TRAVEL SURVEY

May 2011

THE UNIVERSITY OF WARWICK

Staff and Student Travel Survey 2010

Results

115438-02

Rev A | May 2011

Ove Arup & Partners Ltd
The Arup campus
Blythe Gate
Blythe Valley Park
Solihull
West Midlands
B90 8AE
United Kingdom
arup.com

This report takes into account the particular instructions and requirements of our client.

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

Contents

Page

Executive Summary **i**

1 Introduction **1**
- 1.1 Travel Plan 1
- 1.2 Staff and Student Travel Surveys 1
- 1.3 Layout of the Report 2

2 Survey Methodology **3**
- 2.1 Methodology 3
- 2.2 Responses 3
- 2.3 Questionnaire 4

3 Survey Results and Analysis **5**
- 3.1 Question 1: Location 5
- 3.2 Question 2: Staff or Student 5
- 3.3 Question 3: Place of Work / Study 7
- 3.4 Question 4: Travel Days 9
- 3.5 Question 5: Start and Finish Times 10
- 3.6 Question 6: Mode 12
- 3.7 Question 7: Reasons for Driving 15
- 3.8 Question 8: Parking Location 18
- 3.9 Questions 9 and 10: Blue Badge Holders 19
- 3.10 Question 11: Reasons for Walking 20
- 3.11 Questions 12 and 13: Car Sharing 22
- 3.12 Question 14: Bus Service Satisfaction 25
- 3.13 Question 15: Bus Boarding Locations 27
- 3.14 Question 16: Reasons for bus use 28
- 3.15 Question 17 and 18 Train Travel 30
- 3.16 Question 19: Reasons for not using buses 33
- 3.17 Question 20: Encouragement of public transport use 35
- 3.18 Question 21: Measures to Encourage Cycling 37
- 3.19 Question 22: Measures to Encourage Car Sharing 41
- 3.20 Question 23: Sustainable Travel Initiatives 43
- 3.21 Question 24: Travel to other University sites 45

4 Key Changes since 2005 **47**
- 4.1 Modal Share 47

4.2 Progress Towards Travel Plan Targets 48

5 Suggestions for Improvements 50

5.1 Park and Ride 50
5.2 Bus Services 50
5.3 Cycle Facilities 52
5.4 Pedestrian Access 53
5.5 Car Parking 54
5.6 Road Access 55
5.7 Information and Incentives 55
5.8 Rail Links 55
5.9 Personal Circumstances 56
5.10 Childcare Commitments 56
5.11 Other Sustainable Transport Suggestions 56

6 Conclusions 57

Appendices

Appendix A

Survey Questionnaire

Appendix B

Journey Origins

Appendix C

Locations of Respondents without Suitable Bus Routes

Executive Summary

The University of Warwick Masterplan sets out proposals to develop and expand the main campus by 40% over the 10 years from 2008 to 2018, whilst any increase in car parking on campus is limited to 9%. The Masterplan is supported by a comprehensive Travel Plan, the emphasis of which is on reducing single occupancy car use as this is one of the main sources of congestion and one of the least sustainable forms of transport.

A staff and student travel survey in 2005 was used to inform development of the Travel Plan, which was issued in June 2007 with an assumed commencement of 2008. Regular, repeat surveys are required in order to monitor the progress of the Travel Plan and consequently, in November 2010, Ove Arup & Partners Limited was commissioned to design and undertake a new staff and student travel survey.

An online questionnaire was designed and made available via the University Intranet and a paper version of the questionnaire distributed to staff without access to a computer terminal. All staff and students were encouraged to participate in the survey and prizes were offered as an incentive. The survey was open for responses between 29th November and 22nd December 2010 and collected a total of 2,496 responses; an increase of 236 compared to the 2005 survey.

The Travel Plan sets out separate modal share targets for staff and students for 2013 and 2018 based on modal shares identified in the 2005 travel survey These were developed from the Travel Plan’s aim to reduce single occupancy and general car use in order to restrict the growth of traffic at the University to around 12% during the 10 year period of the Masterplan. This represents a challenging target.

The overall results from the 2010 survey are extremely positive; the University has already exceeded its 2013 targets for car driver mode share (all), public transport use (all), walking (staff) and cycling (students). This is a significant achievement, and there has been good progress towards the other targets.

There has been a considerable reduction in single occupancy car use and an increase in car sharing among staff. The car share schemes are accessible and well-promoted by the University.

The University is working hard with operators and the local authorities to press for improvements in the quality of vehicles and services in order to address the negative experience and perception of the current bus services held by some existing and potential users.

The modal share target for cycling by students has been reached although cycling by staff has remained fairly static. The University has invested in cycle parking on site and there are no concerns about the ‘amount’ of cycle parking provided, although there appears to be a demand for greater security and better maintenance of existing facilities.

The survey results clearly indicate that the 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 2005 survey.

1 Introduction

The University of Warwick Masterplan sets out proposals to develop and expand the main campus by 40% over the 10 years from 2008 to 2018, whilst any increase in car parking on campus is limited to 9%. This is supported by a comprehensive Travel Plan produced in June 2007 the objective of which is to minimise and manage the impact of any increase in transport on local roads and the environment throughout the Masterplan development period and beyond.

1.1 Travel Plan

The emphasis of the Travel Plan is on reducing single occupancy car use as this is one of the main sources of congestion and one of the least sustainable forms of transport.

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

The main aims of the Travel Plan are to:

- Provide highway modifications where possible to help to alleviate congestion resulting from additional University traffic;
- Provide new and improved facilities to encourage walking and cycling;
- Provide improved public transport;
- Encourage and enable greater use of car-sharing;
- Reduce demand for peak time travel through changes in working practices;
- Provide better information to staff and students about travel choices available to them;
- Investigate reducing business mileage and University vehicle use as part of the University’s wider Low Carbon Management Programme within the site;
- Work with the local transport and planning authorities to provide access for Bus Rapid Transit and regional cycle routes through the site; and to,
- Monitor transport activity during the Masterplan development period.

1.2 Staff and Student Travel Surveys

A staff travel survey was undertaken in 2003 and was followed by a staff and student survey in 2005. The results of the 2005 survey were used to inform development of the Travel Plan, which was issued in June 2007 with an assumed commencement of 2008.

Regular, repeat surveys are required in order to monitor the progress of the Travel Plan and identify whether targets are being achieved. Two-yearly travel surveys are appropriate, giving initiatives time to take effect, and reducing the likelihood of staff and students being put off by travel surveys repeated too frequently.

In November 2010, Ove Arup & Partners Limited (Arup), who produced the University Travel Plan in 2007, was commissioned by the University of Warwick to design and undertake a new staff and student travel survey.

This document is the 2010 staff and student travel survey report and contains the following:

- Results of the 2010 survey;
- An assessment of changes since the previous survey and progress towards Travel Plan targets; and
- An identification of issues arising from the survey that can inform ongoing development of 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.

2 Survey Methodology

2.1 Methodology

The 2003 and 2005 surveys were undertaken late in the Autumn term and therefore in order to be consistent with the previous work in terms of data collection dates, the 2010 survey was also scheduled for late autumn. This is a good time of year to undertake travel surveys at the University since it is a period of peak activity on site and 'new starters' will have settled into regular travel habits.

A methodology was developed based on the SurveyMonkey online survey website. A questionnaire was designed and made available online via the University Intranet using a customised link. The link was distributed over the internet via the University and Students Union home pages. A paper version of the questionnaire was distributed to staff that do not have access to a computer terminal. All staff and students were encouraged to participate in the survey and prizes were offered as an incentive.

There are a number of advantages in using an online questionnaire compared to the traditional paper system; the data is easily and efficiently collected and stored in a database. The nature of the electronic questionnaire provides easy management of the survey responses and moves the respondent automatically from question to question according to answers, rather than them having to follow instructions. For example, respondents who identified themselves as ‘drivers’ are then led to questions about what would encourage them to use alternative modes. Respondents who already use other modes would be directed 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 of the questionnaire to be merged with the online data and allowed the system to analyse and produce results including all the data.

The survey was distributed to all staff and students during the last week of November and opened for responses from 08.00 on Monday 29th with an initial closing date of Monday 6th December at 23.59. This was subsequently extended to Tuesday 22nd December at 12.00 in order to maximise the potential for data collection and provide time for data entry of the responses that were submitted on paper copies of the questionnaire.

2.2 Responses

At the close of the survey, a total of 2,496 responses had been received, an increase of 236 compared to the 2005 survey. A comparison of the responses is shown in Table 1.

It should be noted that in 2010, the numbers of each category of respondent i.e. staff, undergraduate students and postgraduate students responding to the survey has changed considerably compared to the 2005 survey. In 2005 undergraduate students were the largest category followed by staff and then postgraduate students. In 2010 staff formed the largest category, representing 58% of responses, up from 38% in 2005. The number of responses from postgraduate students (17%) was also up from 2005 (11%). Although still the second largest group, undergraduate students provided 25% of responses; down from 50% in 2005.

Category	2005		2010		Change (percentage of total respondents)
	Number	Percent	Number	Percent	
Staff	867	38%	1444	58%	+20%
Postgraduate Students	251	11%	418	17%	+6%
Undergraduate Students	1142*	50%	634	25%	-25%

Table 1: Survey response numbers and percentages 2005 and 2010

*includes 12 classified in 2005 as 'other student'

The reasons for these changes to the numbers and percentages of each type of respondent have not been fully identified as all three categories were encouraged to participate in the 2010 survey. A large response from staff, and to a lesser extent, postgraduate students is however, helpful as these categories are more likely to be affected by the Travel Plan initiatives. This is because, they are more likely to work or study at the University over a longer period than undergraduate students; thus any change to more sustainable travel modes will have a greater overall benefit than influencing the travel habits of undergraduate students who attend the University for a shorter period of time.

2.3 Questionnaire

The 2010 questionnaire was based mainly on the 2005 survey but with some questions redesigned to draw out the key implications and opportunities for encouraging sustainable travel, whilst ensuring that data related to key transport characteristics could be compared with the previous survey. This resulted in the 2010 questionnaire having a shortened version containing 25 questions compared with 36 questions in the 2005 questionnaire.

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

3 Survey Results and Analysis

This section sets out the survey results, analyses and discusses the findings of the 2010 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 94 out of 2496 respondents provided a 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

Are you a member of staff or a student? (Please tick one option only.)		
Answer Options	Response Percent	Response Count
Staff	57.9%	1444
Undergraduate Student	25.4%	634
Postgraduate Student	16.7%	418
	answered question	2496
	skipped question	0

The University’s statutory accounts for the year ending 31st July 2010 show the population of the respective categories at the University to be:

Total Staff (Full Time Equivalents)	4,448
Total Undergraduates	11,906
Total Postgraduates	4,704

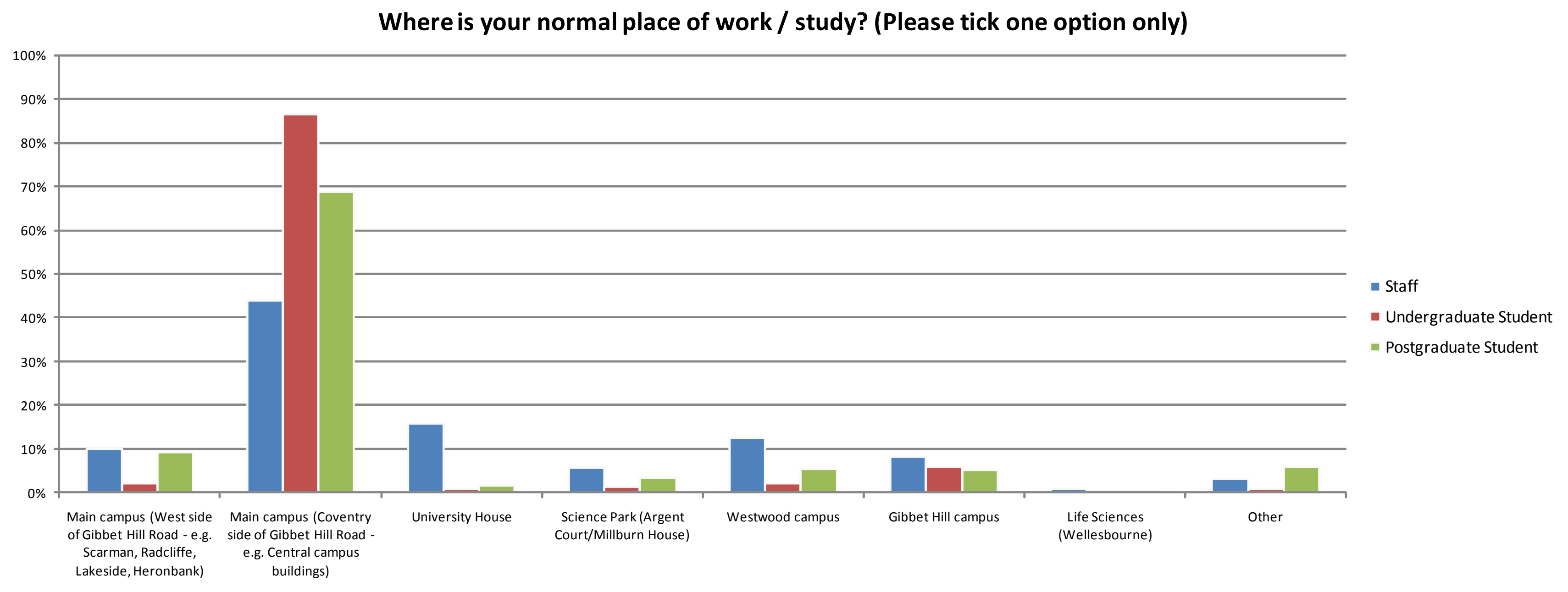
The response numbers for each category represents approximately 33% of all staff, 5% of all undergraduate students and 9% of all postgraduate students. The respondents were self-selecting so the results may reflect the fact that staff and students with particular 'issues' about transport may have been 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

	Staff		Undergraduate Student		Postgraduate Student		Total Response Count	
Main campus (West side of Gibbet Hill Road - e.g. Scarman, Radcliffe, Lakeside, Heronbank)	143	10%	14	2%	39	9%	196	7.9%
Main campus (Coventry side of Gibbet Hill Road - e.g. Central campus buildings)	634	44%	549	87%	287	69%	1470	58.9%
University House	227	16%	6	1%	7	2%	240	9.6%
Science Park (Argent Court/Millburn House)	83	6%	9	1%	14	3%	106	4.2%
Westwood campus	180	12%	13	2%	23	6%	216	8.7%
Gibbet Hill campus	119	8%	37	6%	22	5%	178	7.1%
Life Sciences (Wellesbourne)	13	1%	1	0%	1	0%	15	0.6%
Other	45	3%	5	1%	25	6%	75	3.0%
Total	1444		634		418		**2496**	
Total Population	4,448 (FTE)		11,906		4,704		**21,058**	



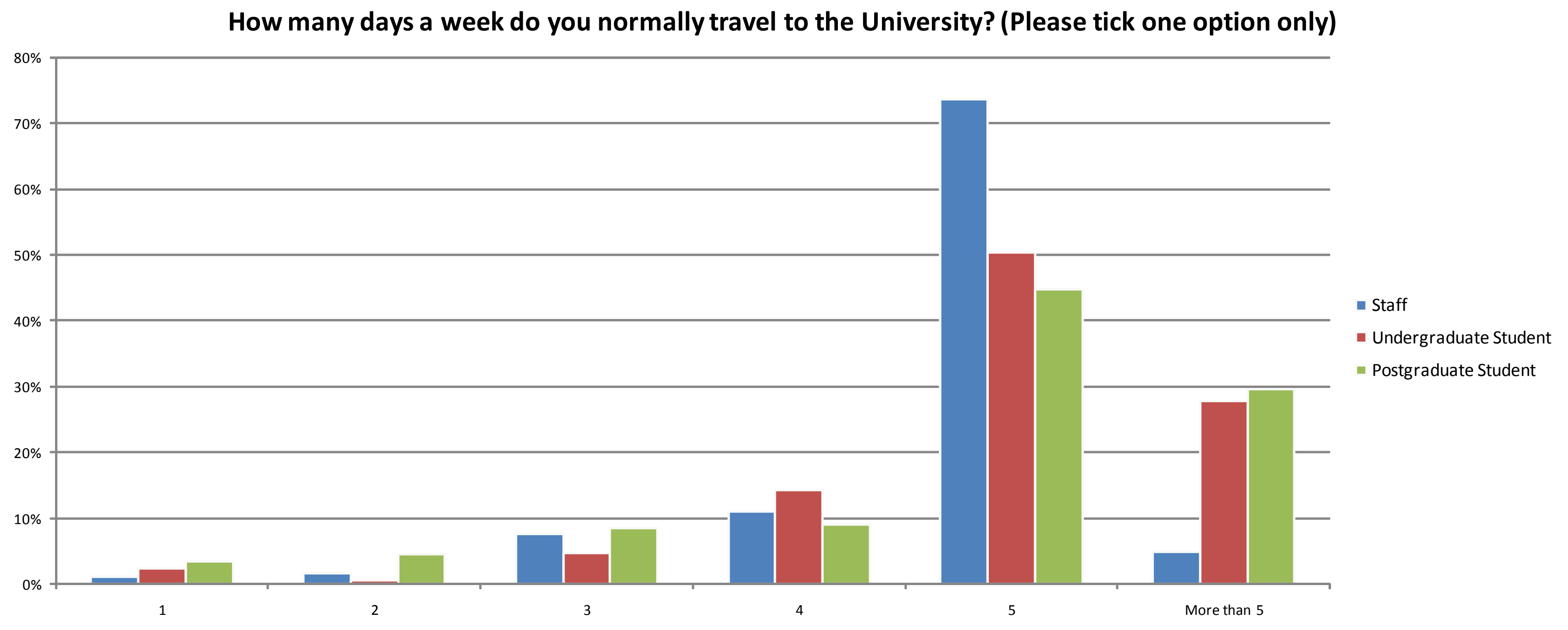
As expected, the main campus on the east side of Gibbet Hill Road comprising the central campus buildings was the main place of attendance for staff and both student groups. Significant numbers of staff also worked at the west side of the main campus, University House, Westwood campus and Gibbet Hill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

Undergraduates were almost all concentrated in the central campus with a few at Gibbet Hill.

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

3.4 Question 4: Travel Days

	Staff		Undergraduate Student		Postgraduate Student		Total Response Count	
1	15	1%	14	2%	14	4%	43	1.8%
2	24	2%	3	0%	18	5%	45	1.9%
3	108	8%	29	5%	34	9%	171	7.1%
4	157	11%	87	14%	36	9%	280	11.6%
5	1042	74%	305	50%	177	45%	1524	63.1%
More than 5	69	5%	168	28%	117	30%	354	14.6%
Total	1415		606		396		**2417**	
Total Population	4,448 (FTE)		11,906		4,704		**21,058**	



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

When asked in Question 4, how many days a week they normally travelled to the University, the majority of all three categories travelled five days (74% of staff, 50% of undergraduates and 45% 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, 7% on three days and 2% on both two days and just one day per week.

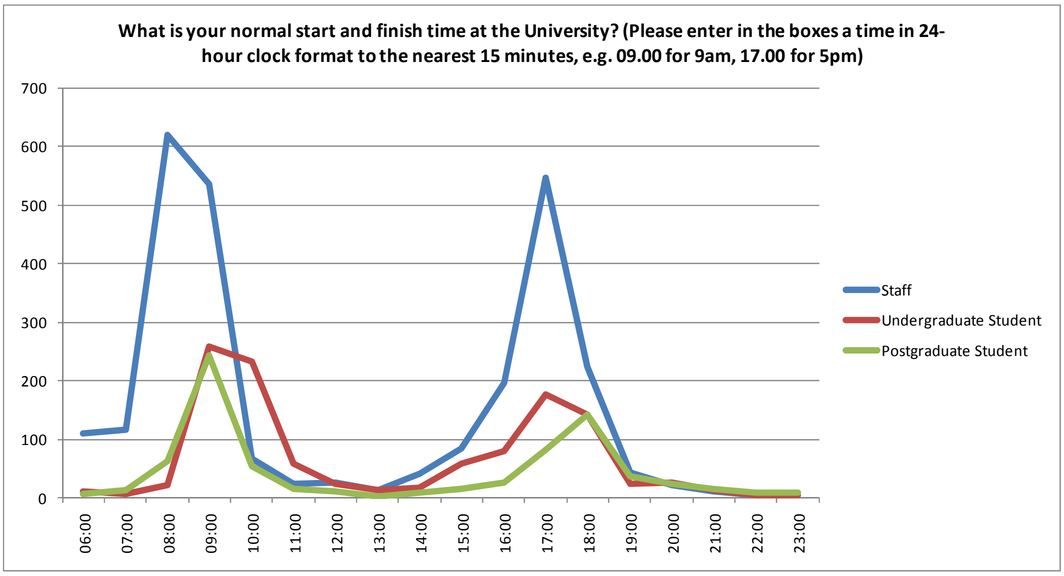
Only 5% of staff respondents travelled to the University on more than five days per week but the percentages were much higher for students; 28% for undergraduates and 30% for post graduates. For undergraduates, this probably represents the fact that approximately 30 % live on campus and therefore travel 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 not be decreased by 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 are concentrated between 0700 and 1000 hours with a peak at approximately 0815 hours. Few staff arrive or leave campus between 1000 and 1500. hours, but after 1500 hours the number of departures rises to a peak at around 1700 hours and then falls steadily until 1900 hours by which time most staff have departed from campus.

