving Huntingdon presented as indices where 2011 = index 100.

Type	2011	2017	2018	2019	2020	2021	2021 12 Hour Flow	2021 Modal Split
Motorcycles	100	62	70	80	45	49	266	0%
Cars & Taxis	100	104	103	104	89	84	54,352	81%
Light Goods	100	101	104	97	107	95	7,814	12%
Heavy Goods	100	84	113	116	91	81	1,056	2%
Bus & Coach	100	88	85	85	101	99	493	1%
Motorised Vehicles	**100**	**103**	**103**	**104**	**91**	**85**	**63,981**	**95%**
Pedal cycles	100	62	96	98	72	111	1,597	2%
Pedestrians	100	139	145	161	104	118	1,719	3%
Total (All modes)	**100**	**103**	**103**	**105**	**91**	**86**	**67,297**	**100%**

Figure 13: Vehicles Entering & Leaving Huntingdon

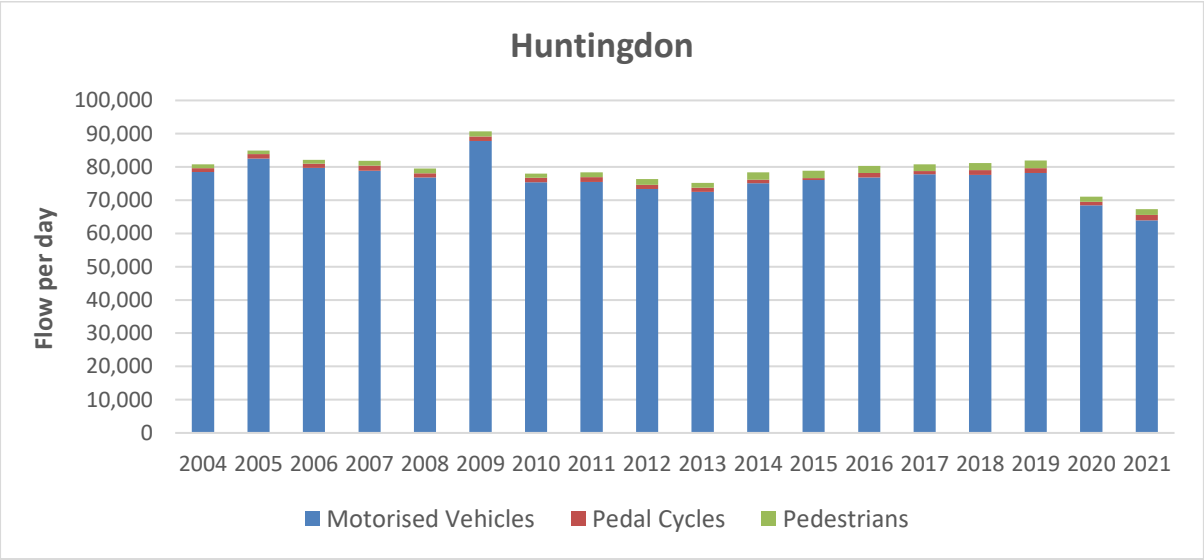
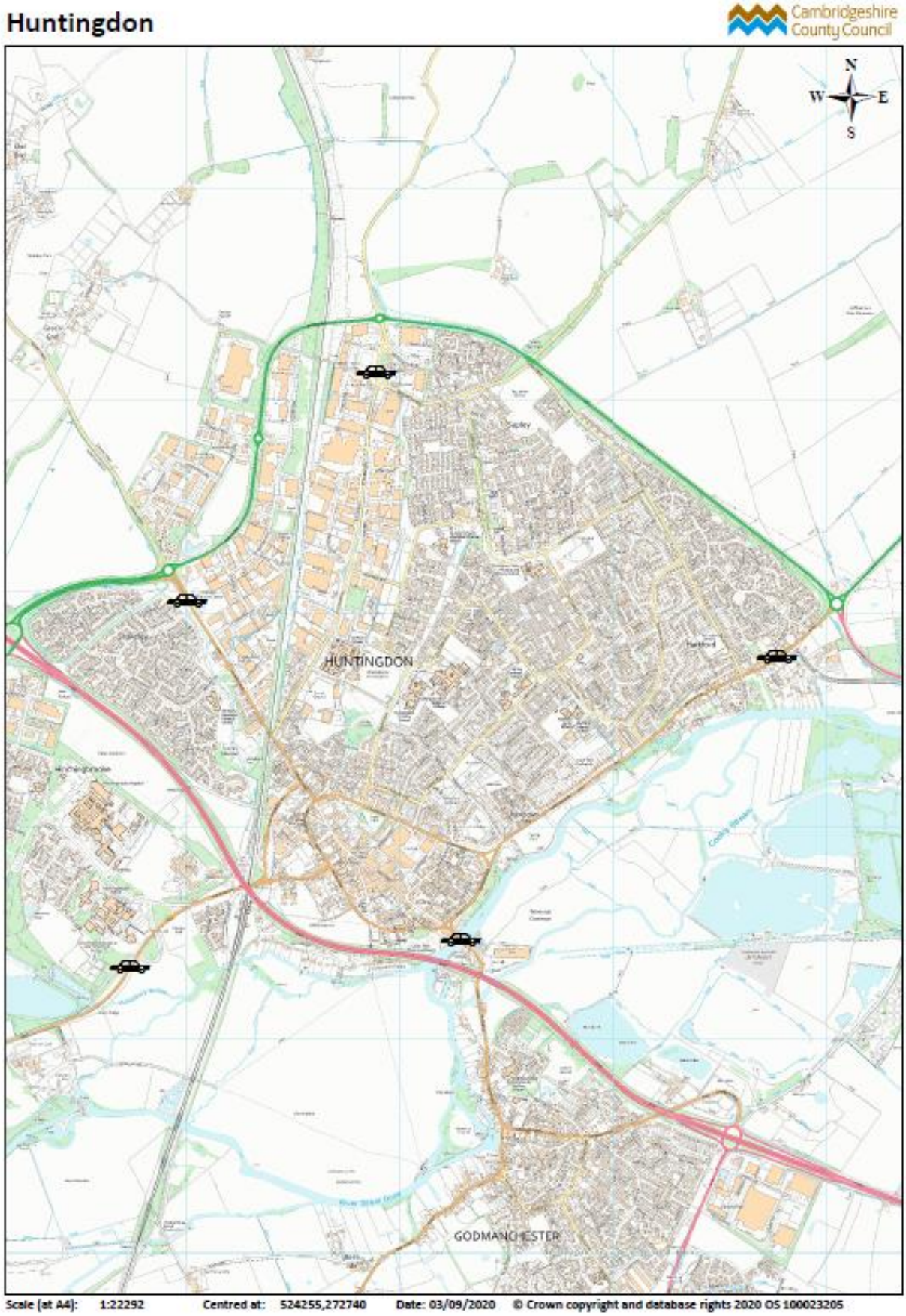


Figure 14: Huntingdon town monitoring sites



4.4 St. Ives

4.4.1 The locations of the individual monitoring points that form the St Ives cordon are shown in Figure 16. The observed flows are summarised in Table 11 alongside indices that compare the flows for the last 5 years back to 2011 levels. Figure 15 presents the long-term monitoring of volumes for this town.

4.4.2 Volumes of motorised vehicles entering/leaving St. Ives held relatively steady from 2015-2019 with the number fluctuating at or near 50,000 per weekday (7am-7pm). This number then dropped down to 43-45,000 in 2020 and 2021 which is lower than all previous years with the exception of 2009 and 2012 which are comparable.

4.4.3 Active mode travel in and out of St. Ives has fluctuated since 2004 and as of 2021 is comparable to 2013 volumes. It represents 7% of observed volumes in 2021.

Table 11: Vehicles Entering & Leaving St. Ives presented as indices where 2011 = index 100.

Type	2011	2017	2018	2019	2020	2021	2021 12 Hour Flow	2021 Modal Split
Motorcycles	100	92	65	69	41	69	242	1%
Cars & Taxis	100	107	111	112	97	95	36,142	78%
Light Goods	100	107	93	95	103	93	5,202	11%
Heavy Goods	100	92	113	117	121	95	1,164	3%
Bus & Coach	100	94	83	89	87	75	452	1%
Motorised Vehicles	**100**	**106**	**108**	**110**	**98**	**94**	**43,202**	**93%**
Pedal cycles	100	79	74	69	40	59	1,110	2%
Pedestrians	100	106	113	132	141	89	2,234	5%
Total (All modes)	**100**	**105**	**107**	**109**	**98**	**92**	**46,546**	**100%**

