Travel Survey Report 2016

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Contents

Introduction

This report provides a summary of the findings of the travel surveys carried out in September 2016. It was distributed electronically to approximately 24,000 members of the University community (staff and students). The results of the travel survey will help quantify the University's progress towards the aims laid out in its travel plan and allow areas of concern to be targeted.

Methodology

24,000 questionnaires were sent out to the majority of University staff and students. Approximately 23% of these were usable returns down slightly from 28% usable returns in 2014.

Data was converted to SPSS files, where variable labels and value labels were added, to allow results to be more easily interpreted. Text entries were analyzed individually and recorded where appropriate.

The survey was confidential and anonymous with only the gender, age range and partial postcode being requested in the main part of the survey.

Findings

This report is compiled from all of the usable returns from the survey. If a return lacked any responses in any field, it was excluded from the report. There were 5,392 usable returns in total (representing a return rate of 23%) which comprised 1,753 staff returns and 3,639 student returns. The data which follows comprises all of the usable returns except in cases where subsets of usable returns are used due to routing rules present in the questionnaire. Routing was used to question respondents more specifically about their particular mode of travel. In these instances the size of the subset is indicated as follows: *(Percentages calculated from a subset of # respondents).*

It should be noted that in some situations people who answered positively to a routed question did not go on to answer all the related questions.

Results

Data from all usable surveys was used in the preparation of this report. As can be seen in figure 1.0 the response rate of the survey was 23% overall which comprised approx. response rates of 43.8% from staff and 18.2% from students.

Figure 1.0 Survey Return Rate

Total number of surveys distributed	24,000
Total number of surveys returned	5,411 (22.6%)
Spoilt returns	19
Total number of usable returns	5,392 (22.5%)

The survey was divided into nine subsections:

1) **Personal Details** – A common stream which requests personal details of the respondent.
2) **Travel Habits** – A common stream which ascertains which mode of travel the respondent uses for commuting.
3) **Car** – A stream restricted to those who travel by car.
4) **Car Share** – A stream restricted to those who car share.
5) **Bicycle** – A stream restricted to those who travel by bicycle.
6) **Public Transport** – A stream restricted to those who travel by bus or train.
7) **Powered Two Wheelers** – A stream restricted to those who travel by motorcycle or moped.
8) **Walking** – A stream restricted to those who travel by foot.
9) **Alternatives and Opinions** – A common stream to elicit opinions of what infrastructure or service improvements would help the respondent travel in a sustainable way.

The results of each of these sections are separated into staff and student survey responses and are detailed below.

Staff Survey Responses

RESPONSE RATES
Overall 1,753 staff responded to the survey which represents an approx. response rate of 43.8%.

PERSONAL DETAILS
Role at University
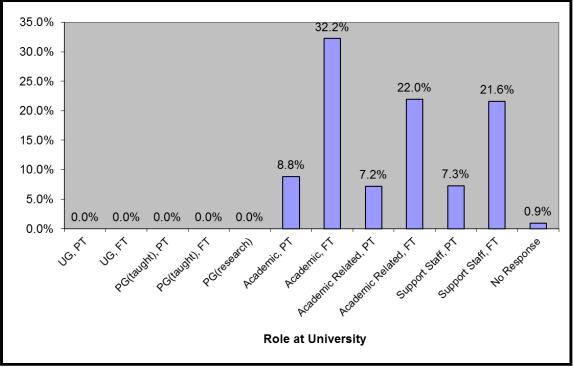Figure 2.01 illustrates the breakdown of respondents' role at the University.

Figure 2.01 Role at University

Gender Split
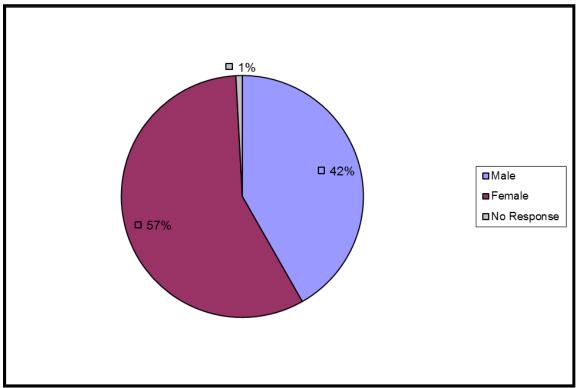The information obtained indicated that 57% of staff respondents were female, with 42% male.

Figure 2.02 Gender of Respondents

Age

As can be seen from Figure 2.03 the majority of staff respondents (54.4%) were aged between 40 and 59 years of age with a significant remaining proportion (31.8%) being between 25 and 39.
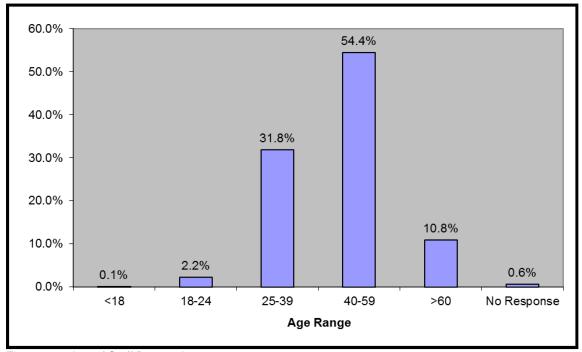

Figure 2.03 Age of Staff Respondents

Distance from Work
Figure 2.04 illustrates the range of distances that staff estimate they travel to work. These represent a single journey and therefore should be doubled to give a daily commute.
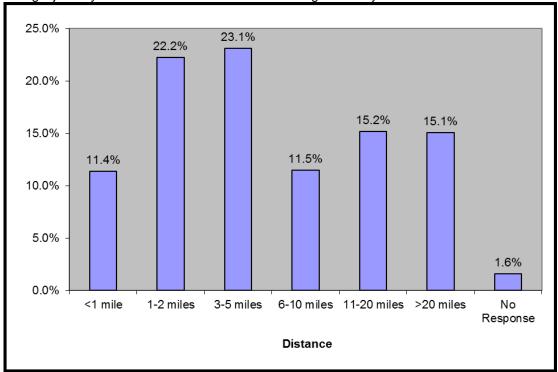

