



University of Bristol



STAFF TRAVEL SURVEY 2016

ANALYSIS REPORT

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CONTENTS

1. INTRODUCTION	1
2. ASSESSMENT METHODOLOGY	2
3. DATA ANALYSIS AND RESULTS	9
4. STAFF TRAVEL CARBON EMISSIONS	40
5. COMPARISON WITH PREVIOUS TARGETS AND DATA	43
6. SUMMARY AND CONCLUSIONS	47

APPENDICES

- A: 2016 Staff Travel Questionnaire
- B: Staff Home Postcode Locations
- C: Illustrative Mode Share Density Maps

1. INTRODUCTION

Background

- 1.1 The University of Bristol (subsequently referred to as 'The University') is committed to reducing reliance on single occupancy vehicle trips (SOV) and aims to reduce the number of cars taken to University sites. The University conducts regular surveys to identify staff work travel patterns and to help develop an effective package of sustainable travel measures aimed at influencing staff members' mode choice for their journeys to and from work.
- 1.2 The current Combined Staff and Student Travel Plan was adopted for use in 2014 and provides baseline data for comparison with the results of the 2016 staff travel survey.

Brief

- 1.3 Key Transport Consultants (KTC) have been retained by The University to analyse the results of their 2016 staff travel survey and summarise the findings. This includes performing a comparison with previous years' mode share data and the current Travel Plan (TP) targets using the University's Travel Plan 2016. For consistency, an assessment of CO₂ emissions is also undertaken, based on the method previously adopted for the assessment of student travel emissions in 2016.

Report Structure

- 1.4 This report is structured as follows.
- **Chapter 2** outlines the survey and assessment methodology including: details of amendments to the datasets, either to correct errors or provide usable data; details of the groupings of University sites into manageable and consistent sets for ease of assessment; changes in travel policies which may have affected the latest survey; and any other assumptions adopted during the assessment process.
 - **Chapter 3** provides summary results of the survey using various charts, graphs and tables to illustrate key points.
 - **Chapter 4** considers the carbon emissions of staff travel movements based on the responses to the survey.
 - **Chapter 5** provides a comparison with previous surveys and the University Travel Plan targets.
 - A summary and conclusions are provided in Chapter 6.

2. ASSESSMENT METHODOLOGY

Introduction

2.1 The University Staff Travel Survey is undertaken periodically to collect information relating to the travel choices of staff members working at the various university sites within the wider Bristol area. Information collected during the survey is used in several ways:

- to identify issues faced by staff members in relation to travel;
- to monitor the effectiveness of the University Travel Plan and any existing travel policies, such as the staff parking policy introduced in 2016, or the expanded Residents Parking Zones within the city of Bristol in 2015; and
- to guide the development of the Travel Plan and future travel policies.

2.2 A survey Questionnaire was produced and circulated electronically (with paper copies also available on request). A copy is provided in **Appendix A**.

Response Rate

2.3 The Staff Travel Survey 2016 received 2,365 responses during the survey period. Data obtained from the University identifies that there were 4,487 full-time and 1,923 part-time employees at the time of the 2016 survey. This gives an overall response rate of 37%.

2.4 As reported in the University Combined Student and Staff Travel Plan 2009-2016, this compares to 2,306 responses in 2011 from 5,721 staff (40% response rate). Although the staff response percentage is slightly below the recorded 2011 levels, the 2016 survey did received a higher number of responses and is considered to be an adequate sample of the wider staff population.

Methodology

2.5 The following steps were taken when assessing the Staff Travel Survey data:

- review Policy documents and identify current University Parking Policies at each site;
- group the multiple University sites recorded within the responses into manageable and coherent groups to present usable data for comparison;
- undertake a cleansing exercise on the staff travel dataset to remove errors. Where possible, options to improve the survey Questionnaire are also explored with the aim of improving the robustness and accuracy of the reporting;

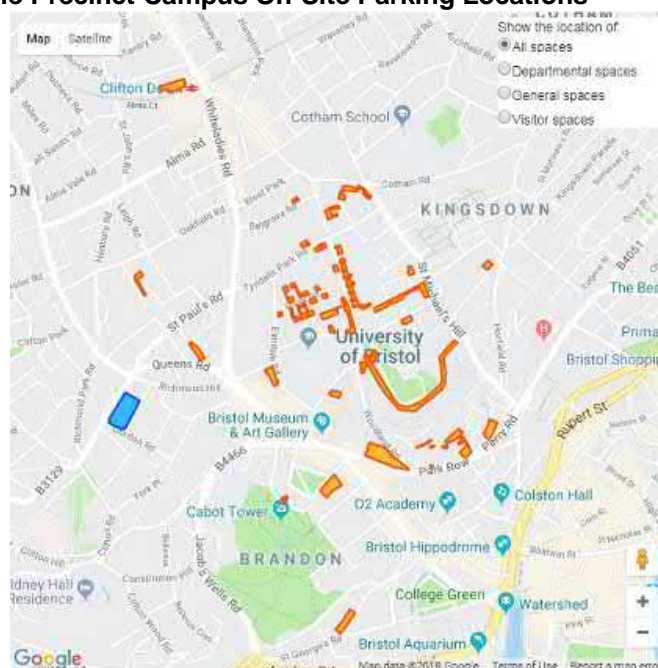
- undertake a spreadsheet analysis of the responses to the staff Travel Survey and produce plan, maps, charts and tables to illustrate its findings; and
- compare the most recent results with data from previous years to chart the scale of changing trends in staff travel movements (see **Chapter 5**).

Review of Travel and Parking Policies

- 2.6 Since the previous Staff Travel Survey in 2013, Bristol City Council expanded its Residents Parking Zones in 2015 to make it harder for commuters to park on residential streets without a permit or payment. This change in policy was expected to cause a move towards the increased use of sustainable travel modes across the city.
- 2.7 In addition, The University updated its own on-site Parking Policies in March 2016 with the aim of reducing pressure on its own, limited on-site parking resources. In summary:
- at the Langford site where non-car travel options are more limited and parking is free, staff are required to pre-register their vehicles and park in a specific zone allocated to them by the parking manager for the site;
 - within the city where on-street parking is restricted and on-site parking is limited to the locations illustrated in **Figure 2.1** below staff members can apply for a permit, provided they do not live within two miles of the University main academic Precinct (see **Figure 2.2** below) or its satellite sites. Permits are then issued on a points-based 'need' system whereby persons with limited travel choices, or responsibilities such as caring for children/relatives, are prioritised. When different staff members have the same 'parking' score and the number of parking permits requested has been exceeded, a lottery is used to allocate the remaining permits to staff; and,
 - additional measures are also made to accommodate the needs of disabled drivers, visitors and for Departmental Parking, where staff are required to travel between sites during their working hours.
- 2.8 From 5th January 2016, The University charges its staff a daily rate for parking within one of its on-site car parks. At present, the charge is 0.0083% of the staff member's salary.
- 2.9 From April 2018, a new on-line parking permit and coupon system will be introduced. This will bring together the application process, coupon purchasing and the parking authorisation service in a single user-friendly system. This will also enable improved parking enforcement procedures, which should reduce the use of formal University parking spaces by unauthorised users.

- 2.10 The University Travel Plan and website also promotes the use of its formal Car Share Scheme (liftshare.com/uk/community/bristoluni). This is free to use and pairs staff members in terms of their home postcode, route to work, time and place of work, and other personal criteria to identify suitable car share companions. Formal car sharers can apply for a parking permit but are provided with up to 30-days free parking per year as a reward for sharing.
- 2.11 Informal car share schemes are also encouraged but are not guaranteed a parking permit.

Figure 2.1: The Precinct Campus On-Site Parking Locations

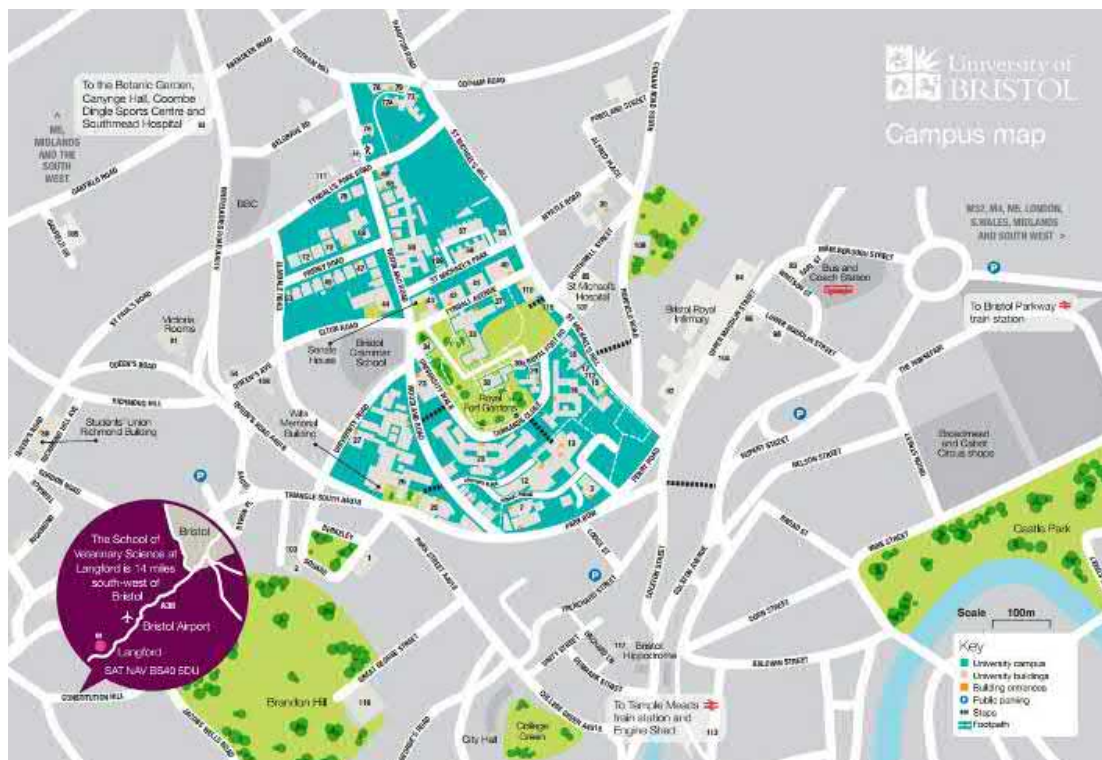


- 2.12 The above University Precinct Campus car parks include the following permit parking locations:
- 48 spaces at Canynge Hall;
 - Around 148 spaces spread across several sites on Woodland Road;
 - 46 spaces on University Walk and 17 on University Road;
 - Around 53 spaces spread across several sites on Priory Road;
 - 44 spaces on St Michaels Park;
 - 35 spaces in Berkeley Square;
 - 27 spaces at Victoria Rooms on Queens Road; and,
 - 138 spaces centred around sites on Park Row, Perry Road and Cantock's Close.

Grouping of University Sites

- 2.13 The University has a large number of sites both within the main Precinct centred around Clifton (see **Figure 2.2** below), and in other areas including the wider centre of Bristol, Southmead (Hospital site), Emersons Green (National Composites Centre) and Langford (School of Veterinary Sciences).

Figure 2.2: The University Precinct (also includes Canynge Hall)



- 2.14 Responses from the Staff Travel Survey 2016 were received from staff members working at 21 different University locations as shown in **Table 2.1** overleaf. To ease the assessment of the data and to provide summary results for sites with similar accessibility characteristics, sites were grouped into three categories:

- the Precinct Campus, which encompasses the principle university campus area centred in Clifton, plus Canynge Hall to the north (as shown in **Figure 2.2** above);
- Langford, which due to its rural location, limited public transport accessibility and higher levels of on-site parking is likely to produce very different travel patterns; and
- all other sites, which incorporates the more suburban and outlying University sites including Coombe Dingle, Engine Shed, the National Composites Centre and various Hospital based sites plus University residential sites.

- 2.15 **Table 2.1** below shows the groupings used within this report for the presentation of staff travel characteristics.

Table 2.1: Site Groupings			
University Building	Location		
Beacon House	Precinct		
Berkeley Square	Precinct		
Burwalls		Other	
Campus (Precinct)	Precinct		
Canynge Hall	Precinct		
Clifton Halls of Residence		Other	
Coombe Dingle		Other	
Dorothy Hodgkins building		Other	
Engine Shed		Other	
Hampton House	Precinct		
Howard House	Precinct		
Langford			Langford
National Composites Centre		Other	
Oakfield and Barley House	Precinct		
Other		Other	
Richmond Building	Precinct		
Southmead Hospital		Other	
Southwell Street buildings	Precinct		
Stoke Bishop Halls of Residence		Other	
University Hospital Bristol buildings		Other	
Victoria Rooms	Precinct		

Correcting Data Errors

- 2.16 To ensure that the Travel Survey responses data spreadsheet contained valid and usable data suitable for analysis, an initial cleansing process of the raw survey data was undertaken. This allows the small number of erroneous, incomplete or unusable responses to be identified and excluded, so that the assessment remains robust.
- 2.17 In particular, five survey responses were identified as containing errors because the respondent provided details of their contracted working hours and travel times but then did not correctly identify a preferred/adopted mode choice. Where information was considered clearly erroneous and could not be accurately corrected, the data was removed from the assessment. Given the small number of responses involved (i.e. 0.2% of responses), this is considered unlikely to affect the robustness of the assessment.

- 2.18 In addition, 47 responses provided home postcode locations that were either incomplete or could not be identified on a postcode database. Where incomplete information was provided, an indicative full postcode was assumed as a proxy, based on a valid postcode within their immediate search area. In some cases, the postcodes of new residential estates were not yet included in the database and could not be matched, such as new developments at Weston Airfield and in Keynsham. In these locations, an appropriate proxy postcode of an adjacent established building was used to retain the travel distance and accessibility details of the missing site.
- 2.19 By assessing the responses, it is considered likely that many respondents failed to understand or read correctly specific questions. In particular, for Question 13 respondents were asked to quantify the number of times they used different travel modes as their main mode for their journeys to work in the previous week. In some cases, respondents claimed to have travelled over 15 times to University in a single week. It is considered that, in most cases, these persons detailed each of their mode selections across their whole journey rather than just the primary mode. For example, a majority of Park and Ride users also stated that they walked and drove as their main travel mode. This may explain why overall inbound mode trips for a five-day week sometimes exceed 15 trips. In these cases, all trips were included within the assessment. Removing these Park & Ride trips (which could be considered a non-primary travel mode, based on travel distance, if the user drives to the bus stop) and retaining car as the main mode would result in very few Park & Ride trips being identified and included within the assessment.
- 2.20 It is suggested that for subsequent surveys, mode choice options be added to include 'Drive, Park and Ride', and 'Drive, Train and Walk' etc. as this would better represent the modes used by many respondents, and would prevent different mode choices from being inadvertently grouped together. The adopted method outlined above may water down the mode share for Park & Ride as, in most cases, an additional duplicate car trip is also included, despite the car not entering or approaching any University sites.
- 2.21 The cleansing exercise also removed any additional comments made by the respondent, which would prevent spreadsheet data from being looked-up for summary information.
- 2.22 The postcode for Howard House (BS8 1SN) previously used was amended to BS8 1SD, as it did not appear in the postcode database used in this assessment.
- 2.23 Errors were also identified in the previous CO₂ calculations undertaken from the Student Travel Survey, which underestimated the previously reported CO₂ outputs. These have been corrected for the emissions calculations presented in this report for staff travel movements and should be corrected in any subsequent assessment of Student survey data.

Charting Trends

- 2.24 To examine any trends in staff travel behaviour, the data from the 2016 survey is compared to data from previous years obtained from the University Combined Staff and Student Travel Plan website.
- 2.25 The trends comparison is presented in **Chapter 5** of this report.

Illustrative Mapping

- 2.26 **Appendix B** provides illustrative maps of the home locations of staff with the primary mode choice groups in **Appendix C**¹. For consistency with previous assessments, and for ease of use, the various mode choice options have been merged into convenient groupings with similar travel characteristics.
- 2.27 The groupings adopted for the illustrative maps are:
- bicycle travel, which only includes respondents who indicated that they travel to work on a bicycle;
 - SOV, which only include car drivers who travel alone. This is a key travel mode, which the University is keen to reduce;
 - 'Car Share', which combines those staff who drive with a passenger, or staff who formally or informally car share;
 - public transport, which includes all forms of mass transit including Park & Ride, Bus, Train and Taxi travel.; and
 - walking, which includes staff who walked or ran to work.
- 2.28 As the survey requested details of mode choices across a full week, with several staff undertaking multiple journeys using different travel modes per day, the full dataset has been divided by five to provide an 'average day's' movements only. To simplify the output, any decimal numbers have been rounded to the nearest whole number.
- 2.29 The maps in **Appendix C** display the average number of daily staff trips to the university sites from each Super Output Area – Lower Layer zones for the individual mode groups listed above.

¹ Due to limitations with the survey wording, the 'walk' mode share map shows all staff walking responses even if walking was only used on part of their journey (i.e. a single leg of a trip chain)

3. DATA ANALYSIS AND RESULTS

Introduction

- 3.1 The results for the 2016 Staff Travel Plan survey are set out by question below.
- 3.2 Typically, where appropriate, the survey results are provided as a percentage. Unless otherwise stated, the percentage is calculated based on the number of valid responses recorded for each question. Where no answer was selected or left blank it has been ignored in the calculation.
- 3.3 The travel survey is divided into six sections, listed below, and results are presented in the order of the travel survey questionnaire provided in **Appendix A**.

2016 Staff Travel Survey Sections:

- Section 1: About You (Questions 1 – 5);
 - Section 2: Working at the University (Questions 6 – 12);
 - Section 3: Travelling to Work (Questions 13 – 24);
 - Section 4: Travel Plan Website (Question 25);
 - Section 5: Business Related Travel (Questions 26 – 31); and,
 - Section 6: Alternatives to Business Related Travel (Questions 32 – 35).
- 3.4 In addition to statistics covering all the respondents, a sub-analysis of particular questions has been undertaken for specific location groups (i.e. Campus sites), as outlined previously in **Table 2.1** provided in **Chapter 2**. To recap, these location groups are:
- the Precinct, which encompasses the principle university campus area centred in Clifton, plus Canynge Hall to the north;
 - Langford, which due to its rural location, limited public transport accessibility and higher levels of on-site parking, is likely to produce very different travel patterns; and,
 - all other sites, which incorporates the more suburban and outlying University sites that are predominantly more remote from the Clifton area including Coombe Dingle, Engine Shed, the National Composites Centre and various Hospital based sites.

Section 1: About You (Questions 1 – 5)

- 3.5 Questions 1 to 5 of the Staff Travel Survey asked respondents about their own personal details including gender, age, home postcode and personal issues which may affect travel mode choice, such as disability or caring commitments.

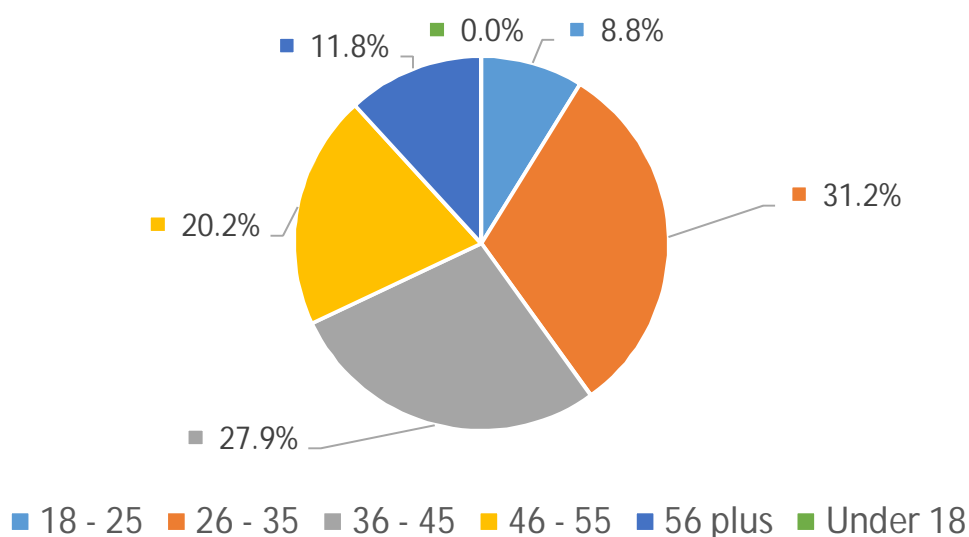
Question 1: Gender

- 3.6 The overall split is approximately 61% female to 39% male with less than 1% selecting other.
- 3.7 As **Table 3.1** below shows, both the Langford and 'Other' Campus sites show even higher levels of female respondents to the survey, whilst the Precinct is similar to the overall survey average, albeit still being above the overall average gender split for the wider University.

Table 3.1: Gender Mix by Campus Group			
Location	Male	Female	Other
Precinct Campus	40%	60%	>1%
Langford Campus	28%	72%	0%
Other Sites	33%	67%	0%
TOTAL	39%	61%	>1%

Question 2: Age

Q2. What is your age group? All Sites Combined



- 3.8 As shown above, the dominant age group of the respondents is in the 26 to 35 age group with nearly one third of all responses (31.2%) which is closely followed by the 36 to 45 age group. Unsurprisingly, as age increases, the number of staff members decreases.
- 3.9 **Table 3.2** below shows the Langford site generally has a slightly older staff population with it ranking top in the three oldest age categories. In contrast, The Precinct Campus ranks top in the 26-35 age bracket and is generally very similar to the overall average across all sites. It is also worth noting that the 'Other' University sites has almost double the percentage of 18 to 25 age group staff members when compared to the other locations which may be reflective of the departments which use these sites.

