



# Northumbria University Travel Plan Update Report

**June 2018**

**Prepared For: Northumbria University**

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## 1. INTRODUCTION

### Background to Travel Planning at Northumbria University

- 1.1 Northumbria University has a long-standing commitment to Sustainable Travel Planning. There has been a Travel Plan in place for over 10 years. This programme of work has helped to meet requirements through the planning process as well as contributing towards the delivery of the University's Environmental Sustainability Policy.
- 1.2 The University's approach to Travel Planning was first formalised through a planning condition attached to the development of City Campus East in 2005 by Newcastle City Council that a Travel Plan should be developed for the University. The travel plan programme has been enhanced since 2005 to reflect the changing nature of travel demands at the University and in light of national and local best practice. Efforts made by the University to be proactive are respected by key stakeholders including Newcastle City Council and Nexus.
- 1.3 Travel surveys have been conducted in 2005 to establish a baseline, then every two years since then to monitor the impacts of the Travel Plan. The original targets were met by 2009. New, increasingly ambitious targets have been set every few years.
- 1.4 The Aim and Objectives of the Travel Plan were reconfirmed in the 2017 Sustainable Travel Plan Update Report as:
- 1.5 Travel Plan **Aim**:  
To provide, facilitate and encourage sustainable travel options for staff and students in relation to travel for work, travel at work and travel to and from work/ the University.
- 1.6 The main **Objectives** of the University Travel Plan continue to be:
  - Reduce car traffic to University sites and contribute to the reduction of congestion in the areas around the Campuses;
  - Encourage the use of more sustainable modes of transport by staff and students;
  - Promote healthier and more active lifestyles for staff and students;
  - Improve road safety on and around the Campuses; and
  - To reduce emissions arising from Business Travel and staff and student Commuter Travel.
- 1.7 The Sustainable Travel Plan programme includes a commitment to monitoring the impact of the Travel Plan on the travel choices of staff and students, reporting both internally and externally to stakeholders. A travel survey is undertaken every 2 years to identify travel patterns, behaviours



and record the travel mode split for the staff and student commute for each campus. There are targets for reducing single occupancy commuting, and emissions from travel (see **Section 6**).

## **Campus Locations and Accessibility**

- 1.8 The University has three main campuses. The largest, City Campus, is situated in the centre of Newcastle upon Tyne. It is itself divided into City Campus East and City Campus West by the Central Motorway. The second Campus, known as Coach Lane Campus, is situated approximately 3 miles from City Campus in Benton. The University's London Campus is a few minutes walk away from Liverpool Street Train Station and Tube Station in central London where the financial district meets the heart of London's digital and technology sector.
- 1.9 In summary the City Centre campus benefits from being in an urban centre with excellent links by public transport to a range of local, regional and national destinations and also has the added benefit of a comprehensive local cycle network. Whilst slightly more remote the Coach Lane Campus is well served by local bus services and is a short walk from the Four Lane Ends Metro Station. As will be illustrated in the survey findings, this has a bearing on travel behaviour, not least as the Coach Lane Campus has more car parking capacity on site.

## **Report Format**

- 1.10 The following report summarises the key findings of the 2018 staff and student travel survey undertaken by Northumbria University ('the University'). Section 2 outlines the methodology adopted for conducting the travel surveys, details the response rates achieved and how.
- 1.11 The survey data is then analysed, and the results are summarised in **Section 3** for staff and in **Section 4** for students. For each group the demographic profile of respondents is summarised before moving on to analyse the current travel patterns of those accessing the university campuses.
- 1.12 In addition to considering changing travel patterns over time, the surveys and report also consider the potential of various sustainable transport incentives and initiatives for influencing changes in travel behaviour moving forward. Throughout the report, cross tabulation exercises are performed where appropriate to gain a deeper insight into the data and fuller understanding of why staff and students are travelling the way they do.
- 1.13 An assessment of the carbon generated from staff and students commuting to the University is then provided in **Section 5** using the most recent Defra methodology and carbon conversion



factors. In **Section 6** the 2018 surveys results are used to assess progress made towards the Travel Plan targets set by the University, to be achieved by 2018.

- 1.14 Finally, in **Section 7** an updated Action/Implementation Plan of measures is detailed. This provides an update on measures already implemented, those in progress and some new proposals to be taken forward in the next Travel Planning period.



## 2. TRAVEL SURVEY METHODOLOGY

### Introduction

- 2.1 The methodology adopted for the 2018 Travel Surveys took account of travel survey data collected in previous years and utilised the communication channels that were available to promote the survey to staff and students in the timescales permitted. The objectives were to balance a high response rate with a comprehensive dataset that is also comparable with that collected in previous years.
- 2.2 Both the staff and student surveys were distributed electronically via email with a web link to an online survey. In addition to direct email correspondence the surveys were promoted via the intranet. The two surveys covered slightly different topic areas to ensure all travel behaviour decisions regarding journeys to and around Northumbria University were considered.
- 2.3 Staff were surveyed about their commuting habits and business travel. Students were asked about their transport choices in relation to three key journey types undertaken throughout the academic year; i) journey from their permanent/parental/family home to University at the start of semester (if applicable) ii) journey(s) back to this address (if applicable) throughout the academic year and iii) their daily/regular commute to University for studies.
- 2.4 The benefit of using an online survey portal, designed and hosted by TPS, is that a greater level of detail on specific issues can be collected without unnecessarily lengthening the survey for those who did not need to answer additional questions through filtering. **Appendix A** contains copies of the survey questions posed to respondents and an indication as to how respondents are guided through the surveys.

### Survey Period and Response Rates

- 2.5 To incentivise a higher response rate, staff and student respondents had the option of being entered into a prize draw to win a £50 shopping voucher. The surveys were available online from the 5th to the 23rd March 2018. Response rates were monitored throughout the survey period by the TPS team.
- 2.6 Both response rates and margins of error have been calculated for the survey samples collected, based on staff and student population size (**Table 2.1**). The sample sizes include completed surveys only (where at least a postcode and main travel mode were recorded).
- 2.7 The staff response rate of 41% is extremely good and exceeds typical response rates at other Universities (e.g. University of Sheffield 23% in 2016, 16% in 2015; University of Birmingham 31% in





2016, University of York 34%). The student response rate is also very good and slightly higher than is achieved elsewhere (e.g. University of Sheffield 3% in 2016, University of York 4% in 2017).

**Table 2.1: Overall Response Rates**

| Group    | Sample | Population (headcount) | Response Rate | Margin of Error (95% Confidence Level) |
|----------|--------|------------------------|---------------|--|
| Staff    | 1,168  | 2,878                  | 40.6%         | +/-2.211%                              |
| Students | 1,668  | 28,306                 | 5.9%          | +/-2.328%                              |

2.8 In the following sections each survey question is taken in turn and an overview of the findings is provided for staff in **Section 3** and students in **Section 4**. The analysis explores current travel patterns and identifies emerging issues. Challenges and opportunities in terms of travel planning, support and travel behaviour change are also discussed.

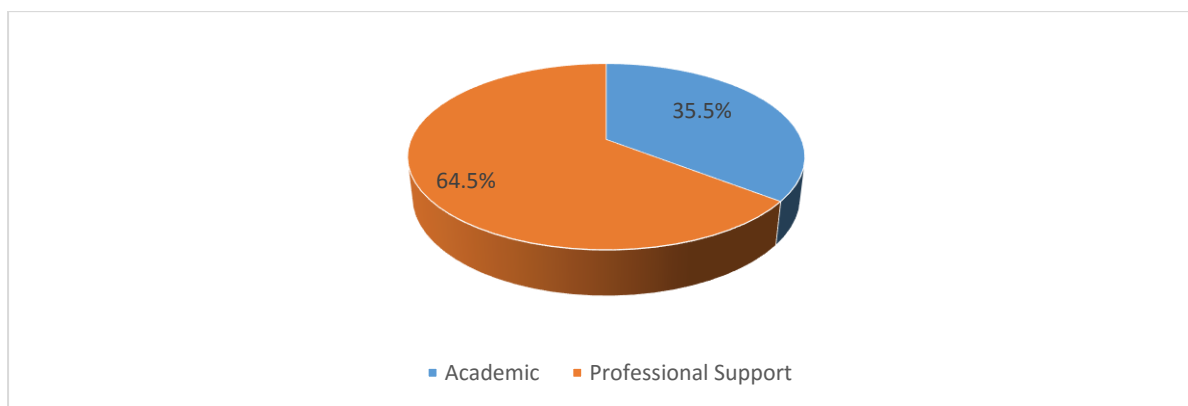


### 3. TRAVEL SURVEY RESULTS – STAFF

#### Staff Characteristics

3.1 The initial section of the staff survey asked questions about individuals' role and working patterns at the University. Staff were asked about their role and just over a third (36%) of respondents indicated that they hold an academic post, whereas 65% considered their role to be a 'Professional Support Role (**Figure 3.1**)'. Most of those who selected 'other' were reclassified as Support roles such as 'Finance' or 'Admin'. The responses to these questions have been compared with staff characteristics data from Human Resources to indicate how representative the sample was.

