



TRAVEL SURVEY

Final Report

July 2015

THE UNIVERSITY OF
WARWICK

THE UNIVERSITY OF
WARWICK

**Staff and Student Travel Survey
2015**

Results

IGC1

Issue | July 2015

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It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 115438

Ove Arup & Partners Ltd
The Arup Campus
Blythe Gate
Blythe Valley Park
Soli hull B90 8AE
United Kingdom
www.arup.com

ARUP

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Executive Summary

The University of Warwick Masterplan sets out proposals to develop and expand the main campus by 40% over a ten year period from 2008 to 2018, but any increase in car parking facilities on main campus is limited to just 9%. The Masterplan is supported by a comprehensive Travel Plan, which aims to reduce single occupancy car use to the campus as this mode of transport is one of the main contributors to traffic congestion and identified as one of the least sustainable modes of transport.

The results of an initial staff and student travel survey in 2005 were used to inform and develop the University Travel Plan published in June 2007 with an expected commencement of 2008. The University has committed to conducting a travel survey approximately every two years in order to monitor and measure the impact and progress of the Travel Plan initiatives. Ove Arup & Partners Limited, who produced the University Travel Plan, was commissioned to design and undertake a new staff and student travel survey during the month of November in; 2010, 2012 and 2014. It should be noted that the 2014 survey originally scheduled for November was postponed until May 2015 while the University completed a tender evaluation and awarded a new contract for the travel survey consultants.

The survey was conducted as previously using an online questionnaire hosted on the University Intranet with a paper version of the questionnaire distributed to staff that do not have access to the University intranet. All staff and students were invited to participate in the survey and prizes were offered as an incentive to encourage responses. The survey was 'open' for responses from 5th to 19th May 2015 and at the close, a total of 2,214 responses had been received. This represented a decrease of 861 responses (28%) compared to the 2012 survey. The decrease is likely to be attributed to a combination of the survey being available for only two weeks compared to three weeks for previous surveys when a one week extension was permitted; and that the survey was conducted during the exams period and student responses were notably down by 49%.

The Travel Plan sets out individual targets for modal share for staff and students for 2013 and 2018, which are based on the actual modal shares identified in the 2005 travel survey. The targets were also developed from the Travel Plan's principal objective to reduce single occupancy and general car use in order to limit any increase in traffic at the University to no more than 12% during the 10 year period of the Masterplan. It is acknowledged by all stakeholders that this is a challenging target!

The results from the 2015 survey show a positive and continuing trend with the University meeting or exceeding the 2013 modal share targets for 11 out of 12 key metrics. This is a significant achievement with an increase of three more targets met compared to 2012. Furthermore, the results show that the University is already meeting or exceeding the 2018 modal share targets for eight out of the 12 key metrics.

The survey results for 2015 clearly demonstrate that the initiatives and measures implemented by the University from the Travel Plan are having a positive impact and have been successful in influencing and supporting a move by staff and students to use alternative and more sustainable modes of transport since the 2005 survey. Most importantly, single occupancy car use has declined significantly since 2005.

The success and impact of the Travel Plan initiatives and measures since the 2012 travel survey has been sustained as the University continues to make excellent progress. Looking forward, further reductions in car use amongst staff in order to meet the 2018 targets, will be challenging as those most able to are already likely to have made the change. It is important that the University continues to promote the Travel Plan and sustainable travel, and should consider further measures and tactics to discourage car use.

1 Introduction

The University of Warwick Masterplan sets out proposals to develop and expand the main campus by 40% over a ten year period from 2008 to 2018, but any increase in car parking facilities on main campus is limited to just 9%. The Masterplan is supported by a comprehensive Travel Plan published in June 2007, with the objective of minimising and managing the impact of any increase in traffic on local roads and the environment throughout the Masterplan development period and beyond.

1.1 Travel Plan

The principal aim of the Travel Plan is to reduce single occupancy and general car use to the University as this mode of transport is one of the main contributors to traffic congestion and identified as one of the least sustainable modes of transport.

The Travel Plan is closely integrated with the Masterplan and aims to provide realistic and practical travel options within the constraints of the local political framework and physical barriers of existing adjacent development and green belt designation.

The aims of the Travel Plan are to:

- Introduce highway modifications where appropriate to help to alleviate congestion resulting from additional University traffic;
- Increase and improve existing facilities to encourage cycling and walking
- Develop and improve public transport services and links to main campus;
- Enable and promote greater use of car-sharing;
- Consider changes to working practices aimed at reducing peak time travel;
- Improve information and communication to staff and students about travel choices available to them;
- Develop strategies to reduce business mileage and use of University vehicles as part of the University's wider Low Carbon Management Programme;
- Engage with the local transport and planning authorities to provide access for a Bus Rapid Transit system and regional cycle routes through the campus site; and to,
- Monitor transport activity during the Masterplan development period.

1.2 Staff and Student Travel Surveys

An initial staff travel survey was undertaken by the University in 2003, which was followed by a staff and student travel survey in 2005. The results of the 2005 survey were used to inform and develop the University Travel Plan, which was published in June 2007 with an expected commencement of 2008.

In order to monitor the impact and progress of the Travel Plan initiatives and identify if the modal share targets are being achieved, the University has committed to conducting a travel survey approximately every two years. It is considered that a survey every two years is appropriate as this allows initiatives time to become effective and reduces the likelihood of staff and students becoming discouraged by the travel survey being repeated too frequently.

Ove Arup & Partners Limited, which produced the University Travel Plan in 2007, was commissioned to design and undertake a new staff and student travel survey in 2010 and again in 2012. The results of this survey and report¹ concluded that the University had made significant progress and exceeded many of the targets for 2013.

Arup was again commissioned to undertake the staff and student travel survey in May 2015. This document is the 2015 report and contains the following:

- Analysis and Results of the 2015 survey;
- Assessment of any changes since the 2012 survey and progress towards the Travel Plan targets; and
- Identification of any issues arising from the survey that can be used to inform and develop the Travel Plan.

1.3 Layout of the Report

Following this introduction;

Chapter 2 provides details of the survey methodology.

Chapter 3 sets out the results.

Chapter 4 discusses progress towards meeting Travel Plan targets.

Chapter 5 presents the key themes and suggestions for improvements put forward by survey respondents.

Chapter 6 provides conclusions.

Appendices are provided at the back of the document.

¹ University of Warwick Staff and Student Travel Survey 2012, Arup, March 2013.

2 Methodology

2.1 Methodology

The methodology originally developed for the 2010 survey was repeated in 2015 with the Survey Monkey online survey website utilised as the basic data collection tool. The survey questionnaire was reviewed and made available online to all staff and students via the University Intranet using a customised link which was advertised on the University and Students Union home web pages. The link was also emailed individually to the email Inbox of all staff and students. A paper version of the questionnaire was distributed to staff that do not have access to the internet. All staff and students were invited to participate in the survey and three prizes were offered as an incentive to encourage responses.

The design of the electronic questionnaire provides easy management of the survey responses and moves the respondent automatically from question to question according to the answers, rather than them having to follow instructions. For example, respondents who identified themselves as 'car drivers' are then taken to questions asking what would encourage them to use alternative modes. Respondents who already use other modes would be taken to the next relevant question.

The completed paper versions of the questionnaire were collected centrally and input into the online questionnaire by an administrator. This facilitated the data from the paper versions being merged with the online data and enabled the system to analyse and produce results from both electronic and paper questionnaires together.

The survey was distributed to all staff and students in early May and was available online for responses from 00:01 on Tuesday 5th May until 23.59 on Tuesday 19th May.

2.2 Questionnaire

The 2015 questionnaire was very similar to 2012, but some questions were revised to reflect changes in behaviour and strategy since the previous survey and to facilitate more detailed information being collected. The 2015 questionnaire contained a total of 30 questions compared to 31 in the 2012 survey although respondents were directed to specific questions depending on their initial selection of transport mode.

A copy of the paper version of the questionnaire is provided in **Appendix A**.

2.3 Responses

A total of 2,214 responses was received, compared to 3,075 responses received in the 2012 survey. A comparison of the number of responses is shown below.

Category	2012		2015		Percentage change in number of responses
	Number	Per cent	Number	Per cent	
Staff	1524	50%	1455	66%	-5%
Postgraduate Students	527	17%	150	7%	-72%
Undergraduate Students	1024	33%	609	28%	-41%

As with the 2012 survey, staff represented the largest category of respondents, making up 66% of all responses, up from 50% in 2012. The proportion of responses from undergraduate students was down to 28%, compared with 33% in 2012, whilst the proportion of responses from postgraduate students was down from 17% to 7%.

There are a number of factors which may have influenced the overall number of responses. Whereas in past surveys, if the deadline for completion was extended, the link was kept available, whereas in the 2015 survey the link was available to staff and students for only the original two weeks. Despite this, the number of staff responses was only slightly lower than in 2012, and had the survey been extended as in 2012, it is likely the number of staff respondents would have exceeded 2012 and been the highest of all the surveys so far undertaken.

The total number of responses by staff represents 30% of all FTE staff employed at the University and is considered to be a successful response rate for any survey.

The number of student respondents showed a substantial decrease compared to 2012. It is considered this can be attributed to the timing of the survey being during exams period, whereas previously it was conducted in the month of November.

3 Survey Results and Analysis

This section sets out the survey results and analyses and discusses the findings of the 2015 survey. Each sub-heading refers to the corresponding question number in the survey.

All questions provided a set of suggested answer categories. Several questions allowed respondents to give more information via free text if they had ticked 'Other' rather than one of the specified categories.

3.1 Question 1: Location

Please tell us the postcode from where you travel to the University on a regular basis.

The purpose of this question is to establish the location from which regular journeys are made to and from the University. This data can then be used to identify issues or opportunities that apply to specific geographical locations. The question is worded rather than asking for home post code, to avoid students providing their family home address rather than their residence whilst attending the University.

All but 59 out of 2214 respondents provided a full post code. A full post code refers to a group of properties but does not identify specific dwellings and therefore no individual respondents could be identified by their post code on its own.

Postcode plots showing journey origins for staff, undergraduates and postgraduates are provided in **Appendix B**.

Question 2 examines whether respondents are students or staff.

3.2 Question 2: Staff or Student

What is your status at Warwick? (Please tick one option only.)		
Answer Options	Response Per cent	Response Count
Staff	65.7%	1455
Undergraduate Student	27.5%	609
Postgraduate Student	6.8%	150
<i>answered question</i>		2214
<i>skipped question</i>		0

The University's statutory accounts for the year ending 31st July 2014 show the staff and student population at the University to be:

Total Staff (Full Time Equivalents) 4,932

Total Undergraduates (Full Time Equivalents) 12,676

Total Postgraduates (Full Time Equivalents) 5,078

The response numbers for each category represents approximately 30% of all staff, 5% of all undergraduate students and 3% of all postgraduate students. The respondents were self-selecting so the results may reflect the fact that staff and students with particular 'issues' about transport may have been more strongly motivated to complete the survey than others. Staff and students who live on or near to campus for example would be less likely to respond if they feel there are no issues relevant to them.

There is some difficulty in defining exactly how many 'staff' and 'students' there are at the University in terms of 'full time equivalent' places at any one time because the payroll includes visiting professors and part time staff with various patterns of work. Similarly students might include distance learning, local people attending short courses as well as full time graduates and post graduates.

The following question (Question 3) explores respondents' place of work or study.

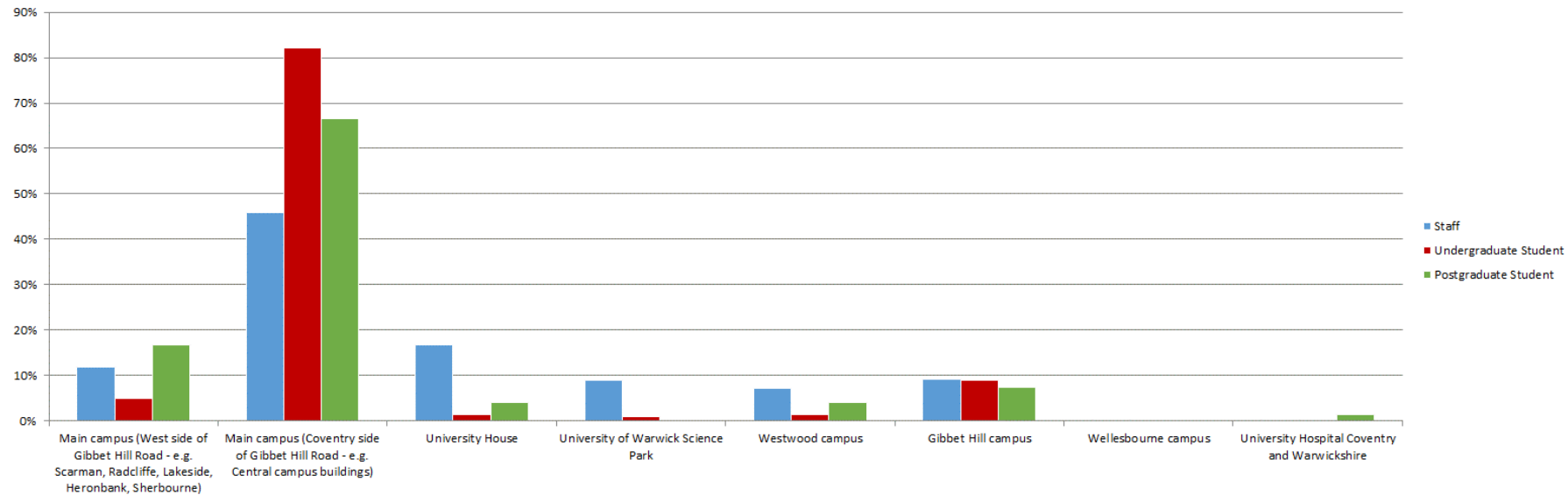
3.3 Question 3: Place of Work / Study

What is the location of your normal place of work or study at Warwick?

Main campus (West side of Gibbet Hill Road - e.g. Scarman, Radcliffe, Lakeside, Heronbank, Sherbourne)
 Main campus (Coventry side of Gibbet Hill Road - e.g. Central campus buildings)
 University House
 University of Warwick Science Park
 Westwood campus
 Gibbet Hill campus
 Wellesbourne campus
 University Hospital Coventry and Warwickshire

	Staff		Undergraduate Student		Postgraduate Student		Total Response Count	
Main campus (West side of Gibbet Hill Road - e.g. Scarman, Radcliffe, Lakeside, Heronbank, Sherbourne)	171	12%	30	5%	25	17%	226	10.2%
Main campus (Coventry side of Gibbet Hill Road - e.g. Central campus buildings)	667	46%	500	82%	100	67%	1267	57.2%
University House	243	17%	8	1%	6	4%	257	11.6%
University of Warwick Science Park	130	9%	6	1%	0	0%	136	6.1%
Westwood campus	103	7%	8	1%	6	4%	117	5.3%
Gibbet Hill campus	132	9%	55	9%	11	7%	198	8.9%
Wellesbourne campus	5	0%	0	0%	0	0%	5	0.2%
University Hospital Coventry and Warwickshire	4	0%	2	0%	2	1%	8	0.4%
Total	1455		609		150		2214	

What is the location of your normal place of work or study at Warwick?



As expected, the main campus on the east side of Gibbet Hill Road comprising the central campus buildings was the main place of attendance for staff and both student groups. Significant numbers of staff also worked at University House, the west side of the main campus, Gibbet Hill campus, and Westwood campus. Postgraduates also attended these locations except University House.

Undergraduates were mainly concentrated in the central campus with some at Gibbet Hill and at the west side of the main campus.

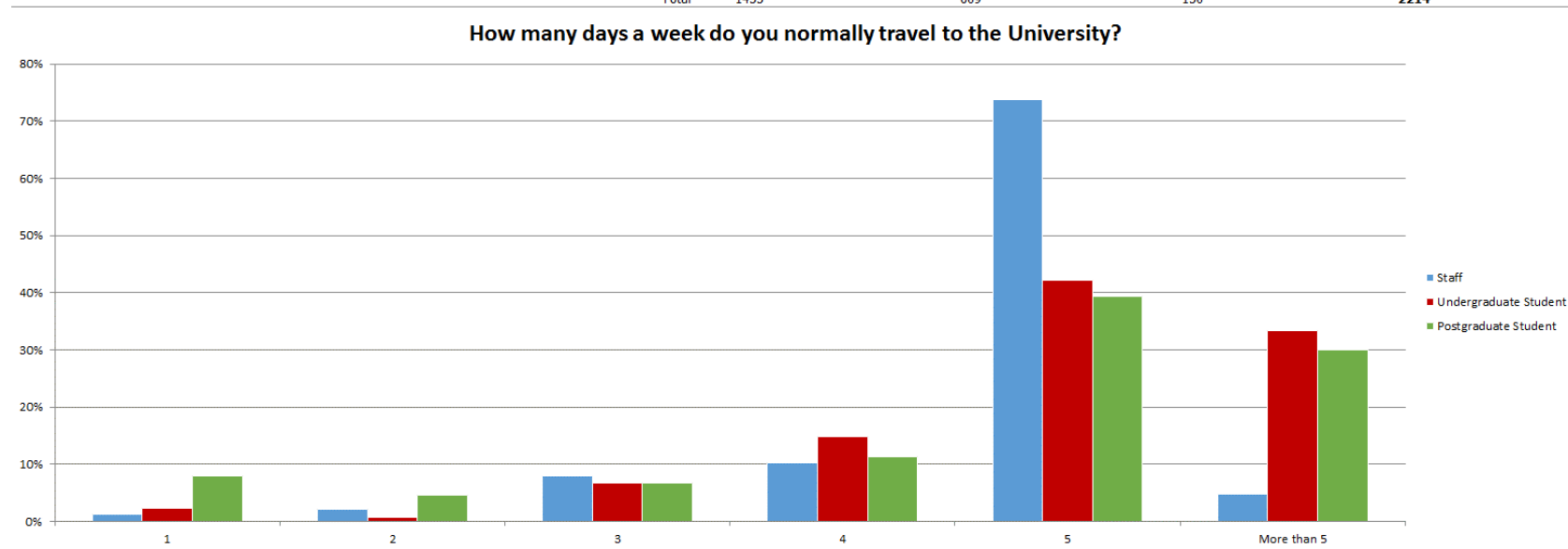
The next question (Question 4) examines how many days per week people travel to and from the University.

3.4 Question 4: Travel Days

How many days a week do you normally travel to the University?

- 1
- 2
- 3
- 4
- 5
- More than 5

	Staff		Undergraduate Student		Postgraduate Student		Total Response Count	
1	18	1%	14	2%	12	8%	44	2.0%
2	31	2%	4	1%	7	5%	42	1.9%
3	116	8%	41	7%	10	7%	167	7.5%
4	148	10%	90	15%	17	11%	255	11.5%
5	1072	74%	257	42%	59	39%	1388	62.7%
More than 5	70	5%	203	33%	45	30%	318	14.4%
Total	1455		609		150		2214	



When asked in Question 4, how many days a week they normally travelled to the University, the largest proportion of all three categories travelled five days (74% of staff, 42% of undergraduates and 39% of postgraduates). The percentages of respondents from each category travelling on four, three, two or a single day was broadly similar, the combined figures being: 12% travelled to the University on four days per week, 8% on three days and 2% on two days and 2% on just one day per week.

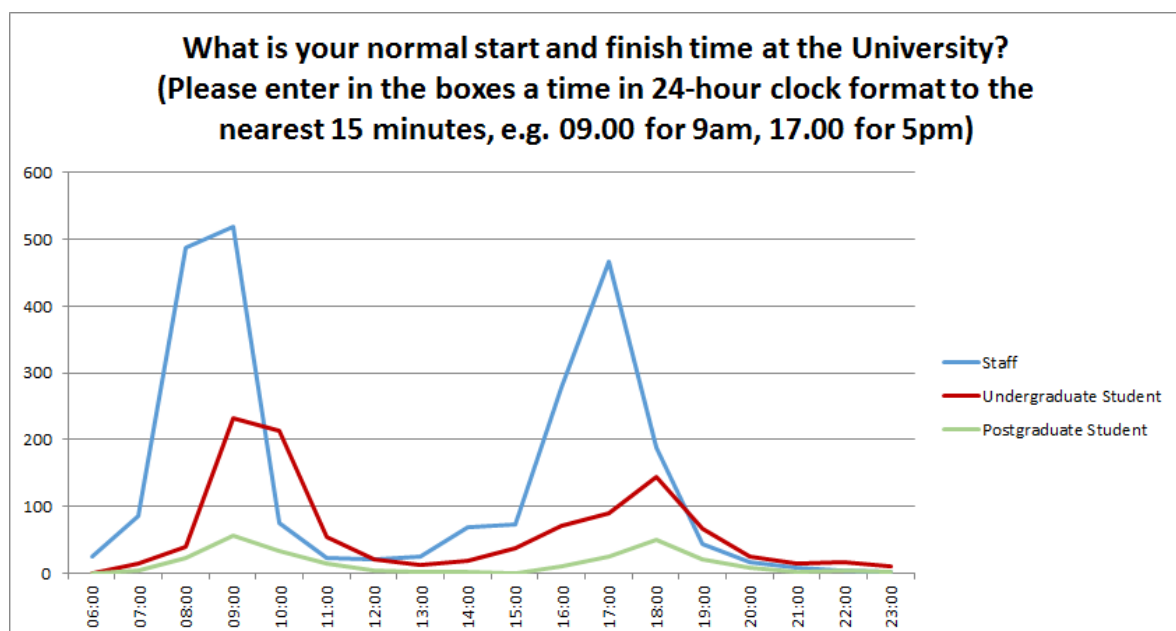
Only 5% of staff respondents travelled to the University on more than five days per week but the percentages were much higher for students; 33% for undergraduates and 30% for post graduates. For undergraduates, this probably represents the fact that many live on campus and therefore travel to the University by simply moving from their residences to another University building or location on main campus. Whilst the same applies to an extent with postgraduate students, fewer live on campus and therefore, the high response may well indicate study related trips.

The relevance for the Travel Plan is that it shows potential for rearranging working practices to spread activity over the whole week and provides evidence that some students, postgraduates in particular, are already following such patterns. However, overall travel would increase if there were more, shorter visits and so the implications would need careful consideration.

The following question looks at arrival and departure times.

3.5 Question 5: Start and Finish Times

Question 5 asked respondents to provide their normal start and finish times to the nearest 15 minutes.