Figure 15: Vehicles Entering & Leaving St Ives

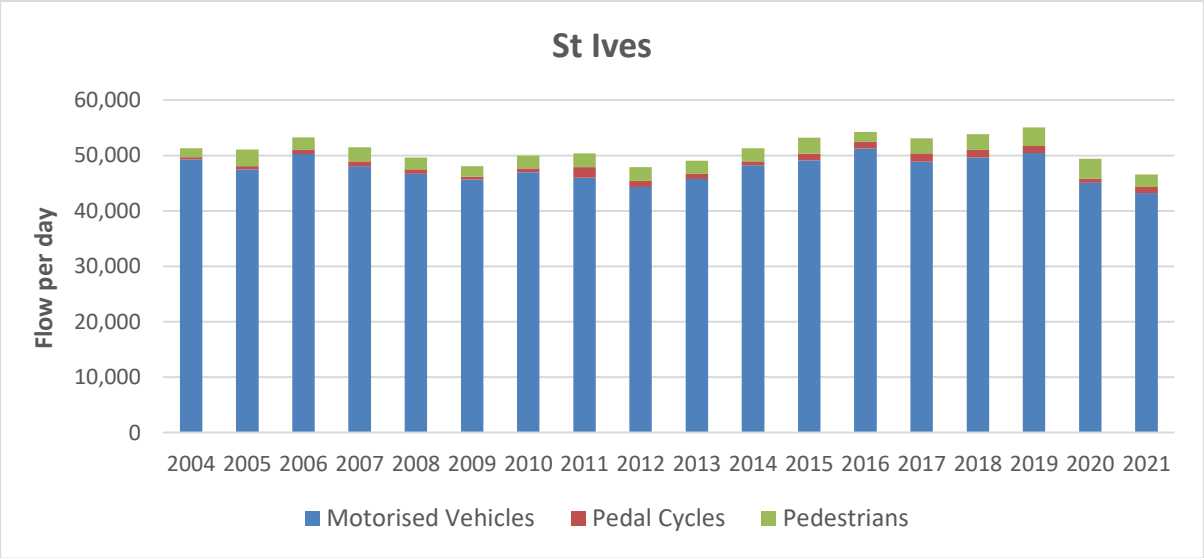
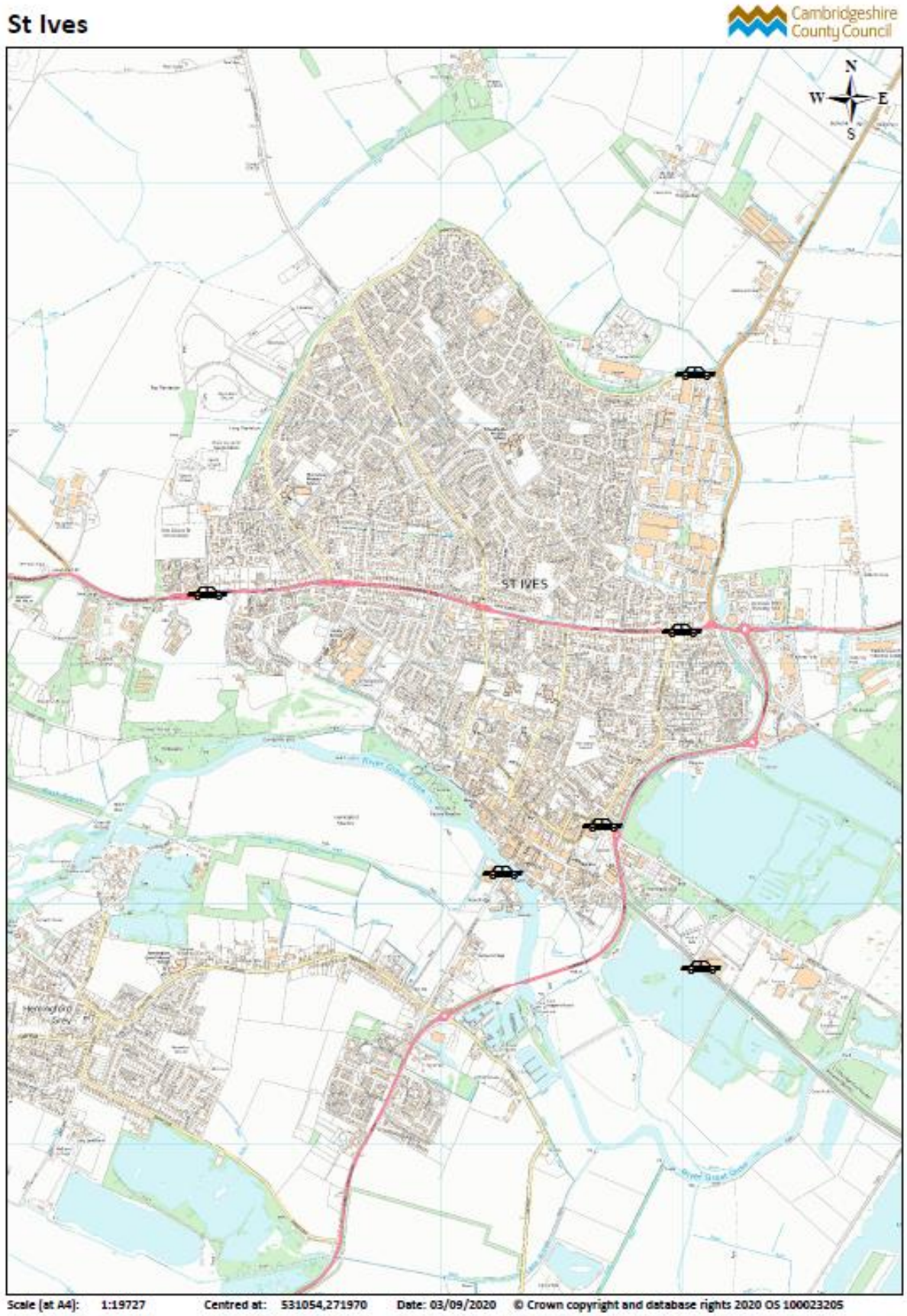


Figure 16: St Ives town monitoring sites



4.5 Wisbech

4.5.1 The locations of the individual monitoring points that form the Wisbech cordon are shown in Figure 18. The observed flows are summarised in Table 12 alongside indices that compare the flows for the last 5 years back to 2011 levels. Figure 17 presents the long-term monitoring of volumes for this town.

4.5.2 Volumes of motorised vehicles entering/leaving Wisbech held relatively steady from 2014-2018 with the number fluctuating at or under 65,000 per weekday (7am-7pm). This number then reached a peak of approx. 68,000 in 2019 and then dropped down to 63,000 in 2021 which is the lowest recorded volume since 2013.

4.5.3 Active mode travel in and out of Wisbech has remained relatively stable from 2014 to 2019 but dropped during 2020 and 2021. As of 2021, active travel represents 1% of all movements in/out of Wisbech.

Table 12: Vehicles Entering & Leaving Wisbech presented as indices where 2011 = index 100.

Type	2011	2017	2018	2019	2020	2021	2021 12 Hour Flow	2021 Modal Split
Motorcycles	100	126	98	96	82	98	279	0%
Cars & Taxis	100	116	116	123	117	112	50,814	80%
Light Goods	100	99	92	90	105	93	8,656	14%
Heavy Goods	100	94	110	105	89	82	2,750	4%
Bus & Coach	100	50	45	48	79	73	487	1%
Motorised Vehicles	**100**	**112**	**111**	**116**	**113**	**107**	**62,986**	**99%**
Pedal cycles	100	147	143	129	66	89	216	0%
Pedestrians	100	148	143	131	86	95	608	1%
Total (All modes)	**100**	**112**	**112**	**116**	**112**	**107**	**63,810**	**100%**

Figure 17: Vehicles Entering & Leaving Wisbech

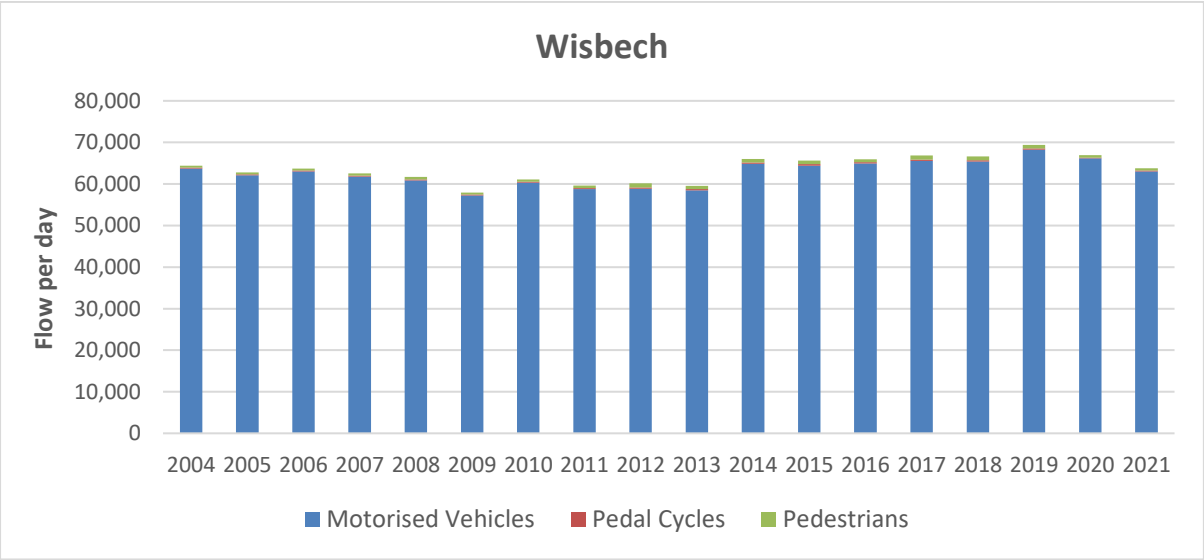
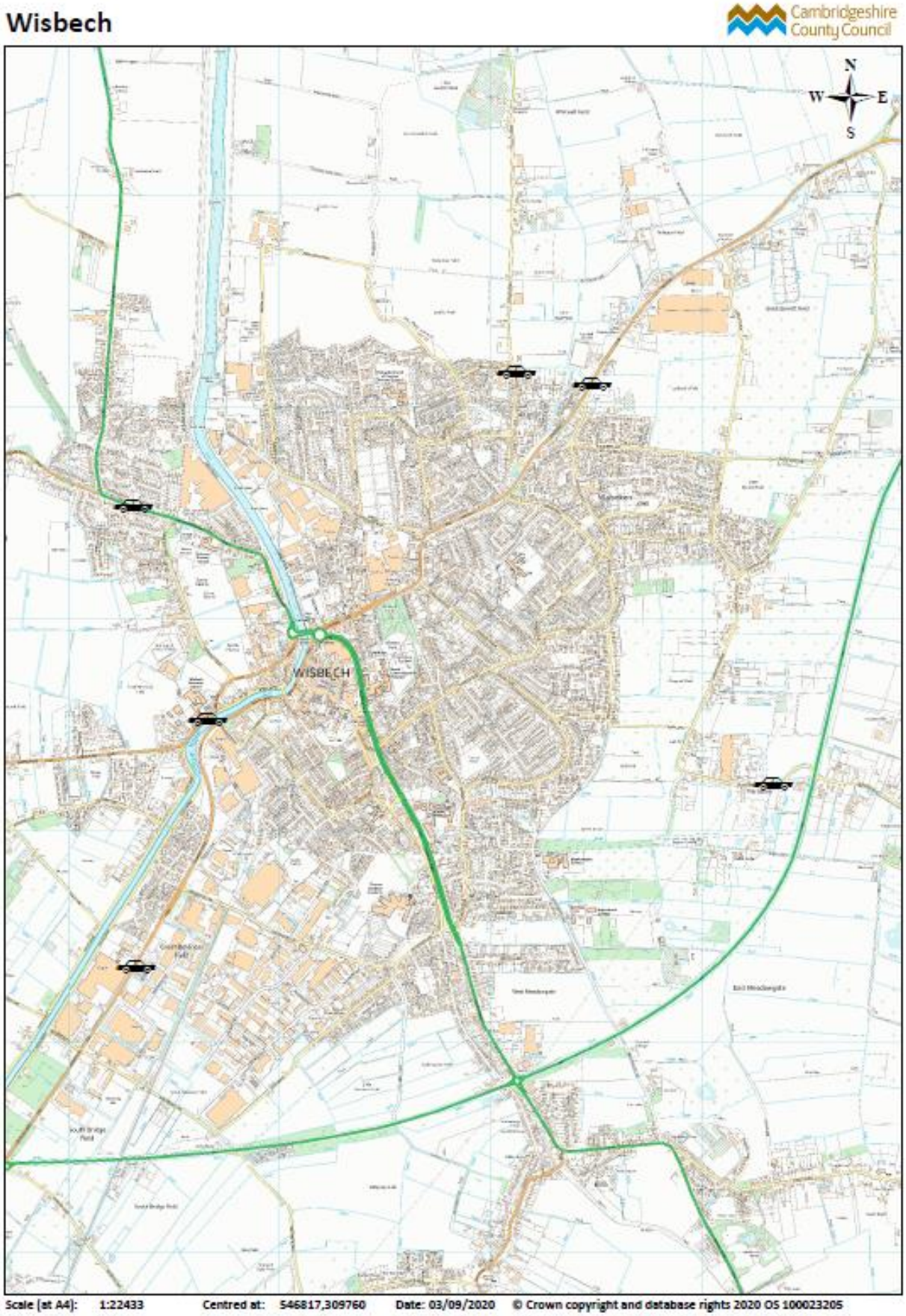