**Figure 3.1: Staff Role Type (n= 1181)**



3.2 **Table 3.1** reveals that the highest response rates by staff department or faculty were I.T. (81%), Research and Innovation (69%) and the Vice Chancellor's Office (69%). The lowest response rates were from Campus Services (20%) and the Environment and Engineering Faculty where just over a quarter of staff responded (26%). The behaviour and opinions of staff in these departments may therefore be slightly underrepresented.

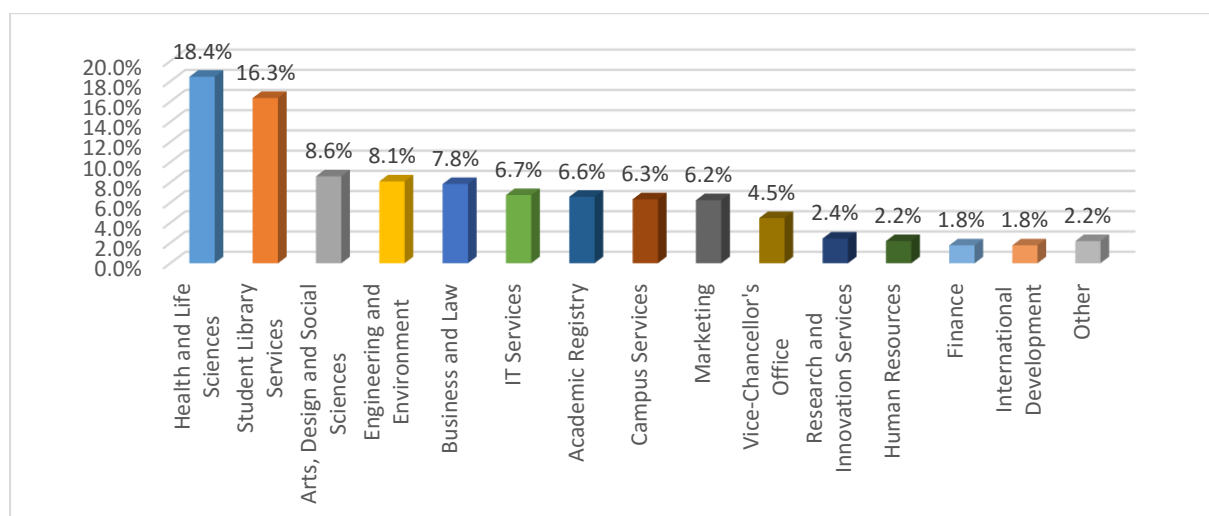
3.3 Indeed, only one (Health and Life Sciences) of the four academic faculties achieved a response rate which was above the average of 41%. Based on the figures from HR 53% of the total staff population are employed in academic faculties, but they only make up 43% of the responses received to the survey. The response rate for academic departments was 33% whereas half (50%) of non-academic staff completed the survey.



**Table 3.1: Staff Faculty, Service or Partner Organisation (n= 1187)**

| Department                               | Count of Respondents | % of Respondents | Headcount     | FTE            | Response Rate Based on Headcount |
|--|----------------------|------------------|---------------|----------------|----------------------------------|
| IT Services                              | 80                   | 6.7%             | 99            | 98             | 81%                              |
| Research & Innovation                    | 29                   | 2.4%             | 42            | 38.5           | 69%                              |
| Vice-Chancellor's Office                 | 53                   | 4.5%             | 77            | 73.61          | 69%                              |
| Student Library Services                 | 194                  | 16.3%            | 308           | 240.02         | 63%                              |
| Academic Registry                        | 78                   | 6.6%             | 142           | 133.84         | 55%                              |
| Marketing                                | 74                   | 6.2%             | 137           | 131.69         | 54%                              |
| Human Resources                          | 26                   | 2.2%             | 49            | 43.77          | 53%                              |
| Business and Enterprise                  | 7                    | 0.6%             | 14.5          | 14.1           | 48%                              |
| Finance                                  | 21                   | 1.8%             | 44.5          | 43.17          | 47%                              |
| Health and Life Sciences                 | 219                  | 18.4%            | 517.5         | 488.97         | 42%                              |
| International Development                | 21                   | 1.8%             | 50            | 44.82          | 42%                              |
| Arts, Design & Social Sciences           | 102                  | 8.6%             | 333           | 313.53         | 31%                              |
| Business and Law                         | 93                   | 7.8%             | 315           | 297.77         | 30%                              |
| Engineering and Environment              | 96                   | 8.1%             | 368           | 346.91         | 26%                              |
| Campus Services                          | 75                   | 6.3%             | 382.5         | 276.78         | 20%                              |
| Sodexo                                   | 10                   | 0.8%             | N/K           | N/K            | N/K                              |
| Chartwells                               | 3                    | 0.3%             | N/K           | N/K            | N/K                              |
| Other                                    | 3                    | 0.3%             | N/K           | N/K            | N/K                              |
| Students' Union                          | 2                    | 0.2%             | N/K           | N/K            | N/K                              |
| Accommodation                            | 1                    | 0.1%             | N/K           | N/K            | N/K                              |
| <b>Academic Faculties Subtotal</b>       | <b>510</b>           | <b>42.9%</b>     | <b>1533.5</b> | <b>1447.2</b>  | <b>33%</b>                       |
| <b>Non-Academic Departments Subtotal</b> | <b>677</b>           | <b>57%</b>       | <b>1345.5</b> | <b>1138.3</b>  | <b>50%</b>                       |
| <b>Total</b>                             | <b>1187</b>          | <b>100%</b>      | <b>2879</b>   | <b>2585.48</b> | <b>-</b>                         |

**Figure 3.2: Staff Faculty, Service or Partner Organisation (n= 1187)**





3.4 According to this survey and summarised in **Table 3.2**, four fifths of staff are based at the Newcastle City Campus with 14% based at the Coach Lane Campus. However, there was a negligible response rate from London and it will therefore not be possible to draw any conclusions about travel behaviour there. Over four fifths (84.6%) of staff responding to the survey work on full time contracts, leaving 15.4% on part-time contracts.

**Table 3.2: Staff Base Campus (n= 1188)**

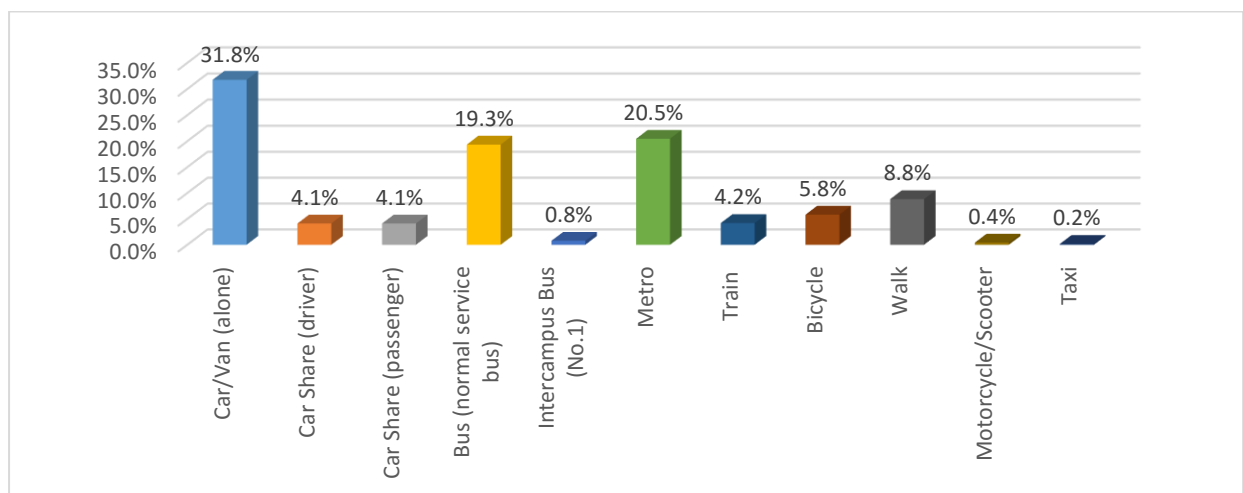
| Campus                | %     | Count |
|-----------------------|-------|-------|
| Newcastle City Campus | 85.6% | 1017  |
| Coach Lane Campus     | 13.9% | 165   |
| Not Provided          | 0.4%  | 5     |
| London Campus         | 0.1%  | 1     |
| Total                 | 100%  | 1188  |

### Staff Main Travel Mode

3.5 Staff were asked to select which travel mode they usually use to travel to work by. If they alternate the modes they use, this question asked for the one they use the most often (occasional mode is recorded later in the survey). If they change mode as part of their journey to and from work (e.g. walk, bus, train, walk), they were asked to select the one they travel the furthest distance by.