Figure 2.04 Estimated Distance Travelled

Duration of Travel
Figure 2.05 illustrates the time typically taken for people to travel to their workplace. These represent single journey times and are suggestive of the time staff are willing to spend commuting.
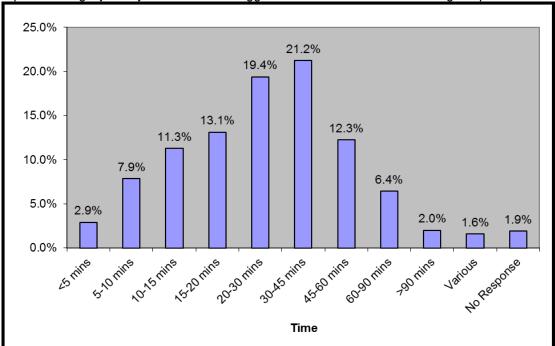

Figure 2.05 Duration of Journey

TRAVEL HABITS
Main Mode of Travel
The single most common mode of travel used by staff remains the car at 49.4%. This is a slight increase from 2014 (47.6%) but a reduction in comparison to figures of 59%, 56%, 54% and 51% in 2006, 2008, 2010 and 2012 respectively. This is likely to be as a result of national changes in fuel prices as well as car parking availability on campus due to staff reductions.
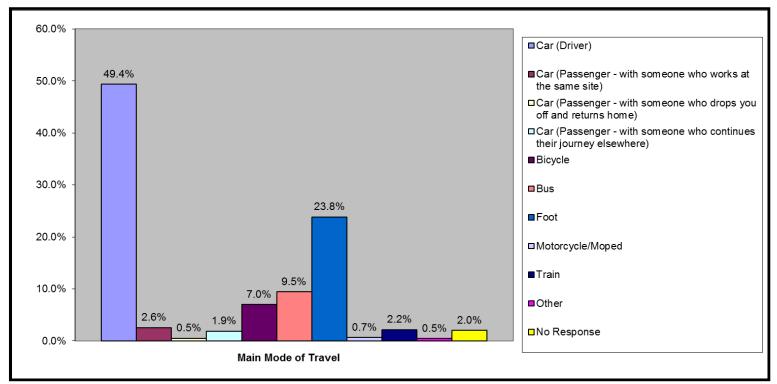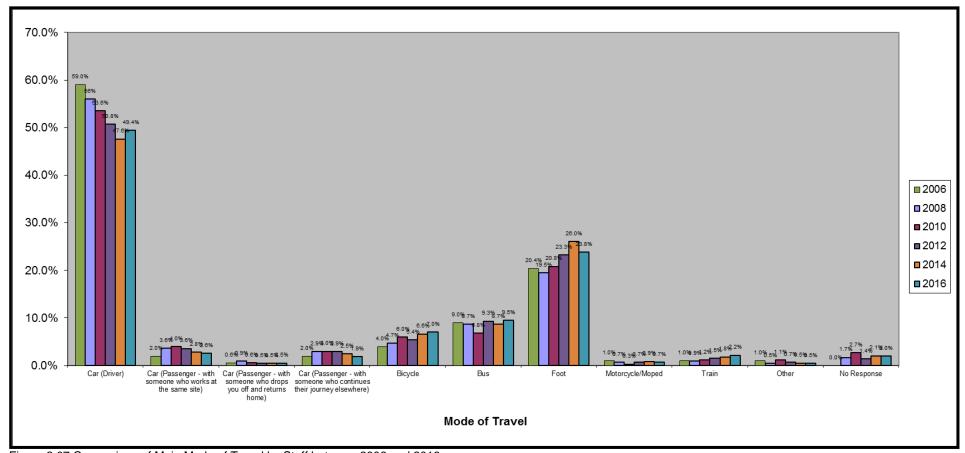

Figure 2.06 Main Mode of Travel by Staff

Figure 2.07 Comparison of Main Mode of Travel by Staff between 2006 and 2016

Reasons for Travelling by Car

No values are used in figure 2.09 as respondents could select as many options as were appropriate. The figure therefore represents the comparative reasons given for using a car to commute. As can be seen in figure 2.09 time constraints and convenience feature heavily in staff member's decisions to commute using their car. These have consistently been provided as reasons for car use and are challenging to address since it is undeniable that cars represent a convenient and demand responsive mode of travel. Measures to facilitate other convenient and demand responsive transport modes, like walking, cycling and car sharing, are therefore most likely to influence current car users.
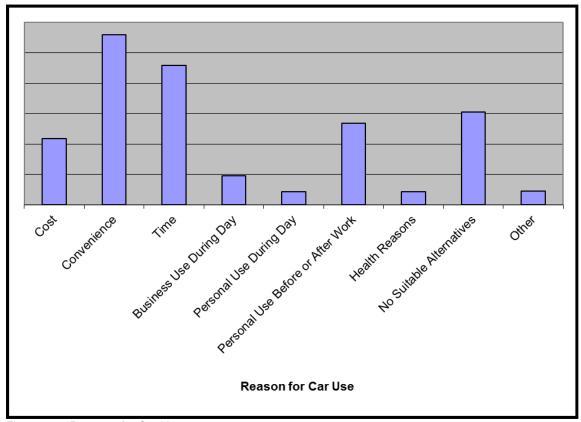