Table 3.2: Age Group by Campus						
Location	Age Group %					
	Under 18	18-25	26-35	36-45	46-55	56+
Precinct Campus	<1%	8%	32%	28%	20%	12%
Langford Campus	0%	7%	23%	30%	25%	15%
Other	0%	14%	29%	26%	20%	12%
Total (All Sites)	0%	9%	31%	28%	20%	12%

Question 3: Disabilities that Affect Travel to Work

- 3.10 A majority of staff members (96%) across all surveyed sites do not have a disability that affects their travel choices for journeys to and from work at University sites.
- 3.11 Although this trend is relatively stable across each of the assessed University (grouped) Campus sites, if they are examined individually (i.e. by building/department), most work locations have no more than three respondents who report a disability with only the larger specific Precinct site reporting a much higher number (60 staff). However, this is reflective of the higher number of staff working in this location and returns an overall percentage of just over 3%.

Question 4: Caring Responsibilities that Affect Travel to Work

- 3.12 A majority of staff members (73%) across all surveyed sites do not have specific caring responsibilities (such as dropping off children, caring for elderly or disabled relatives/partners, caring for pets) which affect their travel to work arrangements.
- 3.13 This trend is relatively stable across each of the assessed University (grouped) Campus sites and most of the individual buildings/departments with at least twice as many staff members having no caring responsibilities, except for staff at the Dorothy Hodgkins Building, which shows a much higher level of caring responsibilities (44.4%) amongst respondents.

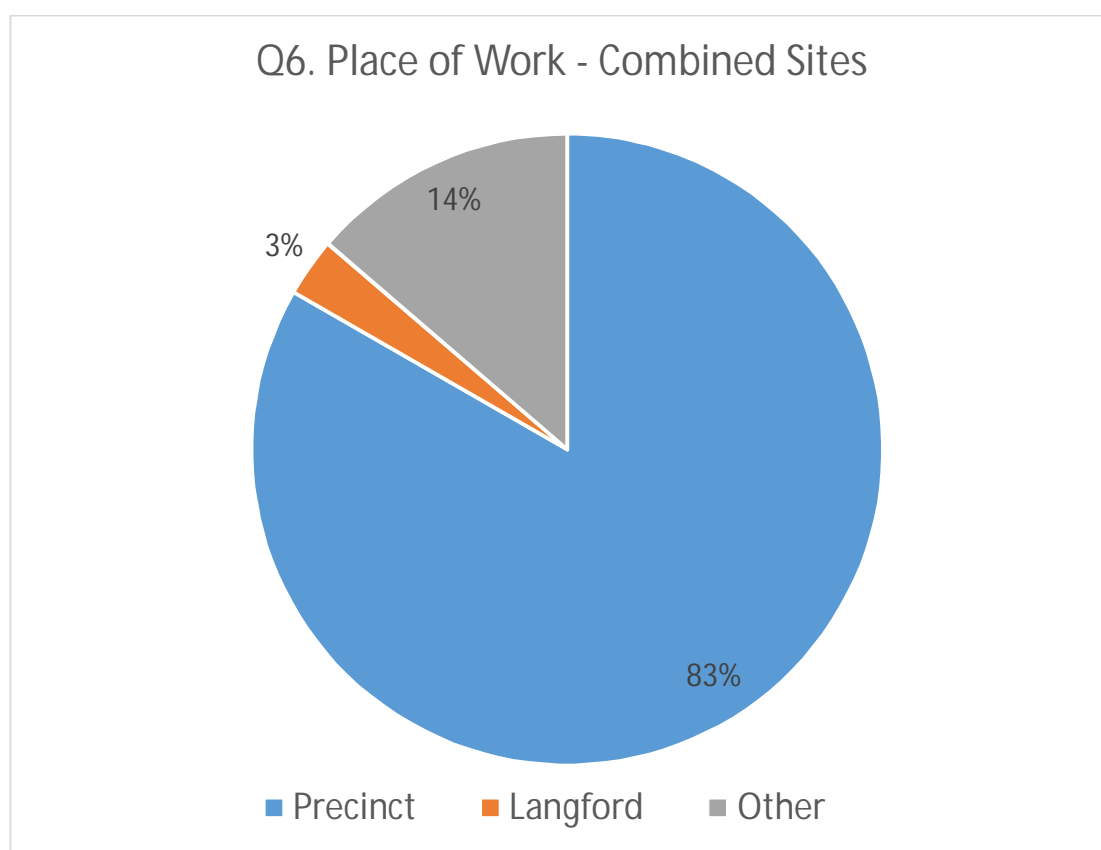
Question 5: Home Postcode

- 3.14 Illustrative maps of staff home postcode location are provided in **Appendix B**. Staff travel mode choice in terms of average daily movements per home location zone presented in **Appendix C**. These uses Census Super Output Areas (Lower Layer) as the zoning, as this provides sufficient detail of the home location whilst also grouping the home locations into manageable chunks.

Section 2: Working at the University (Questions 6 – 12)

- 3.15 Questions 6 to 12 of the Staff Travel Survey asked respondents about working at the University including their role, pay grade, work hours/days, main work location and department.

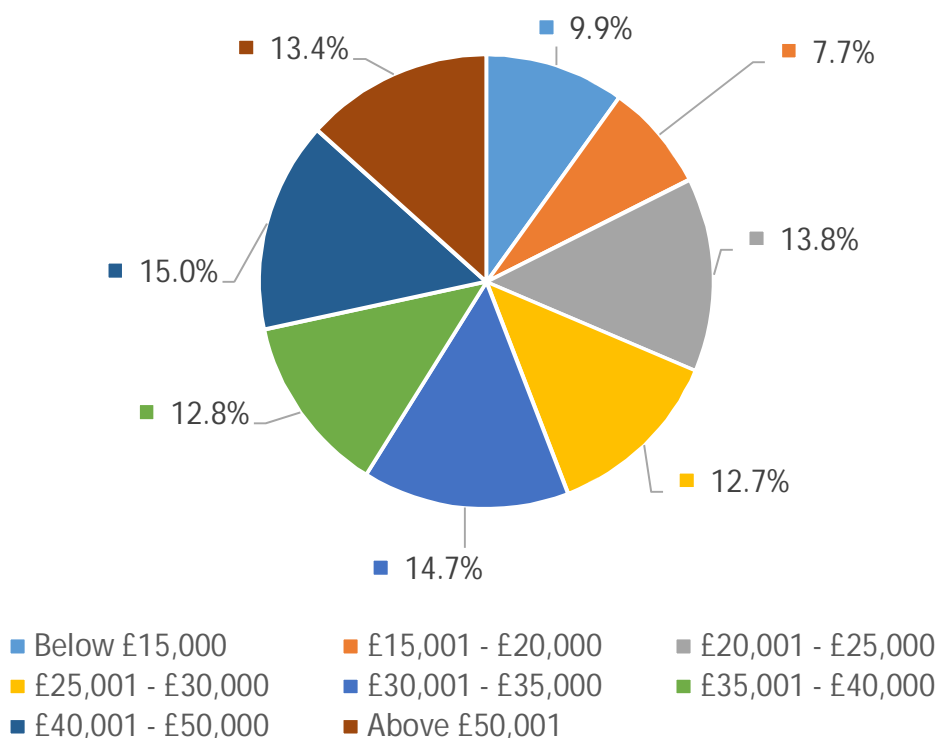
Question 6: Place of Work



- 3.16 Unsurprisingly, a majority of the respondents are located at the Precinct (83%), with 3% working at the Langford Campus and 14% spread across the 'Other' University sites.

Question 7: Salary Bracket

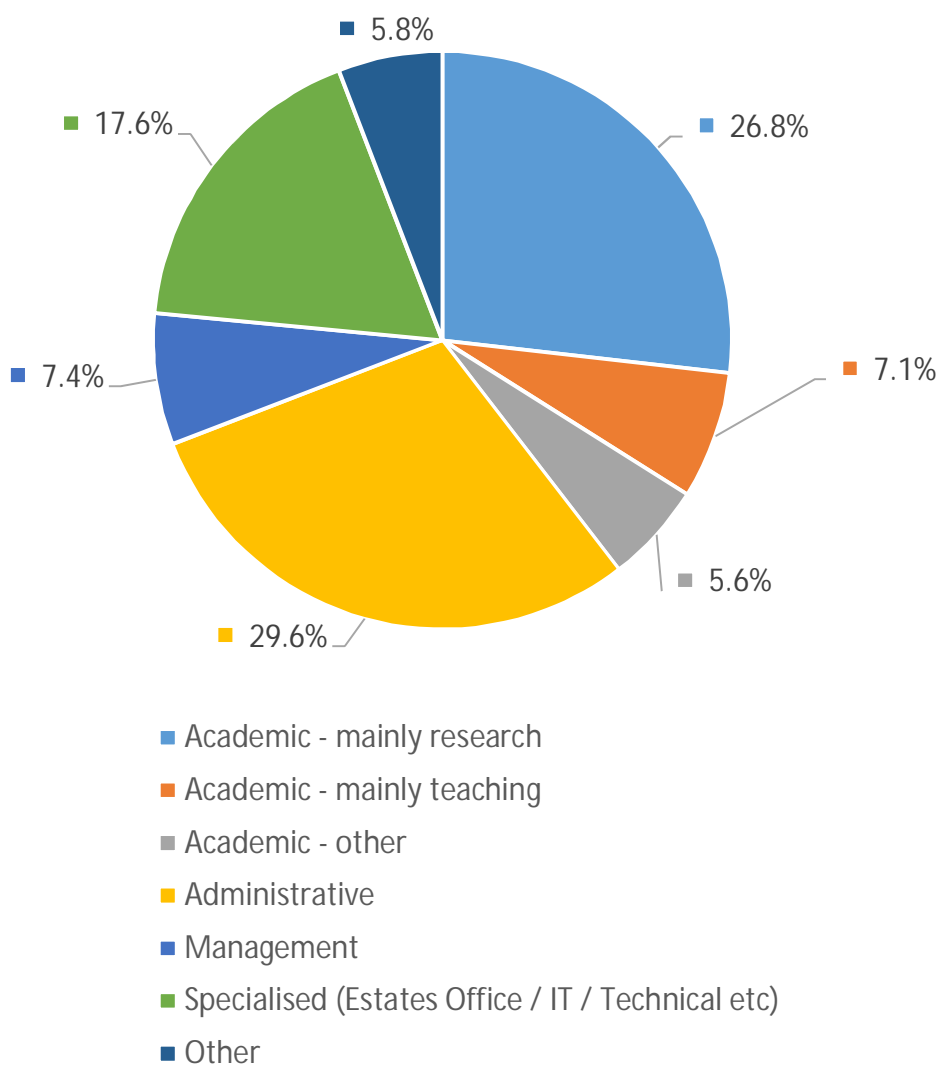
Q7. Which salary bracket does your salary fall into? - All Sites Combined



- 3.17 The chart illustrates that, across all of the UoB sites, the division of staff salaries is relatively evenly spread across each of the wage brackets indicated above.
- 3.18 The two lowest salary brackets (i.e. the '£15,000 to £20,000' and '£20,001 to £25,000' categories) also provided the least proportion of responses from staff members. This may indicate that there are fewer staff on a lower pay grade working at the university, or that those with higher pay grades were more willing to complete the survey.

Question 8: Job Role

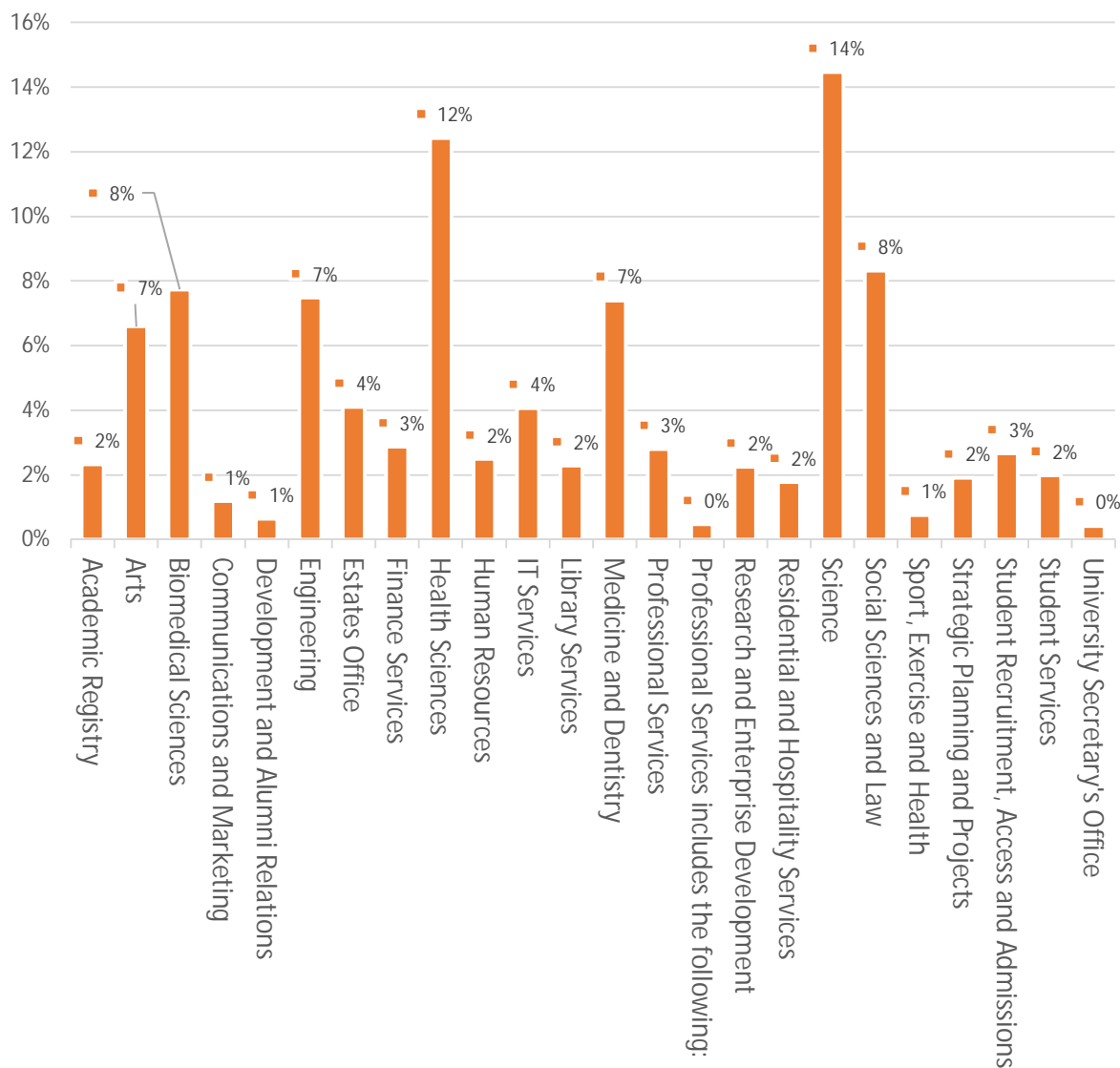
Q8. Which of the following best describes your role? - All Sites Combined



3.19 In terms of staff member job roles, nearly 40% are involved in academic work with nearly 30% being administrative staff. Management and Specialised staff make up a quarter of all responses across all of the sites.

Question 9: Department

9. What is your faculty/department? - All Sites Combined



- 3.20 Staff responses to the survey were received from a total of 24 University faculties/departments across all of the sites with most responses from the Science (15%) and Health Science (13%) departments.

Question 10: Contracted Working Hours

- 3.21 Across all of the sites, roughly three quarters of respondents reported that they were full-time.
- 3.22 In terms of working hours at each of the grouped Campus sites, as shown in **Table 3.3** below, both the Precinct and Other sites are reasonably similar to the overall proportions displayed above. However, the Langford site has a notably higher level of part-time workers (40%), which should be considered when developing suitable transport policies for this site.

Table 3.3: Work Hours by Campus		
Location	Full Time	Part Time
Precinct Campus	75%	25%
Langford Campus	60%	40%
Other	70%	30%
TOTAL	73%	26%

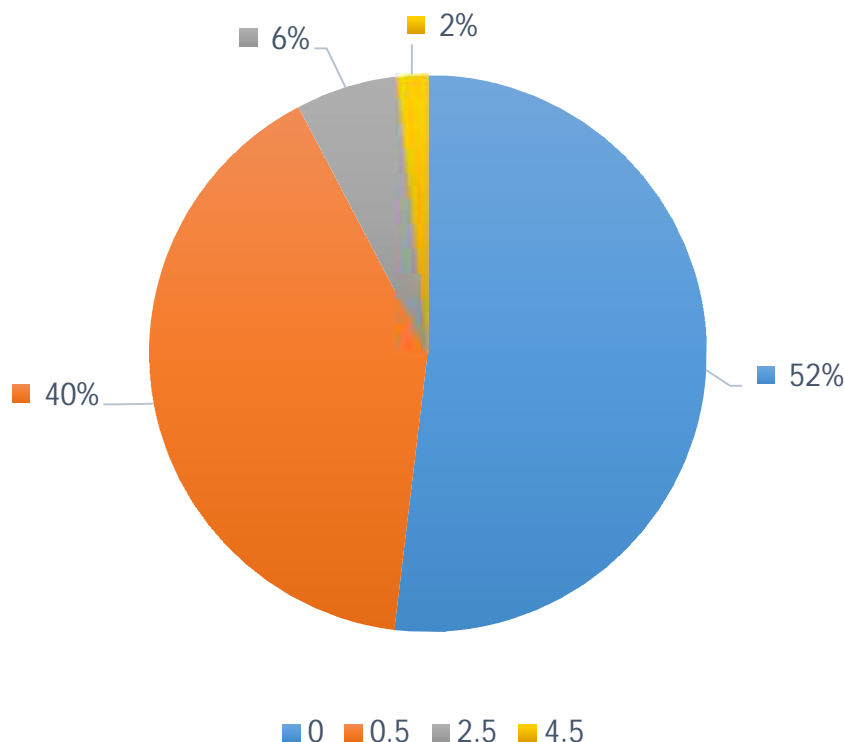
Question 11: Do you have any control over your working times?

- 3.23 Across all of the sites, nearly three quarters of respondents reported that they have some control over their start and finish times.
- 3.24 In terms of responses from each of the grouped Campus sites, as shown in **Table 3.4** below, both the Precinct and Other Campus sites are reasonably similar to the overall proportions displayed above. However, the Langford Campus has a notably higher level of workers who cannot control their work times (48%). This may be related to the higher level of part-time employees on the Langford site, as identified in Question 9, or to particular working practices at Langford, perhaps connected to animal care.

Table 3.4: Control Over Working Times by Campus			
Location	Yes	No	No Answer
Precinct Campus	74%	25%	1%
Langford Campus	52%	48%	0%
Other	69%	30%	1%
TOTAL	73%	26%	1%

Question 12: Working From Home

Q12. Number of Days Working From Home - All Sites



- 3.25 Across all of the sites, just over half of respondents reported that they do not work from home during an average week and therefore travel to University sites every day that they are scheduled to work.
- 3.26 40% of respondents reported that they are able to work from home for half a day per week. Although this may benefit staff morale and offer improved levels of flexibility, it may not reduce trips to and from University sites, as staff members would still be required to travel to and from their workplace on the half day that they have to work.
- 3.27 As illustrated, 6% of respondents are able to work half a week from home (assuming they all work full-time) with around 2% able to work from home the majority of the time and only attend University sites for one half day every week.

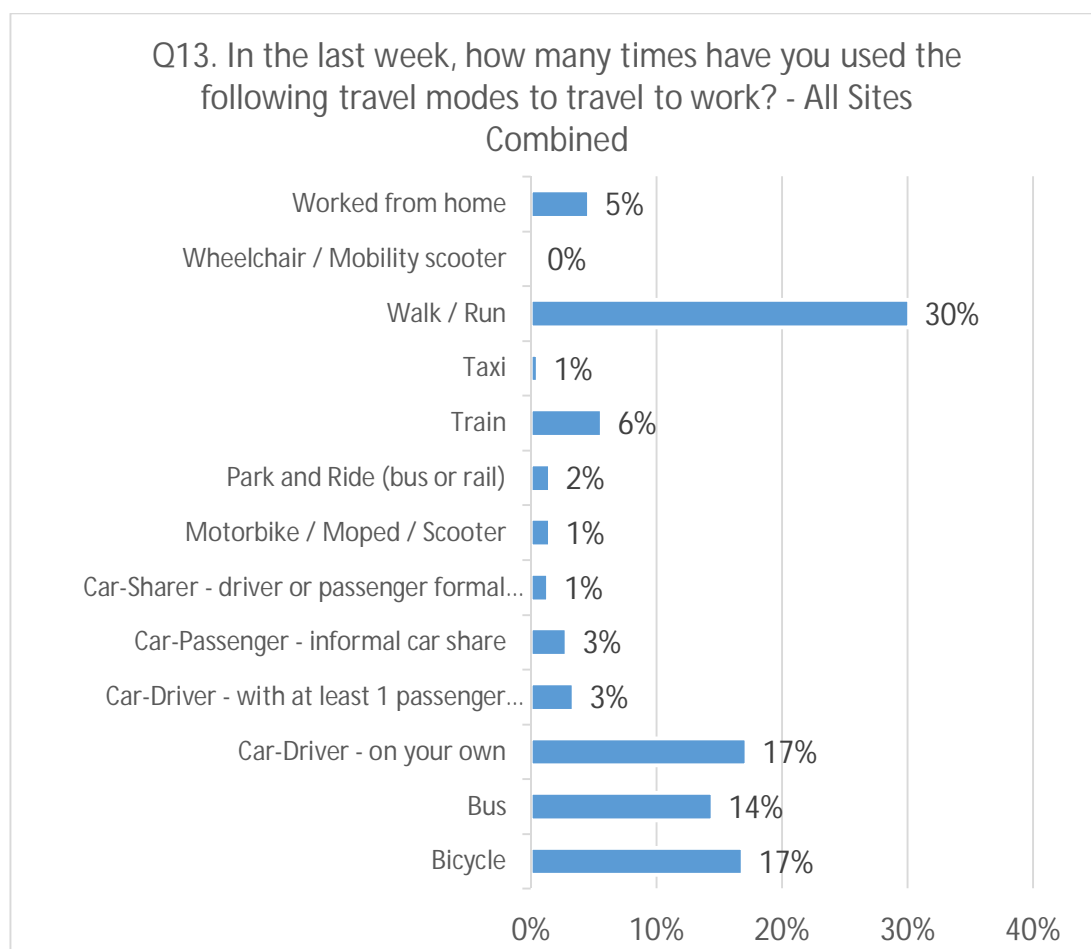
Section 3: Travelling to Work (Questions 13 – 20)

- 3.28 Questions 13 to 20 of the Staff Travel Survey asked respondents about their usual journey to and from work, including average travel times, mode choice and frequency of use of different modes, and for details of external influences that have influenced their travel behaviours over the last year.
- 3.29 To determine mode share proportions for staff travel, Question 13 asked staff members:
- 'In the last week, how many times have you used the following travel modes to get TO work?'*
- 3.30 This question attempted to identify the primary travel modes for individual journeys by staff members to University of Bristol sites.
- 3.31 However, as discussed in **Chapter 2**, the high number of trips undertaken by some respondents may indicate that certain staff members included the mode used on each leg of their inbound trip rather than just their main travel mode per journey. In addition, some staff may have incorrectly assumed that data for both inbound and outbound journeys were required thus resulting in multiple daily trips by different modes whereas the question was only requesting the primary inbound travel mode.
- 3.32 Despite this shortcoming, it was considered most appropriate to assess each of the responses as if they were individual trips in their own right as there is no robust method for separating out a respondents main travel modes and any ancillary travel modes such as walking to/from a bus, cycling to/from the train station, or other multi-modal travel choices such as driving to the Park and Ride and then taking the bus to the city centre before walking the last leg to University.
- 3.33 As such, to calculate the mode share results displayed overleaf, all staff responses to question 13 were included as individual full-length trips. Where a respondent had indicated that their primary inbound mode choice was, for example, 'car, park & ride and walking' (as part of a three-stage trip chain), each mode response is considered as an individual trip in its own right despite only making up a proportion of the total trip chain.
- 3.34 The above methodology may over-estimate the total number of full-length trips per day, and will probably also over-estimate the use of short-use modes such as walking , but will include all legs of trips so as to not underestimate the overall mode share.
- 3.35 The question, posed in its current form, is considered slightly confusing for users of multi-modal travel options who may use more than one mode per day (i.e. if a person travels by Park and Ride, they probably travel for the longest by car but are also using a sustainable mode to enter the city and therefore should be identified as such.