Staff arriving for work on campus is concentrated between 07.00 and 10.00 with a peak at around 09.00. Few staff arrive or leave campus between 10.00 and 14.00, but after 14.00

the number of departures rises to a peak at around 17.00 with departures then falling until 19.00, by which time most staff have departed campus.

Very few undergraduate students arrive on campus before 08.00 with a peak between 09.00 and 10.00 then reducing through to midday. Undergraduate student departures begin at 15.00 with a peak at 18.00 then decreasing until 20.00.

Postgraduate students have more concentrated arrival and departures, with most arrivals between 08.00 and 11.00 with a peak at 09.00, and most departures between 17.00 and 20.00 with a peak between 18.00 and 19.00.

Question 6 below explores the normal mode of transport used to travel to and from main campus.

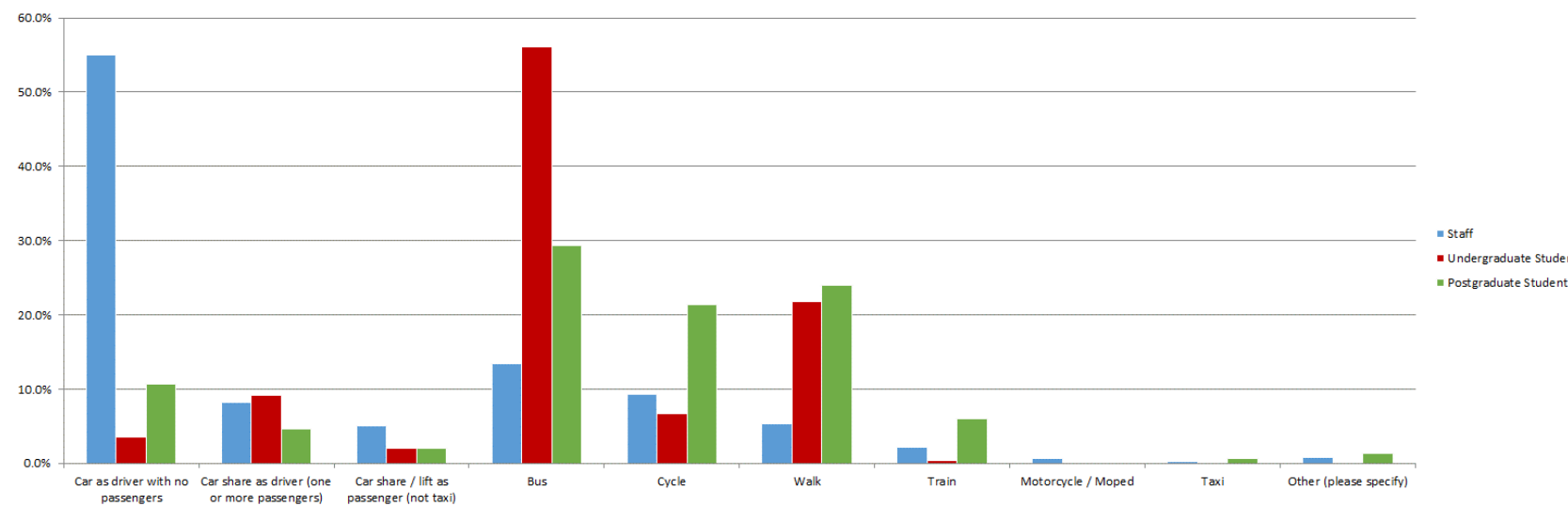
3.6 Question 6: Mode

Which mode of transport do you use for the main part of your journey to the University?

- Car as driver with no passengers
- Car share as driver (one or more passengers)
- Car share / lift as passenger (not taxi)
- Bus
- Cycle
- Walk
- Train
- Motorcycle / Moped
- Taxi
- Other (please specify)

	Staff	Undergraduate Student	Postgraduate Student	Total Response Count
Car as driver with no passengers	800 55.0%	22 3.6%	16 10.7%	838 37.9%
Car share as driver (one or more passengers)	119 8.2%	56 9.2%	7 4.7%	182 8.2%
Car share / lift as passenger (not taxi)	73 5.0%	12 2.0%	3 2.0%	88 4.0%
Bus	195 13.4%	342 56.2%	44 29.3%	581 26.2%
Cycle	135 9.3%	41 6.7%	32 21.3%	208 9.4%
Walk	78 5.4%	133 21.8%	36 24.0%	247 11.2%
Train	31 2.1%	2 0.3%	9 6.0%	42 1.9%
Motorcycle / Moped	9 0.6%	1 0.2%	0 0.0%	10 0.5%
Taxi	4 0.3%	0 0.0%	1 0.7%	5 0.2%
Other (please specify)	11 0.8%	0 0.0%	2 1.3%	13 0.6%
Total	1455	609	150	2214

Which mode of transport do you use for the main part of your journey to the University?



This question shows that in the staff category, the preferred modes of transport used to travel to and from the main campus are:

- 55% drive themselves (single occupancy);
- 13% travel by bus;
- 9% cycle;
- 8% drive with one or more passengers (car share);
- 5% are given a lift by car;
- 5% walk; and
- 2% travel by train.

In the undergraduate student category, the preferred modes of transport used to travel to and from the main campus are:

- 56% travel by bus;
- 22% walk;
- 9% drive with one or more passenger (car share);
- 7% cycle;
- 4% drive themselves (single occupancy);
- 2% get a lift as a passenger; and
- Less than 1% travel by train.

In the postgraduate student category, the preferred modes of transport used to travel to and from the main campus are:

- 29% travel by bus;
- 24% walk;
- 21% cycle;
- 11% drive themselves (single occupancy);
- 6% travel by train;
- 5% drive with one or more passengers (car share); and
- 2% get a lift as a passenger.

Overall, some 63% of staff travel by car as a driver (with or without passengers), whereas the comparative figures are just 13% for undergraduate students and 15% for postgraduate students. However, the relative difference in the total members in each category (4,932 staff, 12,676 undergraduates and 5,078 postgraduates) assumes that the actual numbers of vehicles being driven to the university are only slightly higher for staff than students (3,115 staff compared with 2,403 for students – 1,624 undergraduates and 779

postgraduates) if it is assumed that those that completed the survey are representative of all staff and students. This illustrates that equal importance should be given to measures to reduce car use for students as for staff.

Similar conclusions can be drawn for other modes. For example, only 7% of undergraduate students cycle, similar to staff at 9%. However, if measures to increase cycling led to a one per cent increase in both groups, the actual increases would be in the region of 49 staff and 127 undergraduates. Again, this depends on the sample who responded to the survey being representative of the whole body.

It is assumed that the relatively high figure of 22% recorded for undergraduates who walk is due to a large proportion of undergraduates that responded to the survey being first year students and who live in accommodation on main campus.

Question 7 below examines the reasons why respondents travel by car.

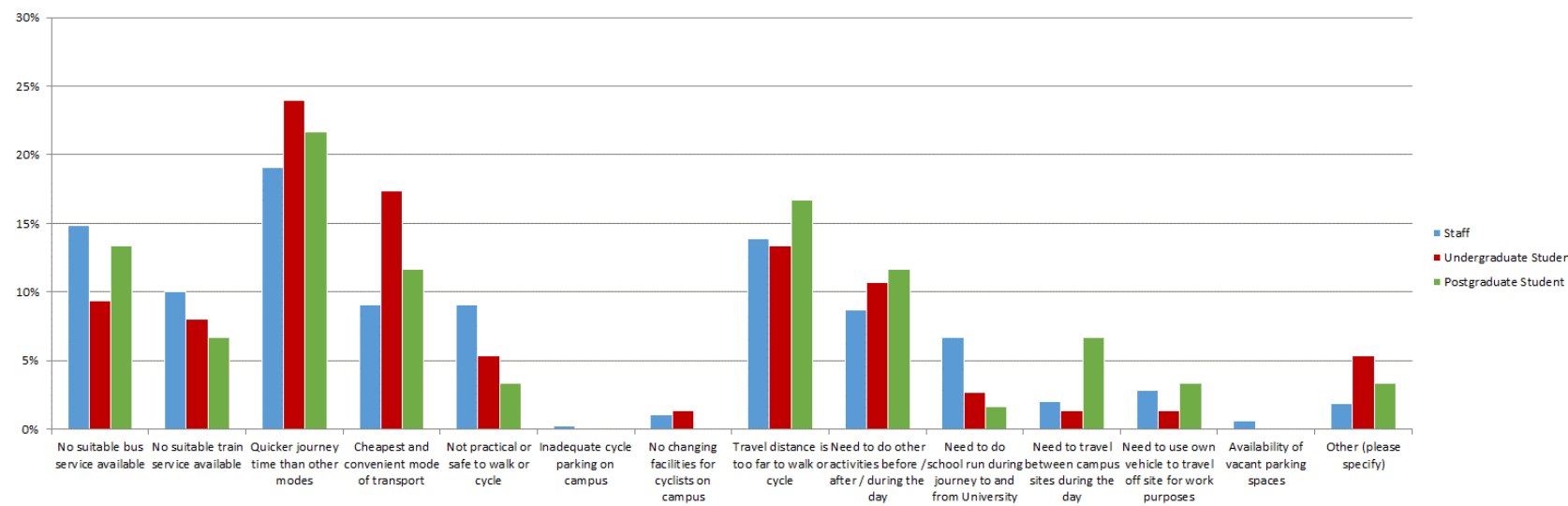
3.7 Question 7: Reasons for Driving

What are your main reasons for driving to the University?

- No suitable bus service available
- No suitable train service available
- Quicker journey time than other modes
- Cheapest and convenient mode of transport
- Not practical or safe to walk or cycle
- Inadequate cycle parking on campus
- No changing facilities for cyclists on campus
- Travel distance is too far to walk or cycle
- Need to do other activities before / after / during the day
- Need to do school run during journey to and from University
- Need to travel between campus sites during the day
- Need to use own vehicle to travel off site for work purposes
- Availability of vacant parking spaces
- Other (please specify)

	Staff		Undergraduate Student		Postgraduate Student		Total Response Count	
No suitable bus service available	409	15%	7	9%	8	13%	424	14.7%
No suitable train service available	277	10%	6	8%	4	7%	287	9.9%
Quicker journey time than other modes	526	19%	18	24%	13	22%	557	19.3%
Cheapest and convenient mode of transport	249	9%	13	17%	7	12%	269	9.3%
Not practical or safe to walk or cycle	249	9%	4	5%	2	3%	255	8.8%
Inadequate cycle parking on campus	7	0%	0	0%	0	0%	7	0.2%
No changing facilities for cyclists on campus	30	1%	1	1%	0	0%	31	1.1%
Travel distance is too far to walk or cycle	383	14%	10	13%	10	17%	403	13.9%
Need to do other activities before / after / during the day	240	9%	8	11%	7	12%	255	8.8%
Need to do school run during journey to and from University	185	7%	2	3%	1	2%	188	6.5%
Need to travel between campus sites during the day	55	2%	1	1%	4	7%	60	2.1%
Need to use own vehicle to travel off site for work purposes	79	3%	1	1%	2	3%	82	2.8%
Availability of vacant parking spaces	17	1%	0	0%	0	0%	17	0.6%
Other (please specify)	52	2%	4	5%	2	3%	58	2.0%
Total	2758		75		60		2893	

What are your main reasons for driving to the University?



This question was directed at car, motorbike and moped drivers only. The reasons provided by staff and the two student categories were very similar. Across all the three categories the most popular reasons were:

- 19% 'quicker journey time than other modes'
- 15% 'no suitable bus service available'
- 14% 'travel distance is too far to walk or cycle'
- 10% 'no suitable train service available'
- 9% 'cheapest and convenient mode of transport'

Responses to the free text 'Other' reason for driving were more detailed explanations of the reasons listed rather than other reasons. The main themes are listed below:

Working Patterns

- 12 respondents commented that they drove because of their working patterns – this included variable work times from day to day and early starts or late finishes and also flexibility or unpredictability of working hours. This implies that the public transport services available at these times are inadequate.

Public Transport

- 5 respondents cited the unreliability or infrequent service of public transport as their reason for using a car.
- 2 respondents said that connecting from bus to train made journey time too long.
- 4 respondents made other negative comments about the bus services.

Activities before or after work

- A key reason for driving to University in relation to activities before or after work related to childcare, with 6 respondents stating that they needed to drop off or pick up children from the nursery or school.
- A further 2 respondents said they needed access to the car due to children with additional needs.
- 2 respondents said they needed to get in and out of university quickly due to work or carer commitments.

Need for car

- Another reason given for using a car, by 9 respondents, related to disability or health reasons that prevented them walking or using public transport.
- 3 respondents said that they needed to travel during the day as part of their work or studies.

Convenience

- 4 respondents said that their car use was purely down to convenience.

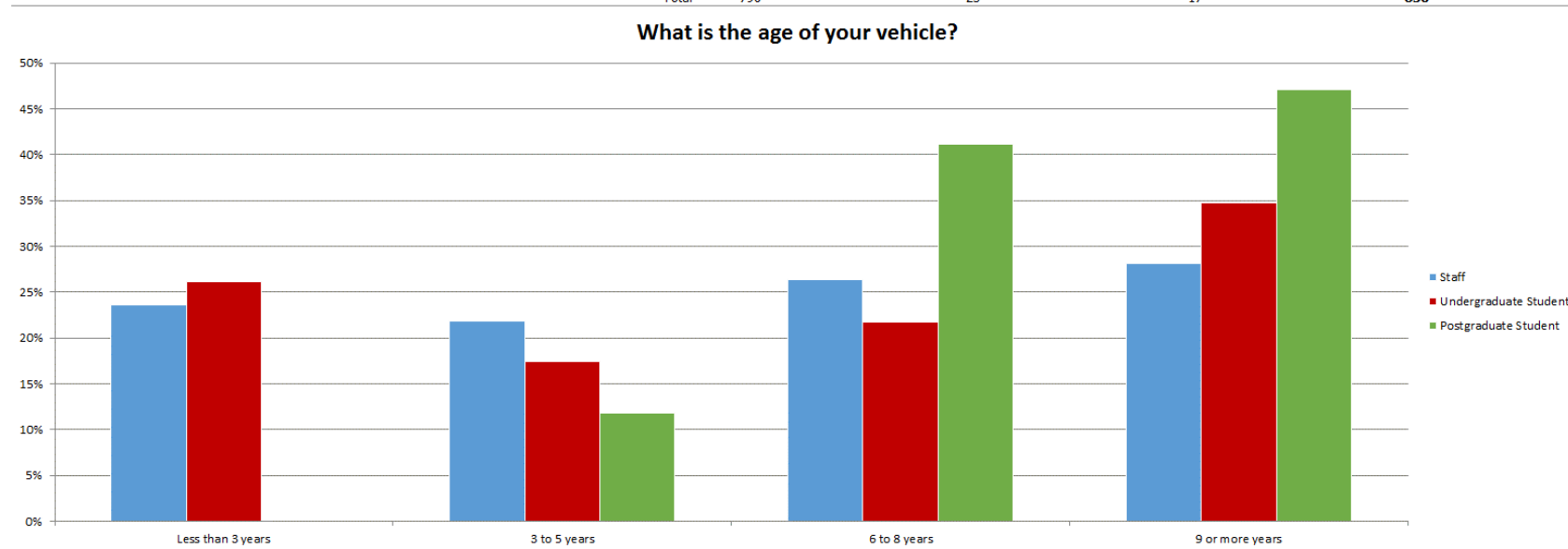
Question 8 below examines the age of vehicles used to travel to University.

3.8 Question 8: Vehicle Age

What is the age of your vehicle?

Less than 3 years
3 to 5 years
6 to 8 years
9 or more years

	Staff	Undergraduate Student	Postgraduate Student	Total Response Count
Less than 3 years	188 24%	6 26%	0 0%	194 23.2%
3 to 5 years	174 22%	4 17%	2 12%	180 21.5%
6 to 8 years	210 26%	5 22%	7 41%	222 26.6%
9 or more years	224 28%	8 35%	8 47%	240 28.7%
Total	796	23	17	836



The age of the vehicle used to travel to University was fairly evenly spread across the four categories, with 23% of vehicles being less than 3 years old, 22% between 3 and 5 years old, 27% between 6 and 8 years old and 29% over 9 years old.

Question 9 below examines the fuel type of vehicles used to travel to University.

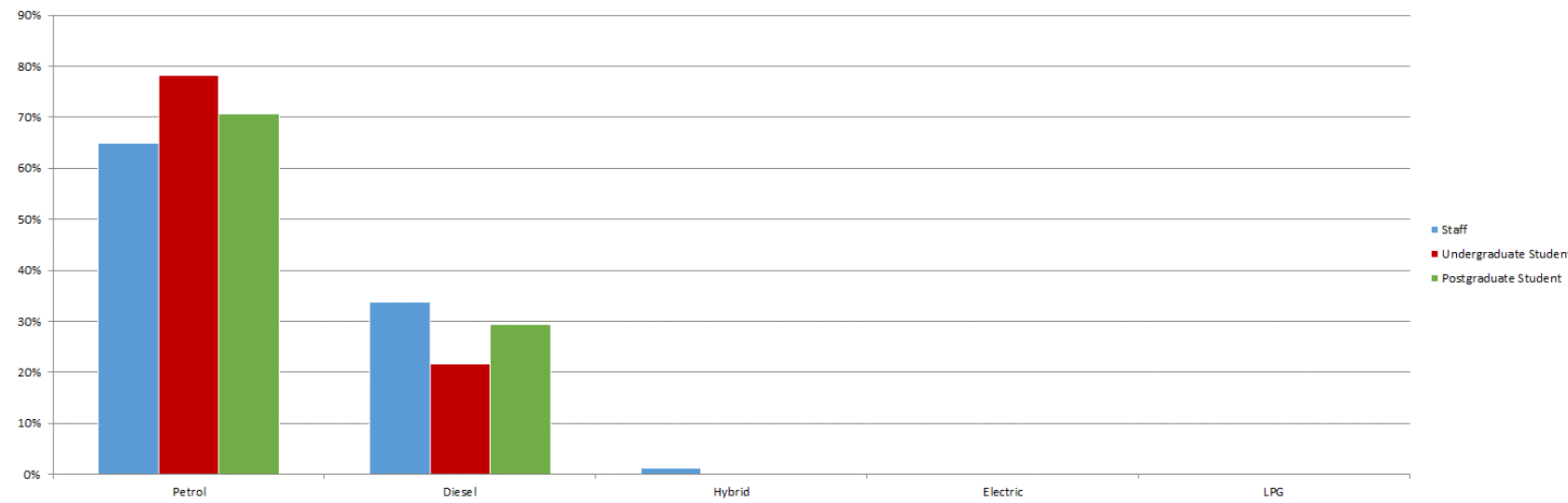
3.9 Question 9: Vehicle Fuel Type

What fuel type is your vehicle?

Petrol
Diesel
Hybrid
Electric
LPG

	Staff		Undergraduate Student		Postgraduate Student		Total Response Count	
Petrol	516	65%	18	78%	12	71%	546	65.3%
Diesel	268	34%	5	22%	5	29%	278	33.3%
Hybrid	9	1%	0	0%	0	0%	9	1.1%
Electric	1	0%	0	0%	0	0%	1	0.1%
LPG	2	0%	0	0%	0	0%	2	0.2%
Total	796		23		17		836	

What fuel type is your vehicle?



The majority of vehicles used are petrol, making up 65% of vehicles across the three respondent categories. Almost all of the remainder of the vehicles are diesel, however there were also 9 hybrid vehicles, 2 LPG vehicles and 1 electric vehicle, all of which were used by staff.

Question 10 below examines the car parking locations used.

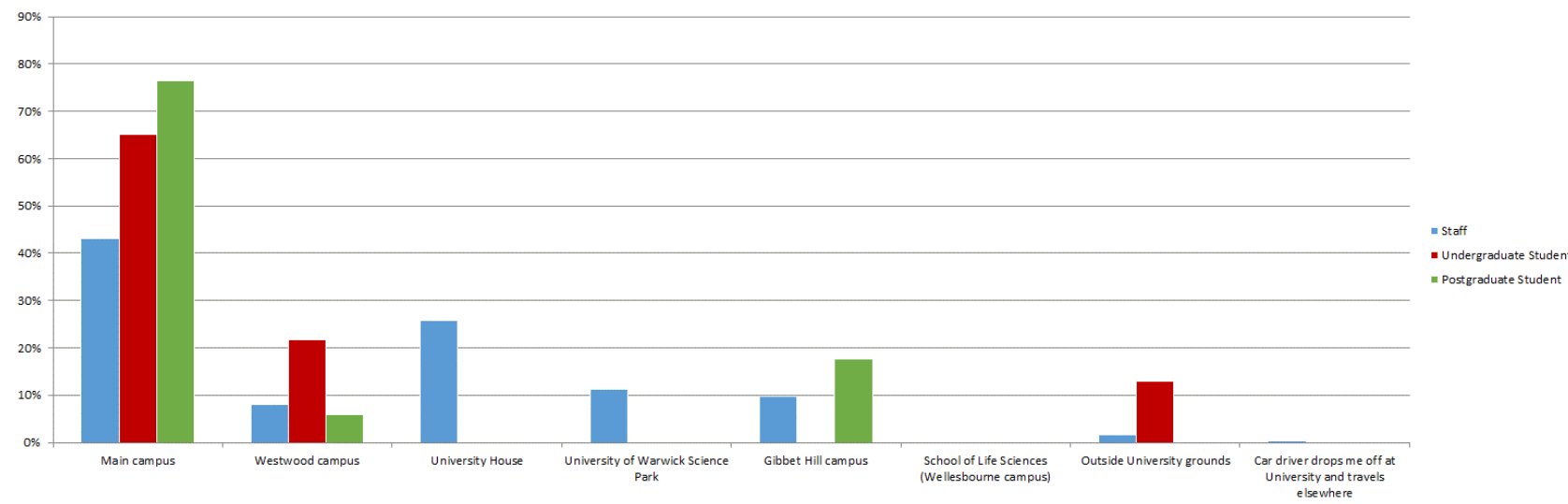
3.10 Question 10: Parking Location

Where do you normally park your vehicle at the University?