Reason for Car Use

Figure 2.09 Reasons for Car Use

Business Travel Alternatives
No values are used in figure 2.10 as respondents could select as many options as were appropriate. The figure therefore represents the comparative preference of alternative travel options for business travel. A clear preference for public transport and the shuttle bus can be seen over pool cars and walking. Cycling and teleconferencing remain relatively undesirable despite improvements in technology making the later far easier in recent years.
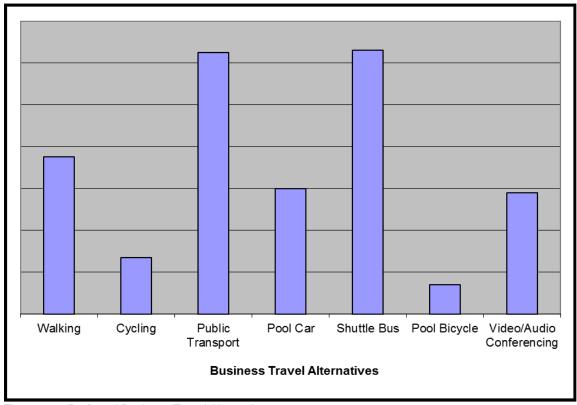

Figure 2.10 Preferred Business Travel Alternatives

Encouragement of Car Sharing

No values are used in figure 2.11 as respondents could select as many options as were appropriate. The figure therefore represents the comparative preference of incentives to encourage car sharing. Responses were fairly flat although staff seem to feel they generally have sufficient information on car sharing. Additional support in finding a car share partner and emergency transport in the event of a car share being unavailable were most desirable. Guaranteed parking also featured highly.
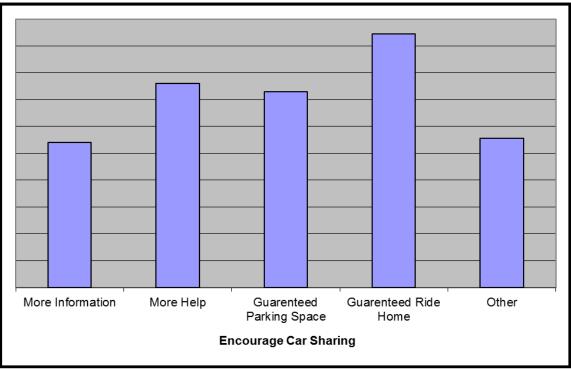

Figure 2.11 Encouragement of Car Sharing

CAR SHARING

Reasons for Car Sharing

No values are used in figure 2.12 as respondents could select as many options as were appropriate. The figure therefore represents the comparative reasons why staff members car share. Convenience can clearly be seen as the most prominent reason while cost and time also feature strongly.
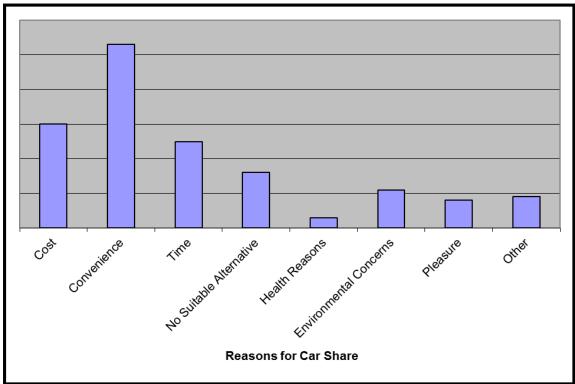

Figure 2.12 Reasons for Car Sharing

CYCLING

Reasons for Cycling

No values are used in figure 2.13 as respondents could select as many options as were appropriate. The figure therefore represents the comparative reasons why staff members cycle to work. With the exception of there being no suitable alternatives all reasons seem to influence cyclists to a fairly large extent with health and fitness featuring most prominently.
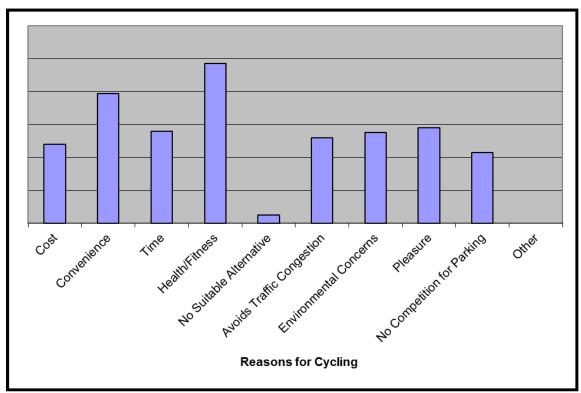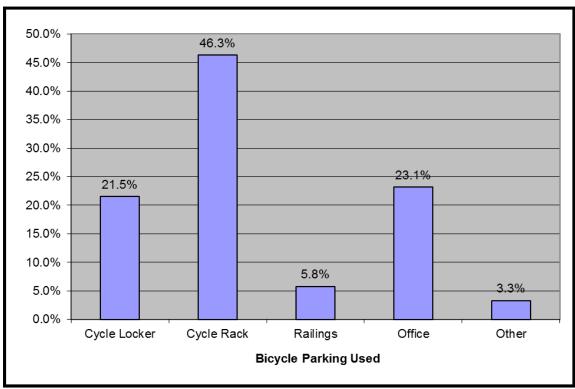

Figure 2.13 Reasons for Cycling

Cycle Parking Used

Figure 2.14 shows some encouraging and some discouraging changes from 2014. Firstly, the proportion of staff storing bicycles in office space, a practice which is discouraged at the University, has increased. A significant change has also occurred in external storage locations with less staff indicating they use railings, a practice which has been actively discouraged due to obstruction it can cause to disabled people.

