The Greater Cambridge Travel Survey Report

Commissioned by the
Greater Cambridge Partnership
as part of the 'Big Conversation'
about travel and transport in the area
Autumn 2017

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

EXECUTIVE SUMMARY

The Greater Cambridge Travel Survey was commissioned by the Greater Cambridge Partnership to benchmark and better understand the most significant factors that influence people's behaviours and choices for travel in and around Cambridge.

Travel for Cambridgeshire collected 7,635 survey responses from residents and commuters in Cambridge and South Cambridgeshire, providing a rich evidence base for analysis. The team carried out extensive data analysis to reveal patterns and explore the related characteristics generated by the survey.

Overall, the survey data suggests there is opportunity and propensity to modal shift, generally and among some key target groups, with a priority list of incentives and current barriers to doing so. Below is a summary of the key findings:

Frequency and types of journey made in and around Cambridge
The survey found that three quarters of respondents (irrespective of age group, gender and occupation type) travel 'in and around Cambridge,' '5 or more times a week'. Over three quarters of respondents make journeys to 'commute to/from work' and slightly less than three quarters travel for 'leisure, including shopping'. About half of all journeys made are 'personal' journeys. Age is an influencing factor for the type of journeys made. 'Commute to/from work' and travel for 'leisure, including shopping' are the two main purposes for journeys for the 25-49 age group, whereas 'leisure, including shopping' and 'personal' journeys are the two main types of journeys made by the 65+ age group.

Eight out of ten respondents travel at peak hours during weekdays and seven out of ten travel on Saturdays. Time of travel depends on the age of the respondent. Within the 16-64 age group, the most frequent journey times are at peak hours during weekdays, whereas for 65+ and retired respondents most journey times are at off-peak hours during weekdays.

Current travel mode and reason for choosing it
Overall, the survey data reveals that the car/van remains the most popular mode of travel, followed by cycling. District-based analysis carried out between workers/residents of Cambridge and South Cambridgeshire shows that this pattern is consistent throughout both districts.

Respondents' main reasons for choosing between modes of transport are 'speed of journey', 'reliability of journey' and 'distance to destination'.

Alternative modes of transport to driving (if driving became less of an attractive option)

A number of respondents selected 'cycle' (28.9%) and 'other bus, minibus or coach services' (23.5%) as alternative modes of transport to driving. However, slightly less than a quarter of participants (24.4%) responded 'I would still drive, no matter what'.

Reason for not using alternative modes of transport

The main reasons listed by respondents for not using alternative modes of transport were 'speed of journey', 'price of transport' and 'reliability of journey'.

Willingness to travel in/around Cambridge without personal car/van

The responses provide very encouraging statistics to implement or transition user behaviour towards sustainable transport modes. A larger number of participants (38.9%) said they would like to make more journeys 'in and around Cambridge' without using their own 'car/van' compared to 32.8% of respondents who said 'No' to the idea. A further 12% responded 'Don't know' while 16.3% answered 'Not applicable' (N/A). Those participants who were uncertain may be inclined to travel 'in/around Cambridge without personal car/van' with improvements in public transport infrastructure/services and safer cycling initiatives (e.g. more/improved cycle paths and cycle crossing facilities).

Effect of potential initiatives to encourage/enable participants to reduce use of car/van

Out of 32 potential initiatives aimed at encouraging a reduction in car/van use, the five most popular initiatives were:

- Cheaper fares for public transport;
- More frequent services on public transport;
- More reliable services on public transport;
- New public transport routes introduced; and
- Faster services on public transport.

The five least popular initiatives were:

- Provision of travel planning advice;
- Fewer free on-street parking spaces;
- A Cycle scheme (like a season ticket loan but to buy a bicycle);
- Introduction of a Workplace Parking Levy; and
- Direct public transport alerts and/or direct weather alerts to your mobile phone.

The five most popular initiatives all relate to public transport. This is an important indicator of respondents' experience and views of public transport. To understand the effect of potential initiatives, district-based analysis was carried out. Results show that respondents working/residing in both districts prioritise stated initiatives in a similar fashion.

INTRODUCTION

1.1 Background

The Greater Cambridge Partnership (GCP) commissioned Travel for Cambridgeshire (TfC) to deliver a travel survey to residents and commuters of Cambridge and South Cambridgeshire. The survey, commissioned alongside representative market research, aimed to benchmark people's current travel behaviours and explore their future travel behaviours. The data collected will be used by the GCP and its partners, now and in the future, to supplement the evidence base for policymaking.

The overarching aims of the survey are to:

- Understand factors affecting the travel behaviours of people living or commuting in and around Cambridge and South Cambridgeshire, now and in the future;

- Identify common problems, ground realities and specific needs with respect to barriers to modal shift, including propensity and motivations to shift to sustainable travel in the future;

- Provide statistical insight into the percentage of people who would not be prepared to shift to sustainable transport modes;

- Give people living or commuting in and around Cambridge and South Cambridgeshire an opportunity to suggest solutions to their transportation problems;

- Provide information to supplement existing travel and transport modelling data for the Greater Cambridge area, including updating the 2011 census data in respect of how people travel to work; and

- Identify which transport schemes are priorities for the GCP's Future Investment Strategy (FIS).

This report details the travel survey methodology and results.

METHODOLOGY

TfC staff prepared the travel survey questionnaire, with final approval from the GCP. The TfC team managed the data collection, using a number of processes deployed by TfC to avoid survey completion bias and to ensure representation of sub-groups among Cambridge and South Cambridgeshire's population (approximately 128,550 households). This was to identify statistically significant differences between segments of the population, including students and other 'hard to reach' groups located in low participation areas.

The survey approach was a mixed method design (quantitative and qualitative questions). The questionnaire was broadly similar to the representative Computer Assisted Telephone Interview (CATI) survey developed in parallel by Systra. A copy of the survey is included in Appendix A. TfC pre-tested the survey, prior to it being launched. The survey was jointly branded as GCP and TfC.

The team used the consumer classification platform ACORN to segment each of Cambridge and South Cambridgeshire postcode sector areas, based on geodemographic and lifestyle characteristics. This identified 69,361 residential dwellings situated within 2,400 postcode areas, as being 'most likely' to respond to a postal survey (or to complete an online version). TfC issued these addresses with a hard copy survey delivered through the door.

TfC then targeted the postcode areas of the 20 traditionally under-represented segments of the community (refer to Appendix B for ACORN classifications) by undertaking door-step Computer-Assisted Personal Interview (CAPI) surveys. The team conducted door-to-door interviews using iPads on three typical weekdays (Tuesday – Thursday) and two Saturdays (to avoid achieving a sample biased towards those more likely to be at home during the week). This was carried out over the three-week survey period in October (11 days in total) and covered 2 shifts (AM and PM) to capture the views of those who were at home and at work during the day. A 'We've Missed You' leaflet was delivered to those properties where the team did not make contact, asking residents to complete the survey online. The team also promoted the survey at the GCP's Big Conversation events.

TfC hosted the online survey on a dedicated landing page – www.travelcambs.org.uk – while the GCP hosted the survey through a portal on www.greatercambridge.org.uk. To maximise survey participation, TfC distributed the online survey link to our wider organisation database of 20,000 email addresses. This consisted of commuters from over 180 organisations (80,000 employees) at key Cambridgeshire employer sites, who have engaged previously with consultations and surveys, as well as the CamShare database of 8,500 registered car-sharers. The GCP signposted people to the survey through existing e-mail distribution lists, via social media and through local media reporting.

The majority of online survey responses were received between 9th October and 6th November 2017. Residents of Cambridge and South Cambridgeshire received the postal

survey from 11th October 2017 and had until 6th November 2017 to complete the survey. Returned responses were accepted until 9th November 2017.

The following are key facts and figures:

- Number of doors knocked on – 1,336
- Number of doorstep surveys completed – 458
- Number of surveys delivered through residents' doors – 69,361
- Number of surveys completed online – 5,920
- Number of postal surveys returned – 1,715

A total of 7,635 surveys were completed by the residents and commuters of Cambridge and South Cambridgeshire.

SURVEY RESULTS

3.1   Introduction

A total of 7,635 completed survey forms were returned by participants (comprising of 5,920 online and 1,715 paper format). Each form included 24 survey questions. A total of 22 questions have been analysed and plotted as bar graphs and the corresponding values are presented in tables. Question 4 and Question 12 have more complex responses and these are presented as weighted data.

Responses have been compared based on demographics, gender, work status and occupation type. Results have been further analysed with respect to the two districts – Cambridge and South Cambridgeshire.

For Question 13, participants had an opportunity to respond in a subjective way with a text-based answer. In addition, six of the questions had 'other' options, where respondents could write their answer in the text box provided. For all of these answers, TfC has carried out text-based analysis by identifying popular keywords or phrases.

3.2   What do we know about the participants?

Figure 1: Demographics

42%
(3,227)

47%
(3,586)

Those with disabilities or long-standing illness

7%

Age group distribution:
- 25-49 (n= 4138)
- 50-64 (n= 1794)
- Over 65 (n= 707)
- N/A (n= 571)
- 16-24 (n= 351)
- Prefer not to say (n= 72)
- Under 16 (n= 2)

No of Participants (%)

Employment status distribution:
- Working Full-time (n= 5361)
- Working Part-time (n= 783)
- N/A (n= 670)
- Retired (n= 601)
- Student (n= 121)
- Not Working (n= 99)

No of Participants (%)

Occupation distribution:
- Intermediate managerial (n= 2721)
- Higher managerial (n= 2205)
- Don't know/prefer not to say (n= 1583)
- Supervisory or clerical and junior managerial (n= 1274)
- Skilled manual worker (n= 254)
- Semi or unskilled manual worker (n= 63)
- Casual worker pensioner or dependent on state welfare (n= 57)

No of Participants (%)

As seen in Figure 1, the number of female participants to male is higher by 5%. About 7% of participants said they have a disability of some type. The highest number of respondents belong to the 25-49 age group (54.2%), followed by 50-64 (23.5%) and 65+ (9.2%) respectively. The highest percentage of survey respondents work full time (70.2%), 10.2% of respondents work part time and 7.8% are retired.

Based on the occupation of the main income earner in each household:

- 35.6% of respondents belong to the 'intermediate managerial, administrative or professional' group;

- 28.8% of respondents belong to the 'higher managerial, administrative or professional' group; and

- 16.6% of respondents belong to the 'supervisory or clerical and junior managerial, administrative or professional' group.

Figure 2 depicts home postcodes of all the respondents. The number associated with each cluster represents the total participants from that area. Larger and smaller numbers are shown in different colours.

Figure 2: Cluster of all the respondents based on home postcodes
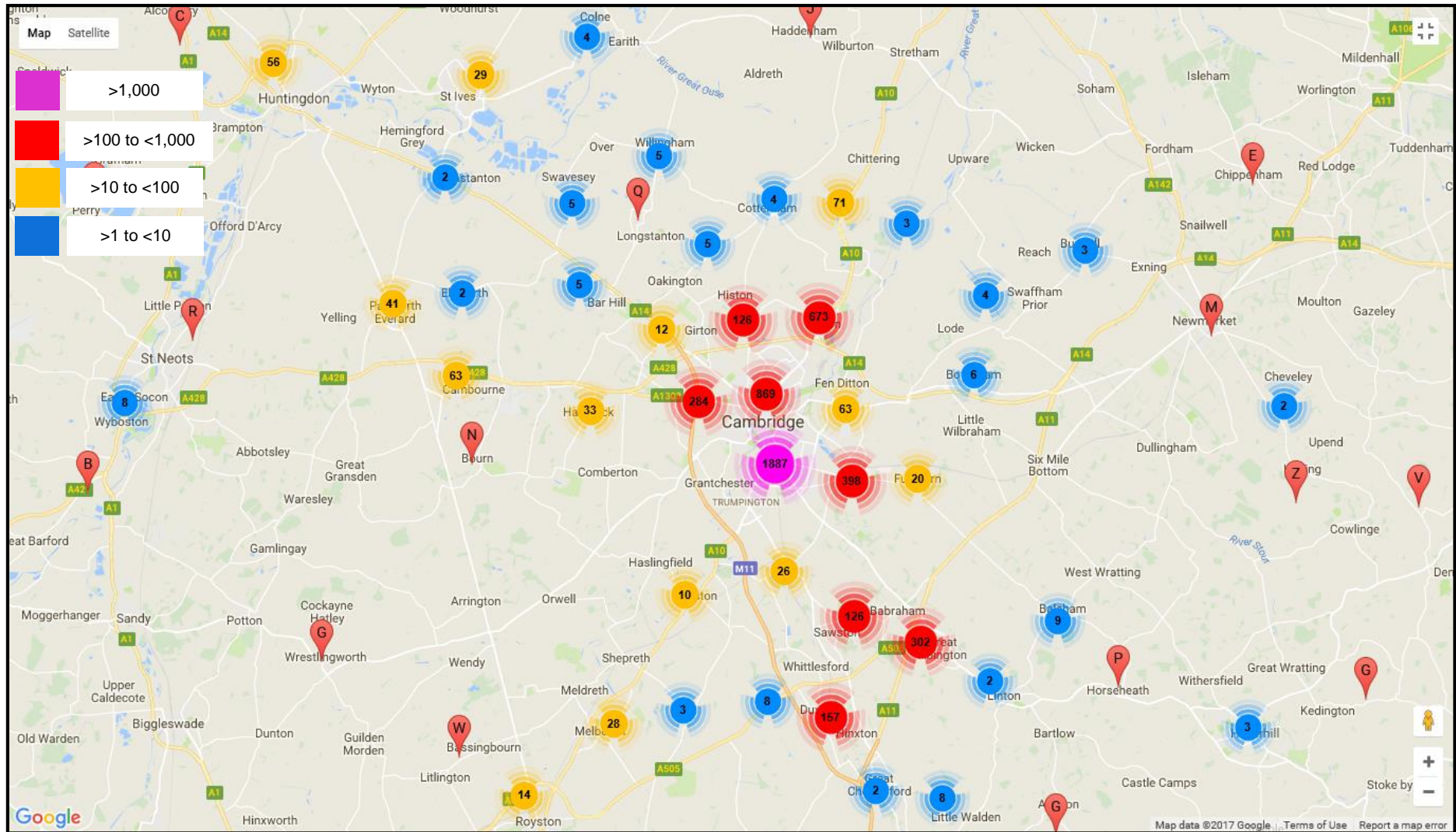
Survey participants based on the districts

Survey data sets with postcodes CB1 to CB5 were categorised as Cambridge. Data sets with postcodes CB21 to CB25 were categorised as South Cambridgeshire.

The survey asked respondents for their work and home postcodes. Data sets of work postcodes were divided into Cambridge (work) or South Cambridgeshire (work). Similarly, data sets of home postcodes were also divided into Cambridge (home) or South Cambridgeshire (home).
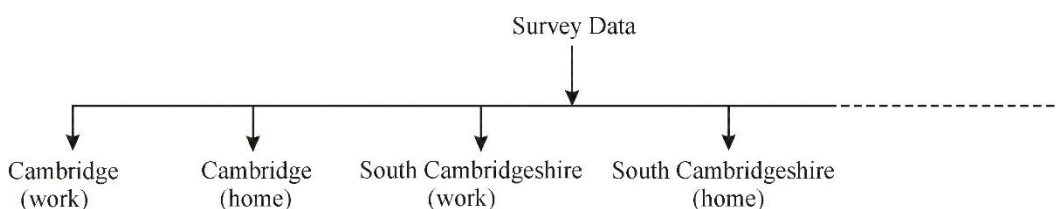
Number of respondents in the survey area include:

- Cambridge (work) – 3,845
- Cambridge (home) – 2,547
- South Cambridgeshire (work) – 1,753
- South Cambridgeshire (home) – 1,830

3.3 Frequency of travel

Participants were asked how often they travel 'in and around Cambridge'. Travel 'in and around Cambridge' refers to travel within the built-up area of the city and its outskirts.

- 75.6% travel in and around Cambridge 5 or more times a week;
- 15.1% travel 2 to 4 times a week;
- 3.3% travel less than once a week, but at least once a month;
- 2.8% travel once a week;
- 2.1% travel less than once a month;
- 0.5% said they never travel; and
- 0.3% said they don't know/prefer not to say/not applicable.

Figure 3: Frequency of travel in and around Cambridge
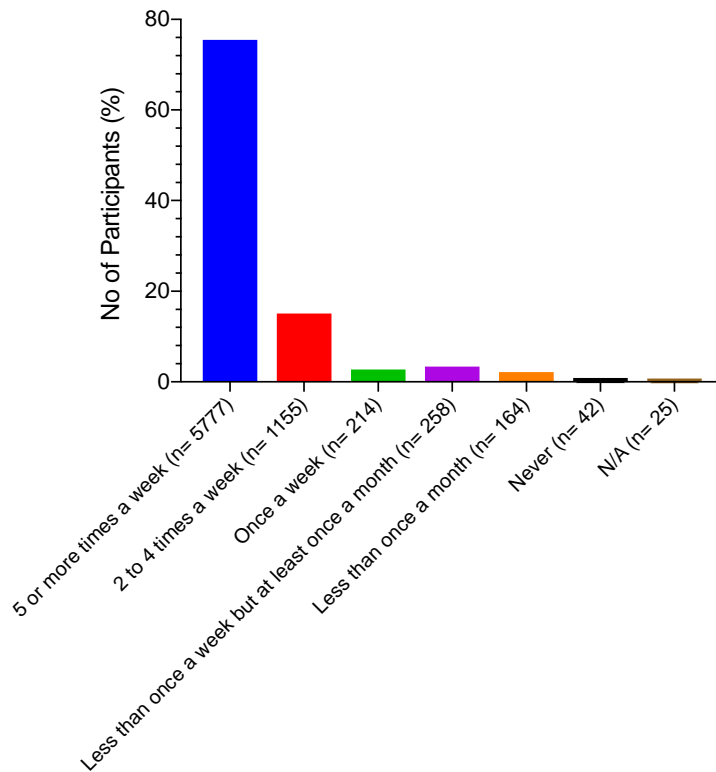
Figure 3 shows that three quarters of respondents travel 'in and around Cambridge,' '5 or more times a week', followed by '2 to 4 times a week' and 'less than once a week but at least once a month'. This pattern is consistent through all the age groups, gender and occupation types as depicted in Figure 4 to Figure 7. In the case of respondents with different working situations, the trend changes slightly. The majority of respondents (46.8%) who are 'retired' travel 'in and around Cambridge' '5 or more times a week'. Similarly, 34.7% and 7.1% of this category travel '2 to 4 times a week' and 'once a week' respectively.