3.6 Across all campuses, as seen in **Figure 3.3**, the most popular mode of travel for staff is by single occupancy car, used by just under a third of all staff (32%). A further 8% car share meaning the split between car and non-car modes is 40:60. Public transport is a popular option with 45% of staff travelling by bus, Metro or Train. Active modes, walking and cycling are the main mode of travel for 15% of staff.

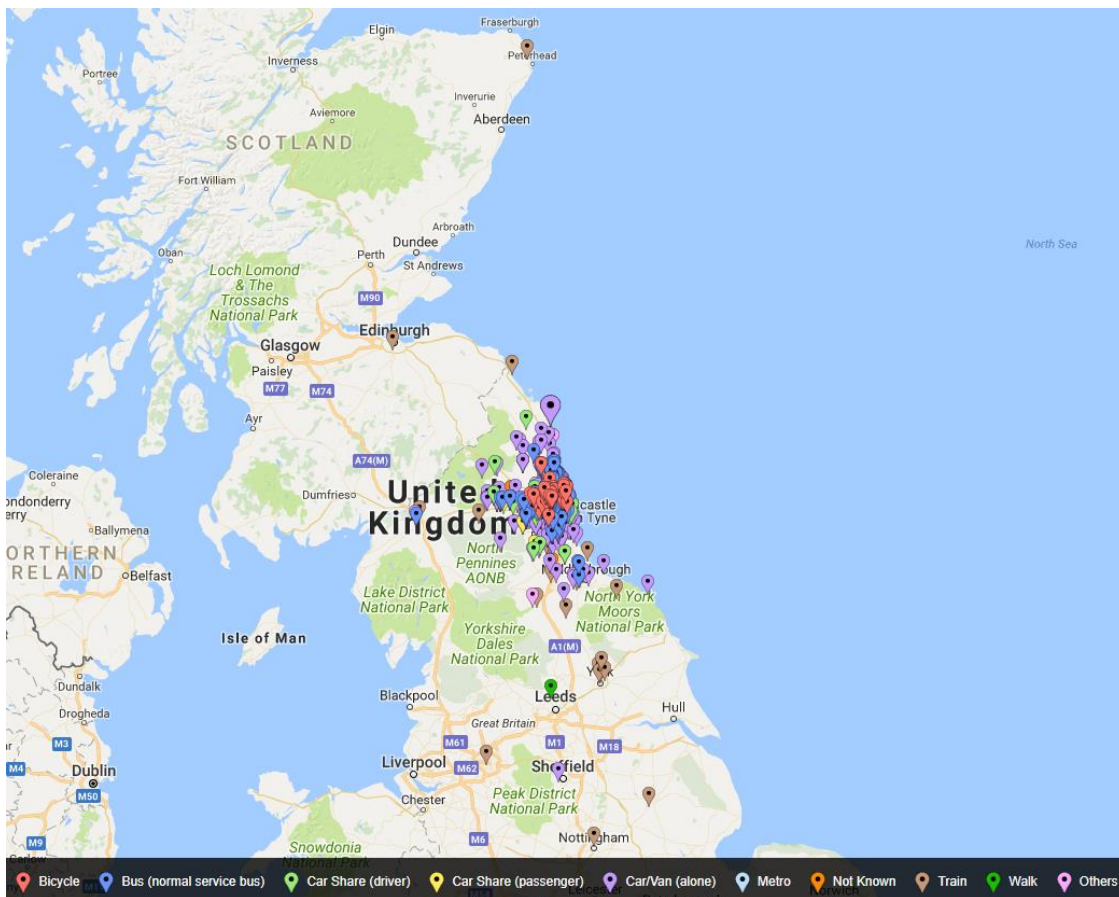
**Figure 3.3: Staff Main Mode – All Campuses (n= 1168)**





- 3.7 The home postcodes and mode for each member of staff responding to the survey have been mapped to provide a visual representation of how staff are travelling and where from. All postcodes and modes are shown in **Figures 3.4a-c**. Staff travel in from as far North as Aberdeen and as far south as Tonbridge where they travel in by train.
- 3.8 Closer to Newcastle there are clear concentrations of staff residing across the city and walking in, as well as clusters of staff around areas such as Heaton Park and Chillingham Road to the north east of the city, where many walk and cycle in from. It also highlights clusters of staff driving by themselves particularly, for example, around the Whitley Bay area on the east coast. These clusters would be good targets for increasing staff car sharing, by simply making staff aware that they are driving by themselves from similar locations to colleagues.

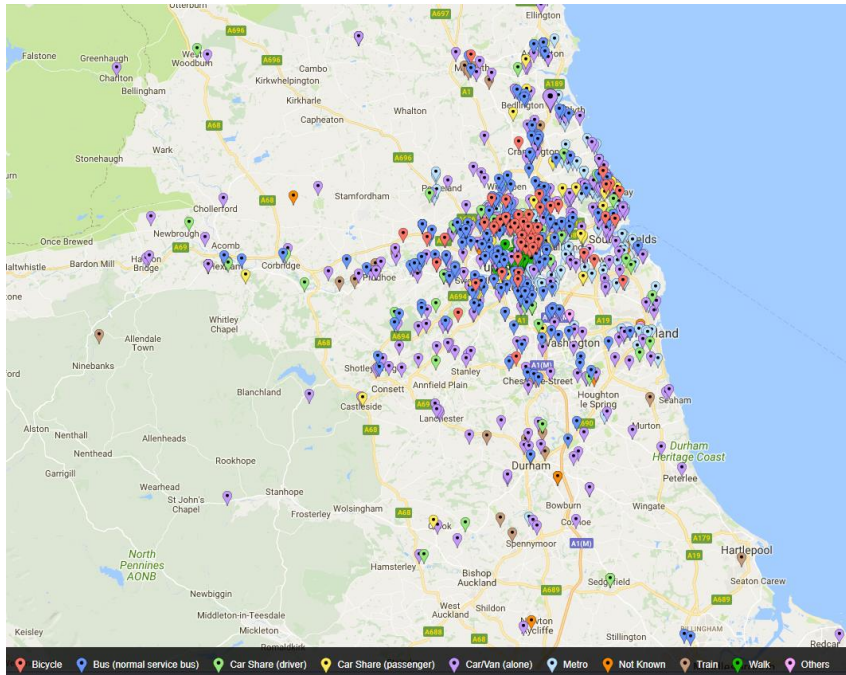
**Figure 3.4a: Map of All Staff Respondents' Home Postcodes and Mode**