Undergraduate students do not commence arriving on campus until approximately after 0800 hours, rising to a peak between 0900 and 1015 hours, then reducing through to midday. Undergraduate students commence departing campus from approximately 1400 hours, continuing through to around 1900 hours with a peak at 1700 hours.

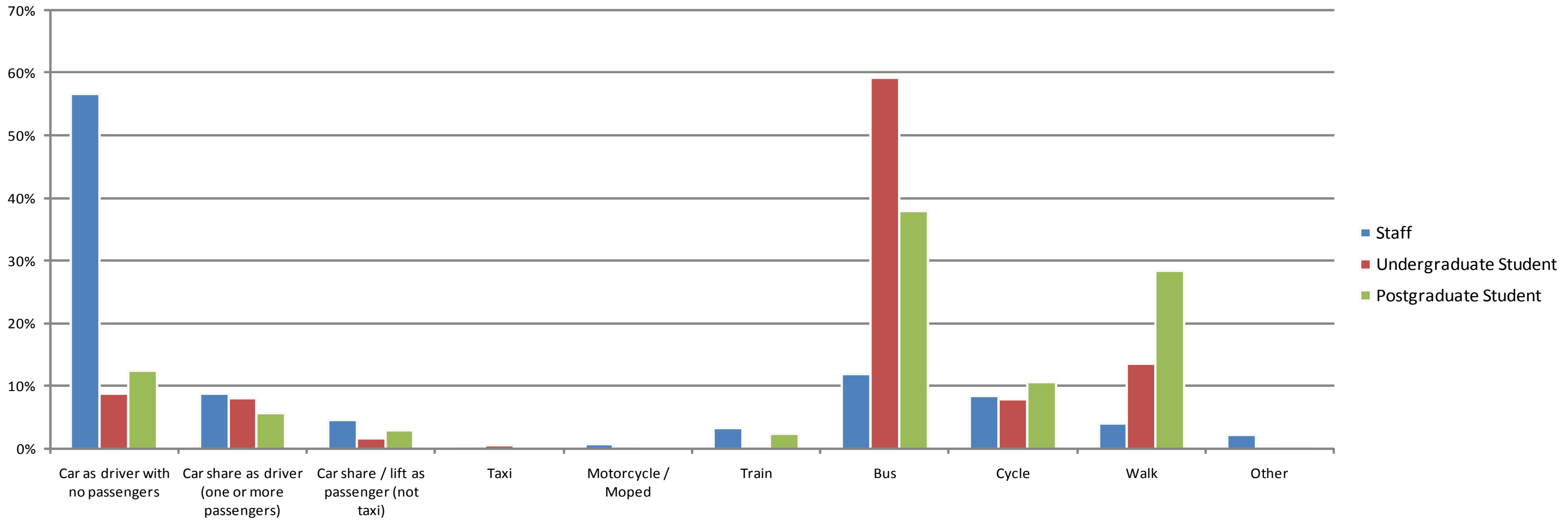
Postgraduate student arrivals and departures from campus are concentrated into a shorter periods than undergraduate students, with most arriving between 0800 and 1000 hours with a peak at 0900 hours. Postgraduate students departures are concentrated from around 1600 hours until 1900 hours, with a peak at approximately 1800 hours, about an hour later than both staff and undergraduate students.

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

3.6 Question 6: Mode

	Staff		Undergraduate Student		Postgraduate Student		Total Response Count	
Car as driver with no passengers	803	57%	53	9%	49	12%	905	37.4%
Car share as driver (one or more passengers)	124	9%	49	8%	22	6%	195	8.1%
Car share / lift as passenger (not taxi)	64	5%	10	2%	11	3%	85	3.5%
Taxi	1	0%	3	0%	0	0%	4	0.2%
Motorcycle / Moped	10	1%	1	0%	0	0%	11	0.5%
Train	45	3%	2	0%	9	2%	56	2.3%
Bus	168	12%	358	59%	150	38%	676	27.9%
Cycle	118	8%	47	8%	42	11%	207	8.6%
Walk	56	4%	82	14%	112	28%	250	10.3%
Other	30	2%	1	0%	1	0%	32	1.3%
Other (please specify)	27	2%	0	0%	1	0%	28	1.2%
Total	1419		606		396		**2421**	
Total Population	4,448 (FTE)		11,906		4,704		**21,058**	

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



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

- 57% drive themselves (single occupancy);
- 9% drive with one or more passengers (car share);
- 5% are given a lift by car;
- 12% travel by bus;
- 3% travel by train;
- 8% cycle; and
- 4% walk.

In response to the ‘other’ mode option a number of staff respondents specified alternative modes that all appear to be various forms of University transport. These included;

- 12 respondents stated University transport and one respondent stated that they travel by staff transport for the main part of their journey.
- 9 respondents travel by University minibus and one respondent travels by estates transport for the main part of their journey to the University.

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

- 59% travel by bus;
- 8% cycle;
- 14% walk;
- 9% drive themselves (single occupancy);
- 8% drive with one or more passenger (car share);
- 2% get a lift as a passenger; and
- 0% travel by train.

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

- 38% travel by bus;
- 28% walk;
- 11% cycle;
- 12% drive themselves (single occupancy);
- 6% drive with one or more passengers (car share);
- 3% get a lift as a passenger; and

- 0% travel by train.

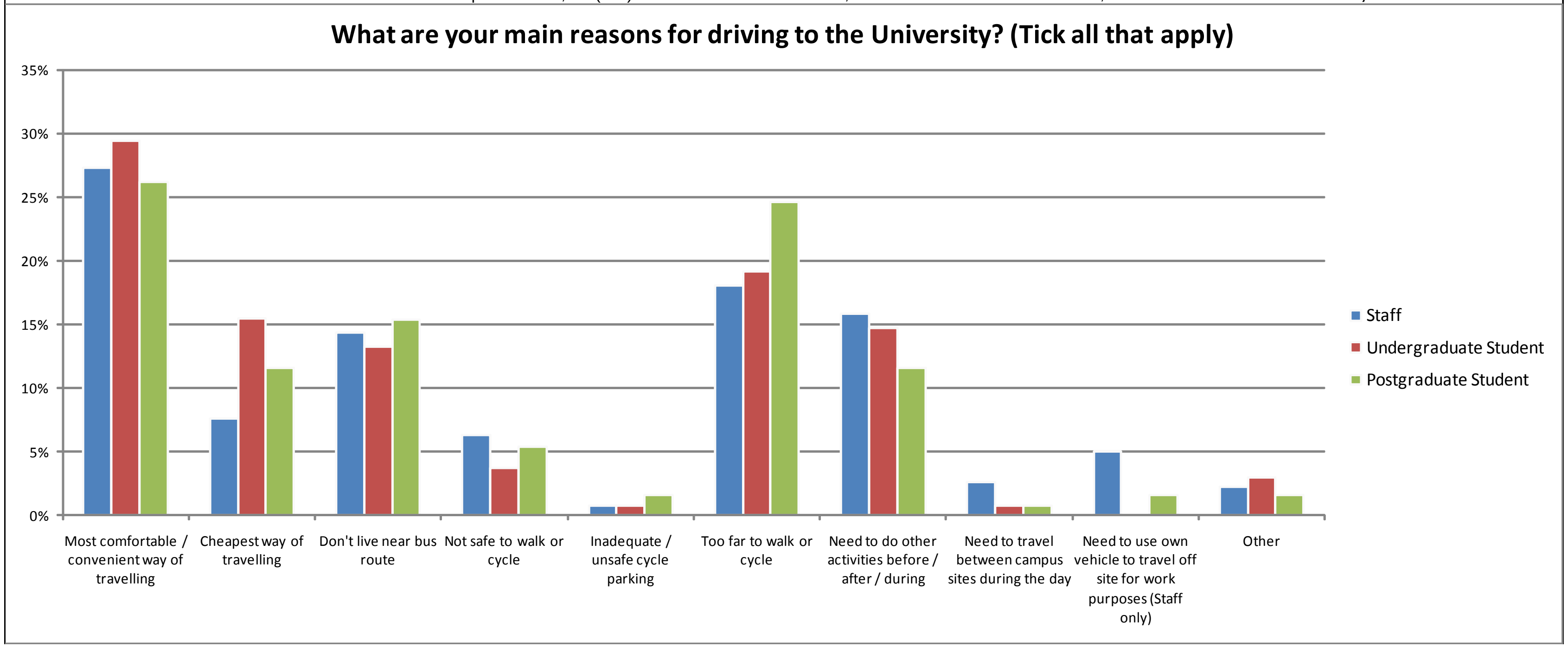
Overall, some 65% of staff travel by car as a driver (with or without passengers), whereas the comparative figures are just 17% for undergraduate students and 18% for postgraduate students. However, the relative difference in the total members in each category (4,448 staff, 11,906 undergraduates and 4,704 postgraduates) means that the actual numbers of vehicles being driven to the university by staff and students are likely to be similar (2,891 staff, 2871 undergraduates and 847 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 8% of undergraduate students cycle, the same percentage as staff. However, if measures to increase cycling led to a one percent increase in both groups, the actual increases would be in the region of 44 staff and 120 undergraduates. Again, this depends on the sample who responded to the survey being representative of the whole body.

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

3.7 Question 7: Reasons for Driving

	Staff		Undergraduate Student		Postgraduate Student		Total Response Count	
Most comfortable / convenient way of travelling	542	27%	40	29%	34	26%	616	27.3%
Cheapest way of travelling	151	8%	21	15%	15	12%	187	8.3%
Don't live near bus route	285	14%	18	13%	20	15%	323	14.3%
Not safe to walk or cycle	125	6%	5	4%	7	5%	137	6.1%
Inadequate / unsafe cycle parking	15	1%	1	1%	2	2%	18	0.8%
Too far to walk or cycle	359	18%	26	19%	32	25%	417	18.5%
Need to do other activities before / after / during	315	16%	20	15%	15	12%	350	15.5%
Need to travel between campus sites during the day	52	3%	1	1%	1	1%	54	2.4%
Need to use own vehicle to travel off site for work purposes (Staff only)	100	5%	0	0%	2	2%	102	4.5%
Other	44	2%	4	3%	2	2%	50	2.2%
Other (please specify)	42	2%	4	3%	2	2%	48	2.1%
Total	1988		136		130		**2254**	
Total Population	4,448 (FTE)		11,906		4,704		**21,058**	



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

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:

- 27% ‘most comfortable and convenient’ followed by
- 19% ‘too far to walk or cycle’
- 16% ‘need to do other activities before/during/after’
- 14% ‘don’t live near a bus route’

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:

Inadequate Facilities

- 3 respondents stated that one of the main reasons for driving to the University was because of the lack of changing facilities, particularly the lack of showers which was highlighted by 2 of the respondents.

Public Transport

- 39 respondents commented that poor quality, infrequent or insufficient buses was the main reason for driving to the University. In particular, respondents noted that buses are full or unreliable particularly at peak times, for example buses are seen as too unreliable to ensure being on time for 9am lectures.
- 21 respondents highlighted specifically that they drive because buses are too infrequent or unavailable to cover various shift patterns and preferred travel times; three of these respondents commented that public transport in general does not match shift patterns. Respondents criticised the bus timetables for being shorter than the working day and running too infrequently. Specific issues highlighted by respondents included transport between the train station and the University, the lack of buses early in the morning i.e. at 4am and 6am, bus and train times not matching, the X17 does not go to campus and is too irregular and the bus service from Kenilworth was highlighted as unreliable particularly outside term time.
- The time taken to drive to the University compared to taking the bus and the lack of direct bus routes to the University is also a key reason for driving. 9 respondents commented specifically that the bus takes a disproportionate amount of time compared to driving.

Activities before or after work

- A key reason for driving to University in relation to activities to do before or after work related to childcare commitments; 9 respondents stated that the need to drop off or pick children up from nursery or school was one of the main reasons given for driving to the University for the main part of their journey. Other activities before or after attending the University included sports clubs and need to carry equipments or sports clothes etc.

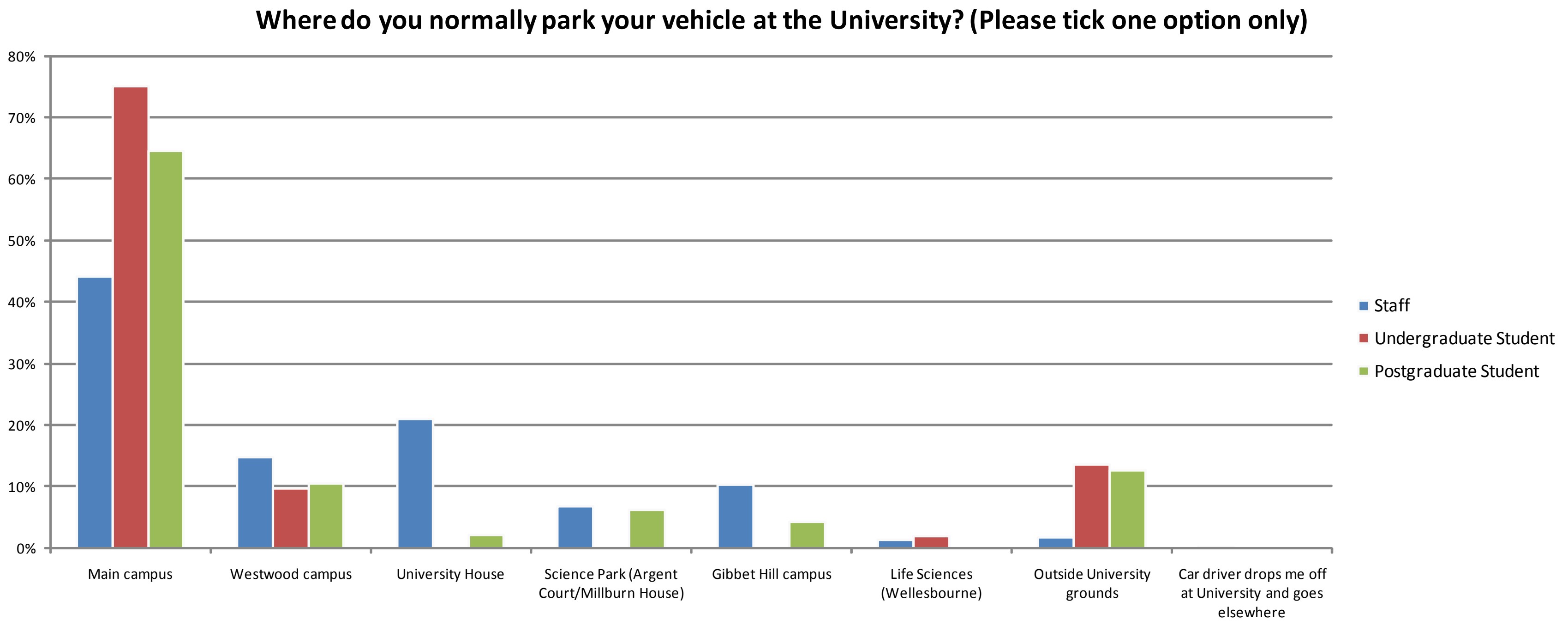
Parking permits

- One respondent stated that the reason they drive to the University was because they have brought an annual parking permit, and so using their car as much as possible makes economic sense.

Question 8 below examines the car parking locations used.

3.8 Question 8: Parking Location

	Staff		Undergraduate Student		Postgraduate Student		Total Response Count	
Main campus	351	44%	39	75%	31	65%	421	47.1%
Westwood campus	117	15%	5	10%	5	10%	127	14.2%
University House	166	21%	0	0%	1	2%	167	18.7%
Science Park (Argent Court/Millburn House)	54	7%	0	0%	3	6%	57	6.4%
Gibbet Hill campus	81	10%	0	0%	2	4%	83	9.3%
Life Sciences (Wellesbourne)	10	1%	1	2%	0	0%	11	1.2%
Outside University grounds	14	2%	7	13%	6	13%	27	3.0%
Car driver drops me off at University and goes elsewhere	1	0%	0	0%	0	0%	1	0.1%
Total	794		52		48		**894**	
Total Population	4,448 (FTE)		11,906		4,704		**21,058**	


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

The results of Question 8 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 (44% staff, 75% undergraduates and 65% postgraduates). Westwood campus was also well represented. University House was used almost exclusively by staff and Gibbet Hill campus by staff and postgraduate students but not by undergraduate students. Interestingly, parking outside the University grounds was the second most popular location for both student groups (13% each) but very low (2%) for staff.

Question 9 and 10 below examine the use of Blue Badge holders.

3.9 Questions 9 and 10: Blue Badge Holders

The main purposes of these questions is to inform the University of the numbers of Blue Badge Holders regularly travelling to main campus and to ensure that adequate parking facilities are in the correct places for disabled staff and students. For this reason it is more useful to look at actual numbers rather than percentages although these are also shown.

In response to Question 9 ‘Are you are registered Blue Badge holder?’, 14 staff and one undergraduate student replied in the affirmative. This represents 2% of the respondents from both groups.

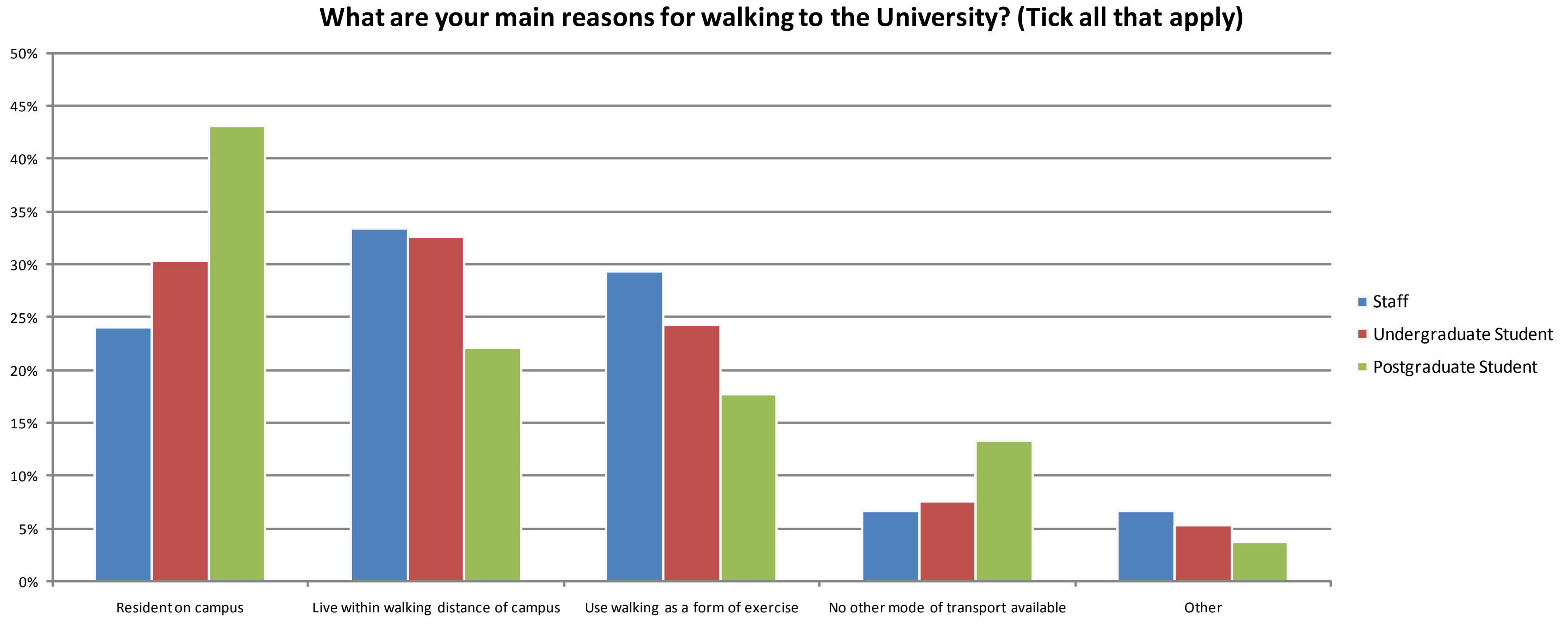
Question 10 asked the registered Blue Badge holders where they usually park at main campus. Three park at Westwood campus, two at Milburn House, two at University House and two in Car Park 15. Other locations mentioned once were Health Centre Road, Main Campus, Car Park 10, close to Library Road and the IARC building.

One respondent stated ‘anywhere there’s a space free – very limited!’.

Question 11 below exams the reasons for walking.

3.10 Question 11: Reasons for Walking

	Staff		Undergraduate Student		Postgraduate Student		Total Response Count	
Resident on campus	18	24%	40	30%	68	43%	126	34.5%
Live within walking distance of campus	25	33%	43	33%	35	22%	103	28.2%
Use walking as a form of exercise	22	29%	32	24%	28	18%	82	22.5%
No other mode of transport available	5	7%	10	8%	21	13%	36	9.9%
Other	5	7%	7	5%	6	4%	18	4.9%
Other (please specify)	5	7%	7	5%	6	4%	18	4.9%
Total	75		132		158		**365**	
Total Population	4,448 (FTE)		11,906		4,704		**21,058**	



This question was directed at those respondents that selected ‘walk’ as their main mode in Question 6 and explored the motives for walking to the University.

Some two thirds of respondents walk because they either live on campus (35% overall) or within walking distance of campus (28% overall). The second most important reason for staff, and third most important for both student groups, was that they use walking as a form of exercise.