Figure 4: Frequency of travel with respect to age groups

11
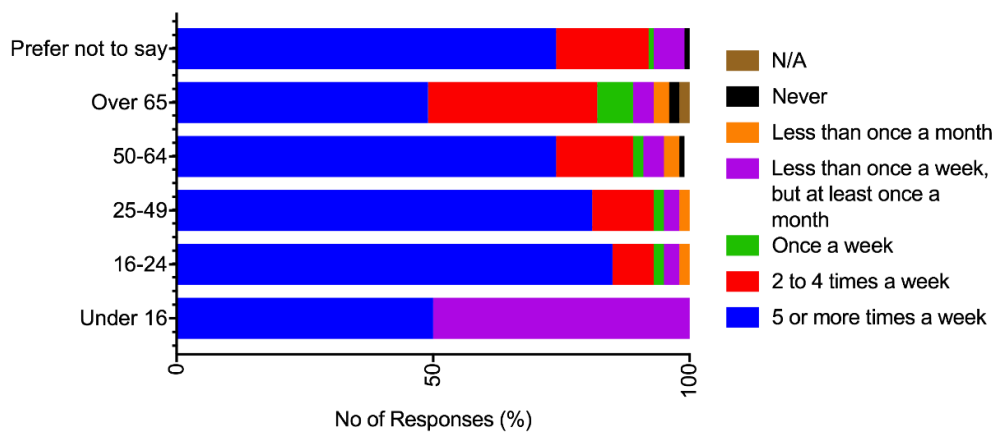
With respect to gender, 78.7% of males stated that they travel '5 or more times a week' compared to 73.4% of females.

Figure 5: Frequency of travel with respect to gender
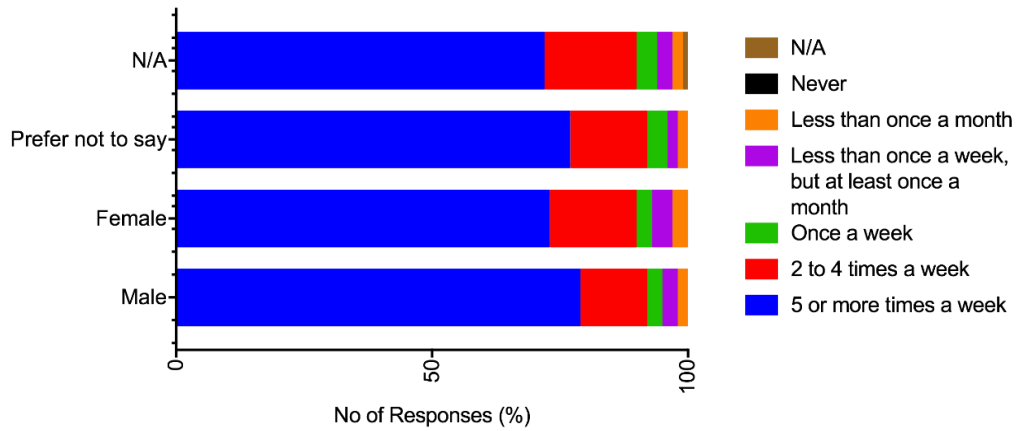
Respondents who work full time (82.2%) travel 'in and around Cambridge' '5 or more times a week', 9.8% of this group travel '2 to 4 times a week' and 3.3% travel 'less than once a week, but at least once a month'.

Figure 6: Frequency of travel with respect to working situation
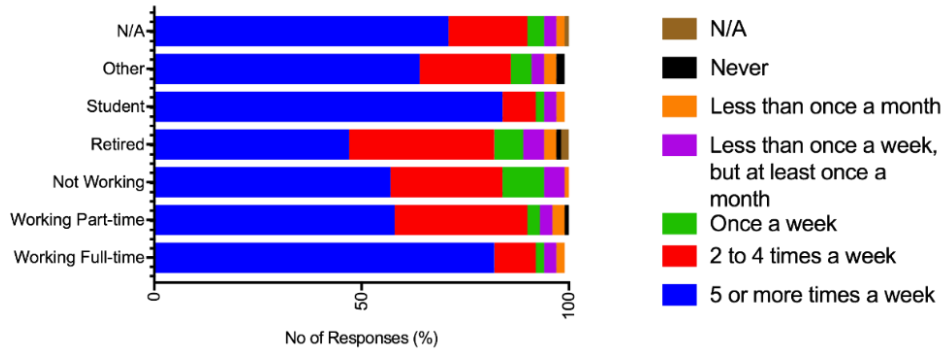
Figure 7: Frequency of travel with respect to occupation type
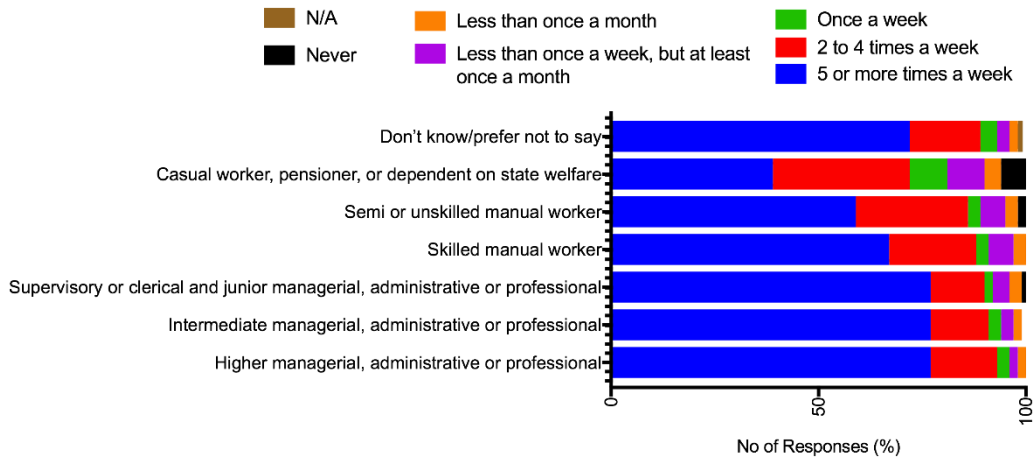
3.4 Journey purpose

The main reasons for journeys made 'in and around Cambridge' are:

- 5,386 (76.4%) respondents commute to/from work;
- 5,701 (74.6%) respondents travel for leisure, including shopping; and
- 3,892 (50.9%) respondents make personal journeys.

Figure 8: Reasons for travel
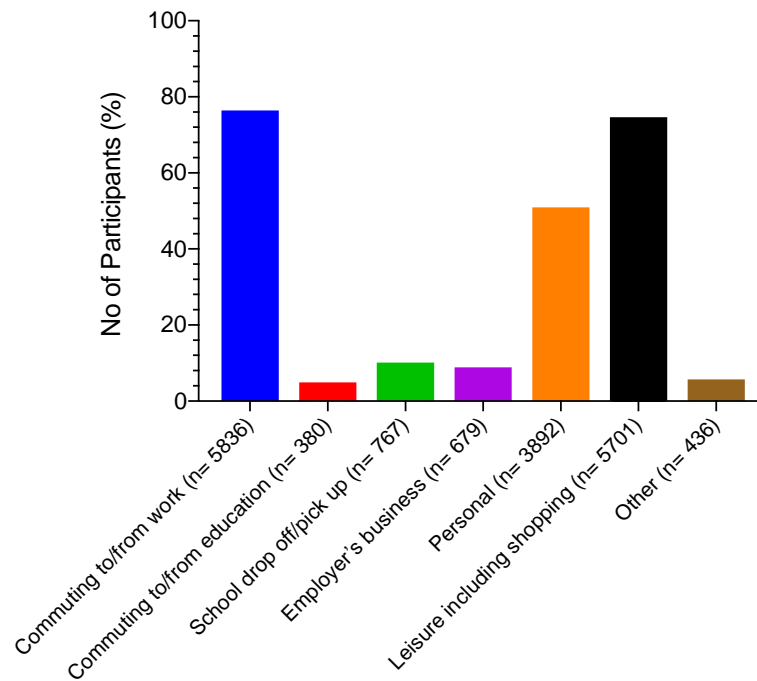
For this question, participants could select multiple responses. Journey type is significantly dependent on the age group. In the case of respondents from the 25-49 age group, 36.8% and 30.5% commute for work and leisure respectively. In comparison, for respondents aged 65[+], 43.5% and 32.2% travel for leisure and personal reasons respectively.

There is a noticeable difference in the type of journeys made by respondents with and without a disability. Journey purpose for those respondents without a disability ranks as commute for work (35.2%), leisure (31.5%) and personal reasons (20.9%). In comparison, journey purpose for those respondents with a disability ranks as travel for leisure (34.5%), personal reasons (26.1%) and commute for work (25.2%).

Journey purpose has also been analysed based on the districts. Responses from participants working in Cambridge were:

- Commuting to/from work – 95.1%
- Commuting to/from education – 4.8%
- School drop off/pick up – 11.0%
- Employer's business – 10.6%

- Personal – 48.5%
- Leisure, including shopping – 71.7%
- Other – 4.1%

Figure 9: Reasons for travel (respondents working in Cambridge)
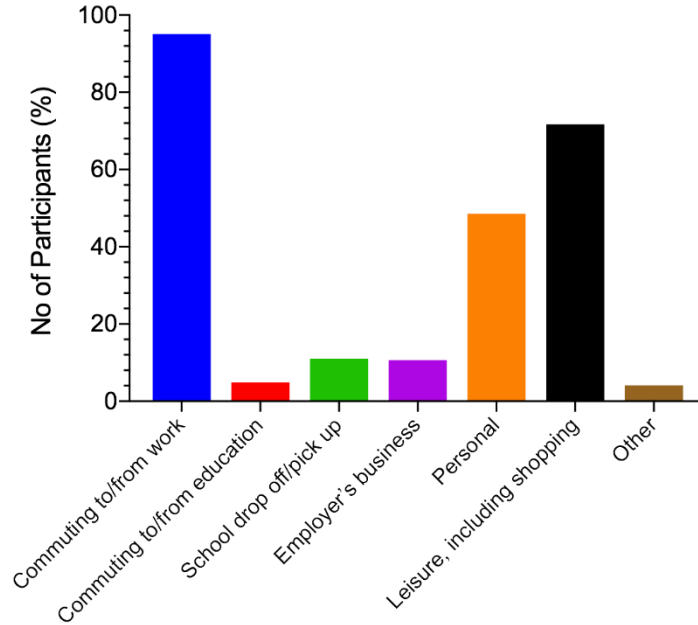
Responses from participants living in Cambridge were:

- Commuting to/from work – 75.6%
- Commuting to/from education – 7.0%
- School drop off/pick up – 14.7%
- Employer's business – 9.8%
- Personal – 73.2%
- Leisure, including shopping – 88.3%
- Other – 8.0%

Figure 10: Reasons for travel (respondents living in Cambridge)
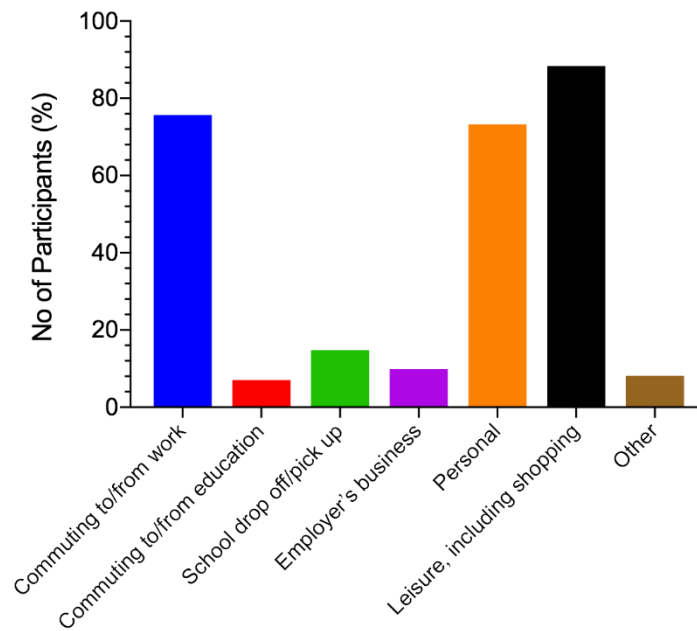
Regarding reasons for travel, responses from participants working in South Cambridgeshire were:

- Commuting to/from work – 80.7%
- Commuting to/from education – 1.6%
- School drop off/pick up – 9.0%
- Employer's business – 8.6%
- Personal – 46.3%
- Leisure, including shopping – 73.6%
- Other – 3.6%

Figure 11: Reasons for travel (respondents working in South Cambridgeshire)
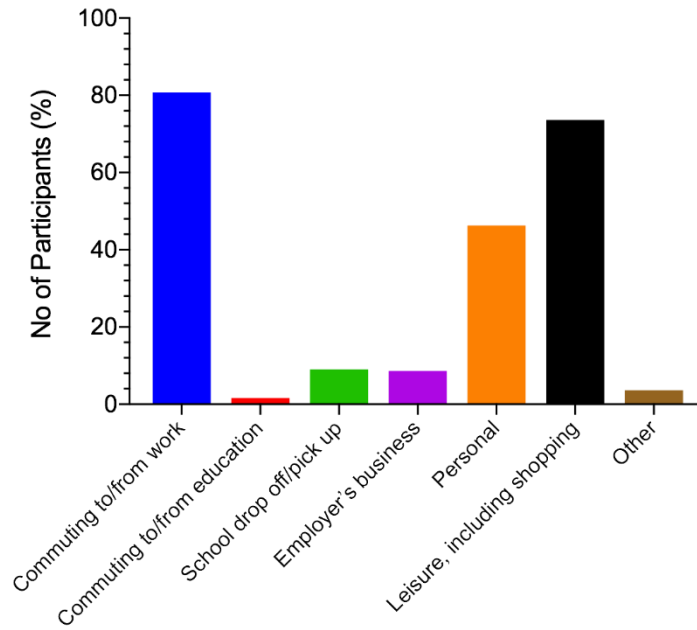
Responses from participants living in South Cambridgeshire were:

- Commuting to/from work – 79.6%

- Commuting to/from education – 3.6%

- School drop off/pick up – 10.9%

- Employer's business – 8.5%

- Personal – 46.9%

- Leisure, including shopping – 80.5%

- Other – 5.6%

Figure 12: Reasons for travel (respondents living in South Cambridgeshire)
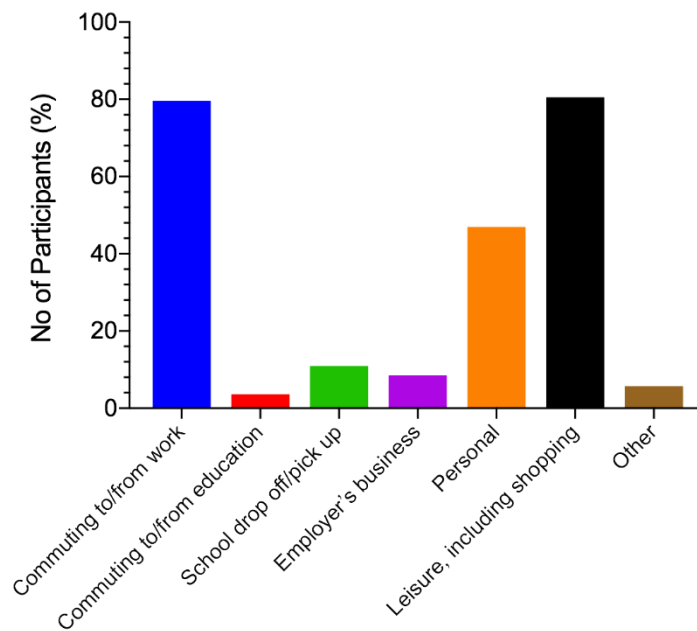
The main reason for travel among respondents who work in Cambridge and South Cambridgeshire, is 'commute to/from work'. For respondents living in Cambridge and South Cambridgeshire, it is 'leisure, including shopping'. Three reasons for travel are common between respondents working/living in Cambridge and South Cambridgeshire. These are 'commuting to/from work', 'leisure, including shopping' and 'personal'.

3.5   Time of travel

Respondents were asked about the time of travel. For this question, participants were encouraged to select all the responses relevant to them.

- 6,089 (79.9%) respondents travel at weekdays from 7am and before 10am;
- 5,524 (72.3%) respondents travel at weekdays from 4pm and before 7pm; and
- 5,297 (69.3%) respondents travel on Saturdays.