Figure 18: Wisbech town monitoring sites



4.6 March

4.6.1 The locations of the individual monitoring points that form the March cordon are shown in Figure 20. The observed flows are summarised in Table 13 alongside indices that compare the flows for the last 5 years back to 2011 levels. Figure 19 presents the long-term monitoring of volumes for this town.

4.6.2 Volumes of motorised vehicles entering/leaving March held fairly steady from 2009-2017 with the number fluctuating around 34,000 per weekday (7am-7pm). This number then peaked towards 38,000 in 2018 before dropping back down to just over 34,000 in 2021.

4.6.3 Active mode travel in and out of March has remained fairly stable since 2004 and as of 2021 represents 5% of these movements.

Table 13: Vehicles Entering & Leaving March presented as indices where 2011 = index 100.

Type	2011	2017	2018	2019	2020	2021	2021 12 Hour Flow	2021 Modal Split
Motorcycles	100	100	96	75	61	61	110	0%
Cars & Taxis	100	111	117	116	107	104	28,303	79%
Light Goods	100	108	117	105	120	104	4,741	13%
Heavy Goods	100	82	149	116	61	69	534	1%
Bus & Coach	100	61	50	51	110	103	342	1%
Motorised Vehicles	**100**	**109**	**117**	**113**	**107**	**103**	**34,030**	**95%**
Pedal cycles	100	96	116	106	79	92	597	2%
Pedestrians	100	90	140	129	130	107	1,084	3%
Total (All modes)	**100**	**108**	**117**	**114**	**107**	**103**	**35,711**	**100%**

Figure 19: Vehicles Entering & Leaving March

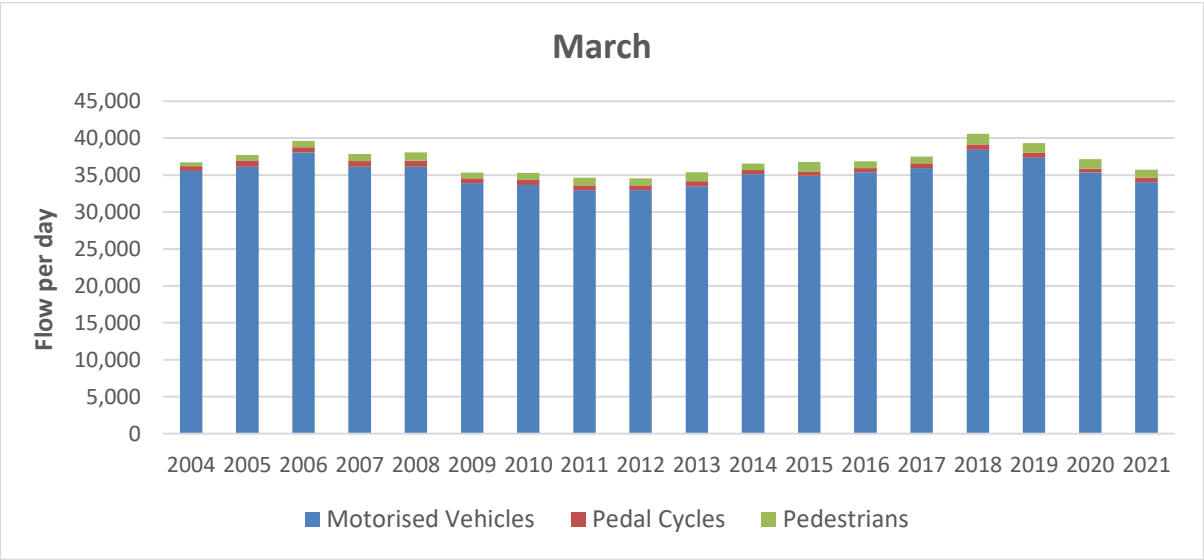
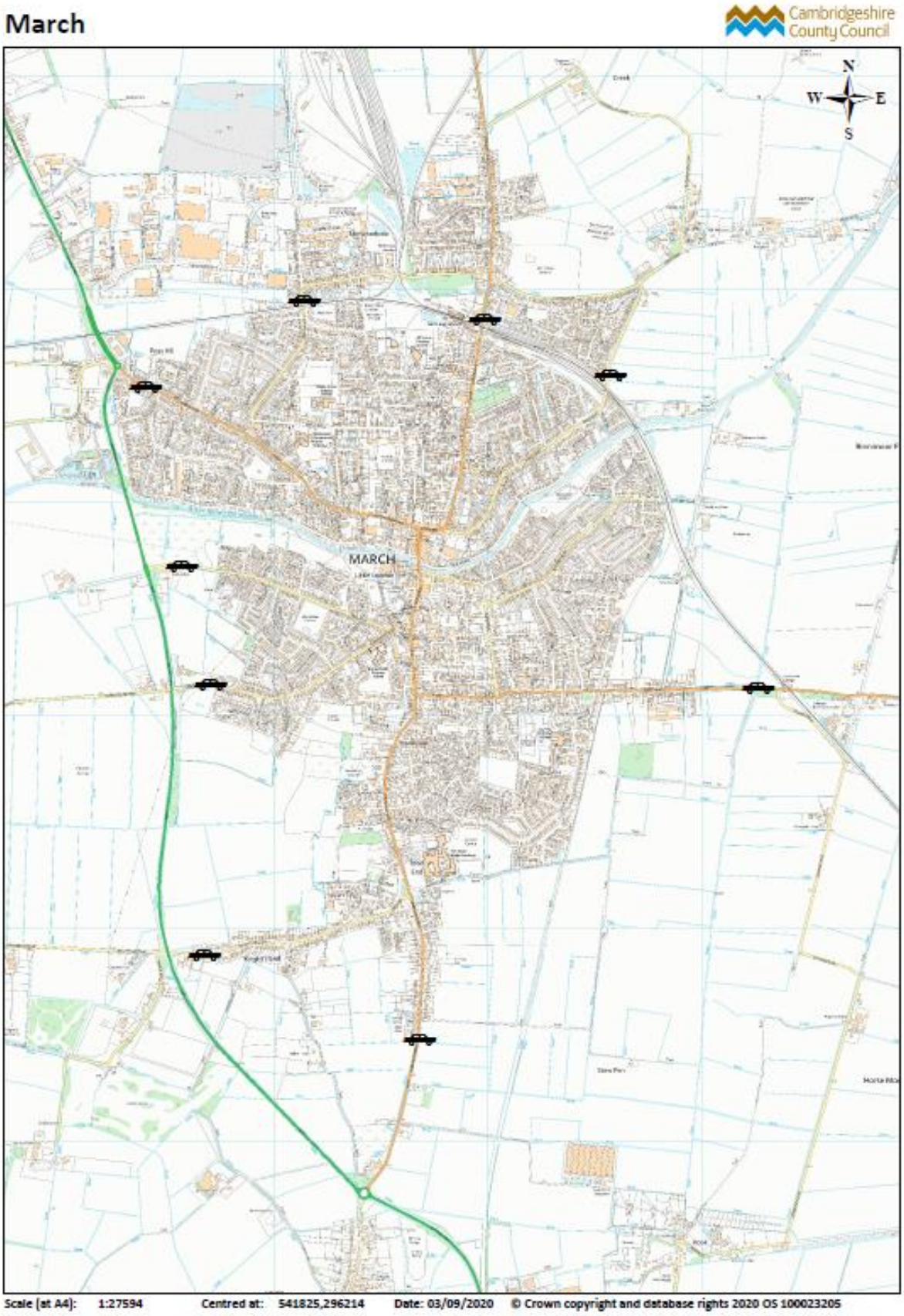


Figure 20: March town monitoring sites



4.7 Ely

4.7.1 The locations of the individual monitoring points that form the Ely cordon are shown in Figure 22. The observed flows are summarised in Table 14 alongside indices that compare the flows for the last 5 years back to 2011 levels. Figure 21 presents the long-term monitoring of volumes for this town.

4.7.2 Volumes of motorised vehicles entering/leaving Ely had been increasing since 2012 with the number peaking at over 48,000 per weekday (7am-7pm) in 2018. This number then dropped back down to just under 42,000 in 2020 and 2021 which is comparable to 2013/14 volumes.

4.7.3 Active mode travel in and out of Ely has remained fairly stable since 2014 and as of 2021 represents 7% of these movements.

Table 14: Vehicles Entering & Leaving Ely presented as indices where 2011 = index 100.