Approximately 10% of the respondents walk because they have ’no other mode of transport available’.

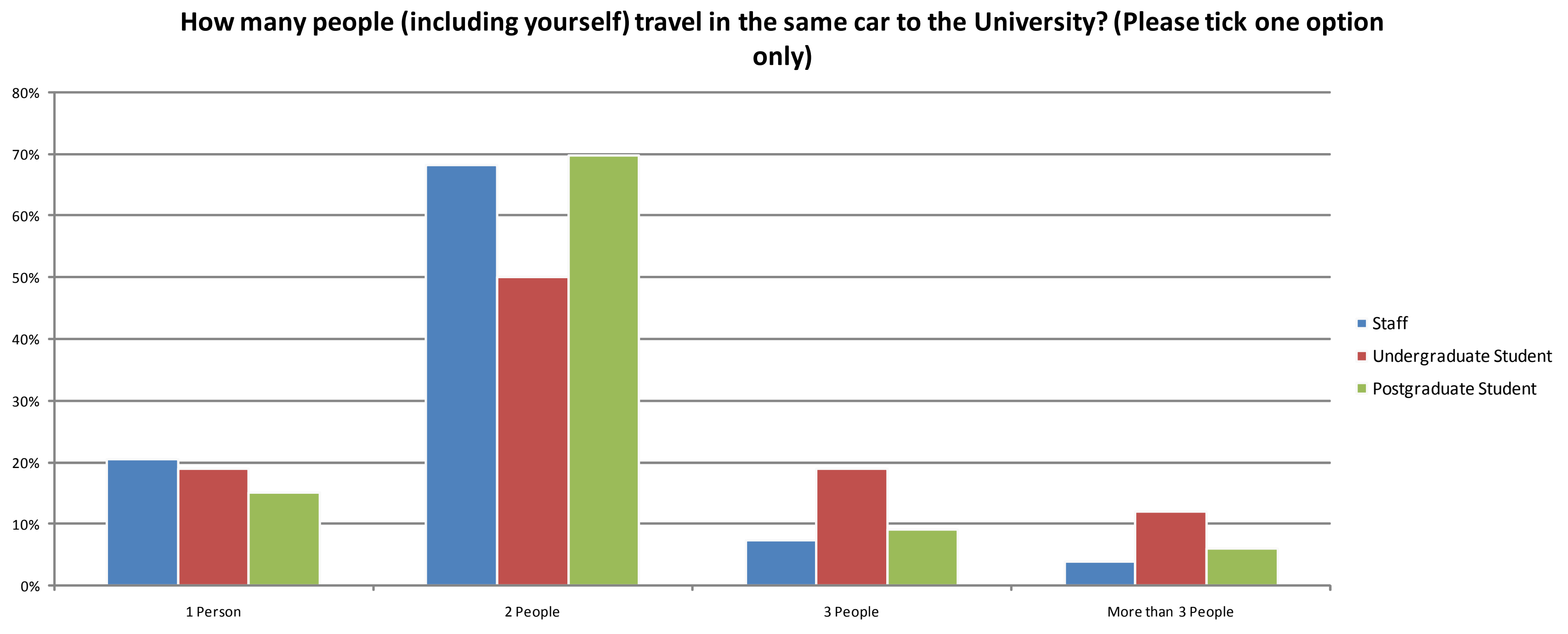
The ‘Other’ free text responses reinforced the reasons that were available as tick box categories:

- 11 respondents stated that cost was one of the key reasons why they walk to University; specifically respondents commented that parking and buses were both too expensive or that they wanted to save money.
- Three respondents stated that they walk to the University because of unreliable and infrequent buses.
- One respondent stated environmental concerns as the main reason for walking to University.
- One respondent stated that they walk to University for enjoyment.
- Two respondents stated that they walk because it is the quickest and most efficient mode of transport for them to travel to University.

Questions (12 and 13) below examine the options related to car sharing.

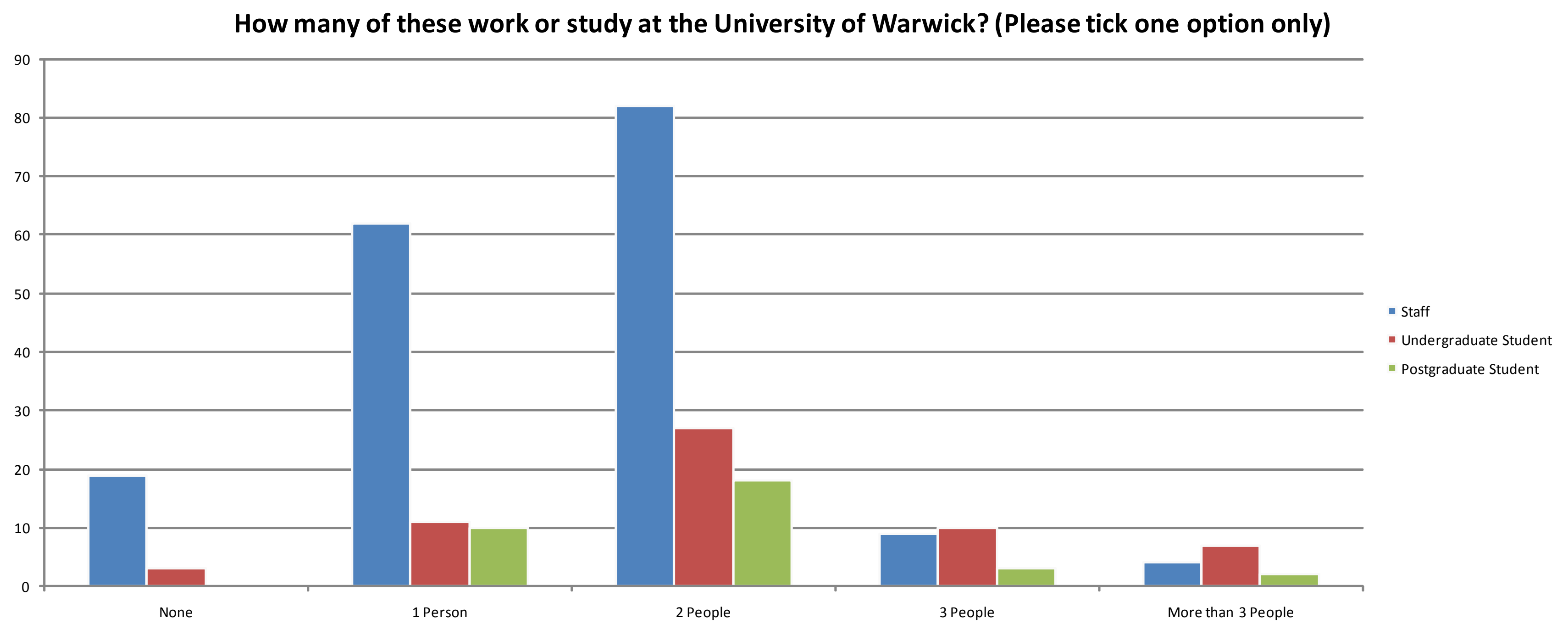
3.11 Questions 12 and 13: Car Sharing

	Staff		Undergraduate Student		Postgraduate Student		Total Response Count	
1 Person	36	20%	11	19%	5	15%	52	19.5%
2 People	120	68%	29	50%	23	70%	172	64.4%
3 People	13	7%	11	19%	3	9%	27	10.1%
More than 3 People	7	4%	7	12%	2	6%	16	6.0%
Total	176		58		33		**267**	
Total Population	4,448 (FTE)		11,906		4,704		**21,058**	



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

	Staff		Undergraduate Student		Postgraduate Student		Total Response Count	
None	19	11%	3	5%	0	0%	22	8.2%
1 Person	62	35%	11	19%	10	30%	83	31.1%
2 People	82	47%	27	47%	18	55%	127	47.6%
3 People	9	5%	10	17%	3	9%	22	8.2%
More than 3 People	4	2%	7	12%	2	6%	13	4.9%
Total	176		58		33		**267**	


How many of these work or study at the University of Warwick? (Please tick one option only)

Questions 12 and 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 12 asked how many people (including respondent) travel together in a car. The majority of respondents across all groups indicated that they travelled with two people in the car (58% of staff, 50% of undergraduate students and 70% of postgraduate students).

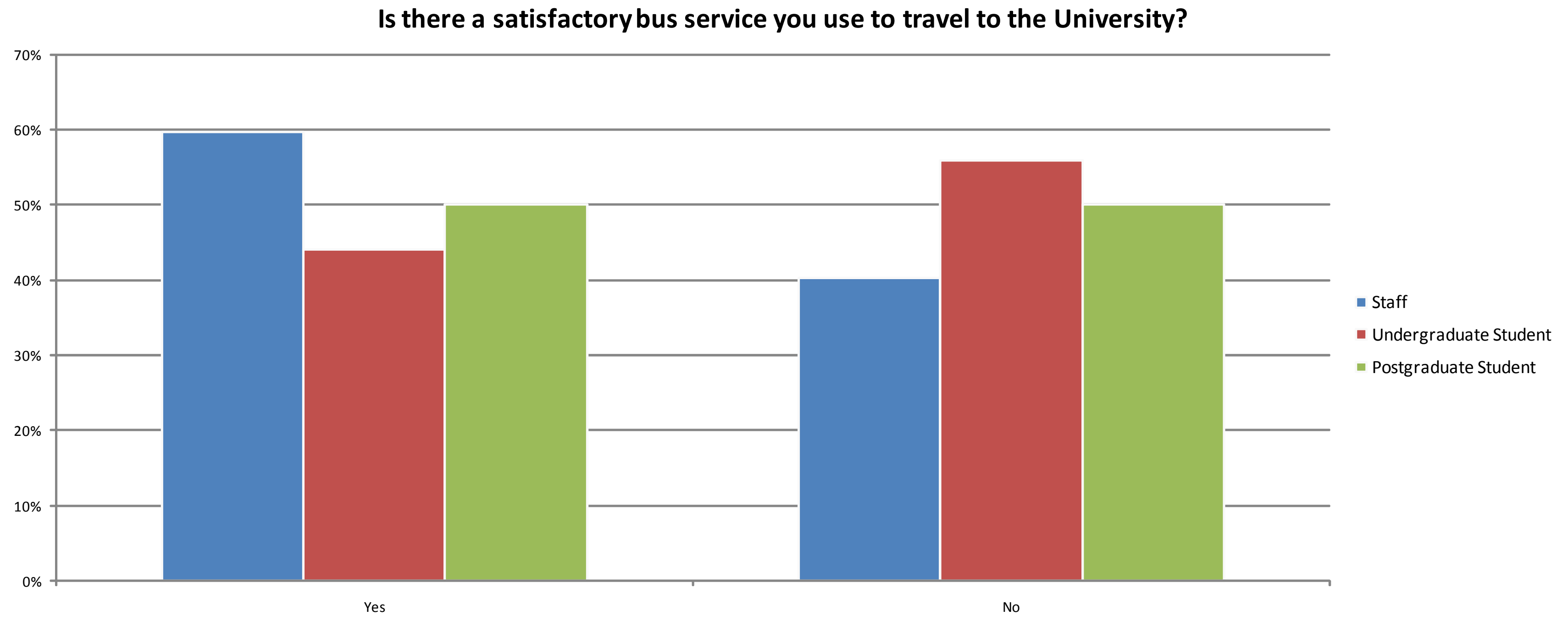
31% of undergraduate students indicated that they were more likely to travel in a full car with three or more passengers whereas only 11% of staff and 15% of postgraduate students travelled with this many people. When compared with the percentages for car sharing shown in Question 6 it is clear that staff are the most likely group to car share, but only with one person. Postgraduate students present a similar profile, whereas undergraduate students are clearly more likely to travel with more passengers in the car, although fewer actually car share as such.

Question 13 examined how many car sharers also study or work at the University. The results show that all postgraduate students car shared with someone else from the University, whereas 5% of undergraduate students and 11% of staff shared with people that do not either study or work at the University.

Questions 14 to 19 below were directed to respondents who indicated in Question 6 that they travel by public transport for the main part of their journey to the University.

3.12 Question 14: Bus Service Satisfaction

	Staff		Undergraduate Student		Postgraduate Student		Total Response Count	
Yes	92	60%	157	44%	74	50%	323	49.1%
No	62	40%	199	56%	74	50%	335	50.9%
Total	154		356		148		**658**	
Total Population	4,448 (FTE)		11,906		4,704		**21,058**	



Question 14 examines satisfaction with the current bus services and was directed at those respondents who currently travel to the University by this mode.

In total, respondents who felt that the current bus services are satisfactory was almost equal to those who felt they are not satisfactory. However, there were some variations within the three groups with postgraduate students split 50/50, staff reported 60% ‘satisfactory’ and 40% ‘unsatisfactory, undergraduate students were almost the opposite of staff with only 44% reporting that the current bus services were ‘satisfactory’ while 56% reported they were ‘unsatisfactory’.

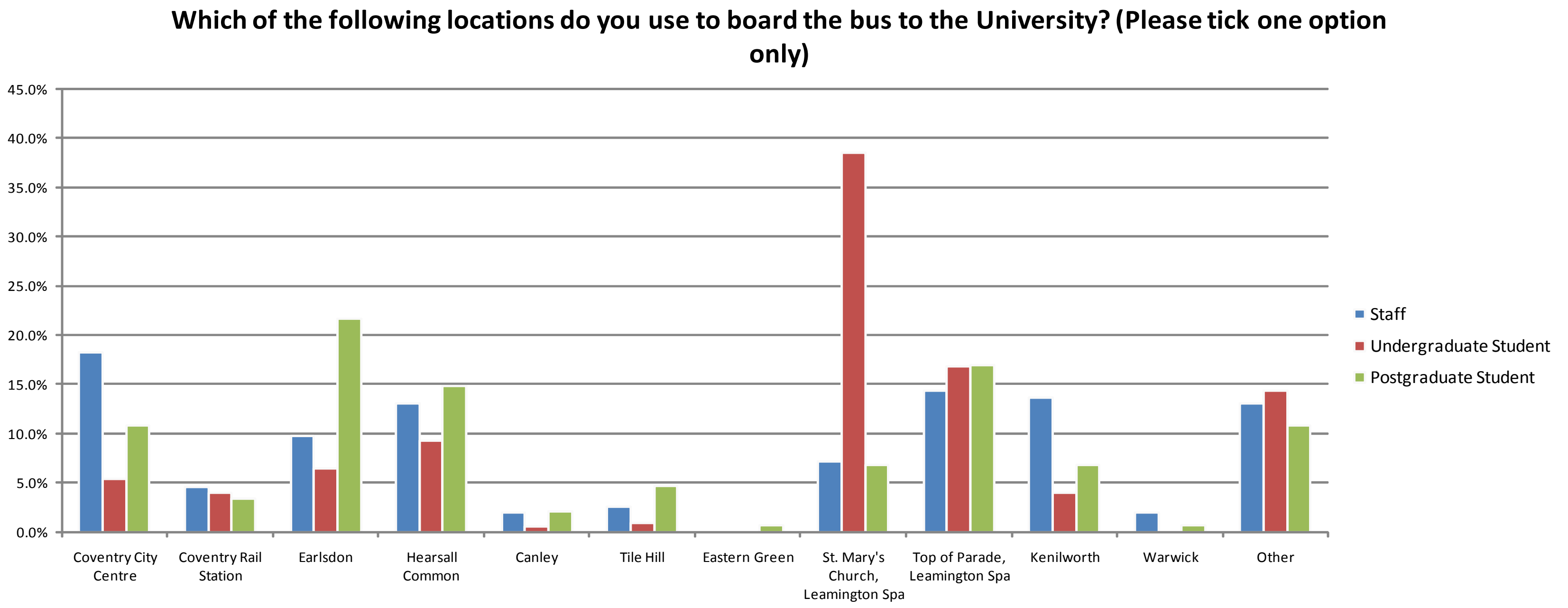
This indicates that as more undergraduate students use the bus than any other transport mode, there is a large number of dissatisfied bus users. However, it should be noted that it is likely that students who are dissatisfied with the current bus services are more likely to complete the travel survey and report their experience than those who have no issues. The responses are also subjective and may be influenced by individual experience, expectations, comparison or perception etc.

However, with 40% of staff, 56% of undergraduate students and 50% of postgraduate students reporting the current bus services are ‘unsatisfactory’ it is clear that this is an important issue. Further information is provided in the results of Question 19.

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

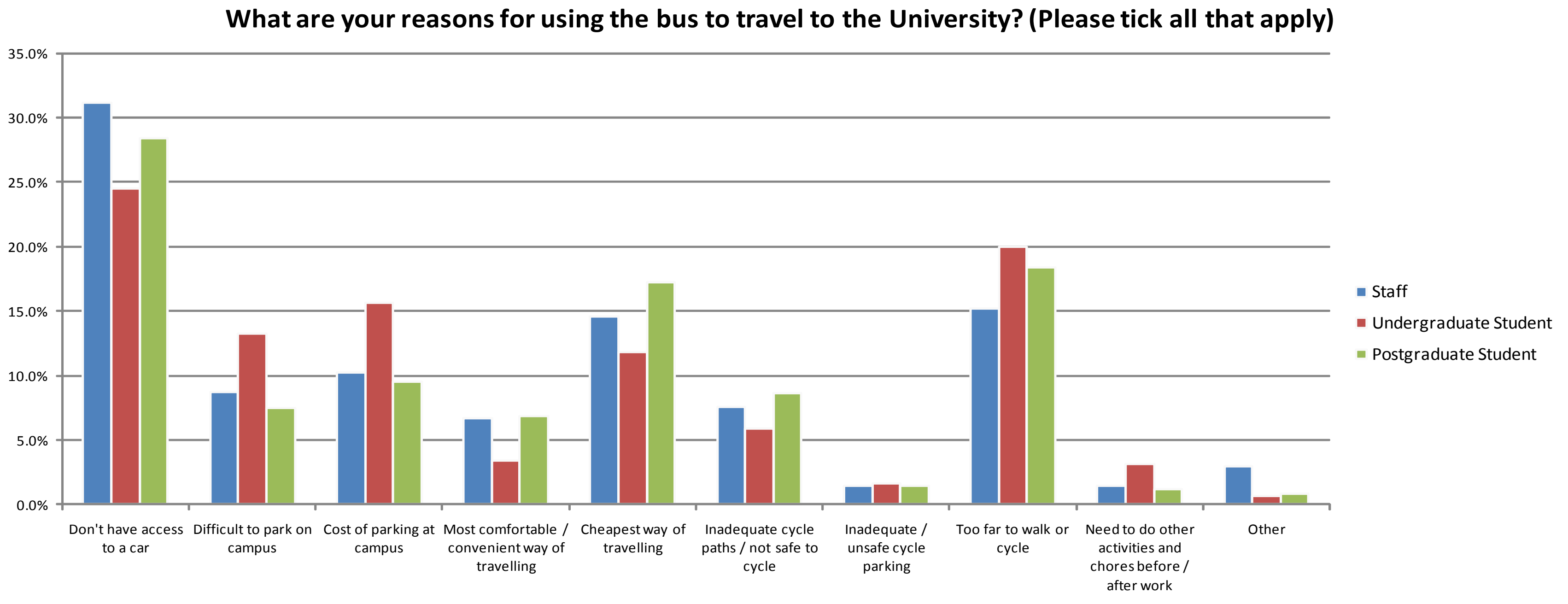
3.13 Question 15: Bus Boarding Locations

	Staff		Undergraduate Student		Postgraduate Student		Total Response Count	
Coventry City Centre	28	18.2%	19	5.3%	16	10.8%	63	9.6%
Coventry Rail Station	7	4.5%	14	3.9%	5	3.4%	26	4.0%
Earlsdon	15	9.7%	23	6.5%	32	21.6%	70	10.6%
Hearsall Common	20	13.0%	33	9.3%	22	14.9%	75	11.4%
Canley	3	1.9%	2	0.6%	3	2.0%	8	1.2%
Tile Hill	4	2.6%	3	0.8%	7	4.7%	14	2.1%
Eastern Green	0	0.0%	0	0.0%	1	0.7%	1	0.2%
St. Mary's Church, Leamington Spa	11	7.1%	137	38.5%	10	6.8%	158	24.0%
Top of Parade, Leamington Spa	22	14.3%	60	16.9%	25	16.9%	107	16.3%
Kenilworth	21	13.6%	14	3.9%	10	6.8%	45	6.8%
Warwick	3	1.9%	0	0.0%	1	0.7%	4	0.6%
Other	20	13.0%	51	14.3%	16	10.8%	87	13.2%
Total	154		356		148		**658**	
Total Population	4,448 (FTE)		11,906		4,704		**21,058**	



3.14 Question 16: Reasons for bus use

	Staff		Undergraduate Student		Postgraduate Student		Total Response Count	
Don't have access to a car	107	31.2%	255	24.5%	99	28.4%	461	26.6%
Difficult to park on campus	30	8.7%	138	13.3%	26	7.5%	194	11.2%
Cost of parking at campus	35	10.2%	163	15.7%	33	9.5%	231	13.3%
Most comfortable / convenient way of travelling	23	6.7%	35	3.4%	24	6.9%	82	4.7%
Cheapest way of travelling	50	14.6%	123	11.8%	60	17.2%	233	13.5%
Inadequate cycle paths / not safe to cycle	26	7.6%	61	5.9%	30	8.6%	117	6.8%
Inadequate / unsafe cycle parking	5	1.5%	17	1.6%	5	1.4%	27	1.6%
Too far to walk or cycle	52	15.2%	208	20.0%	64	18.4%	324	18.7%
Need to do other activities and chores before / after work	5	1.5%	33	3.2%	4	1.1%	42	2.4%
Other	10	2.9%	7	0.7%	3	0.9%	20	1.2%
Other (please specify)	8	2.3%	7	0.7%	3	0.9%	18	1.0%
Total	343		1040		348		**1731**	
Total Population	4,448 (FTE)		11,906		4,704		**21,058**	


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 38% boarding at St Marys Church and a further 15% boarding at The Parade. Staff and postgraduate students also board the bus at The Parade but less so at St Marys Church.