Figure 13: Time of travel
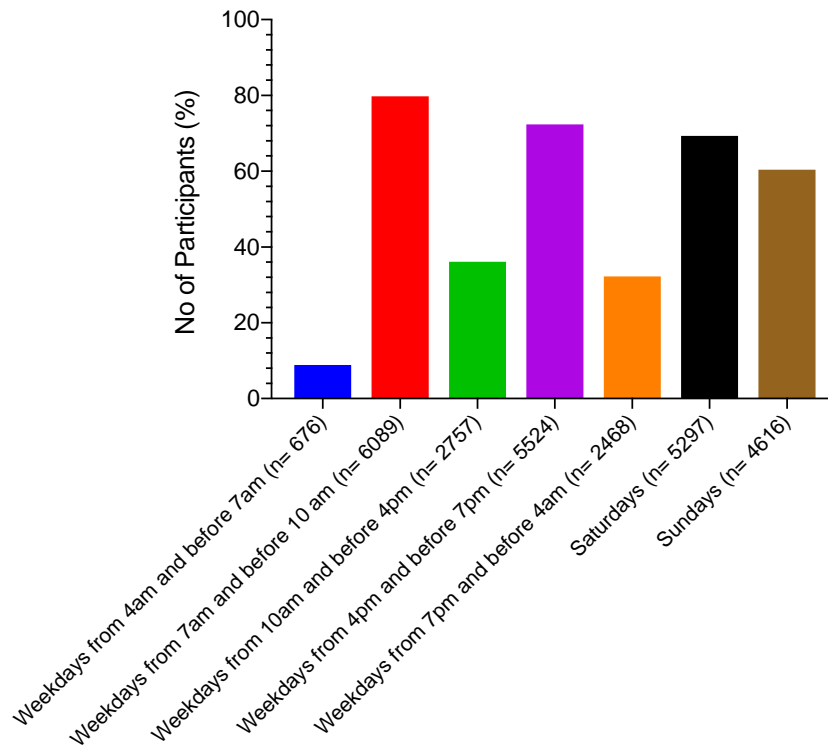
There is a clear link between the time of travel and age of respondents. Analysis based on different age groups shows that 45.8% of the 25-49 age group travel at peak hours and 19.4% travel on 'Saturdays'. In comparison, 25.8% of respondents aged 65[+] travel on 'weekdays from 10am and before 4pm' and 19.6% travel on 'Saturdays'.

There is also a significant difference in time of travel between respondents with different working status. Respondents working full time are more likely to travel at peak hours (46%), with 19.4% travelling on 'Saturdays'. For retired respondents, 27.5% travel on 'weekdays from 10am and before 4pm' and 19.1% on 'Saturdays' respectively.

Regarding disability, 44% of respondents without a disability are likely to travel at peak hours, while 19.2% travel on 'Saturdays'. Similarly, 38.4% of respondents with a disability travel at peak hours, while 19.2% of them travel on 'Saturdays'.

3.6 Modes of travel

Participants were asked which modes of transport they use to travel in and around Cambridge, and how often. For this question, as participants could select multiple responses relevant to them, the total number of responses exceeds the total number of participants.

Table 1: Modes of transport

	Always	Most of the time	Occasionally	Never	N/A
Car/Van (as a driver, travelling alone)	925 12.12%	1,845 24.17%	2,747 35.98%	2,076 27.19%	42 0.55%
Car/Van (as a driver, with passenger/s)	187 2.45%	967 12.67%	3,698 48.43%	2,741 35.90%	42 0.55%
Car/Van (as a passenger)	70 0.92%	359 4.70%	3,814 49.95%	3,350 43.88%	42 0.55%
Taxi	14 0.18%	48 0.63%	3,155 41.32%	4,376 57.31%	42 0.55%
Train	211 2.76%	351 4.60%	2,936 38.45%	4,095 53.63%	42 0.55%
Park & Ride bus services	116 1.52%	273 3.58%	1,948 25.51%	5,256 68.84%	42 0.55%
Other bus, minibus or coach services	255 3.34%	496 6.50%	1,999 26.18%	4,843 63.43%	42 0.55%
Motorcycle/Moped/Scooter	22 0.29%	77 1.01%	132 1.73%	7,362 96.42%	42 0.55%
Cycle	815 10.67%	2,019 26.44%	1,383 18.11%	3,376 44.22%	42 0.55%
Walking/Running	428 5.61%	1,498 19.62%	2,803 36.71%	2,864 37.51%	42 0.55%
Other (e.g. mobility scooter, wheelchair)	26 0.34%	33 0.43%	70 0.92%	7,462 97.73%	44 0.58%

For a clearer representation of data, normalised weighted data is plotted in Figure 14.

Figure 14: Weighted data representation for modes of transport (total)
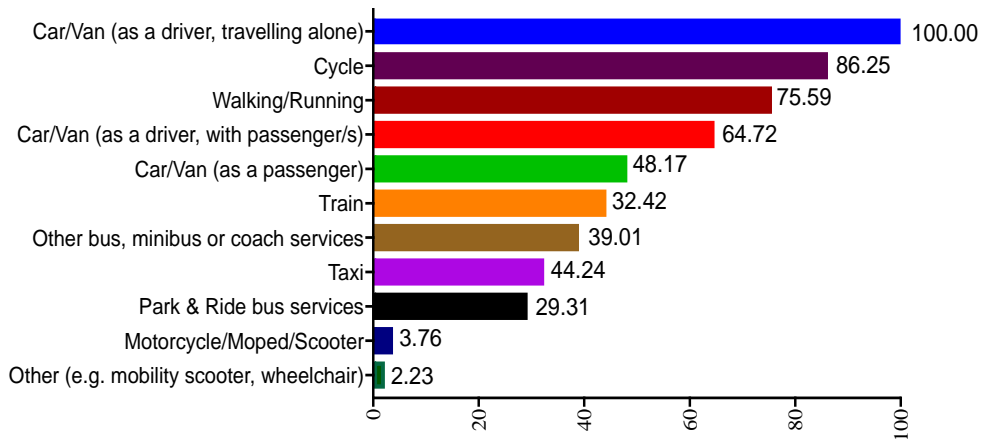
The highest number of respondents indicated use of car/van (as a driver, travelling alone), followed by cycle and walking/running as illustrated above.

Survey participants responding 'other' (1.5%) as their reason for commuting are shown in Table 2.

Table 2: Modes of transport selected from comments

Other Transport Mode Used	Number of Occurrences
Mobility scooter	6
Wheelchair/electric wheelchair	3
Cargo bike	2
Tandem bike	2
Disability bike	1
Tractor/farm vehicles	1
Electric bike	1
Hybrid electric/petrol	1

Analysis based on the districts is plotted in Figures 15-18. The top three modes of transport for workers and residents of Cambridge are 'cycle', 'car/van (as a driver, travelling alone)' and 'walking/running'. Similarly, the top three modes of transport for workers and residents of South Cambridgeshire are 'car/van (as a driver, travelling alone)', 'car/van (as a driver, with passengers)' and 'cycle' respectively.

Figure 15: Weighted data representation for modes of transport (respondents working in Cambridge)
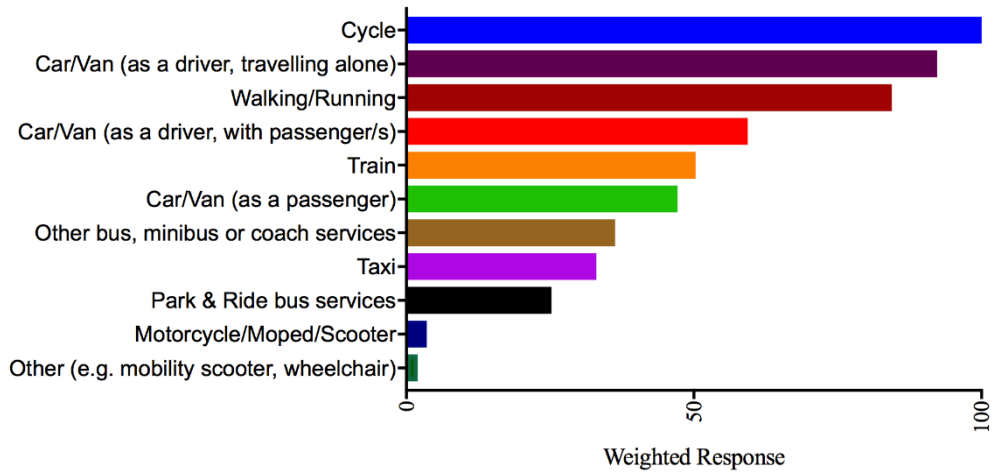
Figure 16: Weighted data representation for modes of transport (respondents living in Cambridge)
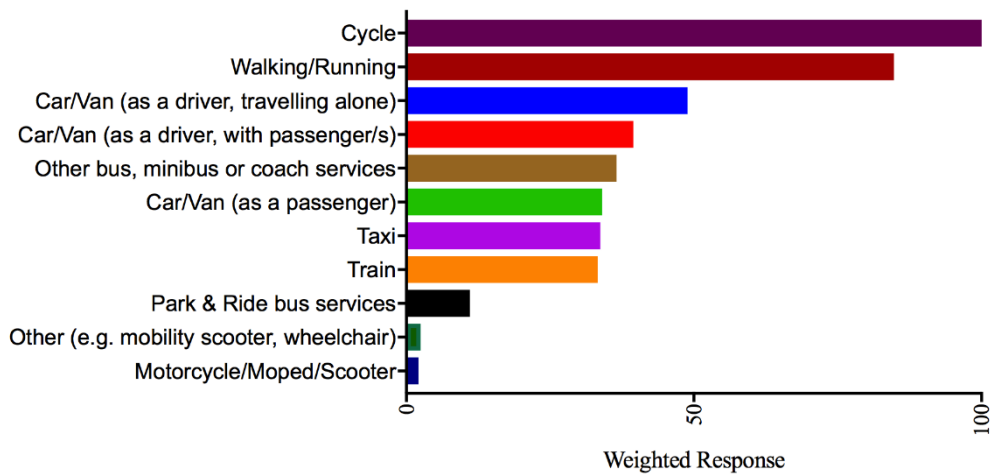
Figure 17: Weighted data representation for modes of transport (respondents working in South Cambridgeshire)
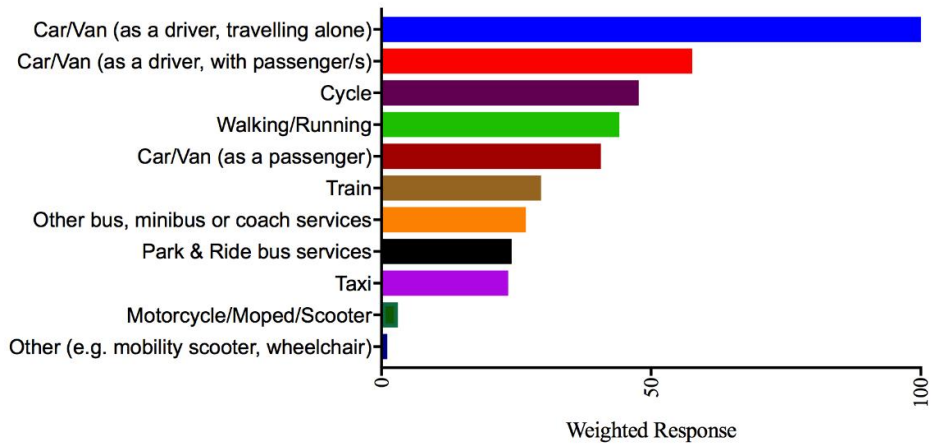
Figure 18: Weighted data representation for modes of transport (respondents living in South Cambridgeshire)
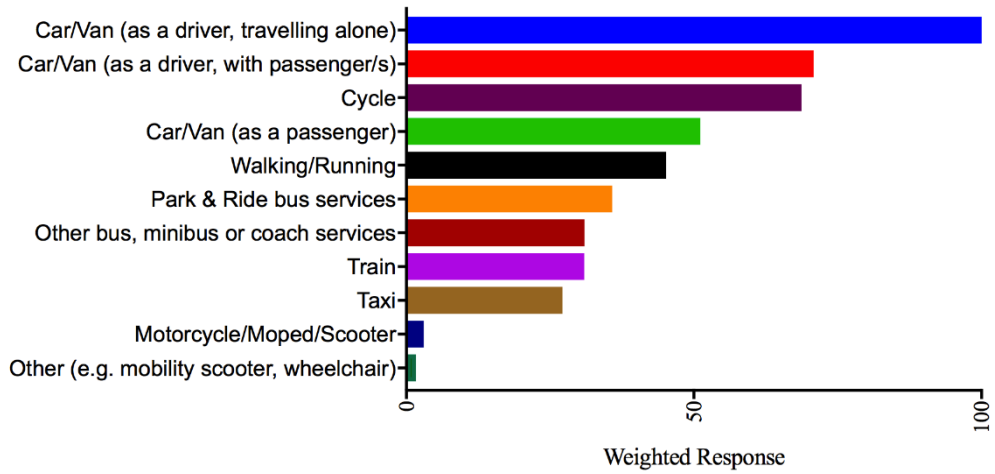
3.7   Reason for choosing the mode of transport

Figure 19 depicts the response of participants to the reasons for choosing the most frequently used mode of transport. For this question, participants could select all the responses relevant to them.

Figure 19: Reason for choosing the mode of transport
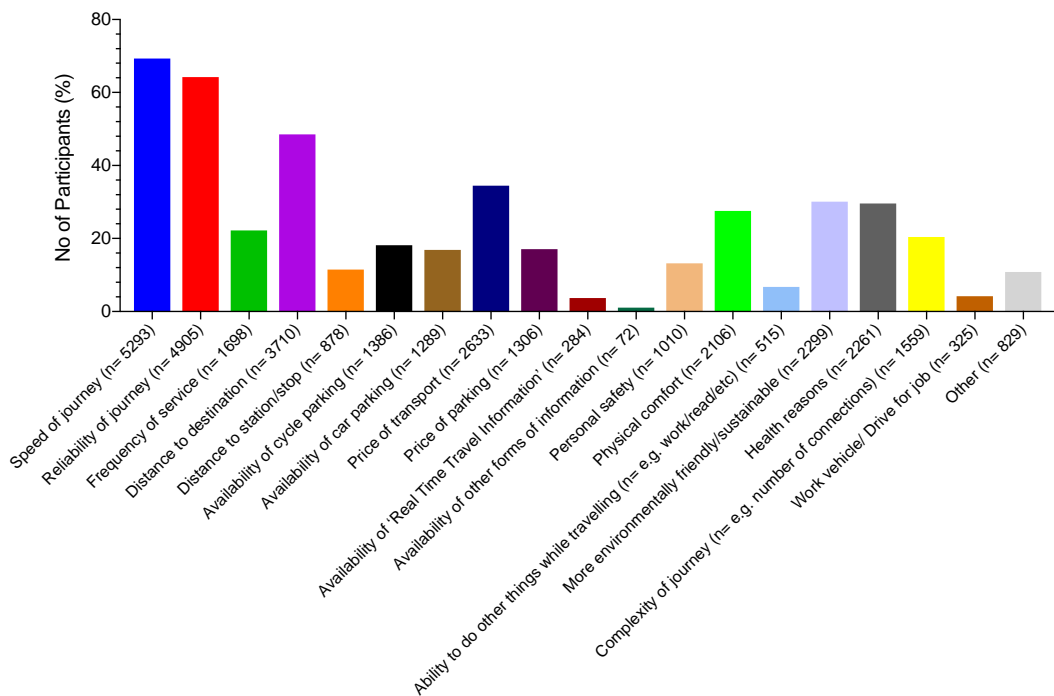
Table 3: Reason for choosing the mode of transport

Speed of journey	5,293	69.33%
Reliability of journey	4,905	64.24%
Distance to destination	3,710	48.59%
Price of transport	2,633	34.49%
More environmentally friendly/sustainable	2,299	30.11%
Health reasons	2,261	29.61%
Physical comfort	2,106	27.58%
Frequency of service	1,698	22.24%
Complexity of journey (e.g. number of connections)	1,559	20.42%
Availability of cycle parking	1,386	18.15%
Price of parking	1,306	17.11%
Availability of car parking	1,289	16.88%
Personal safety	1,010	13.23%
Distance to station/stop	878	11.50%
Other	829	10.86%
Ability to do other things while travelling (e.g. work/read/etc)	515	6.75%
Work vehicle/Drive for job	325	4.26%
Availability of 'Real Time Travel Information'	284	3.72%
Availability of other forms of information	72	0.94%

The most frequently cited reasons were 'speed of journey' (69.3%), 'reliability of journey' (64.2%) and 'distance to destination' (48.5%) respectively.

10.8% of survey participants selected 'other' as the reason for choosing the mode of transport. The top four-word phrases captured from the participants' responses are shown in Table 4.

Table 4: Other reasons for choosing the mode of transport

Other Transport Mode Used	Number of Occurrences
to get to work	22
lack of public transport	11
live in a village/rural area	10
to work on time	10
to and from work	9
to use public transport	9

3.8 Mode of travel to work

Participants' response in regard to how they usually travel to work is shown in Figure 20 and Table 5 on Section 3.10. The most popular mode of travel to work is 'car/van (as a driver, travelling alone)' (32.3%), followed by 'cycle' (25.4%).

Figure 20: Mode of travel to work
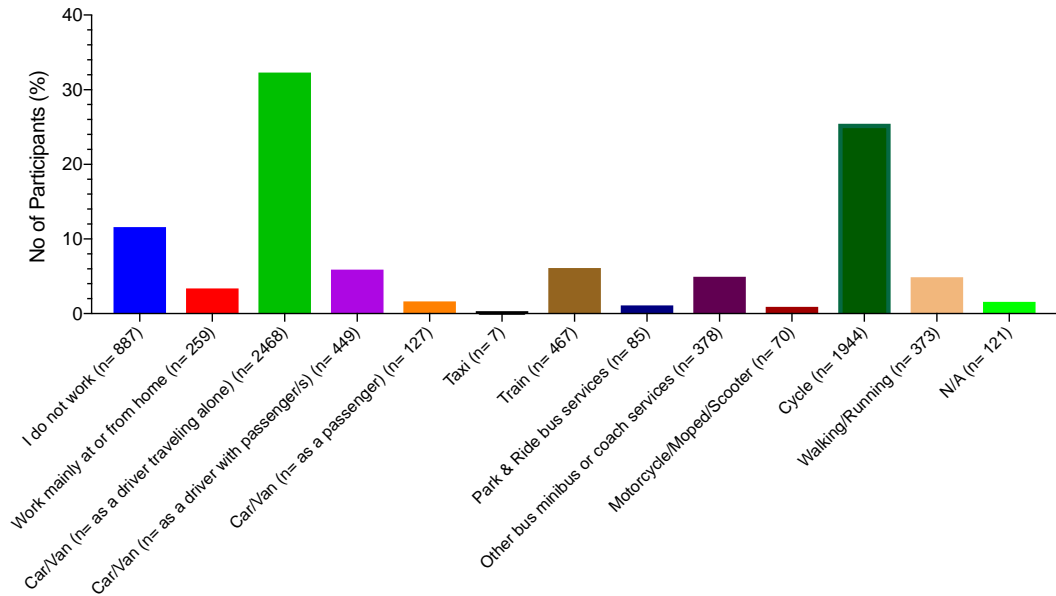
As the participants chose one response per survey for this question, the total number of responses is equal to the total number of participants. Survey response was compared with the 2011 census data for Cambridgeshire Districts[1] and shows a possible significant improvement in the percentage of people who cycle to work (from 29% in Cambridge to 44%). The proportion of people cycling to work within the CB1 to CB5 postcode areas ranged from 53% (CB2) to 38% (CB5).