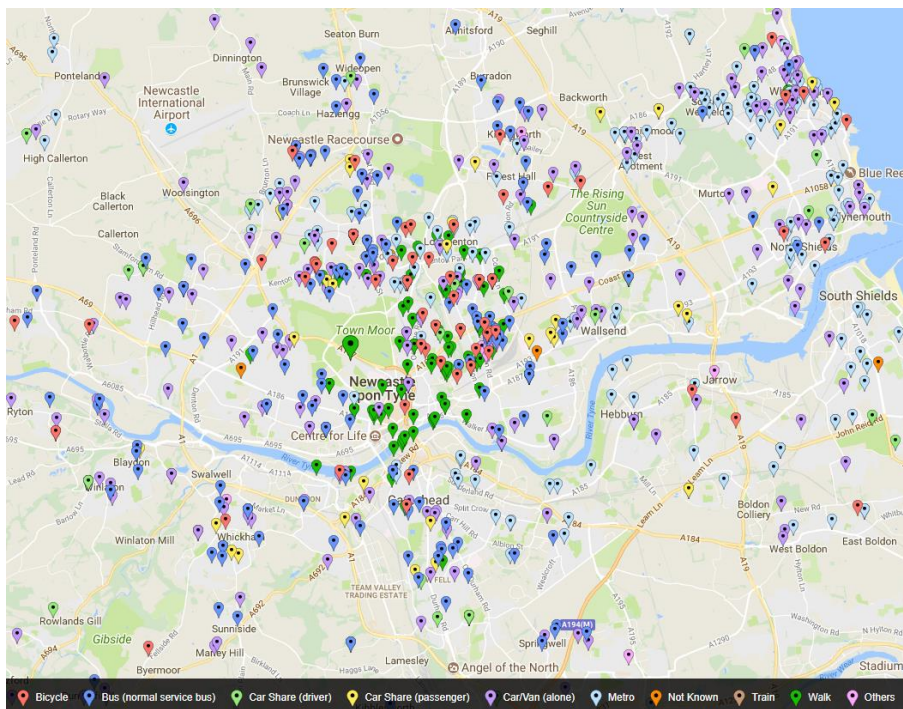




**Figure 3.4b: Map of All Staff Respondents' Home Postcodes and Mode**



**Figure 3.4c: Map of All Staff Respondents' Home Postcodes and Mode**

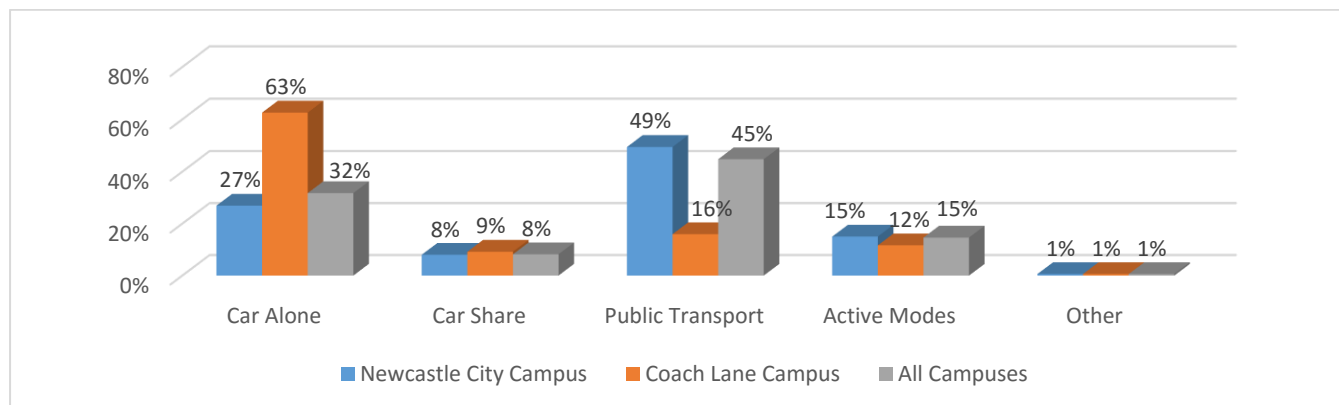


3.9 When travel mode is cross-tabulated with base campus there is a notable difference between Newcastle City and Coach Lane Campuses (London is excluded from Campus based analysis due to a low response rate).



3.10 A much higher proportion of staff commute to Coach Lane as lone drivers (63%) compared to the City Campus (27%). The proportion of car sharers is very similar as are active modes. The results suggest that the main difference is the availability of public transport options, given that the proportion of public transport users at Coach Lane is 33 percentage points lower than at the City Campus.

**Figure 3.5: Staff Usual Main Mode By Campus (n=1167)**



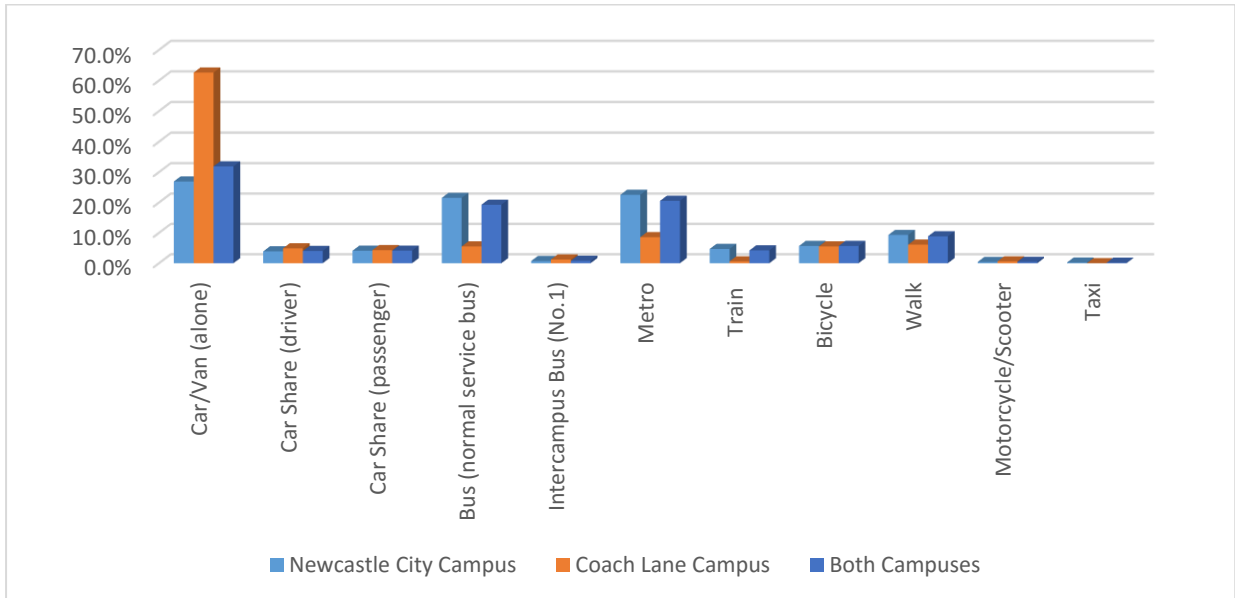
3.11 A more detailed breakdown of staff mode by campus is provided in **Table 3.3** and **Figure 3.6**.

**Table 3.3: Staff Usual Main Mode By Campus (n=1167)**

| Mode                     | Newcastle City Campus |             | Coach Lane Campus |             | Both Campuses |             |
|--------------------------|-----------------------|-------------|-------------------|-------------|---------------|-------------|
|                          | Count                 | %           | Count             | %           | Count         | %           |
| Car/Van (alone)          | 269                   | 26.9%       | 102               | 62.6%       | 371           | 31.9%       |
| Car Share (driver)       | 39                    | 3.9%        | 8                 | 4.9%        | 47            | 4.0%        |
| Car Share (passenger)    | 41                    | 4.1%        | 7                 | 4.3%        | 48            | 4.1%        |
| Bus (normal service bus) | 215                   | 21.5%       | 9                 | 5.5%        | 224           | 19.3%       |
| Intercampus Bus (No.1)   | 7                     | 0.7%        | 2                 | 1.2%        | 9             | 0.8%        |
| Metro                    | 225                   | 22.5%       | 14                | 8.6%        | 239           | 20.6%       |
| Train                    | 47                    | 4.7%        | 1                 | 0.6%        | 48            | 4.2%        |
| Bicycle                  | 57                    | 5.7%        | 9                 | 5.5%        | 66            | 5.7%        |
| Walk                     | 93                    | 9.3%        | 10                | 6.1%        | 103           | 8.9%        |
| Motorcycle/Scooter       | 4                     | 0.4%        | 1                 | 0.6%        | 5             | 0.4%        |
| Taxi                     | 2                     | 0.2%        | 0                 | 0.0%        | 2             | 0.2%        |
| <b>Total</b>             | <b>999</b>            | <b>100%</b> | <b>163</b>        | <b>100%</b> | <b>1162</b>   | <b>100%</b> |

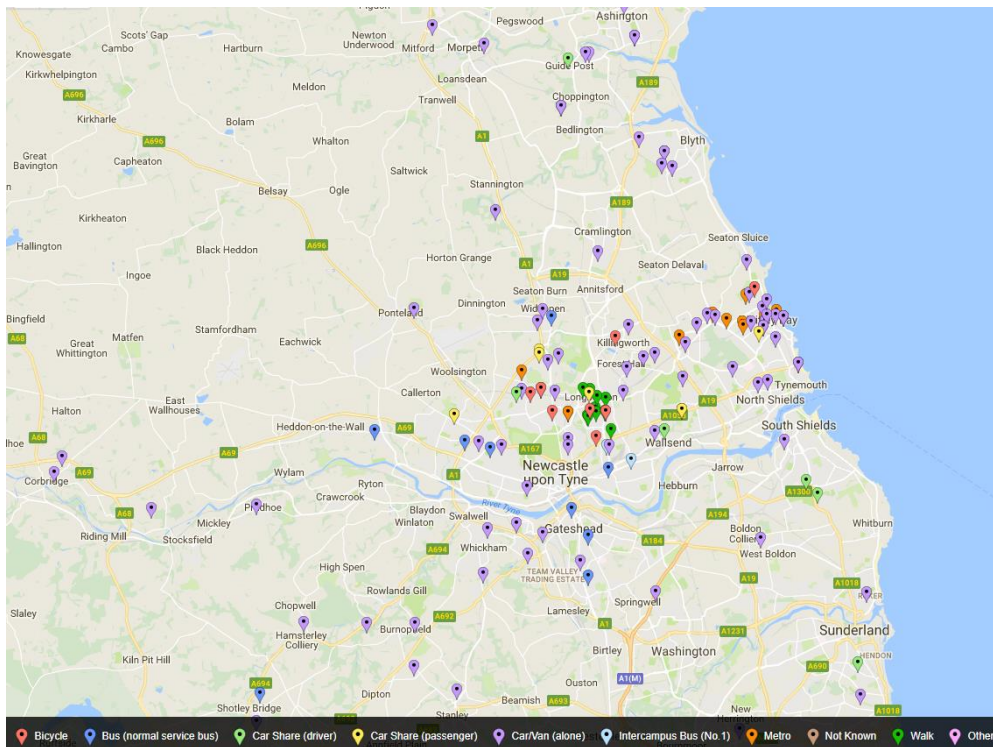


**Figure 3.6: Staff Usual Main Mode By Campus (n=1162)**



3.12 Mode and postcodes have also been mapped for each of the two main campuses (**Figure 3.7** and **3.8**) which illustrate the difference in mode split more clearly. The higher proportions of staff lone drivers stand out in the Coach Lane map, commuting in from areas such as Whitley Bay and Wideopen. By contrast the City map is dominated by more staff walking in from the City as well as bus and particularly Metro stations east of Newcastle.