Other locations with relatively high numbers boarding buses include; Hearsall Common and Canley in Coventry, both of which have around 11% of all passengers. Coventry City Centre also has 10% of all passengers with higher proportions of staff and postgraduate students.

Question 16 examines the main reasons for bus use. The main factor is ‘lack of access to a car’, answered by 31% of staff, 24% of undergraduate students and 28% of postgraduate students. Bus use also fills the ‘niche’ for journeys that are considered ‘too far to walk or cycle’, which was the second most popular reason. Cost was also an important factor, because bus travel is considered relatively inexpensive and also because for undergraduate students particularly (15%) and staff (10%), the cost of parking at University seems to influence their choice to use bus services. The analysis shows that few people choose to use bus services for ‘positive’ reasons of convenience or comfort, rather that lack of opportunity for car travel (whether planned or unplanned) is a major factor in bus use.

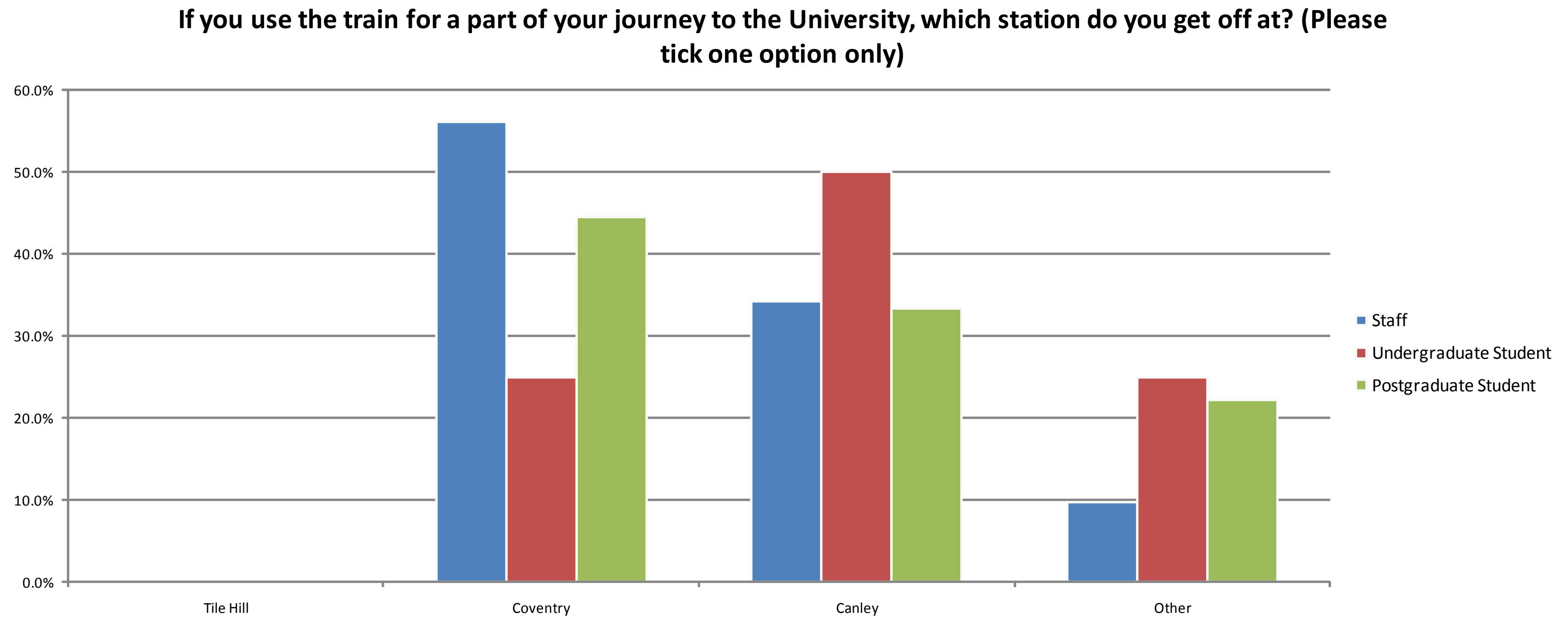
Within the free text question ‘Other’, responses were:

- 10 respondents stated that they use the bus to travel to the University because of environmental concerns;
- One respondent stated that they travel by bus because of a lack of adequate parking in Leamington Spa specifically (presumably given as a reason for not owning a car);
- One respondent stated that they travel by bus because they feel it is unsafe to walk; and
- One respondent stated that they travel by bus because it is sociable.

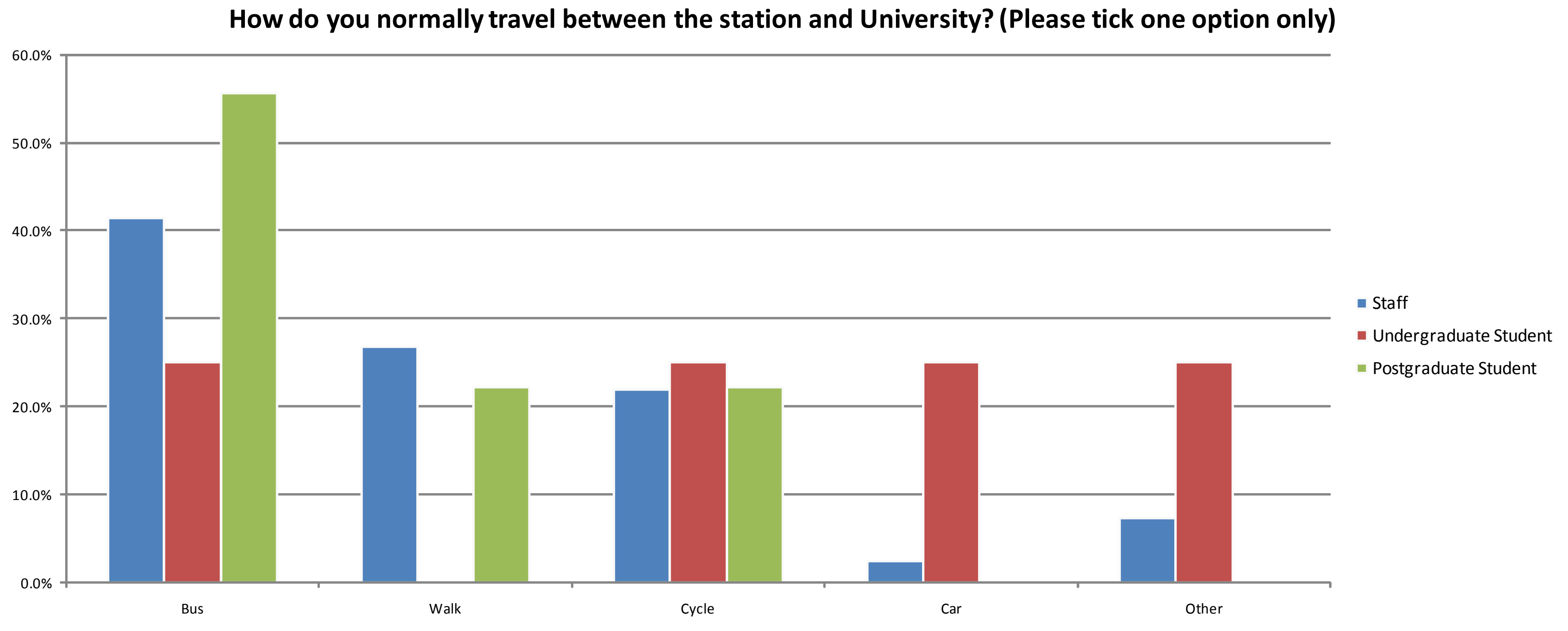
Questions 17 and Question 18 below, examine the train as the mode of transport

3.15 Question 17 and 18 Train Travel

	Staff		Undergraduate Student		Postgraduate Student		Total Response Count	
Tile Hill	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Coventry	23	56.1%	1	25.0%	4	44.4%	28	51.9%
Canley	14	34.1%	2	50.0%	3	33.3%	19	35.2%
Other	4	9.8%	1	25.0%	2	22.2%	7	13.0%
Other (please specify)	4	9.8%	0	0.0%	2	22.2%	6	11.1%
Total	41		4		9		**54**	
Total Population	4,448 (FTE)		11,906		4,704		**21,058**	



	Staff		Undergraduate Student		Postgraduate Student		Total Response Count	
Bus	17	41.5%	1	25.0%	5	55.6%	23	42.6%
Walk	11	26.8%	0	0.0%	2	22.2%	13	24.1%
Cycle	9	22.0%	1	25.0%	2	22.2%	12	22.2%
Car	1	2.4%	1	25.0%	0	0.0%	2	3.7%
Other	3	7.3%	1	25.0%	0	0.0%	4	7.4%
Other (please specify)	3	7.3%	0	0.0%	0	0.0%	3	5.6%
Total	41		4		9		**54**	
Total Population	4,448 (FTE)		11,906		4,704		**21,058**	


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

It is evident from the responses that the numbers using the train are particularly low, with only 41 staff, nine postgraduate students and four undergraduate students using the train.

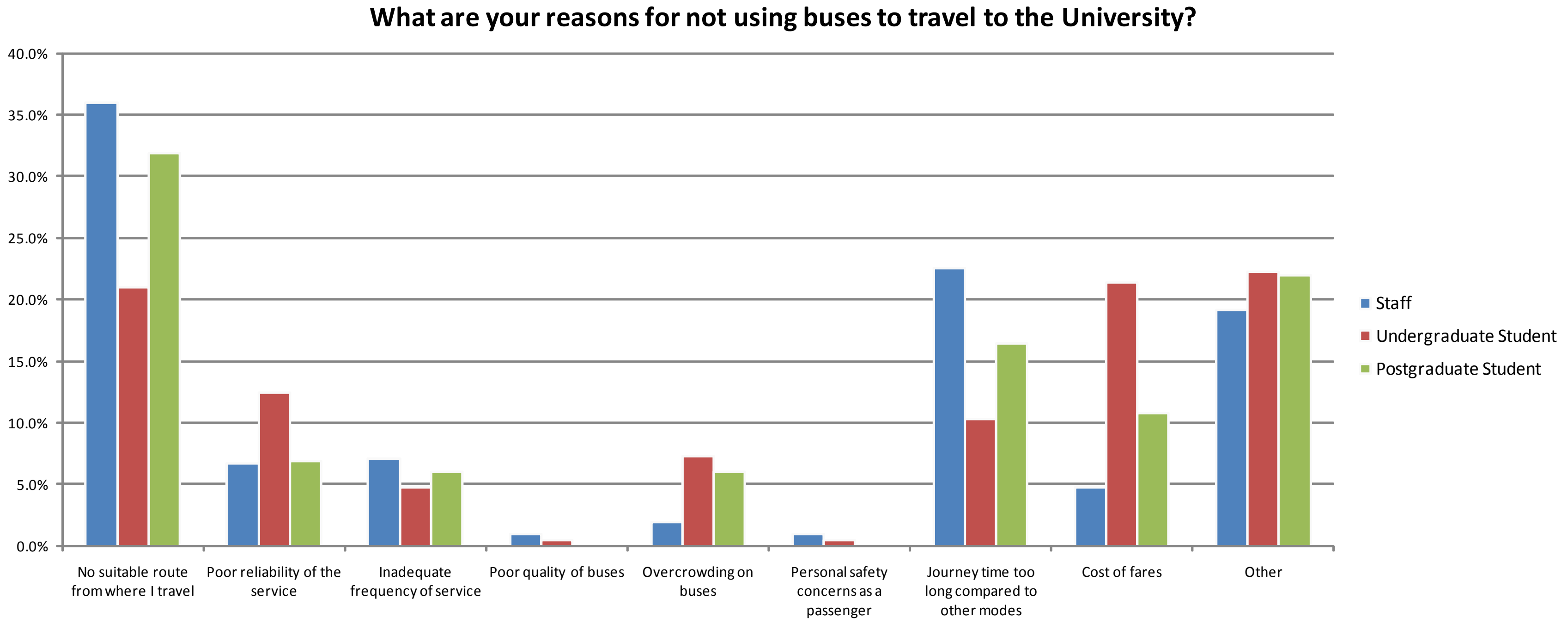
Question 17 reveals that Canley station, served by local trains on the Coventry to Wolverhampton service, is most frequently used by undergraduate students. Coventry railway station, which is served by national and local services, is more frequently used by staff and postgraduate students.

Question 18 shows that bus travel is the most often used mode of transport for the connection to and from the railway stations, with walking and cycling also popular for staff.

Question 19 below examines the reasons for not using bus services to travel to the University

3.16 Question 19: Reasons for not using buses

	Staff		Undergraduate Student		Postgraduate Student		Total Response Count	
No suitable route from where I travel	429	36.0%	49	20.9%	74	31.9%	552	33.3%
Poor reliability of the service	80	6.7%	29	12.4%	16	6.9%	125	7.5%
Inadequate frequency of service	84	7.0%	11	4.7%	14	6.0%	109	6.6%
Poor quality of buses	11	0.9%	1	0.4%	0	0.0%	12	0.7%
Overcrowding on buses	23	1.9%	17	7.3%	14	6.0%	54	3.3%
Personal safety concerns as a passenger	11	0.9%	1	0.4%	0	0.0%	12	0.7%
Journey time too long compared to other modes	269	22.6%	24	10.3%	38	16.4%	331	20.0%
Cost of fares	57	4.8%	50	21.4%	25	10.8%	132	8.0%
Other	228	19.1%	52	22.2%	51	22.0%	331	20.0%
Other (please specify)	217	18.2%	51	21.8%	49	21.1%	317	19.1%
Total	1192		234		232		**1658**	
Total Population	4,448 (FTE)		11,906		4,704		**21,058**	



The option ‘no suitable bus route from where I travel’ was the main reason given by all respondents with staff 36%, undergraduate students 21% and postgraduate students 33%. Similarly ‘journey time compared to other modes’ is cited as a main reason for not using bus services. Both these options indicate concerns by users about the speed and directness of current bus services to the main campus. It should be noted however, that some respondents may not have any actual experience of using the bus and their response may simply be a perception of the bus services.

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**.

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

- 17 respondents stated that flexibility and convenience were the main reasons for not using buses to travel to the University. Respondents stated that it was more convenient to either drive or receive a lift, or that activities after work made it more convenient not to travel by bus.
- 31 respondents stated that childcare commitments were the main reason for not using buses to travel to the University, specifically respondents stated that they need to drop their children off at school or nursery before work.
- A similar key reason for not using buses related to work commitments and activities after work. Seven respondents stated that they need their car for work purposes to travel to business meetings off campus. Three respondents stated that they could not use buses to travel to the University because of varied start and finishing times. Five respondents stated that they need to travel to other activities and so need a car because the location is either not accessible by bus or because they need to transport a lot of work and sports equipment.
- 28 respondents stated that they do not use buses to travel to the University because they simply prefer another mode.
- 23 respondents said they preferred cycling for various reasons including speed, cost, convenience and health and fitness reasons.
- Five respondents stated that they prefer to walk either for exercise or because the distance to the University is too short to travel by bus.
- Three respondents stated that they do not use the buses because a convenient car share is available.
- One respondent stated that they use University transport.
- One respondent stated a reason for not using the bus services was because they have a Sports Executive parking permit.
- 99 respondents stated that a combination of factors rather than a single reason for not using buses to travel to the University.

Questions 20 to 22 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.

3.17 Question 20: Encouragement of public transport use

Question 20 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?

Staff

	First Choice	Second Choice	Third Choice
Shuttle bus / taxi service to nearest rail station	121	82	52
More direct bus services to campus	503	203	73
Pool cars available for business journeys (Staff Only)	23	43	30
More facilities(shops, dentist etc) available at the University	7	39	48
Discounted fares offered by the University	196	296	127
More information about bus and train services	5	41	81
Improved lighting at bus shelters and paths	5	20	34
Competitive or interest free loans for travel	5	18	45
Ticket sales/information bureau on campus	9	19	47
More real-time information on campus	20	74	123
None	323	26	72
Other	109	38	29

Undergraduate Student

	First Choice	Second Choice	Third Choice
Shuttle bus / taxi service to nearest rail station	23	29	39
More direct bus services to campus	212	125	59
Pool cars available for business journeys (Staff Only)	0	1	2
More facilities(shops, dentist etc) available at the University	12	23	42
Discounted fares offered by the University	211	189	47
More information about bus and train services	3	21	42
Improved lighting at bus shelters and paths	2	11	21
Competitive or interest free loans for travel	6	15	33
Ticket sales/information bureau on campus	1	16	23
More real-time information on campus	28	90	149
None	32	6	40
Other	44	18	21

Postgraduate Student

	First Choice	Second Choice	Third Choice
Shuttle bus / taxi service to nearest rail station	33	39	30
More direct bus services to campus	146	58	32
Pool cars available for business journeys (Staff Only)	2	3	3
More facilities(shops, dentist etc) available at the University	13	21	25
Discounted fares offered by the University	99	99	46
More information about bus and train services	5	18	23
Improved lighting at bus shelters and paths	2	5	8
Competitive or interest free loans for travel	1	4	14
Ticket sales/information bureau on campus	9	19	25
More real-time information on campus	19	62	73
None	24	6	23
Other	19	7	10

This question revealed a preference within all three respondent groups for more direct bus services to the University, reflecting the perception that existing services are indirect and do not serve 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 don't compare well with car travel.

The other main issue raised was regarding the cost, suggesting a perception that bus travel is expensive. The responses demonstrated an interest in 'discounted bus fares' although there is a difference between staff and students in terms of which measures had the highest level of importance. All three groups rated 'more direct bus service to campus' as their first choice although this was more important to staff than students where 'discounted bus fares' recorded a higher proportion of the responses from students.

'Real-time information on campus' recorded a modest first choice improvement, but strongly as a supporting measure for improving bus services.

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

Convenience

- Eight respondents commented generally that they would not use public transport anyway because they currently drive or cycle; one respondent stated that there is more incentive to drive. Seven respondents stated that they wouldn't use public transport because they live either too close or too far from the University.
- Eight respondents stated that they would not use public transport to travel to the University because of child care commitments and one respondent specifically suggested child-friendly transport or a nursery bus.

Reliability and frequency of public transport

- 248 respondents commented on the need for more reliable, frequent and convenient public transport.

Information

- Two respondents commented that more Real Time Passenger Information off campus and also more accurate information would encourage them to travel to the University by public transport.

Parking

- Two respondents commented that flexible parking charges would help encourage travel by public transport to the University. The respondent pointed out that currently they are charged 90% of full-time car-parking, and so there is no incentive to pay bus fares on top of parking charges already paid.

Tickets and pricing

- 23 respondents commented on tickets and pricing for public transport. In particular, five respondents commented that coordinated ticketing is needed so that tickets are valid on all bus services; for example, extending the Centro Network cards to Warwickshire. Buses that do not accept exact change was also cited. One respondent commented that an annual pass for the train service from home to the University would encourage travel by public transport. 18 respondents suggested lower ticket prices generally would encourage use of public transport. Specifically, respondents suggested a student discount per journey, a discounted book of 10-20 bus tickets to facilitate occasional bus use.

Flexible working

- One respondent stated that flexible working would help encourage public transport travel to the University.
- Seven respondents commented on the need for a park and ride facility.
- One respondent suggested that accessible bike transport on trains would encourage them to travel to the University by public transport.
- Two respondents suggested a new tram line.

Train links

- 14 respondents commented that improved train links are important to encourage public transport. For example, respondents suggested quicker and direct train routes in general, a direct East to West Midlands service, direct trains between Leicester and Coventry, trains from Solihull, a campus railway station or direct train route and shuttle bus.

3.18 Question 21: 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 measures identified in the responses are safer cycle routes on the journey to and from the main campus. Cyclists expressed concerns about crossing the A45, whilst the lack of safe cycle routes between Leamington Spa, Kenilworth and the University clearly undermines the potential and opportunities for cycling to the University.

The second most featured response was better changing facilities as people who walk and cycle would like the facility to shower or change into different clothes upon arrival at the University. However, some respondents may be unaware of the option to use existing facilities such as the sports centre while for others they may need a more convenient facility close to their place of work or study.

Financial incentives also featured highly, suggesting that the existing ‘cycle to work’ scheme and discount bike packages need to be more widely promoted.