3.9 Work postcode

Figure 21 depicts work postcodes of all the respondents. The number associated with each cluster represents the number of participants from that area. Larger and smaller numbers are shown in different colours.

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[1] http://webarchive.nationalarchives.gov.uk/20160107181726/http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-295663

Figure 21: Cluster of all the respondents based on work postcode
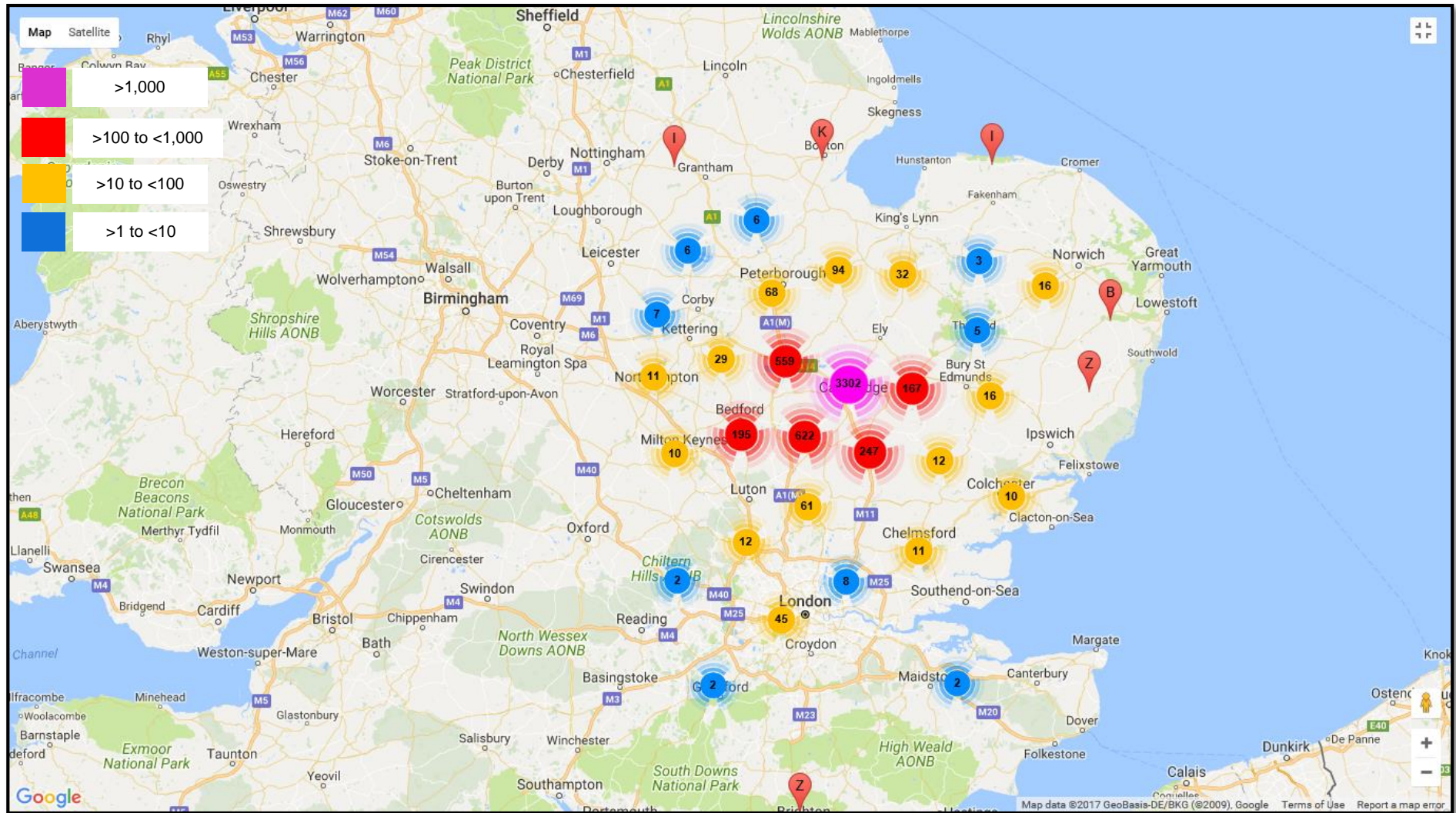
3.10 Alternative modes of transport

With regard to the journeys they make by car/van, participants were asked if they could have used any of the other stated modes of transport instead. Participants were encouraged to select all the answers relevant to them. Responses are plotted in Figure 22 and the corresponding values are tabulated in Table 5. For this question, participants could select multiple responses relevant to them.

Figure 22: Alternative modes of transport
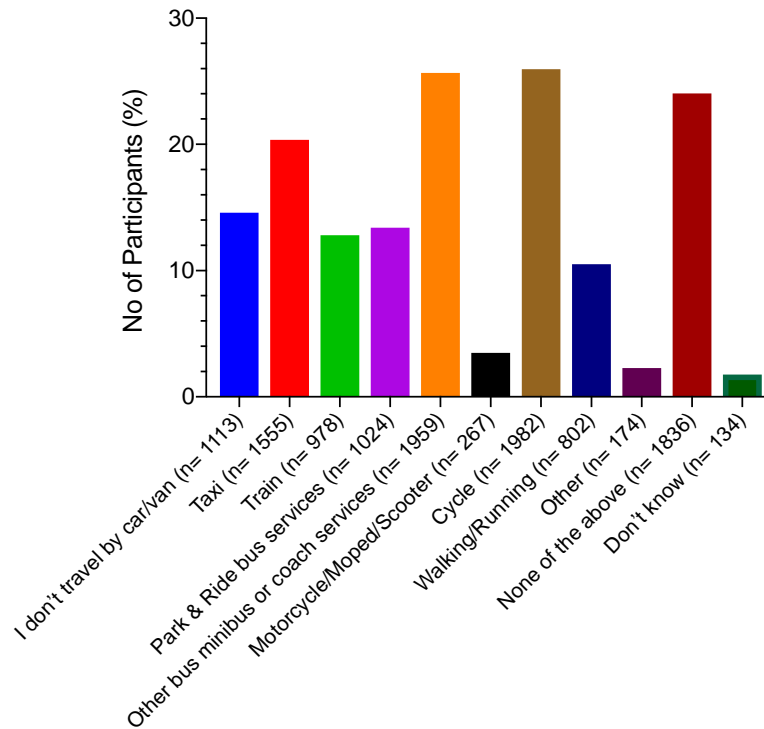
Table 5: Alternative modes of transport

Cycle	1,982	25.96%
Other bus, minibus or coach services	1,959	25.66%
None of the above	1,836	24.05%
Taxi	1,555	20.37%
I don't travel by car/van	1,113	14.58%
Park & Ride bus services	1,024	13.41%
Train	978	12.81%
Walking/Running	802	10.50%
Motorcycle/Moped/Scooter	267	3.50%
Other	174	2.28%
Don't know	134	1.76%

The first, second and third choice for alternative modes of transport are 'cycle' (25.9%), 'other bus, minibus or coach services' (25.6%) and 'none of the above' (24.0%) respectively.

2.2% of the survey respondents responded 'other' and their comments include:

1. "Don't have a train station near my home, taxi is too expensive to use regularly, buses and Park and Ride services aren't suitable for hours of work."

- Comments mentioning 'Park and Ride' were repeated 58 times for this question throughout the survey.

2. "There is a train but I would have so many connections that it would take me almost 3 times as long to get to and from work. There is no other public transport available."

- Comments mirroring similar concerns were given over 50 times for this question throughout the survey.

3. "Only travel by car if I need to transport more than I can on foot/bicycle"

- Similar concerns were mentioned over 40 times for this question throughout the survey.

4. "Generally only use the car when bike is impractical, in these cases buses/taxis/trains are usually more expensive and less convenient"

- Similar comments were made 22 times for this question throughout the survey.

Detailed analysis was carried out to observe how different age groups responded to this part of the survey. In alternative to journeys made by 'car/van', 17.8% of the 25-49 age group would opt for 'cycle', 17% for 'other bus, minibus or coach services' and 14.9% selected 'none of the above' (among provided options) respectively. In comparison, 18.9% of the 65+ age group would opt for 'taxi', 17.2% for 'other bus, minibus or coach services' and 14.6% of the respondents selected 'none of the above' respectively.

Figure 23: Alternative mode of transport with respect to age groups
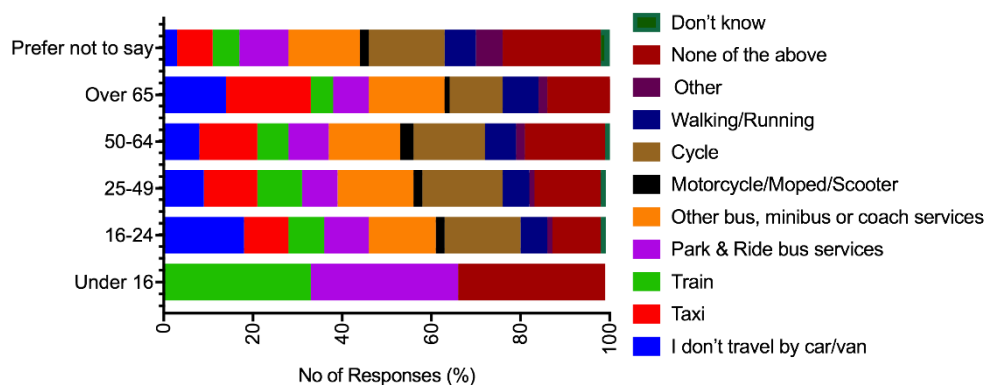
Figure 24: Alternative mode of transport with respect to gender
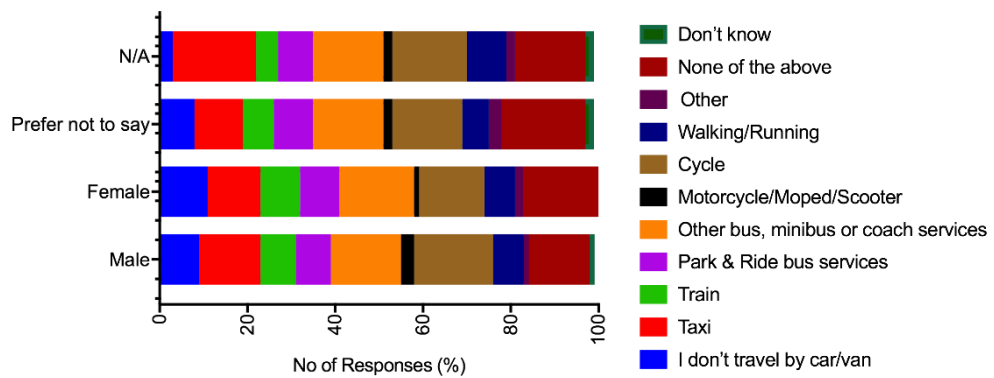
Based on the working situation of the respondents, 17.2% of respondents 'working full time' indicated 'cycle', 16.5% indicated 'other bus, minibus or coach services' and 15.5% selected 'none of the above'. Similarly, 20.1% of respondents belonging to the 'retired' group indicated 'taxi' while 17.2% indicated 'other bus, minibus or coach services' and 14% selected 'none of the above' respectively. In terms of gender, 18.3% of male and 15.1% of female indicated 'cycle' as alternative modes of transport.

Figure 25: Alternative mode of transport with respect to working situation
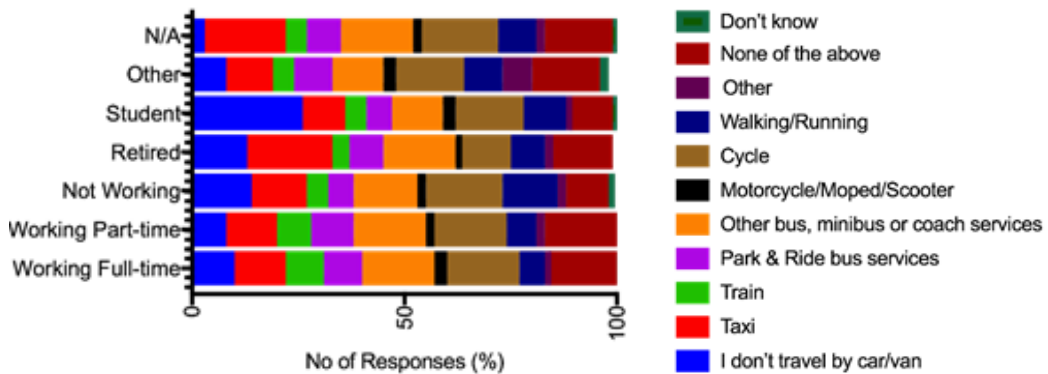
In terms of occupation of respondents, 17.4% of 'intermediate managerial, administrative or professional' respondents stated 'other bus, minibus or coach services' as alternative modes of transport. Similarly, 16.6% and 14% of this group selected 'cycle' and 'none of the above' respectively. However, 24% of 'casual worker, pensioner (reliant on state pension only), or dependent on state welfare' respondents selected 'I don't travel by car/van' followed by 17.7% and 11.3% selected 'other bus, minibus or coach services' and 'taxi' respectively.

Figure 26: Alternative mode of transport with respect to occupation types
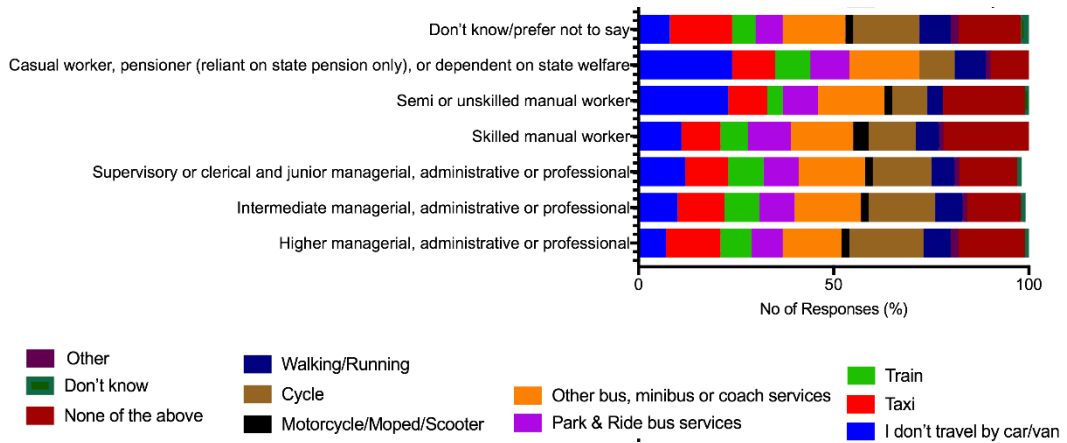
3.11 Challenges to use alternative mode of transport

Participants' responses as to why they don't/can't travel by this/these alternative modes of transport is captured in Figure 27 and Table 6. For this question, participants were encouraged to select all the responses relevant to them.

The majority of respondents (41.3%) indicated 'speed of journey' to be the biggest challenge to using alternative modes of transport, followed by 'price of transport' (33.0%) and 'reliability of journey' (32.6%).

Figure 27: Challenges regarding using alternative modes of transport
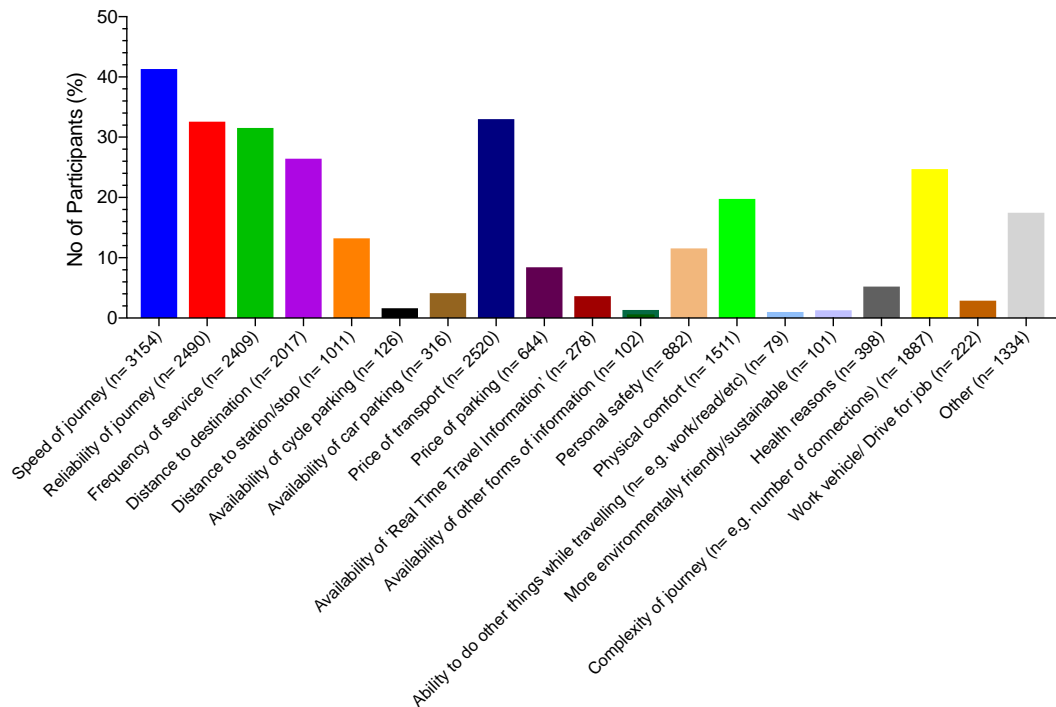
Table 6: Challenges regarding using alternative modes of transport

Speed of journey	3,154	41.31%
Price of transport	2,520	33.01%
Reliability of journey	2,490	32.61%
Frequency of service	2,409	31.55%
Distance to destination	2,017	26.42%
Complexity of journey (e.g. number of connections)	1,887	24.72%
Physical comfort	1,511	19.79%
Other	1,334	17.47%
Distance to station/stop	1,011	13.24%
Personal safety	882	11.55%
Price of parking	644	8.43%
Health reasons	398	5.21%
Availability of car parking	316	4.14%
Availability of 'Real Time Travel Information'	278	3.64%
Work vehicle/ Drive for job	222	2.91%
Availability of cycle parking	126	1.65%
Availability of other forms of information	102	1.34%
More environmentally friendly/sustainable	101	1.32%
Ability to do other things while travelling (e.g. work/read/etc)	79	1.03%

A relatively high number (17.4%) of survey participants selected 'other' reasons and some of their comments include:

1. "carrying heavy items"

- Similar concerns were mentioned by the highest number of respondents (over 300).