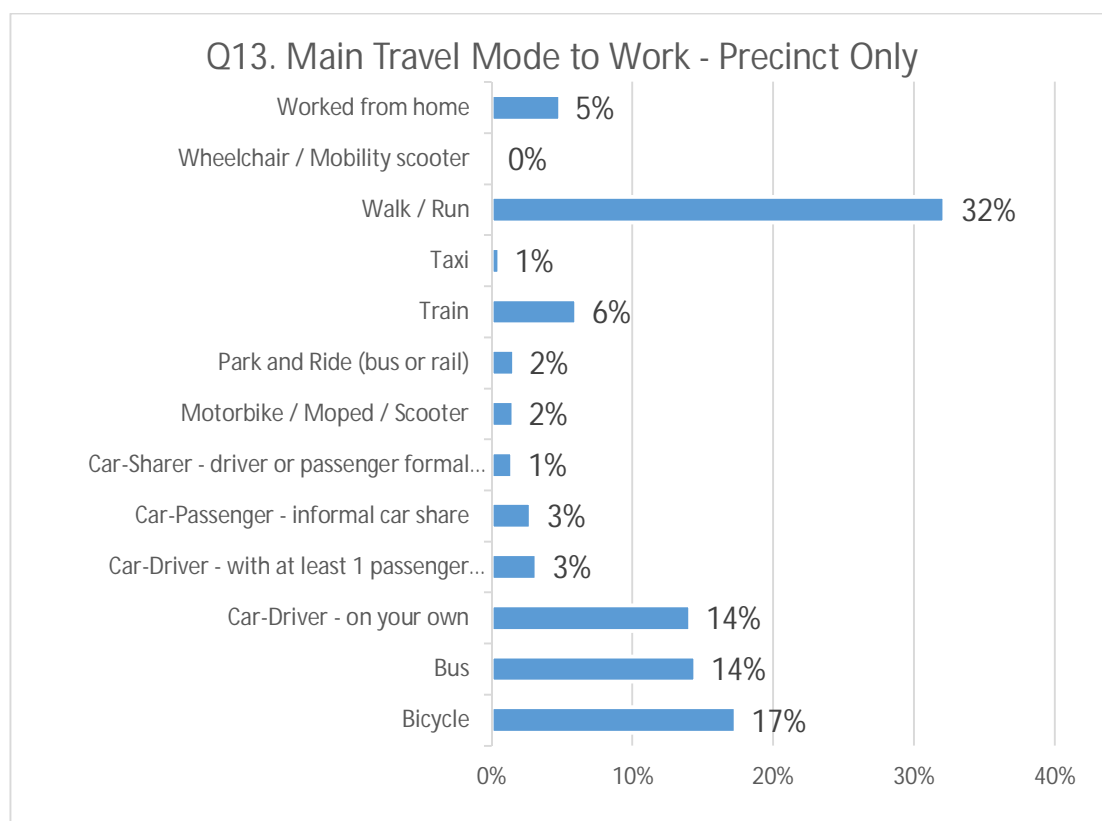
- 3.36 It is recommended that the question be amended to capture all inbound legs of trips as a single trip-chain rather than each leg carrying the same weight as a full-length trip. Although this may affect the mode share results and comparisons, it will provide a better representation of the actual progress the University is making towards achieving its targets. To address this, steps are being taken to clarify the question in any subsequent surveys to ensure that the question cannot be misinterpreted so the results represent an accurate reflection of the actual situation.

Question 13: Main Travel Mode

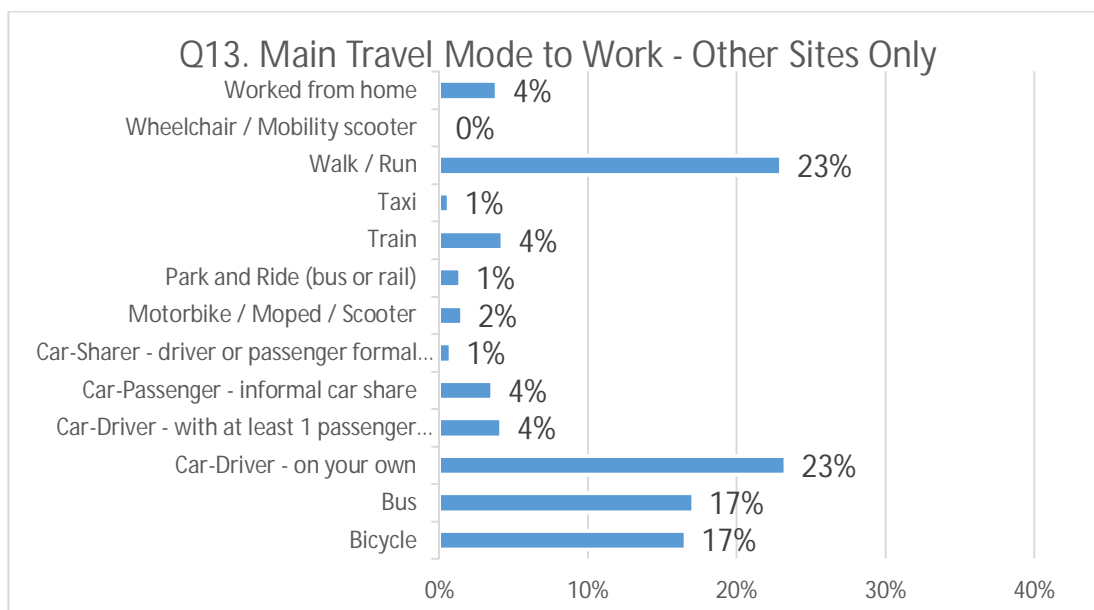
- 3.37 For this question, each mode choice identified in the survey is considered to be a unique trip.
- 3.38 To further illustrate the densities of mode choice, illustrative maps are provided in **Appendix C** outlining the number of staff members within each Lower Super Output Area (LSOA) and their preferred travel mode to University sites.



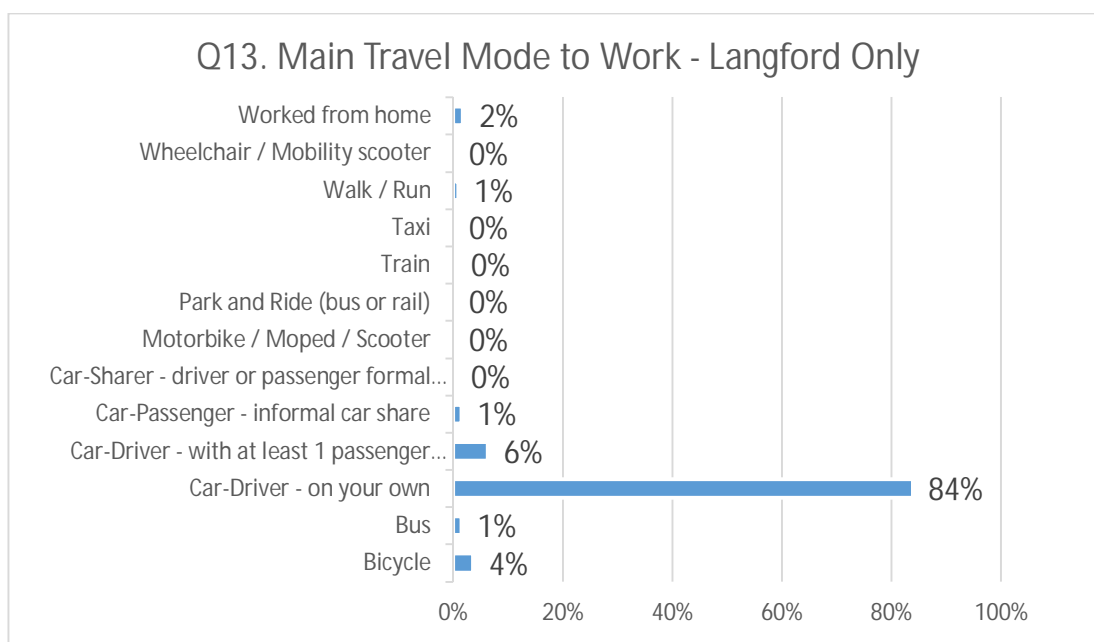
- 3.39 As the Question 13 Bar Chart for all sites (above) illustrates, the most popular travel mode by staff members was reported as walking with 30% of all trips to University sites.
- 3.40 SOV make up 17% of all trips across all the surveyed sites with a further 6% informally car sharing, whether as a driver or passenger. Only 1% of respondents reported using the University formal car share scheme, which is surprising given the additional incentives on offer for drivers to formally match their journeys with appropriate colleagues and pick up a passenger.



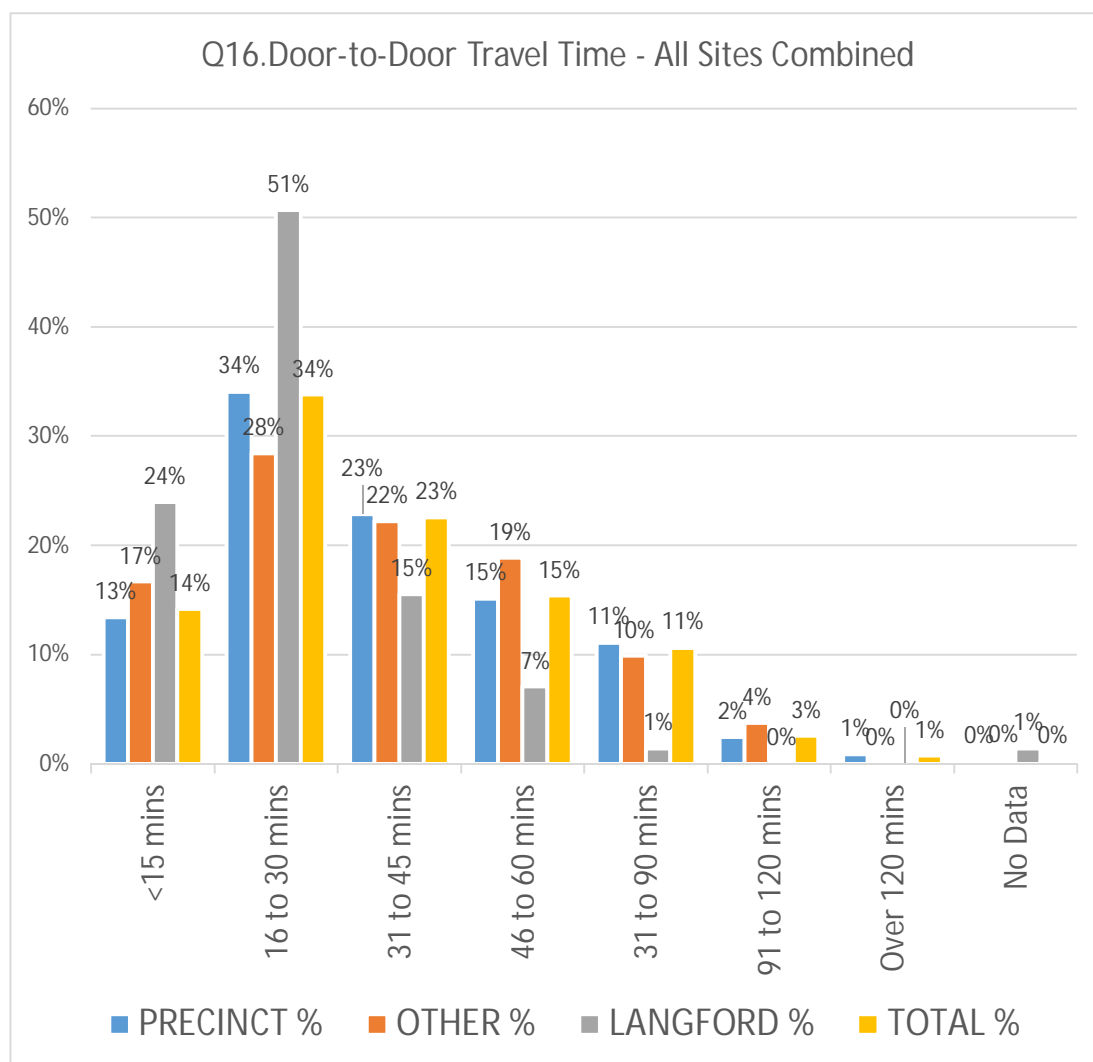
- 3.41 At the Precinct, as displayed above, the mode choice proportions are relatively similar to the overall across all sites which reflects its much higher number of staff movements.
- 3.42 For the Other Campus sites combined, as shown overleaf, a majority of the mode choices are broadly similar to the Precinct and the overall average. The main differences are observed in the 'Car Driver (on own)' category, which shows a much higher level at non-city centre locations, and the 'Walk/Run' category which is significantly lower, falling from 30% overall to 23% at the Other sites.



3.43 In contrast, responses from the Langford Campus below indicate that the dominant mode choice for travel to work journeys is driving a car alone (84%). When other car-based trips are added ('Informal car share' 1% and 'Car driver with passenger' 6%), this shows that 90% of staff members use a car to travel to the Langford Campus. Although this is a very high mode share for car travel, it does reflect the rural location of the Campus, the limited bus services and the nature of the local highway network, which may discourage walking and cycle travel to the Campus.



Question 16: Inbound Travel Time



- 3.44 As shown above, the most common travel time bracket for journeys to work for University staff is between 16 and 30 minutes, both for all sites individually and overall across all sites combined.
- 3.45 Although the proportions in each time category are similar for most sites, the data shows that travel to the Langford Campus generally takes less time than for other sites. When combined, the 'less than 15 minutes' and the '16 to 30 minutes' categories include three quarters of the staff at Langford compared to less than half at the Precinct (47%), Other sites (45%) and overall (48%). This reflects the rural nature of the Langford Campus with staff members at all city-based sites being required to negotiate access to the city, where journey speeds tend to be lower.

Question 20: Agents of Change

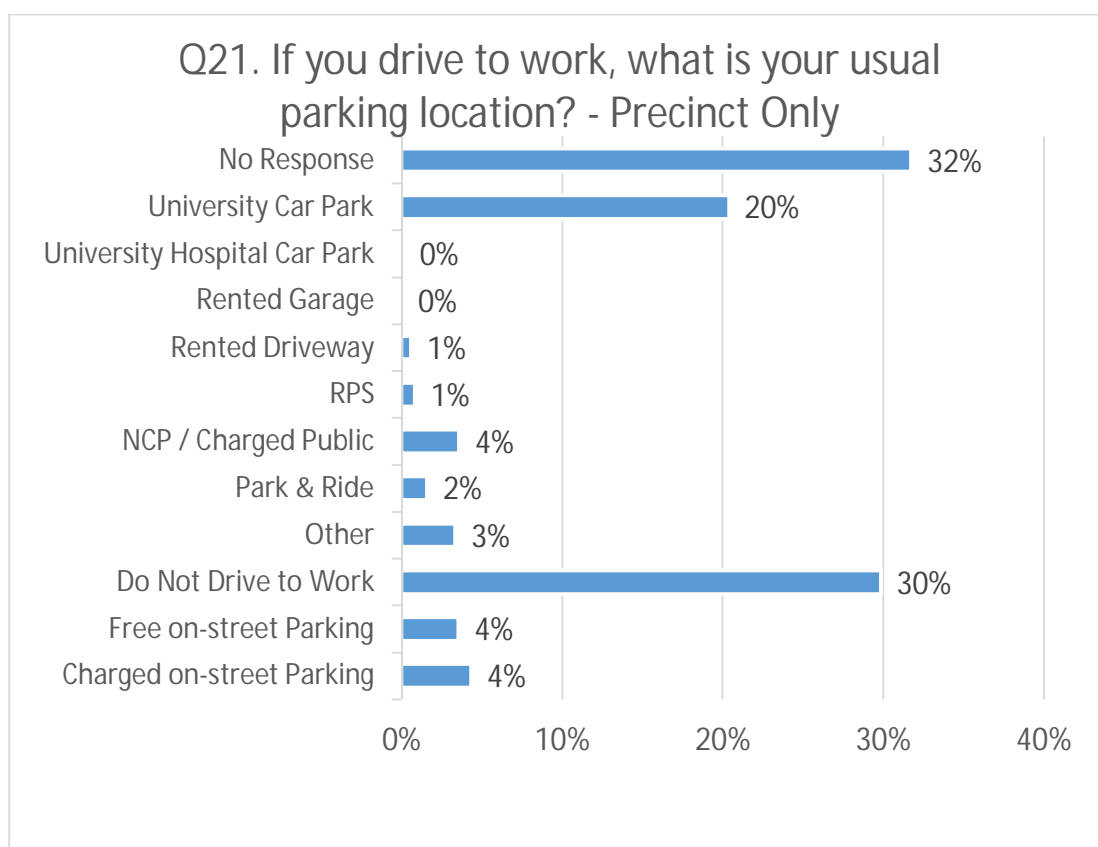
3.46 Respondents were asked to identify if any of a range of specified reasons had affected their travel choices over the last year (2015). **Table 3.5** below provides the rankings of the responses across all of the Campus sites combined. In summary, this shows that:

- just over one third of respondents had not adjusted their travel behaviour;
- one in ten respondents identified that increased journey times had caused them to modify their travel behaviour;
- one in ten respondents had moved house or job in the previous year. A change in the origin and/or destination of trips has the potential to open up alternative travel modes for use or may restrict travel options, depending on the accessibility of alternative travel modes;
- in terms of issues directly related to driving, 5% noted that a reduction in parking spaces had caused them to change their behaviour, 4% stated that the revised University parking policy had had an effect, 3% referred to increased parking charges and 2% to increased fuel costs.

Table 3.5: Reason for Change of Travel Behaviour		
Reason for Change of Travel Behaviour	% of Responses	Rank
Nothing Changed	34%	1
Extended Journey Time	10%	2
Moved House/Job	10%	3
Bus Routes Worsen	6%	4
Reduced Parking Spaces	5%	5
Change of Circumstance	5%	6
Introduction of New University Parking Policy	4%	7
Increased PT Costs	4%	8
Improve Health	4%	9
Change to work times	3%	10
Other	3%	11
Increased Parking Charges	3%	12
Increased Fuel Cost	2%	13
Medical Condition	2%	14
Environmental Concerns	2%	15
Improved Bus Routes / PT	1%	16
Improved cycle routes	1%	17
Improved walk routes	1%	18
Improved travel info	0%	19
Improved facilities / Incentives	0%	20
TOTAL	100%	-

Question 21: Parking Location

- 3.47 Respondents who drive to work were asked to identify their usual parking location. Given the restrictions on parking near or within the Precinct, with less issues at Langford and possibly many of the Other sites, this assessment focussed on the Precinct only.
- 3.48 As shown below, 30% of respondents at the Precinct stated that they do not drive, with a further 32% providing no answer to this question. This would appear to indicate that a total 62% of respondents do not drive or travel by car to the Precinct.
- 3.49 In terms of parking locations, parking within a University managed car park was usual for one in every five respondents (20%).
- 3.50 The use of alternative parking sites is split fairly evenly with 4% each using free on-street spaces, charged public car parks (e.g. Bristol City Council or NCP), and charged on-street parking.
- 3.51 Park and Ride travel only accounts for 2% of all parking locations with minor use of rented driveways and parking within the Residents Parking areas with a valid permit.