Main campus
Westwood campus
University House
University of Warwick Science Park
Gibbet Hill campus
School of Life Sciences (Wellesbourne campus)
Outside University grounds
Car driver drops me off at University and travels elsewhere

	Staff		Undergraduate Student		Postgraduate Student		Total Response Count	
Main campus	342	43%	15	65%	13	76%	370	44.4%
Westwood campus	64	8%	5	22%	1	6%	70	8.4%
University House	205	26%	0	0%	0	0%	205	24.6%
University of Warwick Science Park	89	11%	0	0%	0	0%	89	10.7%
Gibbet Hill campus	78	10%	0	0%	3	18%	81	9.7%
School of Life Sciences (Wellesbourne campus)	0	0%	0	0%	0	0%	0	0.0%
Outside University grounds	13	2%	3	13%	0	0%	16	1.9%
Car driver drops me off at University and travels elsewhere	2	0%	0	0%	0	0%	2	0.2%
Total	793		23		17		833	

Where do you normally park your vehicle at the University?



The results of Question 10 are generally as expected and reflect the work and study locations shown in Question 3.

The main campus is the most popular parking location for all three groups (43% staff, 65% undergraduates and 44% postgraduates). Westwood campus was also used by all three groups (8% staff, 22% undergraduate and 6% postgraduate). University House was used exclusively by staff and Gibbet Hill campus by staff and postgraduates but not undergraduates. The University of Warwick Science Park was used only by staff. 2% of staff and 13% of undergraduate students park outside of the University grounds.

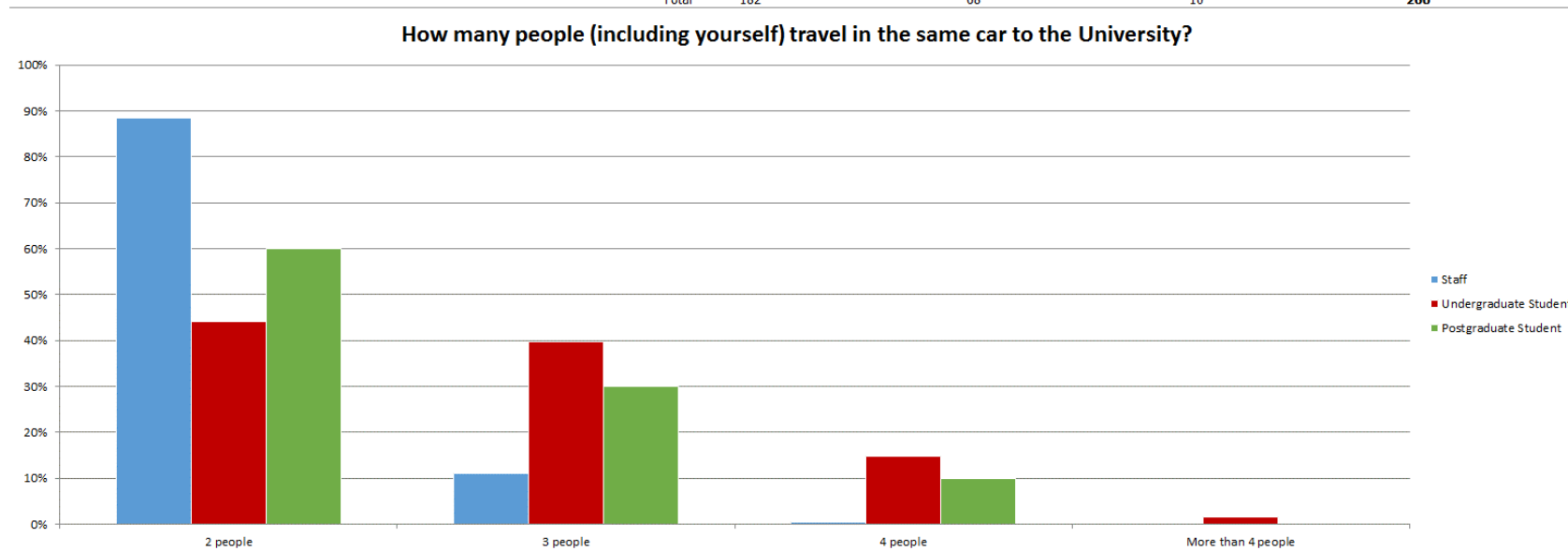
Questions 11 to 13 examine the options related to car sharing.

3.11 Questions 11, 12 and 13: Car Sharing

How many people (including yourself) travel in the same car to the University?

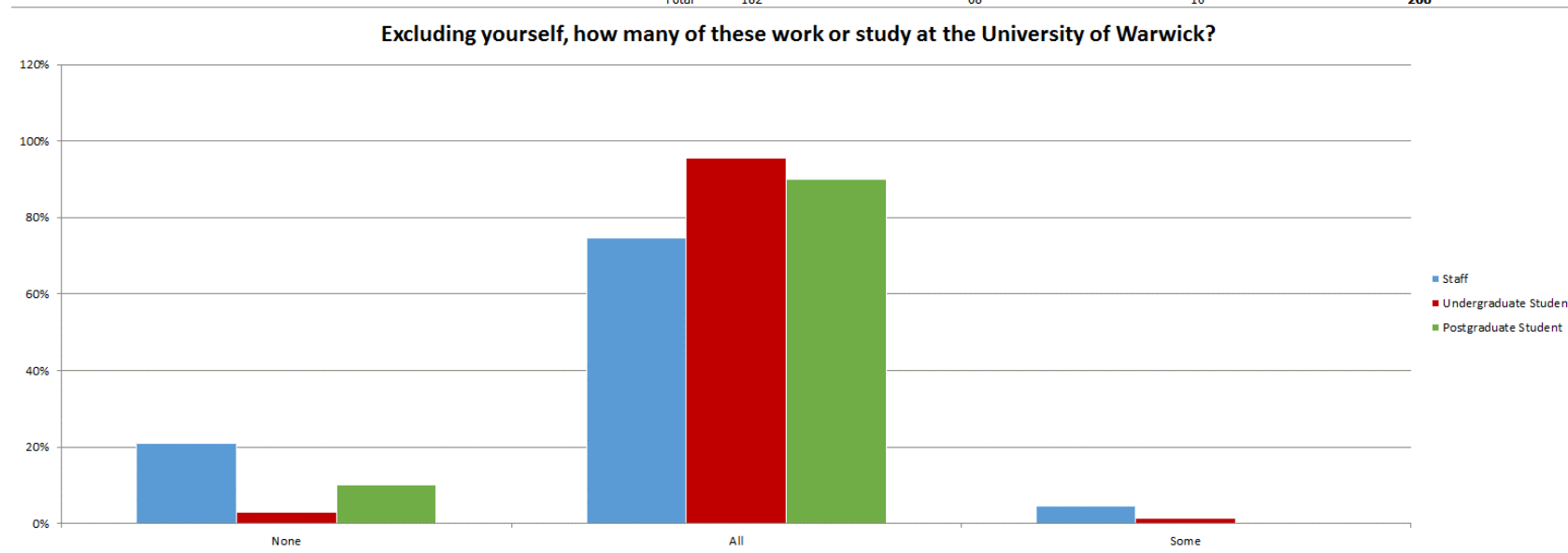
2 people
3 people
4 people
More than 4 people

	Staff	Undergraduate Student	Postgraduate Student	Total Response Count
2 people	161 88%	30 44%	6 60%	197 75.8%
3 people	20 11%	27 40%	3 30%	50 19.2%
4 people	1 1%	10 15%	1 10%	12 4.6%
More than 4 people	0 0%	1 1%	0 0%	1 0.4%
Total	182	68	10	260



Excluding yourself, how many of these work or study at the University of Warwick?

	Staff		Undergraduate Student		Postgraduate Student		Total Response Count	
None	38	21%	2	3%	1	10%	41	15.8%
All	136	75%	65	96%	9	90%	210	80.8%
Some	8	4%	1	1%	0	0%	9	3.5%
Total	182		68		10		260	

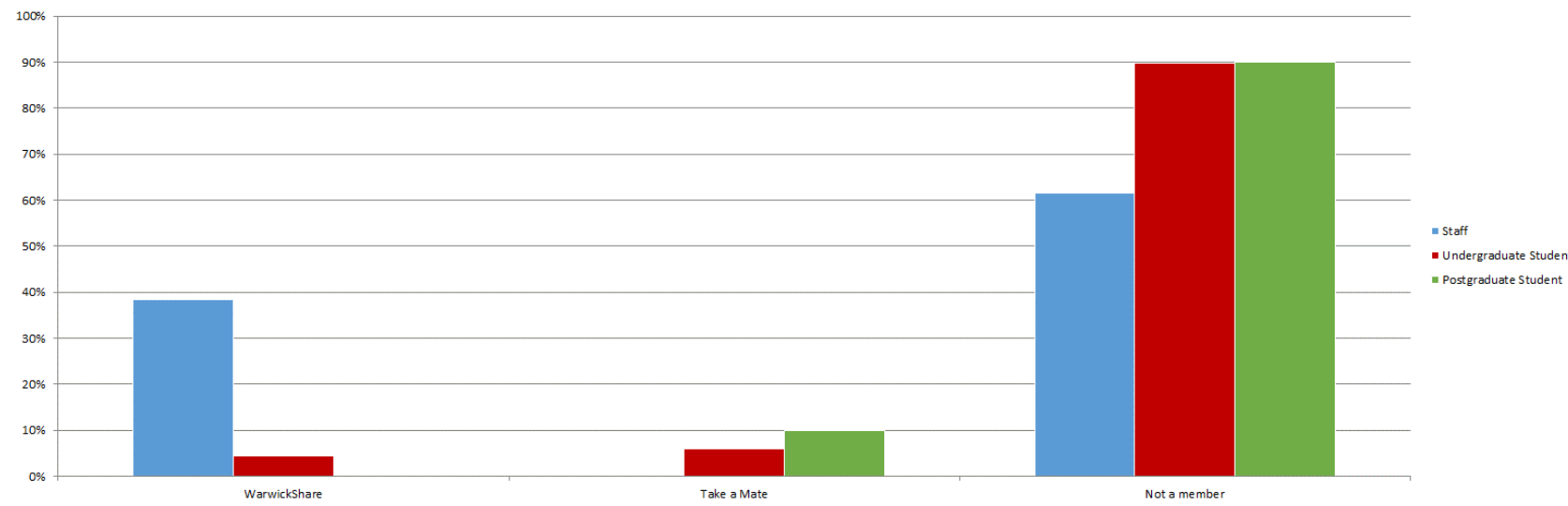


Are you a Registered Member of a formal car share scheme?

WarwickShare
Take a Mate
Not a member

	Staff		Undergraduate Student		Postgraduate Student		Total Response Count	
WarwickShare	70	38%	3	4%	0	0%	73	28.1%
Take a Mate	0	0%	4	6%	1	10%	5	1.9%
Not a member	112	62%	61	90%	9	90%	182	70.0%
Total	182		68		10		260	

Are you a Registered Member of a formal car share scheme?



Questions 11 to 13 were directed to those respondents that indicated in Question 6 that they car share, either by driving and taking passengers, or as passengers.

Question 11 asked how many people (including the respondent) travel together in a car. The vast majority of staff indicated that they travel with two people in the car (88%). For undergraduates, whilst two people in the car was still the most frequent group size, it was a much lower proportion than for the other respondent categories at 44%, with 40% of undergraduates indicating that they travel with 3 people in the car compared with only 11% of staff.

Question 12 examined how many car sharers also work or study at the University. For all groups, the majority work or study at the university, with 21% of staff, 10% of postgraduates and 3% of undergraduates car sharing only with people who do not work or study at the University.

Question 13 sought to establish whether the respondents were a member of any formal car share scheme. Staff are more likely than students to be members of a car share scheme, with 38% belonging to WarwickShare. Of the undergraduate students who car share, only 6% belong to Take a Mate, with 4% claiming to belong to the staff WarwickShare scheme.

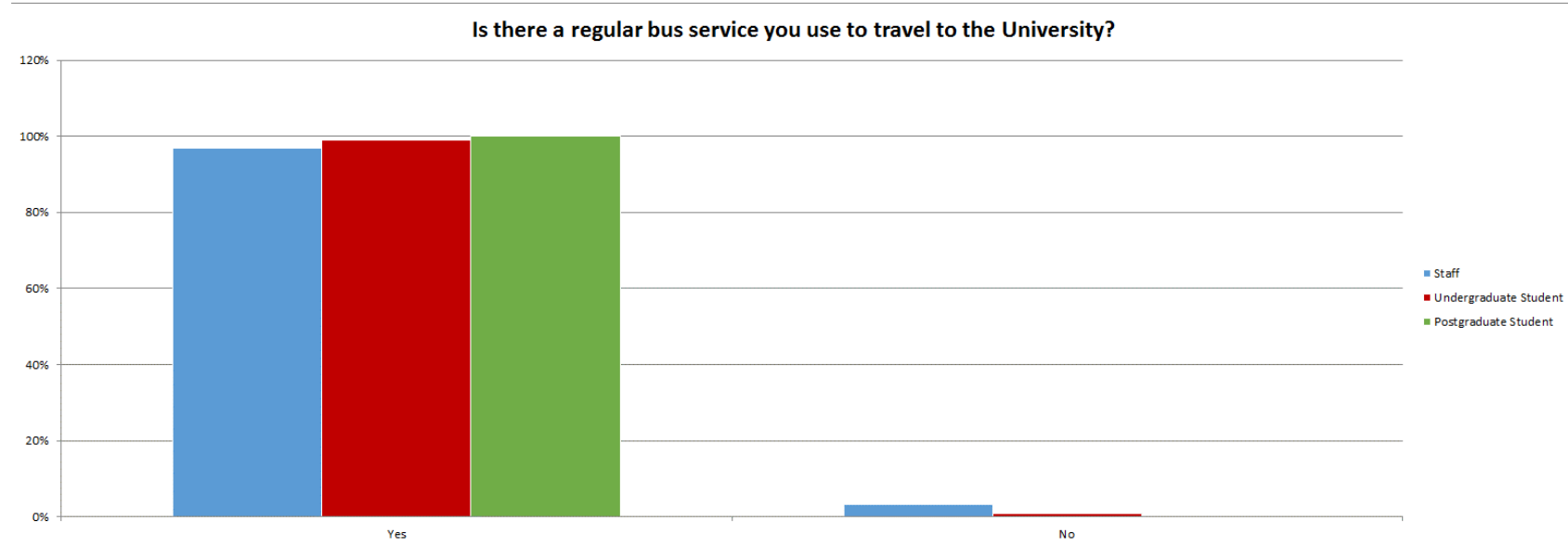
Questions 14 to 16 below were directed to respondents who indicated in Question 6 that they travel by bus for the main part of their journey to the University.

3.12 Question 14: User of Regular Bus Service

Is there a regular bus service you use to travel to the University?

Yes
No

	Staff	Undergraduate Student	Postgraduate Student	Total Response Count
Yes	186	332	43	561
No	6	3	0	9
Total	192	335	43	570

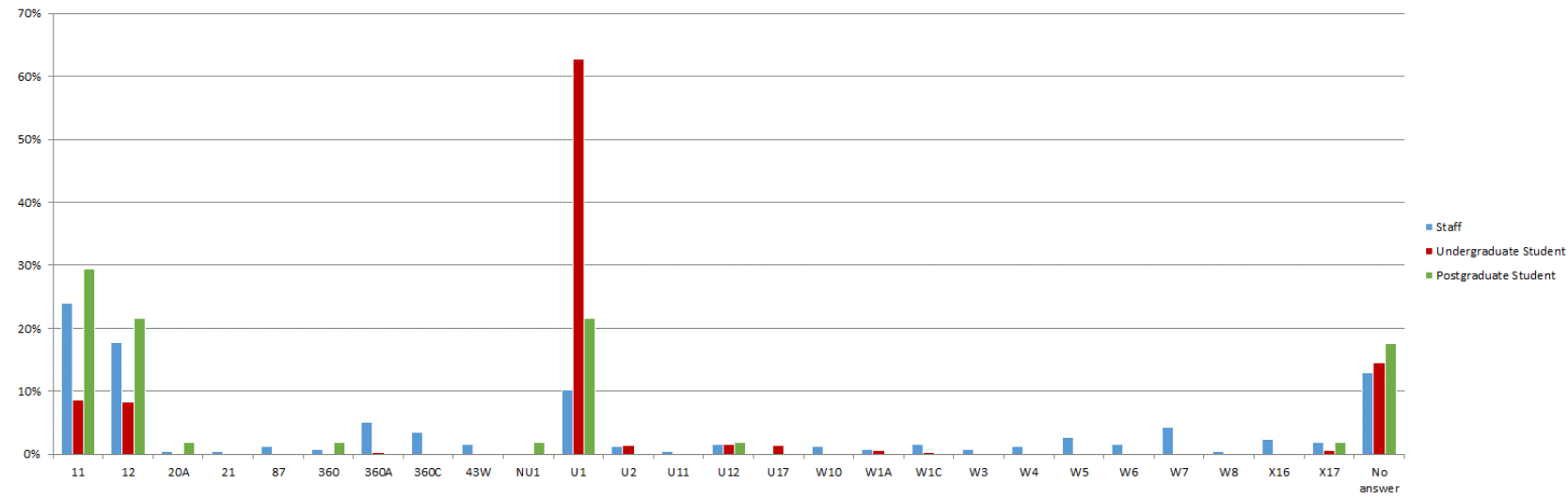


Please state the bus service number you use

11
12
20A
21
87
360
360A
360C
43W
NU1
U1
U2
U11
U12
U17
W10
W1A
W1C
W3
W4
W5
W6
W7
W8
X16
X17
No answer

	Staff		Undergraduate Student		Postgraduate Student		Total Response Count	
11	61	24%	32	9%	15	29%	108	15.9%
12	45	18%	31	8%	11	22%	87	12.8%
20A	1	0%	0	0%	1	2%	2	0.3%
21	1	0%	0	0%	0	0%	1	0.1%
87	3	1%	0	0%	0	0%	3	0.4%
360	2	1%	0	0%	1	2%	3	0.4%
360A	13	5%	1	0%	0	0%	14	2.1%
360C	9	4%	0	0%	0	0%	9	1.3%
43W	4	2%	0	0%	0	0%	4	0.6%
NU1	0	0%	0	0%	1	2%	1	0.1%
U1	26	10%	234	63%	11	22%	271	40.0%
U2	3	1%	5	1%	0	0%	8	1.2%
U11	1	0%	0	0%	0	0%	1	0.1%
U12	4	2%	6	2%	1	2%	11	1.6%
U17	0	0%	5	1%	0	0%	5	0.7%
W10	3	1%	0	0%	0	0%	3	0.4%
W1A	2	1%	2	1%	0	0%	4	0.6%
W1C	4	2%	1	0%	0	0%	5	0.7%
W3	2	1%	0	0%	0	0%	2	0.3%
W4	3	1%	0	0%	0	0%	3	0.4%
W5	7	3%	0	0%	0	0%	7	1.0%
W6	4	2%	0	0%	0	0%	4	0.6%
W7	11	4%	0	0%	0	0%	11	1.6%
W8	1	0%	0	0%	0	0%	1	0.1%
X16	6	2%	0	0%	0	0%	6	0.9%
X17	5	2%	2	1%	1	2%	8	1.2%
No answer	33	13%	54	14%	9	18%	96	14.2%
Total	254		373		51		678	

Please state the bus service number you use



Almost all bus users use a regular bus service to travel to the University, with only 2% saying that they did not.

The bus services used by the greatest number of respondents were the U1 (40%), the 11 (16%) and the 12 (13%)². The U1 was used by almost two thirds of the students.

Question 15 and 16 below provide details of locations where respondents board bus services and explore reasons for bus use.