2. "young children"

- More than 120 respondents made similar comments.

3. "weather conditions"

- Over 70 respondents raised similar issues.

3.12   Alternative mode of transport to driving (if driving became less of an attractive option)

Participants were asked, if driving became less of an attractive option, which of the stated modes of transport they would use instead. For this question, participants could select all the responses relevant to them. The response is plotted in Figure 28 and Table 7. For this

question, 'cycle' was preferred by 28.9% of respondents followed by 'I would still drive, no matter what' (24.4%) and 'other bus, minibus or coach services' (23.5%) respectively.

Comments from the respondents show a significant number of respondents have to drive as a part of their job, or it is impractical not to drive. Some respondents said they would switch to public transport if it was 'cheaper, reliable and more frequent'. A number of respondents raised the need for more efficient route planning, as using multiple buses significantly increases the journey time. Participants also voiced their opinion regarding the need for safer cycling paths.

Figure 28: Alternative (modes of transport) to driving
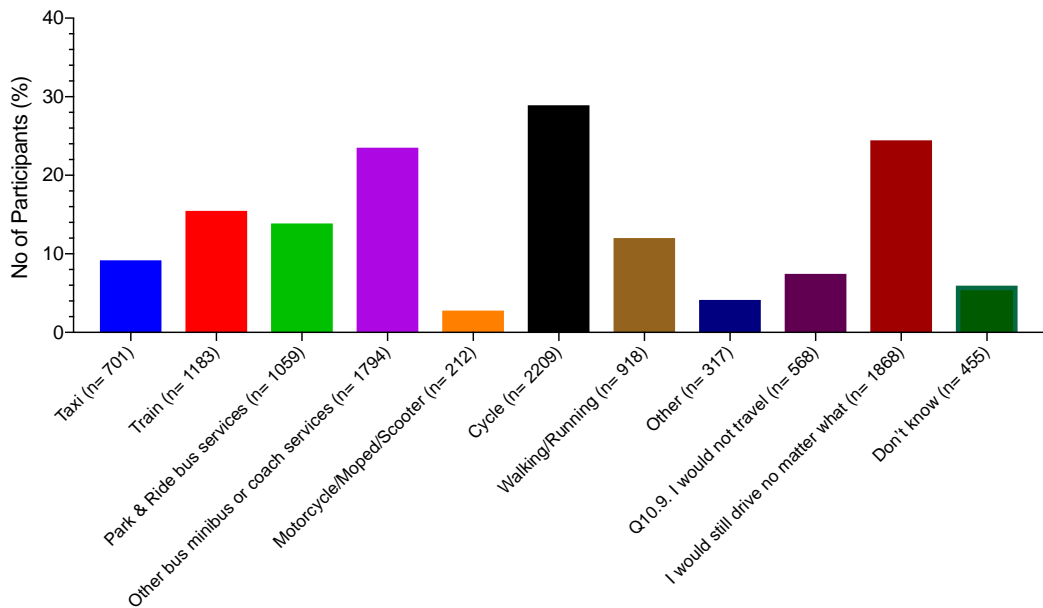
Table 7: Alternative (modes of transport) to driving

Cycle	2,209	28.93%
I would still drive, no matter what	1,868	24.47%
Other bus, minibus or coach services	1,794	23.50%
Train	1,183	15.49%
Park & Ride bus services	1,059	13.87%
Walking/Running	918	12.02%
Taxi	701	9.18%
I would not travel	568	7.44%
Don't know	455	5.96%
Other	317	4.15%
Motorcycle/Moped/Scooter	212	2.78%

4.1% of the survey participants (4.1%) responded 'other' and some of their comments include:

1. *"It depends on the journey. I already find driving unattractive. But the only public transport links from my village go to places I can cycle to. For the rest I have to drive."*

- More than 130 respondents discussed public transport in their comments.

2. *"I would have to give up my job"*

- Over 20 respondents mentioned similar comments.

3. *"Car share with colleagues"*

- More than 10 respondents mentioned the idea of car sharing.

4. *"The question should be if public transport became more of an attractive option - I would stop using my car if public transport could get me to work/home quicker or similar to the car. I would stop using my car if there was a Cambridge South Train station and trains were frequent enough and matched well to busway services. By charging a parking levy and congestion charge, I would still use my car and have to pay it as I have to get back to collect my children and the car is the fastest way and reliable way I can do this."*

3.13 Willingness to travel in/around Cambridge without personal car/van

Figure 29 depicts the response of participants when asked if they would like to make more journeys in and around Cambridge without their own car/van.

- 38.9% of respondents said Yes;
- 32.8% of respondents said No;
- 11.8% of respondents said Don't know; and
- 16.3% of respondents said N/A.

These responses provide very encouraging statistics to implement or transition user behaviour towards sustainable transport modes. Further analysis and planning could encourage unsure respondents to choose 'Yes' in the future.

A significant number (32.8%) of participants responded with 'No' to making more journeys in and around Cambridge without their own car/van. Some of the comments penned by participants (presented in sub-section 3.11) may offer insight for this response. One of the popular themes in the sub-section stated that, at times, it is impractical for the respondents to use modes of transport other than personal car/van. Some of the reasons given were 'complexity of journey' (e.g. number of connections) and 'work vehicle/drive for job'.

In this sub-section, we have analysed respondents' age group, gender, socio-economic background and occupation type.

Figure 29: Willingness to travel in/around Cambridge without personal car/van
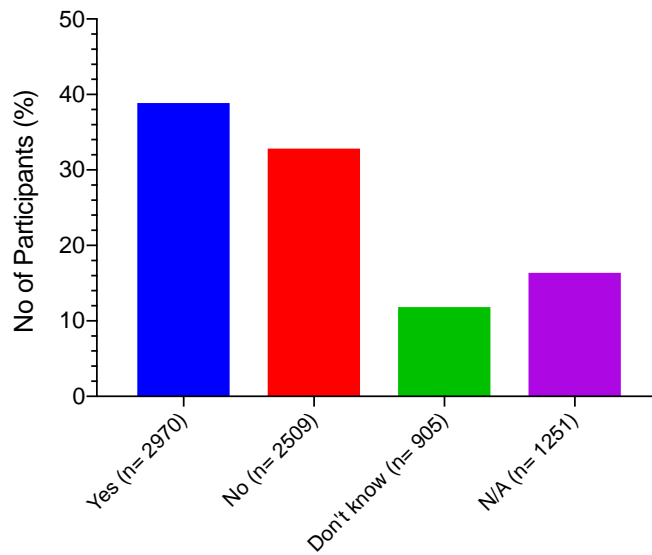
There is a division between willingness to travel in/around Cambridge without personal car/van based on the respondents' age group. The majority of respondents (41.5%) in the 25-49 age group said they are willing to travel in/around Cambridge without personal car/van, compared to 30.5% who said 'No' to this idea. In the 65+ age group, however, the majority of respondents (34.3%) said 'No' to the idea, compared to 31.2% of respondents who said 'Yes'.

Figure 30: Willingness to travel in/around Cambridge without personal car/van with respect to age groups
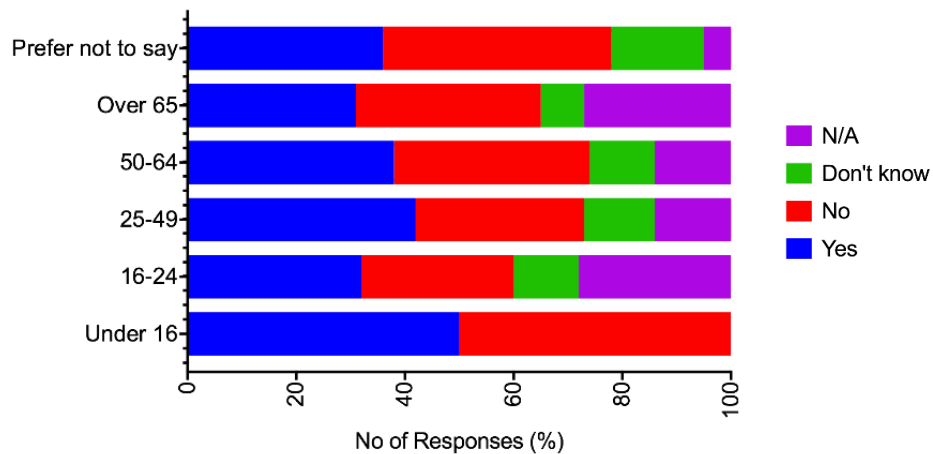
Analysis carried out based on gender reveals that a higher percentage of male (40.1%) and female (38.3%) respondents said 'Yes' to the idea, rather than 'No' (33.4% of male and 30.9% of female).

Figure 31: Willingness to travel in/around Cambridge without personal car/van with respect to gender
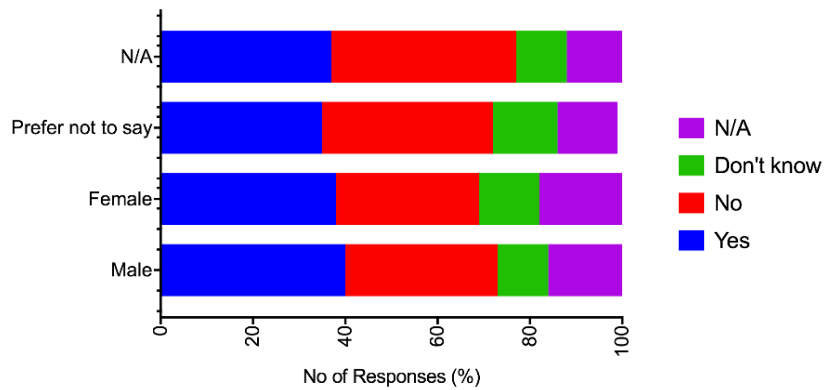
Based on their working status, 39.6% of respondents working full time said 'Yes' compared to 'No' (32.5%). In contrast, 36.6% of retired respondents replied 'No', while 30.9% of respondents from the same group answered 'Yes'.

Figure 32: Willingness to travel in/around Cambridge without personal car/van with respect to working status
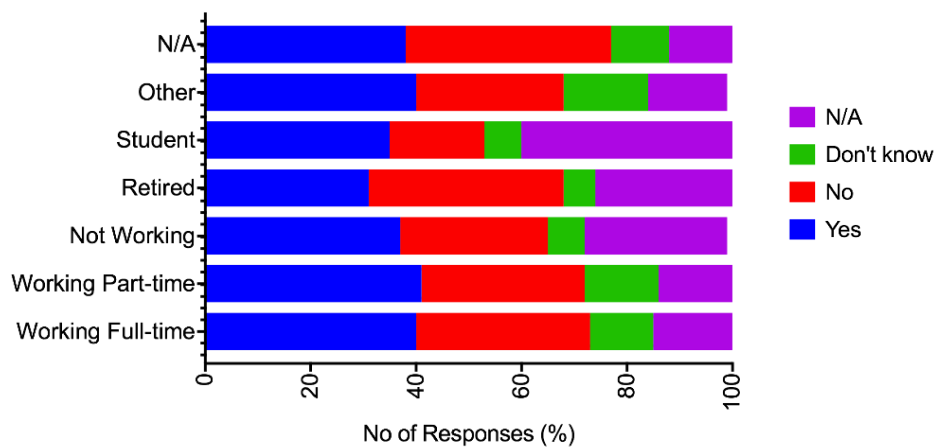
Analysis carried out based on occupation type, reveals a higher percentage of participants in every category responded 'Yes' to the idea rather than 'No', except respondents belonging to the 'Don't know/prefer not to say' category.

Figure 33: Willingness to travel in/around Cambridge without personal car/van with respect to occupation type
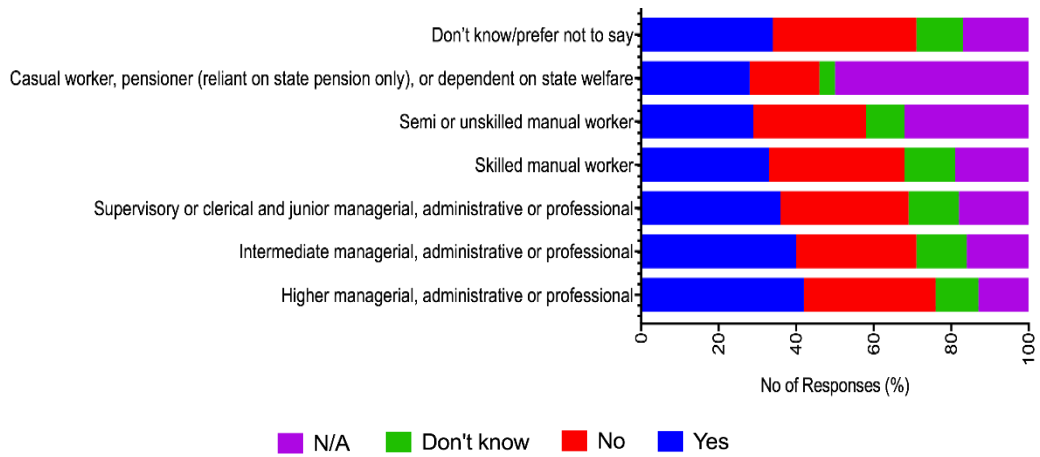
3.14 Effect of potential initiatives to encourage/enable participants to reduce use of car/van

Participants' response to the question 'to what extent would each of the stated potential initiatives encourage or enable you to reduce the use of your car/van, and use other modes of travel instead?' is shown in Table 8. In this part of the survey respondents are presented with 32 different potential initiatives, each aimed at encouraging a reduction in car/van use.

Table 8: Effect of potential initiatives to encourage/enable participants to reduce use of car/van

	Very likely	Somewhat likely	Not likely at all	Do not know	N/A
Faster services on public transport	2,126	2,502	1,340	512	1,155
	27.85%	32.77%	17.55%	6.71%	15.13%
More reliable services on public transport	2,321	2,422	1,188	549	1,155
	30.40%	31.72%	15.56%	7.19%	15.13%
More frequent services on public transport	2,508	2,370	1,117	485	1,155
	32.85%	31.04%	14.63%	6.35%	15.13%
Longer operating hours on public transport	2,043	1,886	1,862	689	1,155
	26.76%	24.70%	24.39%	9.02%	15.13%
New public transport routes introduced	2,251	2,174	1,267	788	1,155
	29.48%	28.47%	16.59%	10.32%	15.13%
On-demand driverless vehicles (e.g. autonomous taxis/buses)	1,201	1,336	2,389	1,554	1,155
	15.73%	17.50%	31.29%	20.35%	15.13%
Improved accuracy of 'Real Time Travel Information' displays at all stations/stops	862	1,850	2,681	1,087	1,155
	11.29%	24.23%	35.11%	14.24%	15.13%
Direct public transport alerts and/or direct weather alerts to your mobile phone	496	1,158	3,626	1,200	1,155
	6.50%	15.17%	47.49%	15.72%	15.13%
Increased security (e.g. lighting/CCTV) at stations/stops	587	1,448	3,392	1,053	1,155
	7.69%	18.97%	44.43%	13.79%	15.13%
Improved physical comfort of waiting facilities at stations/stops (e.g. provision of shelters/seating)	829	1,970	2,830	851	1,155
	10.86%	25.80%	37.07%	11.15%	15.13%
Increased physical comfort/ cleanliness on public transport (e.g. comfort of seating/temperature)	865	2,026	2,708	881	1,155
	11.33%	26.54%	35.47%	11.54%	15.13%
Better offers on public transport tickets, e.g. discounts for specific types of people and/or times	2,023	1,986	1,766	705	1,155
	26.50%	26.01%	23.13%	9.23%	15.13%
Simpler ticketing options for public transport (e.g. smart	1,713	2,027	1,954	786	1,155
	22.44%	26.55%	25.59%	10.29%	15.13%

cards/ integrated ticketing/ online payments)					
Cheaper fares for public transport	3,162	1,677	1,150	4,91	1,155
	41.41%	21.96%	15.06%	6.43%	15.13%
Season ticket loans for public transport	743	901	3,577	1,259	1,155
	9.73%	11.80%	46.85%	16.49%	15.13%
Free parking at Park & Ride sites	2,212	1,496	1,996	776	1,155
	28.97%	19.59%	26.14%	10.16%	15.13%
More Park & Ride options	1,566	1,489	2,413	1,012	1,155
	20.51%	19.50%	31.60%	13.25%	15.13%
A Cycle scheme (like a season ticket loan but to buy a bicycle)	551	738	3,906	1,285	1,155
	7.22%	9.67%	51.16%	16.83%	15.13%
More/Improved cycle paths and cycle crossing facilities	2,140	1,215	2,323	802	1,155
	28.03%	15.91%	30.43%	10.50%	15.13%
More/improved cycle parking at stations/stops	1,598	1,153	2,766	963	1,155
	20.93%	15.10%	36.23%	12.61%	15.13%
More/Improved public cycle parking (e.g. more locations/ better security)	1,795	1,199	2,591	895	1,155
	23.51%	15.70%	33.94%	11.72%	15.13%
Improved quality of footpaths	1,438	1,441	2,707	894	1,155
	18.83%	18.87%	35.46%	11.71%	15.13%
More/Improved pedestrian crossing facilities	1,016	1,271	3,163	1,030	1,155
	13.31%	16.65%	41.43%	13.49%	15.13%
Improved public realm (e.g. more trees/planters, better footways/ cycleway surfacing)	1,380	1,392	2,754	954	1,155
	18.07%	18.23%	36.07%	12.50%	15.13%
Provision of cycling/walking route maps and wayfinding information	1,001	1,264	3,202	1,013	1,155
	13.11%	16.56%	41.94%	13.27%	15.13%
More/Improved facilities at your workplace for cyclists/pedestrians (e.g. showers/ storage/ changing facilities)	923	1,063	3,264	1,230	1,155
	12.09%	13.92%	42.75%	16.11%	15.13%
Provision of travel planning advice (from experts visiting your child's school/your workplace)	287	701	4,036	1,456	1,155
	3.76%	9.18%	52.86%	19.07%	15.13%