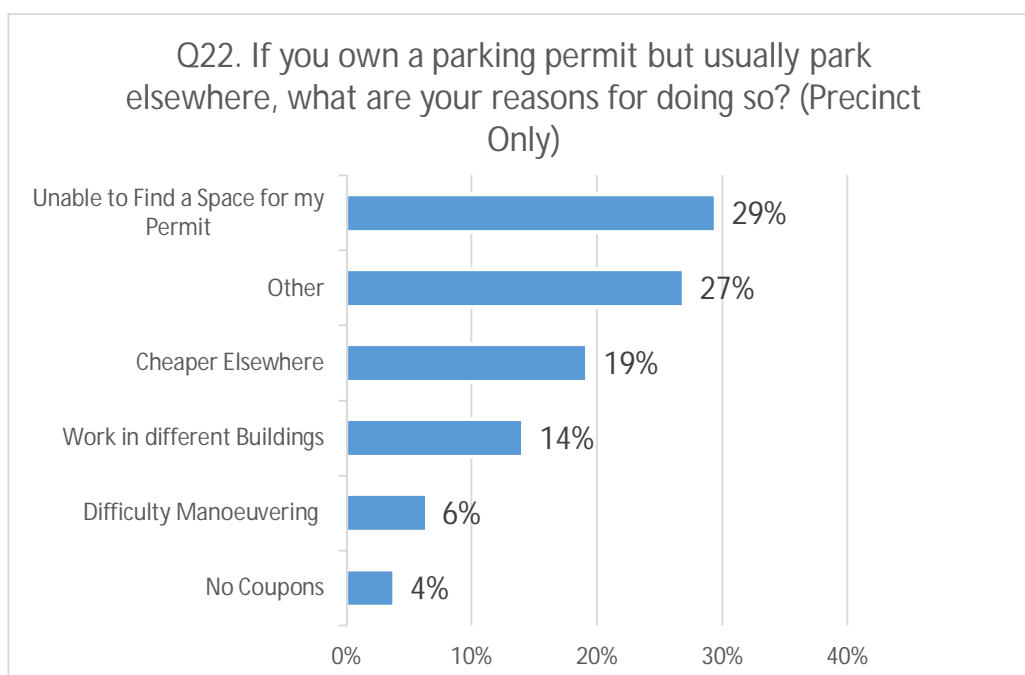


Question 22: Use of Parking Permits

3.52 Survey respondents with University parking permits were asked to identify their reasons for not usually parking within a University managed car park. The chart below illustrates the responses from staff at the Precinct only, as this area has the most constrained parking. The results indicated that 33% (653 of 1983) of staff responses from the Precinct did not own a permit with a further 63% (1252 of 1983) providing no response. As such, non-permit owners and 'no response' have been removed to focus on those with permits only with the responses from the remaining 4% (78 responses) summarised below.

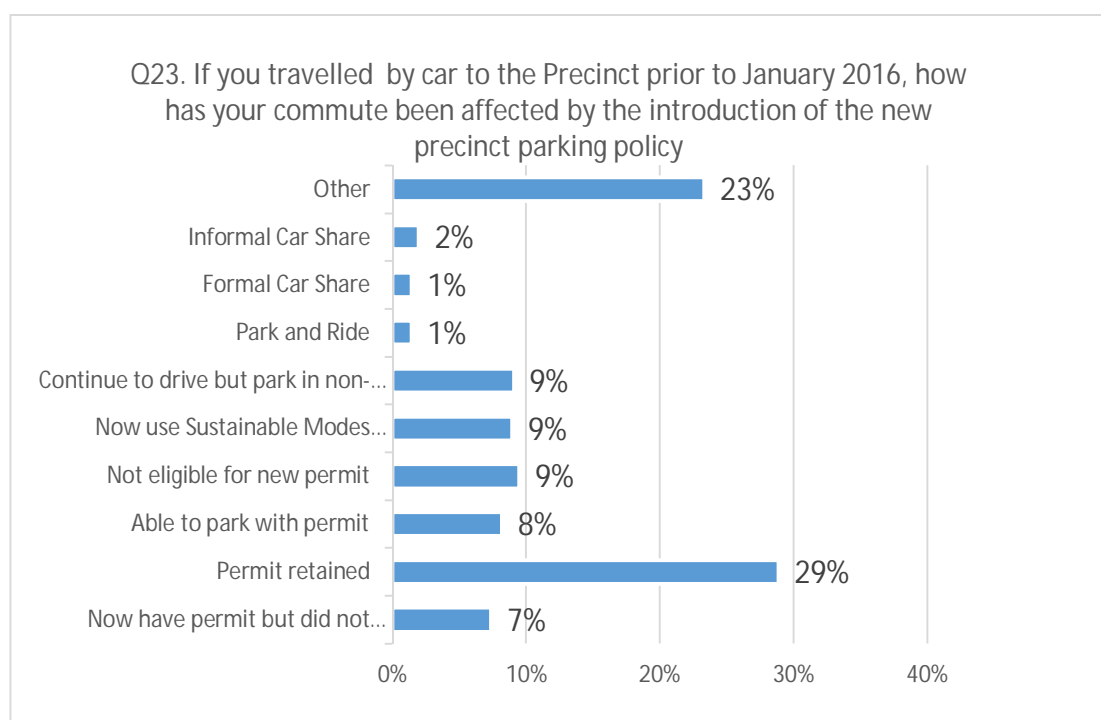
3.53 As shown:

- 29% of respondents identified that they were unable to make use of their permit as they could not find a suitable parking space;
- 27% had a different unidentified reason for not parking at the University;
- 19% reported that cheaper alternative parking is available elsewhere, which may include use of the Park and Ride facilities surrounding Bristol, use of rented private driveways and/or garages, or possibly short-term parking on-street, or in a private car park.
- 14% said they were unable to use their permit as they were working in a different building and the permits are not transferrable.



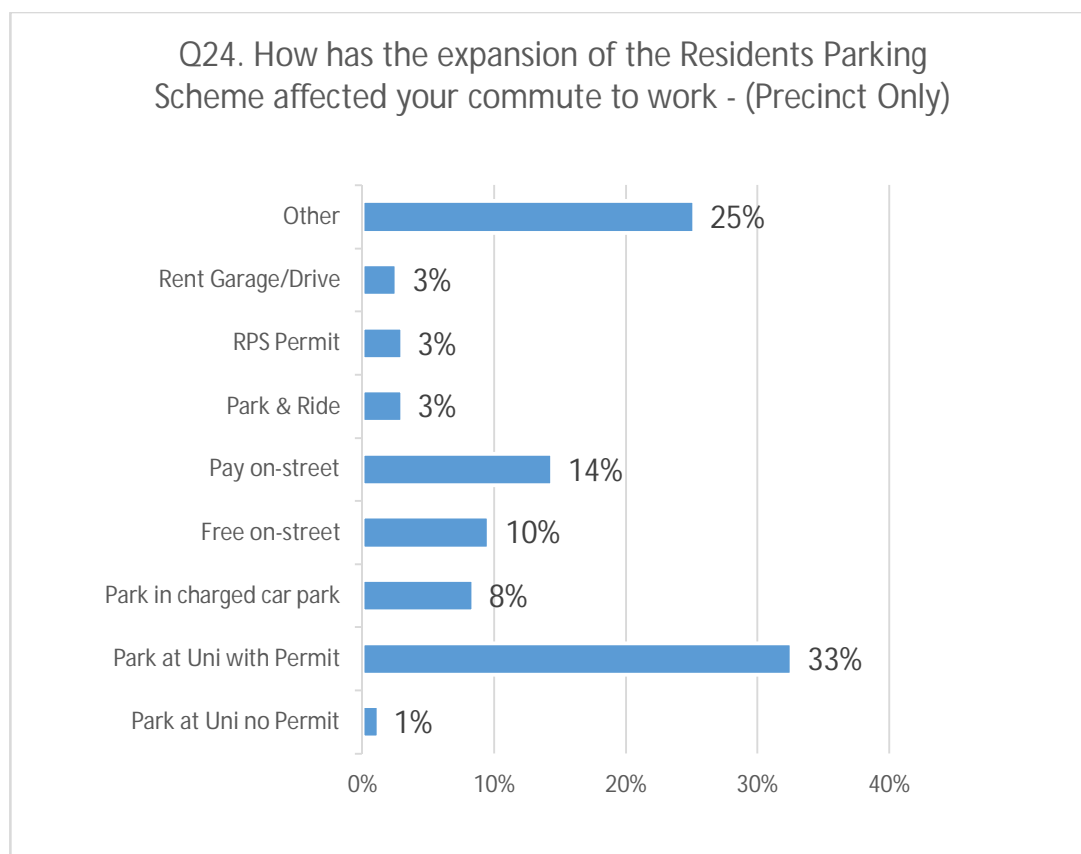
Question 23: Effect of University Parking Policy

- 3.54 Staff members who travelled by car to the Precinct prior to the introduction of the new parking policy in January 2016 were asked how their commute had been affected by the new policy. The results indicated that 64% of staff responses from the Precinct did not travel by car to the Precinct prior to January 2016, with the responses from the remaining 36% summarised below.
- 3.55 Of the staff who travelled by car prior to 2016, the responses below indicate that 9% continue to drive but no longer park in a University car park, 9% now travel by a sustainable mode, 9% were not eligible for a new permit, 3% had a permit and as a result of the policy change were able to park in a University car park, 29% of respondents (i.e.. just under one-third of those who previously drove to the Precinct) retained their parking permit, and 7% indicated that they now have a permit when they did not previously.
- 3.56 In terms of the impact of the new parking policy on SOV use, 6% indicated that they have changed their travel habits with: 1% switching to formal car share, 2% to informal car share, 1 % to Park and Ride; and 9% switching to sustainable travel modes including cycling, walking and public transport.
- 3.57 8% of staff respondents (213 staff members in total of the 2,559 surveyed across all sites, or 180 staff of the 2,136 responses from the Precinct only) selected an 'other' impact of the introduction of the parking policy. In many cases, the respondent ticked this option in addition to selecting an alternative as a way of providing additional details of their commute.



Question 24: Effect of Expanded Residents Parking Zone

- 3.58 Staff members were asked to consider the impact on their commute of the, then recent, expansion of the Residents Parking Scheme (RPS).
- 3.59 Just over half of the respondents (51%) indicated that they do not drive, with a further 24% leaving this question blank. The chart below excludes these responses and only provides information from the 25% of respondents who reported that they drive to the Precinct.

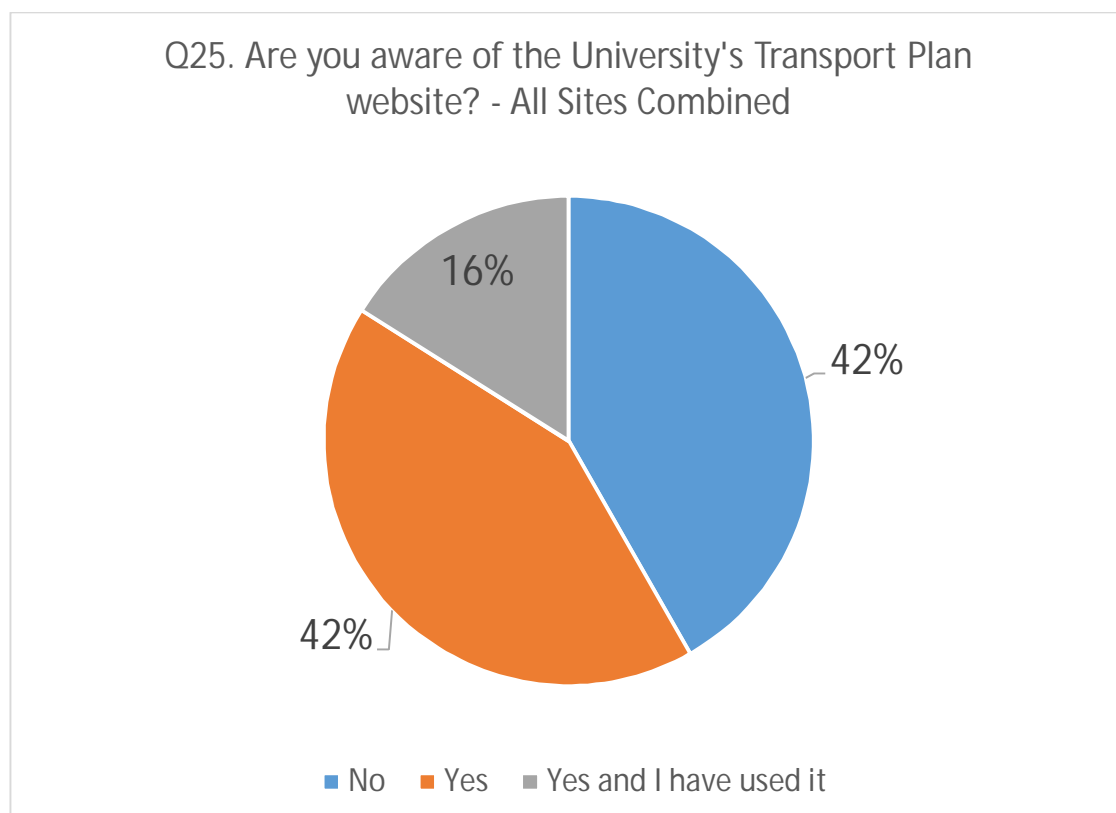


- 3.60 The chart above illustrates that one-third of car commuters park on University property with the appropriate permit and 1% park without a permit. 8% of car travellers park in a public car park with charges, 3% use a Park and Ride and 3% rent a private driveway or garage. Despite the expansion of the RPS, 27% of car-based staff travellers are still able to park on-street with 3% able to access a RPS permit for use, 14% paying for on-street parking and 10% finding free on-street parking. Around one quarter of responses from car travellers identified a different impact on their travel as a result of the expanded RPS. On examination of the detailed responses, these include a switch to motorcycle or cycle use, car sharing or that their commute has not been affected.

Section 4: Travel Plan Website Use (Question 25)

- 3.61 Question 25 of the Staff Travel Survey asked respondents about their awareness of the University's Travel Plan website that among other things, provides details of free cycle surgeries, free car club membership, discounted bus travel, and discounts at bicycle shops, including lock and light sales.

Question 25: Website Awareness



- 3.62 As illustrated above, across all of the sites, a majority of staff members are aware of the website (total of 58%) but only 16% have actually made use of it. The data shows that very similar levels of staff members are not aware of the website (42%), or are aware but have not used it personally (42%).
- 3.63 Given the relatively high level of staff members who were not aware of the benefits available on the website, additional efforts could be made to raise awareness and publicise the benefits.

Section 5: Business Related Travel (Questions 26 – 31)

- 3.64 Questions 26 to 31 of the Staff Travel Survey asked respondents for details of any business travel they undertake, including usual mode of travel, frequency, reasons for travel and details of expenses.

Question 26: Do you ever undertake Business Travel as part of your job?

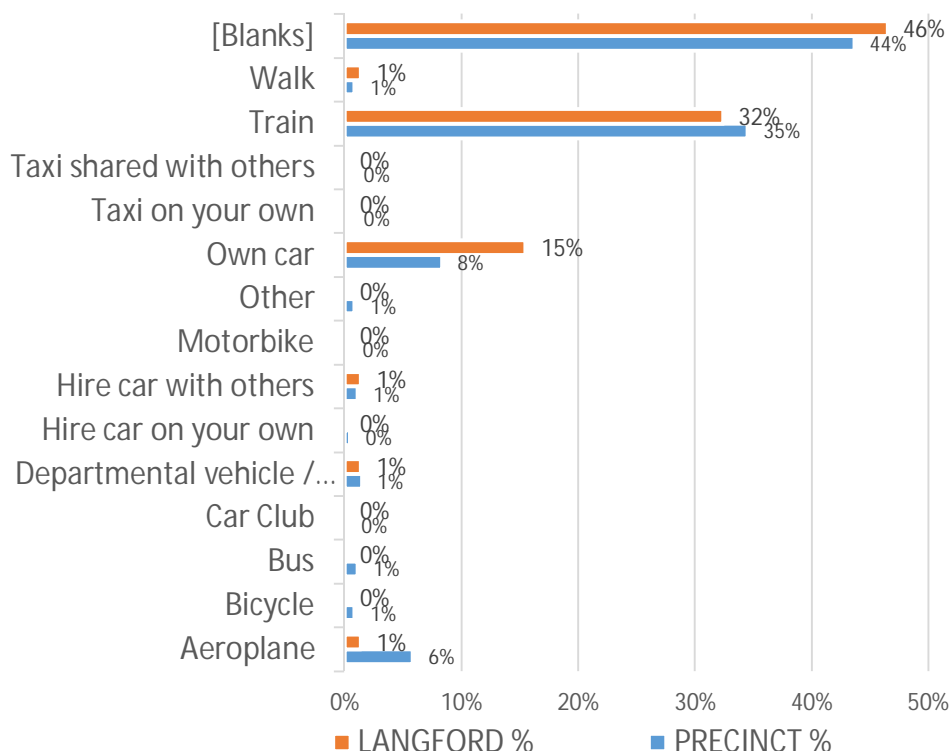
- 3.65 As the table below illustrates, just over half of the respondents from both the Precinct (53%) and Langford (51%) undertook some form of business travel as part of their job requirements.
- 3.66 The results exclude the 1% of respondents from the Precinct who did not answer this question.

Table 3.6: Numbers of Staff who Undertake Business Travel as Part of Their Job		
Location	No	Yes
Precinct Count	900	1048
Precinct %	46%	53%
Langford Count	35	36
Langford %	49%	51%
Total Count Both Sites	935	1084
Total Both Sites %	46%	54%

Question 27: Mode Choice for Business Travel

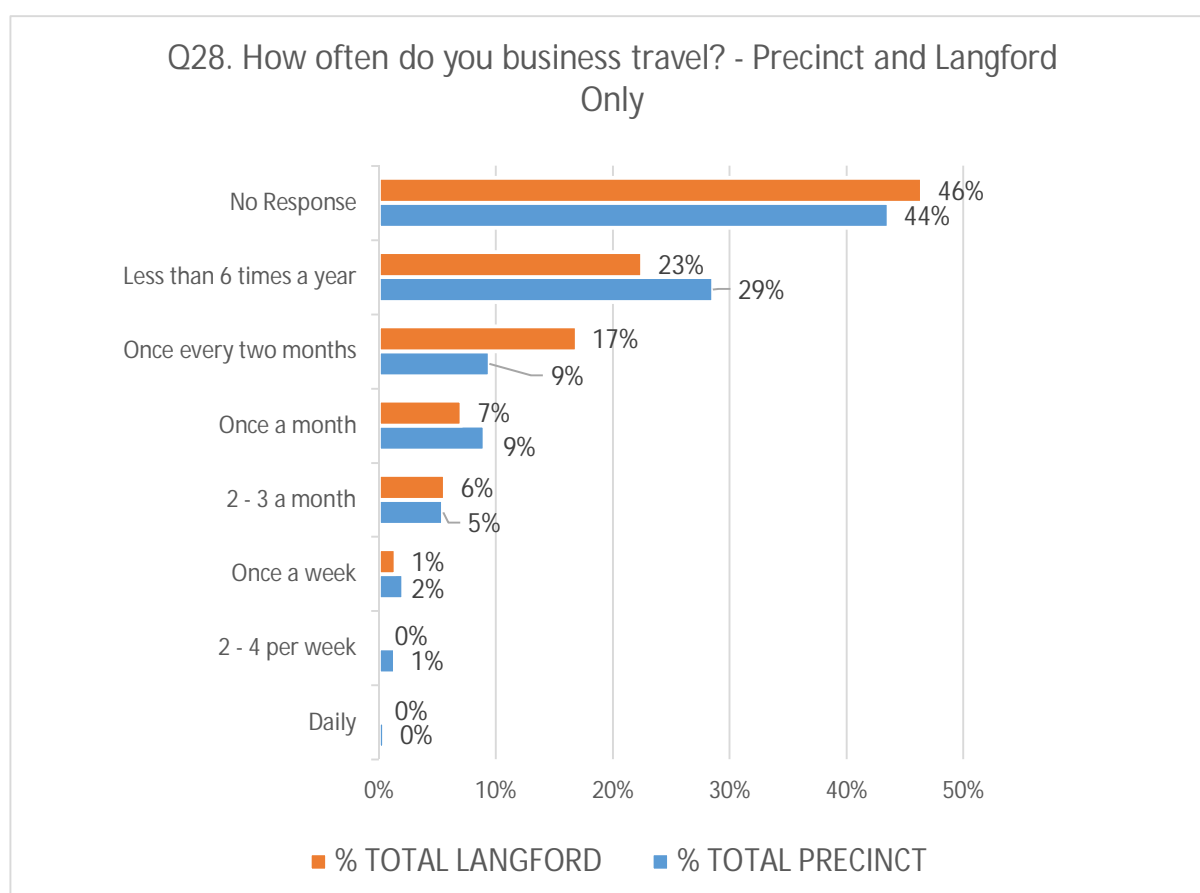
- 3.67 The chart below illustrates the travel modes used by staff members for business travel. As shown, nearly a half of respondents did not provide an answer to this question with 44% (i.e. 860 respondents) of Precinct staff and 46% (33 respondents) of Langford staff not indicating a preferred mode. This may be due to them not undertaking any business travel, which is reasonably consistent with the responses to Question 26 above.
- 3.68 As shown, the primary modes used for business travel are the train, with 32% (23 respondents) of Langford staff and 35% (680 respondents) of the Precinct staff using this travel method. This choice of mode may imply relatively long distance business journeys. Use of the staff member's private car is the second most popular travel mode, with around twice the proportion of Langford staff (15% or 11 respondents) using this compared to the Precinct (8% 164 respondents). Aeroplane travel is the third most common travel mode at the Precinct with 6% (115) of responses, again implying long distance travel. At Langford aeroplane, walking, hire car (with others) and the use of a departmental vehicle each account for 1% of responses with 1 staff member providing a response in each category.