(Percentages calculated from a subset of 121 respondents)
Figure 2.14 Cycle Parking Used

BUS TRAVEL

Reasons for Travelling by Bus

No values are used in figure 2.15 as respondents could select as many options as were appropriate. The figure therefore represents the comparative reasons why staff members use the bus to travel to work. Convenience features most highly but No suitable alternative continues to feature prominently suggesting that bus travel is often used out of necessity rather than choice. Time features least prominently suggesting that the service frequency or reliability is perceived to be poor. Actions to make local bus journeys more attractive are limited since bus companies are private, commercial businesses and difficult for the University to influence.
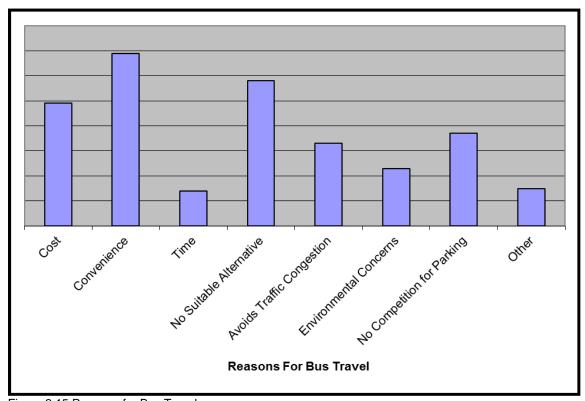

Figure 2.15 Reasons for Bus Travel

WALKING

Reasons for Walking

No values are used in figure 2.16 as respondents could select as many options as were appropriate. The figure therefore represents the comparative reasons why staff members walk to work. Convenience and health reasons feature most highly with cost also being a significant factor.
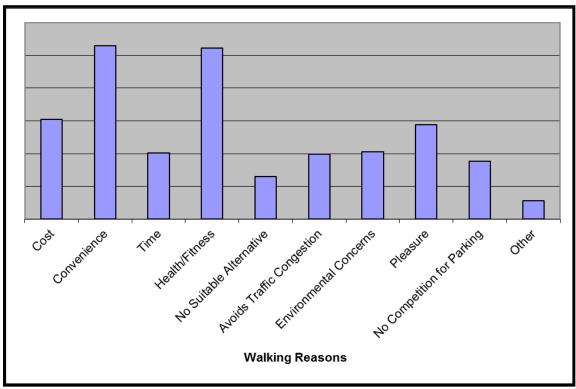

Figure 2.16 Reasons for Walking

MOTORCYCLING
Reasons for Travelling by Motorcycle
No values are used in figure 2.17 as respondents could select as many options as were appropriate. The figure therefore represents the comparative reasons why staff members travel by motorcycle to work. Like cycling, there seem to be many contributing factors why people choose this mode of travel. Again, like cycling, there is a perception among motorcyclists that it is not due to a lack of suitable alternatives that they choose to use a motorcycle.
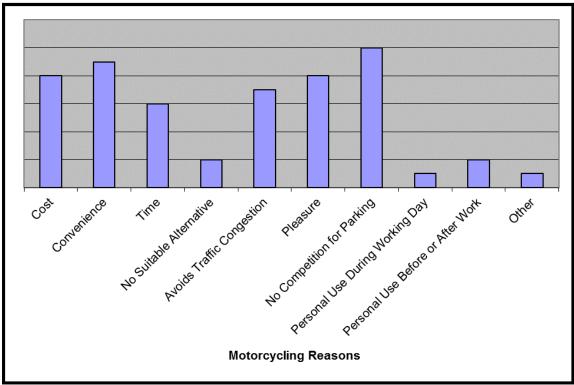

Figure 2.17 Reasons for Travelling by Motorcycle

RAIL TRAVEL

Reasons for Travelling by Train

No values are used in figure 2.18 as respondents could select as many options as were appropriate. The figure therefore represents the comparative reasons why staff members travel by train to work. Convenience and avoiding congestion feature most prominently. Cost, a previously popular reason, has become one of the lowest reasons, probably due to rising rail costs and a squeeze on personal finances.
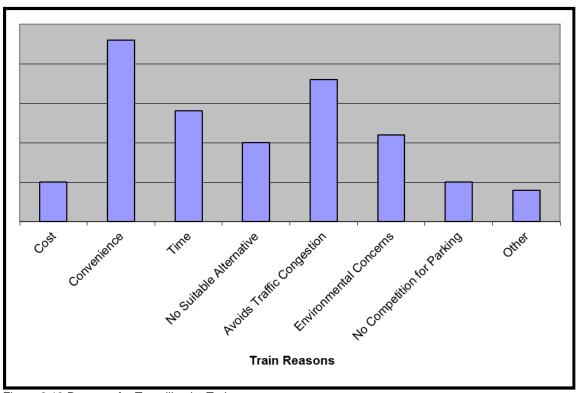

Figure 2.18 Reasons for Travelling by Train

ALTERNATIVE TRAVEL
Alternative Modes of Travel Used
To determine what modes of travel were considered most viable as an alternative to the main mode of travel used, respondents were asked to give their preferred alternative, if any. This is important as it indicates which modes of travel people are most likely to use if encouraged away from single occupancy car. It is clear that improvements to bus travel would reap the largest change but they are also notoriously difficult to influence due to the private nature of public transport companies.
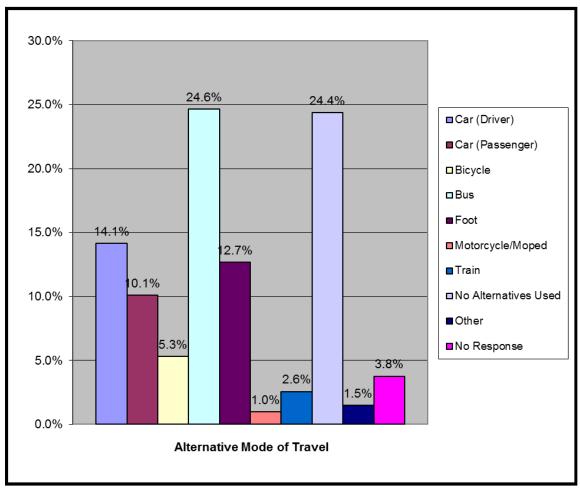