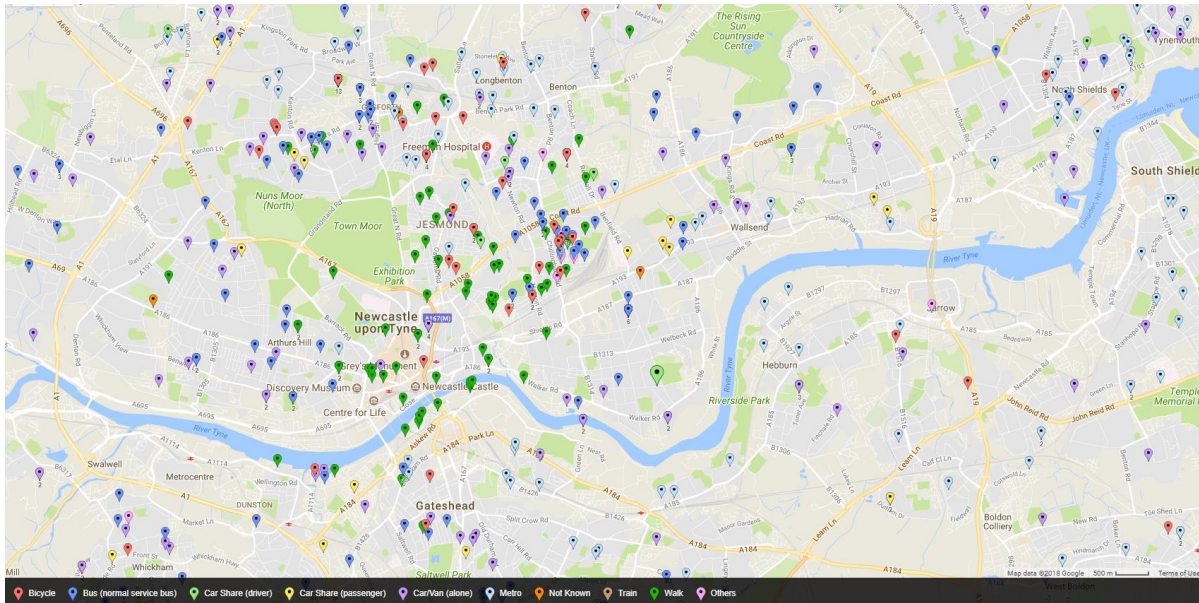
**Figure 3.7: Staff Based at Coach Lane Home Postcode and Mode**





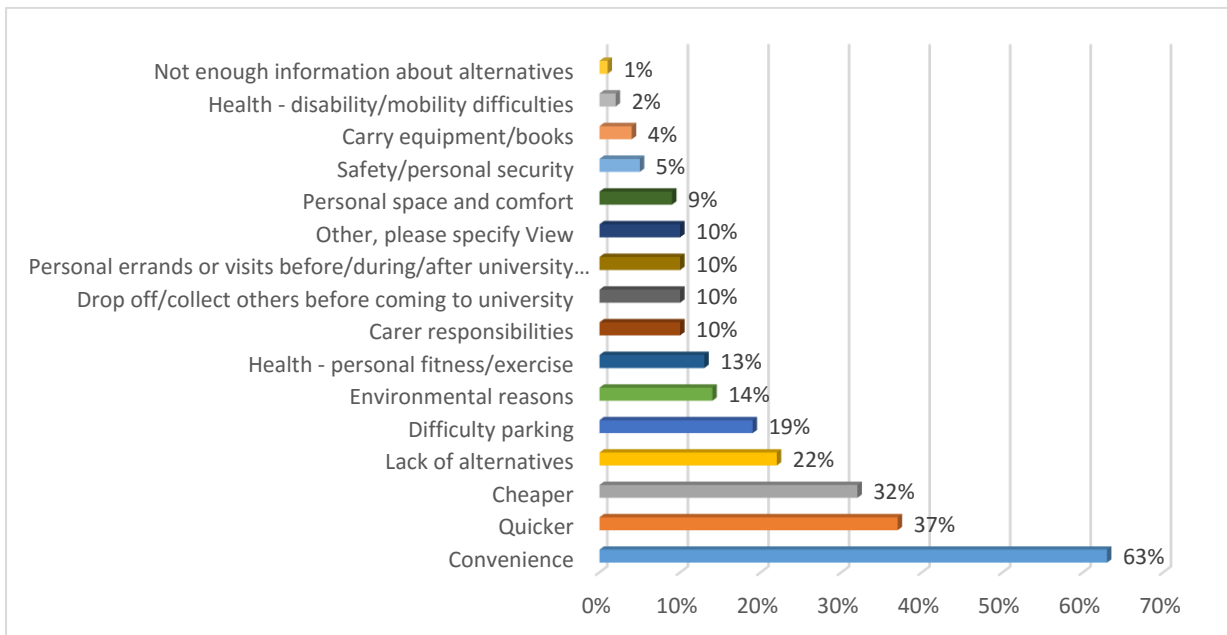


**Figure 3.8: Staff Based at City Campus Home Postcode and Mode**



3.13 Staff were asked why they choose the mode they do and invited to select up to four reasons from a list with an option of specifying an 'other' option. As **Figure 3.9** conveys, the clear overriding factor for all staff modes is convenience, selected by 63% of staff. The next most influential reasons are far behind with 37% selecting quicker and 32% selecting cheaper. Of the 10% who selected other, the majority did not then specify the reason, but many suggested a lack of public transport options, living in a rural/inaccessible area and the need to carry out linked trips as part of the commute (e.g. dropping off/picking up others) have an impact.

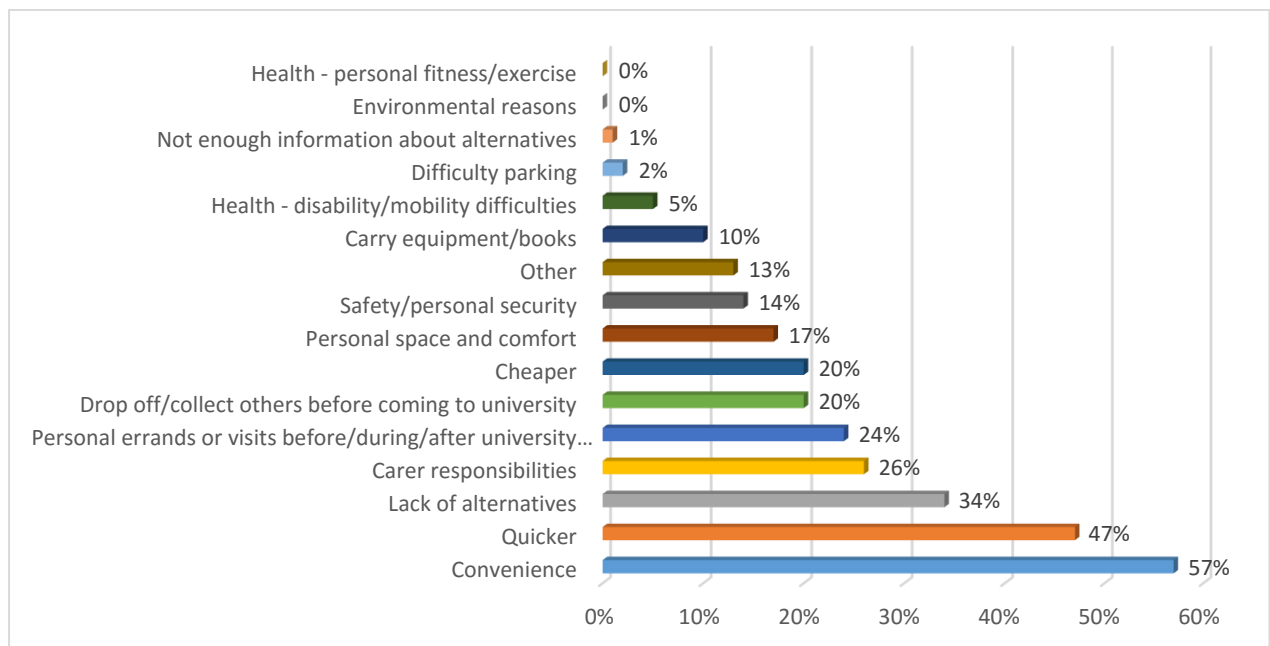
**Figure 3.9: Staff Reasons for Main Mode (n= 1172)**





3.14 Data collected about staff mode and the reasons for choosing these modes were then cross tabulated to reveal any differences between groups choosing one mode over another. The reasons given for mode choice by staff driving by themselves are shown in **Figure 3.10**. A reason that is more dominant for lone drivers is 'caring responsibilities', which was selected by 26% of lone drivers compared to 10% of all staff. Personal errands and needing to drop off/collect others were also selected more frequently.