Q27. What is your primary business travel mode? - Precinct and Langford Only



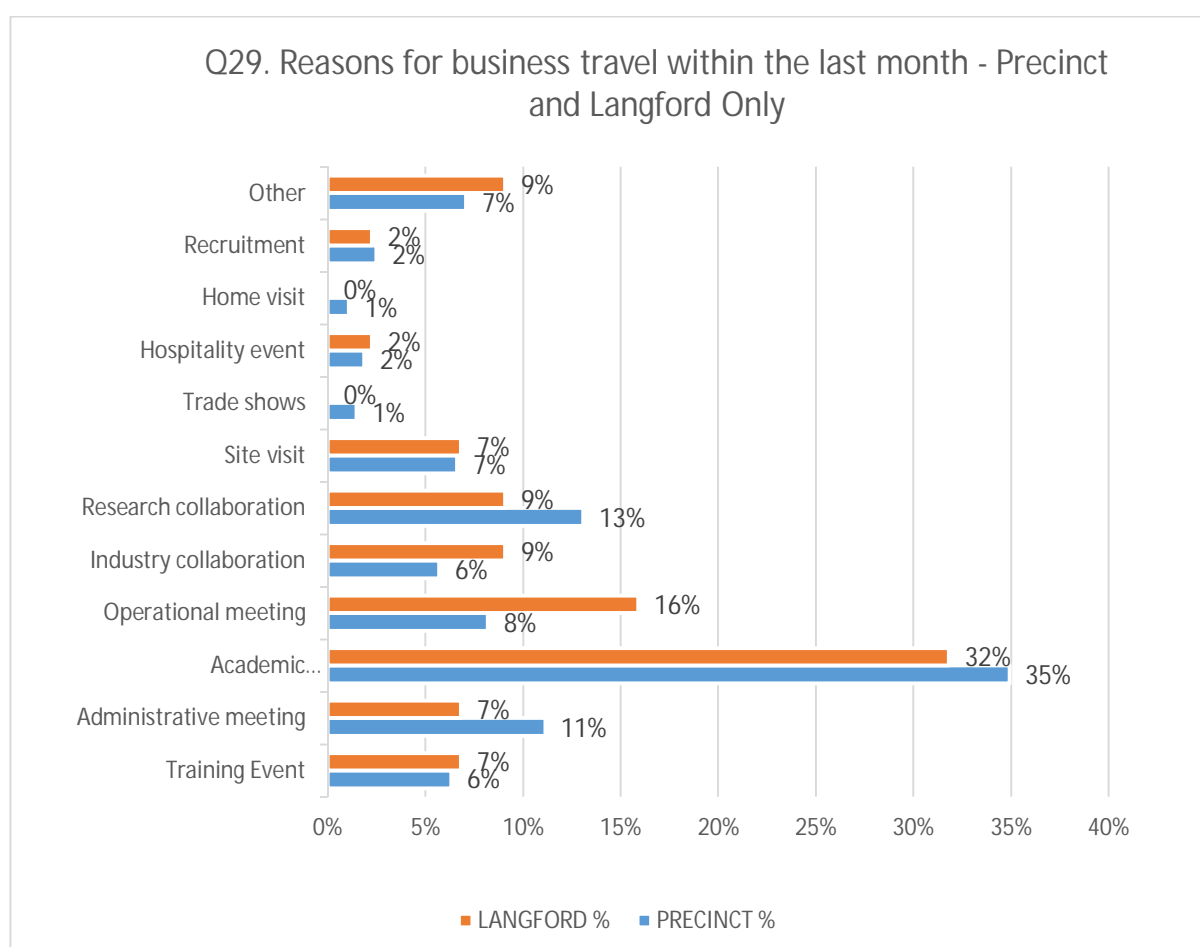
Question 28: Frequency of Business Travel

- 3.69 The chart below illustrates the frequency of business travel undertaken by staff located at the Precinct and Langford sites.
- 3.70 Nearly a half of respondents did not provide any answer to this question with 44% of Precinct staff and 46% of Langford staff not responding. This may be due to them not undertaking any business travel, which is reasonably consistent with the responses to Questions 26 and 27 above.
- 3.71 The chart reveals that 23% (16 respondents) of Langford staff and 29% (563) of Precinct staff undertake business travel less than six time per year. The proportion of Langford staff who undertake business travel once every two months (17% or 12) is more than double the proportion of Precinct staff (9% or 186). However, when these two high frequency categories are combined, both sites report around 40% of staff undertaking business travel once every two months or more. The remaining proportions are similar across both sites in each category.



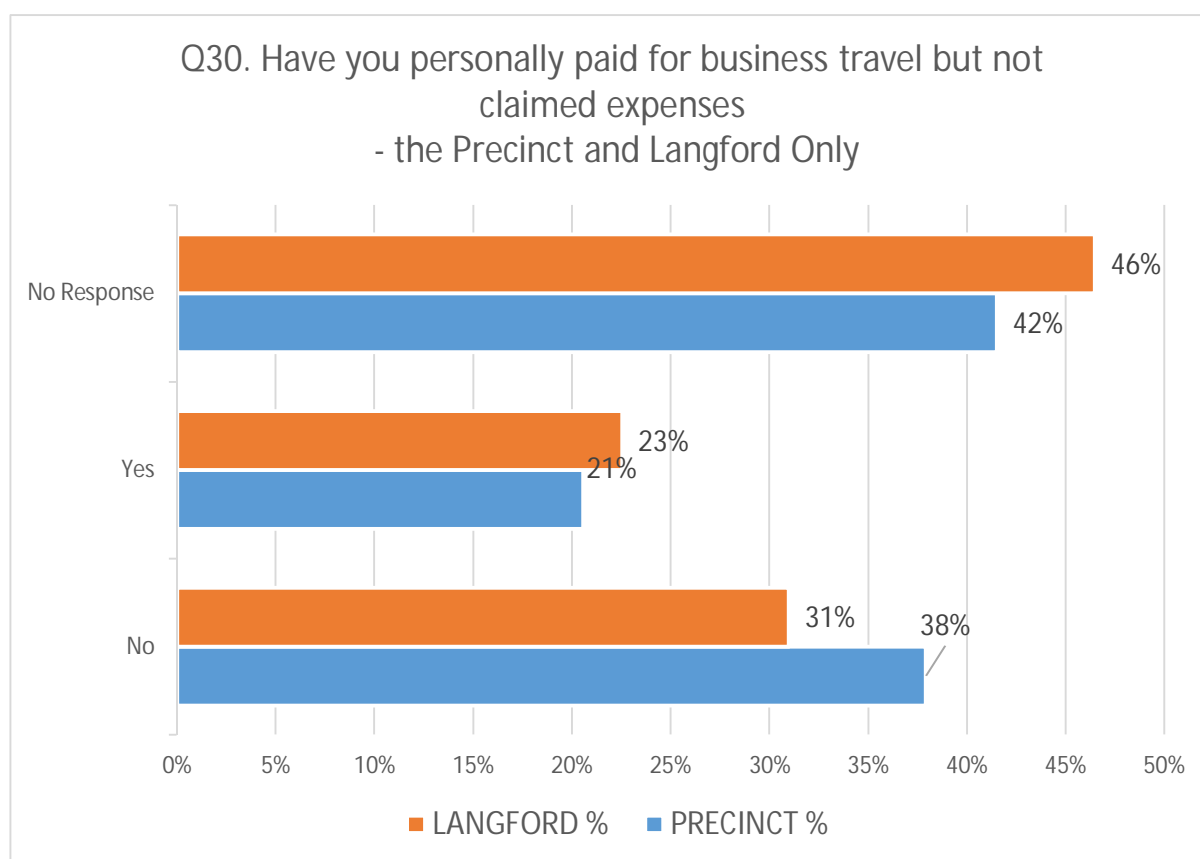
Question 29: Reasons for Business Travel

- 3.72 The chart below illustrates the reasons for undertaking business travel by staff located at the Precinct and Langford sites.
- 3.73 As shown, nearly a half of respondents did not provide an answer to this question with 46% (1109 respondents) of Precinct staff and 51% (45) of Langford staff not responding. These levels are consistent with the responses to Questions 26, 27 and 28 above. The small increases may be due to the staff member previously undertaking some business travel but not within the last month.
- 3.74 Excluding those who did not undertake business travel, as shown, travel to academic conferences or research sharing was the most popular reason for business travel at each site, with 32% (14) of Langford staff and 35% (448) of Precinct staff having undertaken this in the last month.
- 3.75 Other common reasons for business travel include site visits, meetings, training and research/industry collaboration with reasonably consistent levels observed at both sites.



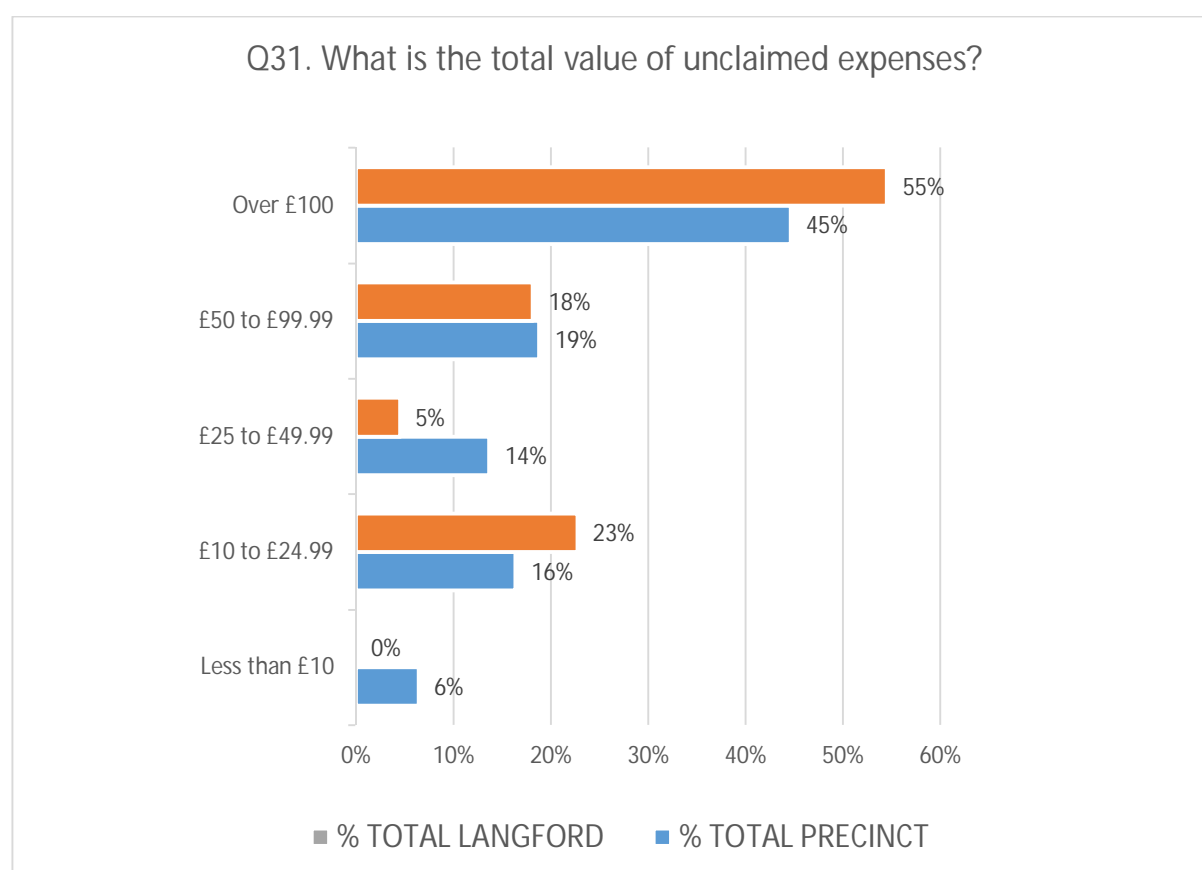
Question 30: Business Travel Expenses

- 3.76 The chart below illustrates the proportion of staff who have undertaken business travel in the last year but paid for it themselves and did not make an expense claim.
- 3.77 Almost a half of respondents did not provide any answer to this question with 42% of Precinct staff and 46% of Langford staff not responding. These levels are reasonably consistent with the responses to the previous four questions above, which may indicate that they did not undertake any business travel.
- 3.78 The chart shows that just over one fifth of staff at Langford (23% or 16 respondents) and the Precinct (21% or 405 respondents) did not make an expense claim for their business travel.
- 3.79 The chart also shows that a slightly higher proportion of Precinct staff (38% or 747 respondents) compared to Langford staff (31% or 22 respondents) had not paid for business travel themselves and were able to either make a claim or did not travel.



Question 31: Unclaimed Business Travel Expenses

- 3.80 In terms of the value of unclaimed business travel expenses, the chart below summarises the range of unclaimed expenses for each of the site groups and for the total overall.
- 3.81 This shows that roughly half of unclaimed expenses total more than £100 per staff member with Langford displaying the highest proportion, 55% having unclaimed expenses exceeding £100. The three categories between £99.99 and £10 are reasonably consistent between each site with between 14% and 19% of respondents in each category. The only anomaly is at Langford where only 5% of staff have unmade claims between £25 and £50, although this is balanced out in the lower £10 to £25 category where Langford reports 23% of responses.
- 3.82 In total, of the 2,365 staff responses to the survey, 452 staff members across all of the sites stated that they had at least some unrecovered expenses. This equates to an overall rate of around 19% of the total staff responses. Of these, 206 staff reported expenses exceeding £100 were unclaimed, and a further 83 staff had unclaimed amounts in the range £50 to £100.



Section 6: Alternatives to Business Travel (Questions 32 - 35)

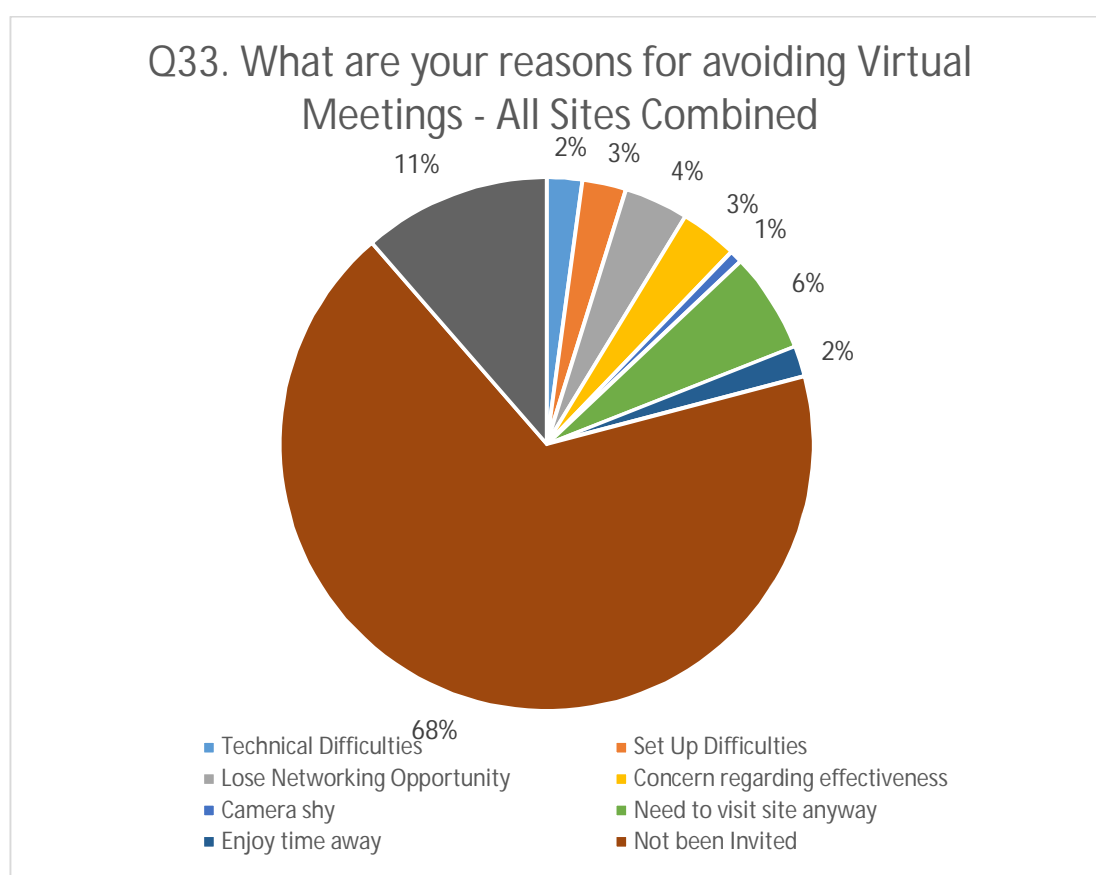
- 3.83 Questions 32 to 35 of the Staff Travel Survey asked respondents about their use of 'virtual meeting' solutions as an alternative to business travel.

Question 32: Use of Virtual Meeting Resources

- 3.84 Roughly half of all staff respondents indicated that they had been present at a virtual meeting involving two or more persons in the 2016 Survey.
- 3.85 In total, of the 2,365 respondents to the survey across all of the sites, 1,174 had not attended a virtual meeting whilst 1,191 had attended a virtual meeting.
- 3.86 The percentage proportions at each of the individual site groups were the same, suggesting that access and use of virtual meetings appear to be consistent at each of the University sites.

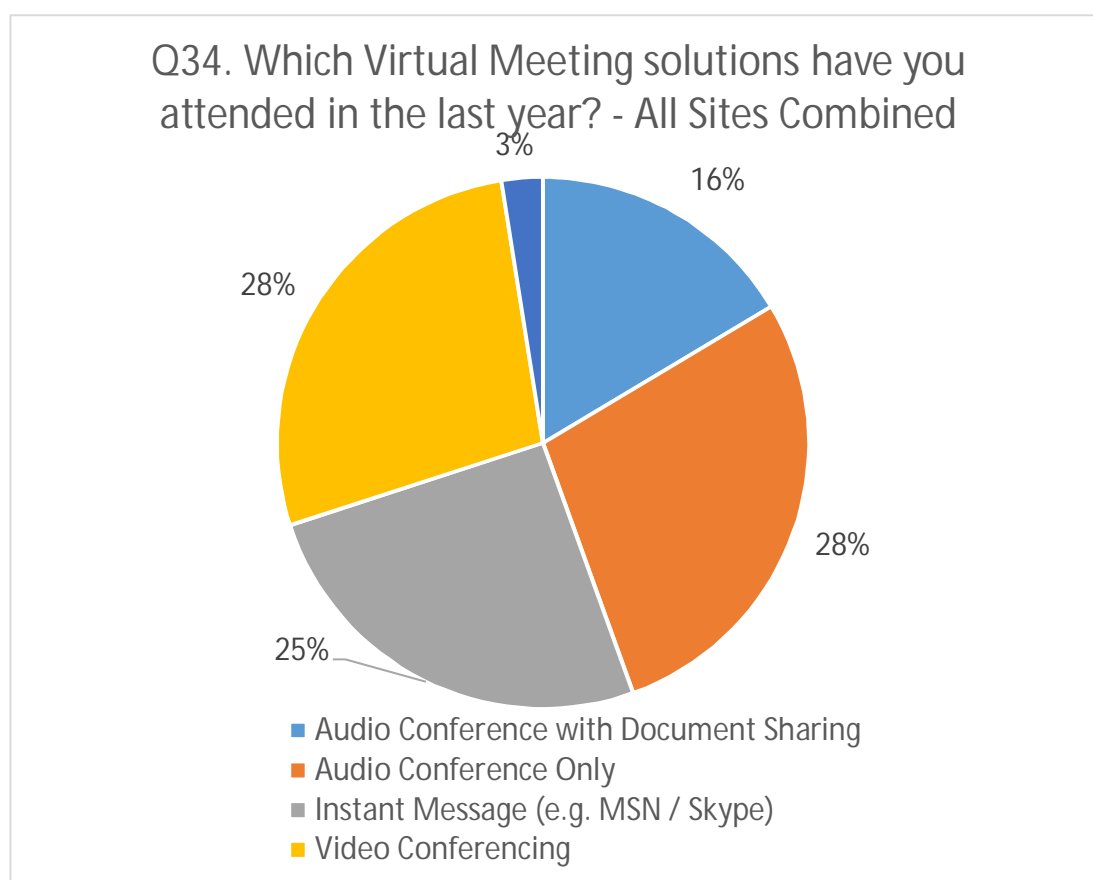
Question 33: Reasons for Low Use of Virtual Meeting Resources

- 3.87 Staff members who indicated in Question 32 that they had not been present at a virtual meeting were asked for the reasons for not taking part in one during the previous year. There were 1,320 responses from the 2,365 staff who completed the survey (56%), excluding any blanks.
- 3.88 The most common reason given for not attending a virtual meeting is that the staff member was not invited to one. Given the wording of the question, this is to be expected.
- 3.89 In terms of avoidance of virtual meetings, a range of between 1% and 4% of responses identified specific reasons for non-attendance including combining a meeting with a site visit (6%), retaining networking opportunities (4%), enjoying time away from the workplace (2%) and being camera shy (1%).
- 3.90 Technical reasons for not using the virtual meeting resource were identified by around 8% of the respondents to this question, 2% citing technical difficulties, 3% citing set up issues and 3% claiming that this type of meeting was ineffective for their needs. 11% had another reason for not using virtual meetings.