² Many bus users specified that they used the 11 or the 12 therefore there is overlap between these responses

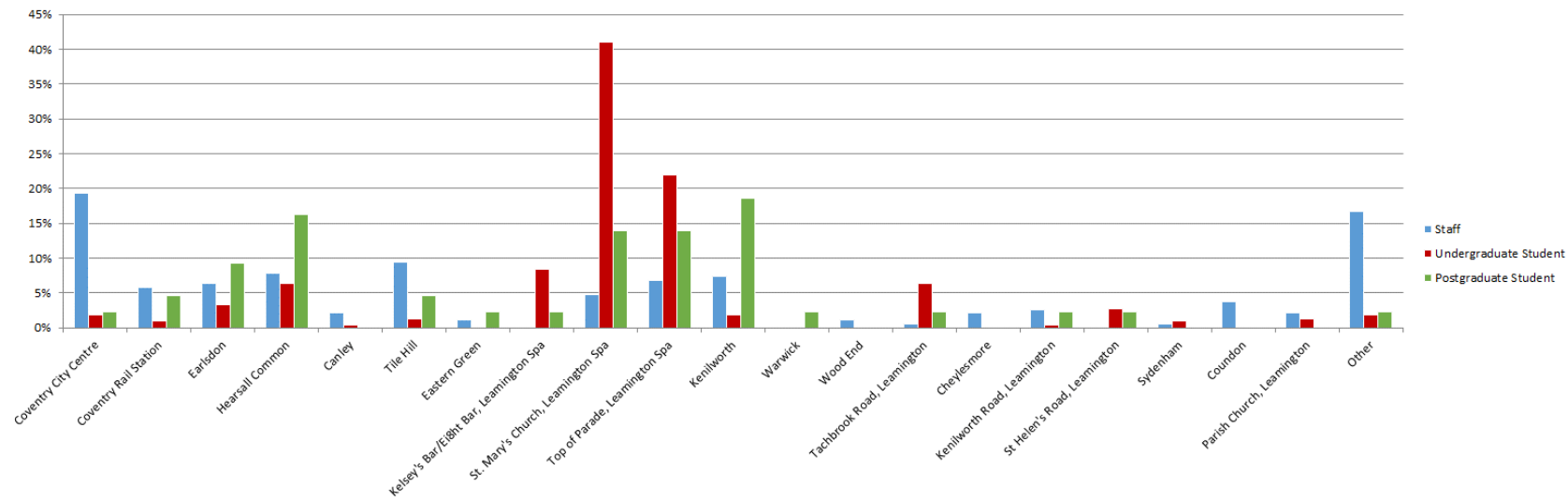
3.13 Question 15: Bus Boarding Locations

Which of the following locations do you use to board the bus to the University? (Please tick one option only)

- Coventry City Centre
- Coventry Rail Station
- Earlsdon
- Hearsall Common
- Canley
- Tile Hill
- Eastern Green
- Kelsey's Bar/Eight Bar, Leamington Spa
- St. Mary's Church, Leamington Spa
- Top of Parade, Leamington Spa
- Kenilworth
- Warwick
- Wood End
- Tachbrook Road, Leamington
- Cheylesmore
- Kenilworth Road, Leamington
- St Helen's Road, Leamington
- Sydenham
- Coundon
- Parish Church, Leamington
- Other

	Staff	Undergraduate Student	Postgraduate Student	Total Response Count
Coventry City Centre	37	6	1	44
Coventry Rail Station	11	3	2	16
Earlsdon	12	11	4	27
Hearsall Common	15	21	7	43
Canley	4	1	0	5
Tile Hill	18	4	2	24
Eastern Green	2	0	1	3
Kelsey's Bar/Eight Bar, Leamington Spa	0	28	1	29
St. Mary's Church, Leamington Spa	9	137	6	152
Top of Parade, Leamington Spa	13	73	6	92
Kenilworth	14	6	8	28
Warwick	0	0	1	1
Wood End	2	0	0	2
Tachbrook Road, Leamington	1	21	1	23
Cheylesmore	4	0	0	4
Kenilworth Road, Leamington	5	1	1	7
St Helen's Road, Leamington	0	9	1	10
Sydenham	1	3	0	4
Coundon	7	0	0	7
Parish Church, Leamington	4	4	0	8
Other	32	6	1	39
Total	191	334	43	568

Which of the following locations do you use to board the bus to the University? (Please tick one option only)



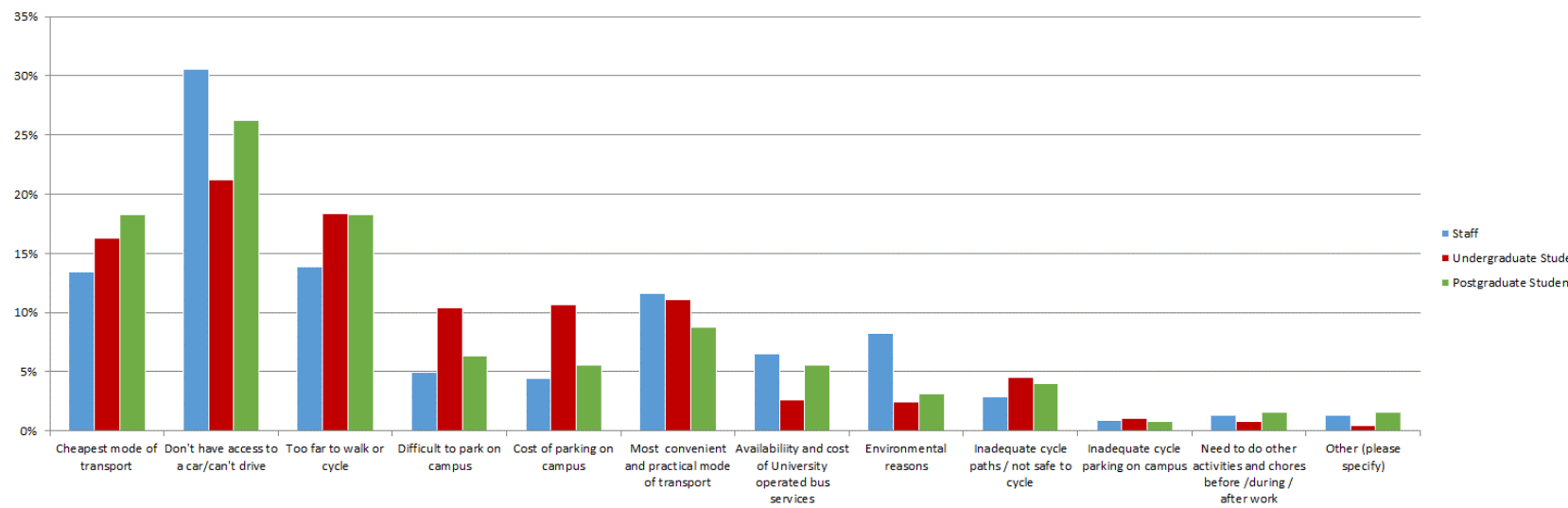
3.14 Question 16: Reasons for bus use

What are your reasons for using the bus to travel to the University? (Please tick all that apply)

- Cheapest mode of transport
- Don't have access to a car/can't drive
- Too far to walk or cycle
- Difficult to park on campus
- Cost of parking on campus
- Most convenient and practical mode of transport
- Availability and cost of University operated bus services
- Environmental reasons
- Inadequate cycle paths / not safe to cycle
- Inadequate cycle parking on campus
- Need to do other activities and chores before /during / after work
- Other (please specify)

	Staff	Undergraduate Student	Postgraduate Student	Total Response Count
Cheapest mode of transport	60 13%	176 16%	23 18%	259 15.7%
Don't have access to a car/can't drive	137 31%	229 21%	33 26%	399 24.2%
Too far to walk or cycle	62 14%	198 18%	23 18%	283 17.1%
Difficult to park on campus	22 5%	112 10%	8 6%	142 8.6%
Cost of parking on campus	20 4%	115 11%	7 6%	142 8.6%
Most convenient and practical mode of transport	52 12%	120 11%	11 9%	183 11.1%
Availability and cost of University operated bus services	29 6%	28 3%	7 6%	64 3.9%
Environmental reasons	37 8%	26 2%	4 3%	67 4.1%
Inadequate cycle paths / not safe to cycle	13 3%	49 5%	5 4%	67 4.1%
Inadequate cycle parking on campus	4 1%	11 1%	1 1%	16 1.0%
Need to do other activities and chores before /during / after work	6 1%	9 1%	2 2%	17 1.0%
Other (please specify)	6 1%	5 0%	2 2%	13 0.8%
Total	448	1078	126	1652

What are your reasons for using the bus to travel to the University? (Please tick all that apply)



As expected, a high proportion of undergraduate students travel by bus from Leamington Spa with 45% boarding at St Mary's Church and a further 24% boarding at the top of The Parade. A further 8% board at Kelsey's Bar/Ei8ht Bar.

For staff, the greatest number travel from Coventry City Centre (19%), with 9% travelling from Tile Hill and 8% from Hearsall Common, whilst for postgraduate students it is Kenilworth (19%) and Hearsall Common (16%).

Question 16 examines the main reasons for bus use. The main factor is 'lack of access to a car', given by 30% of staff, 21% of undergraduate students and 26% of postgraduate students. Bus use fills the 'niche' for journeys that are considered 'too far to walk or cycle', which was the second most popular reason (17%). Cost was an important factor, because bus travel is considered relatively inexpensive, with 13% of staff, 16% of undergraduates and 18% of postgraduates saying it was the 'cheapest mode of transport'. 11% choose to use bus services for 'positive' reasons of convenience or practicality.

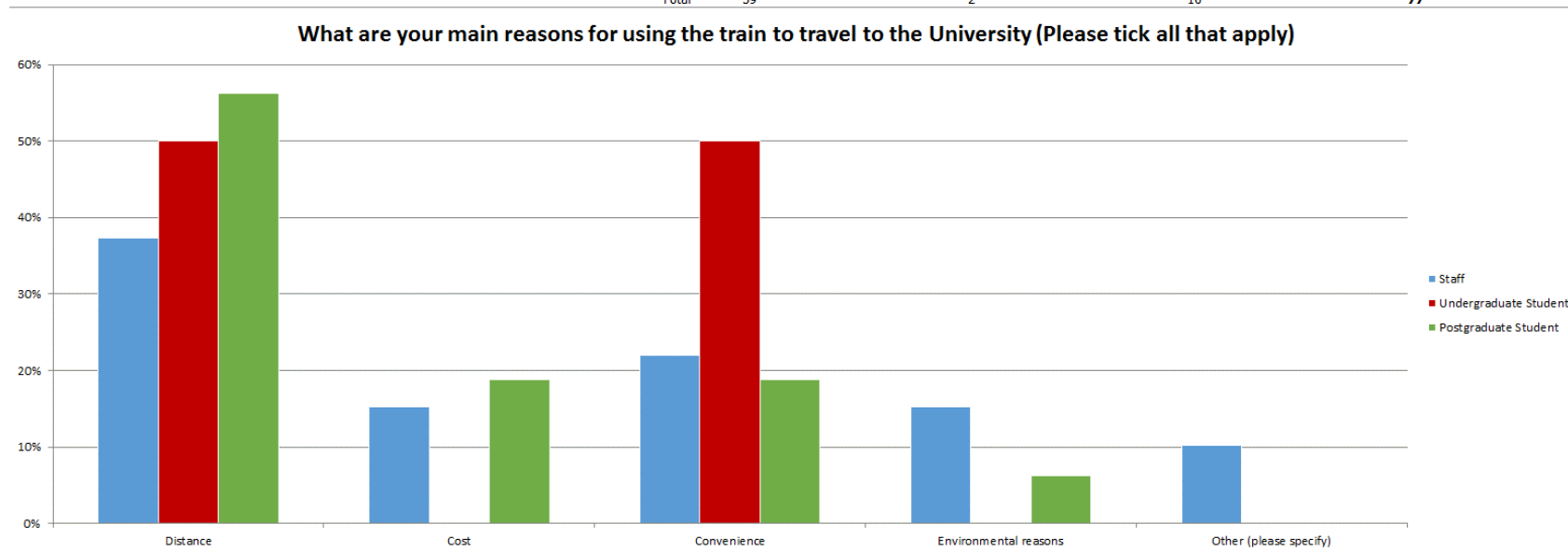
Within the free text question 'Other' responses, there were no clear themes emerging.

Questions 17 to 21 below, examine the train as the mode of transport

3.15 Question 17 Reasons for using Train

What are your main reasons for using the train to travel to the University (Please tick all that apply)

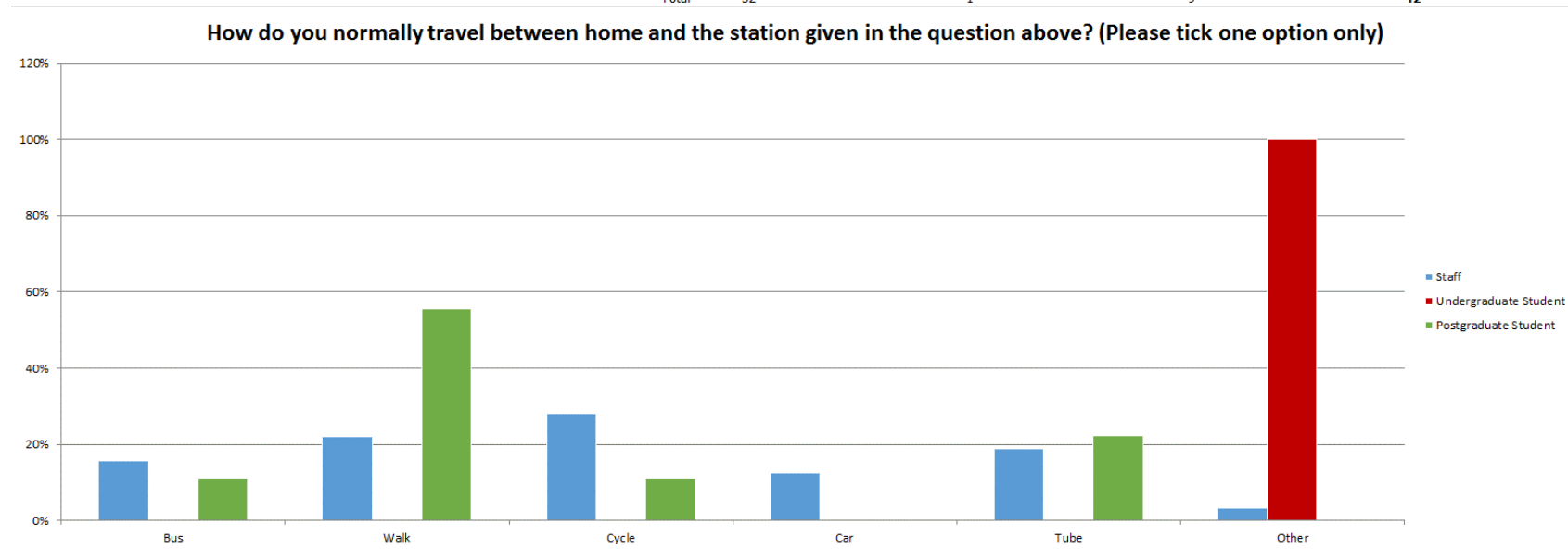
	Staff		Undergraduate Student		Postgraduate Student		Total Response Count	
Distance	22	37%	1	50%	9	56%	32	41.6%
Cost	9	15%	0	0%	3	19%	12	15.6%
Convenience	13	22%	1	50%	3	19%	17	22.1%
Environmental reasons	9	15%	0	0%	1	6%	10	13.0%
Other (please specify)	6	10%	0	0%	0	0%	6	7.8%
Total	59		2		16		77	



3.16 Question 19 Mode of travel between Home and Boarding Station

How do you normally travel between home and the station given in the question above? (Please tick one option only)

	Staff	Undergraduate Student	Postgraduate Student	Total Response Count
Bus	5 16%	0 0%	1 11%	6 14.3%
Walk	7 22%	0 0%	5 56%	12 28.6%
Cycle	9 28%	0 0%	1 11%	10 23.8%
Car	4 13%	0 0%	0 0%	4 9.5%
Tube	6 19%	0 0%	2 22%	8 19.0%
Other	1 3%	1 100%	0 0%	2 4.8%
Total	32	1	9	42

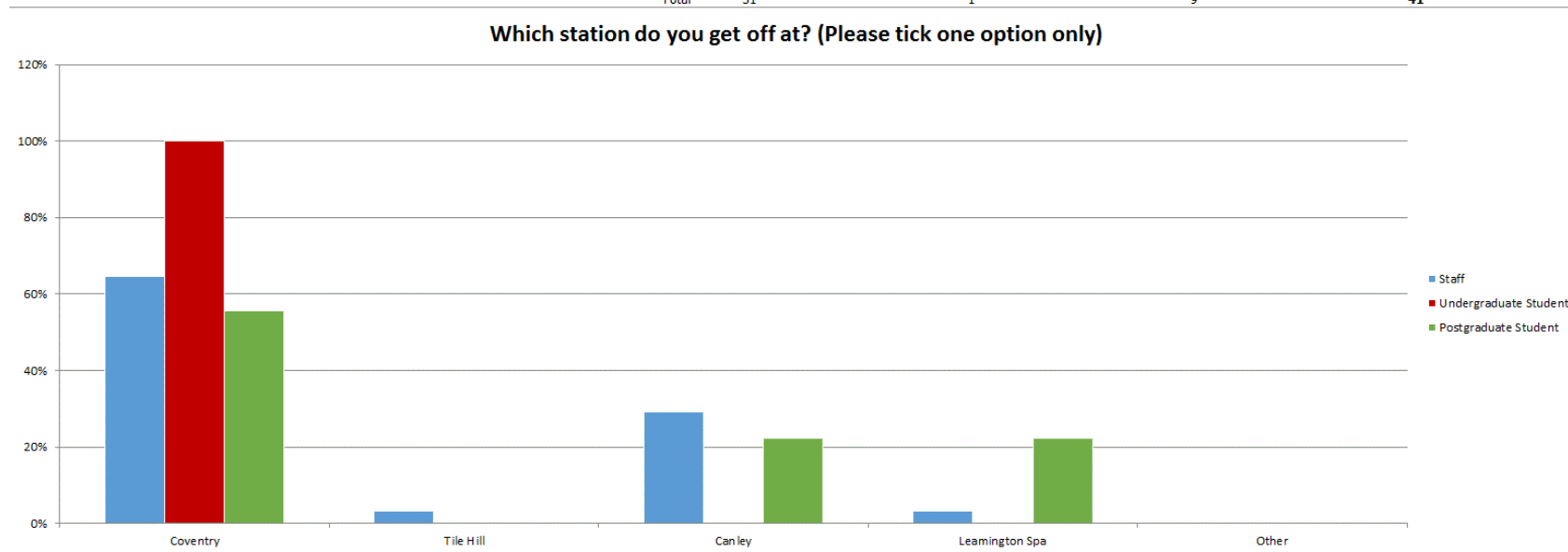


3.17 Question 20 Alighting Station

Which station do you get off at? (Please tick one option only)

Coventry
Tile Hill
Canley
Leamington Spa
Other

	Staff		Undergraduate Student		Postgraduate Student		Total Response Count	
Coventry	20	65%	1	100%	5	56%	26	63.4%
Tile Hill	1	3%	0	0%	0	0%	1	2.4%
Canley	9	29%	0	0%	2	22%	11	26.8%
Leamington Spa	1	3%	0	0%	2	22%	3	7.3%
Other	0	0%	0	0%	0	0%	0	0.0%
Total	31		1		9		41	

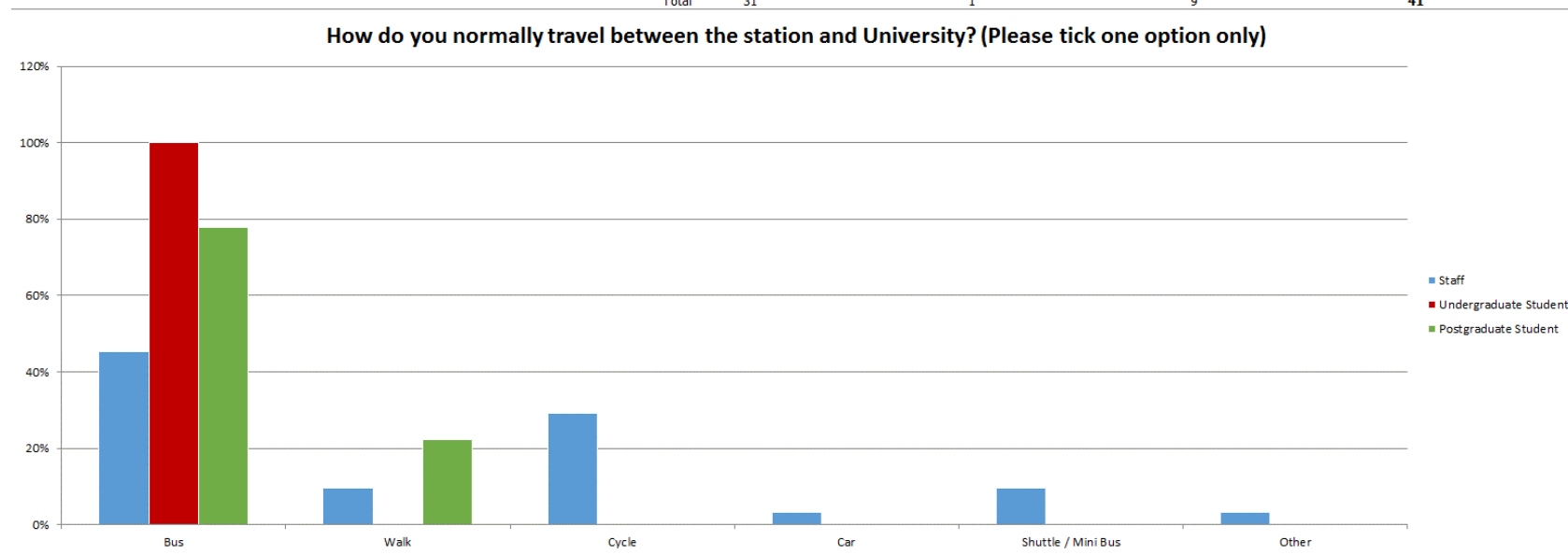


3.18 Question 21 Mode of Travel between alighting Station and University

How do you normally travel between the station and University? (Please tick one option only)

Bus
Walk
Cycle
Car
Shuttle / Mini Bus
Other

	Staff	Undergraduate Student	Postgraduate Student	Total Response Count
Bus	14 45%	1 100%	7 78%	22 53.7%
Walk	3 10%	0 0%	2 22%	5 12.2%
Cycle	9 29%	0 0%	0 0%	9 22.0%
Car	1 3%	0 0%	0 0%	1 2.4%
Shuttle / Mini Bus	3 10%	0 0%	0 0%	3 7.3%
Other	1 3%	0 0%	0 0%	1 2.4%
Total	31	1	9	41



It is evident from the responses that the numbers using the train are low, with only 59 staff, 16 postgraduate students and 2 undergraduate students using the train.

The main reasons given for using the train are the distance (42%), convenience (22%), cost (16%) and environmental reasons (13%). Amongst the Other responses, 2 respondents cited traffic, whilst 2 said that they had no alternative as they could not drive.

The stations where respondents boarded the train covered a large area; the 39 respondents who named a boarding station used 16 different stations. The most frequently used stations were London Euston (11 respondents), Birmingham New Street (9 respondents), Oxford (3 respondents), Nuneaton and Wolverhampton (each 2 respondents).

The most frequently used mode of transport to travel between home and the station was walking (29%), followed by cycle (24%). Amongst the Other responses, 8 respondents (19%) used the London Underground.

Question 20 reveals that Coventry railway station, which is served by national and local services, is the most frequently used station for alighting, by 63%. Canley station, served by local trains on the Coventry to Wolverhampton service, is used by a further 27%. Amongst the Other responses, 3 respondents stated that they used Leamington Station.

Question 21 shows that bus travel is the most often used mode of transport for the connection to and from the railway stations, by 54% of respondents, with cycling also popular, used by 22%.

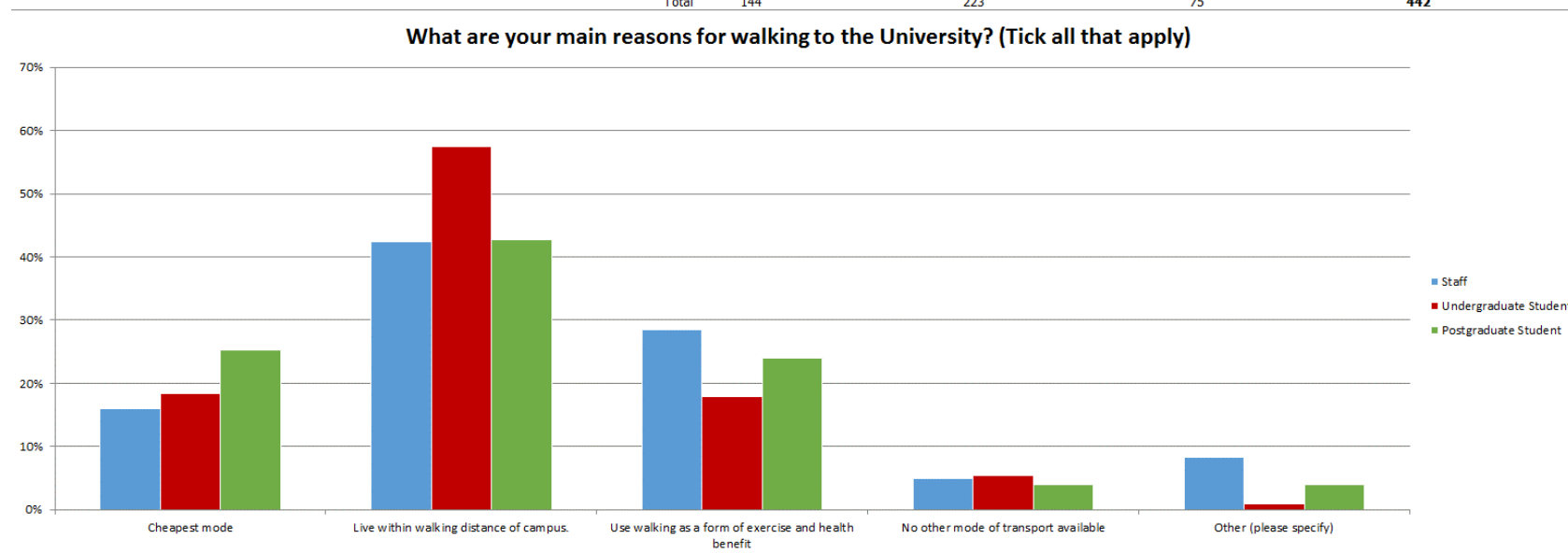
Question 22 below, examines walking as the mode of transport.