Staff

	First Choice	Second Choice	Third Choice
Safe cycle routes on the way to campus	465	94	55
Improved cycle parking at the campus	44	160	97
Improved changing facilities, showers and luggage lockers for cyclists	102	192	118
Cycle lockers to store a bike securely at the rail station	18	25	33
Financial incentive e.g. Cycle to Work Scheme	56	105	98
An arrangement with a nearby cycle shop to buy / maintain	8	43	53
Help from Bicycle User Group (advice and support for cyclists	1	8	16
Cycling skills training	8	18	30
Pool cars available for business journeys (Staff only)	8	25	35
More facilities (shops, dentist, etc) available at the University	4	6	24
None	537	9	42
Other	83	28	17

Undergraduate Student

	First Choice	Second Choice	Third Choice
Safe cycle routes on the way to campus	256	74	71
Improved cycle parking at the campus	43	102	84
Improved changing facilities, showers and luggage lockers for cyclists	64	114	83
Cycle lockers to store a bike securely at the rail station	5	24	23
Financial incentive e.g. Cycle to Work Scheme	63	79	58
An arrangement with a nearby cycle shop to buy / maintain	19	42	38
Help from Bicycle User Group (advice and support for cyclists	1	5	10
Cycling skills training	9	20	17
Pool cars available for business journeys (Staff only)	1	0	1
More facilities (shops, dentist, etc) available at the University	4	6	16
None	102	4	39
Other	9	1	14

Postgraduate Student

	First Choice	Second Choice	Third Choice
Safe cycle routes on the way to campus	160	40	28
Improved cycle parking at the campus	35	60	40
Improved changing facilities, showers and luggage lockers for cyclists	38	62	46
Cycle lockers to store a bike securely at the rail station	7	15	16
Financial incentive e.g. Cycle to Work Scheme	23	37	33
An arrangement with a nearby cycle shop to buy / maintain	13	36	43
Help from Bicycle User Group (advice and support for cyclists	3	7	13
Cycling skills training	6	10	12
Pool cars available for business journeys (Staff only)	1	1	6
More facilities (shops, dentist, etc) available at the University	6	10	14
None	65	3	20
Other	12	4	7

There were a considerable number of free text ‘Other’ responses as follows:

General

- 121 respondents stated that they would not cycle regardless of any potential incentives.

- 68 respondents stated that this was because they live too far to be able to cycle to the University comfortably or practicably.

It was suggested that some respondents would cycle if they lived closer to the University. Four respondents stated that they already cycle or walk and so did not suggest measures to encourage them to cycle. 47 respondents stated that they would not cycle generally or because they have health problems or childcare commitments. One respondent stated that it was too dangerous to cycle.

New and improved cycle routes and crossings

- 25 respondents commented on the need for new or improved safer cycle routes to encourage them to cycle to the University. Two respondents commented specifically on the need for an improved cycle crossing on the A45.
- Six respondents stated the need for the Kenilworth - campus cycle route. Three respondents raised concerns about Gibbet Hill, including the need to level the hill!, the lack of room for cyclists on the route and the need for the route from Kenilworth to avoid it.
- Respondents suggested the need for a designated cycle route from Leamington to campus via Stoneleigh, more safer cycle routes on campus, lighting cycle routes, and a cycle route from Leamington.

Safety and security for cyclists

- Eight respondents commented on a lack of safety for cyclists. Specifically, it was noted as dangerous to cycle from Leamington to campus, plus issues of cycling in the dark and poor driving.
- Seven respondents suggested the need to improve security on campus for cycle storage, including safer bike locks, secure indoor parking and surveillance cameras.
- One respondent suggested warning signs for cyclists e.g. turning onto East Site and on the route to University House.

Cycle maintenance provision and financial incentives

- Seven respondents suggested on-site bicycle maintenance facilities for repairs or a mechanic available during working hours for servicing and repairs, perhaps using the University porters.
- Two respondents suggested financial incentives such as a cycle to work scheme.
- In terms of facilities, one respondent noted that specifically more lock points and covers near the sports centre would encourage them to cycle.
- One respondent suggested being able to take bikes on trains.
- One respondent suggested changing parking permits so that they are not encouraged to drive every day due to the financial incentive to buy a car park pass rather than daily tickets.

- One respondent highlighted the need for information on which train stations are realistic to cycle from to the University.
- One respondent suggested cycling in a group.
- Seven respondents highlighted that they cannot cycle but two respondents in particular highlighted that they would like to learn.

Eleven respondents suggested introducing pool bikes or a cycle to work scheme, or they highlighted that they would cycle if they had a bike. One respondent in particular suggested introducing pool bikes on campus for short trips. Other schemes that were suggested in relation to providing bikes included enabling graduating students to sell their old bikes to new students. A financial incentive to cycle was suggested by respondents, this included discounted bikes, free University bikes or a more affordable cycle to work scheme. It was highlighted by two respondents, in particular that the current cycle to work scheme does not provide a financial incentive, because the scheme is more expensive than just buying a bike outright.

Two respondents suggested a subsidy or financial incentive to buy an electric bike or scooter.

3.19 Question 22: Measures to Encourage Car Sharing

Staff	First Choice	Second Choice	Third Choice
Help in finding car share partners with similar travel patterns	332	126	134
Reserved parking on campus for car sharers	32	166	110
Reduced or free parking charges on campus for car sharers	291	207	150
Pool cars available for business journeys (Staff only)	13	35	49
Guaranteed Lift Home in an emergency or if let down by car driver	162	218	194
More facilities (shops, dentist, etc) available at the University	8	9	21
None	421	11	30
Other	74	21	5

Undergraduate Student	First Choice	Second Choice	Third Choice
Help in finding car share partners with similar travel patterns	153	75	130
Reserved parking on campus for car sharers	53	171	90
Reduced or free parking charges on campus for car sharers	258	134	62
Pool cars available for business journeys (Staff only)	0	1	4
Guaranteed Lift Home in an emergency or if let down by car driver	31	105	134
More facilities (shops, dentist, etc) available at the University	6	9	22
None	66	5	34
Other	6	4	4

Postgraduate Student	First Choice	Second Choice	Third Choice
Help in finding car share partners with similar travel patterns	121	45	50
Reserved parking on campus for car sharers	22	78	58
Reduced or free parking charges on campus for car sharers	114	93	50
Pool cars available for business journeys (Staff only)	0	5	6
Guaranteed Lift Home in an emergency or if let down by car driver	23	53	55
More facilities (shops, dentist, etc) available at the University	7	10	23
None	73	5	28
Other	10	3	3

Question 22 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?’

The most important response from staff and undergraduate students was ‘help in finding car share partners with similar travel patterns’ , whereas ‘reduced or free parking charges on campus for car sharers’ was more important to undergraduate students. A ‘guaranteed lift home’ was a strong second choice for all three respondent groups as was the choice of ‘reserved parking for car sharers’.

Some interesting additional information emerged from the free text ‘Other’ answers as follows:

- Five respondents highlighted that car sharing is difficult given the problem of working irregular hours - one respondent suggested introducing a car share scheme that supports unpredictable working hours. Another respondent suggested a need for a change in culture to facilitate fixed finishing times for administrative staff.

- One respondent suggested a website where you can find a sharer and offer to car share.
- Two respondents commented that they do not own a car!

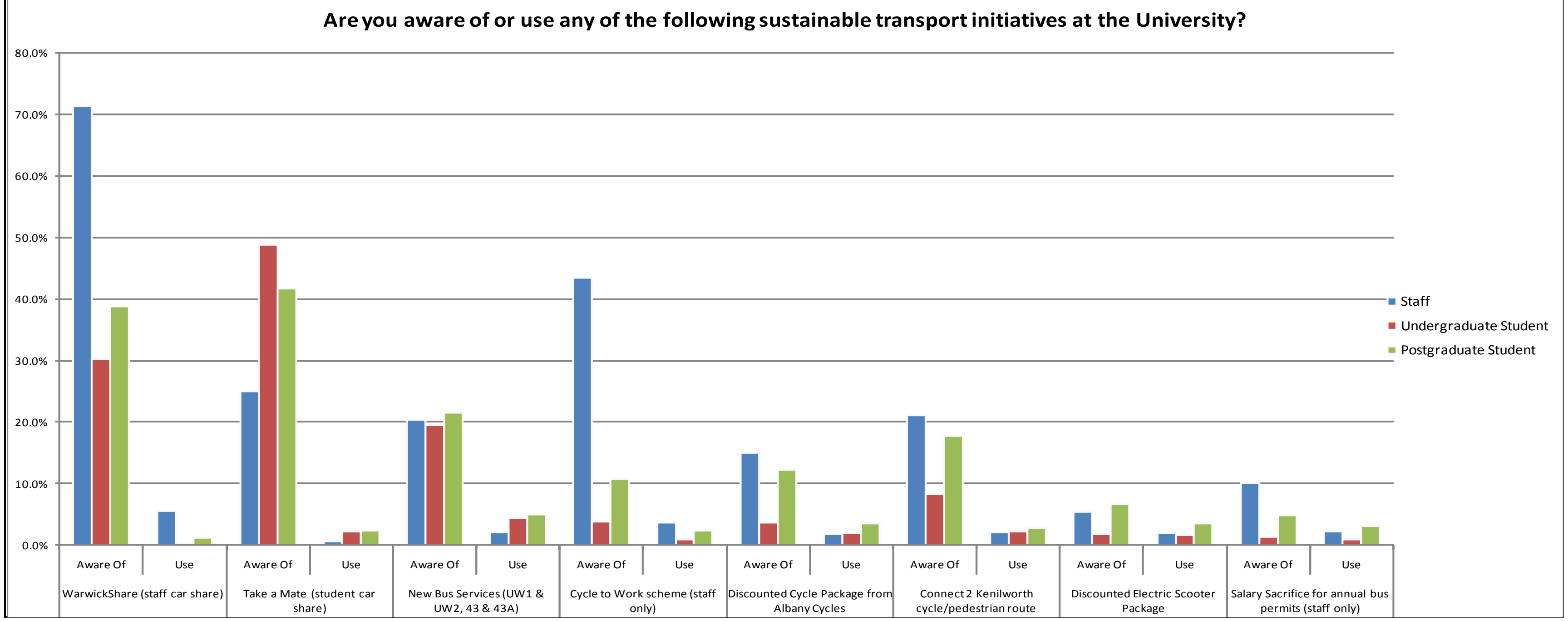
Parking

Five respondents highlighted issues and suggestions to encourage car sharing in relation to parking. The need to be able to park in Gibbet Hill and main campus was suggested, along with guaranteed parking, stronger financial incentives such as free parking or reduced parking prices for car sharing. One respondent highlighted that currently the car share scheme is too complex and that car sharers can only use the spaces before 10.30 when there are nearly always non-car share places available anyway.

The following question, Question 23, was designed to examine respondents’ awareness and use of various sustainable travel initiatives that are currently in place at the University.

3.20 Question 23: Sustainable Travel Initiatives

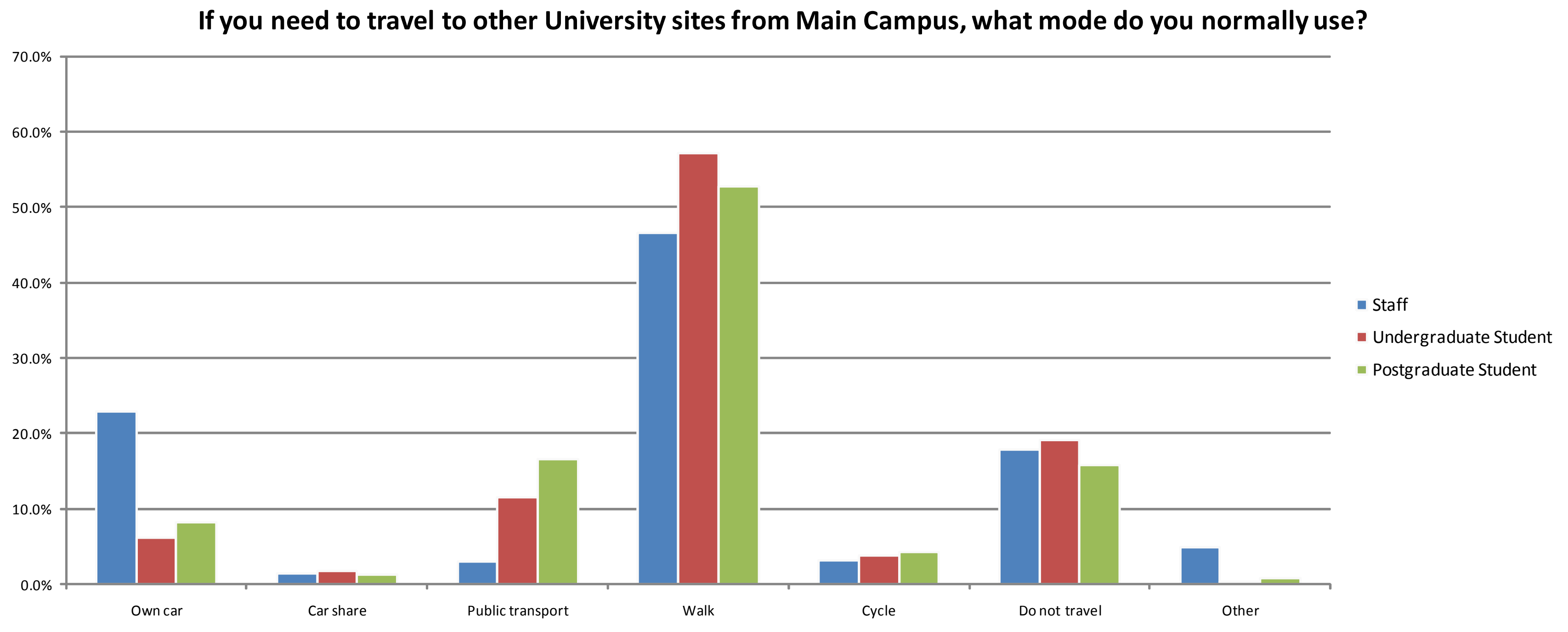
		Staff		Undergraduate Student		Postgraduate Student		Total Response Count	
WarwickShare (staff car share)	Aware Of	1029	71.3%	192	30.3%	162	38.8%	1383	55.4%
	Use	81	5.6%	2	0.3%	5	1.2%	88	3.5%
Take a Mate (student car share)	Aware Of	362	25.1%	309	48.7%	174	41.6%	845	33.9%
	Use	8	0.6%	14	2.2%	10	2.4%	32	1.3%
New Bus Services (UW1 & UW2, 43 & 43A)	Aware Of	293	20.3%	124	19.6%	90	21.5%	507	20.3%
	Use	31	2.1%	28	4.4%	21	5.0%	80	3.2%
Cycle to Work scheme (staff only)	Aware Of	627	43.4%	24	3.8%	45	10.8%	696	27.9%
	Use	53	3.7%	6	0.9%	10	2.4%	69	2.8%
Discounted Cycle Package from Albany Cycles	Aware Of	217	15.0%	23	3.6%	51	12.2%	291	11.7%
	Use	25	1.7%	12	1.9%	15	3.6%	52	2.1%
Connect 2 Kenilworth cycle/pedestrian route	Aware Of	304	21.1%	53	8.4%	74	17.7%	431	17.3%
	Use	30	2.1%	14	2.2%	12	2.9%	56	2.2%
Discounted Electric Scooter Package	Aware Of	79	5.5%	11	1.7%	28	6.7%	118	4.7%
	Use	28	1.9%	10	1.6%	15	3.6%	53	2.1%
Salary Sacrifice for annual bus permits (staff only)	Aware Of	146	10.1%	9	1.4%	20	4.8%	175	7.0%
	Use	32	2.2%	6	0.9%	13	3.1%	51	2.0%
Total Answers		3345		837		745		**4927**	
Total Respondents		1444		634		418		**2496**	
Total Population		4,448 (FTE)		11,906		4,704		**21,058**	


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 and ‘Cycle to Work Scheme’ amongst staff‘ and the Take a Mate’ car share initiative amongst students. There is much more limited awareness of the other initiatives such as local bus services, discounted bike sales, discounted scooter sales and salary sacrifice schemes. This indicates that more effort and resource is necessary to promote the various initiatives and alternative sustainable transport modes at the start of each term and through ongoing promotions.

3.21 Question 24: Travel to other University sites

	Staff		Undergraduate Student		Postgraduate Student		Total Response Count	
Own car	307	22.9%	36	6.2%	31	8.3%	374	16.3%
Car share	19	1.4%	10	1.7%	5	1.3%	34	1.5%
Public transport	40	3.0%	67	11.6%	62	16.6%	169	7.4%
Walk	625	46.6%	330	57.2%	197	52.8%	1152	50.3%
Cycle	43	3.2%	22	3.8%	16	4.3%	81	3.5%
Do not travel	240	17.9%	110	19.1%	59	15.8%	409	17.9%
Other	66	4.9%	2	0.3%	3	0.8%	71	3.1%
Total	1340		577		373		**2290**	
Total Population	4,448 (FTE)		11,906		4,704		**21,058**	


If you need to travel to other University sites from Main Campus, what mode do you normally use?

Question 24 is concerned with travel to and from the other University sites that are some distance away from the main campus. However, it would appear that this has been interpreted as ‘local or in-campus’ travel as the overwhelming response was ‘walk’. This may reveal a response to the changes to the car parking arrangements, as in the past it was more common for people to drive between locations on main campus. However, staff are more likely to travel off-site by car than any other mode of transport than by students.

4 Key Changes since 2005

4.1 Modal Share

Table 2 below shows the detailed breakdown of modal change from 2005, reported in the same format as that reported in the original Travel Plan dated June 2007 (Page 10 - Table 4.2).

Mode	2005 Modal Share %			2010 Modal Share %		
	Staff (868)	Post-grad Students (251)	Undergrad Students (1130)	Staff (1444)	Post-grad Students (418)	Undergrad Students (634)
Car driver (no passengers)	64.4	12.0	10.0	56.6	12.4	8.7
Car driver (car share)	7.0	7.6	10.8	8.7	5.6	8.1
Car passenger	3.8	0.4	4.7	4.5	2.8	1.7
Bus	10.7	24.4	46.6	11.8	37.9	59.1
Cycle	8.5	13.2	5.1	8.3	10.6	7.8
Walk	4.0	41.2	22.4	3.9	28.3	13.5
Motorcycle/ scooter	0.3	0	0.3	0.7	0	0.2
Train	0.5	0.8	0.3	3.2	2.3	0.3
Taxi	0	0.4	0	0.1	0	0.5
Other	0.6	0	0	2.1	0.3	0.2

Table 2: Modal share by staff and students, 2005 and 2010

The main headlines related to **staff** over the period 2005 to 2010 are:

- Single car drivers down from 64.4% to 56.6%;
- Car share drivers up from 7.0% to 8.7%;
- Car share passengers up from 3.8% to 4.5%;
- Bus use up from 10.7% to 11.8%;
- Train use up from 0.5% to 3.2%;
- Cycling and Walking down slightly.

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

- Single car occupancy down from 10% to 8.7%;

- Car share drivers down from 10.8% to 8.1%;
- Car share passengers down from 4.7% to 1.7%;
- Bus use up from 46.6% to 59.1%;
- Cycling up from 5.1% to 7.8%;
- Walking down from 22.4% to 13.5%.

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

- Single car occupancy up from 12.0% to 12.4%;
- Car share drivers down from 7.6% to 5.6%;
- Car share passengers up from 0.4% to 2.8%;
- Bus use up from 24.4% to 37.9%;
- Cycling down from 13.2% to 10.6%;
- Walking down from 41.2% to 28.3%.

The principle changes between 2005 and 2010 are most positive with:

- staff and undergraduate students single car occupancy reduced;
- staff car sharing increased;
- bus use increased by all three groups;
- train use increased for staff and postgraduate students.

On the downside however:

- cycling has reduced a little for staff and postgraduate students;
- walking has reduced more significantly for both student groups and by a small amount for staff.

The overall results from the 2010 survey are extremely positive and clearly indicate that the 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 2005 Travel Survey.

4.2 Progress Towards Travel Plan Targets

The 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. These were developed from the Travel Plan’s aim to reduce single occupancy and general car use in order to restrict the growth of traffic at the University to around 12% during the 10 year period of the Masterplan. This represents a challenging target, which is significantly below the Government’s 'low growth traffic forecast' for the period to 2018.

The targets were bracketed within a variation of 2% either side of the predicted modal share.

Table 3 below shows the modal shares recorded in the 2005 travel survey, the targets set for 2013 and the modal shares from the new 2010 travel survey. The cells in green in the table indicate where the 2013 targets have already been achieved or exceeded.

Mode	2005 Modal Share		Target for 2013 (+/- 2%)		2010 Modal Share	
	Staff	Student	Staff	Student	Staff	Student
Car driver	72	21	63	18	65	17
Car passenger	4	5	7	7	5	2
Public Transport	11	46	14	48	15	52
Cycle	9	5	11	6	8	9
Walk	4	22	5	23	4	19
Other	<1	1	<1	<1	3	3

Table 3: Modal share – progress towards targets

Journeys as car driver have reduced from 72% (staff) and 21% (students) to 65% (staff) and 17% (students). This is a significant reduction given that reducing single car occupancy is a vital element of the Travel Plan.

The car passenger target has been achieved by staff (to within the +/- 2% threshold) although the car passenger percentage for students has dropped since 2005. This may be a result of the number of student drivers also reducing (ie. less opportunity to get lifts).

Public transport targets have been exceeded by both staff and students, for the latter group over half of all trips were by public transport.

The cycle target has been achieved by students although not by staff. It can be seen from the journey origin post codes plots (**Appendix B**) that staff origins are generally further from the University and more scattered meaning the opportunities for cycling may be fewer. However, the walking target for staff has been met although the percentage is only half that for cycling. The student walking target has not been achieved nor the ‘other’ target for staff and students.