**Figure 3.10: Reasons Given For Driving Alone (n= 371)**



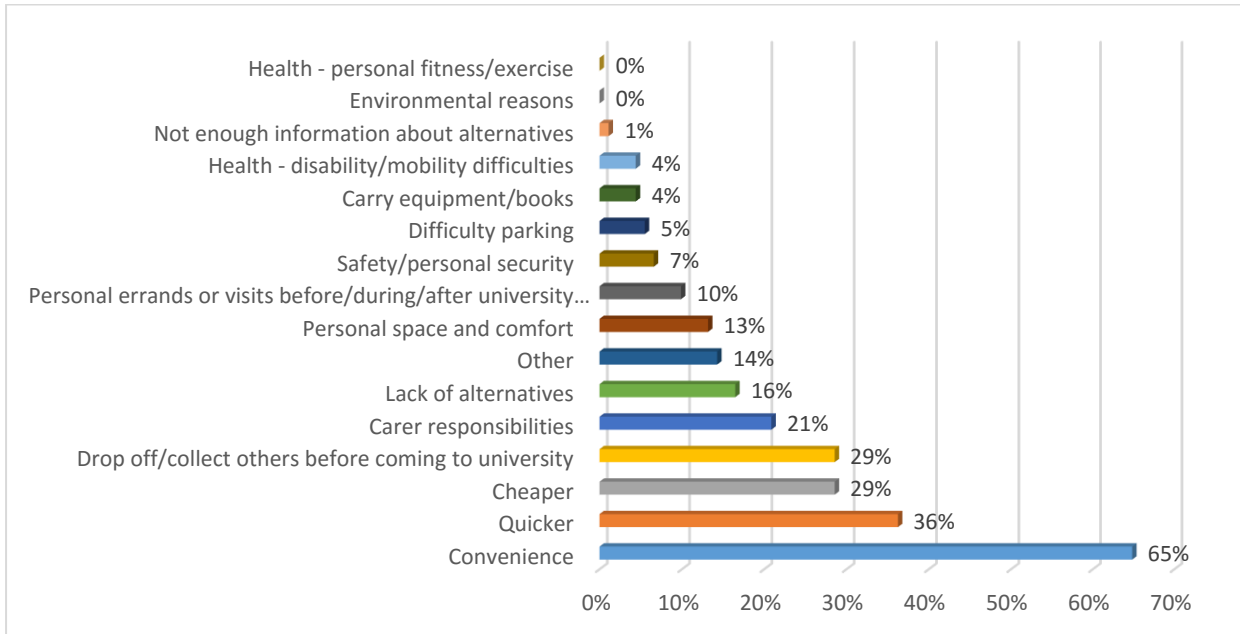
3.15 The reasons selected by car sharers (drivers and passengers) are shown in **Figure 3.11**. The top reasons are similar to lone drivers but with the need to drop off/collect others featuring higher in the list (4<sup>th</sup>), in place of caring responsibilities which is slightly further down the list (5<sup>th</sup>).

3.16 Reasons given by public transport users (bus, train and Metro) are shown in **Figure 3.12**. The main difference is the selection of 'Difficulty Parking' by 35% of public transport users making it 2<sup>nd</sup> in the list compared to 19% of all staff mode users where it was 5<sup>th</sup>.

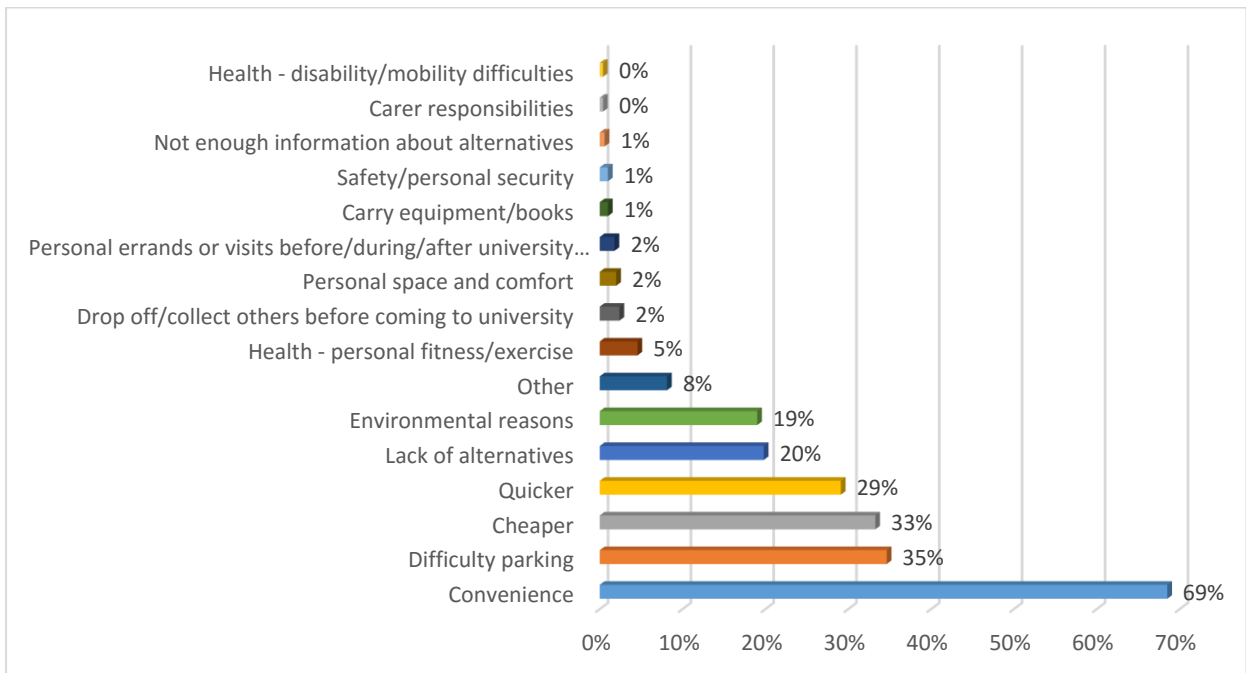
3.17 Finally, the reasons selected by staff who cycle are shown in **Figure 3.13**. In contrast to motivations for using previous modes, cyclists say they cycle for health and fitness (86%), followed by environmental reasons (59%) then cost (58%). Interestingly convenience and speed are still high up in the list (4<sup>th</sup> and 5<sup>th</sup>), so current cyclists confirm that, for them cycling is quick and convenient.