3.19 Question 22 Reasons for Walking

What are your main reasons for walking to the University? (Tick all that apply)

- Cheapest mode
- Live within walking distance of campus.
- Use walking as a form of exercise and health benefit
- No other mode of transport available
- Other (please specify)

	Staff	Undergraduate Student	Postgraduate Student	Total Response Count
Cheapest mode	23 16%	41 18%	19 25%	83 18.8%
Live within walking distance of campus.	61 42%	128 57%	32 43%	221 50.0%
Use walking as a form of exercise and health benefit	41 28%	40 18%	18 24%	99 22.4%
No other mode of transport available	7 5%	12 5%	3 4%	22 5.0%
Other (please specify)	12 8%	2 1%	3 4%	17 3.8%
Total	144	223	75	442



The main reasons given for walking to University were similar for both staff and students, with the most frequently given reason being that they live within walking distance of campus (57% of undergraduates, 43% of postgraduates and 42% of staff). 28% of staff, 24% of postgraduates and 18% of undergraduates use walking as exercise, whilst 25% of postgraduates, 18% of undergraduates and 16% of staff walk because it is the cheapest mode.

The main reasons given within the 'Other' category were:

- The cost of alternative modes of transport (10 respondents);
- The buses are not good enough or unreliable (5 respondents);
- The predictability or reliability of the journey time (3 respondents);
- To avoid traffic or congestion in the area or due to roadwork disruption (3 respondents); and
- The difficulty of parking on campus (3 respondents).

Question 23 below examines the reasons for not using bus services to travel to the University

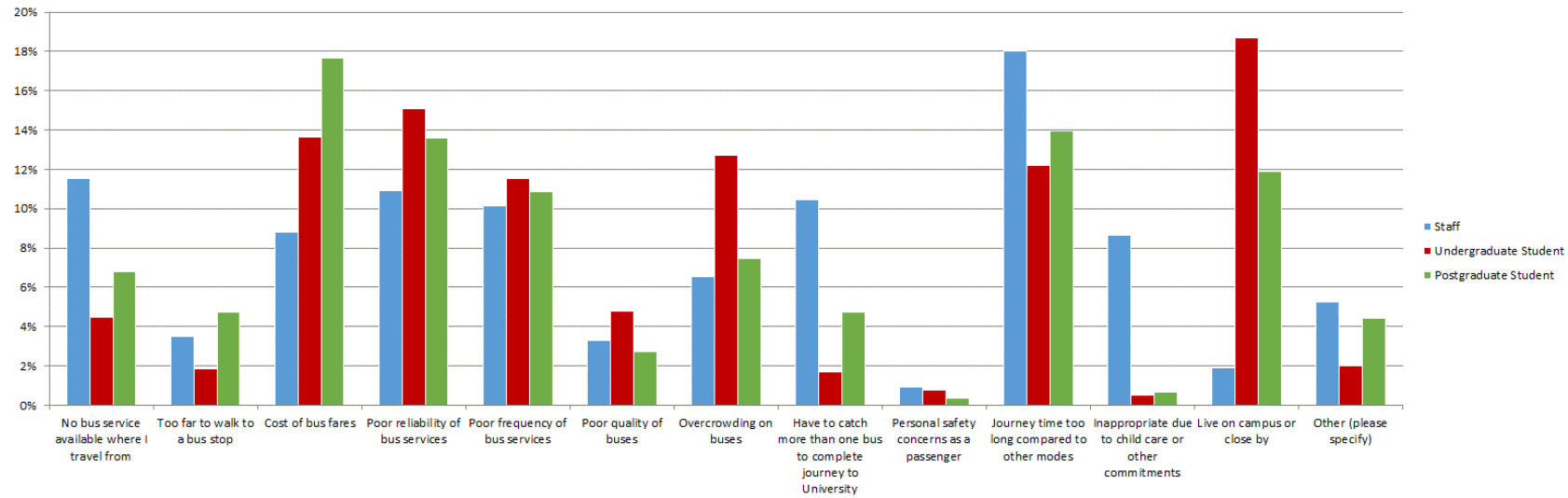
3.20 Question 23: Reasons for not using buses

What are your reasons for not using buses to travel to the University? (please tick all that apply)

- No bus service available where I travel from
- Too far to walk to a bus stop
- Cost of bus fares
- Poor reliability of bus services
- Poor frequency of bus services
- Poor quality of buses
- Overcrowding on buses
- Have to catch more than one bus to complete journey to University
- Personal safety concerns as a passenger
- Journey time too long compared to other modes
- Inappropriate due to child care or other commitments
- Live on campus or close by
- Other (please specify)

	Staff	Undergraduate Student	Postgraduate Student	Total Response Count	
No bus service available where I travel from	399 12%	34 5%	20 7%	453	10.0%
Too far to walk to a bus stop	122 4%	14 2%	14 5%	150	3.3%
Cost of bus fares	306 9%	103 14%	52 18%	461	10.2%
Poor reliability of bus services	378 11%	114 15%	40 14%	532	11.8%
Poor frequency of bus services	351 10%	87 12%	32 11%	470	10.4%
Poor quality of buses	115 3%	36 5%	8 3%	159	3.5%
Overcrowding on buses	227 7%	96 13%	22 7%	345	7.6%
Have to catch more than one bus to complete journey to University	362 10%	13 2%	14 5%	389	8.6%
Personal safety concerns as a passenger	33 1%	6 1%	1 0%	40	0.9%
Journey time too long compared to other modes	625 18%	92 12%	41 14%	758	16.8%
Inappropriate due to child care or other commitments	300 9%	4 1%	2 1%	306	6.8%
Live on campus or close by	66 2%	141 19%	35 12%	242	5.4%
Other (please specify)	182 5%	15 2%	13 4%	210	4.7%
Total	3466	755	294	4515	

What are your reasons for not using buses to travel to the University? (please tick all that apply)



The option 'Journey time too long compared to other modes' was the main reason given by staff; 18%, with the second most frequently chosen reason being 'no bus service available where I travel from' (12%).

For postgraduate students it was 'cost of bus fares', chosen by 18%, with the next most frequently selected reason being 'Journey time too long compared to other modes' and 'poor reliability of bus services', each with 14%. For undergraduates the most frequently selected reason was that they live on campus or close by (19%), followed by the poor reliability (15%).

In order to identify the locations where, by inference, respondents might travel to the University by bus if there was a service, their responses have been matched to their postcodes. The resultant postcode plots are provided in **Appendix C**. These plots show the number of respondents at each postcode. A number of those stating that there is not a bus service available live on Campus or within walking distances. Most respondents who say they do not have a bus service available live in Coventry

In addition to the options offered for this question, a large percentage of respondents provided additional information via the 'Other' option and the main issues raised were:

- 51 respondents said that they prefer walking or cycling, either for the health benefits, because they enjoy it or because it is simpler than using a bus.
- 18 respondents said that the timing of the buses was not suitable for them, either because they started work earlier or later than the buses ran, or that they would have a long wait after work for the next service due to the timetable.
- 13 respondents said that health reasons prevented them from using the bus, either through disability or mobility issues, or because of travel sickness.
- 12 respondents stated that they need their car for work during the day.
- 12 respondents said that flexibility and convenience were the reasons they do not use buses.
- 11 respondents stated that they need their car due to childcare or carer responsibilities or the need to travel to other commitments.
- 10 respondents said that they prefer to travel by car.
- 6 respondents said that as they already pay to have a car they would rather use it than have to pay for a bus pass as well.
- Other factors which were mentioned by smaller numbers of respondents but relate to the bus services themselves rather than the respondents' personal circumstances include road works affecting the journey (three respondents), having to have correct change (two respondents), not being able to use tickets across operators (two respondents), poor bus services in the holidays (two respondents) and not knowing if the bus that arrived would be wheelchair accessible (one respondent).

Questions 24 to 26 below asked respondents what would encourage them to travel by public transport or cycle or car share. They were asked to pick three measures and rate them as first, second and third choice. There was also an 'Other' choice with free text.

3.21 Question 24: Encouraging use of public transport

Question 24 asked 'Which of the following measures would most encourage you to travel to the University by public transport? If you currently travel by public transport, which measures would you most like to see implemented?'

This question revealed a preference within the staff group for more direct bus services to the University, reflecting the perception that existing services are indirect and do not service the areas from which people are travelling. It is particularly an issue for those travelling longer distances who may need to change buses resulting in extended journey times that do not compare well with car travel.

The other main issue raised, and the highest preference for undergraduate students, was the cost, with an interest in discounted fares offered by the University. 'Faster/more frequent service' was the improvement that was next most likely to be chosen as the first preference for both groups and the most chosen first preference for the postgraduate student group.

Staff			
	First Choice	Second Choice	Third Choice
Shuttle bus / taxi service to nearest rail station	103	64	62
More direct bus services to campus	298	169	79
Pool cars available on campus for business journeys	23	16	42
More facilities (shops, dentist etc) available on campus	12	32	34
Subsidised/Discounted fares offered by the University	155	167	103
Better information about bus and train services	12	44	84
Improved environment at bus shelters	7	21	38
Interest free loans for bus travel	3	8	12
Ticket sales/information office on campus	4	13	18
Smartcard/Oyster Card payment technology for bus travel	37	68	71
Multi operator bus pass	39	59	73
Facilities to pay for bus travel through salary	9	28	30
Options to pay for bus travel by direct debit	4	6	12
Increased parking charges	9	18	23
Flexible parking charges ('pay on use')	43	36	44
Faster/more frequent service	194	195	129
None	351	30	63
Other	79	32	22
Undergraduate Student			
	First Choice	Second Choice	Third Choice
Shuttle bus / taxi service to nearest rail station	45	25	33
More direct bus services to campus	84	85	65
Pool cars available on campus for business journeys	1	5	10
More facilities (shops, dentist etc) available on campus	11	22	30
Subsidised/Discounted fares offered by the University	196	96	61
Better information about bus and train services	6	29	44
Improved environment at bus shelters	1	12	25
Interest free loans for bus travel	4	12	11
Ticket sales/information office on campus	0	3	8
Smartcard/Oyster Card payment technology for bus travel	22	48	54
Multi operator bus pass	27	68	66
Facilities to pay for bus travel through salary	0	0	0
Options to pay for bus travel by direct debit	0	10	10
Increased parking charges	2	0	8
Flexible parking charges ('pay on use')	5	6	7
Faster/more frequent service	133	109	69
None	9	4	18
Other	9	4	6
Postgraduate Student			
	First Choice	Second Choice	Third Choice
Shuttle bus / taxi service to nearest rail station	21	8	6
More direct bus services to campus	21	14	11
Pool cars available on campus for business journeys	0	2	6
More facilities (shops, dentist etc) available on campus	4	5	4
Subsidised/Discounted fares offered by the University	25	24	15
Better information about bus and train services	2	1	9
Improved environment at bus shelters	0	3	2
Interest free loans for bus travel	2	2	3
Ticket sales/information office on campus	0	3	1
Smartcard/Oyster Card payment technology for bus travel	13	19	16
Multi operator bus pass	7	8	14
Facilities to pay for bus travel through salary	0	0	1
Options to pay for bus travel by direct debit	0	2	4
Increased parking charges	1	0	1
Flexible parking charges ('pay on use')	2	2	3
Faster/more frequent service	27	30	17
None	9	2	9
Other	5	3	5

A number of free text responses were received to the 'Other' category.

Convenience

- 8 respondents commented generally that they would not use public transport because they currently car share, cycle or walk and like doing that. 14 respondents said that they wouldn't use public transport either because they live too far away or do close to do so.
- 17 respondents said they would not use public transport because of childcare commitments. One said they would use the bus if places were available at the University nursery.
- Four respondents said they had to use the car because of need to travel during the day.

Reliability and frequency of public transport

- 22 respondents commented on the need for more reliable, frequent, faster and convenient public transport.
- 15 respondents said that they would need a public transport connection which ran closer to where they live.
- Three respondents commented that they would like a better quality of buses – cleaner, more modern and more comfortable.

Information

- Three respondents said that provision of real time information, or more accurate real time information, would encourage them to use public transport.

Tickets and pricing

- Three respondents mentioned the car parking permits, saying that a reduced charge for the parking permits would encourage them to use public transport.
- Two respondents said they would be more likely to use public transport if they did not have to have the correct change for the fare.
- 11 respondents said that cheaper fares would encourage them to use public transport.

Train links

- 11 respondents suggested a train station on or near campus.

Other public transport links

- Five respondents commented on the need for a Park and Ride facility.
- Two respondents would like to see a staff only service operating from Leamington.
- Two respondents suggested having a 'Boris bike' system on campus and at the train stations.

3.22 Question 25: Measures to Encourage Cycling

This question asked; 'which of the following measures would most encourage you to cycle? If you currently do cycle to the University, which measures would you most like to see implemented?'

The key measure identified, which was the measure most likely to be chosen as first preference by all three groups, was safer cycle routes to and from campus.

The second most featured response was better changing facilities, showers. Some respondents may be unaware of the option to use existing facilities such as the sports centre whilst others may need a more convenient facility close to their place of work or study.

Staff			
	First Choice	Second Choice	Third Choice
Safe cycle routes to the campus	441	106	61
Improved cycle parking at the campus	46	144	92
Improved changing facilities, showers and luggage lockers for cyclists	131	172	123
Secure cycle lockers at the rail station	13	27	30
Bike parking scheme (cycle to work)	37	82	65
Arrangement with a local cycle shop to purchase bike and equipment	12	37	36
Support and information from a Bicycle User Group	2	7	22
Cycling skills training and maintenance on campus	16	25	45
Pool cars or pool bikes available for business journeys	15	29	32
More facilities (shops, dentist, etc) available on campus	5	14	24
Cycle maintenance and repair facilities available on campus	14	57	91
Increased parking charges	3	21	27
Flexible parking charges ('pay on use')	29	35	41
None	529	17	54
Other	90	30	16
Undergraduate Student			
	First Choice	Second Choice	Third Choice
Safe cycle routes to the campus	281	69	36
Improved cycle parking at the campus	33	102	56
Improved changing facilities, showers and luggage lockers for cyclists	49	96	89
Secure cycle lockers at the rail station	3	17	17
Bike parking scheme (cycle to work)	36	56	50
Arrangement with a local cycle shop to purchase bike and equipment	8	27	26
Support and information from a Bicycle User Group	2	10	8
Cycling skills training and maintenance on campus	7	16	39
Pool cars or pool bikes available for business journeys	2	3	6
More facilities (shops, dentist, etc) available on campus	7	14	20
Cycle maintenance and repair facilities available on campus	7	32	51
Increased parking charges	0	2	4
Flexible parking charges ('pay on use')	2	4	6
None	112	6	30
Other	5	2	5
Postgraduate Student			
	First Choice	Second Choice	Third Choice
Safe cycle routes to the campus	67	18	7
Improved cycle parking at the campus	4	20	16
Improved changing facilities, showers and luggage lockers for cyclists	18	21	13
Secure cycle lockers at the rail station	1	3	7
Bike parking scheme (cycle to work)	18	12	12
Arrangement with a local cycle shop to purchase bike and equipment	2	10	10
Support and information from a Bicycle User Group	0	1	3
Cycling skills training and maintenance on campus	1	1	10
Pool cars or pool bikes available for business journeys	0	4	3
More facilities (shops, dentist, etc) available on campus	1	3	1
Cycle maintenance and repair facilities available on campus	5	17	18
Increased parking charges	0	1	1
Flexible parking charges ('pay on use')	1	0	1
None	18	1	6
Other	3	1	3

There was a considerable number of free text 'Other' responses as follows:

General

- 57 respondents said it was too far for them to cycle from their homes.
- 26 respondents said they did not want to or were unable to because of needing their car for work or to carry equipment, their health or needing to transport children.
- Seven respondents said they were unable to ride a bike.
- Eight respondents said that it was too dangerous.
- Four respondents did not want to cycle because of the weather.

New and improved cycle routes and crossings

- 12 respondents commented on the need for cycle routes, with five of these requesting a route from Leamington to Kenilworth/the University, and two requesting better routes around campus.
- Nine respondents suggested having a Park and Cycle site where they could leave their car and cycle the rest of the route.

Security and storage

- Seven respondents requested more cycle parking, with several specifically wanting secure, covered parking.
- One respondent had nowhere they could store a bike at their homes.

Financial incentives, bike loans and maintenance

- Three respondents suggested a Boris bike scheme with bikes available at stations, whilst two mentioned a bike rental scheme.
- Two respondents said they would be encouraged to cycle by a subsidy scheme to purchase a bike.
- Two respondents suggested an incentive scheme for cycling.
- One respondent suggested priority car parking for those who cycle on some days
- One respondents suggested flexible working hours so that they could cycle at quieter times on the roads.

3.23 Question 26: Measures to Encourage Car Sharing

Question 26 asked 'which of the following measures would most encourage you to car share? If you currently car share, which measures would you most like to see implemented?'

Staff			
	First Choice	Second Choice	Third Choice
Help in finding car share partners	235	119	146
Reserved parking on campus for car sharers	87	175	137
Reduced or free parking charges on campus for car sharers	353	224	118
Pool cars or pool bikes available for business journeys	17	40	38
Guaranteed Lift Home in an emergency or if let down by car driver	161	213	179
More facilities (shops, dentist, etc) available at the University	6	20	35
Increased parking charges	6	10	22
Flexible parking charges ('pay on use')	28	45	65
None	414	20	54
Other	80	20	17
Undergraduate Student			
	First Choice	Second Choice	Third Choice
Help in finding car share partners	155	67	101
Reserved parking on campus for car sharers	54	165	82
Reduced or free parking charges on campus for car sharers	218	115	74
Pool cars or pool bikes available for business journeys	7	11	11
Guaranteed Lift Home in an emergency or if let down by car driver	40	83	106
More facilities (shops, dentist, etc) available at the University	6	15	16
Increased parking charges	1	4	1
Flexible parking charges ('pay on use')	9	23	42
None	60	2	32
Other	4	3	4
Postgraduate Student			
	First Choice	Second Choice	Third Choice
Help in finding car share partners	41	17	21
Reserved parking on campus for car sharers	8	21	15
Reduced or free parking charges on campus for car sharers	42	33	11
Pool cars or pool bikes available for business journeys	3	5	5
Guaranteed Lift Home in an emergency or if let down by car driver	11	18	15
More facilities (shops, dentist, etc) available at the University	1	3	4
Increased parking charges	0	3	3
Flexible parking charges ('pay on use')	1	1	11
None	30	1	12
Other	0	1	4

The most frequently chosen response from all groups was 'reduced or free parking charges on campus for car sharers'. The next most frequently chosen response for all groups was 'help in finding car share partners with similar travel patterns'.

A guaranteed lift home in an emergency was popular with staff in particular, whilst undergraduate students were more likely to choose reserved parking on campus for car sharers.

Responses emerging from the free text 'Other' answers were as follows:

Personal circumstances

- 12 respondents mentioned that car sharing was difficult for them as they did not work fixed hours, worked part time, or needed to stay late. Eight said they would need to find a partner who worked similar hours to them. One said that flexible working would enable them to car share.

- Two respondents said they had other commitments after work that prevented them sharing whilst 12 respondents needed to drop children off.
- 10 respondents said that they did not drive or did not have access to a car.
- Two respondents said that they had to have their car for business during the day.

Administration of the scheme

- Three respondents had signed up but had no one to share with.

Parking

- Five respondents said that car sharing spaces needed better enforcement.
- Three respondents said there needed to be more car sharing spaces.

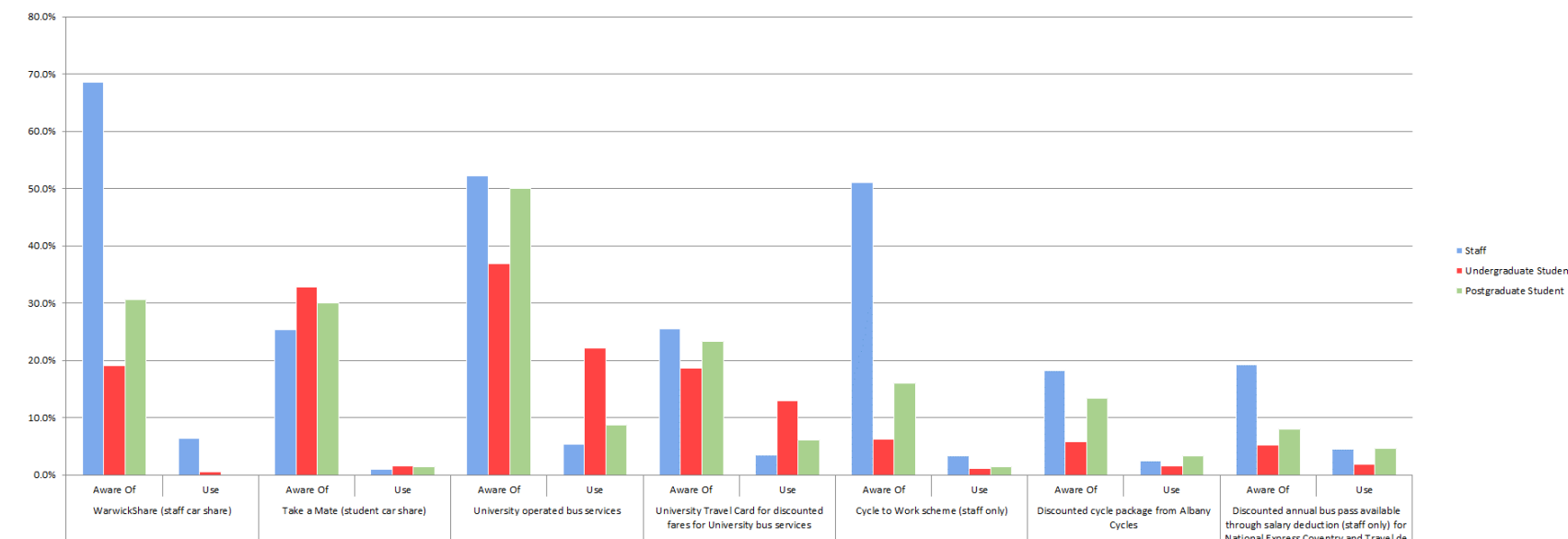
Question 27 was designed to examine respondents' awareness and use of various sustainable travel initiatives that are currently in place at the University.