5 Suggestions for Improvements

After completion of the actual questions, the survey provided a free text option, through which respondents were asked to provide comments and views on their transport issues when travelling to and from the University and suggestions for improvement. A total of 1086 inputs were received that provided comments. These have been analysed using a 'coding' method, which 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. Students suggested that a park and ride should include a shuttle bus to the university along a priority route. In particular, respondents cited the possibility of a park and ride scheme from Leamington or Warwick. One respondent suggested that a park and ride should include secure cycle parking facilities so people could cycle part 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 would pass a stop due to being at capacity, whilst lecturers noted there have been incidents where students have missed or been late to lectures due to the unreliable bus service. Some respondents noted that measures to discourage driving to the University placed more pressure on the bus service, which cannot be accommodated. Some respondents draw a link between the poor quality bus services and reputation of the university: "*for a university that is ranked 3rd in the UK, the current service is appalling*." Fundamentally, respondents frequently concluded that additional people cannot be encouraged to use the bus when buses are overcrowded and at capacity. It is widely agreed that additional buses are needed during peak term times.

Existing bus users clearly have a very negative perception of services. People asked why they don't use the bus also cited indirect and slow journeys as disincentives.

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 commented that Stagecoach do not provide real time information on the bus service. 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 respondent suggested that a bus pass system should be set up that would allow students and staff to take any of the different buses going to the University (for instance Kenilworth, 12, U1, U2, X17) instead of waiting for the selected line of the present bus passes;
- Paying on board the bus is only possible with exact change, there needs to be a change machine at appropriate locations;
- To be able to renew bus passes on campus; and
- A pay station on campus for the ‘Oyster’ style bus pass.

Bus service is over-priced with regard to the service that is received

Several respondents believe that the cost of bus travel is over-priced with regard to the service offered, in particular the frequency of buses. Respondents suggested that the bus service should be subsidised for students and University staff. Others commented that the qualities of the buses with regard to seating, noise, cleanliness and age mean that ticket/passes prices are significantly overpriced.

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. It was also commented that this could include negotiations on the price of bus travel. Consultees believe that the University provides a bulk of custom to the bus operators and as a result should be in an enhanced position of influence – *“The University must have some clout with the bus companies.”* One respondent commented that *“The University are poor. With an organisation as big as the university, and if it is serious about sustainable transport, it should exert its influence to get public transport improved as currently this is a most unattractive option.*” It was suggested that with regard to cost, the university could promote a discounted price if the same bus journey is taken each day and that this would also help bus operators re-distribute their buses based on demand.

Additional bus routes are required

This included:

- Better connections to Kenilworth;
- Improved links to Canley Station;
- Improved service to Leamington at the weekends;
- A bus running from Oxford, for those that live in Oxford and visit the libraries;
- Improved connections to Gilbert Hill;

- A direct service from Nuneaton to University via Chapel End/Galley Common/Arley/Fillongley; and
- A dedicated shuttle bus from the Coventry Station to Warwick Arts Centre and back during term time.

General poor quality bus service

Respondents commented on the general poor quality of the bus service. This included bus shelters, inaccurate real time information, interior of buses including seating and also the service given by the bus drivers on board the bus. It is felt by several consultees that students are treated poorly in comparison to other users.

Generally a good bus service

A small number of respondents commented that there is generally a good bus service, although each of these also noted that this would be improved with an increased frequency and reliability of buses.

5.3 Cycle Facilities

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

- Respondents commented that they do not cycle due to the risk of cycle theft, and more secure and sheltered cycle stands were required on campus to address this;
- Some noted that cycle ranks are taken up by old cycles that are clearly no longer in use; and
- Respondents commented that changing facilities/showers should be made available for cyclists and lockers.

There should be rewards and incentives to cycle

The following were suggested:

- Cycling proficiency classes to improve people’s confidence to cycle;
- Cycle hire scheme similar to the public hire system in London;
- Provide coupons per year to cyclists who need to use a bus due to serious weather conditions or a puncture – this would provide confidence that they could get to campus on time;
- Selling of used bikes by previous students to new students;
- Discounted and easily obtainable bicycle equipment (helmets, trouser clips, bike lights);
- Financial assistance with cycle maintenance;
- The Cycle to Work Scheme financial incentive is restricted to more expensive retailers;
- Provision of high visibility cycle wear;

- Partnership with the local bike shop to collect, repair and return bike to the University; and
- Cycle repair workshop on campus.

Cycle routes should be improved

- This point was most frequently linked to safety and weather conditions. Some respondents would like cycle routes to be gritted more frequently. In addition, several consultees commented on the congestion around campus making it hazardous for cyclists.
- Overgrown trees obstructing cycle routes;
- Lighting of cycle routes is a must – in particular Stoneleigh Road;
- Respondents commented that dedicated cycle routes were often obstructed: "*cyclists are denied safe use of 'dedicated' cycle lanes on campus far too often, for reasons that include temporary parking in the lanes by university estates and security vehicles; builders and contractors' vehicles left there; glass detritus from revellers often takes several days to clear from some part of the route across main campus.*"
- It was suggested that there should be a cycle lane on Westwood Heath Road and Gibbet Hill Road.
- The A45 roundabout near the Fire Station should be more cycle friendly for cyclists riding in from Earlsdon;
- The potholes on Sir Henry Parkes Road should be filled in;
- The cycle path that connects Kenilworth to Leamington requires improvement;
- Cycle lane required from Gibbet Hill Road to University House;
- Drivers should have increased awareness of cyclists;
- A cycle route between the university and Coventry Train Station; and
- Improved cycle route from Earlsdon.

5.4 Pedestrian Access

Improvements to pedestrian infrastructure including crossings, paths and lights

Several respondents noted that footpaths were often unsafe in poor weather and should be better gritted. It was also noted that footpaths should be lit to increase safety. Some believe additional pedestrian crossings are required.

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

Similarly to cyclists, respondents noted that changing facilities and lockers should be made available to all walkers.

5.5 Car Parking

Changes to the car parking payment system

Whilst a number of respondents commented more generally that the car parking cost was too high, others believe that the system could be improved to provide more flexibility and take better account of particular circumstances, these suggestions are summarised below:

- Specific circumstances have been described whereby public transport is considered unpractical due to living locations, which would mean a high number of changes and a significantly increased journey time than by car;
- Due to increased costs a number of respondents explained that they now car share, although this restricts arrival and leaving times;
- The increase in car park fees is not supported by an improvement in the public transport system;
- A more flexible parking payment system is required. Drivers that pay for an annual car parking pass are discouraged from occasional use of public transport or cycling when this is practicable. This discourages the use of public transport (e.g. cycling in summer months). A ‘pay as you go’ approach to car parking would be better; and
- Information on what the car park revenue is spent on to increase confidence that this goes to ‘green’ initiatives.

An increase in car park spaces is required

- Several respondents believe that for some people travelling by car will always be the most efficient or feasible option due to particular circumstances and therefore additional car parking spaces are required; and
- Respondents noted that some have parked their car at the nearby Tesco due to the lack of car parking spaces.

Priority Car Parking is required

- Parking spaces should be made a priority for postgraduate science students, who often work unsociable hours due to experimental runs;
- Parking on campus should be limited to visitors and disabled parking spaces, and others should park in ‘satellite’ car parks off-site with a shuttle bus;
- Postgraduates should be regarded the same as staff in terms of parking, as they have the same work time commitments;
- Some students are required to drive to the University by car, due to the need to travel to work after university – student parking permits should therefore be provided in these circumstances;
- There should be more dedicated staff car parking spaces and/or reduce student parking;
- Car parking spaces should be provided to those that are required to drive to the University due to childcare commitments; and

- Students should be considered equal priority to staff with regard to car parking.

The car share scheme should be improved

- The car share scheme should be better promoted;
- Recognition to those that share lifts (i.e. some respondents noted that they lift share with others travelling to other destinations); and
- The university should more actively ‘pair’ up potential ‘sharers.’

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.

Some respondents made suggestions about vehicle access. A summary of these is as follows:

- The queue at the Gibbet Hill and Kenilworth Road traffic lights is back to the A46 slip road, the traffic light phasing should be re-assessed;
- Safety improvements should be implemented on the Gibbet Hill Road; and
- Poor access to the University means that traffic is funnelled on to the campus and this consequently creates delays and means journey times are increased. This should be improved.

5.7 Information and Incentives

Respondents noted that they were not aware of the sustainable transport initiatives named in the survey, and that these should be more prominently advertised. One respondent commented that it would be useful to have route-maps made available, indicating safe crossing-points and well-lit short cuts for pedestrians and cyclists;

It was suggested that sustainable travel campaigns could be run that targeted specific locations of staff and students and provided information specific to this location;

More specifically, a respondent notes that ‘take a mate’ did not raise any awareness, and it remains difficult to find sharing partners; and

It would be helpful to know about salary sacrifice schemes as part of staff induction.

5.8 Rail Links

The following suggestions were made to improve travel by rail:

- In the long term, developing the university’s own train station would improve congestion and other current transport issues;
- A railway station at Gibbet Hill;

- More direct rail links from Leicester to Coventry;
- Improve train connection from Rugby to Coventry; and
- Better connections from local train stations to campus. Particular suggestions included a free shuttle bus to Canley Station and Coventry Station.

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;
- Hospital appointments;
- Students that have jobs after university hours; 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:

- Permanently open up the road by Car Park 8/Claycroft leading to Sir William Lyons Road, and use it as an extra egress point from the University;
- A double-decker tram service; and
- Increase the amount of on-campus accommodation.

6 Conclusions

From the analysis of the questionnaires and the results of 2010 travel survey it is evident that the University has already exceeded its 2013 targets for car driver mode share (all), public transport use (all), walking (staff) and cycling (students). This represents significant progress, and there has been good progress towards the other targets.

There has been a significant reduction in single occupancy car use since the introduction of the Travel Plan as the 2010 survey showed that only 37% of staff and students were driving single occupant vehicles.

Some of the increase in car sharing however would appear to have been from other modes, and some are travelling with passengers who go to other destinations. The car share schemes are accessible and well-promoted by the University compared to some of the other options and initiatives and also reflects the comfort and convenience of car travel for many people. The University should continue to promote car-sharing to ensure that shared car occupancy remains high, and should particularly target staff who may require some flexibility in their arrangements but may be able to share at least some of their journeys as well as the ‘regular’ daily commuters.

There is clearly a negative experience and perception of the current bus services from existing users and potential users who currently travel in cars to the University. However, it should be noted that the proportion of bus users within the university population has increased in recent years. Continued investment in bus travel on-site is required to improve the waiting environment and provide reliable information. Further work with bus operators is required to build on existing services to reduce peak-time overcrowding (mainly on the Leamington and Kenilworth routes) and to continue to liaise with operators and the local authorities to press for improvements in the quality of vehicles, services and waiting areas off-site.

It will be difficult to promote the bus as a ‘positive’ choice, given the many negative perceptions, but bus travel continues to be the ‘next best’ option for car drivers and should continue to grow as a proportion of University journeys.

Cycling by staff has remained fairly static although the student modal share target has been reached. The University has invested in cycle parking on site and there no longer appears to be concerns about the ‘amount’ of cycle parking provided. There is concern about security however, and there appears to be a demand for greater security (e.g. restricted ‘swipe-card’ access compounds). Another issue appears to be the maintenance of existing facilities on site, with more frequent sweeping of broken glass and removal of vegetation required. While the University has limited influence over the provision of off-site facilities, it can ensure that on-site routes are kept clear by reminding staff and contractors working on site not to block them.

On-site bicycle repairs (or a deal with a local shop to provide this service) may help to encourage new cyclists and retain existing cycle users. The provision of ‘cycle training’ may help encourage cycle use by those who feel that the road conditions are hostile around campus and on their journey to the university, especially foreign students who may also be unfamiliar with UK regulations.

The increasing availability of low-cost electric bicycles may be a factor in encouraging an increase in staff cycling. These cycles are already becoming popular in central London as a result of congestion charging and increased provision of cycle routes. The University should continue to promote cycling to staff as part of the Travel Plan, and work in partnership with local suppliers to offer deals on bikes and accessories. A number of people who walk, cycle or run as part of their journey have suggested improved changing facilities, showers and a safe place to store kit would help them. One of the issues here appears to be that existing facilities are not always ‘near’ to the parts of the campus where people are working or studying, making them inconvenient and adding to journey times. The health benefit of walking and cycling has increased in importance and should be emphasised.

There is relatively high awareness of the Warwick-Share and ‘Take a Mate’ car share promotions for staff and students. Other travel promotions such as season ticket loans, electric scooter and cycle purchase schemes appear to be less well recognised. Further work is required to raise the profile and take-up of such schemes. It is particularly important to engage with new staff and students when they start at the University, but also to keep reminding existing staff and students with different messages about sustainability, health, saving money and saving time that might spur them into changing their travel behaviour.

Appendix A

Survey Questionnaire

University of Warwick Travel Survey 2010

The University is obliged to undertake a travel survey every two years to update the key measures of the Green Travel Plan and inform the ongoing development of sustainable transport at the University.

This survey wishes to consult with the current staff and student community 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 Green 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 from Monday, 29th November and the deadline for completion is 23:59 hours on Monday 6th December. **PLEASE RETURN YOUR COMPLETED QUESTIONNAIRE BY MONDAY 6th DECEMBER TO LISA SHIELDS, ESTATES OFFICE, ARGENT COURT**

All staff and students completing the survey will be entered into a prize draw and have the opportunity of winning one of the following prizes:

1st Prize: Bicycle and accessories up to the value of £300

2nd Prize: Contribution to an Annual Travel Permit for public transport up to the value of £200

3rd Prize: Warwick 'Eatcard' credit worth £100

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. Are you a member of staff or a student? (Please tick one option only.)

○ Staff

○ Undergraduate Student

○ Postgraduate Student

3. Where is your normal place of work / study? (Please tick one option only)

○ Main campus (West side of Gibbet Hill Road - e.g. Scarman, Radcliffe, Lakeside, Heronbank)

○ Main campus (Coventry side of Gibbet Hill Road - e.g. Central campus buildings)

○ University House

○ Science Park (Argent Court/Millburn House)

○ Westwood campus

○ Gibbet Hill campus

○ Life Sciences (Wellesbourne)

○ Other

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 form of transport do you normally use for the main part of your journey to the University? (Please tick one option only and proceed to your next question as specified below)

○ Car as driver with no passengers	**PLEASE PROCEED TO QUESTION 7**
○ Car share as driver (one or more passengers)	**PLEASE PROCEED TO QUESTION 12**
○ Car share / lift as passenger (not taxi)	**PLEASE PROCEED TO QUESTION 12**
○ Taxi	**PLEASE PROCEED TO QUESTION 19**
○ Motorcycle / Moped	**PLEASE PROCEED TO QUESTION 7**
○ Train	**PLEASE PROCEED TO QUESTION 17**
○ Bus	**PLEASE PROCEED TO QUESTION 14**
○ Cycle	**PLEASE PROCEED TO QUESTION 19**
○ Walk	**PLEASE PROCEED TO QUESTION 11**
○ Other	**PLEASE PROCEED TO QUESTION 19**

Other (please specify)

☐

CAR / MOTORBIKE / MOPED USERS ONLY

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

☐ Most comfortable / convenient way of travelling
☐ Cheapest way of travelling
☐ Don't live near bus route
☐ Not safe to walk or cycle
☐ Inadequate / unsafe cycle parking
☐ Too far to walk or cycle
☐ Need to do other activities before / after / during
☐ Need to travel between campus sites during the day
☐ Need to use own vehicle to travel off site for work purposes (Staff only)
☐ Other

Other (please specify)

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

○ Main campus
○ Westwood campus
○ University House
○ Science Park (Argent Court/Millburn House)
○ Gibbet Hill campus
○ Life Sciences (Wellesbourne)
○ Outside University grounds
○ Car driver drops me off at University and goes elsewhere

9. Are you a registered Blue Badge holder?

○ Yes
○ No **PLEASE PROCEED TO QUESTION 19**

10. If a registered Blue Badge holder where do you normally park at the University?

PLEASE PROCEED TO QUESTION 19

WALKERS ONLY

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

☐ Resident on campus
☐ Live within walking distance of campus
☐ Use walking as a form of exercise
☐ No other mode of transport available
☐ Other

Other (please specify)

PLEASE PROCEED TO QUESTION 19

CAR SHARES ONLY

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

○ 1 Person

○ 2 People

○ 3 People

○ More than 3 People

13. How many of these work or study at the University of Warwick? (Please tick one option only)

○ None

○ 1 Person

○ 2 People

○ 3 People

○ More than 3 People

PLEASE PROCEED TO QUESTION 19

BUS USERS ONLY

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

○ Yes
○ No

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
○ St. Mary's Church, Leamington Spa
○ Top of Parade, Leamington Spa
○ Kenilworth
○ Warwick
○ Other

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

- ☐ Don't have access to a car
- ☐ Difficult to park on campus
- ☐ Cost of parking at campus
- ☐ Most comfortable / convenient way of travelling
- ☐ Cheapest way of travelling
- ☐ Inadequate cycle paths / not safe to cycle
- ☐ Inadequate / unsafe cycle parking
- ☐ Too far to walk or cycle
- ☐ Need to do other activities and chores before / after work
- ☐ Other

Other (please specify)

PLEASE PROCEED TO QUESTION 19

University of Warwick Travel Survey 2010

TRAIN USERS ONLY

17. If you use the train for a part of your journey to the University, which station do you get off at? (Please tick one option only)

○ Tile Hill

○ Coventry

○ Canley

○ Other

Other (please specify)

☐

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

○ Bus

○ Walk

○ Cycle

○ Car

○ Other

Other (please specify)

☐

19. What are your reasons for not using buses to travel to the University?

○ No suitable route from where I travel

○ Poor reliability of the service

○ Inadequate frequency of service

○ Poor quality of buses

○ Overcrowding on buses

○ Personal safety concerns as a passenger

○ Journey time too long compared to other modes

○ Cost of fares

○ Other

Other (please specify)

☐

20. 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	○	○	○
More direct bus services to campus	○	○	○
Pool cars available for business journeys (Staff Only)	○	○	○
More facilities(shops, dentist etc) available at the University	○	○	○
Discounted fares offered by the University	○	○	○
More information about bus and train services	○	○	○
Improved lighting at bus shelters and paths	○	○	○
Competitive or interest free loans for travel	○	○	○
Ticket sales/information bureau on campus	○	○	○
More real-time information on campus	○	○	○
None	○	○	○
Other	○	○	○

Other (please specify)

☐

21. 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 on the way to campus	○	○	○
Improved cycle parking at the campus	○	○	○
Improved changing facilities, showers and luggage lockers for cyclists	○	○	○
Cycle lockers to store a bike securely at the rail station	○	○	○
Financial incentive e.g. Cycle to Work Scheme	○	○	○
An arrangement with a nearby cycle shop to buy / maintain	○	○	○
Help from Bicycle User Group (advice and support for cyclists	○	○	○
Cycling skills training	○	○	○
Pool cars available for business journeys (Staff only)	○	○	○
More facilities (shops, dentist, etc) available at the University	○	○	○
None	○	○	○
Other	○	○	○

Other (please specify)

☐

22. 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	Thrid Choice
Help in finding car share partners with similar travel patterns	○	○	○
Reserved parking on campus for car sharers	○	○	○
Reduced or free parking charges on campus for car sharers	○	○	○
Pool cars available for business journeys (Staff only)	○	○	○
Guaranteed Lift Home in an emergency or if let down by car driver	○	○	○
More facilities (shops, dentist, etc) available at the University	○	○	○
None	○	○	○
Other	○	○	○

Other (please specify)

☐

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

	Aware Of	Use
WarwickShare (staff car share)	☐	☐
Take a Mate (student car share)	☐	☐
New Bus Services (UW1 & UW2, 43 & 43A)	☐	☐
Cycle to Work scheme (staff only)	☐	☐
Discounted Cycle Package from Albany Cycles	☐	☐
Connect 2 Kenilworth cycle/pedestrian route	☐	☐
Discounted Electric Scooter Package	☐	☐
Salary Sacrifice for annual bus permits (staff only)	☐	☐

24. If you need to travel to other University sites from Main Campus, what mode do you normally use?

- ○ Own car
- ○ Car share
- ○ Public transport
- ○ Walk
- ○ Cycle
- ○ Do not travel
- ○ Other

Can you help?

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

25. Comments / Suggestions

University of Warwick Travel Survey 2010

Thank you very much for your time.

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.