Type	2011	2017	2018	2019	2020	2021	2021 12 Hour Flow	2021 Modal Split
Motorcycles	100	101	143	117	69	77	140	0%
Cars & Taxis	100	120	127	122	107	108	35,556	80%
Light Goods	100	109	111	99	115	112	4,958	11%
Heavy Goods	100	122	150	136	106	114	858	2%
Bus & Coach	100	74	74	72	85	77	246	1%
Motorised Vehicles	**100**	**119**	**126**	**119**	**108**	**108**	**41,758**	**94%**
Pedal cycles	100	134	148	147	71	110	749	2%
Pedestrians	100	193	203	211	130	154	2,032	5%
Total (All modes)	**100**	**121**	**128**	**123**	**108**	**109**	**44,539**	**100%**

Figure 21: Vehicles Entering & Leaving Ely

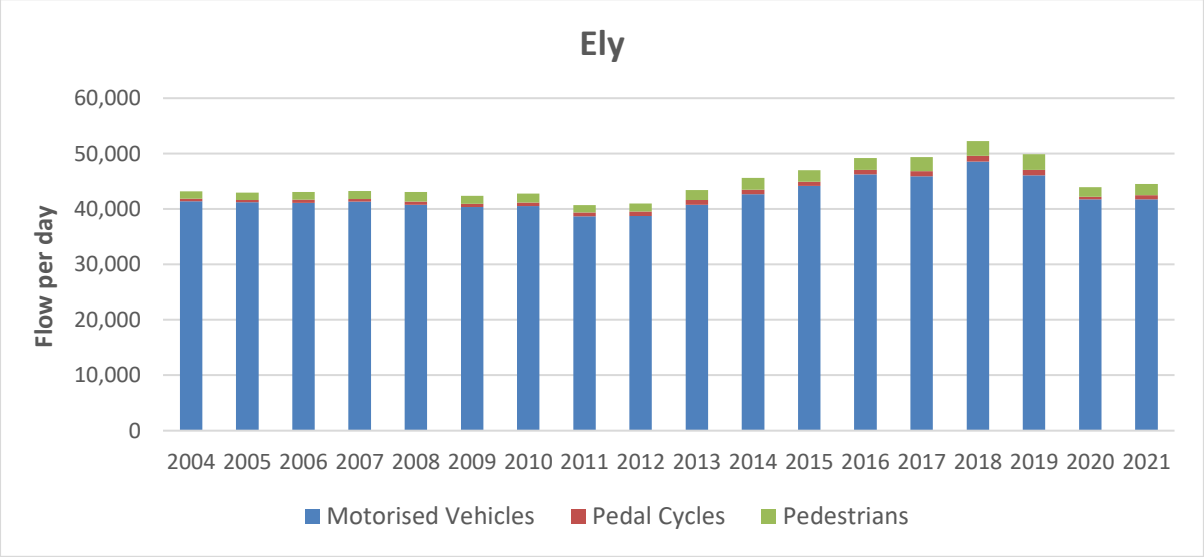
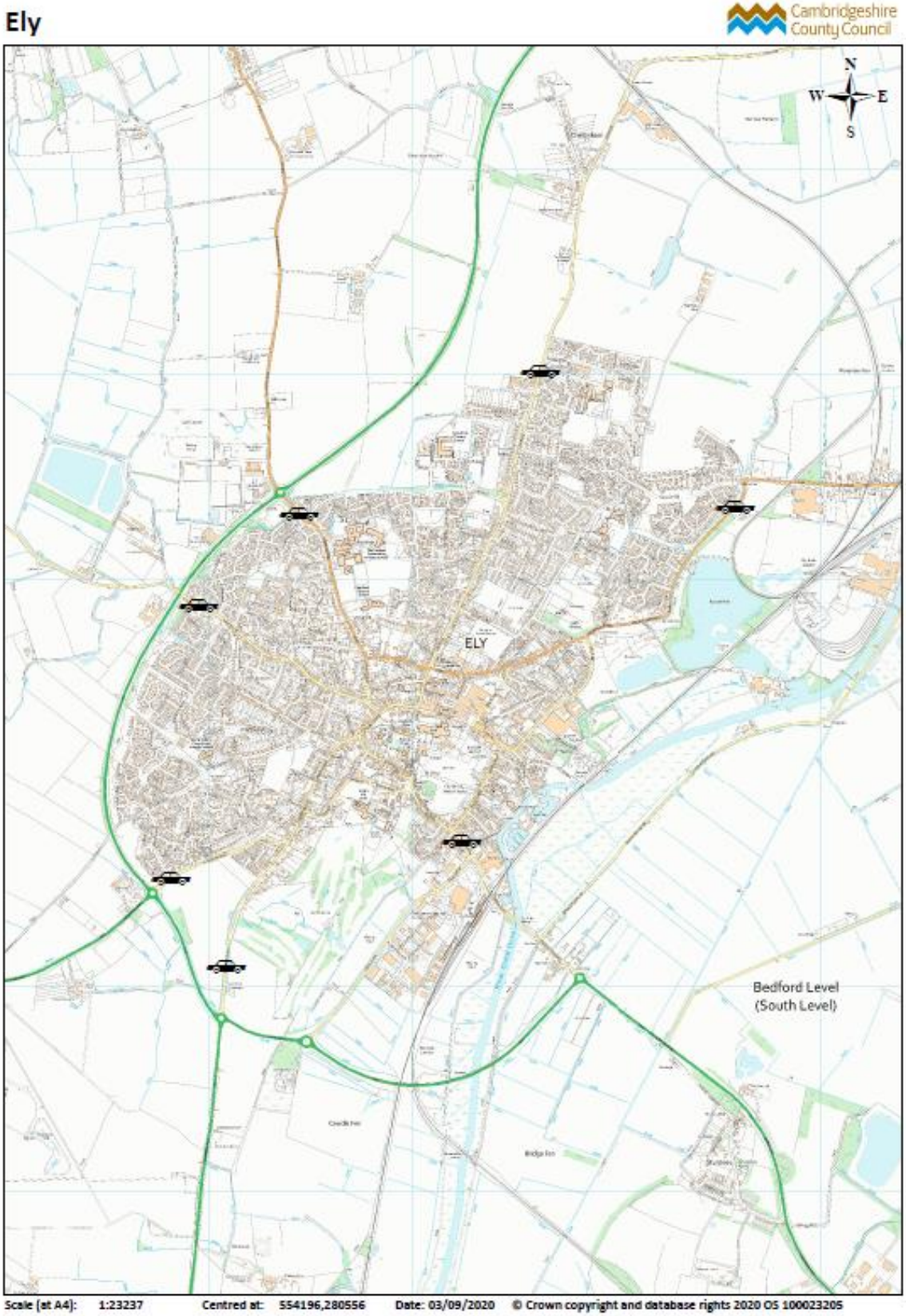


Figure 22: Ely town monitoring sites



4.8 Chatteris

4.8.1 The locations of the individual monitoring points that form the Chatteris cordon are shown in Figure 24. The observed flows are summarised in Table 15 alongside indices that compare the flows for the last 5 years back to 2011 levels. Figure 23 presents the long-term monitoring of volumes for this town.

4.8.2 Volumes of motorised vehicles entering/leaving Chatteris have been slowly increasing since 2015, reaching a peak of just over 21,000 per weekday (7am-7pm) in 2019. This number then dropped down to just over 19,000 in 2020 and 2021.

4.8.3 Active mode travel in and out of Chatteris has remained relatively stable since 2012 with the exception of a peak in 2017. As of 2021, active modes represent 1% of the movements entering / exiting Chatteris.

Table 15: Vehicles Entering & Leaving Chatteris presented as indices where 2011 = index 100.

Type	2011	2017	2018	2019	2020	2021	12 Hour Flow	Modal Split
Motorcycles	100	108	46	87	49	43	47	0%
Cars & Taxis	100	113	127	132	116	116	15,743	81%
Light Goods	100	101	103	101	115	106	2,833	15%
Heavy Goods	100	129	128	129	71	76	323	2%
Bus & Coach	100	59	51	52	111	102	219	1%
Motorised Vehicles	**100**	**111**	**122**	**125**	**114**	**113**	**19,165**	**99%**
Pedal cycles	100	162	48	55	83	50	29	0%
Pedestrians	100	376	166	169	137	169	240	1%
Total (All modes)	**100**	**114**	**122**	**126**	**114**	**113**	**19,434**	**100%**