3.24 Question 27: Sustainable Travel Initiatives

Are you aware of or use any of the following sustainable transport initiatives at the University?

		Staff	Undergraduate Student	Postgraduate Student	Total Response Count	
WarwickShare (staff car share)	Aware Of	998 68.6%	116 19.0%	46 30.7%	1160	52.4%
	Use	92 6.3%	3 0.5%	0 0.0%	95	4.3%
Take a Mate (student car share)	Aware Of	369 25.4%	200 32.8%	45 30.0%	614	27.7%
	Use	14 1.0%	9 1.5%	2 1.3%	25	1.1%
University operated bus services	Aware Of	759 52.2%	225 36.9%	75 50.0%	1059	47.8%
	Use	78 5.4%	135 22.2%	13 8.7%	226	10.2%
University Travel Card for discounted fares for University bus services	Aware Of	370 25.4%	113 18.6%	35 23.3%	518	23.4%
	Use	51 3.5%	79 13.0%	9 6.0%	139	6.3%
Cycle to Work scheme (staff only)	Aware Of	742 51.0%	38 6.2%	24 16.0%	804	36.3%
	Use	48 3.3%	7 1.1%	2 1.3%	57	2.6%
Discounted cycle package from Albany Cycles	Aware Of	264 18.1%	35 5.7%	20 13.3%	319	14.4%
	Use	36 2.5%	9 1.5%	5 3.3%	50	2.3%
Discounted annual bus pass available through salary deduction (staff only) for National Express Coventry and Travel de Courcy services	Aware Of	280 19.2%	32 5.3%	12 8.0%	324	14.6%
	Use	64 4.4%	11 1.8%	7 4.7%	82	3.7%
Total answers		4165	1012	295	5472	
Total respondents		1455	609	150	2214	

Are you aware of or use any of the following sustainable transport initiatives at the University?



The responses indicate a good awareness of the 'WarwickShare' car share scheme (69%), University operated bus services (52%) and Cycle to Work scheme (51%) amongst staff. Amongst undergraduates, 33% were aware of the Take a Mate car share scheme, whilst 37% were aware of University operated bus services. 50% of postgraduates were aware of University operated bus services, 31% were aware of WarwickShare and 30% were aware of Take a Mate.

There was more limited awareness of the University Travel Card for bus services, discounted cycle package and discounted bus pass through salary deduction, suggesting that these measures may need more promotion to raise awareness.

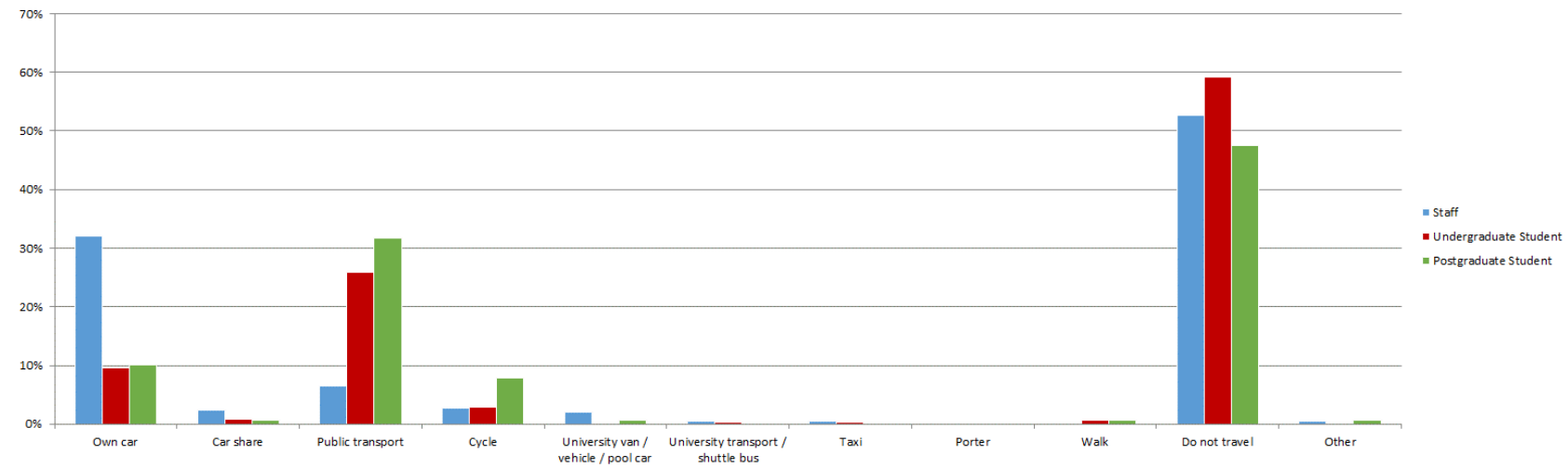
It is also notable that staff awareness of WarwickShare has dropped from 76% in 2012, whilst undergraduate awareness of Take a Mate has dropped from 53%. The University should continue to provide and invest in the car share schemes and give resources to promote car sharing to increase awareness.

3.25 Question 28: Travel to other University sites

If you need to travel to University sites that are too far to walk from Main Campus (e.g. Wellesbourne, UHCW) what mode do you normally use?

	Staff		Undergraduate Student		Postgraduate Student		Total Response Count	
Own car	447	32%	53	10%	14	10%	514	24.6%
Car share	32	2%	5	1%	1	1%	38	1.8%
Public transport	91	7%	144	26%	44	32%	279	13.4%
Cycle	38	3%	16	3%	11	8%	65	3.1%
University van / vehicle / pool car	28	2%	0	0%	1	1%	29	1.4%
University transport / shuttle bus	7	1%	2	0%	0	0%	9	0.4%
Taxi	6	0%	2	0%	0	0%	8	0.4%
Porter	3	0%	0	0%	0	0%	3	0.1%
Walk	1	0%	4	1%	1	1%	6	0.3%
Do not travel	733	53%	330	59%	66	47%	1129	54.1%
Other	6	0%	1	0%	1	1%	8	0.4%
Total	1392		557		139		2088	

If you need to travel to University sites that are too far to walk from Main Campus (e.g. Wellesbourne, UHCW) what mode do you normally use?



Question 28 is concerned with travel to and from the other University sites that are some distance away from the main campus. Over half of staff and undergraduates and almost half of postgraduates (53%, 59% and 47% respectively) do not travel between sites. For staff, most use their own car to travel (32% of all respondents), whilst students are more likely to use public transport (26% of undergraduates and 32% of postgraduates).

Use of the University shuttle bus to travel between sites is low, just nine respondents across all three groups.

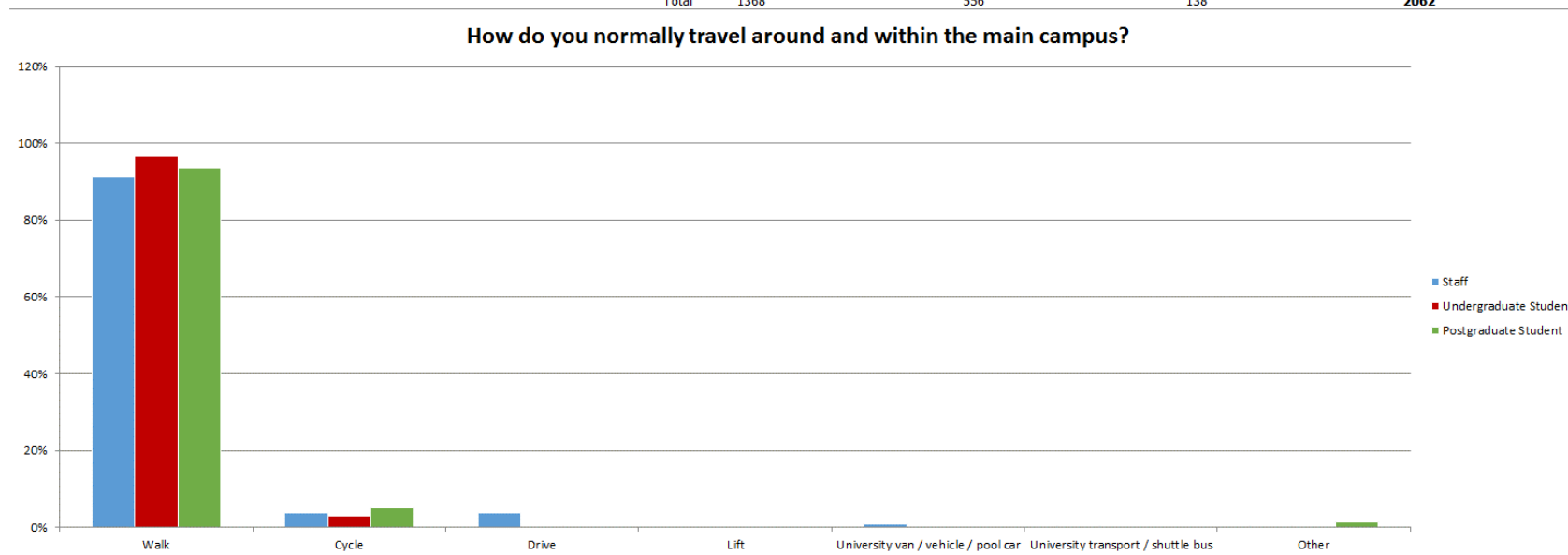
Question 29 asks how respondents normally travel around and within the main campus.

3.26 Question 29: Travel around main campus

How do you normally travel around and within the main campus?

Walk
Cycle
Drive
Lift
University van / vehicle / pool car
University transport / shuttle bus
Other

	Staff		Undergraduate Student		Postgraduate Student		Total Response Count	
Walk	1250	91%	537	97%	129	93%	1916	92.9%
Cycle	50	4%	16	3%	7	5%	73	3.5%
Drive	52	4%	2	0%	0	0%	54	2.6%
Lift	0	0%	0	0%	0	0%	0	0.0%
University van / vehicle / pool car	11	1%	0	0%	0	0%	11	0.5%
University transport / shuttle bus	1	0%	0	0%	0	0%	1	0.0%
Other	4	0%	1	0%	2	1%	7	0.3%
Total	1368		556		138		2062	



Question 29 showed that the vast majority walk around the main campus – 91% of staff, 97% of undergraduates and 93% of postgraduates.

4 Changes since 2012

4.1 Modal Share

Table 1 below shows the detailed breakdown of modal change from 2012, reported in the same format as that reported in the original Travel Plan dated June 2007 (Page 10 - Table 4.2).

Mode	2012 Modal Share %			2015 Modal Share %		
	Staff (1524)	Post-grad Students (527)	Undergrad Students (1024)	Staff (1455)	Post-grad Students (150)	Undergrad Students (609)
Car driver (no passengers)	55.8	10.6	4.1	55.0	10.7	3.6
Car driver (car share)	7.7	4.7	3.5	8.2	4.7	9.2
Car passenger	3.7	1.5	1.8	5.0	2.0	2.0
Bus	14.8	33.6	43.6	13.4	29.3	56.2
Cycle	9.1	8.7	9.9	9.3	21.3	6.7
Walk	4.4	39.5	35.6	5.4	24.0	21.8
Motorcycle/ scooter	0.9	0	0.5	0.6	0.0	0.2
Train	2.7	1.1	1.0	2.1	6.0	0.3
Taxi	0.2	0	0.1	0.3	0.7	0.0
Other	0.7	0.2	0	0.8	1.3	0.0

Table 1: Modal share by staff and students, 2012 and 2015

The main headlines related to **staff** over the period 2012 to 2015 are:

- Single car drivers down from 55.8% to 55.0%;
- Car share drivers up from 7.7% to 8.2%;
- Car share passengers up from 3.7% to 5.0%;
- Cycling up from 9.1% to 9.3%;
- Walking up from 4.4% to 5.4%.
- Bus use down from 14.8% to 13.4%;
- Train use down from 2.7% to 2.1%;

For **undergraduate students**, the key changes are:

- Single car drivers down from 4.1% to 3.6%;
- Car share drivers up from 3.5% to 9.2%;
- Car share passengers up slightly from 1.8% to 2.0%;

- Bus use up from 43.6% to 56.2%;
- Cycling down from 9.9% to 6.7%;
- Walking down from 35.6% to 21.8%.

For **postgraduate students**, the key changes are:

- Single car drivers up slightly from 10.6% to 10.7%;
- Car share drivers unchanged at 4.7%;
- Car share passengers up from 1.5% to 2.0%;
- Bus use down from 33.6% to 29.3%;
- Cycling up from 8.7% to 21.3%;
- Walking down from 39.5% to 24.0%.

The changes between 2012 and 2015 are mostly positive with:

- single car occupancy reduced for staff and undergraduates;
- walking and cycling increased for staff;
- bus use increased for undergraduate students;
- car share drivers and passengers increased or unchanged for all three groups.

The negative changes however are:

- public transport use has reduced slightly amongst staff. However, this is mainly due to increases in walking and cycling, and single car drivers have also decreased;
- walking and cycling are down for undergraduates. However, this is likely to reflect a lower proportion of the students surveyed living on campus.

The overall results from the 2015 survey are extremely positive and indicate that the initiatives and measures introduced from the Travel Plan have been successful in encouraging the use of alternative and more sustainable modes of transport during the period since the 2012 Travel Survey.

4.2 Progress Towards Travel Plan Targets

The University Travel Plan dated June 2007 sets out separate modal share targets for staff and students for 2013 and 2018 based on modal shares identified in the 2005 travel survey. The targets have been developed from the Travel Plan's main objective to reduce single occupancy and general car use in order to limit any growth of traffic at the University to around 12% during the 10 year period of the Masterplan. This represents a challenging target and is significantly below the Government's 'low growth traffic forecast' for the period to 2018. The targets were assigned a tolerance/variation of 2% either side of the predicted modal share.

Table 2 below shows the modal shares recorded in the 2005 travel survey, the targets set for 2013 and the modal shares realised from the new 2015 travel survey. The green cells in the table indicate where the 2013 targets have been achieved or exceeded.

Mode	2005 Modal Share		Target for 2013 (+/- 2%)		2015 Modal Share	
	Staff	Student	Staff	Student	Staff	Student
Car driver	72	21	63	18	63	13
Car passenger	4	5	7	7	5	2
Public Transport	11	46	14	48	16	52
Cycle	9	5	11	6	9	10
Walk	4	22	5	23	5	22
Other	<1	1	<1	<1	2	1

Table 2: Modal share – achievement of 2013 targets

This shows that all of the 2013 targets have been achieved or exceeded (to within the +/-2% threshold) with the exception of car passenger for students.

Since 2005, journeys as car driver only have reduced from 72% (staff) and 21% (students) to 63% (staff) and 13% (students). This is a significant achievement by the University given that reducing single occupancy car use is a key element of the Travel Plan.

The car passenger target has not been achieved by students and the car passenger percentage has dropped compared to 2005. This may be attributed to the overall number of student drivers also reducing (i.e. less opportunity to get lifts).

The targets for Public Transport have been exceeded by staff and students.

The target for cycling has been achieved by students and staff (to within the +/-2% threshold). The walking target has also been achieved by both groups, although the percentage for walking for staff is only half that for cycling.

Table 3 compares the 2015 travel survey results with the 2018 Travel Plan targets.

Mode	Target for 2018 (+/- 2%)		2015 Modal Share	
	Staff	Student	Staff	Student
Car driver	57	16	63	13
Car passenger	10	7	5	2
Public Transport	16	48	16	52
Cycle	12	6	9	10
Walk	5	23	5	22
Other	<1	<1	2	1

Table 3: Modal share – progress towards 2018 targets

Positively, the 2015 results show that eight of the 12 targets for 2018 have already been met or exceeded.

The staff car driver proportion is some 6% higher than the target, whilst the car passenger numbers are below the target for both groups, and the staff cycle percentage is below target.

Achieving further modal shift from car driving over the next three years will be challenging, as those who continue to drive probably represent a core of habitual drivers who have no options or desire to change, and who will be more difficult to influence.

To achieve the 2018 targets, the University may need to consider implementing a more 'assertive' price mechanism for car parking in order to discourage habitual car use. In addition the University should consider providing interest free loans or salary sacrifice schemes to help fund public transport fares and cycling, and investigate the benefits of developing discounted tickets and multi operator passes for staff and students with the bus operators.

It is also important that communication of information on the Travel Plan and sustainable transport is readily available and the University invests in developing a central transport and travel portal on the intranet and website where all transport related information is easily accessible. This will better inform staff, students and visitors of all the options and choices for sustainable transport and travel available at the University.

5 Suggestions for Improvements

After completing the actual questions, the survey provided a free text option, through which respondents were invited to provide comments and views on their transport experience when travelling to and from the University campus and suggestions for improvement. A total of 888 inputs were received that provided comments. These were analysed using a 'coding' method and has enabled the identification of key themes and leading views within each of these themes. A narrative is provided below under theme headlines.

5.1 Park and Ride

Development of a park and ride that would alleviate congestion around campus, address parking issues and support people who do not have reasonable access to public transport

A number of respondents suggested the development of a park and ride as a feasible transport solution that would ease congestion and address parking issues. Sites suggested included Coventry Airport, the Memorial Park and the car parks used for open days

Some respondents suggested a park and cycle site where people could park then cycle the remainder of their journey.

5.2 Bus Services

Buses need to be more frequent and reliable to address issues of overcrowding and long waiting periods

This was the most frequent comment submitted to the text survey. Respondents described a clear desire for additional bus services and significant issues of overcrowding. Students commented that overcrowding on buses would sometimes mean a bus or as many as four or five buses would pass a stop due to being at capacity.

It is widely agreed that additional buses are needed during peak term times. Some respondents suggested starting some of the services from The Parade or north of The Parade to ensure there were seats for passengers boarding on the later parts of the route.

Existing bus users clearly have a very negative perception of services. Indirect and slow journeys were also frequently mentioned as issues. A number of respondents questioned why the buses went via Kenilworth in the mornings, increasing the journey time, when few people were boarding there and the buses were already full before reaching Kenilworth. A number of respondents also suggested that bus lanes were required to reduce journey times by removing the buses from the congestion at peak times.

Students commented that the unpredictability of the buses and slow journey times had caused them to miss lectures and seminars and struggle to get to exams in time.

Weekends and nights were noted as times when there was a particular need for more buses by some respondents.

There were also a number of comments relating to the adverse effect that road works had on the bus services during the year.

Poor bus service information on timetabling and real-time information failing to work or not provided

Respondents noted the importance of having up to date information on the bus timetable. Various respondents requested real time information. When timetable information is provided on the internet and at bus stops, many respondents noted that this is unreliable and that the buses do not stick to the timetable.

Changes should be made to the bus pass/ticketing system

The following suggestions were made to improve the bus ticketing system:

- A number of respondents suggested that a multi-operator bus pass would benefit them by allowing them to use any of the buses to and from the University rather than just being restricted to one operator's services, or having to pay extra for an alternative;
- Paying on board the bus is only possible with exact change. One alternative would be an 'Oyster' style electronic ticketing system where they could top up a card and scan their pass on the bus.

Bus service is over-priced

Many students felt that the cost of bus travel was expensive, particularly considering the service that they receive in terms of frequency of buses and overcrowding. Some respondents cited other universities where buses were cheaper or free, and suggested that the service should be subsidised by the University. A couple of students specifically mentioned that the cost of tuition fees meant the University should be doing more to fund the cost of their travel.

One respondent cited the Bristol University as an example, where students are given a free bus pass which allows them to catch any bus in the city in the first year, as the main halls of residence are outside of the city. Another mentioned Southampton University as an example where students get a free bus pass.

Some commented that the buses were more expensive than buses in London.

There were a number of comments that there wasn't enough competition for the route from Leamington and the company therefore had no incentive to improve its service and pricing.

The University should assert more influence over bus operators to improve the service

Respondents believe that the University could negotiate more effectively with the bus operators to achieve a service that better meets the needs of the University. One respondent commented that *"I realise that these public buses are not the responsibility of the University however as the overwhelming majority of passengers on these buses are students of the University, I believe there is some responsibility of the University to at least attempt to address these issues by perhaps talking to the city council"*.

Some respondents suggested that the University should run its own bus service to Leamington.

Additional bus routes are required

This included:

- Improved links to local rail stations, particularly Canley, Tile Hill and Coventry Stations;
- Improved service to Leamington at the weekends;
- Improved service to Leamington later into the evening and at night;
- Improved service to Leamington during holidays;

General poor quality bus service

Respondents commented on the general poor quality of the bus service. This included bus shelters, inaccurate real time information, cleanliness of the buses and also the service given by the bus drivers on board the bus.

Generally a good bus service

One respondent commented positively on the Travel de Courcey routes, saying they cut travel costs and time for many staff, and offered a reliable service with friendly and helpful drivers.

University shuttle bus

The University shuttle bus on campus was felt to be a good idea, but some respondents commented that the route took longer than walking. It was suggested it would benefit from more and clearer stops and more information.

5.3 Cycle Facilities

Additional cycling facilities such as lockers, stands and changing facilities are required

- Many respondents commented more secure and sheltered cycle stands were required on campus. Some found that there was no space in the existing stands, whilst others were concerned about security, citing thefts of bikes on campus, and others about damage to their bikes from being left out in all weathers. Some respondents suggested a card entry system could be used on cycle sheds, whilst others stressed the importance of covered stands as they did not want to store their bike uncovered outside; and
- Respondents commented that changing facilities/showers and lockers should be made available for cyclists. There was also a need for drying facilities for wet clothes, and storage for clean clothes to change into.

There should be a cycle hire/borrowing scheme on campus

A number of respondents suggested having some kind of scheme on campus and at nearby stations where bikes were available to borrow, either free or for a charge, with many referring to it as Boris bikes in reference to the scheme in London. It was felt that this would make travel between University sites easier.