**Figure 3.11: Reasons Given For Car Sharing (n= 91)**

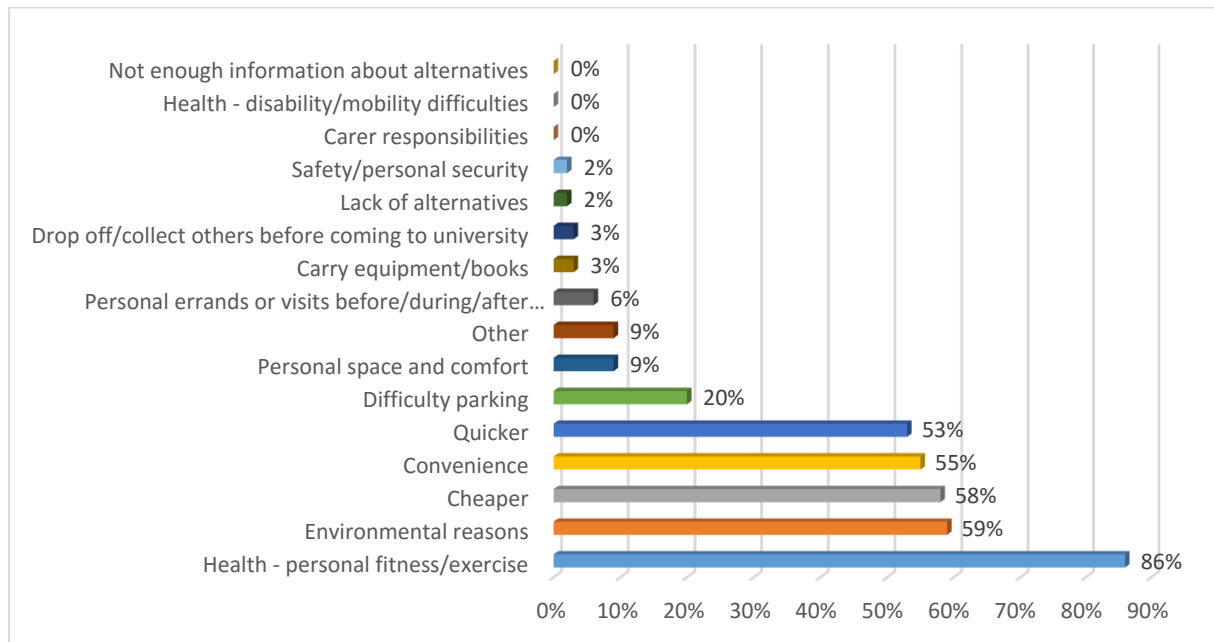


**Figure 3.12: Reasons Given By Public Transport Users (n= 505)**





**Figure 3.13: Reasons Given by Cyclists (n= 57)**



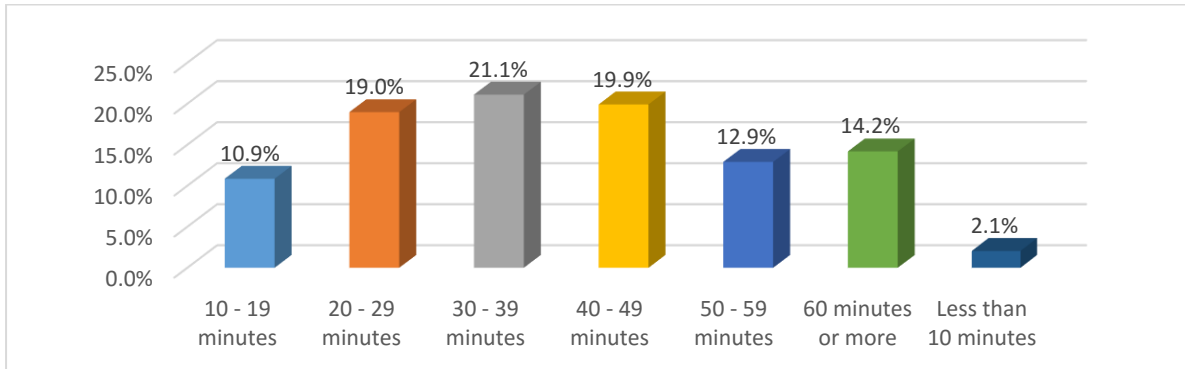
- 3.18 Staff journey times vary with the highest proportion of staff taking 30-39 minutes to get to work (21%). Although similar proportions take 40-49 minutes (20%) and 20-29 minutes (19%). Less than a third of staff currently take less than half an hour to commute and 14% take an hour or more.
- 3.19 Understanding the peak periods for staff and students being on campus gives a good insight into demand for facilities such as car and cycle parking. Policies or initiatives that can help spread the arrival and departure times of staff and students can go some way to easing pressure or demand.

**Table 3.4: Staff Journey Times (n=1170)**

| Time                 | %      | Count |
|----------------------|--------|-------|
| Less than 10 minutes | 2.1%   | 24    |
| 10 - 19 minutes      | 10.9%  | 127   |
| 20 - 29 minutes      | 19.0%  | 222   |
| 30 - 39 minutes      | 21.1%  | 247   |
| 40 - 49 minutes      | 19.9%  | 233   |
| 50 - 59 minutes      | 12.9%  | 151   |
| 60 minutes or more   | 14.2%  | 166   |
| Total                | 100.0% | 1170  |

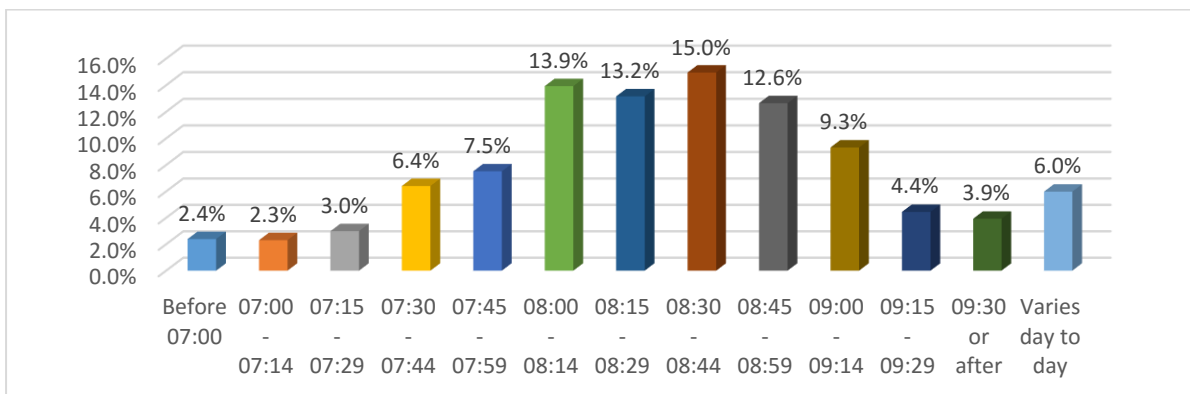


**Figure 3.14: Staff Journey Times (n=1170)**



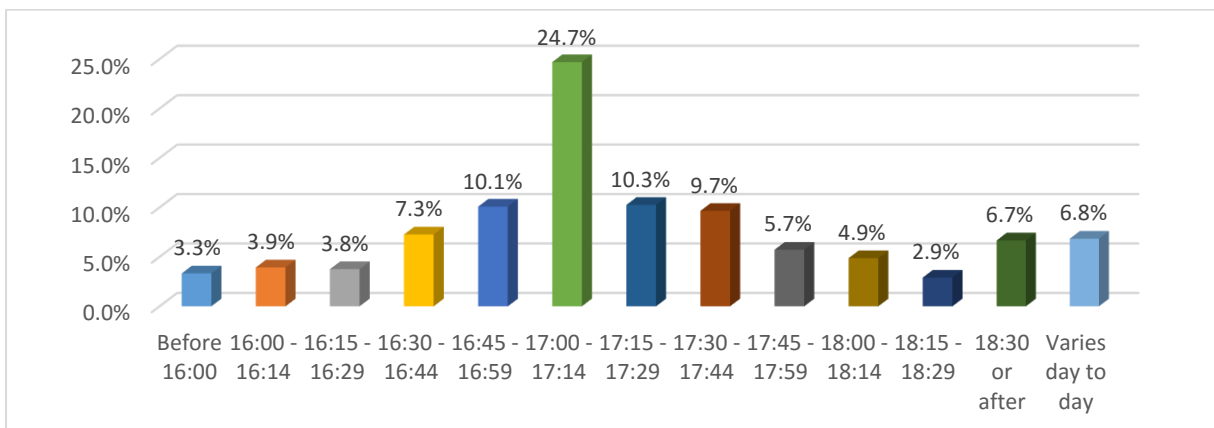
3.20 **Figure 3.15** shows that arrival times for staff are relatively spread out. The peak arrival time for staff is around 08.30 with 15% of staff arriving in this 15-minute interval. Over half of staff (55%) arrive between 08.00 and 9.00. Very few staff are in work before 07.30 (8%).

**Figure 3.15: Staff Usual Arrival Times (n=1170)**



3.21 Staff departure times are similarly spread out (**Figure 3.16**), with the exception of a larger peak in staff finishing work at 17.00 (25%). A similar proportion (55%) leave work in the peak departure hour between 16.45 and 17.45.

**Figure 3.16: Staff Usual Departure Times (n=1170)**





3.22 As many people may vary the mode they use to travel to work and indeed the first indicators of a sustainable modal shift can be in the travel mode people use more occasionally, staff and students are asked about these choices.

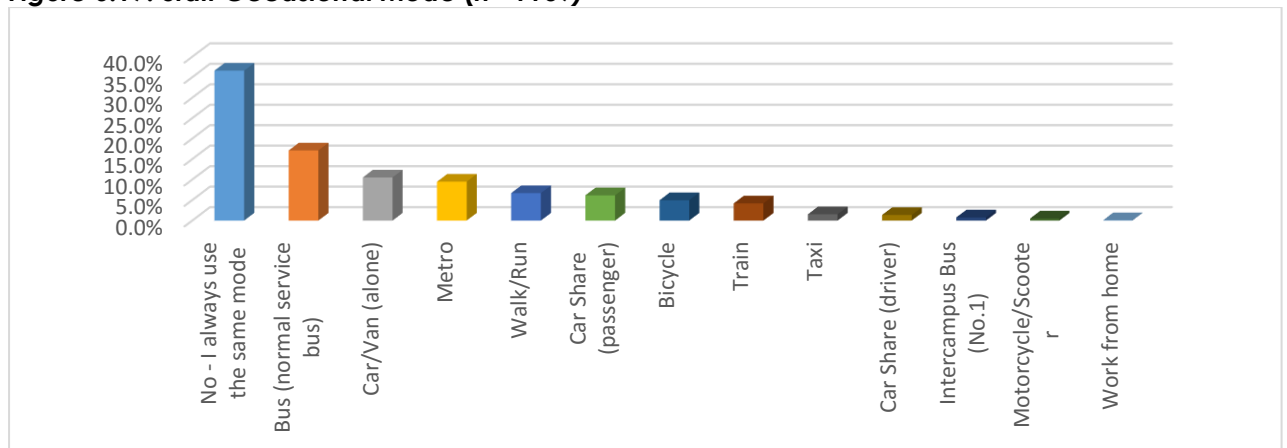
3.23 **Table 3.5** and **Figure 3.17** reveal that over a third of staff always use the same mode, suggesting a majority of two thirds vary how they travel. This is very positive as encouraging staff to travel by more sustainable modes on just one or a few days a week can make a significant reduction in demand for car parking and on actual emissions from travel.