Figure 23: Vehicles Entering & Leaving Chatteris

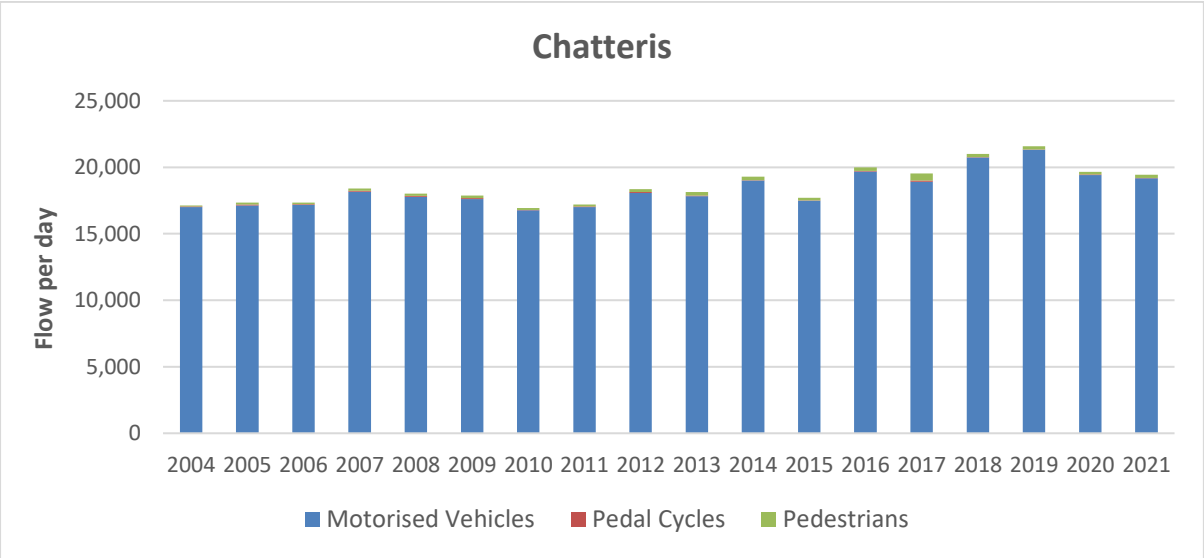
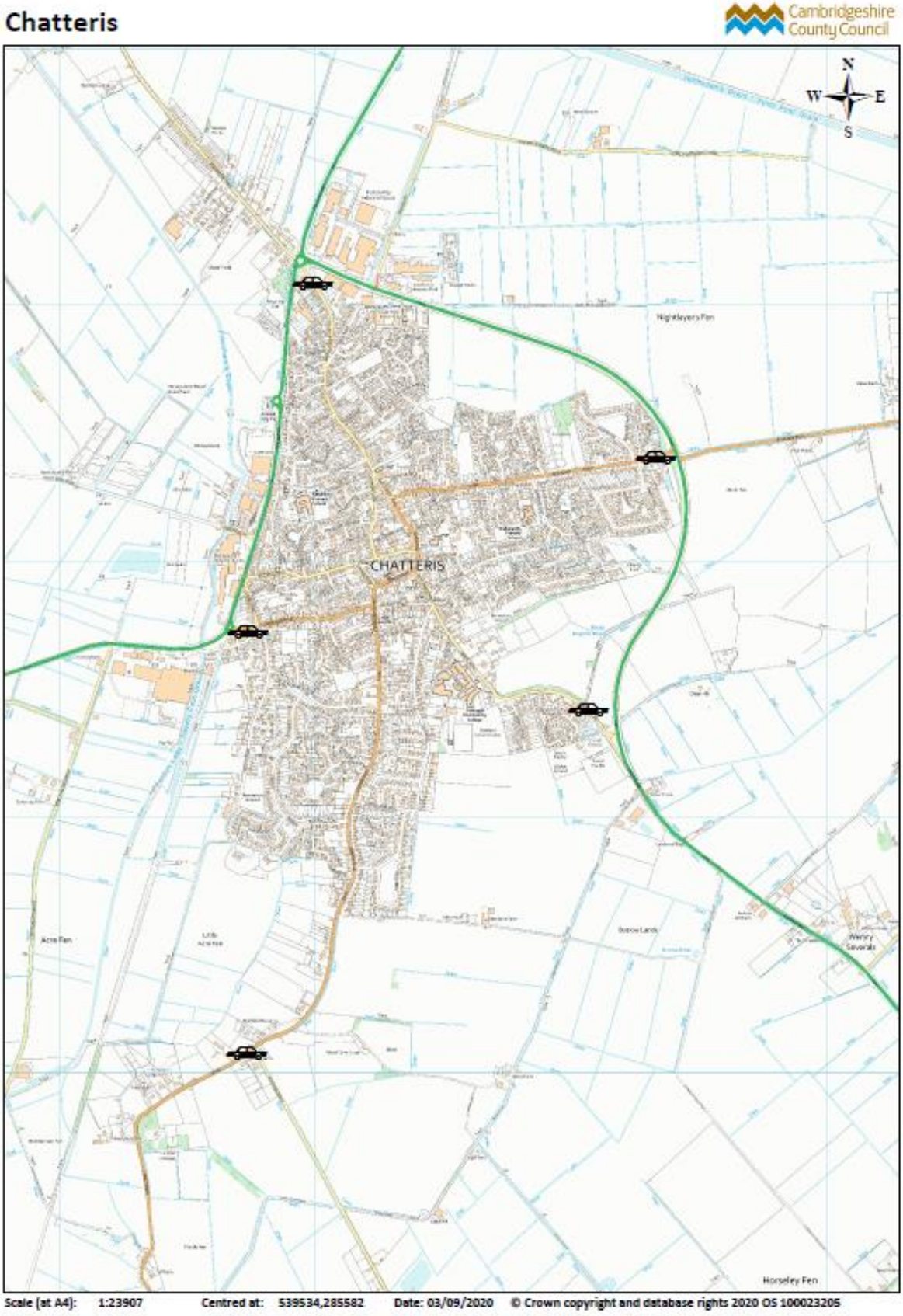


Figure 24: Chatteris town monitoring sites



4.9 Ramsey

4.9.1 The locations of the individual monitoring points that form the Ramsey cordon are shown in Figure 26. The observed flows are summarised in Table 16 alongside indices that compare the flows for the last 5 years back to 2011 levels. Figure 25 presents the long-term monitoring of volumes for this town.

4.9.2 Volumes of motorised vehicles entering/leaving Ramsey have been relatively stable since 2014 with the number fluctuating around 19-20,000 per weekday (7am-7pm). Volumes in 2020 and 2021 are at the lower end of this range.

4.9.3 Active mode travel in and out of Ramsey has also remained relatively stable and as of 2021 represents 1% of movements entering / exiting Ramsey.

Table 16: Vehicles Entering & Leaving Ramsey presented as indices where 2011 = index 100.

Type	2011	2017	2018	2019	2020	2021	2021 12 Hour Flow	2021 Modal Split
Motorcycles	100	59	59	86	60	56	75	0%
Cars & Taxis	100	110	109	112	103	104	15,336	80%
Light Goods	100	107	95	95	114	106	2,872	15%
Heavy Goods	100	120	180	170	117	126	542	3%
Bus & Coach	100	63	59	55	74	68	132	1%
Motorised Vehicles	**100**	**109**	**108**	**110**	**104**	**104**	**18,957**	**99%**
Pedal cycles	100	48	63	59	58	90	64	0%
Pedestrians	100	140	130	86	116	114	150	1%
Total (All modes)	**100**	**109**	**108**	**110**	**104**	**104**	**19,171**	**100%**

Figure 25: Vehicles Entering & Leaving Ramsey

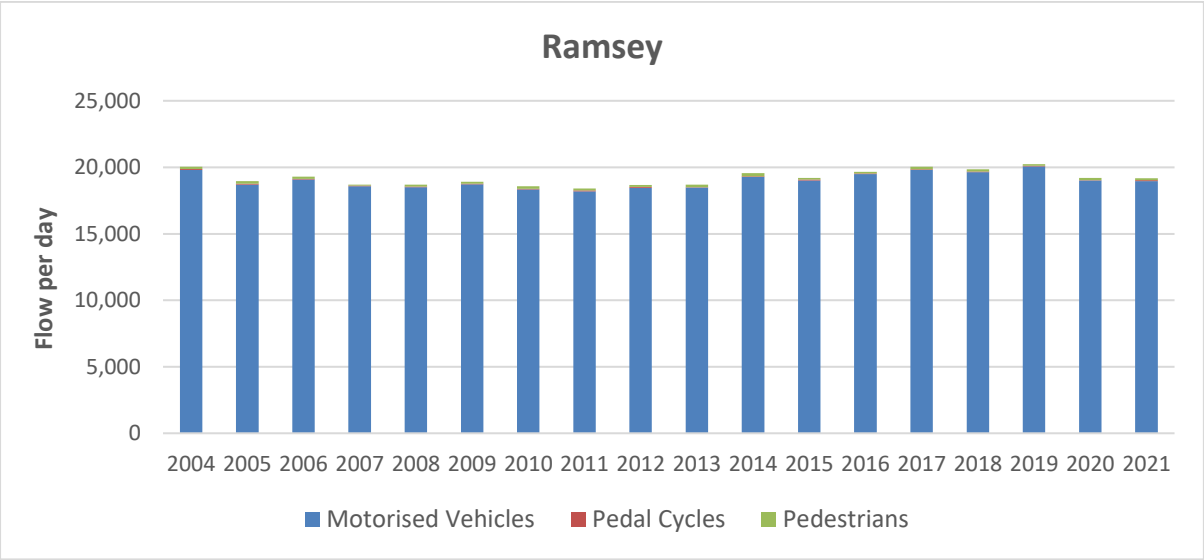
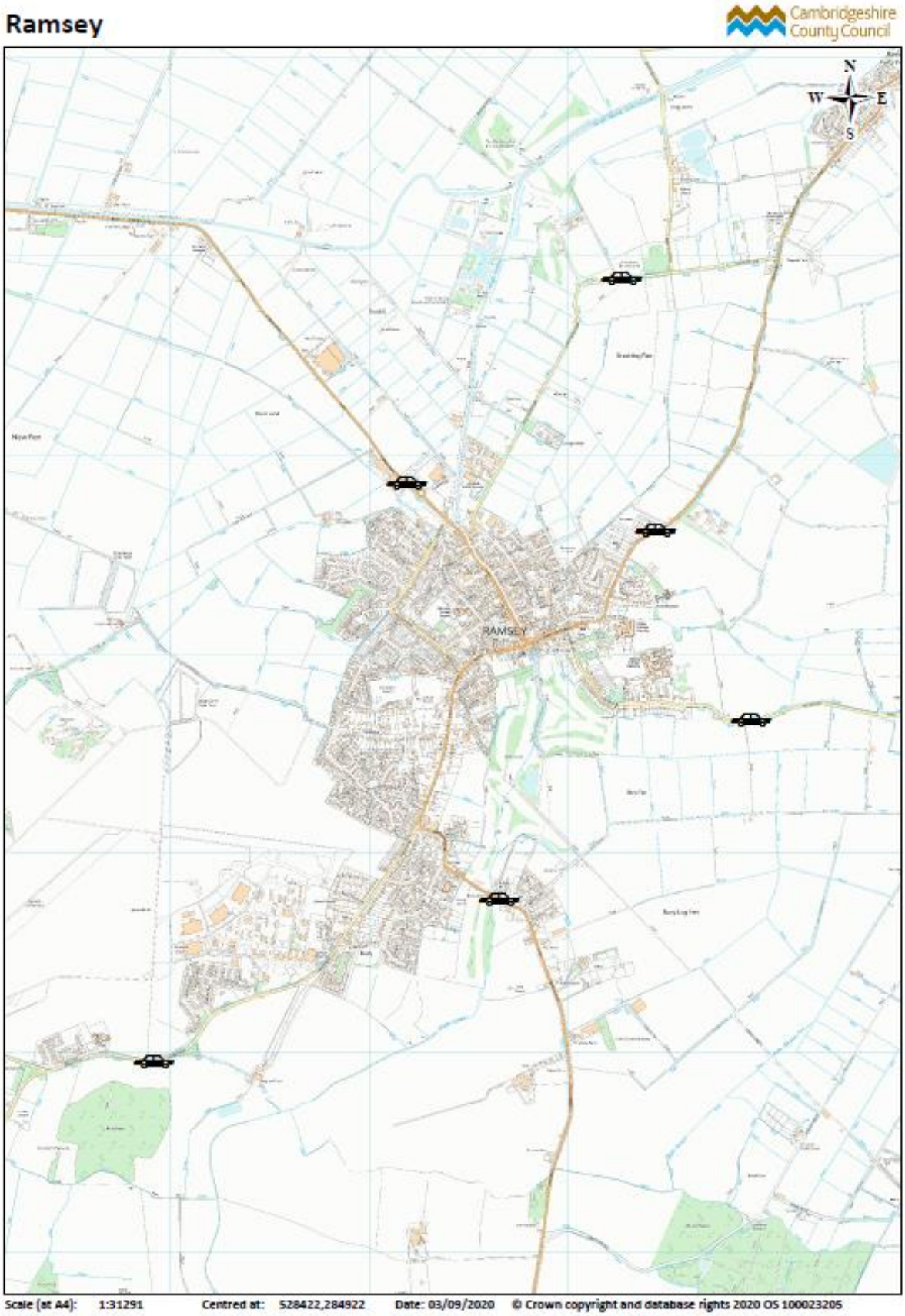


Figure 26: Ramsey town monitoring sites



4.10 Whittlesey

4.10.1 The locations of the individual monitoring points that form the Whittlesey cordon are shown in Figure 28. The observed flows are summarised in Table 17 alongside indices that compare the flows for the last 5 years back to 2011 levels. Figure 27 presents the long-term monitoring of volumes for this town.