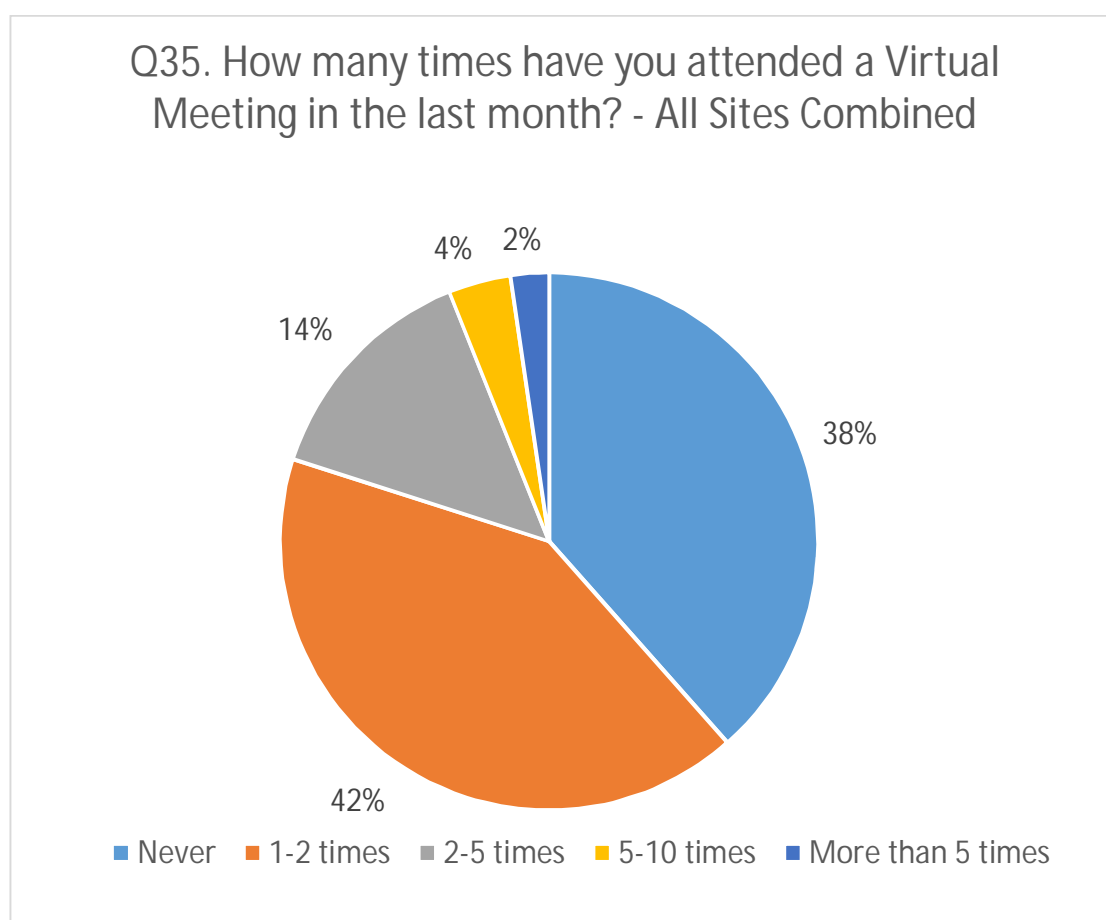
Question 34: Types of Virtual Meeting Resources Used

- 3.91 This question asked staff who have used the virtual meeting resources about the solutions they had used. To focus on the distribution of these resources, any blank responses have been removed, which equates to 1,073 of all responses or 45% of all staff members.
- 3.92 The raw data for the remaining staff members shows that 2,162 responses were received, with several staff members noting that they used two or more of the specified meeting types.
- 3.93 Of these, in terms of the types of virtual meeting solutions used by those staff who were present at a meeting within the last year, the chart below shows that roughly equal proportions of staff used 'Audio Only' conferencing (28%), Instant Messaging (25%) and Video Conferencing (28%). Audio conferencing with document sharing was less popular at 16% of all virtual meeting responses
- 3.94 3% of responses identified an alternative virtual meeting method. Further examination of the raw dataset revealed that this included the use of Skype, Webinars, Google Hangouts, Facetime and Goto Meetings.



Question 35: Frequency of Use of Virtual Meeting Resources

- 3.95 This question asked staff who have attended virtual meetings how often they have used the available resources within the last month. To focus on the distribution of these resources, any blank responses have been removed. This equates to 680 of all responses, 29% of all staff respondents.
- 3.96 Of the remaining responses, 38% of staff had not attended a virtual meeting within the last month, while 42% of staff had attended once or twice.
- 3.97 As expected, the number of staff attending decreased as the frequency of meetings increased, with 14% claiming to have attended between two and five times, and 4% between 5 and 10 times. Only 2% claimed to have more than 5 virtual meetings within the last month.



4. STAFF TRAVEL CARBON EMISSIONS

Introduction

- 4.1 Based on the information collected in the Staff Travel Survey, it is possible to provide an indication of the carbon footprint of staff travel movements between their home and place of work.
- 4.2 For simplification purposes and for consistency with previous survey year datasets, the calculation is a necessarily broad-brush assessment, as no details were collected regarding the engine size, fuel types, or emissions of vehicles used by staff members during their travel to work.
- 4.3 To capture and compare information over a suitable average period, the calculations are based on the staff members' travel habits on the week before the survey was completed. This includes information on the number of days worked, the number of journeys undertaken and the travel modes used.
- 4.4 Again, for simplicity, the distances between the staff member's home address and usual place of work is taken as a straight line between origin and destination coordinates of each location. Although this underestimates the actual travel distance between these points, it does provide a simple method to compare progress against an earlier emissions data calculation using the same method of assessment.
- 4.5 The quantity of Carbon Dioxide (CO₂) assumed to be generated per mile per respondent by each mode of travel is provided in **Table 4.1** below. The figures are taken from UK Government conversion factors provided for company reporting. The 2015 figures were obtained from <http://www.ukconversionfactorscarbonsmart.co.uk/>, which is a website produced by the Department for Environment, Food & Rural Affairs and the Department of Energy & Climate Change. This is consistent with CO₂ levels used previously for the assessment of emissions generated by student travel as outlined in the *Student Travel Survey Analysis Report* (November 2015).

Table 4.1: Carbon Dioxide Emissions per Mile Travelled	
Source	grams CO ₂ / mile
Average Car (petrol)	306.9
Car Share (driver or passenger) 50% of average car	153.5
Average Motorcycle	187.77
Bus / Coach (per passenger mile)	161.4
Taxi (per passenger mile)	281.2
Train (per passenger mile)	72.4

- 4.6 The average distance travelled by each staff member between their home address and their usual place of work over a typical week has been calculated based upon the answers to a number of questions.
- 4.7 First, the distance between their home address and their usual place of study was calculated based on the answers to question 5 (home post code) and question 6 (usual place of work) using 'as the crow flies' distances to provide a robust but conservative comparison with previous assessments.
- 4.8 The number of journeys per week was then calculated using the answers to question 13 (mode choice for travelling to place of work). This was then multiplied by the distance between their home postcode centroid and their usual place of work, and then doubled to account for the two-way journey to and from their place of work. To prevent an overestimation of the distances travelled and account for respondents who were confused by the question by reporting an excessive number of inbound journeys to the University (i.e. more than 5), the maximum number of (two-way) journeys was set at 10 (5 inbound, 5 outbound).
- 4.9 The distance travelled in a week was then split between the numbers of times a travel mode was used by respondents, which was provided in the answers to question 13. For example, if a staff member stated that they usually travel by bus three times a week and drive twice (and did not state that they used any other mode) it has been assumed that 60% of the distance they travel in a typical week was by bus and 40% as a car driver.

Table 4.2: Distance Travelled per Week in Miles (based on 2,365 responses)		
Mode	Distance travelled per week (miles)	Average number of miles travelled per week by a single staff member
Bicycle	22699	9.6
Bus	23652	10.0
Car-Driver - on your own	49525	20.9
Car-Driver - with at least 1 passenger (informal car share)	11972	5.1
Car-Passenger - informal car share	4672	2.0
Formal Car-Sharer	6294	2.7
Motorbike / Moped / Scooter	5800	2.5
Park and Ride (bus or rail)	2071	0.9
Train	20726	8.8
Taxi	884	0.4
Walk / Run	37748	16.0
Wheelchair / Mobility scooter	10	0.0
Worked from home	0	0

- 4.10 The calculated distance travelled by each staff member by each mode was then added together and the total divided by the number of survey respondents to calculate the average distance travelled by each mode by each staff member. The results as summarised **Table 4.2** on the previous page.
- 4.11 The average distance travelled per staff member by mode was then multiplied by the CO₂ emissions produced per mile by each mode as set out in **Table 4.1**.

Table 4.3: CO₂ Emissions Produced by Staff Members in a Week			
Mode	Average grams CO ₂ produced by one person in a week	kg CO ₂ produced by all 2,365 respondents in a week	kg CO ₂ produced by all 6,943 Staff in a week
Bicycle	0.0	0.0	0.0
Bus	1614.1	3817.4	11206.7
Car-Driver - on your own	6426.7	15199.2	44620.7
Car-Driver - with at least 1 passenger (informal car share)	776.8	1837.1	5393.3
Car-Passenger - informal car share	303.2	717.0	2104.9
Formal Car-Sharer	408.4	965.9	2835.6
Motorbike / Moped / Scooter	460.5	1089.1	3197.4
Park and Ride (bus or rail)	141.4	334.3	981.4
Train	634.5	1500.6	4405.3
Taxi	105.1	248.6	730.0
Walk / Run	0.0	0.0	0.0
Wheelchair / Mobility scooter	0.0	0.0	0.0
Worked from home	0.00	0.000	0.000
TOTAL			75475.4

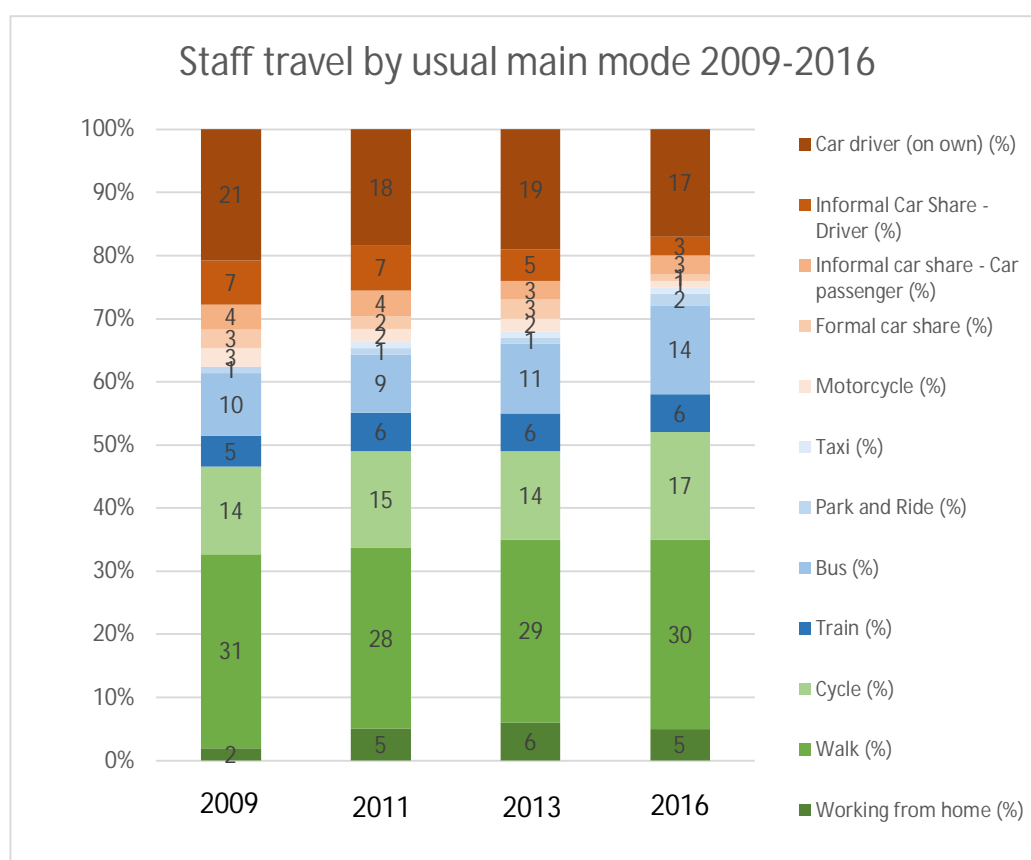
- 4.12 In terms of the overall CO₂ output from all 6,943 University staff members (assuming their travel behaviours are reasonably represented by the 2,365 sample who responded to the survey), the above data can be factored up by a ratio of 2.93573 to give a total CO₂ output per week of 75,475kg for all staff movements to and from work. The results of the analysis can be seen in **Table 4.3**.

5. COMPARISON WITH PREVIOUS TARGETS AND DATA

Recent Trends

5.1 This section provides a comparison of mode share proportions from the 2016 staff travel survey with data for previous years. The following observations are made.

- A slight reduction in SOV use (i.e. Car Driver) to 17% from 19% in 2013 is observed. This continues a steady downward trend since 2009.
- The proportion of informal car sharers has declined slightly from 8% in 2013 to 6%. This shows a downward trend since 2009 when 11% travelled using this method. Formal car sharing has declined from 3% in 2013 to 1%.
- Travel by walking has remained relatively stable at 30% compared to previous years, which range from 28% to 31%.
- Use of the bus has increased to 14% from a range of 9% to 11% recorded previously.
- Cycle travel has increased slightly to 17% from a stable range of 14% to 15% in previous years.

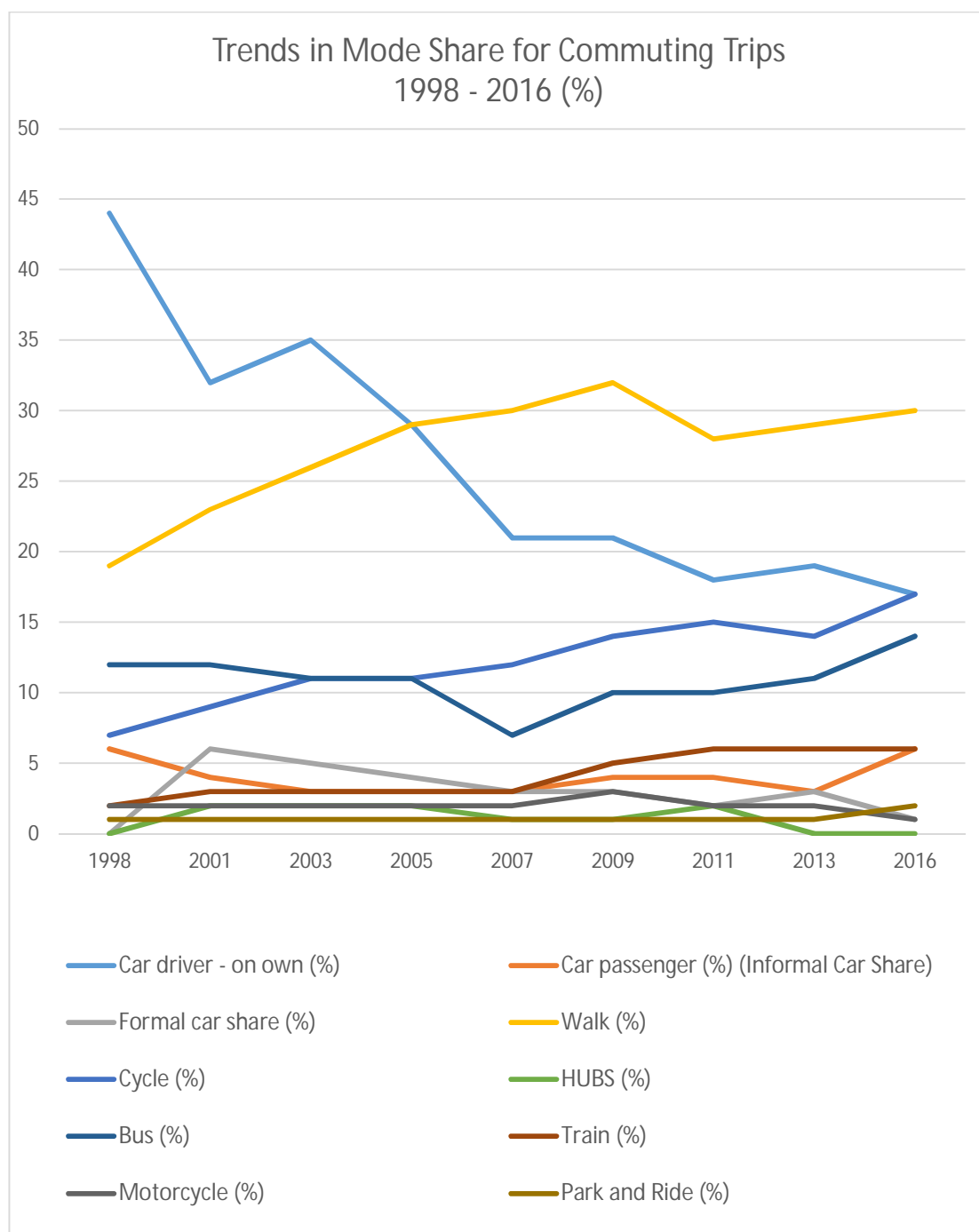


Comparison with Longer Term Mode Share Data

- 5.2 For completeness, the mode share data is also compared with longer term survey results from the University Travel Plan website to identify whether the changes in mode share reflect a longer-term trend. The data comparison is displayed in **Table 5.1** below and overleaf in a line chart.

Table 5.1: Trends in Mode Share (excludes 'Taxi' and 'Working from Home' for consistency)									
Year	1998	2001	2003	2005	2007	2009	2011	2013	2016
Car driver - on own (%)	44	32	35	29	21	21	18	19	17
Car passenger (%) (6	4	3	3	3	4	4	3	3
Formal car share (%)	-	6	5	4	3	3	2	3	1
Walk (%)	19	23	26	29	30	32	28	29	30
Cycle (%)	7	9	11	11	12	14	15	14	17
HUBS (%)	-	2	2	2	1	1	2	N/A	N/A
Bus (%)	12	12	11	11	7	10	10	11	14
Train (%)	2	3	3	3	3	5	6	6	6
Motorcycle (%)	2	2	2	2	2	3	2	2	1
Park and Ride (%)	1	1	1	1	1	1	1	1	2
Total (%)	93	94	99	95	83	94	88	88	91

- 5.3 It should be noted that since 2012, the recording of HUBS as a staff travel mode has been discontinued due to the low level of use. HUBS is a dedicated Hospital and University Shuttle Bus Service, which runs from Monday to Friday on a circular route that includes Temple Meads Railway Station and various Hospital sites within Bristol.
- 5.4 It is assumed that any staff still using HUBS to access the University would instead record their journey as a bus trip, thus all bus travel (other than Park and Ride) is combined into a single category regardless of the bus servicer used.



- 5.5 As illustrated above, the use of SOVs to travel to University sites shows a notable downward trend since 1998 with only one instance of an increase in 2003. In contrast, walking and cycling have shown a notable increase since 1998, with only one instance of a reduction in walking in 2011 and in cycling in 2013. All other modes, including bus travel, show only minor overall changes, although bus travel declined from 1998 to 2007 but has climbed steadily since then to rise above its 1998 starting value.

Comparison with Travel Plan Targets

5.6 Chapter 5 of the University *Combined Student and Staff Travel Plan 2009-2016* includes a series of transport related targets. The key targets related to staff travel movements are summarised below.

1. Develop a framework to support sustainable modes of transport to work and study at the University by staff ... (e.g. walking, cycling, public transport and car sharing) achieving 85% (Baseline 2007) respectively by 2016 for sustainable modes of transport.
2. Reduce the percentage of SOV journeys made to the University by staff ... by 2016 from 21% to 15% (baseline 2007) and to remain at 4% (baseline 2008) respectively.
5. Reduce car and aviation business mileage by 5% by 2016 (from a baseline of 2009).
8. Identify, measure and monitor carbon emissions related to all University transport by 2015.

Comparison with Travel Plan Targets

5.7 With regards to meeting the above targets, the data analysed in this report relating to the 2016 Staff Travel Survey indicates the following results.

1. Sustainable travel by staff (i.e. using either public transport, Park and Ride, car share, walking or cycling) accounted for 76% of staff trips rising to 81% if working from home is included. This compares to a staff target of 85%;
2. Examination of the data indicates that 17% of all staff commuting trips were SOVs. So the staff Travel Plan target for SOV use in 2016 has been missed by 2%.
5. Progress towards the reduced use of cars and aviation travel for business mileage cannot be determined as the 2013 survey did not appear to collect the relevant information. However, the 2016 survey did note that there is an increasing awareness and usage of virtual meeting resources which itself will reduce business travel; and,
8. Carbon emissions have been measured and monitored in this report.

6. SUMMARY AND CONCLUSIONS

Introduction

- 6.1 The 2016 University Staff Travel Survey was undertaken in January 2016 to collect information regarding the travel habits of staff, and issues that impact on their choice of travel mode.
- 6.2 The survey was undertaken as part of the University of Bristol's ongoing commitment to manage the impact of travel and promote sustainable travel choices, as set out in its Travel Plan.
- 6.3 Invitations to complete the online survey were emailed to all 6,410 staff members (both full-time and part-time) and 2,365 responded. The survey response is sufficient to be considered as representative of the staff population.
- 6.4 The surveys identified that the vast majority (81%) of staff trips between their home address and their place of work were by sustainable modes (walking, cycling, public transport, Park & Ride, car share), with 17% travelling in single occupancy vehicles.
- 6.5 Comparison with a previous travel survey from 2013 shows an increase in the number of staff using sustainable modes of travel to work (up from 60% in 2013 to 76%, or 81% if 'working from home' is included), with slight decreases in the proportion using SOVs (down to 17% from 19%).
- 6.6 The survey revealed how staff members had adjusted their travel behaviour over the previous year. Although around one third of staff had made no adjustments to their travel mode choice, 10% had changed modes as a result of increased journey times using their previously selected travel mode, 10% changed as a result of moving house/job, with 6% changing mode due to worsening bus travel times. The effect of parking restrictions only affected 9% of staff trips, with 5% of staff changing travel habits due to reduced parking being available and a further 4% changing as a direct result of the new University Parking Policy, whether towards car use as they became eligible for a parking permit, or away from car use as they were no longer able to obtain a parking space.
- 6.7 Of those staff members who drove, 29% claimed experiencing difficulties in using their University Permit due to limited spaces available, with 33% of staff who drove parking within a University car park. This compares to 32% of staff who drove but parked in an alternative location, whether a private car park, on-street or in a rented driveway/garage.