There should be rewards and incentives to cycle

The following were suggested:

- Free breakfast or coffee for cyclists, or discounts on canteen purchases
- Cycle training
- A bike repair shop on campus
- A cheap cycle purchase scheme
- A free towel service
- Selling of used bikes by previous students to new students;

Cycle routes should be improved

- The Kenilworth cycle path was mentioned positively by a number of respondents.
- Respondents were keen to see a new cycle route from Leamington to the University;
- A cycle lane on Gibbet Hill Road and Kirby Corner Road was requested
- Better cycle links to UHCW
- Some commented that speed bumps and barriers on campus presented barriers to cyclists
- There were also a number of requests for routes from Coventry, particularly Earlsdon, Canley and the city centre;
- There were some requests for better segregation between pedestrians and cyclists and complaints of pedestrians walking in cycle lanes.

5.4 Pedestrian Access

Improvements to pedestrian infrastructure including crossings, paths and lights

- Some respondents commented on the footpaths around campus, that the paths are not wide enough or that paths end abruptly;
- Several noted that footpaths could be unsafe when slippery, flooded or obstructed;
- There were concerns about using unlit footpaths;
- Some respondents requested more access points for walkers into campus to shorten their journeys;
- One respondent suggested pedestrian lights should change instantly for pedestrians to give them more priority over cars.

Facilities for walkers/runners are required (i.e. changing and showers)

Similarly to cyclists, those respondents who ran or walked requested facilities such as changing, showers and lockers be made available.

5.5 Car Parking

Changes to the car parking payment system

A number of respondents commented in general that the parking costs were too high, whilst others suggested the system could be improved as summarised below:

- A more flexible parking system should be available. Respondents who pay for an annual pass feel discouraged from cycling or using public transport on occasions where it is practical, for instance those who would cycle in the summer but do not want to cycle in winter. It also penalises those who cycle some days and drive on others. Respondents suggested that there should be a way of refunding some of the charges when you travelled by another mode, or a pay as you go system that was not so expensive;
- A number of respondents objected on principle to being charged for parking where they work;
- Some commented that they had no choice but to drive, and there should be a focus on improving public transport rather than penalising car drivers by increasing charges;
- Car sharers should have reduced parking charges. Some commented that because they took it in turns to drive, they all had to pay for a full annual parking pass;
- There should be permits available for undergraduate students;
- In contrast, some respondents wanted to see an increase in car parking charges with a corresponding increase to public transport subsidy;
- Some respondents suggested a points system for the allocation of parking permits, based on factors such as how far away they lived, their access to public transport, need to do drop offs and mobility;
- There was also a suggestion that the pay and display machines should take cards, to speed up the payment process.

An increase in car parking spaces is required

- Some respondents thought that more car parking spaces needed to be made available, particularly as the size of the university has increased, saying that it was difficult to find a space especially if you arrived after 9-9.30am. Some staff reported being late for meetings or lectures as a result of the time taken to find a space;
- Some respondents felt that paying for a permit should guarantee them a space. There were also complaints that areas of parking were reserved for events or conferences;
- Some respondents who car share noted that it could be difficult to find a car share space, and that better enforcement was needed as they had seen spaces used by non-car sharers;
- Some staff wanted to see staff only car parks, whilst some students wanted areas of student only parking'

- One respondent with disabilities requested more disabled spaces around campus directly outside entrances to buildings

More information on available spaces

- There should be signs directing you to car parks with spaces to reduce time spent circling the campus looking for a space ;
- Some respondents also felt more notice should be given of car parks being temporarily unavailable so that they could make alternative arrangements.

Improvements to the car share scheme

- The car share scheme should be better promoted;
- Some respondents commented that they car share informally, and are not able to benefit from the car share spaces as they are not part of the formal system;
- Should be possible to share between students and staff; and
- Some respondents wanted to car share but had never found a match to their location and working hours. Some commented the scheme could be opened up to other nearby businesses such as Westwood Business Park, to increase the chances of finding a match.

Charging points

- Several respondents requested charging points for electric vehicles.

5.6 Road Access

Some respondents explained that due to their personal circumstances (hours of work, childcare, home location) public transport is not feasible and travelling by car is always the most efficient option. In addition, some respondents noted that due to the cost of public transport, driving was a more economical option.

Most comments relating to road access referred to the ongoing road works and the impact they were having on respondents' journeys.

There were also suggestions of staggering start and finish times to spread traffic at the most congested times, and introducing more flexible working hours and home working to reduce congestion.

5.7 Information and Incentives

Respondents noted that they were not aware of some or all of the sustainable travel initiatives named in the survey, and thought these should be better promoted.

Information should be given to new staff and to students when they start.

5.8 Rail Links

The following suggestions were made to improve travel by rail:

- A train station on or near campus;

- Better connections from Coventry and Canley stations to campus, with shuttle buses running direct from the stations being suggested, or setting up a taxi share system;
- Salary sacrifice or discounted fares for train travel.

5.9 Personal Circumstances

The following were frequently listed as personal circumstances that discourage/prevent respondents from using more sustainable transport options:

- Hours of work; in particular, late working and shift work;
- Home location, where there are no, or impractical transport connections, to the University; and
- Fear and concerns around safety of walking, cycling and waiting for buses.

5.10 Childcare Commitments

Several respondents noted that due to childcare arrangements, public transport was not feasible. In particular, the need to 'drop' children off on the way to the University and collect them on return.

5.11 Other Sustainable Transport Suggestions

A number of other sustainable transport suggestions were made, which do not sit within any of the identified themes. These are listed as follows:

- A number of respondents suggested that the university encourage flexible working hours or working from home for part of the week where possible;
- A number of respondents also suggested staggering start and end times to avoid queues around campus at peak times;
- There were some suggestions of building more accommodation on campus to reduce the number of students who need to travel.

6 Conclusions

From the analysis of the questionnaires and the results of the 2015 travel survey, it is evident that the University has achieved or exceeded 11 out of the 12 modal share targets for 2013, which is three more than in 2012. The University has also already achieved or exceeded eight out of the 12 targets for 2018. This represents significant progress by the University and there have been positive advances towards the other targets.

There has been a significant reduction in single occupancy car use since the introduction of the Travel Plan as the 2015 survey shows that only 38% of all staff and students were travelling to the campus driving single occupant vehicles.

For many, car travel is the most comfortable and convenient option, and the University should invest and continue to promote car sharing to increase shared car occupancy. This should particularly target staff that may require some flexibility in their arrangements but may be able to share at least some of their journeys as well as 'regular' daily commutes. Incentives and changes to the parking charges on campus for car sharers may also influence an increase in car sharing, especially by staff.

Feedback and comments from the survey indicate that there is a negative perception and experience of the bus services from both existing and potential users who currently travel in cars to the University.

The University should continue to lobby and work with the bus operators to build on the improvements achieved since 2012, and to manage the peak-time overcrowding issues reported on existing services and mainly on the Leamington and Kenilworth bus routes. The University should also liaise with the bus operators, the local authorities and passenger transport authority (PTA) and continue to press for improvements in the quality of vehicles, services and waiting areas off-site (bus stops). On-site improvements are also required to the waiting environment (bus stops and terminus) and the provision of bus travel information.

Cycling has increased slightly for staff. The Kenilworth cycle path to the University has been positively received and if the cycle path was extended to Leamington it would most likely attract more users. There was concern about the type of cycle parking available on campus, with a number of requests for greater security (such as sheds accessed by swipe card) and greater protection for bikes from the weather.

To achieve the 2018 mode share targets will be challenging as those who continue to use their car will be harder to influence. The University may need to look at its car park charging mechanism to discourage car use.

It is also important that communication of information on the Travel Plan and sustainable transport is readily available and the University invests in developing a central transport and travel portal on the intranet and website where all transport related information is easily accessible. This will better inform staff, students and visitors of all the options and choices for sustainable transport and travel, as well as demonstrating the good practise and progress being achieved at the University.

Appendix A

Questionnaire

University of Warwick Travel Survey 2015

As part of the University's Development Masterplan, Warwick has a planning obligation to undertake a Travel Survey every two years. Furthermore, the University values the feedback and views of all who work and study at Warwick which will be used to help formulate transport strategies for the future.

The survey gathers essential data required to update the key measures of the University Travel Plan and inform the ongoing development of sustainable transport at the University.

The Travel Survey aims to consult with all current staff and students at Warwick and we ask that as many of you as possible complete the survey questionnaire. The questionnaire is designed to take no longer than 10 minutes and should be completed in a single session.

All data will remain confidential and be used solely for the purpose of updating the measures of the University's Travel Plan and informing the development of sustainable transport strategies at Warwick.

Please pay close attention to the instructions when completing the questionnaire and answer the questions as accurately as possible.

The survey is open for two weeks from 00:01 hours on Tuesday 5th May and the deadline for completion is 23:59 hours on Tuesday 19th May.

All staff and students completing the survey have the option to be entered into a prize draw to win one of the following fantastic prizes:

1st Prize: Apple iPad Air 1 (16GB)

2nd Prize: Apple iPhone 5c (8GB, SIM free)

3rd Prize: Warwick Sports Annual Membership (Standard)

1. Please tell us the postcode from where you travel to the University on a regular basis. (for example, for CV3 1BG enter in the box, as shown: CV3 1BG)

2. What is your status at Warwick? (Please tick one option only.)

- Staff
- Undergraduate Student
- Postgraduate Student

3. What is the location of your normal place of work or study at Warwick? (Please tick one option only)

- Main campus (West side of Gibbet Hill Road - e.g. Scarman, Radcliffe, Lakeside, Heronbank, Sherbourne)
- Main campus (Coventry side of Gibbet Hill Road - e.g. Central campus buildings)
- University House
- University of Warwick Science Park
- Westwood campus
- Gibbet Hill campus
- School of Life Sciences (Wellesbourne campus)
- University Hospital Coventry and Warwickshire

University of Warwick Travel Survey 2015

4. How many days a week do you normally travel to the University? (Please tick one option only)

- 1
- 2
- 3
- 4
- 5
- More than 5

5. What is your normal start and finish time at the University? (Please enter in the boxes a time in 24-hour clock format to the nearest 15 minutes, e.g. 09.00 for 9am, 17.00 for 5pm)

Start

Finish

6. Which mode of transport do you use for the main part of your journey to the University? (Please tick one option only)

- Car as driver with no passengers
- Car share as driver (one or more passengers)
- Car share / lift as passenger (not taxi)
- Bus
- Cycle
- Walk
- Train
- Motorcycle / Moped
- Taxi
- Other (please specify)

DEPENDENT ON YOUR ANSWER TO QUESTION 6, PLEASE ANSWER THE FOLLOWING QUESTIONS ONLY:

Car driver with no passengers / motorbike / moped	Questions 7 to 10 and 23 to 31
Car sharers	Questions 11 to 13 and 23 to 31
Bus	Questions 14 to 16 and 24 to 31
Walk	Questions 22 to 31
Train	Questions 17 to 21 and 23 to 31
Taxi	Questions 23 to 31
Other	Questions 23 to 31

7. What are your main reasons for driving to the University? (Tick all that apply)

- No suitable bus service available
- No suitable train service available
- Quicker journey time than other modes
- Cheapest and convenient mode of transport
- Not practical or safe to walk or cycle
- Inadequate cycle parking on campus
- No changing facilities for cyclists on campus
- Travel distance is too far to walk or cycle
- Need to do other activities before / after / during the day
- Need to do school run during journey to and from University
- Need to travel between campus sites during the day
- Need to use own vehicle to travel off site for work purposes
- Availability of vacant parking spaces
- Other (please specify)

8. What is the age of your vehicle? (Please tick one option only)

- Less than 3 years
- 3 to 5 years
- 6 to 8 years
- 9 or more years

9. What fuel type is your vehicle? (Please tick one option only)

- Petrol
- Diesel
- Hybrid
- Electric
- LPG

10. Where do you normally park your vehicle at the University? (Please tick one option only)

- Main campus
- Westwood campus
- University House
- University of Warwick Science Park
- Gibbet Hill campus
- School of Life Sciences (Wellesbourne campus)
- Outside University grounds
- Car driver drops me off at University and travels elsewhere

11. How many people (including yourself) travel in the same car to the University? (Please tick one option only)

- 2 people
- 3 people
- 4 people
- More than 4 people

12. Excluding yourself, how many of these work or study at the University of Warwick? (Please tick one option only)

- None
- All
- Some

13. Are you a Registered Member of the University's formal car share schemes? (Please tick one of these only)

- WarwickShare
- Take a Mate
- Not a member

14. Is there a regular bus service you use to travel to the University?

- Yes
- No

If yes, please state the bus service number you use

15. Which of the following locations do you use to board the bus to the University? (Please tick one option only)

- Coventry City Centre
- Coventry Rail Station
- Earlsdon
- Hearsall Common
- Canley
- Tile Hill
- Eastern Green
- Kelsey's Bar/Ei8ht Bar, Leamington Spa
- St. Mary's Church, Leamington Spa
- Top of Parade, Leamington Spa
- Kenilworth
- Warwick
- Other (please specify)

16. What are your reasons for using the bus to travel to the University? (Please tick all that apply)

- Cheapest mode of transport
- Don't have access to a car/can't drive
- Too far to walk or cycle
- Difficult to park on campus
- Cost of parking on campus
- Most convenient and practical mode of transport
- Availability and cost of University operated bus services
- Environmental reasons
- Inadequate cycle paths / not safe to cycle
- Inadequate cycle parking on campus
- Need to do other activities and chores before /during / after work
- Other (please specify)

17. What are your main reasons for using the train to travel to the University (Please tick all that apply)

- Distance
- Cost
- Convenience
- Environmental reasons
- Other (please specify)

18. If you use the train for a part of your journey to the University, which station do you get on?

19. How do you normally travel between home and the station given in the question above? (Please tick one option only)

- Bus
- Walk
- Cycle
- Car
- Other (please specify)

20. Which station do you get off at? (Please tick one option only)

- Coventry
- Tile Hill
- Canley
- Other

Other (please specify)

21. How do you normally travel between the station and University? (Please tick one option only)

- Bus
- Walk
- Cycle
- Car
- Other

Other (please specify)

22. What are your main reasons for walking to the University? (Tick all that apply)

- Cheapest mode
- Live within walking distance of campus.
- Use walking as a form of exercise and health benefit
- No other mode of transport available
- Other (please specify)

23. What are your reasons for not using buses to travel to the University? (please tick all that apply)

- No bus service available where I travel from
- Too far to walk to a bus stop
- Cost of bus fares
- Poor reliability of bus services
- Poor frequency of bus services
- Poor quality of buses
- Overcrowding on buses
- Have to catch more than one bus to complete journey to University
- Personal safety concerns as a passenger
- Journey time too long compared to other modes
- Inappropriate due to child care or other commitments
- Live on campus or close by
- Other (please specify)

24. Which of the following measures would most encourage you to travel to the University by public transport? If you currently travel by public transport, which measures would you most like to see implemented? (Please tick one measure as your first, second and third choice based on their level of importance to you)

	First Choice	Second Choice	Third Choice
Shuttle bus / taxi service to nearest rail station	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More direct bus services to campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pool cars available on campus for business journeys	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More facilities (shops, dentist etc) available on campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Subsidised/Discounted fares offered by the University	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Better information about bus and train services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved environment at bus shelters	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interest free loans for bus travel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ticket sales/information office on campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Smartcard/Oyster Card payment technology for bus travel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Multi-operator bus pass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Facilities to pay for bus travel through salary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Options to pay for bus travel by direct debit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased parking charges	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Flexible parking charges ('pay on use')	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Faster/more frequent service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
None	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

25. Which of the following measures would most encourage you to cycle? If you currently do cycle to the University, which measures would you most like to see implemented? (Please tick one measure as your first, second and third choice based on their level of importance to you)

	First Choice	Second Choice	Third Choice
Safe cycle routes to the campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved cycle parking at the campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved changing facilities, showers and luggage lockers for cyclists	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Secure cycle lockers at the rail station	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bike parking scheme (cycle to work)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Arrangement with a local cycle shop to purchase bike and equipment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Support and information from a Bicycle User Group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cycling skills training and maintenance on campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pool cars or pool bikes available for business journeys	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More facilities (shops, dentist, etc) available on campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cycle maintenance and repair facilities available on campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased parking charges	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Flexible parking charges ('pay on use')	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
None	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

26. Which of the following measures would most encourage you to car share? If you currently car share, which measures would you most like to see implemented? (Please tick one measure as your first, second, and third choice based on their level of importance to you)

	First Choice	Second Choice	Third Choice
Help in finding car share partners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reserved parking on campus for car sharers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduced or free parking charges on campus for car sharers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pool cars or pool bikes available for business journeys	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Guaranteed Lift Home scheme in an emergency or if let down by car driver	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More facilities (shops, dentist, etc) available on campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased parking charges	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Flexible parking charges ('pay on use')	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
None	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

27. Are you aware of or use any of the following sustainable transport initiatives at the University?

	Aware Of	Use
WarwickShare (staff car share)	<input type="checkbox"/>	<input type="checkbox"/>
Take a Mate (student car share)	<input type="checkbox"/>	<input type="checkbox"/>
University operated bus services	<input type="checkbox"/>	<input type="checkbox"/>
University Travel Card and discounted fares for University bus services	<input type="checkbox"/>	<input type="checkbox"/>
Cycle to Work scheme (staff only)	<input type="checkbox"/>	<input type="checkbox"/>
Discounted cycle package from Albany Cycles	<input type="checkbox"/>	<input type="checkbox"/>
Discounted annual bus pass available through salary deduction (staff only) for National Express Coventry and Travel de Courcey services	<input type="checkbox"/>	<input type="checkbox"/>

28. If you need to travel to University sites that are too far to walk from Main Campus (e.g. Wellesbourne, UHCW) what mode do you normally use?

- Own car
- Car share
- Public transport
- Cycle
- Do not travel
- Other (please specify)

29. How do you normally travel around and within the main campus?

- Walk
- Cycle
- Drive
- Lift
- Other (please specify)

The University is interested in receiving comments or suggestions from staff and students on ways to develop and improve sustainable transport to the University. Please feel free to make your comments or suggestions in the box below.

30. Comments / Suggestions

Thank you very much for your time in completing the survey.

If you wish to be entered into the prize draw, please provide your name, ID number, telephone number and e-mail address in the boxes below

Please note: entries not providing a University ID number will be excluded from the prize draw.

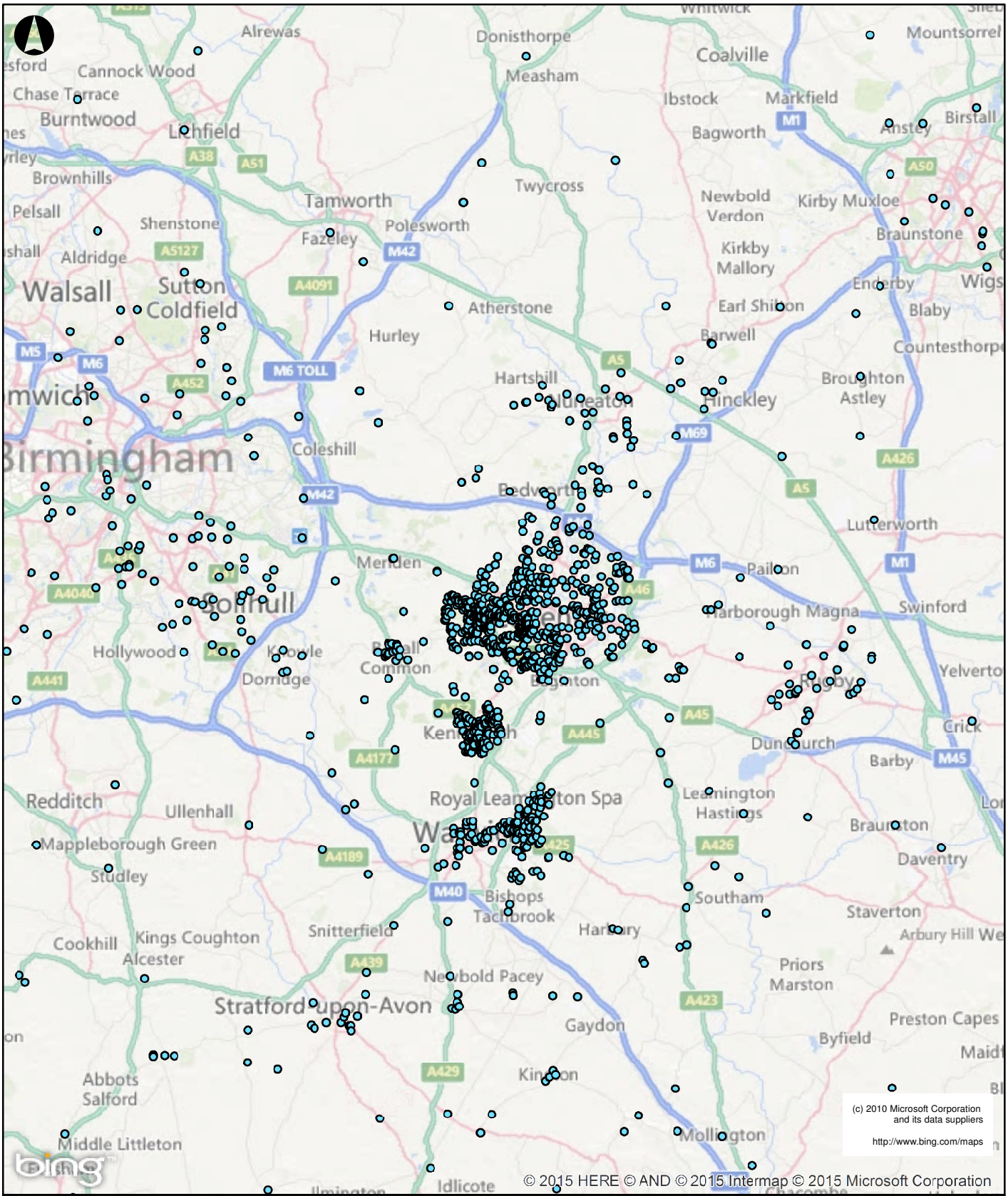
By providing these details you give your informed consent within the terms of the Data Protection Act 1998.