Introduction of a Workplace Parking Levy (e.g. being charged to use parking spaces at your place of work)	550 7.20%	721 9.44%	3,821 50.05%	1,388 18.18%	1,155 15.13%
Fewer free on-street parking spaces	555 7.27%	657 8.61%	3,966 51.94%	1,302 17.05%	1,155 15.13%
Pollution charging (a charge for using more polluting vehicles)	820 10.74%	1,056 13.83%	3,430 44.92%	1,174 15.38%	1,155 15.13%
A form of road charging (dependent on level of congestion)	827 10.83%	1,081 14.16%	3,394 44.45%	1,178 15.43%	1,155 15.13%
Flexible working hours	1,088 14.25%	1,115 14.60%	3,014 39.48%	1,263 16.54%	1,155 15.13%

Respondents could rate each potential initiative as 'very likely', 'somewhat likely', 'not likely at all', 'don't know' and 'N/A'. Each 'very likely' and 'somewhat likely' response is assigned the weightage of 1 and 0.5 respectively, whereas 'not likely at all' is weighted at -0.5 to reflect respondents' unwillingness to use the initiative despite resources required to execute the idea. Similarly, 'don't know' and 'N/A' are assigned the weightage of 0. Corresponding normalised weighted plot is shown in Figures 34-38.

The five most popular initiatives all relate to public transport, giving a very important indicator of respondents' experience and views of public transport. The top five initiatives are:

- Cheaper fares for public transport;
- More frequent services on public transport;
- More reliable services on public transport;
- New public transport routes introduced; and
- Faster services on public transport.

The five least popular initiatives are:

- Provision of travel planning advice;
- Fewer free on-street parking spaces;
- A Cycle scheme (like a season ticket loan but to buy a bicycle);
- Introduction of a Workplace Parking Levy; and
- Direct public transport alerts and/or direct weather alerts to your mobile phone.

To understand the effect of potential initiatives, district-based analysis was carried out. Results show that respondents working/residing in both districts prioritise stated initiatives in a similar fashion. Figures 35-38 shows weighted data obtained from the survey.

Figure 34: Weighted response of effect of potential initiatives to encourage/enable participants to reduce use of car/van (total)

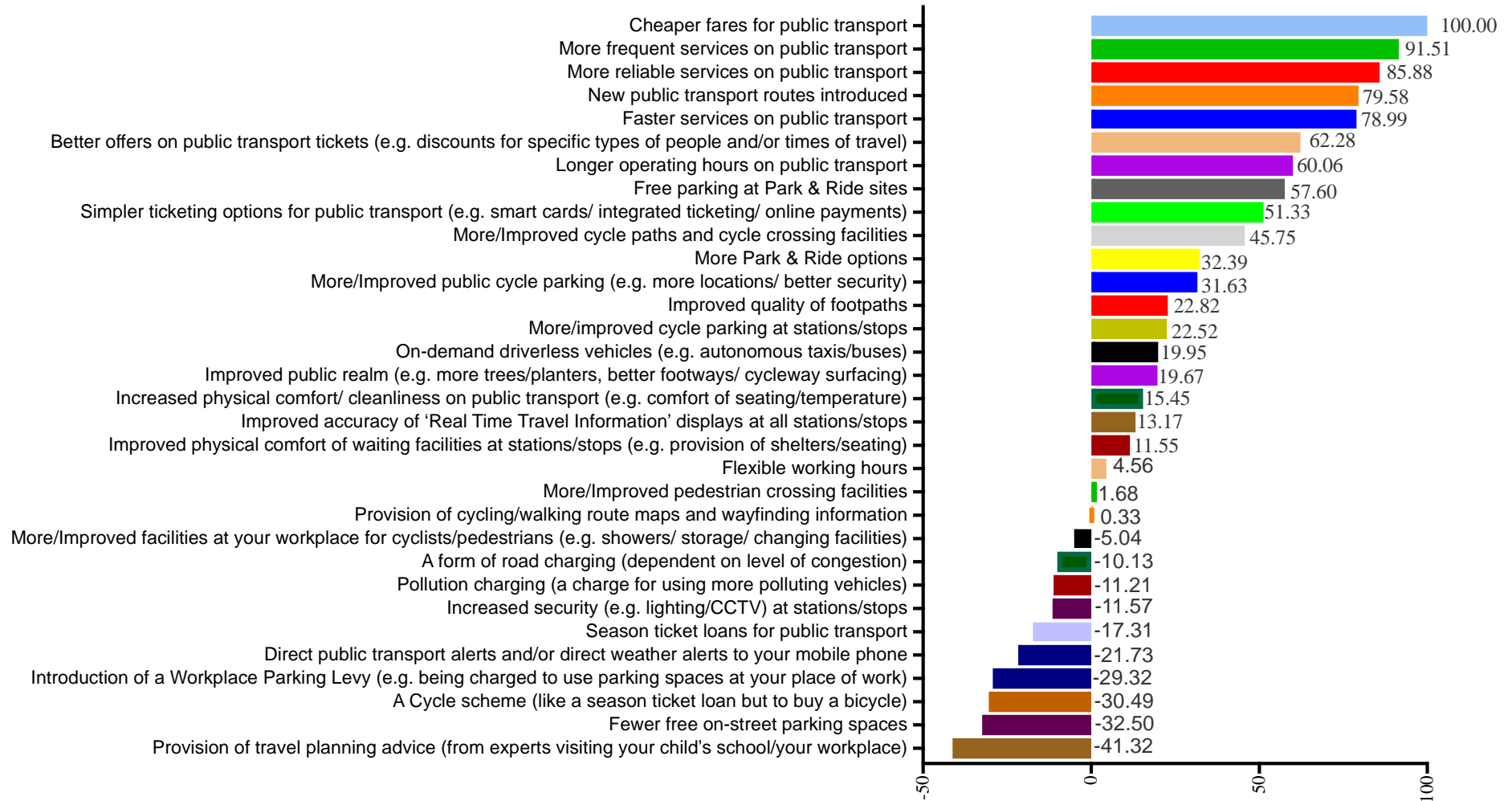| Initiative	Value
Cheaper fares for public transport	100.00
More frequent services on public transport	91.51
More reliable services on public transport	85.88
New public transport routes introduced	79.58
Faster services on public transport	78.99
Better offers on public transport tickets (e.g. discounts for specific types of people and/or times of travel)	62.28
Longer operating hours on public transport	60.06
Free parking at Park & Ride sites	57.60
Simpler ticketing options for public transport (e.g. smart cards/ integrated ticketing/ online payments)	51.33
More/Improved cycle paths and cycle crossing facilities	45.75
More Park & Ride options	32.39
More/Improved public cycle parking (e.g. more locations/ better security)	31.63
Improved quality of footpaths	22.82
More/improved cycle parking at stations/stops	22.52
On-demand driverless vehicles (e.g. autonomous taxis/buses)	19.95
Improved public realm (e.g. more trees/planters, better footways/ cycleway surfacing)	19.67
Increased physical comfort/ cleanliness on public transport (e.g. comfort of seating/temperature)	15.45
Improved accuracy of 'Real Time Travel Information' displays at all stations/stops	13.17
Improved physical comfort of waiting facilities at stations/stops (e.g. provision of shelters/seating)	11.55
Flexible working hours	4.56
More/Improved pedestrian crossing facilities	1.68
Provision of cycling/walking route maps and wayfinding information	0.33
More/Improved facilities at your workplace for cyclists/pedestrians (e.g. showers/ storage/ changing facilities)	-5.04
A form of road charging (dependent on level of congestion)	-10.13
Pollution charging (a charge for using more polluting vehicles)	-11.21
Increased security (e.g. lighting/CCTV) at stations/stops	-11.57
Season ticket loans for public transport	-17.31
Direct public transport alerts and/or direct weather alerts to your mobile phone	-21.73
Introduction of a Workplace Parking Levy (e.g. being charged to use parking spaces at your place of work)	-29.32
A Cycle scheme (like a season ticket loan but to buy a bicycle)	-30.49
Fewer free on-street parking spaces	-32.50
Provision of travel planning advice (from experts visiting your child's school/your workplace)	-41.32

Figure 35: Weighted response of effect of potential initiatives to encourage/enable participants to reduce use of car/can (respondents working in Cambridge)
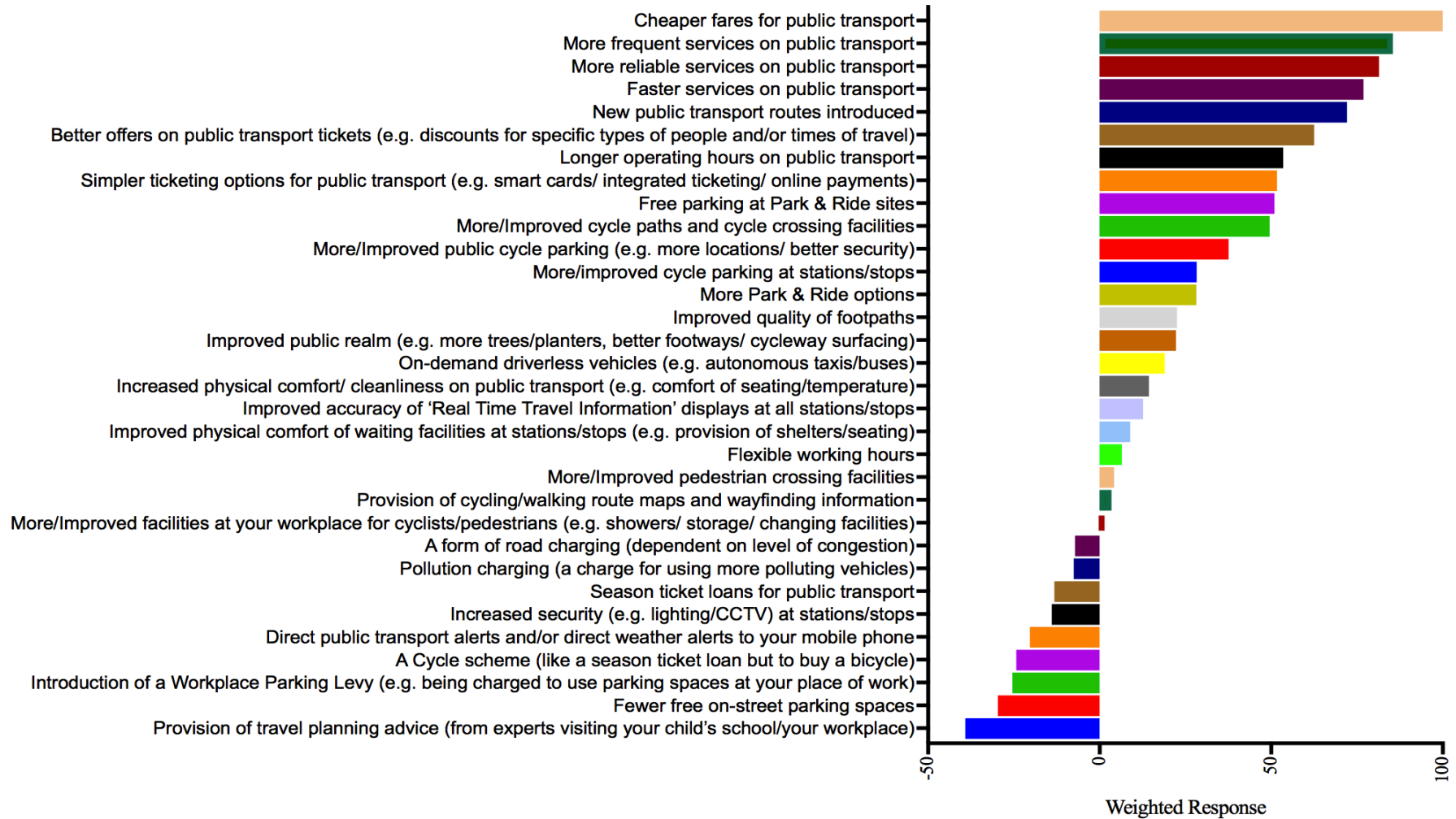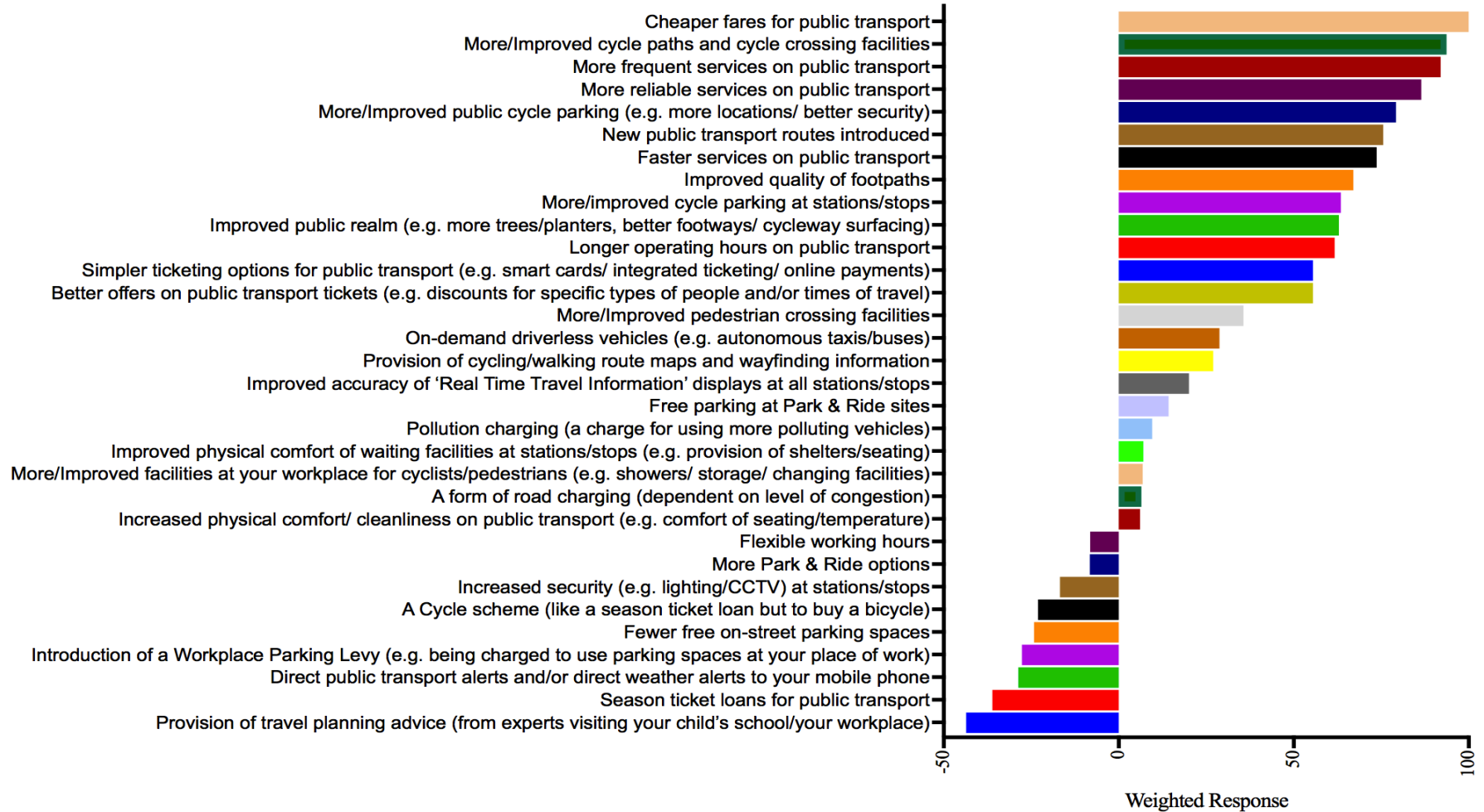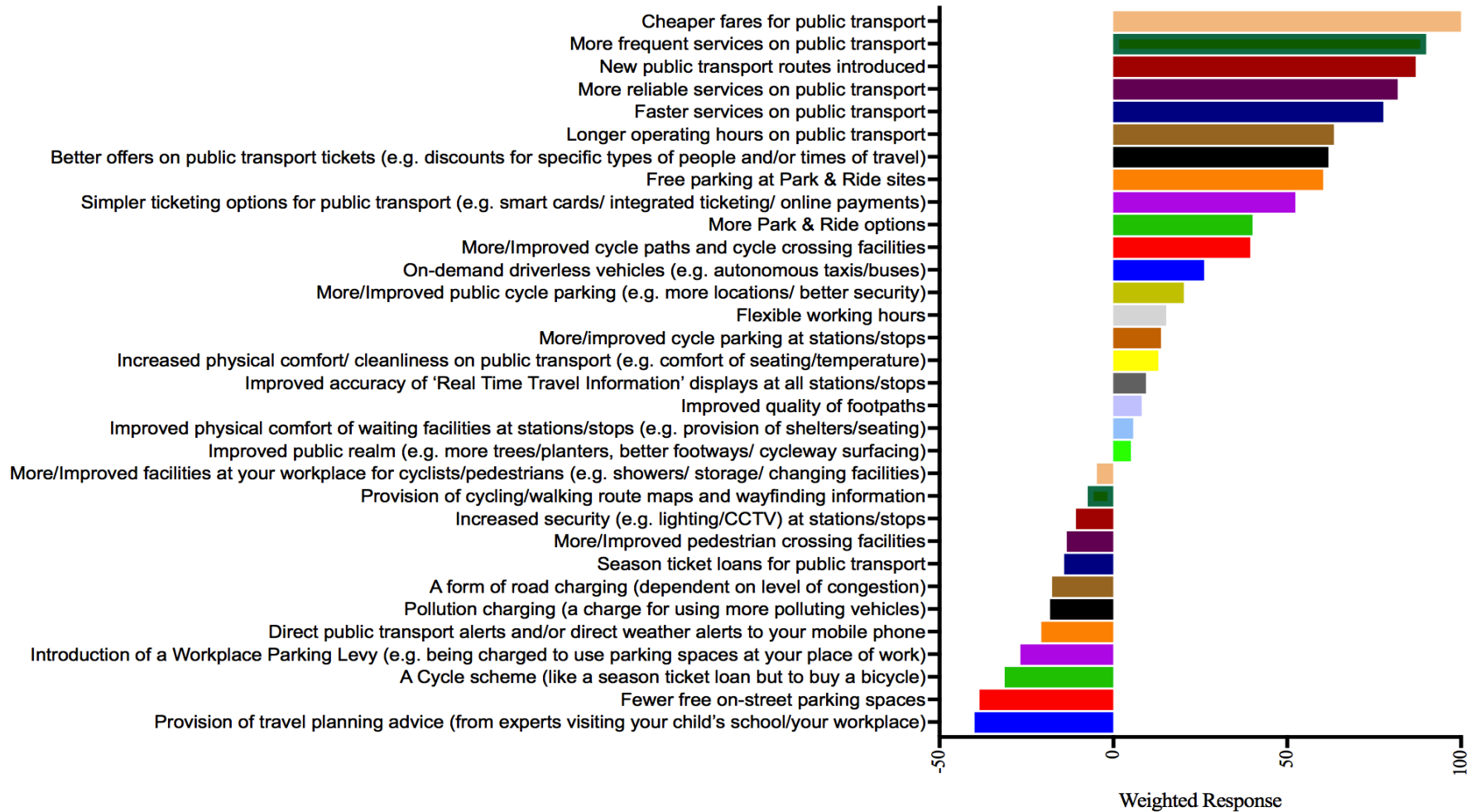
Figure 36: Weighted response of effect of potential initiatives to encourage/enable participants to reduce use of car/van (respondents living in Cambridge)