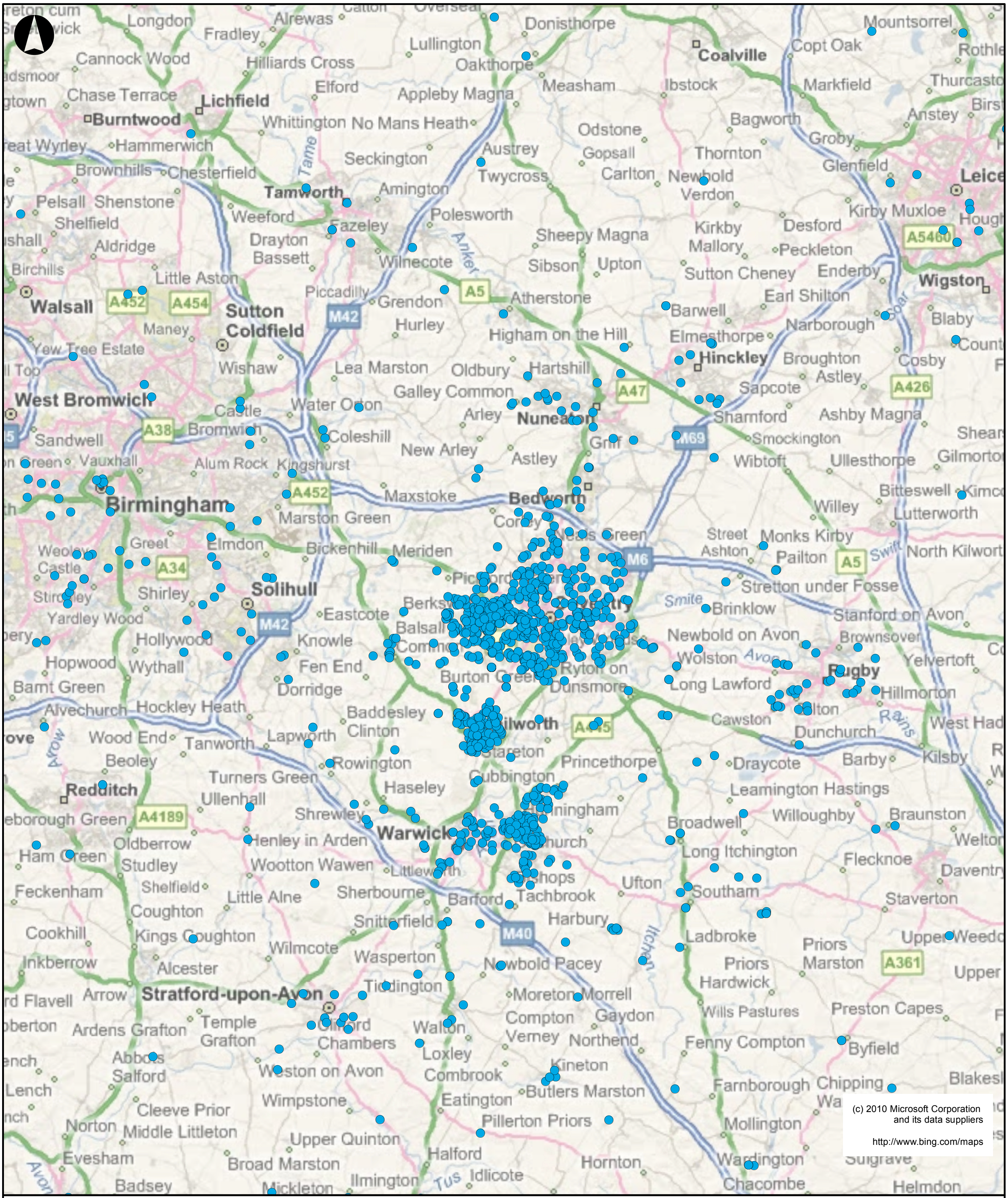
By providing these details you give your informed consent within the terms of the Data Protection Act 1998.

26. Prize Draw

Name	
University ID number	
Telephone Number	
E-mail Address	

Appendix B

Journey Origins


Longdon
Fradley
Alrewas
Donisthorpe
Mountsorrel
Lullington
Coalville
Copt Oak
Cannock Wood
Hilliards Cross
Oakthorpe
Elford
Appleby Magna
Measham
Ibstock
Markfield
Thurcaston
Chase Terrace
Lichfield
Burntwood
Whittington
No Mans Heath
Odstone
Bagworth
Anstey
Hammerwich
Austrey
Gopsall
Thornton
Groby
Brownhills
Chesterfield
Tame
Seckington
Carlton
Glenfield
Twycross
Newbold Verdon
Leicester
Pelsall
Shenstone
Tamworth
Amington
Kirby Muxloe
Shelfield
Weeford
Polesworth
Kirkby Mallory
Desford
Fazeley
Sheepy Magna
A5460
Aldridge
Drayton Bassett
Peckleton
Birchills
Wilnecote
Sibson
Upton
Sutton Cheney
Enderby
Anker
Little Aston
Wigston
Walsall
A452
A454
Sutton Coldfield
Piccadilly
A5
Atherstone
Earl Shilton
M42
Grendon
Barwell
Narborough
Blaby
Maney
Hurley
Higham on the Hill
Elmesthorpe
Yew Tree Estate
Hinckley
Broughton Astley
Cosby
Wishaw
Lea Marston
Oldbury
Hartshill
West Bromwich
Galley Common
A47
Sapcote
A426
Castle Bromwich
Water Orton
Arley
Nuneaton
Sharnford
Ashby Magna
A38
M69
Smockington
Sandwell
Coleshill
Griff
Vauxhall
New Arley
Astley
Wibtoft
Ullesthorpe
Alum Rock
Kingshurst
A452
Maxstoke
Bedworth
Bitteswell
Birmingham
Willey
Lutterworth
Marston Green
Corley
Street Ashton
Monks Kirby
Great
Elmdon
Bickenhill
Meriden
M6
Pailton
A5
North Kilworth
Weoley Castle
A34
Stretton under Fosse
Stirchley
Shirley
Solihull
Pickford
Coventry
Smite
Brinklow
Berkswell
Eastcote
Stanford on Avon
Yardley Wood
Balsall Common
Newbold on Avon
Brownsover
Hollywood
M42
Knowle
Wolston
Avon
Yelvertoft
Hopwood
Wythall
Fen End
Ryton on Dunsmore
Rugby
Barnt Green
Dorridge
Burton Green
Long Lawford
Hillmorton
Alvechurch
Hockley Heath
Baddesley Clinton
Kenilworth
Cawston
Rains
Wood End
Lapworth
A445
Dunchurch
West Haddon
Tanworth
Stareton
Beoley
Rowington
Princethorpe
Draycote
Barby
Kilsby
Turners Green
Cubbington
Redditch
Ullenhall
Haseley
Leamington Hastings
Shrewley
Leamington
Broadwell
Willoughby
Braunston
A4189
Warwick
Oldberrow
Henley in Arden
Whitnash
Long Itchington
Welton
Ham Green
Studley
Wootton Wawen
Littlewoorth
Bishops Tachbrook
Fleckno
Daventry
Feckenham
Shelfield
Sherbourne
Ufton
Southam
Little Alne
Barford
Staverton
Coughton
Snitterfield
Harbury
Cookhill
Kings Coughton
M40
Itchen
Ladbroke
Upper Weedon
Wilmcote
Priors Marston
Inkberrow
Wasperton
Newbold Pacey
Priors Hardwick
A361
Alcester
Upper
Flavell
Arrow
Stratford-upon-Avon
Tiddington
Moreton Morrell
Ardens Grafton
Temple Grafton
Wills Pastures
Preston Capes
Clifford Chambers
Walton
Compton Verney
Gaydon
Northend
Fenny Compton
Byfield
Abbots Salford
Loxley
Combrook
Kineton
Lench
Weston on Avon
Farnborough
Chipping Warden
Blakesley
Cleeve Prior
Wimpstone
Eatington
Butlers Marston
Norton
Middle Littleton
Upper Quinton
Pillerton Priors
Mollington
Evesham
Halford
Wardington
Broad Marston
Hornton
Badsey
Mickleton
Ilmington
Idlicote
Chacombe
Helmdon
Sulgrave

(c) 2010 Microsoft Corporation and its data suppliers

http://www.bing.com/maps

Legend

● Staff

Metres

0 4,100 8,200 16,400

Client

Univeristy of Warwick

Job Title

University of Warwick
Travel Survey 2010

Drawing Title

Post Code Plot Staff

Issue	Date	By	Chkd	Appd
01	03/02/11	PJD	IC	IC

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

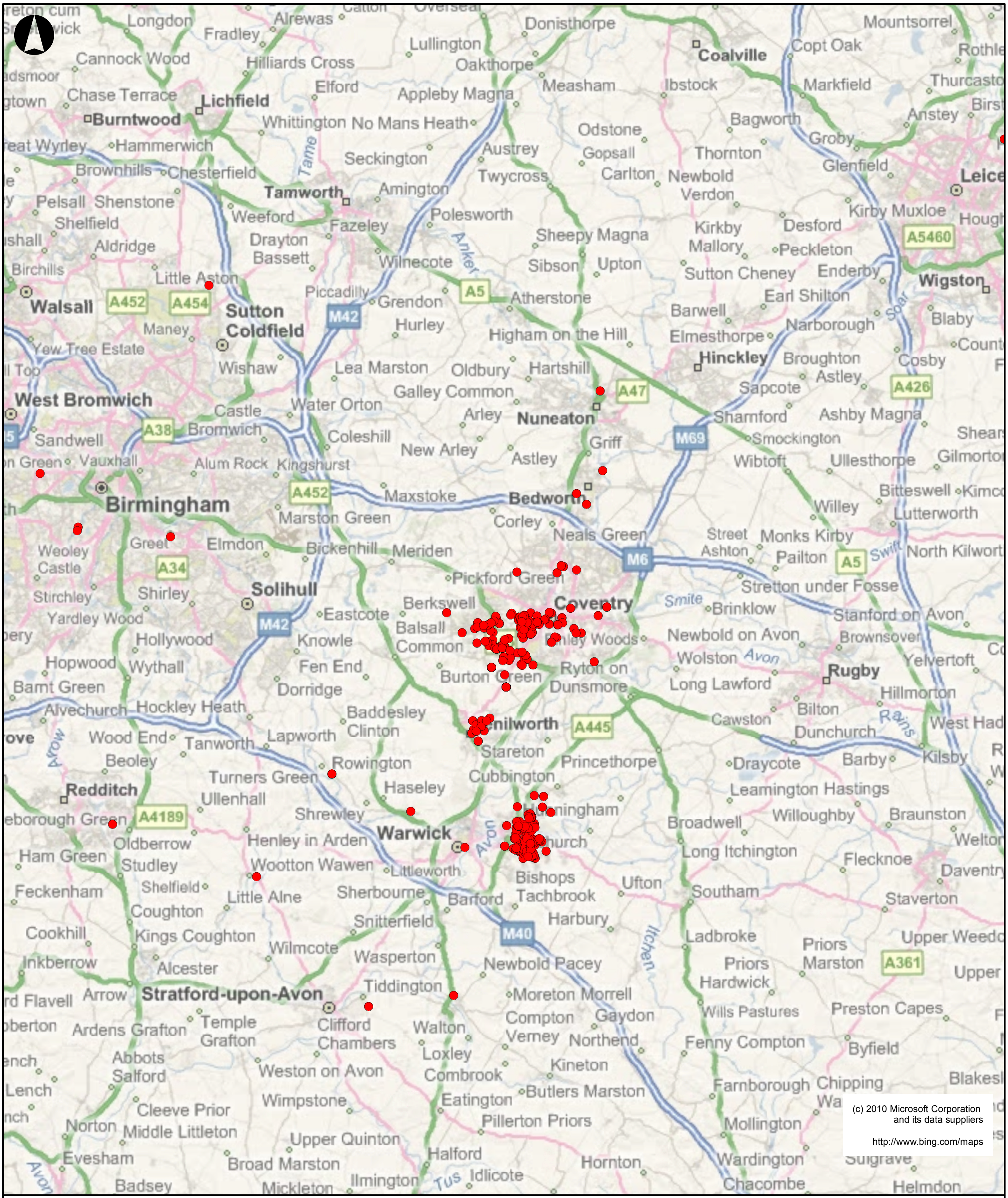
Drawing Status

For Information

Job No	Drawing No	Issue
115438-00	**001**	**01**

oFileLocation

© Arup


Longdon
Fradley
Alrewas
Donisthorpe
Coalville
Mountsorrel
Cannock Wood
Hilliards Cross
Lullington
Oakthorpe
Copt Oak
Chase Terrace
Lichfield
Elford
Appleby Magna
Measham
Ibstock
Markfield
Burntwood
Whittington
No Mans Heath
Odstone
Bagworth
Anstey
Hammerwich
Austrey
Gopsall
Groby
Brownhills
Chesterfield
Tame
Seckington
Thornton
Glenfield
Pelsall
Shenstone
Tamworth
Amington
Twycross
Carlton
Newbold Verdon
Leicester
Shelfield
Weeford
Fazeley
Polesworth
Kirby Muxloe
Aldridge
Drayton Bassett
Anker
Sheepy Magna
Kirkby Mallory
Desford
A5460
Birchills
Little Aston
Wilnecote
Sibson
Upton
Peckleton
Sutton Cheney
Enderby
Wigston
Walsall
A452
A454
Sutton Coldfield
Piccadilly
Grendon
A5
Atherstone
Barwell
Earl Shilton
Maney
M42
Hurley
Higham on the Hill
Elmesthorpe
Narborough
Blaby
Yew Tree Estate
Wishaw
Lea Marston
Oldbury
Hartshill
Hinckley
Broughton Astley
Cosby
West Bromwich
Castle Bromwich
Water Orton
Galley Common
A47
Sapcote
A426
Arley
Nuneaton
Sharnford
Ashby Magna
Sandwell
A38
Coleshill
M69
Smockington
Vauxhall
Alum Rock
Kingshurst
New Arley
Astley
Griff
Wibtoft
Ullesthorpe
Gilmorton
A452
Maxstoke
Bedworth
Bitteswell
Birmingham
Marston Green
Corley
Willey
Lutterworth
Weoley Castle
Green
Elmdon
Bickenhill
Meriden
Neals Green
Street Ashton
Monks Kirby
Pailton
A5
North Kilworth
A34
Pickford Green
M6
Stirchley
Shirley
Solihull
Stretton under Fosse
Yardley Wood
Eastcote
Berkswell
Coventry
Smite
Brinklow
Stanford on Avon
M42
Balsall Common
Binley Woods
Newbold on Avon
Brownsover
Hollywood
Knowle
Wolston
Avon
Yelvertoft
Hopwood
Wythall
Fen End
Ryton on Dunsmore
Rugby
Long Lawford
Barnt Green
Dorridge
Burton Green
Hillmorton
Alvechurch
Hockley Heath
Baddesley Clinton
Kenilworth
A445
Cawston
Bilton
Dunchurch
Rains
West Haddon
Wood End
Tanworth
Lapworth
Stareton
Princethorpe
Draycote
Barby
Kilsby
Arrow
Beoley
Rowington
Turners Green
Cubbington
Leamington Hastings
Redditch
Ullenhall
Haseley
Lillington
Willoughby
Braunston
A4189
Shrewley
Warwick
Broadwell
Oldberrow
Henley in Arden
Avon
Long Itchington
Welton
Ham Green
Studley
Wootton Wawen
Littleworth
Bishops Tachbrook
Ufton
Flecknoe
Daventry
Feckenham
Shelfield
Sherbourne
Southam
Coughton
Little Alne
Barford
Harbury
Staverton
Cookhill
Kings Coughton
Snitterfield
M40
Ladbroke
Priors Marston
Upper Weedon
Inkberrow
Alcester
Wilmcote
Wasperton
Itchen
Priors Hardwick
A361
Newbold Pacey
Upper
Arrow
Stratford-upon-Avon
Tiddington
Moreton Morrell
Wills Pastures
Preston Capes
Ardens Grafton
Temple Grafton
Clifford Chambers
Walton
Compton Verney
Gaydon
Northend
Fenny Compton
Byfield
Abbots Salford
Loxley
Kineton
Weston on Avon
Combrook
Lench
Farnborough
Chipping Warden
Blakesley
Cleeve Prior
Wimpstone
Eatington
Butlers Marston
Norton
Middle Littleton
Pillerton Priors
Mollington
Upper Quinton
Evesham
Halford
Hornton
Wardington
Sulgrave
Avon
Broad Marston
Stour
Idlicote
Badsey
Mickleton
Ilmington
Chacombe
Helmdon

(c) 2010 Microsoft Corporation and its data suppliers

http://www.bing.com/maps

Legend

● Undergraduate

Metres

0 4,100 8,200 16,400

Client

Univeristy of Warwick

Job Title

University of Warwick
Travel Survey 2010

Drawing Title

Post Code Plot Undergraduate

Issue	Date	By	Chkd	Appd
01	03/02/11	PJD	IC	IC

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

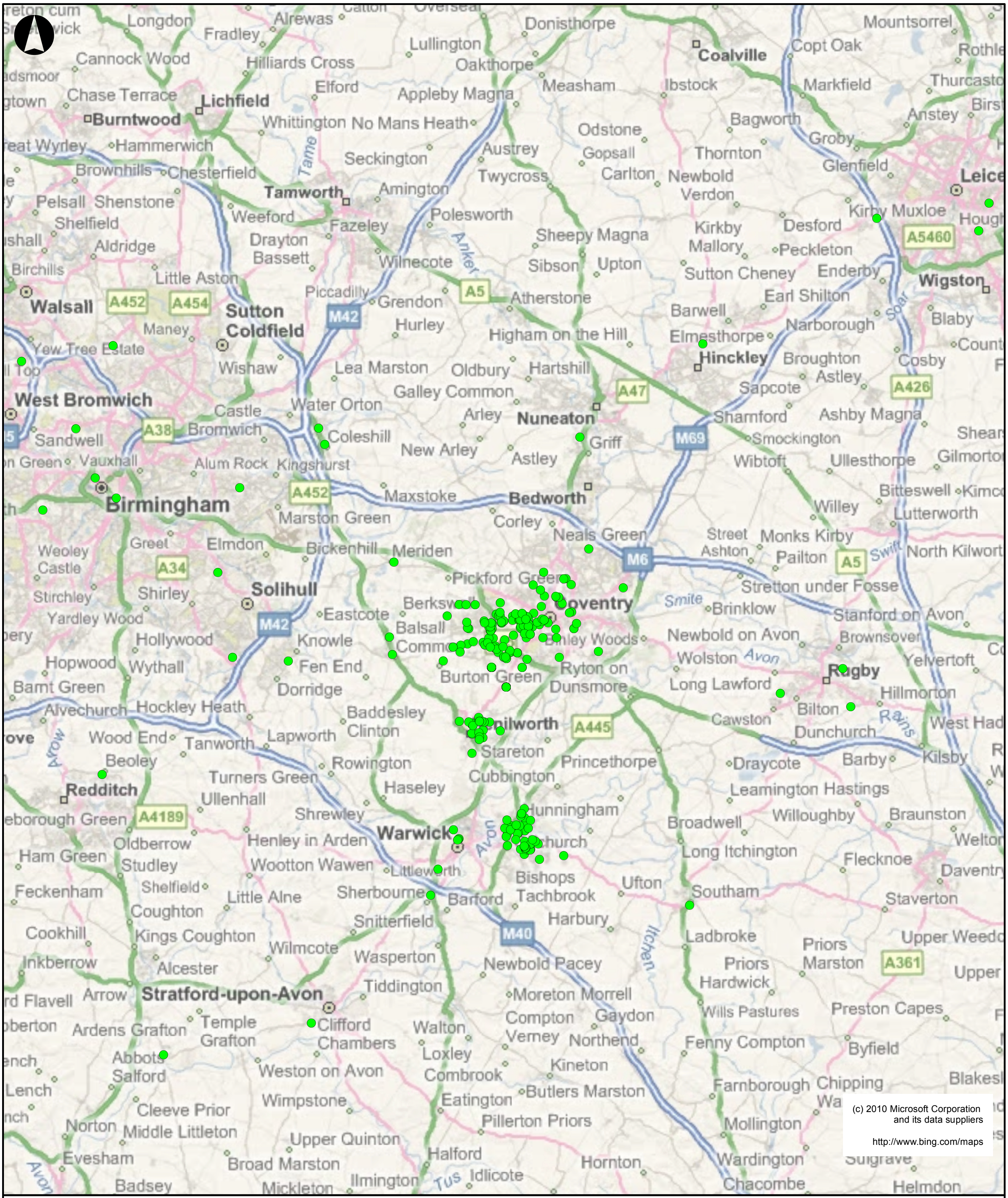
Drawing Status

For Information

Job No	Drawing No	Issue
115438-00	**002**	**01**

oFileLocation

© Arup


Longdon
Fradley
Alrewas
Lullington
Donisthorpe
Coalville
Copt Oak
Mountsorrel
Rothley
Cannock Wood
Hilliards Cross
Oakthorpe
Measham
Ibstock
Markfield
Thurcaston
Chase Terrace
Lichfield
Elford
Appleby Magna
Bagworth
Anstey
Burntwood
Whittington
No Mans Heath
Odstone
Groby
Hammerwich
Austrey
Gopsall
Thornton
Glenfield
Brownhills
Chesterfield
Tame
Seckington
Carlton
Newbold Verdon
Leicester
Pelsall
Shenstone
Tamworth
Amington
Twycross
Kirby Muxloe
Shelfield
Weeford
Polesworth
Kirkby Mallory
Desford
A5460
Aldridge
Drayton Bassett
Fazeley
Sheepy Magna
Peckleton
Birchills
Wilnecote
Anker
Sibson
Upton
Sutton Cheney
Enderby
Little Aston
A5
Atherstone
Earl Shilton
Wigston
Walsall
A452
A454
Sutton Coldfield
Piccadilly
Grendon
Barwell
Narborough
Blaby
M42
Hurley
Higham on the Hill
Elmesthorpe
Soar
Countesthorpe
Maney
Hinckley
Broughton Astley
Cosby
Yew Tree Estate
Wishaw
Lea Marston
Oldbury
Hartshill
Sapcote
A426
West Bromwich
Galley Common
A47
Castle Bromwich
Water Orton
Arley
Nuneaton
Sharnford
Ashby Magna
A38
Smockington
Sandwell
Coleshill
New Arley
Griff
M69
Wibtoft
Ullesthorpe
Gilmorton
Vauxhall
Alum Rock
Kingshurst
Astley
A452
Maxstoke
Bedworth
Bitteswell
Birmingham
Marston Green
Corley
Willey
Lutterworth
Weoley Castle
Greet
Elmdon
Bickenhill
Meriden
Neals Green
Street Ashton
Monks Kirby
A34
Pailton
M6
A5
Swift
North Kilworth
Solihull
Pickford Green
Stirchley
Shirley
Berkswell
Coventry
Smite
Brinklow
Stretton under Fosse
Yardley Wood
Eastcote
M42
Balsall Common
Stanford on Avon
Hollywood
Knowle
Binley Woods
Newbold on Avon
Brownsover
Wolston
Avon
Yelvertoft
Hopwood
Wythall
Fen End
Burton Green
Ryton on Dunsmore
Long Lawford
Rugby
Barnt Green
Dorridge
Hillmorton
Alvechurch
Hockley Heath
Baddesley Clinton
Bilton
Wood End
Lapworth
Kenilworth
A445
Cawston
Dunchurch
Rains
West Haddon
Arrow
Tanworth
Stareton
Princethorpe
Beoley
Rowington
Draycote
Barby
Kilsby
Turners Green
Cubbington
Redditch
Ullenhall
Haseley
Leamington Hastings
A4189
Shrewley
Hunningham
Willoughby
Braunston
Feckenham Green
Warwick
Broadwell
Oldberrow
Henley in Arden
Avon
Radford Semele / church
Welton
Ham Green
Studley
Wootton Wawen
Littleworth
Long Itchington
Flecknoe
Daventry
Shelfield
Bishops Tachbrook
Ufton
Feckenham
Little Alne
Sherbourne
Barford
Southam
Staverton
Coughton
Snitterfield
Harbury
M40
Cookhill
Kings Coughton
Wilmcote
Ladbroke
Priors Hardwick
Upper Weedon
Priors Marston
Inkberrow
Alcester
Wasperton
Newbold Pacey
Itchen
A361
Upper
Arrow
Stratford-upon-Avon
Tiddington
Moreton Morrell
Wills Pastures
Preston Capes
Ardens Grafton
Temple Grafton
Clifford Chambers
Walton
Compton Verney
Gaydon
Northend
Fenny Compton
Byfield
Abbots Salford
Loxley
Kineton
Weston on Avon
Combrook
Farnborough
Chipping Warden
Blakesley
Lench
Cleeve Prior
Wimpstone
Eatington
Butlers Marston
Mollington
Norton
Middle Littleton
Pillerton Priors
Upper Quinton
Evesham
Halford
Wardington
Sulgrave
Broad Marston
Hornton
Chacombe
Badsey
Mickleton
Ilmington
Idlicote
Stour
Helmdon
Avon