31. Prize Draw

Name	<input type="text"/>
University ID number	<input type="text"/>
Telephone Number	<input type="text"/>
E-mail Address	<input type="text"/>

Appendix B

Journey Origins - Staff,
Undergraduates and
Postgraduates



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Legend

● Staff



Client
University of Warwick

Job Title
**University of Warwick
 Travel Survey 2015**

Drawing Title
Post Code Plot Staff

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Issue	Date	By	Chkd	Appd

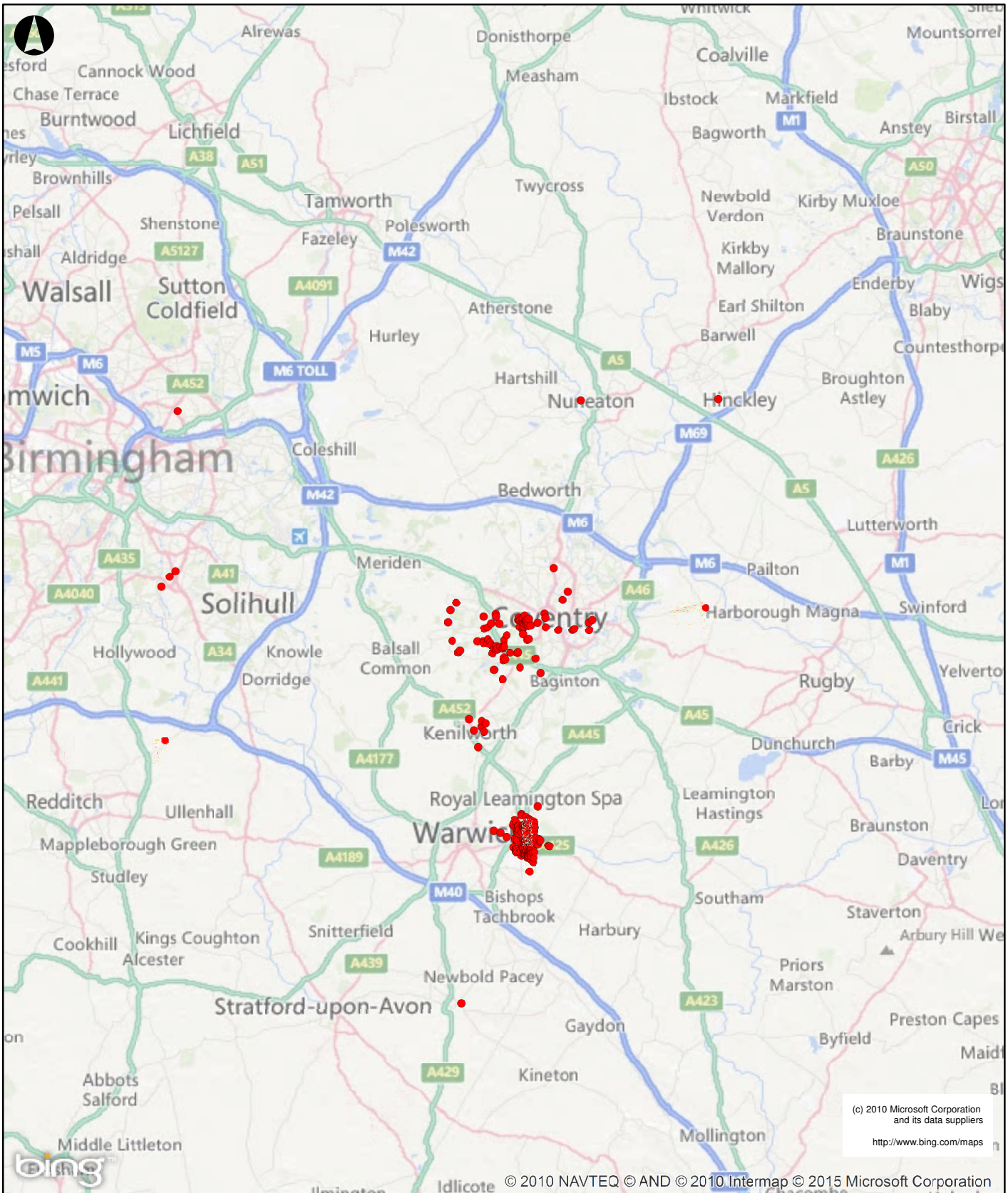
ARUP

The Arup Campus Blythe Gate Blythe Valley Park
 Solihull West Midlands B90 8AE United Kingdom
 t +44 121 213 3000
 www.arup.com

Scale at A4
1:327,458

Drawing Status
For Information

Job No	Drawing No	Issue
115438-00	001	01

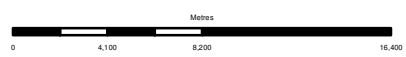


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Legend

● Undergraduate



Client
University of Warwick

Job Title
University of Warwick Travel Survey 2015

Drawing Title
Post Code Plot Undergraduate

01	09/07/15	EP	IC	IC
Issue	Date	By	Chkd	Appd

ARUP

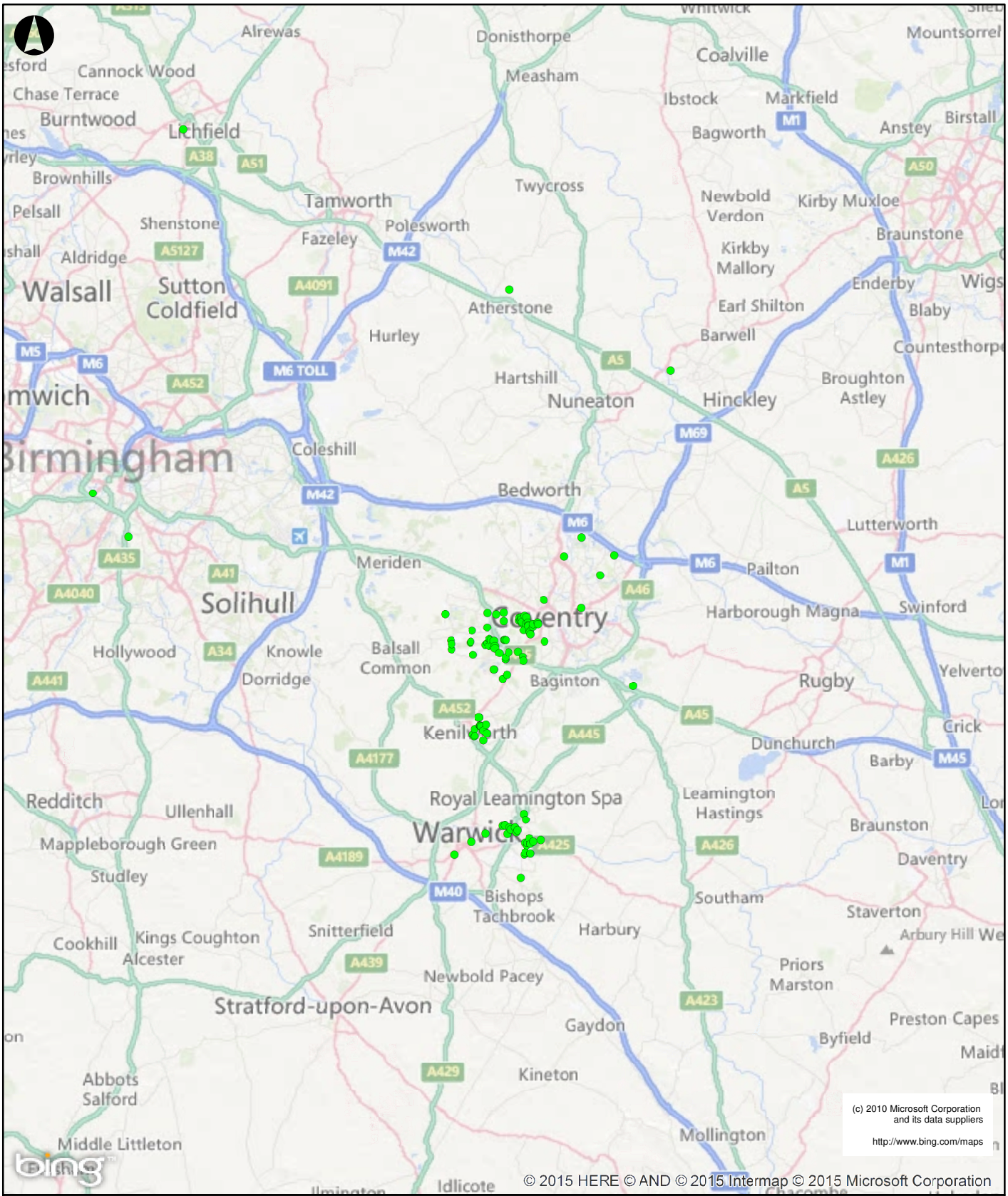
The Arup Campus Blythe Gate Blythe Valley Park
 Solihull West Midlands B90 8AE United Kingdom
 t +44 121 213 3000
 www.arup.com

Scale at A4
1:327,458

Drawing Status
For Information

Job No	Drawing No	Issue
115438-00	002	01

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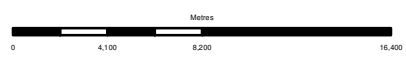


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Legend

● Postgraduate



Client University of Warwick				
Job Title University of Warwick Travel Survey 2015				
Drawing Title Post Code Plot Postgraduates				
01	09/07/15	EP	IC	IC
Issue	Date	By	Chkd	Appd

ARUP

The Arup Campus Blythe Gate Blythe Valley Park
 Solihull West Midlands B90 8AE United Kingdom
 t +44 121 213 3000
 www.arup.com

Scale at A4
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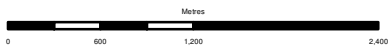
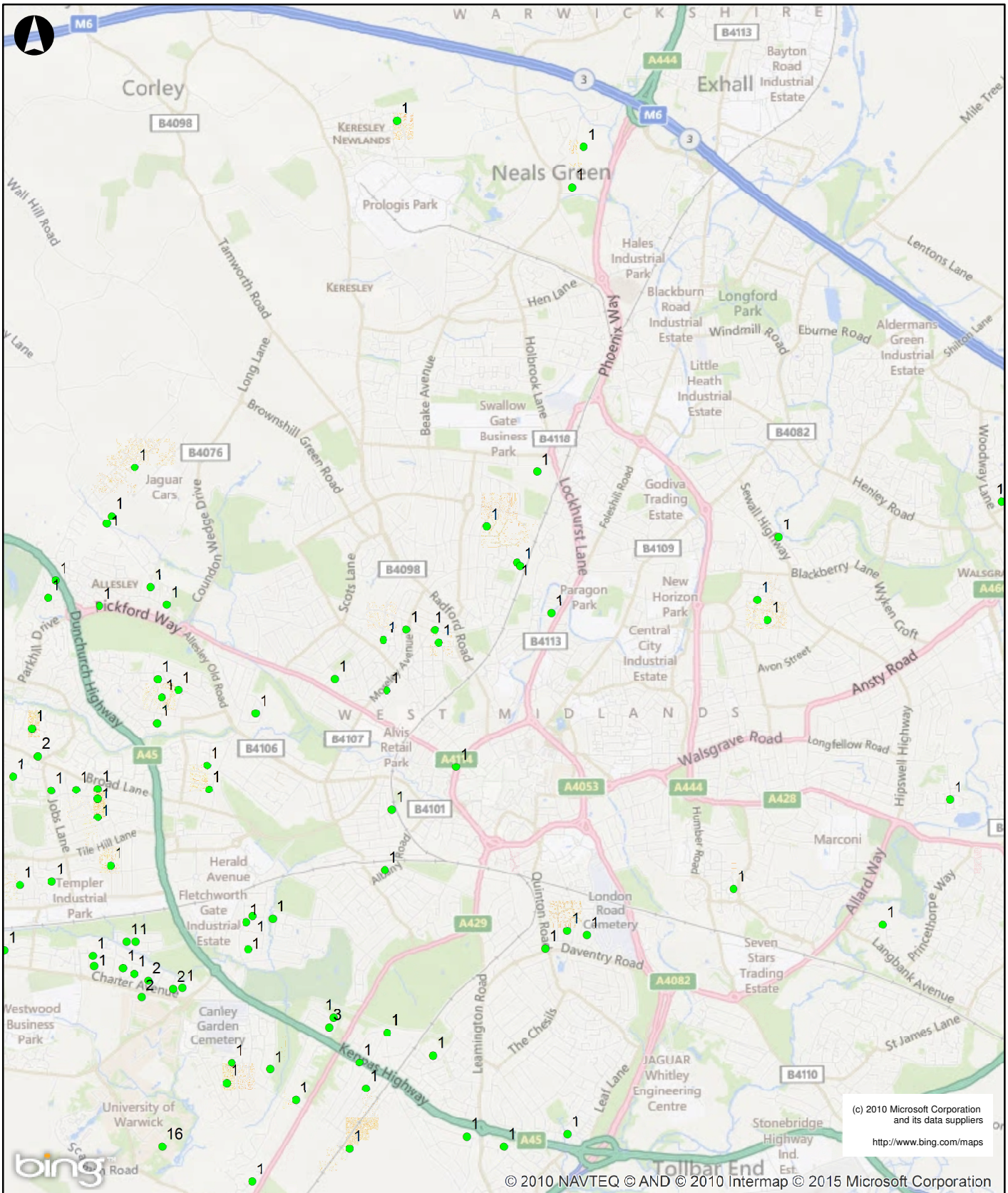
Drawing Status

For Information

Job No 115438-00	Drawing No 003	Issue 01
----------------------------	--------------------------	--------------------

Appendix C

Location of Respondents Without Bus Service



Client

University of Warwick

Job Title

**University of Warwick
Travel Survey 2015**

Drawing Title

**Location of Respondents Without
Suitable Bus Route - Coventry**

01	09/07/15	EP	IC	IC
Issue	Date	By	Chkd	Appd

ARUP

The Arup Campus Blythe Gate Blythe Valley Park
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t +44 121 213 3000
www.arup.com

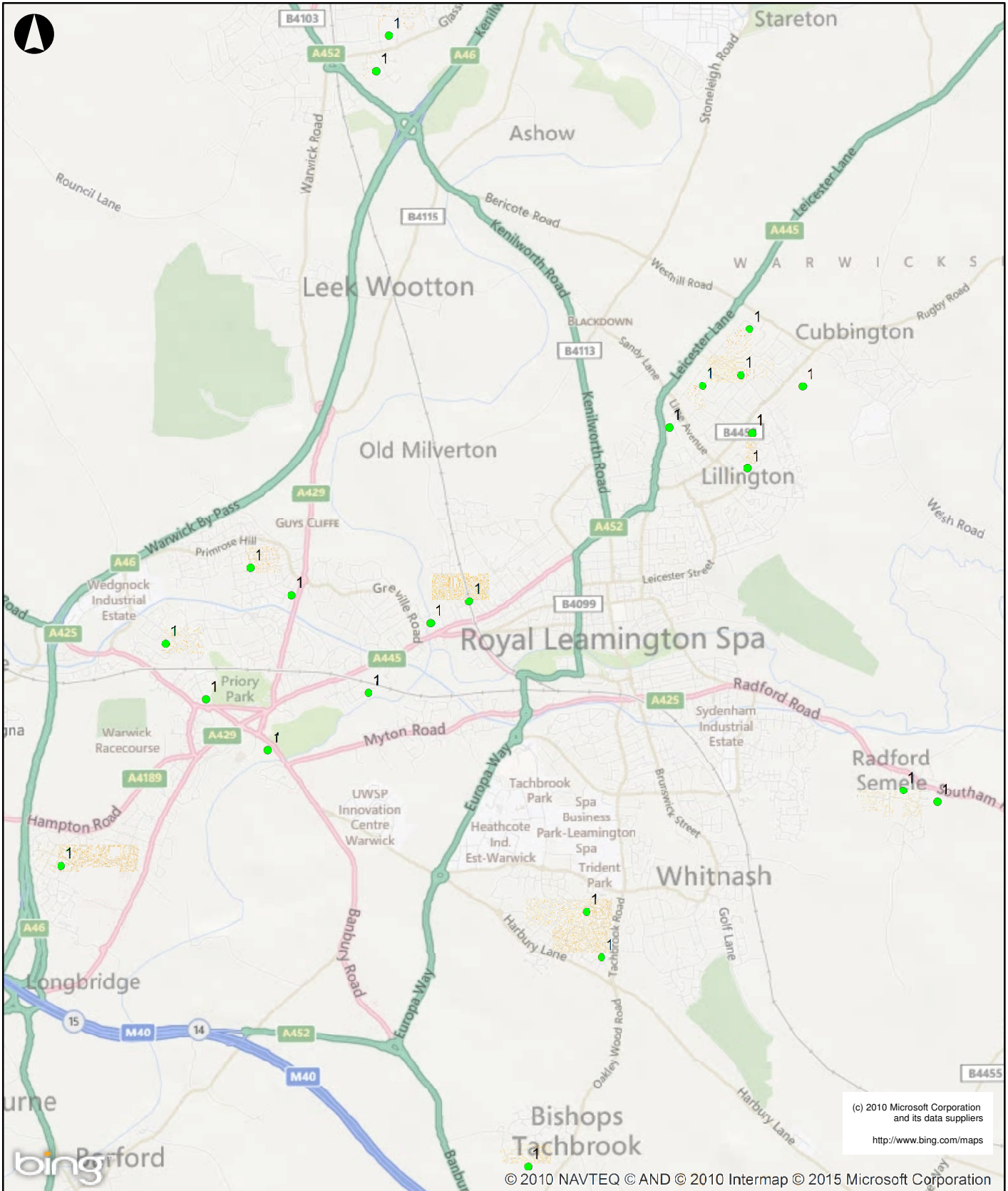
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Drawing Status

For Information

Job No	Drawing No	Issue
115438-00	004	01



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Client
University of Warwick

Job Title
**University of Warwick
Travel Survey 2015**

Drawing Title
**Location of Respondents Without
Suitable Bus Route - Leamington Spa**

01	09/07/15	EP	IC	IC
Issue	Date	By	Chkd	Appd

ARUP

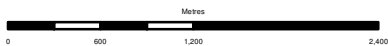
The Arup Campus Blythe Gate Blythe Valley Park
Solihull West Midlands B90 8AE United Kingdom
t +44 121 213 3000
www.arup.com

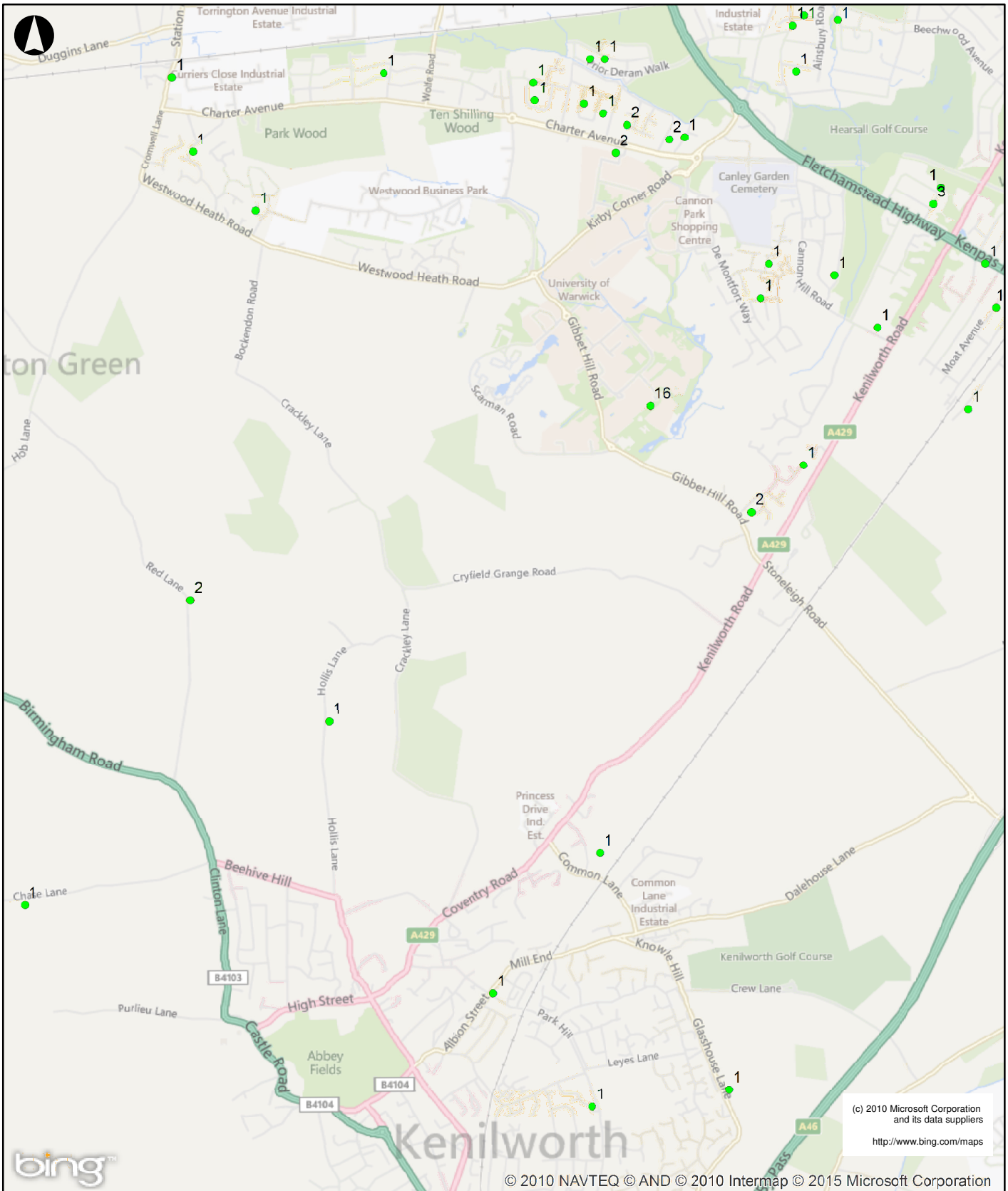
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Drawing Status

For Information

Job No	Drawing No	Issue
115438-00	005	01





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Client
University of Warwick

Job Title
**University of Warwick
 Travel Survey 2015**

Drawing Title
**Location of Respondants Without
 Suitable Bus Route - S Coventry**

01	09/07/15	EP	IC	IC
Issue	Date	By	Chkd	Appd

ARUP

The Arup Campus Blythe Gate Blythe Valley Park
 Solihull West Midlands B90 8AE United Kingdom
 t +44 121 213 3000
 www.arup.com

Scale at A4
1:28,850

Drawing Status

For Information

Job No	Drawing No	Issue
115438-00	006	01