- 6.8 The survey identified that a significant number of staff members did not claim for their business travel expenses in the previous year, with 46% of all respondents failing to claim for expenses in excess of £100.
- 6.9 The survey examined the use of virtual meeting resources and identified that over half of staff had used the virtual meeting resources in 2016. Issues with use of the available facilities was confined to a small number of staff members, with a significant level of use of the range of meeting options available. This may indicate that staff are becoming more adept at using the virtual meeting technology.
- 6.10 The survey data has been used to calculate the carbon footprint of staff travel movements between their home address and their place of work each week. It was calculated that total two-way staff travel movements to and from University sites generated 75,475kg of CO₂ per week for the 6,943 staff, equating to an average of 10.9 kg of CO₂ per staff member per week.
- 6.11 Comparing the travel survey results to the Travel Plan targets reveal some areas where further work is required if the target is to be met by 2016, and some areas where the 2016 target has been significantly exceeded. Overall the results show some significant improvements in the use of sustainable travel over the Travel Plan period.

APPENDIX A

2016 STAFF QUESTIONNAIRE

University of Bristol Staff Travel Survey (2016)

The University of Bristol Staff Travel Plan is now well established and every two years a staff travel survey takes place. Results from the survey help the Strategic Transport Group (STG) review and refine the way the Travel Plan operates. This is your main opportunity to influence how the Travel Plan develops.

Further to the introduction in January 2016 of a new parking policy for the University Precinct and associated satellite sites, this year we have included additional parking-related questions. The information you provide, even if you do not drive to work, will be valuable in helping us to assess the effectiveness of the policy on University staff and University operations.

Thank you for your help.

Closing date

Please complete this paper copy and return it in the internal post to **TRAVEL PLAN ASSISTANT, SUSTAINABILITY, 1-9 OLD PARK HILL, BS2 8BB** by the end of the day on 6th December 2016. Alternatively you can complete the survey on line:
<https://travel.onlinesurveys.ac.uk/2016staff>

Explanatory text or additional information is provided in our FAQ attached to the back of the survey.

***This survey is available in large print on request to Dan Carey:
(0117) 331 7259 or transport-plan@bristol.ac.uk***

Data protection

All individual responses to the survey will be treated in the strictest confidence. All data collected in this survey will be held securely and not passed to any other party, in accordance with the Data Protection Act 1998.

Postcodes will not be used for communication in any form, but are important in assessing the effectiveness of different parts of the travel plan.

At the end of the survey you will be asked to give your email or contact details if you would like to be entered into the prize draw. Giving this information is optional and your details will not be used for any other purpose than that stated.

SECTION 1: ABOUT YOU

1. Are you?

☐

Male

☐

Female

☐

Transgender

2. What is your age group? *[please select one]*

☐
☐

Under 18

36 – 45

☐
☐

18 – 25

46 – 55

☐
☐

26 – 35

56 plus

3. Do you have a disability that affects your travel to work arrangements?

☐

Yes

☐

No

4. Do you have caring responsibilities that affect your travel to work arrangements?

☐

Yes

☐

No

5. What is your home postcode? _ _ _ _ _

SECTION 2: WORKING AT THE UNIVERSITY

6. Where is your main place of work (or if you travel around, where are you based)? *[please select one]*

<input type="checkbox"/> Beacon House	<input type="checkbox"/> Frenchay Hospital	<input type="checkbox"/> Southmead Hospital
<input type="checkbox"/> Berkeley Square	<input type="checkbox"/> Hampton House	<input type="checkbox"/> Southwell Street buildings
<input type="checkbox"/> Burwalls	<input type="checkbox"/> Howard House	<input type="checkbox"/> Stoke Bishop Halls
<input type="checkbox"/> Canynge Hall	<input type="checkbox"/> Langford	<input type="checkbox"/> UBHT buildings
<input type="checkbox"/> Clifton Halls	<input type="checkbox"/> Oakfield & Barley House	<input type="checkbox"/> Victoria Rooms
<input type="checkbox"/> Coombe Dingle	<input type="checkbox"/> Richmond Building	
<input type="checkbox"/> Other (please state) _____		

7. Which salary bracket does your salary fall into? * *[please select one]*

<input type="checkbox"/> Below £15,000	<input type="checkbox"/> £30,001 - £35,000
<input type="checkbox"/> £15,001 - £20,000	<input type="checkbox"/> £35,001 - £40,000
<input type="checkbox"/> £20,001 - £25,000	<input type="checkbox"/> £40,001 - £50,000
<input type="checkbox"/> £25,001 - £30,000	<input type="checkbox"/> Above £50,001

8. Which of the following best describes your role?

<input type="checkbox"/> Academic – mainly research	<input type="checkbox"/> Administrative
<input type="checkbox"/> Academic – mainly teaching	<input type="checkbox"/> Management
<input type="checkbox"/> Academic – other	<input type="checkbox"/> Specialised (Estates/IT/Technical etc)
<input type="checkbox"/> Other (please state) _____	

9. What is your faculty/department?

<input type="checkbox"/> Arts	<input type="checkbox"/> Science
<input type="checkbox"/> Engineering	<input type="checkbox"/> Social Sciences and Law
<input type="checkbox"/> Medical and Veterinary Sciences	<input type="checkbox"/> Professional Services (Estates/IT/Technical etc)
<input type="checkbox"/> Medicine and Dentistry	

10. What are your contracted working hours?

<input type="checkbox"/> Full time	<input type="checkbox"/> Part time
------------------------------------	------------------------------------

11. Do you have any control over your working times? (i.e. the time you arrive and leave)

<input type="checkbox"/> Yes	<input type="checkbox"/> No
------------------------------	-----------------------------

12. On average how often do you work from home? *[please select one]*

<input type="checkbox"/> 4-5 times per week	<input type="checkbox"/> 1 or less times per week
<input type="checkbox"/> 2-3 times per week	<input type="checkbox"/> Never

SECTION 3: TRAVELLING TO WORK

13. In your last working week, how many times did you use these forms of travel as your MAIN FORM of travel TO work [select all that apply]

	5 times		4 times		3 times		2 times		1 time		Did not use	
Worked from home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walk / Run	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wheelchair/mobility scooter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bicycle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Motorbike / Moped / Scooter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Train	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Park and Ride (bus or rail)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Car-Sharer (formal match through a car sharing scheme).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Car-Passenger (Informal car share)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Car-Driver – with at least 1 passenger (Informal car share).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Taxi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Car-Driver – on your own.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. If you travelled by bus which service did you use (tick as many as apply)?

Wessex Bus Service no.16	<input type="checkbox"/>
First Bus Service no.72	<input type="checkbox"/>
First Bus Service no. 9	<input type="checkbox"/>
Other (Please specify)	<input type="checkbox"/>

15. If you travelled TO work BY TRAIN in your last working week, how did you travel from the train station to your place of work? *[select all that apply]*

	5 times		4 times		3 times		2 times		1 time		Did not use	
Walk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wheelchair/mobility scooter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bicycle.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Motorbike / Moped / Scooter.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bus, e.g. First Bus 8/9.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Car-Sharer (formal match through a car sharing scheme)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Car-Passenger.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Car-Driver – with at least 1 passenger.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Taxi.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Car-Driver – on your own.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

16. Typically, how long does your door-to-door journey from home TO WORK usually take (hours: minutes)?

 :

17. What time do you usually ARRIVE at the University (hours: minutes)?

 :

18. Typically, how long does your door-to-door journey from work TO HOME usually take (hours: minutes)?

 :

19. What time do you usually LEAVE WORK to go home (hours: minutes)?

 :

20. Have any of the following changed how you travelled to work in the last year? *[select all that apply]*

<input type="checkbox"/> Nothing has changed	<input type="checkbox"/> Improved walking routes	<input type="checkbox"/> Improved cycling routes / lanes
<input type="checkbox"/> Improved bus routes / lanes	<input type="checkbox"/> Improved facilities/incentives at work	<input type="checkbox"/> Improved public transport
<input type="checkbox"/> Improved travel information	<input type="checkbox"/> Introduction of new UoB parking policy in Jan 2016	<input type="checkbox"/> Extended journey time due to roadworks and/or congestion
<input type="checkbox"/> Reduced car parking spaces (public or private)	<input type="checkbox"/> Increased parking charges (public or private)	<input type="checkbox"/> Increased petrol/diesel prices
<input type="checkbox"/> Increased public transport costs	<input type="checkbox"/> Decreased bus routes and/or reduction in bus frequency	<input type="checkbox"/> Wanting to improve my health
<input type="checkbox"/> Concerns about the environment	<input type="checkbox"/> Changes to personal circumstances	<input type="checkbox"/> New/worsened medical condition
<input type="checkbox"/> Changes to work times / practices	<input type="checkbox"/> Moved house and/or job	
<input type="checkbox"/> Other (please specify):		

21. If you DRIVE TO WORK where do you usually park? [select all that apply]

<input type="checkbox"/> University car park (with the associated parking permit)	<input type="checkbox"/> Charged public / NCP car park
<input type="checkbox"/> University car park (without the associated parking permit)	<input type="checkbox"/> Rented private garage
<input type="checkbox"/> Charged on-street parking	<input type="checkbox"/> Rented private driveway
<input type="checkbox"/> Park & Ride car park	<input type="checkbox"/> University Hospital Bristol car park
<input type="checkbox"/> Free on-street car park	<input type="checkbox"/> I do not drive to work
<input type="checkbox"/> Residents parking scheme area with the relevant permit	<input type="checkbox"/> Other (<i>please specify</i>):

22. If you own a University parking permit, but USUALLY park elsewhere than a designated University car park, what are the reasons for you doing this? [select all that apply]

<input type="checkbox"/> Unable to find a parking space for my type of permit	<input type="checkbox"/> It is cheaper to park elsewhere
<input type="checkbox"/> I find it difficult to manoeuvre in and around my specified car park	<input type="checkbox"/> I work in a number of different buildings
<input type="checkbox"/> I did not receive the parking coupons in time	<input type="checkbox"/> I do not own a University parking permit
<input type="checkbox"/> Other (<i>please specify</i>)	<input type="checkbox"/>

23. If you travelled by car to the University Campus (Precinct) prior to January 2016, how has your commute been affected by the introduction of the University's new Campus (Precinct) parking policy? [select all that apply]

<input type="checkbox"/> I did not travel by car to the Campus (Precinct) prior to January 2016	<input type="checkbox"/> I now have a parking permit, but I did not before
<input type="checkbox"/> I was able to retain my parking permit	<input type="checkbox"/> I am now able to park with my permit when I arrive at the University
<input type="checkbox"/> I was not eligible for a new parking permit, so I had to make alternative travel arrangements	<input type="checkbox"/> I no longer drive to work, but now either walk, cycle, use public transport or a combination of these
<input type="checkbox"/> I continue to drive to work, but park in a non-University car park	<input type="checkbox"/> I continue to drive but use the Park and Ride
<input type="checkbox"/> I now formally car share through the University's car sharing scheme	<input type="checkbox"/> I now informally car share with another University member of staff who is eligible to park in a University car park
<input type="checkbox"/> Other (<i>please specify</i>)	<input type="checkbox"/>

24. How has the expansion of the Residents' Parking Schemes in Bristol affected your commute to work? (tick as many as apply)

<input type="checkbox"/> I now park in a University car park (with the associated parking permit)	<input type="checkbox"/> I now park in a University car park (without the associated parking permit)
<input type="checkbox"/> I now park in a charged public / NCP car park	<input type="checkbox"/> I now use the Park and Ride
<input type="checkbox"/> I now park on free on-street parking elsewhere	<input type="checkbox"/> I now pay to park on-street
<input type="checkbox"/> I now park using a RPS permit	<input type="checkbox"/> I now rent a private garage / driveway
<input type="checkbox"/> It has not affected me as I do not drive and / or did not park within the RPS scheme boundary	<input type="checkbox"/> Other (<i>please specify</i>)

SECTION 4: TRAVEL PLAN WEBSITE

25. Are you aware of the University's Transport plan website that contains information on initiatives such as the University's free cycle surgery, free membership to a car club, discounted bus travel, discounts at bike shops and lock and light sales? www.bristol.ac.uk/transportplan

<input type="checkbox"/> Yes, and I have used it	<input type="checkbox"/> Yes
<input type="checkbox"/> No	<input type="checkbox"/>

SECTION 5: BUSINESS RELATED TRAVEL

We are interested to know about any business related travel you undertake. Questions in this section relate to any travel over half a mile around or between University sites, as well as business trips away to attend meetings, conferences etc.

26. Do you ever have to undertake business travel as part of your job? ☐ Yes ☐ No (go to Question 32)

27. What is your primary form of business travel? (the form of travel you use for the greater distances. (Excluding international travel) [please select one]

<input type="checkbox"/> Walk	<input type="checkbox"/> Bicycle	<input type="checkbox"/> Bus
<input type="checkbox"/> Train	<input type="checkbox"/> Motorbike	<input type="checkbox"/> Taxi shared with others
<input type="checkbox"/> Hire car with others	<input type="checkbox"/> Departmental vehicle / pool car	<input type="checkbox"/> Car Club
<input type="checkbox"/> Taxi on your own	<input type="checkbox"/> Hire car on your own	<input type="checkbox"/> Own car
<input type="checkbox"/> Aeroplane	<input type="checkbox"/> Other	<input type="checkbox"/>

28. In a typical year, how often do you make business travel journeys?

<input type="checkbox"/> Daily	<input type="checkbox"/> Once a month	<input type="checkbox"/> Less than 6 times a year
<input type="checkbox"/> Once a week	<input type="checkbox"/> 2 – 3 times a month	
<input type="checkbox"/> 2 – 4 times per week	<input type="checkbox"/> Once every two months	

29. Why did you undertake business travel in the last month? [select all that apply]

<input type="checkbox"/> Academic conference/sharing research	<input type="checkbox"/> Operational meeting	<input type="checkbox"/> Training Event
<input type="checkbox"/> Administrative meeting	<input type="checkbox"/> Recruitment	<input type="checkbox"/> Research collaboration
<input type="checkbox"/> Hospitality event	<input type="checkbox"/> Trade Shows	<input type="checkbox"/> Home visit
<input type="checkbox"/> Industry collaboration	<input type="checkbox"/> Site Visit	
<input type="checkbox"/> No travel undertaken	<input type="checkbox"/> Other (please specify)	

30. In the last year have you personally paid for business travel and subsequently not made an expense claim to the University to recover costs?

<input type="checkbox"/> Yes	<input type="checkbox"/> No
------------------------------	-----------------------------

31. If you answered 'yes' to the previous question can you estimate the total cost of any journeys you made over the year that you did not claim for?

£

SECTION 6: ALTERNATIVES TO BUSINESS TRAVEL

32. Have you participated in any kind of virtual meeting (e.g. video conference, teleconference, Sykpe call, webinar etc.) involving two or more people during 2016?

☐ Yes (please go to question 34)

☐ No (please continue)

33. If you answered 'no' to the previous question, which of the following reasons best explains why you did not take part in any kind of virtual meeting? (Then please proceed to the Prize Draw section) 2016?

<input type="checkbox"/> Never crossed my mind	<input type="checkbox"/> Never been invited to participate	<input type="checkbox"/> Difficulties (actual or perceived) in setting up the meeting
<input type="checkbox"/> Difficulties (actual or perceived) in operating the technology during the meeting	<input type="checkbox"/> Losing networking / social opportunities connected to a physical meeting	<input type="checkbox"/> Worried about whether it would be an effective meeting
<input type="checkbox"/> Cost	<input type="checkbox"/> Concerns about being on camera	<input type="checkbox"/> Enjoy time away from the office
<input type="checkbox"/> Need to travel to the meeting location anyway	<input type="checkbox"/> Other (please specify)	

34. Which of the following virtual meeting solutions have you made use of in the last year, to meet with two or more other people? (Please ignore if you answered 'no' to question 32)

<input type="checkbox"/> Audio conference with electronic document sharing	<input type="checkbox"/> Audio only conference
<input type="checkbox"/> Instant message (e.g. MSN / SKYPE)	<input type="checkbox"/> Video-conferencing
<input type="checkbox"/> Other (please specify)	

35. Approximately how many times did you participate in a virtual meeting with two or more other people over your last working month? (Please ignore if you answered 'no' to question 32)

<input type="checkbox"/> 1-2 times	<input type="checkbox"/> 2-5 times
<input type="checkbox"/> 5-10 times	<input type="checkbox"/> More than 5 times
<input type="checkbox"/> Never	

Prize Draw

Enter the prize draw and you could win one of the following:

- iPod mini
- 5 x £30 Amazon vouchers
- 5 x Bike lock and bike light sets

The winners will be drawn at random from those who have completed the survey in full and entered their contact details below. The winners will be notified by the end of January 2017.

Please enter your contact details here if you would like to be entered into the prize draw.

This section will be detached from your main survey responses and contact details given here will not be used for any purpose other than the prize draw.

Your Name *[in capitals please]*: _____

Either a) Your email address: _____

Or b) Your day-time telephone number: _____

Stay in Touch and be Informed:

Website: www.bristol.ac.uk/transportplan

Email: transport-plan@bristol.ac.uk

Twitter: [@UoBrisTravel](https://twitter.com/UoBrisTravel)

Facebook: [University of Bristol Travel](https://www.facebook.com/UniversityofBristolTravel)

Cycling Mailing lists: <http://www.bristol.ac.uk/transportplan/transport/cycling/tub-bug.html>

Motorcycling Mailing list: www.bristol.ac.uk/transportplan/transport/motorcycle/

Public Transport Mailing list: <http://www.bristol.ac.uk/transportplan/transport/bus/keep-in-touch.html>

**THANK YOU FOR TAKING THE TIME TO COMPLETE THIS TRAVEL SURVEY.
PLEASE NOW SEND YOUR COMPLETED SURVEY TO:**

TRAVEL PLAN ASSISTANT, SUSTAINABILITY, 1-9 OLD PARK HILL, BS2 8BB

GOOD LUCK WITH THE PRIZE DRAW!

2016 Staff Travel Survey Frequently Asked Questions

Why should I complete the travel survey?

Your views are important to us. In 2013, more than 2,000 staff completed the survey. Results from the survey help the University review and refine the way its travel plan operates. If you elect to do so, you can also take part in our prize draw!

I do not have access to a computer. How can I participate?

Hard copies of the survey are available. Please contact Daniel Carey, (0117) 3317259 or transport-plan@bristol.ac.uk. Completed surveys should be returned to Daniel Carey, Sustainability, 1-9 Old Park Hill, BS2 2BB.

How often does the survey take place?

A staff travel survey is organised every years during the months of November and December. However, due to the University all staff survey that took place in November 2015, there is a three year gap between the last staff travel surveys. During years when the staff survey is not carried out, a student travel survey is completed.

How long will it take me to complete the survey?

The survey will take approximately 10 minutes to complete.

Why are there so many questions?

The staff travel survey is our primary method of obtaining data on travel behaviour. The better we understand how our staff travel to work the greater the potential for new initiatives to be successful and our resources used wisely.

Why do you ask me for my postcode?

Postcodes will not be used for communication in any form, but are important in assessing the effectiveness of different parts of the travel plan.

Are any of the questions mandatory?

Only questions 7 are mandatory (Q1, 2, 5, 6, 12, 20 and 23), however we hope you will complete all of the questions in as much detail as possible.

Can I see the results of previous surveys?

Previous survey results are available on the University's website: <http://www.bristol.ac.uk/transportplan/surveys/>

When will the results of the 2016 survey be available?

We hope to have completed the analysis of the 2016 survey in January 2017. When complete, the results will be available on the above website.

Data protection

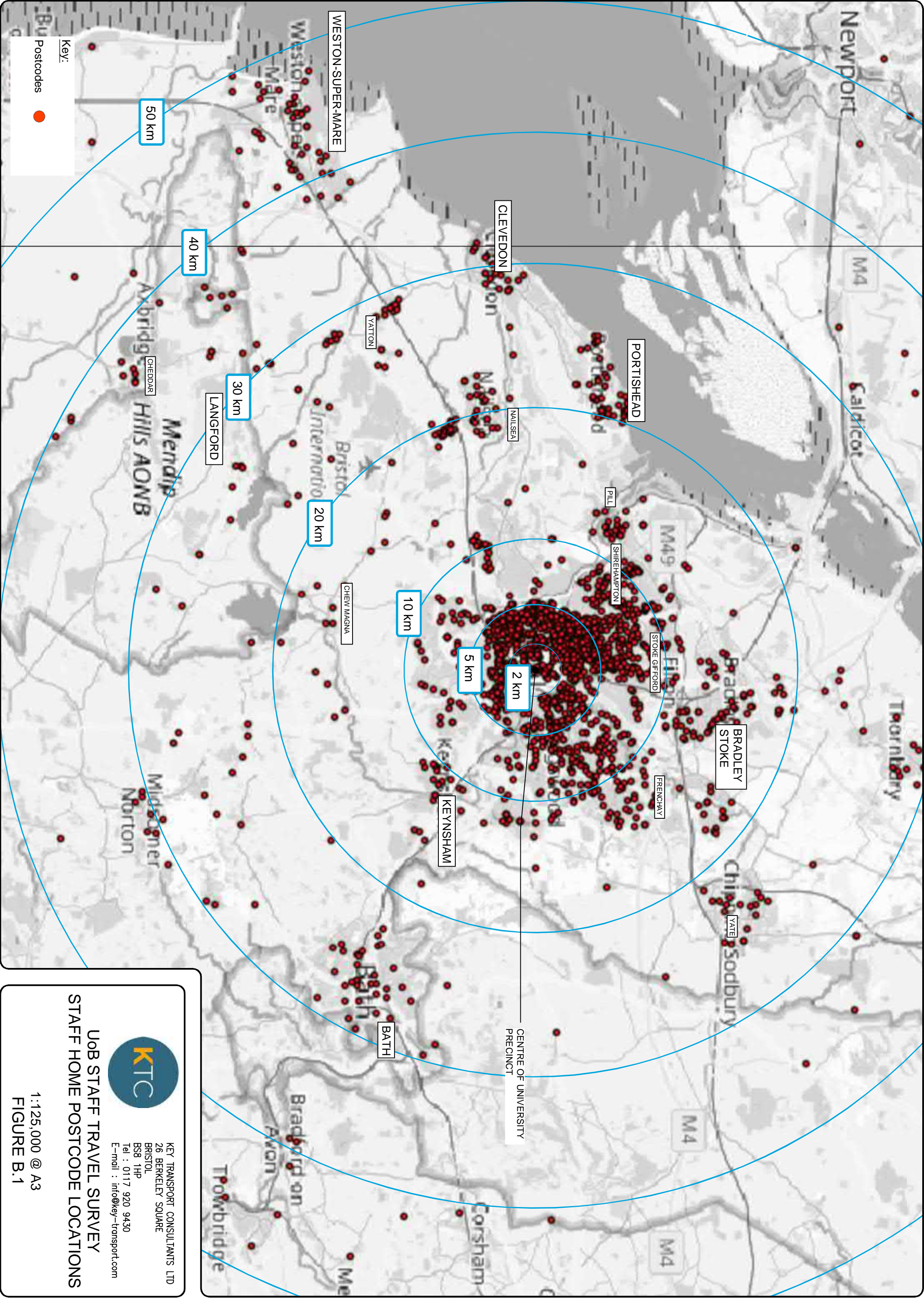
All individual responses to the survey will be treated in the strictest confidence. All data collected in this survey will be held securely and not passed to any other party, in accordance with the Data Protection Act 1998.