Figure 37: Weighted response of effect of potential initiatives to encourage/enable participants to reduce use of car/can (respondents working in South Cambridgeshire)

Figure 38: Weighted response of effect of potential initiatives to encourage/enable participants to reduce use of car/van (respondents living in South Cambridgeshire)
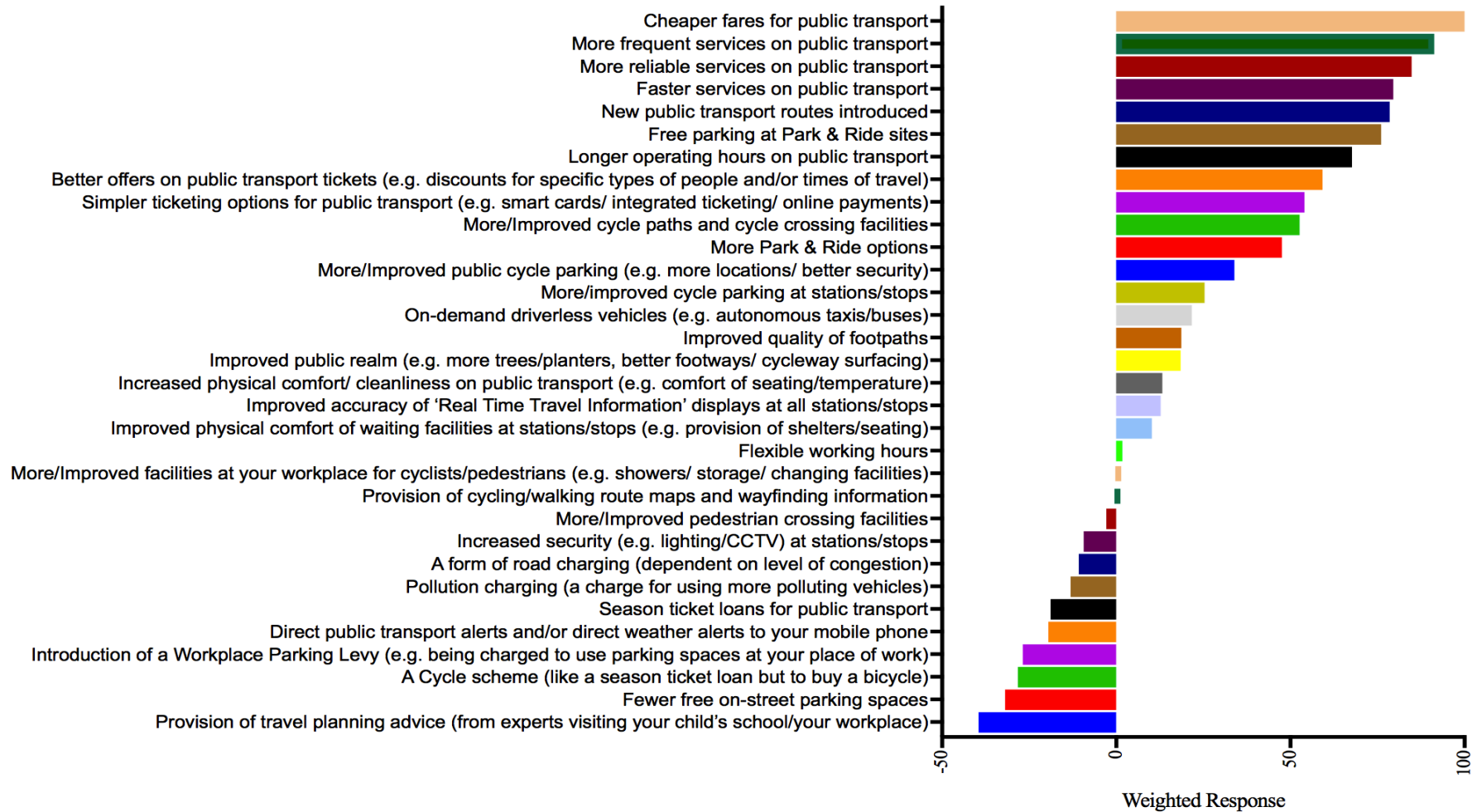
3.15   Comments from respondents

Survey participants have expressed their opinions in a grand total of over 2,300 sentences with words in excess of 36,000. Table 9 lists some of the top recurring three-word phrases from the comments.

Table 9: Top three-word phrases from the comments

Top Three-Word Phrases	Number of Occurrences
park and ride	76
use my car	68
use the car	35
to get to	26
I need to	25
in the City	24
out of Cambridge	23
use a car; the City centre; I do not; there is no	22

A selection of the comments given are shown below:

1. "Mostly improved and cheaper public transport and better cycle paths. Can feel dangerous cycling."

- 352 respondents mention 'cycle', 213 mention 'public transport', 33 mention 'dangerous' and 32 mention 'safe' in their comments.

2. "I rarely use my car except for longer journeys. Main use in Cambridge is food shopping. With a family of five, it's the only option for the big weekly shop."

- 37 respondents mention 'shop or shopping' in their comments.

3. "First choice would be public transport but it is too expensive. Public transport should be/must be reliable, safe, comfortable and cheap enough to use, reduce bus fares and charge extortionate congestion charges, it works, look at the Transport for London."

- 213 respondents mention 'public transport' with keywords 'expensive' and 'reliable' repeated 60 and 56 times respectively throughout the document.

4. "Better and bigger and cheaper Park and Ride, cheaper rail fares, better links from terminals to other areas in Cambridge".

- Throughout this comment section, the words 'train', 'cheaper' and 'Park and Ride' are repeated 154, 135 and 88 times respectively.

5. "Longer hours at the Park and Ride, making this a viable option for nights out in Cambridge. Better connections from villages. Train station at Addenbrookes."

- 33 respondents mention 'Addenbrookes' in their comments.

6. "I use buses but up to 40 minutes can be added to my journey each way due to unreliable bus service. Buses used Citi2_Busway".

7. "Better cycle routes so that I can travel safely around the City with children on bikes would be a massive help e.g. a cycle lane up Castle Hill."

8. "A park and ride that I don't have to queue in traffic for 30 mins to reach (which is the case for all the current ones)"

9. "Improved bus service, later running of services to park and ride"

10. "We already use our car very rarely – mostly to get out of Cambridge or to collect many people / large objects."

Respondents by large commented on cycling in terms of better cycling paths and a safer cycling environment. They also commented on the need for more reliable and cheaper public transport, in order to change to a more sustainable mode. Many respondents mentioned they are using the car to carry heavy objects and in the situation where they have to use the car, they have few alternatives available.

3.16   Influence of travel conditions

Participants were asked if they check travel conditions before starting their journeys. The highest percentage of respondents answered 'sometimes', followed by 'rarely' and 'most of the time'.

**Figure 39: Checking travel conditions before journeys**
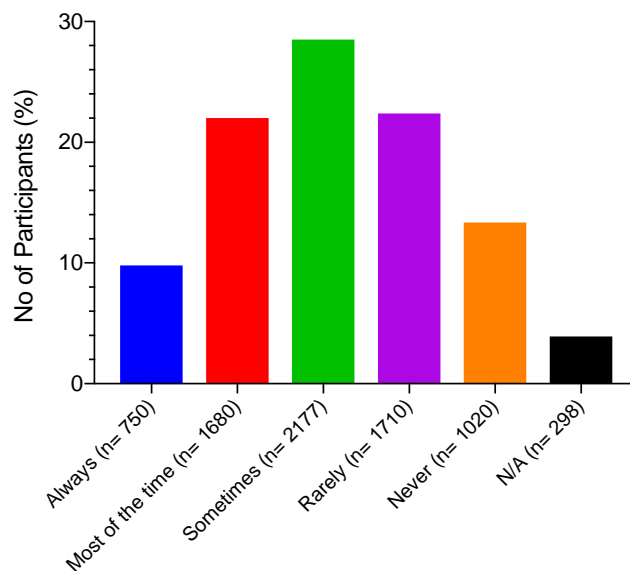
Table 10: Checking travel conditions before journeys

Always	Most of the time	Sometimes	Rarely	Never	N/A
750	1,680	2,177	1,710	1,020	298
9.82%	22.00%	28.51%	22.40%	13.36%	3.90%

3.17   Influence of traffic congestion

In this survey question, respondents were asked if information about traffic congestion or other transport delays, influences their choice of transport mode. The highest percentage of respondents answered 'never' (33.1%), followed by 'rarely' (31.0%) and 'sometimes' (22.3%).

Figure 40: Influence of traffic congestion or other transport delays information on the choice of transport mode
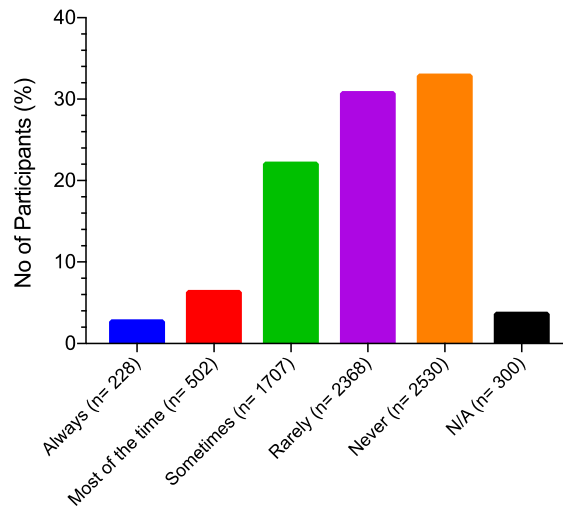
Table 11: Influence of traffic congestion or other transport delays information on the choice of transport mode

Always	Most of the time	Sometimes	Rarely	Never	N/A
228	502	1,707	2,368	2,530	300
2.99%	6.57%	22.36%	31.02%	33.14%	3.93%

3.18   Influence of weather conditions

Participants were asked if weather conditions influenced their choice of transport mode. The highest percentage of respondents said 'sometimes', followed by 'rarely' and 'never'.

Figure 41: Influence of weather conditions on the choice of transport mode
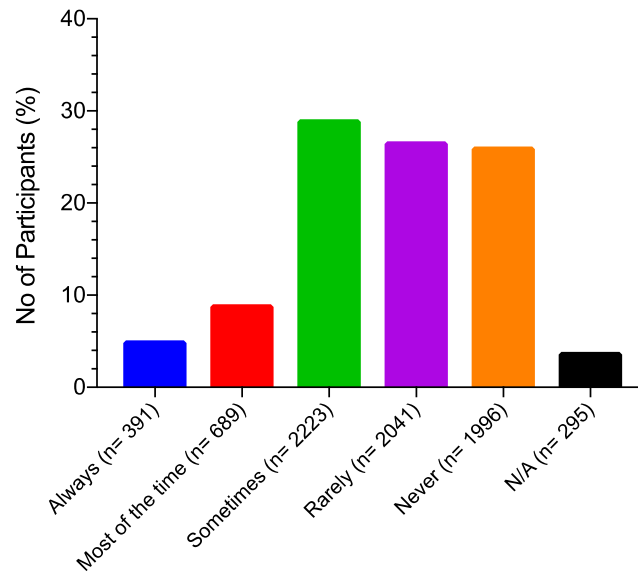

Table 12: Influence of weather conditions on the choice of transport mode

Always	Most of the time	Sometimes	Rarely	Never	N/A
391	689	2,223	2,041	1,996	295
5.12%	9.02%	29.12%	26.73%	26.14%	3.86%

3.19   Hard to reach postcodes

Figure 42 shows home postcodes of respondents living in all the hard to reach areas. The number associated with each cluster represents the number of participants from that area. Larger and smaller numbers are shown in different colours. Appendix B shows respondents who ticked the box as 'students' or in a household 'dependent on state benefits'.

Figure 42: Cluster of all the respondents based on hard to reach postcodes
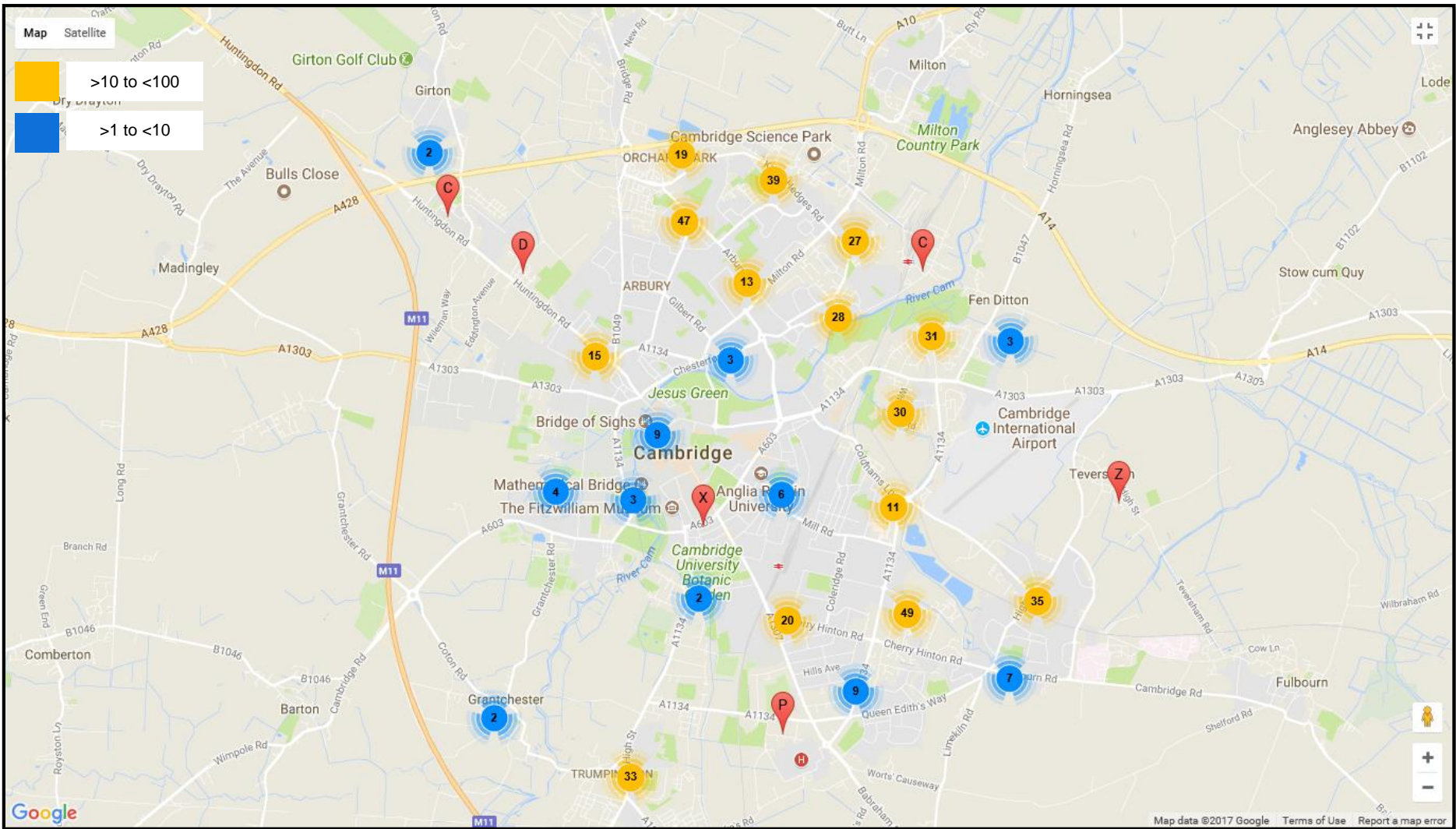
SUMMARY

The findings of the survey results are summarised below:

Frequency of travel: Three quarters of respondents (75.6%) travel 'in and around Cambridge', '5 or more times a week', followed by respondents travelling '2-4 times a week' and 'less than once a week but at least once a month' respectively. This pattern is consistent through all the age groups, gender and occupation type.