4.10.2 Volumes of motorised vehicles entering/leaving Whittlesey have gradually increased since 2015, reaching a peak of just over 36,000 vehicles per weekday in 2019. Volumes dropped back down to just under 32,000 in 2021 which is comparable to 2015 volumes.

4.10.3 Active mode travel in and out of Whittlesey has remained fairly stable since 2016 and as of 2021 actives modes represent 2% of these movements.

Table 17: Vehicles Entering & Leaving Whittlesey presented as indices where 2011 = index 100.

Type	2011	2017	2018	2019	2020	2021	12 Hour Flow	Modal Split
Motorcycles	100	133	98	98	57	82	127	0%
Cars & Taxis	100	115	118	126	108	108	24,310	75%
Light Goods	100	119	114	116	122	107	5,107	16%
Heavy Goods	100	122	135	163	144	134	1,932	6%
Bus & Coach	100	38	37	40	51	54	157	0%
Motorised Vehicles	**100**	**115**	**117**	**125**	**111**	**109**	**31,633**	**98%**
Pedal cycles	100	177	146	135	103	124	221	1%
Pedestrians	100	131	148	151	143	159	405	1%
Total (All modes)	**100**	**116**	**118**	**125**	**111**	**109**	**32,259**	**100%**

Figure 27: Vehicles Entering & Leaving Whittlesey

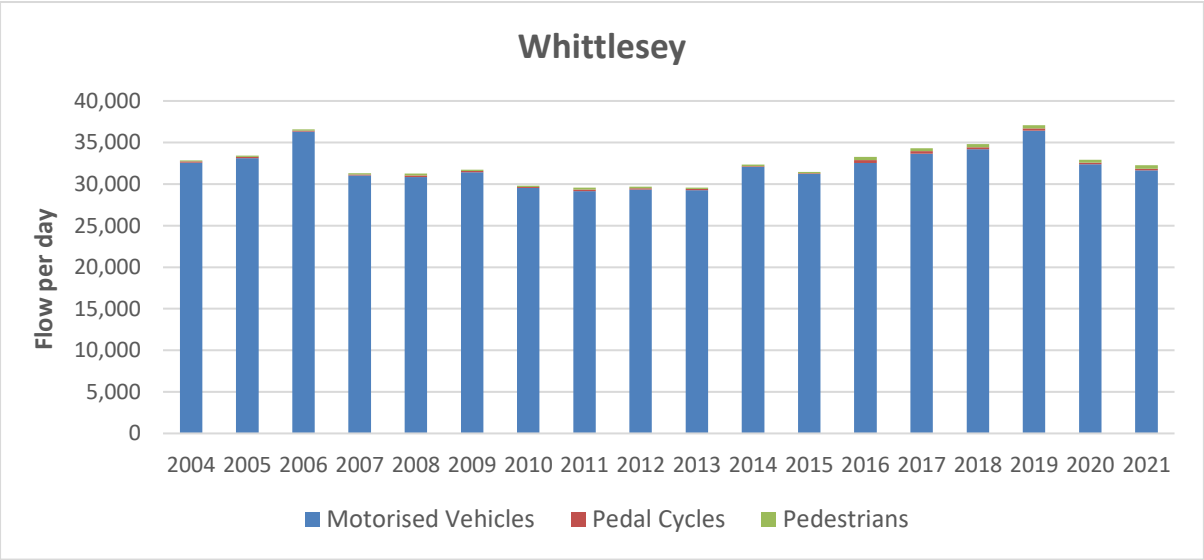
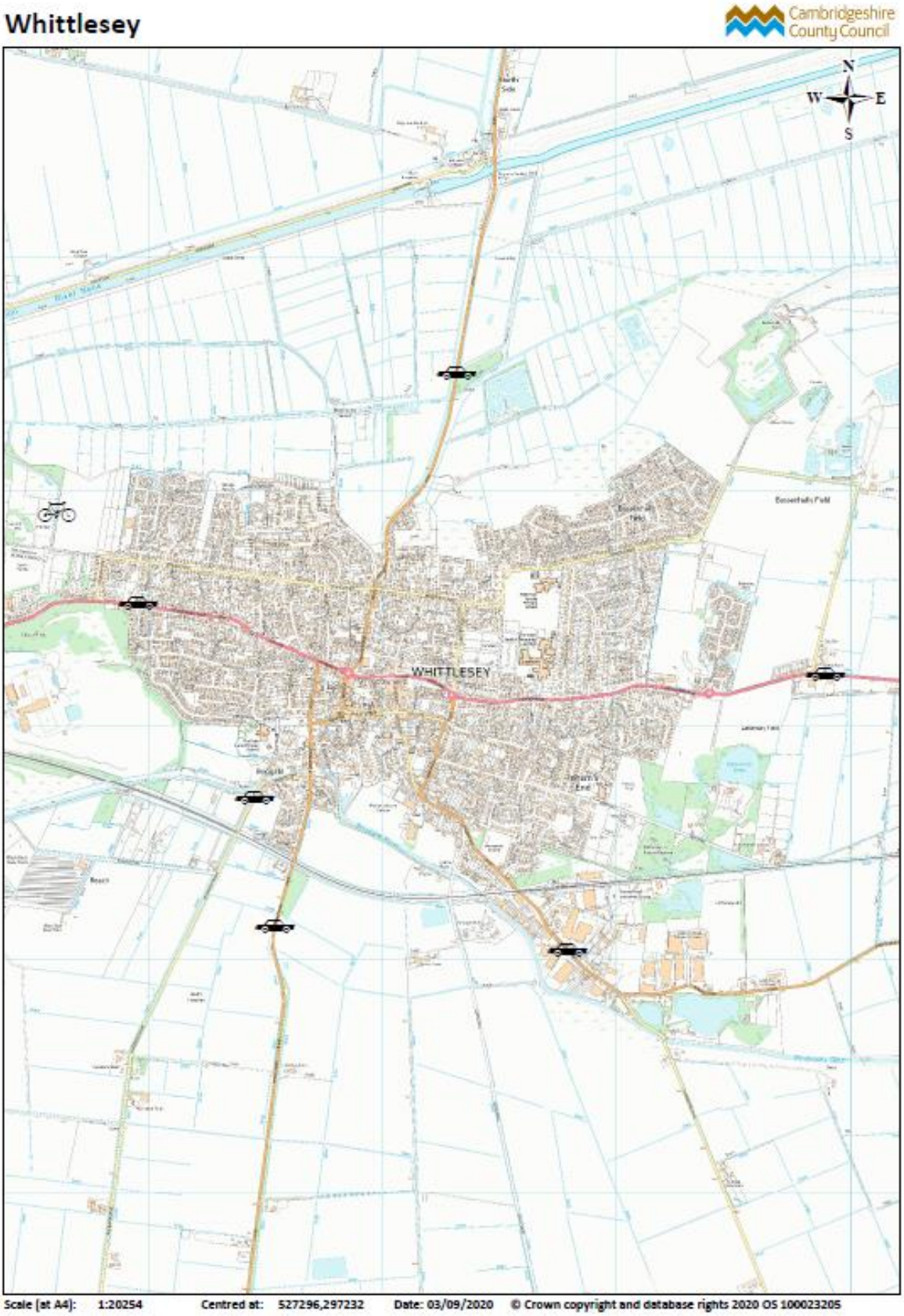


Figure 28: Whittlesey town monitoring sites



5 CYCLE MONITORING

5.1.1 Cycle volumes across the county are assessed during the annual cycle monitoring survey which traditionally takes place in Spring each year. This survey has monitored sites across Cambridge and South Cambridgeshire since 2007. Due the pandemic, the survey was undertaken in both the Spring and Autumn in 2020 and 2021. Historic data is presented in the Appendix (section 0).

5.2 Growth in Cycling

5.2.1 Cycle volumes are monitored based on the overall increase captured at many survey locations throughout Cambridgeshire, giving a large, robust sample.

5.2.2 Cycle volumes captured by the Cycle Route Monitoring, River Cam Screenline, Annual Town Monitoring and Cambridge Radial surveys have been summed to indicate the total number of cyclists captured across all surveys. Based on this total, there was a 68% increase in cycle trips in April 2021 compared with April 2020. However, the April 2021 volumes remain below pre-pandemic volumes. April 2021 volumes were 10% below the 2011 baseline, as presented in Table 18.

Table 18: Change in Cambridgeshire cycling volumes compared to 2011.

Year	Apr 2011	Apr 2017	Apr 2018	Apr 2019	Apr 2020	Oct 2020	Apr 2021	Oct 2021
Weekday cycle flow (7am-7pm)	55,678	69,650	66,181	67,698	29,826	40,183	50,200	57,679
% change from Apr 2011		+25%	+19%	+22%	-46%	-28%	-10%	+4%

5.3 Journey to Work by Pedal Cycle

5.3.1 The latest Department for Transport walking and cycling statistics, published in December 2021, show that in the 12 months ending mid-November 2020, 24% of adults in Cambridgeshire cycled at least once a week (see Table 19). The equivalent figure for Cambridge is 45% which is the highest in the country. All districts within Cambridgeshire fall above the national average with the exception of Fenland which is slightly below the national average.

Table 19: Proportion of adults that cycle by frequency (DfT)

Area	Once per month	Once per week	Three times per week	Five times per week
ENGLAND	**16%**	**12%**	**53%**	**3%**
East of England	**19%**	**14%**	**6%**	**3%**
Peterborough	23%	17%	8%	4%
Cambridgeshire:	31%	24%	12%	7%
Cambridge	51%	45%	29%	20%
East Cambridgeshire	24%	18%	6%	4%
Fenland	15%	10%	5%	3%
Huntingdonshire	25%	18%	6%	3%
South Cambridgeshire	34%	28%	14%	6%

6 THE BUSWAY

6.1.1 The Cambridgeshire Guided Busway and parallel cycle track opened on 7th August 2011. This chapter aims to summarise Busway usage by presenting the number of bus passengers, cyclists and pedestrians using the busway.