If your question has not been answered above please contact Amy Heritage, (0117) 3317817 or transport-plan@bristol.ac.uk.

Thank you in advance for your participation in this year's survey.

APPENDIX B

STAFF HOME POSTCODE LOCATIONS MAP



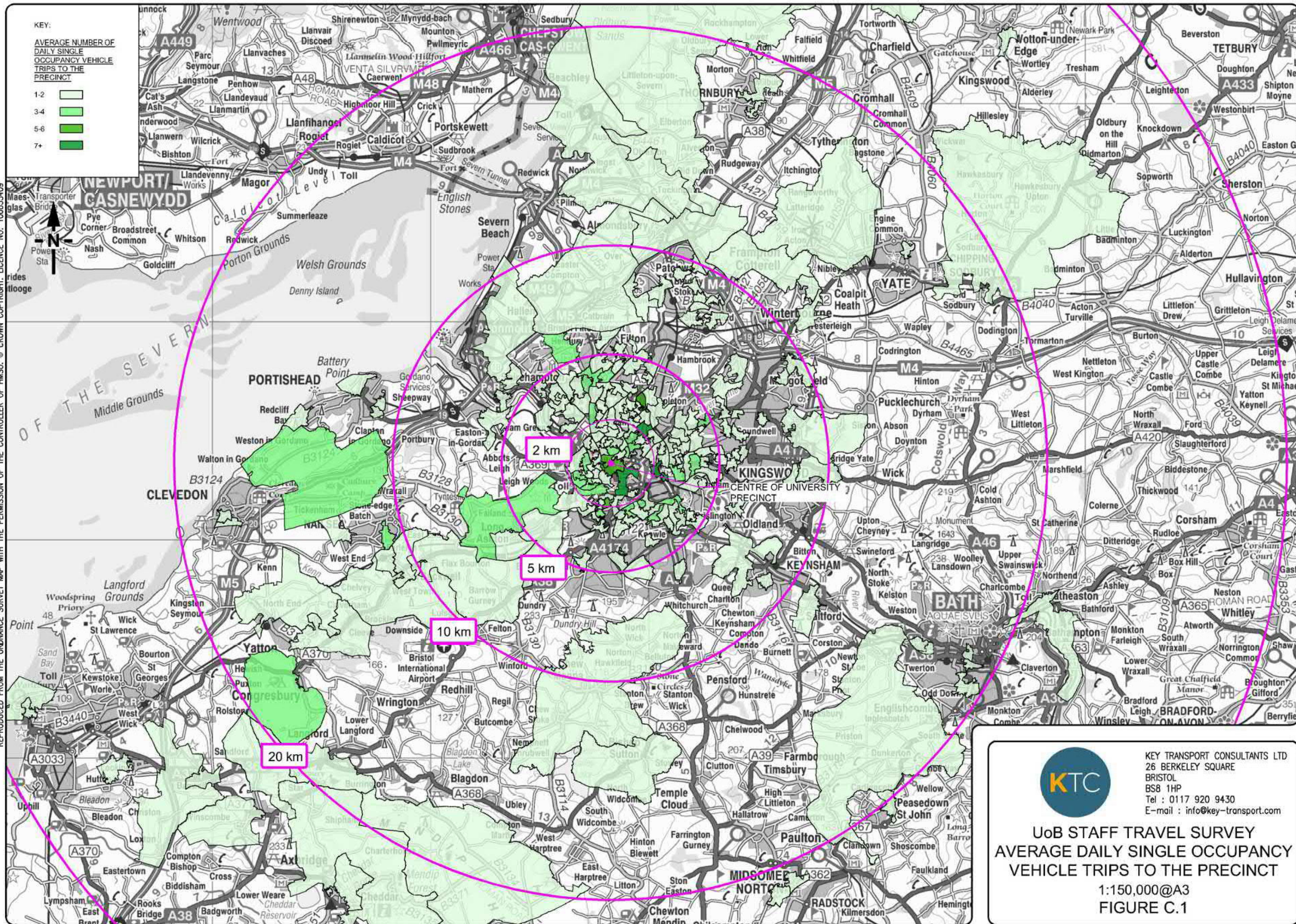
KEY TRANSPORT CONSULTANTS LTD
26 BERKELEY SQUARE
BRISTOL
BS8 1HP
Tel : 0117 920 9430
E-mail : info@key-transport.com

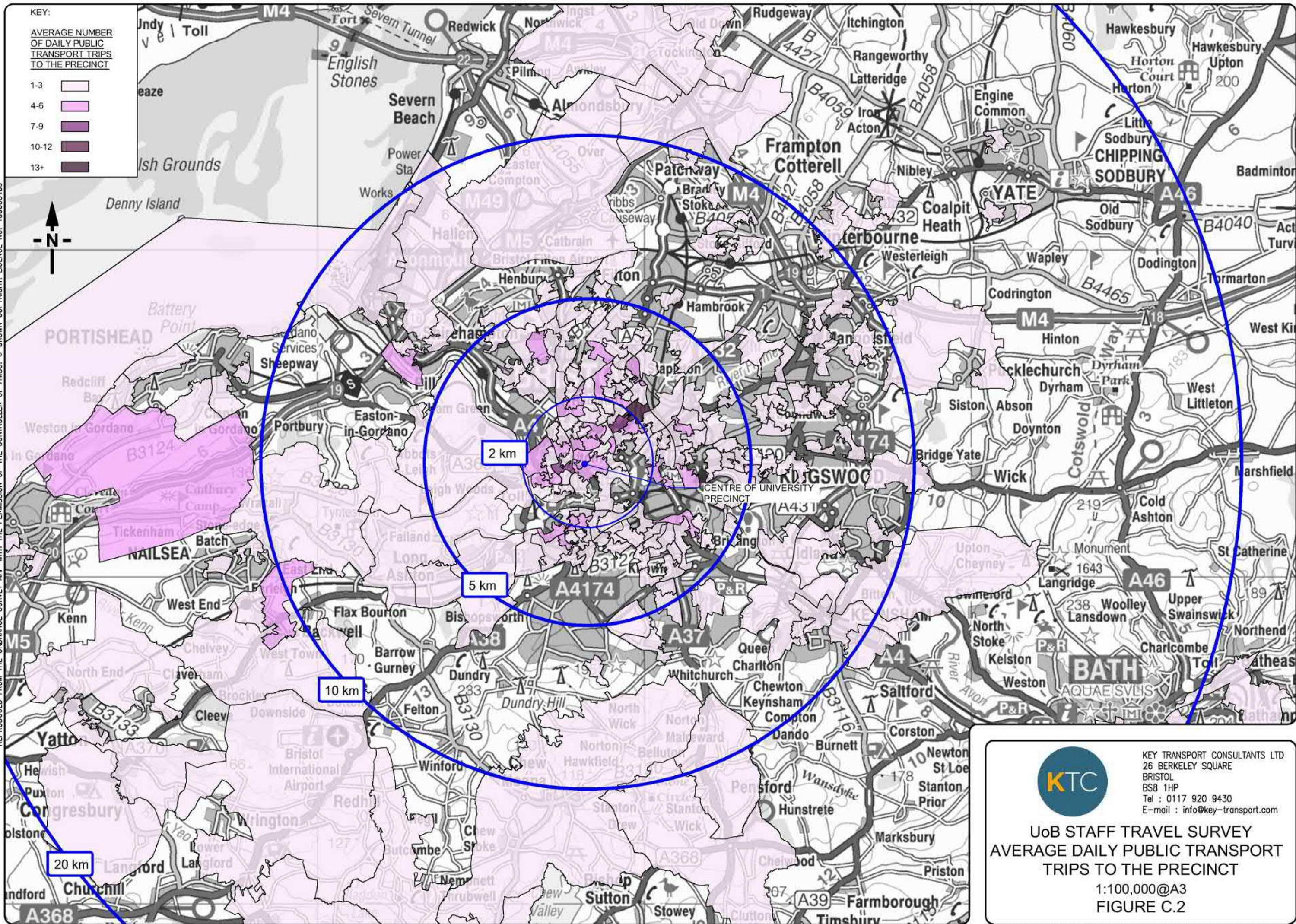
UOB STAFF TRAVEL SURVEY
STAFF HOME POSTCODE LOCATIONS

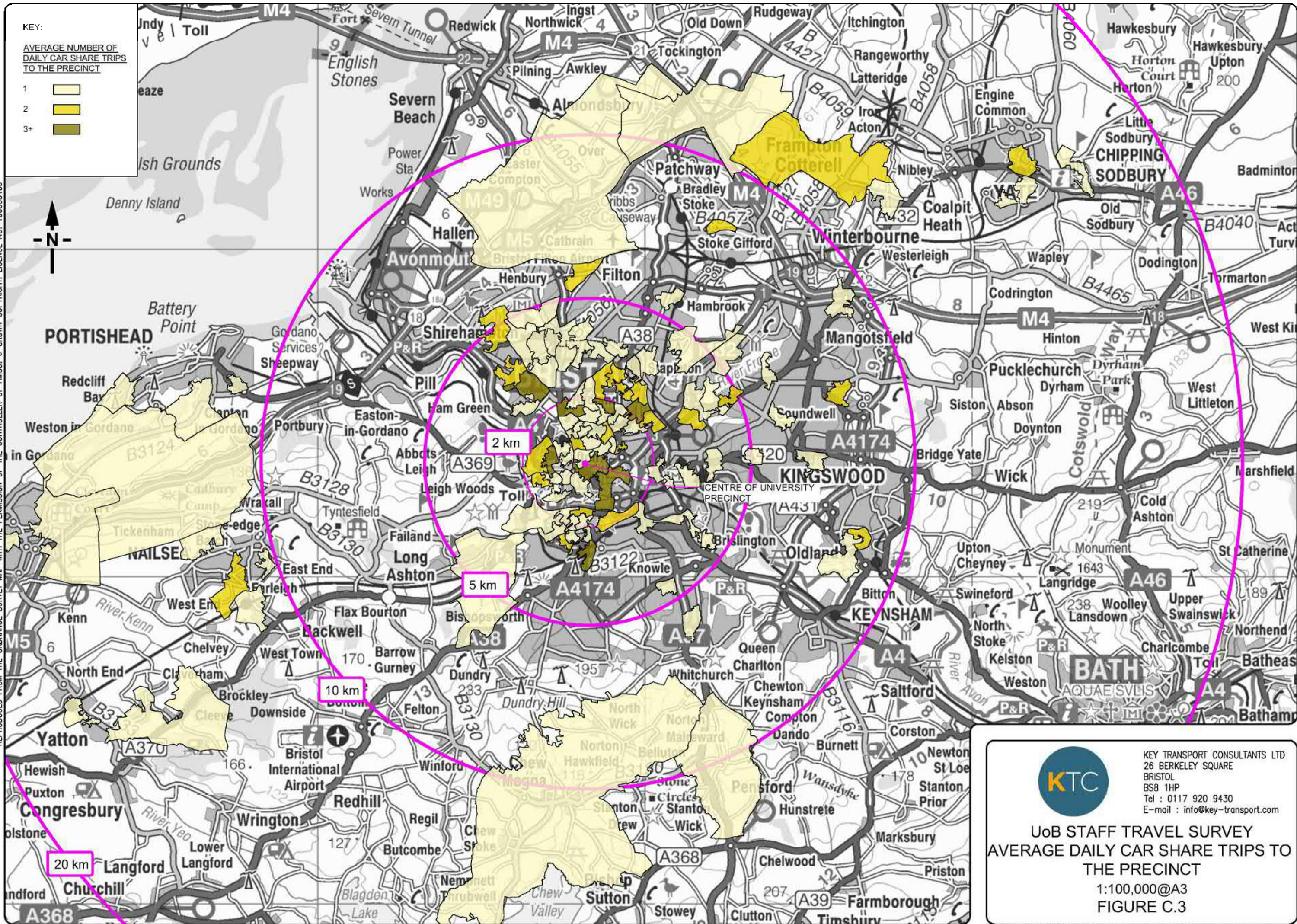
1:125,000 @ A3
FIGURE B.1

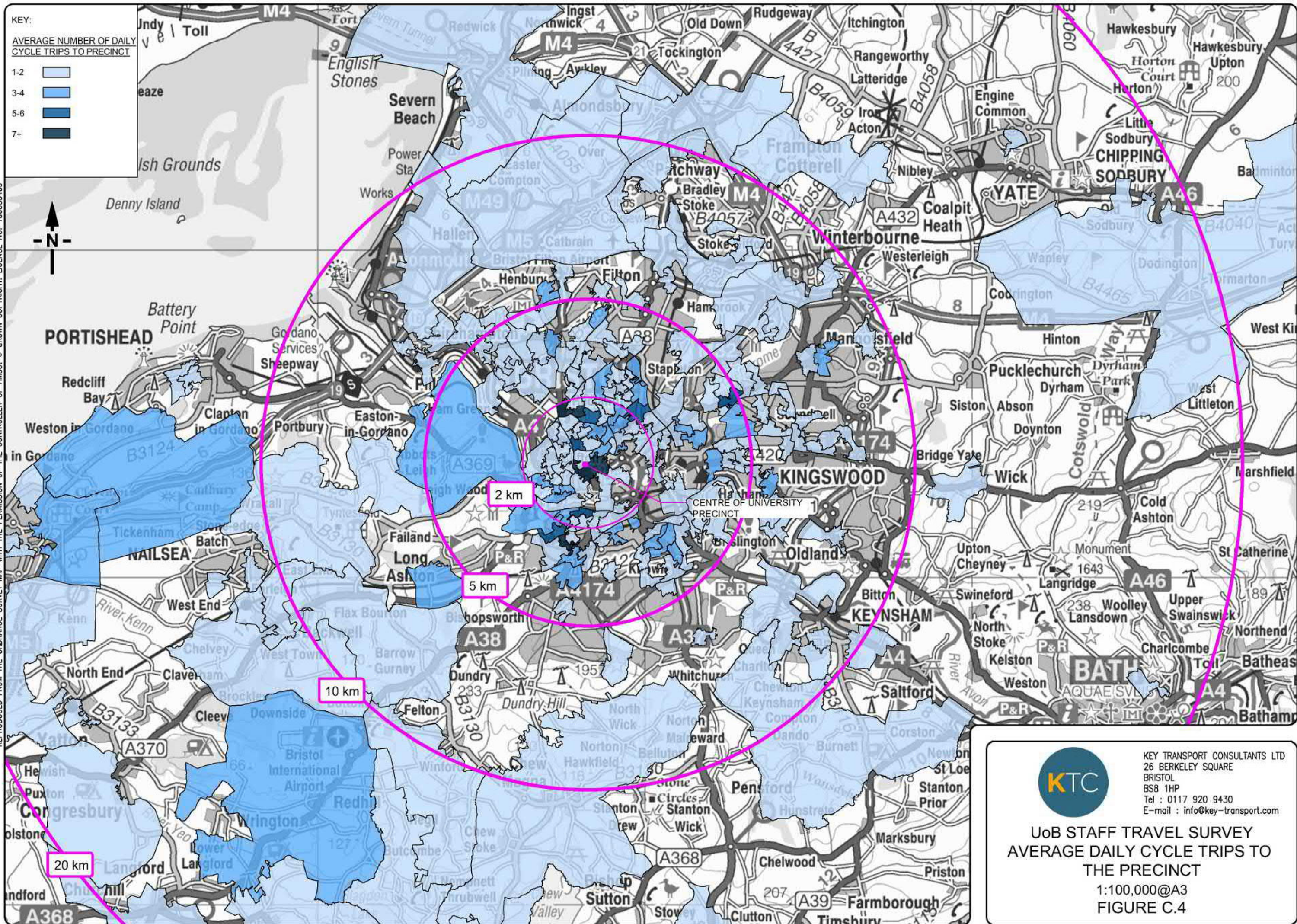
APPENDIX C

ILLUSTRATIVE MODE SHARE DENSITY MAPS



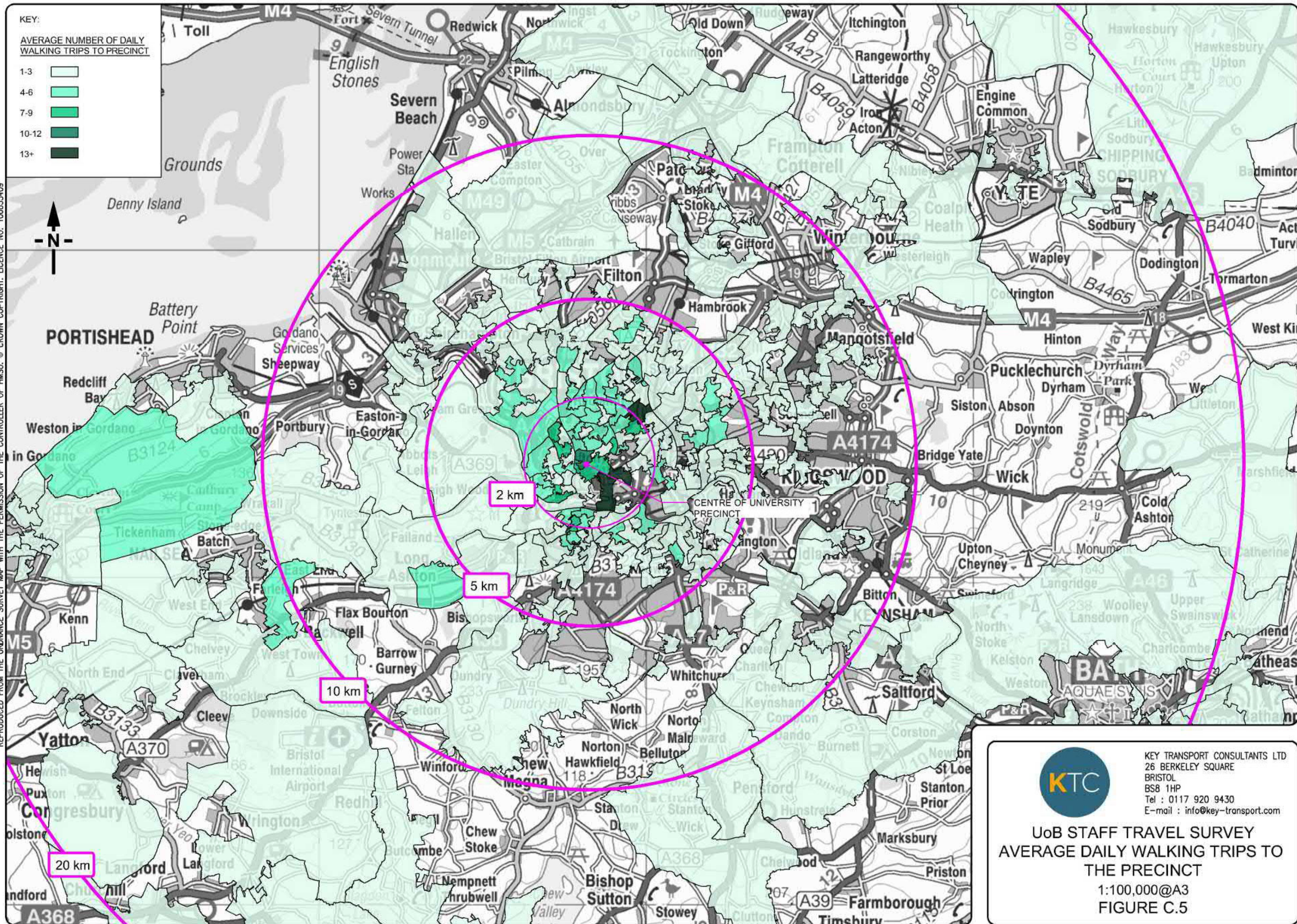






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UoB STAFF TRAVEL SURVEY
AVERAGE DAILY CYCLE TRIPS TO
THE PRECINCT
1:100,000@A3
FIGURE C.4



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**UoB STAFF TRAVEL SURVEY
AVERAGE DAILY WALKING TRIPS TO
THE PRECINCT**
1:100,000@A3
FIGURE C.5