Figure 2.19 Alternative Modes of Travel Used

WILLINGNESS TO CHANGE

Willingness to Change Travel Habits

Staff were asked whether they would be willing to change their travel habits to make it more environmentally sustainable. Generally speaking equal numbers of staff were willing and unwilling to change their habits with a significant number remaining undecided.
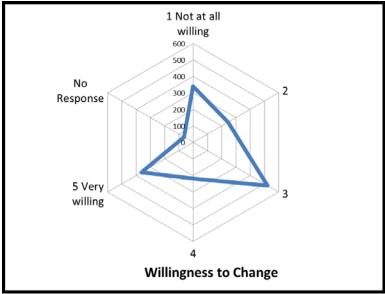

Figure 2.20 Willingness to Change Travel Habits

Given that a primary aim of the University's travel plan is to reduce single occupancy cars additional analysis was carried out on this specific group of staff. The group showed more unwillingness to change in comparison to staff generally. This is a concern since this is the group the University most wants to change the travel habits of.
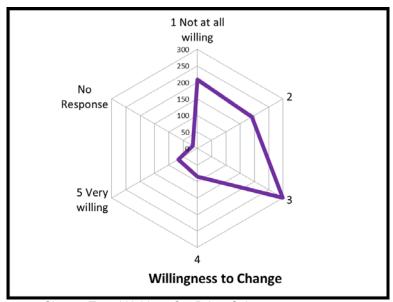

Figure 2.21 Willingness to Change Travel Habits – Car Driver Sub-set

Student Survey Responses

RESPONSE RATES
The student response rate for this years survey was 18.2%, down from the 26.6% response rate recorded in 2014 but appears to represent an accurate spread of students.

PERSONAL DETAILS
Role at University
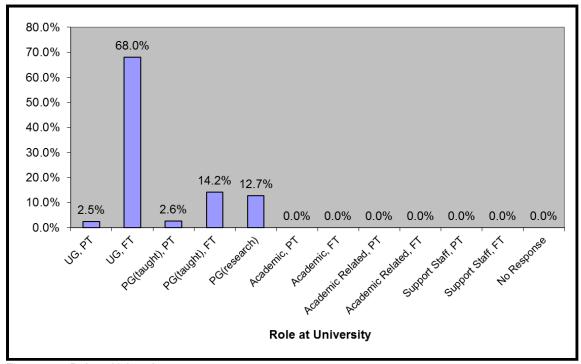Figure 3.01 illustrates the breakdown of respondents' role at the University.

Figure 3.01 Role at University

Gender Split
The information obtained indicated that 65% of student respondents were female, with 34% male.
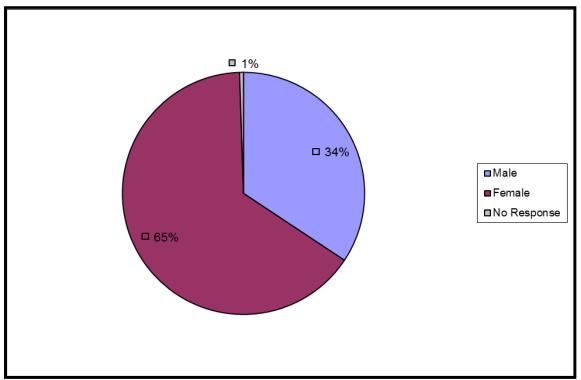

Figure 3.02 Gender of Respondents

Age
As can be seen from Figure 3.03 the majority of student respondents (67.1%) were aged between 18 and 24 years of age with a much smaller proportion (21.5%) being in the older 25-39 bracket.
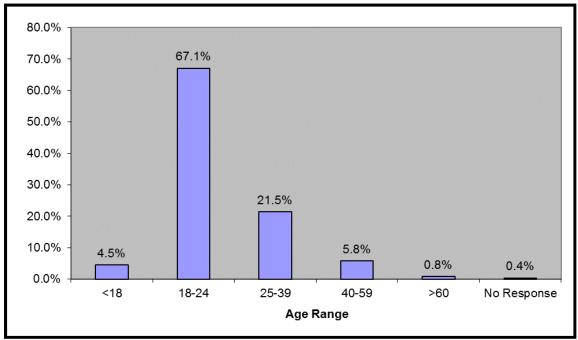

Figure 3.03 Age of Student Respondents

Distance from Work
Figure 3.04 illustrates the range of distances students estimate they travel to their place of study. The data gathered shows a continuing trend of students living closer to their place of study (<5 miles). This could help when encouraging students to use active travel methods which are more suited to shorter distances.
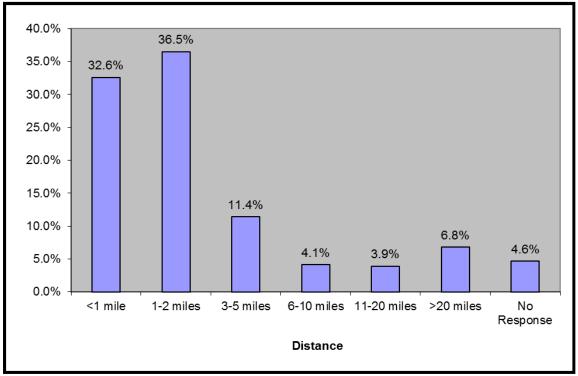

Figure 3.04 Estimated Distance Travelled

Duration of Travel
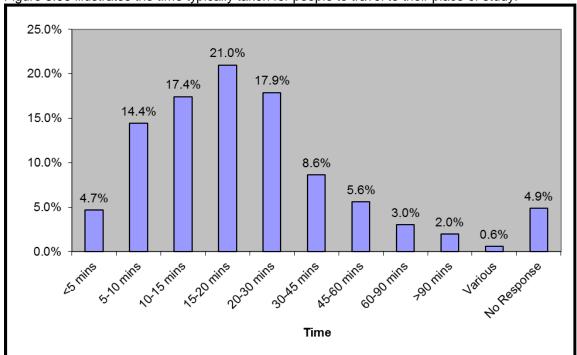Figure 3.05 illustrates the time typically taken for people to travel to their place of study.