6.2 Busway Bus Passenger Journeys

6.2.1 Guided busway passenger volumes are presented in Figure 29 and Figure 30. During 2021 there were over 1.8 million bus passenger journeys on the Busway. This is an increase of 13% compared to 2020 but a decrease of 59% compared with 2019. Busway passenger numbers are showing an upwards trend and as of December 2021 were at 54% of the equivalent month in 2019.

Figure 29: Guided Busway Passenger Journeys, August totals since 2011

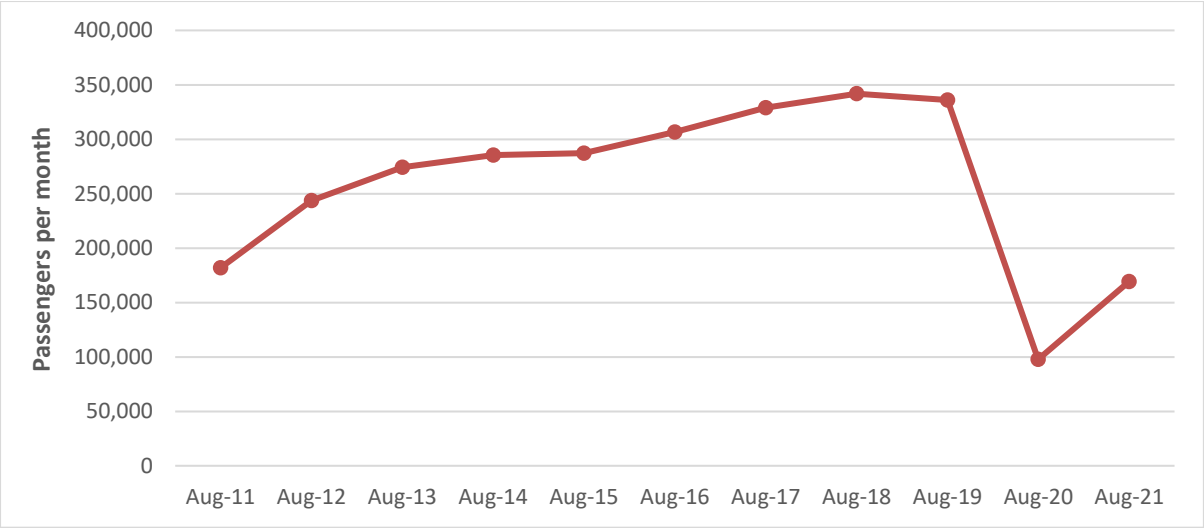
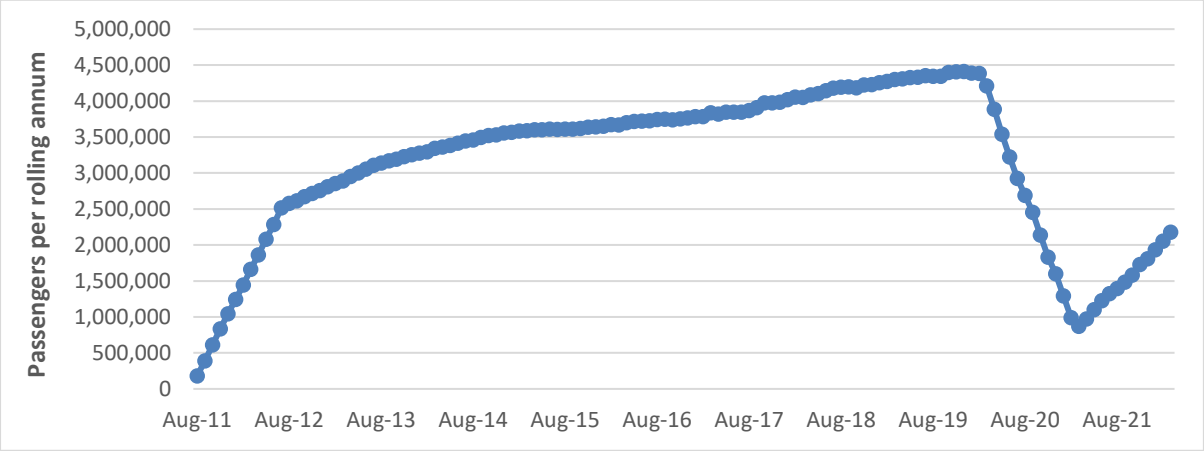


Figure 30: Guided Busway Passenger Journeys, 12-month rolling total since 2011



6.3 Busway Cyclists and Pedestrians

6.3.1 Table 20 below shows the number of cyclists and pedestrians using the maintenance track beside the Busway between 7am and 7pm in October each year.

Table 20: Cyclists and pedestrians using the busway maintenance track in autumn (7am-7pm flow)

Cyclists	Oct 2011	Oct 2017	Oct 2018	Oct 2019	Oct 2020	Oct 2021
St Ives P&R site	724	389	377	296	181	246
A14 underpass	724	1509	1628	1512	918	762
Trumpington				1736	1624	1304

Pedestrians	Oct 2011	Oct 2017	Oct 2018	Oct 2019	Oct 2020	Oct 2021
St Ives P&R site	139	78	557	793	159	131
A14 underpass	139	213	212	217	341	688
Trumpington				598	689	755

6.3.2 Figure 31 and Figure 32 present walking and cycling trends on the busway maintenance track over time. Volumes of pedestrians and cyclists fluctuate considerably each year which is likely due to the flows being sourced from a single day count which may have been influenced by the weather or other factors affecting active mode travel.

In Impington and Trumpington, cycle volumes appear to have decreased since 2019 whilst pedestrian volumes have increased. The reverse is true for St Ives which saw cycle volumes remain fairly stable and a large reduction in pedestrians. It should be noted that active mode flows are particularly susceptible to day-to-day fluctuation so reliance on single day counts for long term monitoring is not advisable. This information is therefore presented for information only.

Figure 31: Guided Busway Cycle Flows, weekday total (7am-7pm)

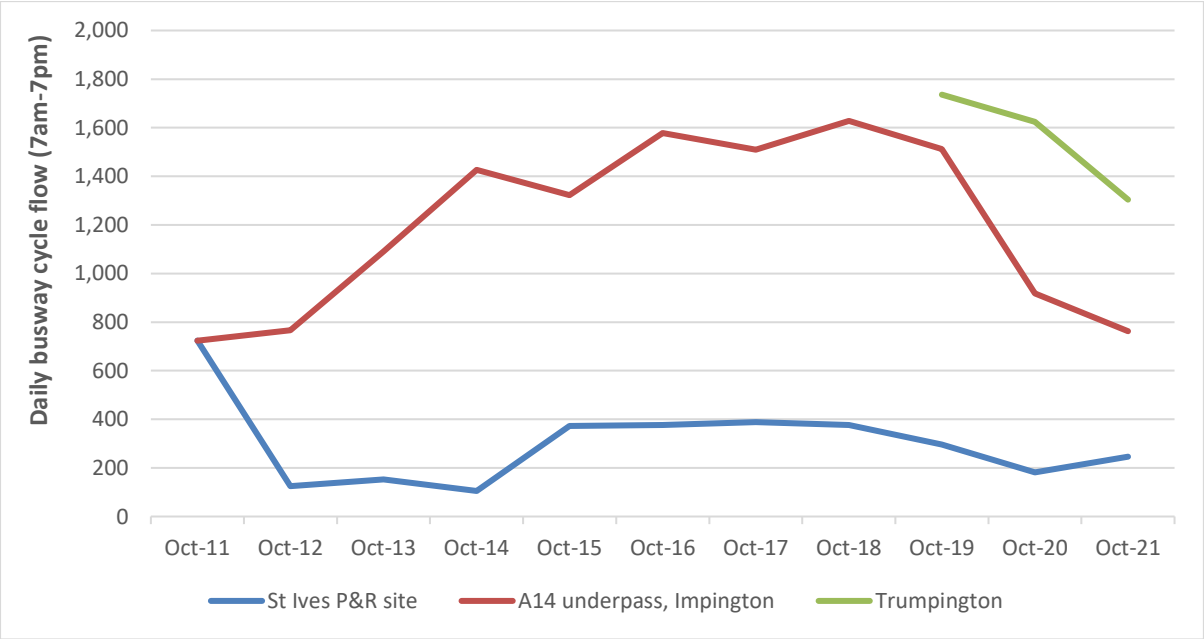
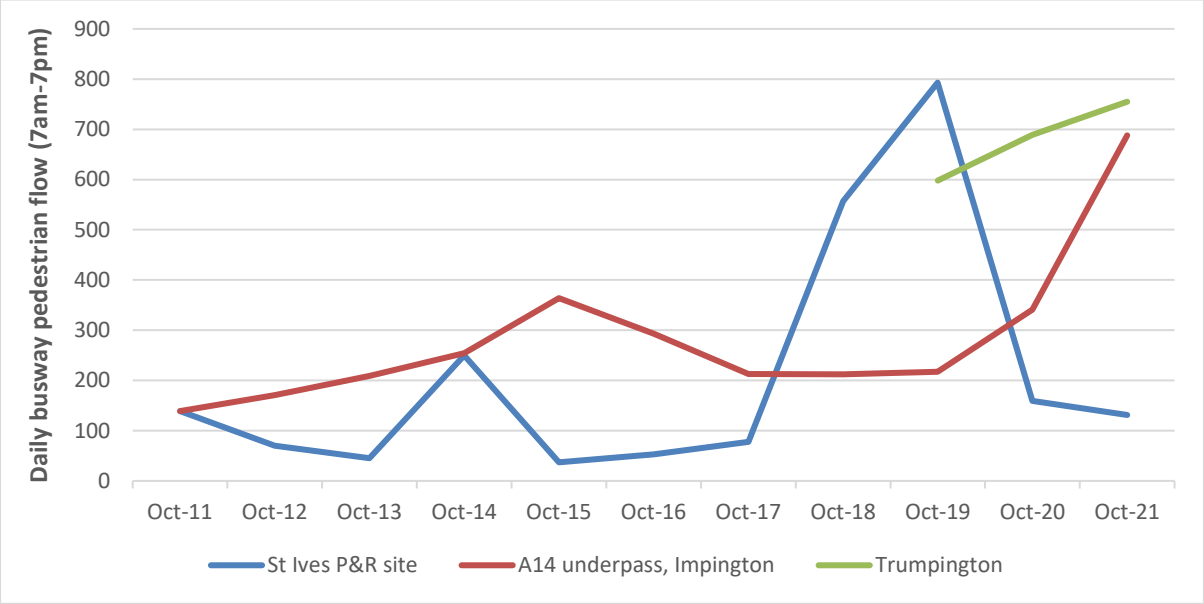


Figure 32: Guided Busway Pedestrian Flows, weekday total (7am-7pm)



7 APPENDIX

7.1 Definitions

7.1.1 General

Term	Description
Traffic Flow	The number of motorised vehicles in a given period of time, expressed as a two-way total.
12 hour flow	Flow in the period between 7am and 7pm on a weekday. This is the typical period observed for manual traffic surveys.
ATC	An Automatic Traffic Count (ATC) records and classifies flows automatically based on technology developed to distinguish between different vehicle types. This typically uses technology such as pneumatic tubes, radars, artificial intelligence or induction loops.
MCC	A Manual Classified Count (MCC) is a traffic count undertaken by manual observation, often aided by the collection of video footage, which is counted and classified by a human observer.
Screenline	An imaginary line drawn across a transport corridor (often following a physical barrier such as a river or a railway line) used to determine net flows between the areas on either side.