Journey purpose: Over three quarters of respondents (76.4%) make journeys to 'commute to/from work' and slightly less than three quarters (74.6%) travel for 'leisure, including shopping'. Half of all journeys (50.9%) made are 'personal' journeys. Age is an influencing factor for the type of journeys made. 'Commute to/from work' and travel for 'leisure, including shopping' are the two main reasons for journeys in the 25-49 age group. 'Leisure, including shopping' and 'personal' journeys are the two main types of journeys made by the 65+ age group.

Time of travel: The survey found that 8 out of 10 respondents travel at peak hours during weekdays and 7 out of 10 travel on Saturdays. Time of travel depends on the age of respondents. The most frequent journey times within the 16-64 age group are at peak hours during weekdays, whereas 65+ and retired respondents' travel at off-peak hours during weekdays.

Modes of travel: Overall, the survey data reveals that the car remains the most popular mode of travel, followed by cycle. District-based analysis carried out between workers/residents of Cambridge and South Cambridgeshire shows that this pattern is consistent throughout both districts.

Reasons for choosing mode of transport: Respondents' main reasons for choosing mode of transport are 'speed of journey', 'reliability of journey' and 'distance to destination'.

Mode of travel to work: In regard to mode of travel for commuting, most of the respondents travel by car/van (as a driver) followed by cycle. Survey response was compared with the 2011 census data for Cambridgeshire Districts and shows a significant improvement in the percentage of people who cycle to work (from 29% in Cambridge to 44%). The proportion of people cycling to work within the CB1 to CB5 postcode areas range from 53% (CB2) to 38% (CB5).

Postcode of place of home/work: Home and work postcodes of respondents are plotted in Figure 2 and Figure 21 respectively.

Alternative mode of transport: Slightly above a quarter of respondents said they would choose 'cycle' (25.9%) and 'other bus, minibus or coach services' (25.6%) as an alternative mode of transport. Whereas, slightly less than a quarter of respondents (24%) chose 'none of the above'. As an alternative mode of transport, the 25-49 age group would opt for 'cycle' (17%), followed by 'other bus, minibus or coach services' (14.9%). In the 65+ age group, 18.9% would opt for 'taxi', followed by 17.2% for 'other

bus, minibus or coach services'. Based on occupation, 17.4% of 'intermediate managerial, administrative or professional' respondents chose 'other bus, minibus or coach services', whereas 24% of 'casual worker, pensioner (reliant on state pension only), or dependent on state welfare' respondents selected 'I don't travel by car/van'.

Reason for not using alternative mode of transport: The main reasons listed by respondents for not using alternative modes of transport were 'speed of journey', 'price of transport' and 'reliability of journey'.

Alternative modes of transport to driving (if driving became less of an attractive option): Slightly more than a quarter of participants selected 'cycle' (28.9%) followed by 'other bus, minibus or coach services' (23.5%) as alternative modes of transport to driving. However, slightly less than a quarter of participants (24.4%), said 'I would still drive, no matter what'.

Willingness to travel in/around Cambridge without personal car/van
This answer provides very encouraging statistics to implement or transition user behaviour towards sustainable transport modes. A larger number of participants (38.9%) said they would like to make more journeys 'in and around Cambridge' without using their own 'car/van', compared to 32.8% of respondents who said 'No' to the idea. A further 12% answered 'Don't know', while 16.3% answered 'N/A'. Those participants who were uncertain could be inclined to travel 'in/around Cambridge without personal car/van' with improvements in public transport infrastructure/services and safer cycling initiatives (e.g. more/improved cycle paths and cycle crossing facilities).

There is a division between willingness to travel in/around Cambridge without personal car/van based on the respondents' age group. The majority of respondents (41.5%) of the 25-49 age group said they would like to travel in/around Cambridge without their personal car/van compared to 30.5% who said 'No' to this idea. In the case of the 65+ age group, the majority of participants (34.3%) said 'No' to the idea compared to 31.2% of participants who responded 'Yes'.

Analysis carried out based on gender, reveals a higher percentage of male (40.1%) and female (38.3%) respondents said 'Yes' to the idea of travelling in/around Cambridge without their personal car/van, as opposed to 'No' (33.4% of male and 30.9% of female).

Analysis carried out based on occupation type, reveals that a higher percentage of participants in every category responded 'Yes' to the idea of travelling in/around Cambridge without their personal car/van, as opposed to 'No'.

Effect of potential initiatives to encourage/enable participants to reduce use of car/van
The five most popular initiatives were:

- Cheaper fares for public transport;
- More frequent services on public transport;
- More reliable services on public transport;

- New public transport routes introduced; and
- Faster services on public transport.

The five least popular initiatives were:

- Provision of travel planning advice;
- Fewer free on-street parking spaces;
- A Cycle scheme (like a season ticket loan but to buy a bicycle);
- Introduction of a Workplace Parking Levy; and
- Direct public transport alerts and/or direct weather alerts to your mobile phone.

To understand the effect of potential initiatives, district-based analysis was carried out. Results show that respondents working/residing in both districts prioritise stated initiatives in a similar fashion.

Influence of travel conditions: Most of the respondents said they 'sometimes' check the travel conditions before starting their journeys.

Influence of traffic conditions: Information about traffic congestion or other transport delays does not influence choice of transport mode for most of the respondents.

Influence of weather conditions: Most of the participants said that weather conditions 'sometimes' influence their choice of transport mode.

APPENDIX A: SURVEY FORM

GC travel survey.qrp_Layout 1 17/10/2017 16:41 Page 1

13. Do you check travel conditions before starting your journeys?

Always ☐   Most of the time ☐   Sometimes ☐   Rarely ☐   Never ☐

14. Does information about traffic congestion or other transport delays influence your choice of transport mode?

Always ☐   Most of the time ☐   Sometimes ☐   Rarely ☐   Never ☐

15. Do weather conditions influence your choice of transport mode?

Always ☐   Most of the time ☐   Sometimes ☐   Rarely ☐   Never ☐

16. Is there anything else that could encourage or enable you to reduce your use of your own car/van, and use other modes of travel instead?

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Shire Hall
Cambridge
CB3 0AP

Demographics

17. Which of the following age groups do you fall under?

Under 16 ☐   16-24 years old ☐   25-49 years old ☐   50-64 years old ☐   65+ years old ☐

18. Please can you confirm, are you....?   Male ☐   Female ☐   Prefer not to say ☐

19. Which of the following best describes your current situation?

Working full-time (30+ hours a week) ☐   Retired ☐
Working part-time (less than 30 hours a week) ☐   Student ☐
Not working ☐   Other, please specify ☐

20. What is the occupation of the main income earner in your household? If the main income earner is retired, please select the option that best describes what their occupation was before they retired.

Higher managerial, administrative or professional ☐
Intermediate managerial, administrative or professional ☐
Supervisory or clerical and junior managerial, administrative or professional ☐
Skilled manual worker ☐
Semi or unskilled manual worker ☐
Casual worker, pensioner (reliant on state pension only), or dependent on state welfare ☐
Don't know/prefer not to say ☐

21. What is your full home postcode?

Home postcode ☐   Prefer not to say ☐

22. Do you have any disabilities that affect the way you travel?

Yes ☐   Yes ☐   Prefer not to say ☐

23. Would you be willing to participate in further research? If yes, we will need to take your contact details below and will pass these on to the Greater Cambridge Partnership along with a subset of the data collected here today.

Yes (please provide your best contact details below) ☐   No ☐

Name
Email address
Phone number

24. Would you like to be entered into our prize draw?   Yes ☐   No ☐

If you find you have any queries after we've finished you can contact the Greater Cambridge Partnership by telephone on **01223 699906** or via our website

www.greatercambridge.org.uk/contact-us

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Growing and sharing prosperity

travel 4 CAMBRIDGESHIRE

the Greater Cambridge Travel Survey 2017

Your feedback will allow the GCP to better understand people's travel needs and reasons behind their transport choices, to help inform future investment in the local transport network.

If you would prefer to give us your views online, please visit

travelcambs.org.uk/travelsurvey

Our survey is open until **6 November 2017**. The anonymised results will be available in due course at www.greatercambridge.org.uk

In compliance with The Data Protection Act 1998 all personal information you provide will be held by Cambridgeshire County Council. It will only be used for the purposes of the survey. We will not pass this information to any third party.

Thank you for taking part in this survey.

This survey is being carried out by Travel for Cambridgeshire on behalf of the Greater Cambridge Partnership (GCP).

PRIZE DRAW!

Win 2 tickets

for an event of your choice at the **O2 Arena**, including **rail travel** courtesy of our partners at Greater Anglia.

Three runners up will each receive a **£100** high street shopping voucher.

Competition T&Cs can be found at www.travelcambs.org.uk/travelsurvey

Your Travel Behaviour

1. How often do you travel in and around Cambridge? By 'in and around Cambridge' we mean within the built-up area of the City and its outskirts.

5 or more times a week ☐   Less than once a week, but at least once a month ☐
2-4 times a week ☐   Less than once a month ☐
Once a week ☐   Never (please go to **17 – Demographics** section) ☐

2. For which of the following reasons do you make these journeys? *(Please select all that apply)*

Commuting to/from work ☐   Personal ☐
Commuting to/from education ☐   Leisure, including shopping ☐
School drop off/pick up ☐   Other, please specify ☐
Employer's business ☐

➤ *continue overleaf*

3. At which of these times of day do you travel in and around Cambridge?
(Please select all that apply)

Weekdays from 4am and before 7am ☐	Weekdays from 7pm and before 4am ☐
Weekdays from 7am and before 10 am ☐	Saturdays ☐
Weekdays from 10am and before 4pm ☐	Sundays ☐
Weekdays from 4pm and before 7pm ☐	

4. Which of the following modes of transport do you use to travel in and around Cambridge, and how often? *(Please select a single response per row)*

	Always	Most of the time	Occasionally	Never
Car/van (as a driver, travelling alone)	☐	☐	☐	☐
Car/van (as a driver, with passenger/s)	☐	☐	☐	☐
Car/van (as a passenger)	☐	☐	☐	☐
Taxi	☐	☐	☐	☐
Train	☐	☐	☐	☐
Park & Ride bus services	☐	☐	☐	☐
Other bus, minibus or coach services	☐	☐	☐	☐
Motorcycle/Moped/Scooter	☐	☐	☐	☐
Cycle	☐	☐	☐	☐
Walking/Running	☐	☐	☐	☐
Other, please specify				

5. Please tell us why you choose your most frequently used mode of transport for travel in and around Cambridge? *(Please select all that apply)*

Speed of journey	☐	Availability of 'Real Time Travel Information'	☐
Reliability of journey	☐	Availability of other forms of information	☐
Frequency of service	☐	Personal safety	☐
Distance to destination	☐	Physical comfort	☐
Distance to station/stop	☐	Ability to work/read/etc while travelling	☐
Availability of cycle parking	☐	More environmentally friendly/sustainable	☐
Availability of car parking	☐	Health reasons	☐
Price of transport	☐	Complexity of journey (e.g. number of connections)	☐
Price of parking	☐	Work vehicle/Drive for job	☐
Other, please specify			

6. How do you usually travel to work? *(If you use more than one mode please select the mode you use for the longest part, by distance, of your usual journey to work.)*

I don't work (please go to **question 8**)	☐	Train	☐
Work mainly at or from home	☐	Park & Ride bus services	☐
Car/van (as a driver, travelling alone)	☐	Other bus, minibus or coach services	☐
Car/van (as a driver, with passenger/s)	☐	Motorcycle/Moped/Scooter	☐
Car/van (as a passenger)	☐	Cycle	☐
Taxi	☐	Walking/Running	☐

7. What is the full postcode of your place of work?

Work postcode [＿＿＿＿＿]   Prefer not to say ☐

8. Of the journeys you make by car/van, could you make these journeys using any of the following modes of transport instead? *(Please select all that apply)*

I don't travel by car/van (please go to **17 – Demographics** section) ☐

Taxi	☐	Cycle	☐
Train	☐	Walking/Running	☐
Park & Ride bus services	☐	Other, please specify	[＿＿＿]
Other bus, minibus or coach services	☐	None of the above	☐
Motorcycle/Moped/Scooter	☐	Don't know	☐

9. And why don't/can't you travel by this/these alternative modes of transport? *(Please select all that apply)*

Speed of journey	☐	Availability of 'Real Time Travel Information'	☐
Reliability of journey	☐	Availability of other forms of information	☐
Frequency of service	☐	Personal safety	☐
Distance to destination	☐	Physical comfort	☐
Distance to station/stop	☐	Ability to work/read/etc while travelling	☐
Availability of cycle parking	☐	More environmentally friendly/sustainable	☐
Availability of car parking	☐	Health reasons	☐
Price of transport	☐	Complexity of journey (e.g. number of connections)	☐
Price of parking	☐	Work vehicle/Drive for job	☐
Other, please specify			

10. If driving became less of an attractive option / more difficult, which of the following modes of transport would you use instead? *(Please select all that apply)*

Taxi	☐	Walking/Running	☐
Train	☐	Other, please specify	[＿＿＿]
Park & Ride bus services	☐	I wouldn't travel	☐
Other bus, minibus or coach services	☐	I would still drive, no matter what	☐
Motorcycle/Moped/Scooter	☐	Don't know	☐
Cycle	☐		

11. Would you like to make more journeys in and around Cambridge without your own car/van?

Yes ☐   No ☐   Don't know ☐

12. To what extent would each of the following potential initiatives encourage or enable you to reduce your use of your car/van, and use other modes of travel instead?
(Please select a single response per row)

	Very likely	Somewhat likely	Not likely at all	Don't know
Faster services on public transport	☐	☐	☐	☐
More reliable services on public transport	☐	☐	☐	☐
More frequent services on public transport	☐	☐	☐	☐
Longer operating hours on public transport	☐	☐	☐	☐
New public transport routes introduced	☐	☐	☐	☐
On-demand driverless vehicles (e.g. autonomous taxis/buses)	☐	☐	☐	☐
Improved accuracy of 'Real Time Travel Information' displays	☐	☐	☐	☐
Mobile phone public transport/weather alerts	☐	☐	☐	☐
Increased security (e.g. lighting/CCTV) at stations/stops	☐	☐	☐	☐
Improved physical comfort of waiting facilities at stations/stops (e.g. provision of shelters/seating)	☐	☐	☐	☐
Increased physical comfort/cleanliness on public transport	☐	☐	☐	☐
Better offers on public transport tickets (e.g. discounts for specific types of people and/or times of travel)	☐	☐	☐	☐
Simpler ticketing options for public transport (e.g. smart cards/ integrated ticketing/online payments)	☐	☐	☐	☐
Cheaper fares for public transport	☐	☐	☐	☐
Season ticket loans for public transport	☐	☐	☐	☐
Free parking at Park & Ride sites	☐	☐	☐	☐
More Park & Ride options	☐	☐	☐	☐
A Cycle scheme (like a season ticket loan but to buy a cycle)	☐	☐	☐	☐
More/improved cycle paths and cycle crossing facilities	☐	☐	☐	☐
More/improved cycle parking at stations/stops	☐	☐	☐	☐
More/Improved public cycle parking (e.g. better security)	☐	☐	☐	☐
Improved quality of footpaths	☐	☐	☐	☐
More/Improved pedestrian crossing facilities	☐	☐	☐	☐
Improved public realm (e.g. more trees/planters, better footways/ cycleway surfacing)	☐	☐	☐	☐
Provision of cycling/walking route maps and wayfinding	☐	☐	☐	☐
More/Improved facilities at your workplace for cyclists/ pedestrians (e.g. showers/ storage/ changing facilities)	☐	☐	☐	☐
Provision of travel planning advice	☐	☐	☐	☐
Introduction of a Workplace Parking Levy (e.g. being charged to use parking spaces at your place of work)	☐	☐	☐	☐
Fewer free on-street parking spaces	☐	☐	☐	☐
Pollution charging (for using more polluting vehicles)	☐	☐	☐	☐
A form of road charging (dependent on congestion)	☐	☐	☐	☐
Flexible working hours	☐	☐	☐	☐

APPENDIX B: ACORN HARD TO REACH GROUPS AND PARTICIPANT NUMBERS

Hard to reach groups	Number of participants
Young families in low cost private flats	30
Student flats and halls of residence	28
Struggling younger people in mixed tenure	75
Struggling young families in post-war terraces	93
Singles and young families, some receiving benefits	10
Semi-skilled workers in traditional neighbourhoods	20
Poorer families, many children, terraced housing	2
Poorer families, many children, terraced housing	2
Pensioners in social housing, semis and terraces	22
Pensioners and singles in social rented flats	31
Multi-ethnic, purpose-built estates	6
Low income large families in social rented semis	27
Larger family homes, multi-ethnic areas	5
Inactive communal population	13
Families in right-to-buy estates	53
Elderly singles in purpose-built accommodation	4
Elderly people in social rented flats	7
Deprived areas and high-rise flats	25
Deprived and ethnically diverse in flats	3
Active communal population	2
Total	**458**