Figure 3.05 Duration of Journey

TRAVEL HABITS

Main Mode of Travel

The most common mode of travel used by students remains walking at 61.6%. It is likely the trend of students living closer to the University is helping maintain this. Car use has increased for the first time, possibly due to reductions in the cost of fuel, while cycling has seen a small rebound. Other modes have remained relatively static.
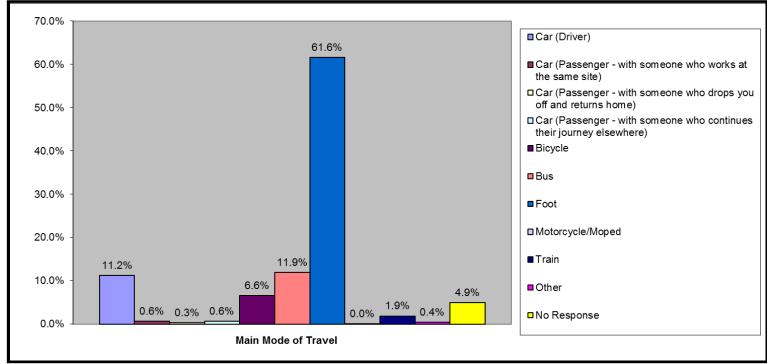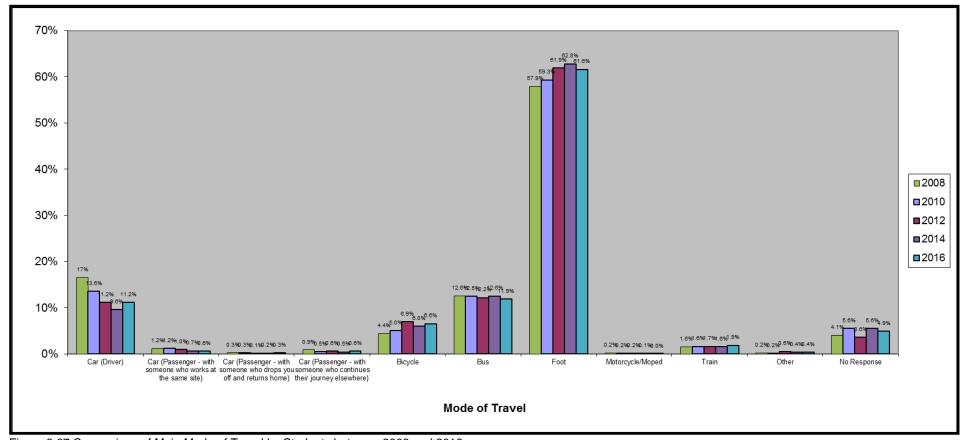

Figure 3.06 Main Mode of Travel by Students

Figure 3.07 Comparison of Main Mode of Travel by Students between 2006 and 2016

CAR USE

Reasons for Travelling by Car

No values are used in figure 3.08 as respondents could select as many options as were appropriate. The figure therefore represents the comparative reasons given for using a car to commute. As can be seen in figure 3.08 convenience and time constraints feature heavily in students' decisions to commute using their car. Cost, personal use and the lack of a suitable alternative also appear to feature commonly.
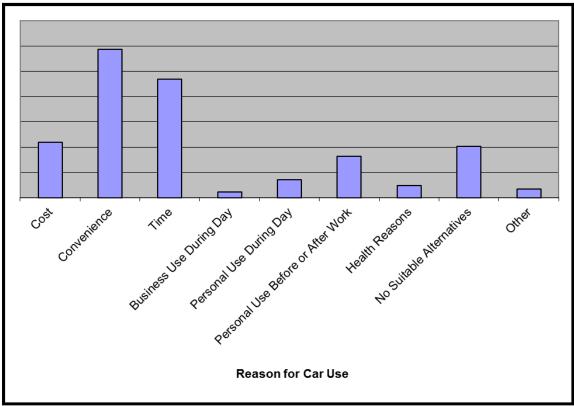

Figure 3.08 Reasons for Car Use

Encouragement of Car Sharing

No values are used in figure 3.09 as respondents could select as many options as were appropriate. The figure therefore represents the comparative preference of incentives to encourage car sharing. Guaranteed parking featured most strongly. More help in finding a car share partner and a guaranteed ride home also featured commonly.
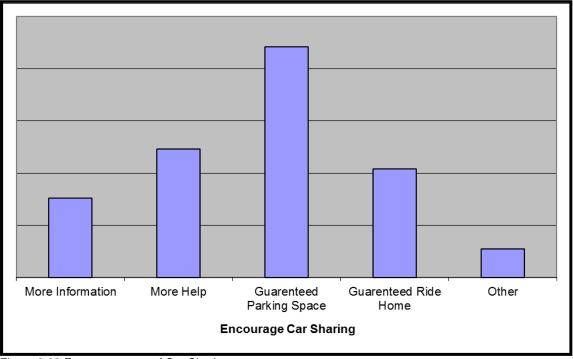