7.1.2 Vehicle Classifications

Name	Description
Motorcycle	Motorcycles, mopeds, scooters and motor cycle combinations.
Car	Cars, taxis, estate cars, light goods vans with side windows to the rear of the driver's seat, three wheeled cars and motor invalid carriages.
LGV	Light Goods Vehicles are goods vehicles up to 3.5 tonnes gross vehicle weight. This category includes all transit style vans, and small pickup vans.
HGV	Heavy Goods Vehicles are goods vehicles over 3.5 tonnes gross vehicle weight. This category includes both rigid and articulated vehicles.
Bus	All buses and coaches, including works buses.
Motorised Vehicle	Motorcycle, Car, LGV, HGV and bus combined.
Pedal Cycle	All bicycles, tricycles and cargo bikes.
Pedestrian	All travelling by foot or wheelchair.
Active Modes	Pedal cycles and pedestrians combined.
Total Flow	Motorcycle, Car, LGV, HGV, bus, pedal cycle and pedestrian combined.

7.2 Motorised Vehicle and Active Mode Volumes

Table 21: River Cam Screenline Total Motor Vehicles - 12 Hour Flows

Location	Apr 2011	Apr 2017	April 2018	April 2019	April 2020	Oct 2020	April 2021	Oct 2021
Elizabeth Way	25,371	24,258	23,618	23,699	9,968	21,408	21,783	22,308
Victoria Avenue	10,820	11,085	10,442	10,163	2,863	7,983	7,821	8,421
Bridge Street	2,141	2,338	2,206	2,219	647	1,889	1,908	2,317
Silver Street	3,495	4,225	4,544	3,141	382	624	643	948
Fen Causeway	19,033	16,937	15,605	17,738	5,523	15,614	16,107	17,450
Total	**60,859**	**58,843**	**56,415**	**56,960**	**19,383**	**47,518**	**48,262**	**51,443**

Table 22: River Cam Screenline Total Cyclists & Pedestrians - 12 Hour Flows

Location	Apr 2011	Apr 2017	April 2018	April 2019	April 2020	Oct 2020	April 2021	Oct 2021
Elizabeth Way	2,723	2,817	2,845	2,930	902	1,675	1,933	2,124
Victoria Avenue	2,610	4,031	4,169	4,856	1,745	2,806	3,406	4,059
Bridge Street	12,763	13,981	15,726	15,660	1,770	11,901	9,547	14,716
Silver Street	11,212	7,674	6,438	7,929	722	3,930	3,615	8,167
Fen Causeway	2,813	2,493	1,682	2,338	721	1,352	1,403	1,794
Coe Fen	1,860	2,745	2,823	3,351	1,517	1,615	2,545	2,961
Fort St George	2,767	3,296	3,503	3,403	1,533	2,704	3,313	3,604
Garrett Hostel Lane	4,757	7,116	6,734	7,246	1,053	5,248	4,380	6,968
Green Dragon	2,878	3,276	3,824	4,602	2,800	2,906	3,935	4,297
Jesus Lock	3,770	4,700	4,558	5,030	2,167	3,162	4,319	4,679
Mill Lane Weir	2,330	3,059	2,877	3,540	1,013	1,541	2,826	2,787
Pye's Bridge	2,061	2,145	2,144	2,278	1,083	1,661	2,271	2,500
Riverside	2,399	3,366	3,062	3,453	2,344	2,374	3,230	3,217
Total	**54,942**	**60,696**	**60,382**	**66,613**	**19,367**	**42,872**	**46,721**	**61,869**

Table 23: Cambridge Radials Total Motor Vehicles - 12 Hour Flows

Location	Oct 2011	Oct 2017	Oct 2018	Oct 2019	Oct 2020	Oct 2021
DNA path: Addenbrooke's to Granham's Rd	0	0	0	0	0	0
Babraham Road	13,113	13,942	13,319	12,845	11,489	11,750
Barton Road	9,740	11,770	12,024	11,979	9,810	10,751
Cambridge Rd, Fulbourn	9,280	10,158	9,675	9,835	6,607	7,564
Coton Footpath	0	0	0	0	0	0
Coton Road	2,943	2,996	3,169	3,041	2,252	2,616
Fulbourn Old Drift	0	0	0	0	0	0
Girton Road	4,410	5,160	4,671	4,842	4,164	4,154
Granham's Road	2,942	3,506	3,804	3,080	2,744	2,475
Grantchester Path	0	0	0	0	0	0
Guided Busway (A14)	183	273	235	0	124	34
Hauxton Road	22,503	27,019	25,369	28,595	22,894	25,100
High St, Teversham	2,798	2,930	2,923	2,607	2,272	2,259
Histon Road	20,901	22,822	22,639	21,720	15,504	16,664
Horningsea Road	13,906	15,406	13,766	14,636	12,935	13,624
Huntingdon Road	9,034	7,894	7,653	6,808	6,602	7,669
Jane Coston Bridge	0	0	0	0	0	0
Lime Kiln Road (adjusted)	4,623	4,772	6,671	6,962	6,783	6,075
Madingley Road	13,620	14,821	16,797	15,542	11,224	12,672
Milton Road	25,872	27,421	27,046	26,327	19,653	21,921
Newmarket Road	20,812	21,551	21,503	21,516	17,627	18,758
Radial Exclude	0	-273	-195	-175	-184	-184
River Cam Path	0	0	0	0	0	0
Shelford Road	9,691	10,302	9,879	10,808	8,361	9,355
Wort's C'way (adjusted)	982	859	1,207	1,265	862	926
Total	**187,348**	**203,329**	**202,155**	**202,233**	**161,723**	**174,183**

Table 24: Cambridge Radials Total Cyclists & Pedestrians - 12 Hour Flows

Location	Oct 2011	Oct 2017	Oct 2018	Oct 2019	Oct 2020	Oct 2021
DNA path: Addenbrooke's to Granham's Rd	1,098	1,512	1,502	1,677	1,041	1,240
Babraham Road	174	290	332	429	270	324
Barton Road	502	528	206	512	309	454
Cambridge Rd, Fulbourn	425	451	499	553	267	331
Coton Footpath	285	454	553	561	447	425
Coton Road	68	58	323	57	90	113
Fulbourn Old Drift	573	51	41	16	64	39
Girton Road	1,310	1,358	1,390	1,412	1,121	1,393
Granham's Road	48	32	25	23	25	26
Grantchester Path	426	808	842	1,114	1,066	899
Guided Busway (A14)	863	1,722	1,840	1,729	1,259	1,450
Hauxton Road	229	252	303	335	200	294
High St, Teversham	130	127	200	120	170	194
Histon Road	1,478	1,438	1,520	999	948	1,180
Horningsea Road	85	155	276	254	172	194
Huntingdon Road	50	41	96	95	160	226
Jane Coston Bridge	1,575	2,148	2,313	2,542	1,139	1,553
Lime Kiln Road (adjusted)	28	0	0	0	40	39
Madingley Road	319	455	839	886	267	321
Milton Road	31	9	8	10	10	6
Newmarket Road	351	10	355	226	278	284
Radial Exclude	0	0	0	0	0	0
River Cam Path	413	361	815	768	1,259	826
Shelford Road	727	869	887	957	847	883
Wort's C'way (adjusted)	48	32	0	0	49	27
Grand Total	**11,230**	**13,161**	**15,165**	**15,275**	**11,498**	**12,721**

Table 25: Cambridgeshire Cycle Route Monitoring – 12 Hour Cycle Flows

Location	April 2011	April 2017	April 2018	April 2019	April 2020	Oct 2020	April 2021	Oct 2021
Barton Road, Newnham	1,897	2,300	2,313	1,470	960	987	1,569	1,880
Cambridge Road, Fulbourn	190	273	188	148	291	98	227	188
Cambridge Road, Milton	752	1,208	1,175	825	597	438	886	759
Cambridge Road, Sawston	426	732	868	347	472	325	722	459
Carter Cycle Bridge	2,972	3,301	3,517	2,562	698	1,499	1,976	2,189
Coldham's Lane	1,506	2,042	1,573	1,902	943	955	1,304	1,324
Comberton Road	272	375	413	176	389	160	405	225
High Green, Great Shelford	703	1,051	1,096	464	875	441	870	609
High St, Dry Drayton	81	121	128	86	147	22	50	31
Hills Road	3,207	3,569	1,925	4,016	1,563	2,065	2,887	2,667
Jubilee Way	669	1,894	1,049	1,108	391	766	520	742
Long Road	1,010	1,269	1,686	1,491	604	1,161	1,677	1,448
Newmarket Road, Teversham	243	328	335	141	388	86	275	140
Oakington Road	345	275	329	150	404	86	217	163
Quy to Bottisham	186	274	177	68	276	52	199	86
Swaffham Bulbeck	91	117	149	41	299	21	154	38
Toft Rd, West of Comberton	95	160	124	140	311	50	195	72
Total	**14,645**	**19,289**	**17,045**	**15,135**	**9,608**	**9,212**	**14,133**	**13,020**