(c) 2010 Microsoft Corporation and its data suppliers

http://www.bing.com/maps

Legend

● Postgraduate

Metres

0 4,100 8,200 16,400

Client

Univeristy of Warwick

Job Title

University of Warwick
Travel Survey 2010

Drawing Title

Post Code Plot Postgraduates

01	03/02/11	PJD	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

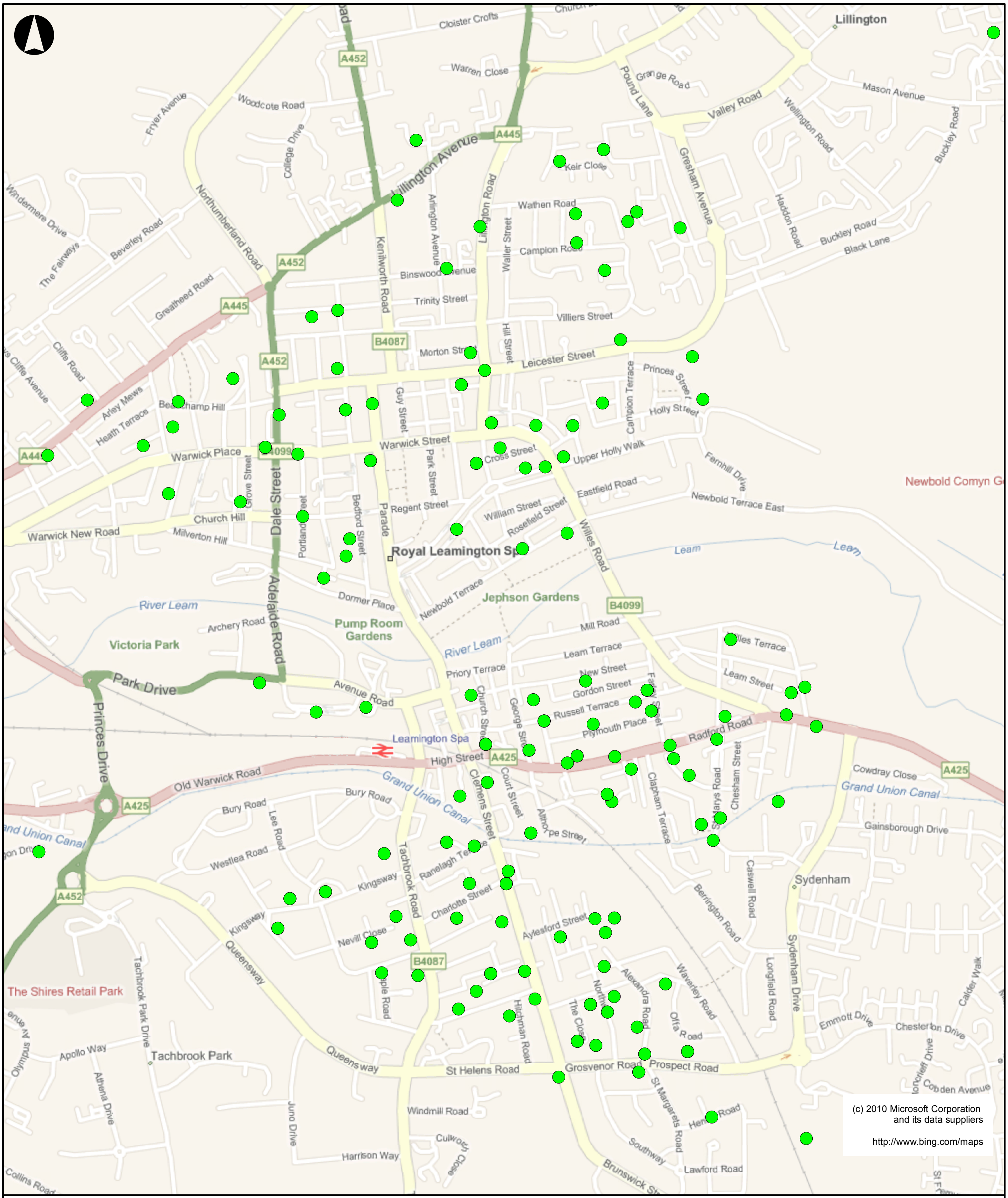
Job No	Drawing No	Issue
115438-00	**003**	**01**

oFileLocation

© Arup

Appendix C

Locations of Respondents without Suitable Bus Routes


Lillington
Cloister Crofts
Warren Close
Grange Road
Pound Lane
Mason Avenue
Valley Road
Wellington Road
Buckley Road
Woodcote Road
Fryer Avenue
College Drive
Lillington Avenue
Lillington Road
Keir Close
Wathen Road
Gresham Avenue
Haddon Road
Black Lane
Windermere Drive
The Fairways
Beverley Road
Northumberland Road
Arlington Avenue
Waller Street
Campion Road
Greatheed Road
Kenilworth Road
Binswood Avenue
Trinity Street
Villiers Street
Cliffe Road
Cliffe Avenue
Hill Street
Morton Street
Leicester Street
Princes Street
Campion Terrace
Arley Mews
Heath Terrace
Beauchamp Hill
Guy Street
Holly Street
Warwick Place
Warwick Street
Park Street
Cross Street
Upper Holly Walk
Fernhill Drive
Newbold Comyn G
Grove Street
Eastfield Road
Newbold Terrace East
Church Hill
Dale Street
Bedford Street
Parade
Regent Street
William Street
Rosefield Street
Warwick New Road
Milverton Hill
Portland Street
Willes Road
Royal Leamington Spa
Leam
Dormer Place
Newbold Terrace
Jephson Gardens
River Leam
Archery Road
Pump Room Gardens
Adelaide Road
Mill Road
Victoria Park
Willes Terrace
Leam Terrace
Park Drive
Priory Terrace
New Street
Leam Street
Avenue Road
Gordon Street
Church Street
George Street
Russell Terrace
Farley Street
Plymouth Place
Radford Road
Princes Drive
Leamington Spa
High Street
Old Warwick Road
Clemens Street
Court Street
Cowdray Close
Bury Road
Grand Union Canal
Clapham Terrace
St Marys Road
Chesham Street
Lee Road
Althorpe Street
Gainsborough Drive
Westlea Road
Tachbrook Road
Ranelagh Terrace
Kingsway
Caswell Road
Sydenham
Berrington Road
Charlotte Street
Nevill Close
Aylesford Street
Sydenham Drive
Queensway
Longfield Road
The Shires Retail Park
Alexandra Road
Waverley Road
Calder Walk
Emmott Drive
Chesterton Drive
Tachbrook Park Drive
Hitchman Road
The Close
Offa Road
Olympus Avenue
Apollo Way
Tachbrook Park
St Helens Road
Grosvenor Road
Prospect Road
Moncrieff Drive
Cobden Avenue
Athena Drive
Juno Drive
Windmill Road
St Margarets Road
Henry Road
Culworth Close
Harrison Way
Southway
Lawford Road
Brunswick Street
Collins Road
St Fremund Way
A452
A445
B4087
B4099
A425
(c) 2010 Microsoft Corporation and its data suppliers
http://www.bing.com/maps

Metres
0 190 380 760

Client
Univeristy of Warwick

Job Title
University of Warwick
Travel Survey 2010

Drawing Title
Location of Respondants Without Suitable Bus Route - Leamington Spa

02	14/02/11	PJD	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

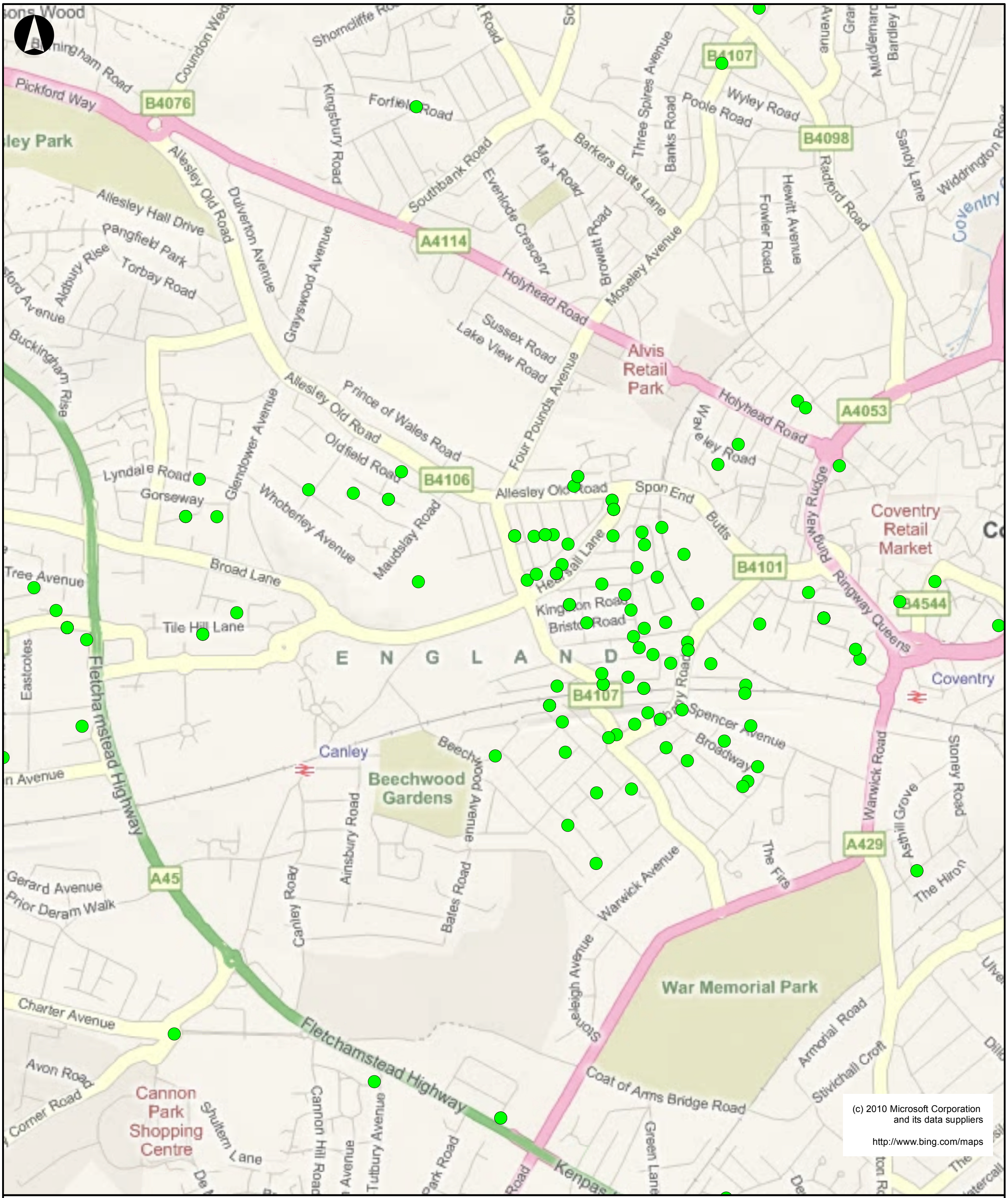
Scale at A4
1:15,000

Drawing Status
For Information

Job No	Drawing No	Issue
115438-00	**005**	**02**

oFileLocation

© Arup


Birmingham Road
Pickford Way
B4076
Coundon Wedge
Shorncliffe Road
Forfield Road
Kingsbury Road
Allesley Park
Allesley Old Road
Allesley Hall Drive
Pangfield Park
Torbay Road
Aldbury Rise
Dulverton Avenue
Grayswood Avenue
Southbank Road
Evenlode Crescent
Max Road
Barkers Butts Lane
Three Spires Avenue
Banks Road
B4107
Poole Road
Wyley Road
B4098
Fowler Road
Hewitt Avenue
Radford Road
Sandy Lane
Widdrington Road
A4114
Holyhead Road
Browett Road
Moseley Avenue
Sussex Road
Lake View Road
Buckingham Rise
Alvis Retail Park
Prince of Wales Road
Oldfield Road
Four Pounds Avenue
Waveley Road
A4053
Lyndale Road
Gorseway
Glendower Avenue
Whoberley Avenue
Maudslay Road
B4106
Allesley Old Road
Spon End
Butts
Ringway Rudge
Coventry Retail Market
Broad Lane
Hearsall Lane
B4101
Ringway Queens
B4544
Tree Avenue
Tile Hill Lane
Kingston Road
Bristol Road
Eastcotes
ENGLAND
Coventry
Fletchamstead Highway
B4107
Albany Road
Spencer Avenue
Broadway
Canley
Beechwood Avenue
Beechwood Gardens
Warwick Road
Asthill Grove
Stoney Road
Ainsbury Road
The Firs
A429
Gerard Avenue
Prior Deram Walk
A45
Canley Road
Bates Road
Warwick Avenue
The Hiron
Stoneleigh Avenue
War Memorial Park
Armorial Road
Charter Avenue
Stivichall Croft
Avon Road
Cannon Park Shopping Centre
Shultern Lane
Cannon Hill Road
Tutbury Avenue
Park Road
Coat of Arms Bridge Road
Green Lane
Kenpas

(c) 2010 Microsoft Corporation and its data suppliers

http://www.bing.com/maps

Metres
0 255 510 1,020

Client
Univeristy of Warwick

Job Title
University of Warwick
Travel Survey 2010

Drawing Title
Location of Respondants Without Suitable Bus Route - Coventry

02	28/02/11	PJD	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

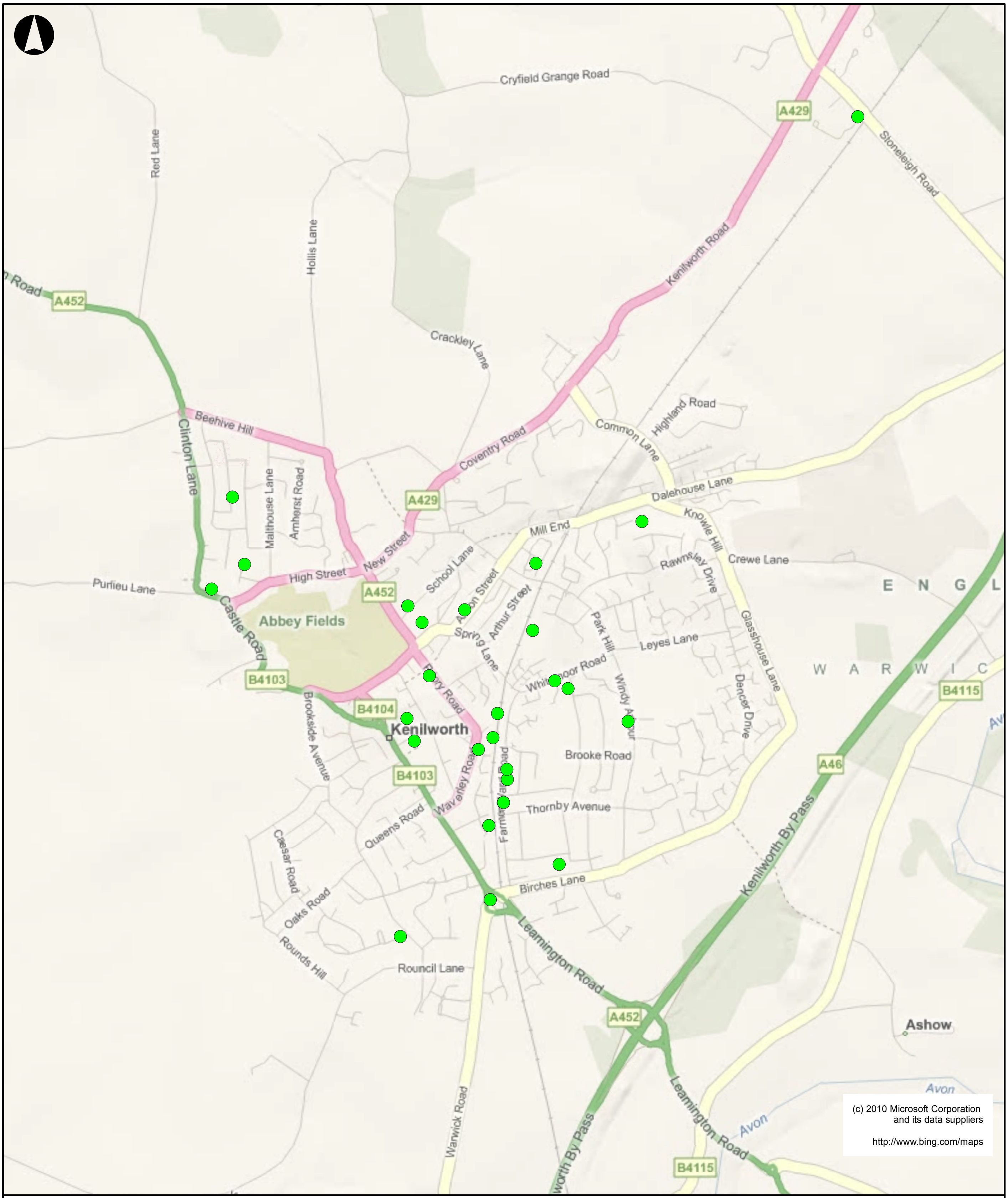
Scale at A4
1:20,000

Drawing Status
For Information

Job No	Drawing No	Issue
115438-00	**004**	**02**

oFileLocation

© Arup


Cryfield Grange Road
A429
Stoneleigh Road
Red Lane
Hollis Lane
Kenilworth Road
Road
A452
Crackley Lane
Highland Road
Beehive Hill
Common Lane
Coventry Road
Clinton Lane
Malthouse Lane
Amherst Road
A429
Dalehouse Lane
Knowle Hill
Mill End
New Street
Crewe Lane
Rawnsley Drive
School Lane
High Street
Purlieu Lane
A452
Abbey Fields
Castle Road
Spring Lane
Arthur Street
Park Hill
Leyes Lane
Glasshouse Lane
E N G L
W A R W I C
B4115
B4103
Whitemoor Road
Windy Arbour
Dencer Drive
Brookside Avenue
B4104
Kenilworth
Brooke Road
B4103
A46
Waverley Road
Thornby Avenue
Queens Road
Caesar Road
Kenilworth By Pass
Birches Lane
Oaks Road
Rounds Hill
Rouncil Lane
Leamington Road
A452
Ashow
Avon
Warwick Road
Leamington Road
Avon
B4115

(c) 2010 Microsoft Corporation
and its data suppliers

http://www.bing.com/maps

Metres
0 315 630 1,260

Client
Univeristy of Warwick

Job Title
University of Warwick
Travel Survey 2010

Drawing Title
Location of Respondants Without
Suitable Bus Route - Kenilworth

02	14/02/11	PJD	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
1:25,000

Drawing Status
For Information

Job No	Drawing No	Issue
115438-00	**006**	**02**

oFileLocation

© Arup