Figure 3.09 Encouragement of Car Sharing

CAR SHARING

Reasons for Car Sharing

No values are used in figure 3.10 as respondents could select as many options as were appropriate. The figure therefore represents the comparative reasons why students car share. Convenience can clearly be seen as the most prominent reason while cost and time also feature very strongly.
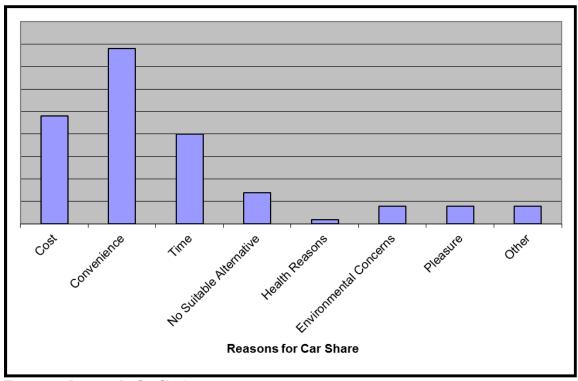

Figure 3.10 Reasons for Car Sharing

CYCLING

Reasons for Cycling

No values are used in figure 3.11 as respondents could select as many options as were appropriate. The figure therefore represents the comparative reasons why students cycle to work. With the exception of there being no suitable alternatives all reasons seem to influence cyclists to a fairly large extent.
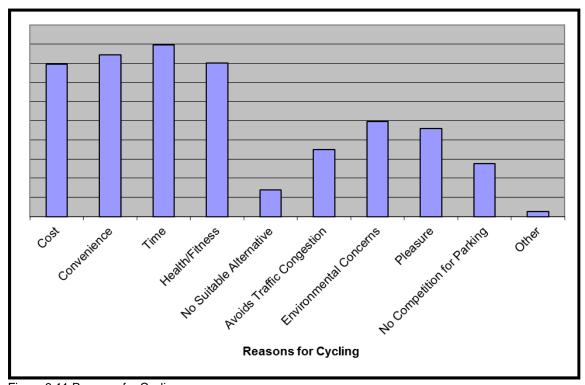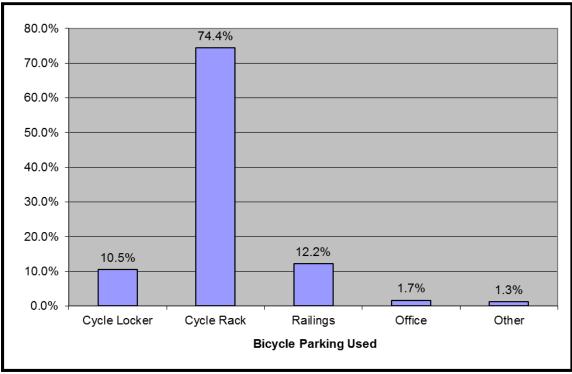

Reasons for Cycling

Figure 3.11 Reasons for Cycling

Cycle Parking Used

Figure 3.12 shows the majority of students use cycle racks. Railings appear to be used commonly as an alternative, presumably if there are no cycle racks nearby or cycle racks are full. The proportion of students using railings has dropped while rack and locker use has increased. The proportion of students storing bikes in buildings has dropped to negligible levels.

(Percentages calculated from a subset of 238 respondents)
Figure 3.12 Cycle Parking Used

BUS TRAVEL

Reasons for Travelling by Bus

No values are used in figure 3.13 as respondents could select as many options as were appropriate. The figure therefore represents the comparative reasons why students use the bus to travel to their place of study. No suitable alternative features most commonly suggesting that bus travel is often used out of necessity rather than choice although students indicate that bus services are generally convenient.
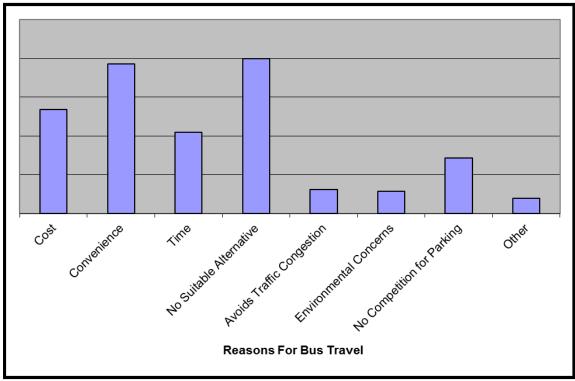

Figure 3.13 Reasons for Bus Travel

WALKING

Reasons for Walking

No values are used in figure 3.14 as respondents could select as many options as were appropriate. The figure therefore represents the comparative reasons why students walk to their place of study. Cost, convenience and health reasons feature most highly however all reasons feature to some extent probably due to the relatively large numbers of students who walk to University.
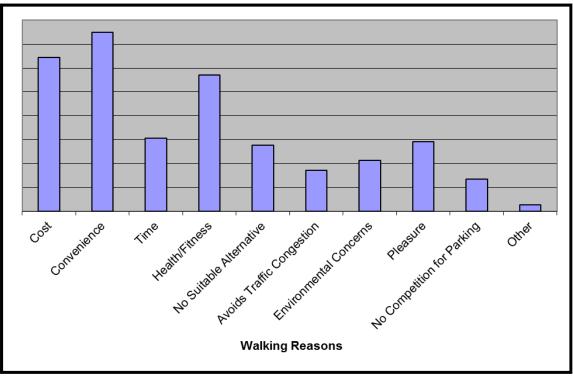

Figure 3.14 Reasons for Walking

MOTORCYCLING

Reasons for Travelling by Motorcycle

No values are used in figure 3.15 as respondents could select as many options as were appropriate. The figure therefore represents the comparative reasons why students travel by motorcycle to their place of study. Due to the very small number of students who responded to this question the results provide limited insight.
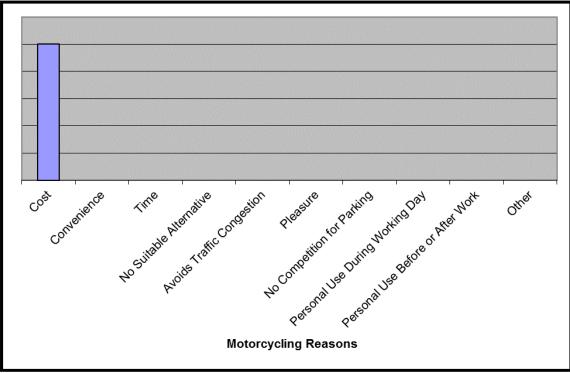

Figure 3.15 Reasons for Travelling by Motorcycle

RAIL TRAVEL
Reasons for Travelling by Train
No values are used in figure 3.16 as respondents could select as many options as were appropriate. The figure therefore represents the comparative reasons why students travel by train to their place of study. A wide range of responses were received indicating there are many reasons why rail travel is chosen by students.
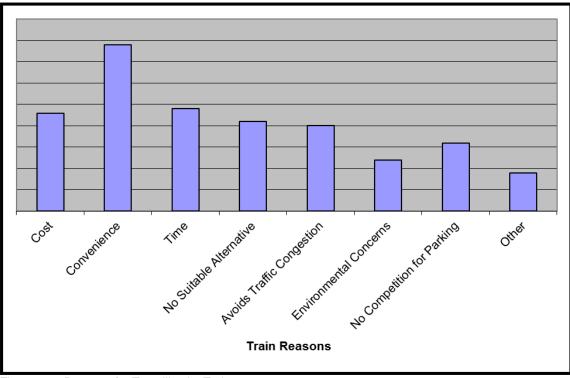

Figure 3.16 Reasons for Travelling by Train

ALTERNATIVE TRAVEL

Alternative Modes of Travel Used

To determine what modes of travel were considered most viable as an alternative to the main mode of travel used, respondents were asked to give their preferred alternative, if any. The use of buses as an alternative remains very high among the student population.
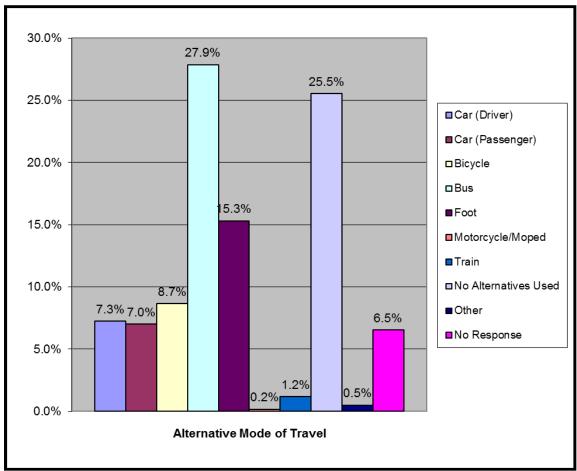

Figure 3.17 Alternative Modes of Travel Used

WILLINGNESS TO CHANGE

Willingness to Change Travel Habits

Students were asked whether they would be willing to change their travel habits to make it more environmentally sustainable. This is of limited value in the case of students since the majority of them already travel in a relatively sustainably way.
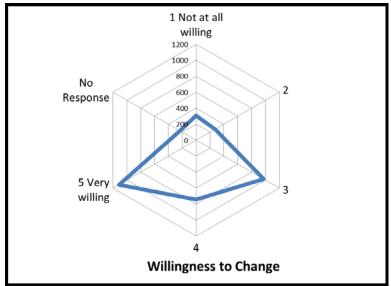

Figure 3.18 Willingness to Change Travel Habits

The more important subset of students to consider are those who currently drive. Of these we can see that the majority are either unwilling or indifferent to the prospect of changing their habits to be more environmentally sustainable.
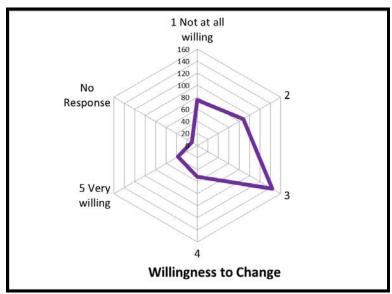

Figure 3.19 Willingness to Change Travel Habits – Car Driver Sub-set

Carbon Emissions of Travel

The University can group carbon emissions from transport into two categories; commuting and business travel. The later is not considered in this report since data is gathered by different means.

STAFF COMMUTING

Certain assumptions and calculated averages are used in conjunction with the data gathered to arrive at an approximate figure for emissions from staff commuting.

- Average days worked p.a. is estimated to be 200.2[1]
- Car and motorcycle emissions are assumed to be average for an unknown fuel
- Train emissions are assumed to be average national
- Bus emissions are assumed to be average local

The total CO_2 emissions of staff commuting travel was calculated to be 3,150 tonnes CO^2e.

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[1] Based on 4.55 working days per week as gathered from the survey and 44 working weeks p.a.

Conclusion

Progress in reducing single occupancy car use has halted with both staff and student use of cars showing a small increase since the last survey in 2014. As staff and students move away from single occupancy car use it becomes more and more difficult to maintain a shift in habits. This is partially due to the remaining car users having less opportunity to change, typically because of carer commitments and distance and also partially due to the increased competition for sustainable travel facilities like cycle storage and access to public transport. It is likely that reductions in the cost of fuel and parking spaces being more easily available, due to staff reductions, have both influenced travel choice.

Despite the lack of progress in reducing single occupancy car use there are some positives to be taken from the survey. Most other modes of travel have remained stable and the overall trend is still positive since the University introduced a sustainable travel plan in 2006. The results should serve as a reminder that constant improvements to facilities are needed to maintain progress towards the aims of the travel plan and that these must be combined with behaviour change initiatives to support staff and students to make use of those facilities.

The University is still performing well by achieving car modal share which is lower than the local area as a whole. Staff and students should be justifiably happy that their personal travel habits are helping move the University towards more sustainable travel. There is, however, no room for complacency and further actions will be required to retain and improve on current performance.