3.24 The most popular occasional mode used by 18% of staff is the bus. The same proportion also occasionally walk or cycle. However, it should also be highlighted that 11% of staff occasionally drive by themselves.

**Table 3.5: Staff Occasional Mode (n= 1169)**

| Occasional Mode                 | %           | Count       |
|---------------------------------|-------------|-------------|
| No - I always use the same mode | 36.6%       | 428         |
| Bus (normal service bus)        | 17.1%       | 200         |
| Car/Van (alone)                 | 10.5%       | 123         |
| Metro                           | 9.5%        | 111         |
| Walk/Run                        | 6.7%        | 78          |
| Car Share (passenger)           | 6.2%        | 72          |
| Bicycle                         | 5.0%        | 58          |
| Train                           | 4.2%        | 49          |
| Taxi                            | 1.5%        | 18          |
| Car Share (driver)              | 1.4%        | 16          |
| Intercampus Bus (No.1)          | 0.8%        | 9           |
| Motorcycle/Scooter              | 0.5%        | 6           |
| Work from home                  | 0.1%        | 1           |
| <b>Total</b>                    | <b>100%</b> | <b>1169</b> |

**Figure 3.17: Staff Occasional Mode (n= 1169)**



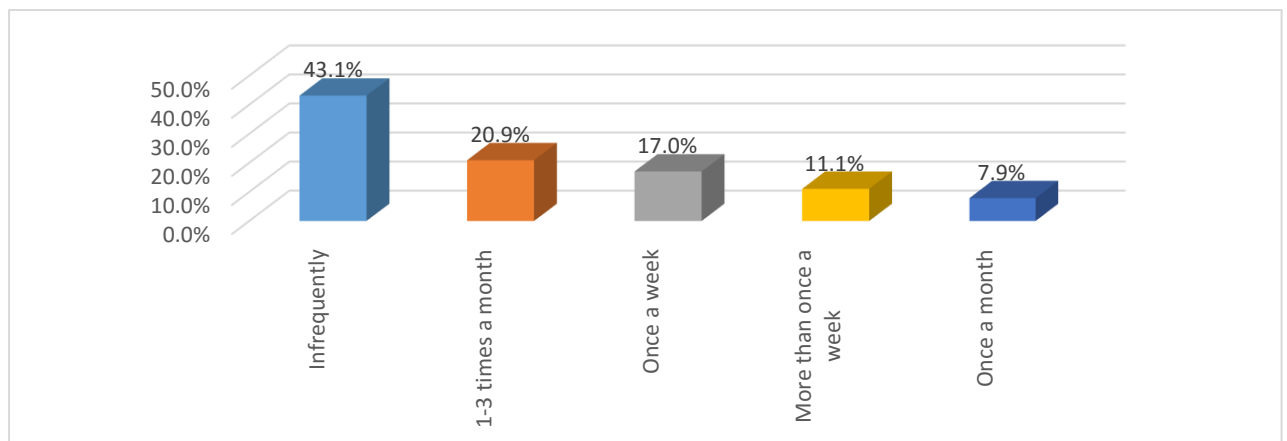


3.25 Staff were also asked how frequently they use these occasional modes. Of those who do travel by an occasional mode (i.e. after excluding those who do not from the analysis), over two fifths said they only use this mode infrequently. However, a significant 28% travel by their occasional mode once a week or more.

**Table 3.6: Staff Frequency of Occasional Mode (n= 751)**

| Frequency             | %     | Count |
|-----------------------|-------|-------|
| Infrequently          | 43.1% | 324   |
| 1-3 times a month     | 20.9% | 157   |
| Once a week           | 17.0% | 128   |
| More than once a week | 11.1% | 83    |
| Once a month          | 7.9%  | 59    |
| Total                 | 100%  | 751   |

**Figure 3.18: Staff Frequency of Occasional Mode (n=751)**



3.26 Interrogating this data further to look at lone drivers as a separate group, reveals that of the 371 lone drivers responding to this question, 205 (55%) do use an alternative mode occasionally. Of these drivers, 39 (19%) use this mode once a week or more. The most popular occasional mode for lone drivers overall is the bus, used by 21% of lone drivers and by 4% of lone drivers 1-3 times a month. However, when looking at the most popular mode for lone drivers used once a week or more, it is the Metro (3.3% of lone drivers).





**Figure 3.19: Occasional Mode and Frequency for Staff Lone Drivers (n= 371)**

| Mode                           | No - I always use the same mode | Bus (normal service bus) | Metro     | Train     | Bicycle   | Car Share Driver | Car Share Passenger | Motorcycle / Scooter | Taxi     | Walk / Run | Total      |
|--------------------------------|---------------------------------|--------------------------|-----------|-----------|-----------|------------------|---------------------|----------------------|----------|------------|------------|
| Frequency                      |                                 |                          |           |           |           |                  |                     |                      |          |            |            |
| N/A I always use the same mode | 166                             | 0                        | 0         | 0         | 0         | 0                | 0                   | 0                    | 0        | 0          | 166        |
| More than once a week          | 0                               | 1                        | 4         | 1         | 4         | 2                |                     | 1                    | 0        | 1          | 14         |
| Once a week                    | 0                               | 7                        | 8         | 2         | 5         | 1                | 2                   | 0                    | 0        | 0          | 25         |
| 1-3 times a month              | 0                               | 15                       | 9         | 8         | 6         | 1                | 1                   | 0                    | 0        | 3          | 43         |
| Once a month                   | 0                               | 9                        | 4         | 2         | 1         | 1                |                     | 1                    | 0        | 1          | 19         |
| Infrequently                   | 0                               | 45                       | 18        | 23        | 7         | 1                | 3                   |                      | 3        | 4          | 104        |
| <b>Total</b>                   | <b>166</b>                      | <b>77</b>                | <b>43</b> | <b>36</b> | <b>23</b> | <b>6</b>         | <b>6</b>            | <b>2</b>             | <b>3</b> | <b>9</b>   | <b>371</b> |

| Mode                           | No - I always use the same mode | Bus (normal service bus) | Metro        | Train       | Bicycle     | Car Share Driver | Car Share Passenger | Motorcycle / Scooter | Taxi        | Walk / Run  | Total         |
|--------------------------------|---------------------------------|--------------------------|--------------|-------------|-------------|------------------|---------------------|----------------------|-------------|-------------|---------------|
| Frequency                      |                                 |                          |              |             |             |                  |                     |                      |             |             |               |
| N/A I always use the same mode | 44.7%                           | 0.0%                     | 0.0%         | 0.0%        | 0.0%        | 0.0%             | 0.0%                | 0.0%                 | 0.0%        | 0.0%        | 44.7%         |
| More than once a week          | 0.0%                            | 0.3%                     | 1.1%         | 0.3%        | 1.1%        | 0.5%             | 0.0%                | 0.3%                 | 0.0%        | 0.3%        | 3.8%          |
| Once a week                    | 0.0%                            | 1.9%                     | 2.2%         | 0.5%        | 1.3%        | 0.3%             | 0.5%                | 0.0%                 | 0.0%        | 0.0%        | 6.7%          |
| 1-3 times a month              | 0.0%                            | 4.0%                     | 2.4%         | 2.2%        | 1.6%        | 0.3%             | 0.3%                | 0.0%                 | 0.0%        | 0.8%        | 11.6%         |
| Once a month                   | 0.0%                            | 2.4%                     | 1.1%         | 0.5%        | 0.3%        | 0.3%             | 0.0%                | 0.3%                 | 0.0%        | 0.3%        | 5.1%          |
| Infrequently                   | 0.0%                            | 12.1%                    | 4.9%         | 6.2%        | 1.9%        | 0.3%             | 0.8%                | 0.0%                 | 0.8%        | 1.1%        | 28.0%         |
| <b>Total</b>                   | <b>44.7%</b>                    | <b>20.8%</b>             | <b>11.6%</b> | <b>9.7%</b> | <b>6.2%</b> | <b>1.6%</b>      | <b>1.6%</b>         | <b>0.5%</b>          | <b>0.8%</b> | <b>2.4%</b> | <b>100.0%</b> |

### Staff Business Travel

3.27 As well as understanding the travel behaviour of staff when they are commuting to work, it is equally as important to examine how staff choose to travel on business whilst at work. Indeed, through travel and subsistence policies the University can probably influence these choices more than the commute. Moreover, a common reason given for driving into work can be the need to have a vehicle at work.

3.28 There is an even split between whether staff travel on business or not with 51% (593) of staff respondents saying they do and 49% (576) saying they don't. Not surprisingly staff are more likely to undertake local (0-3 miles) business trips regularly. The vast majority, (87%) of staff make long distance business trips, although they are less frequent than shorter ones. Interestingly half of staff respondents said they make international business trips.

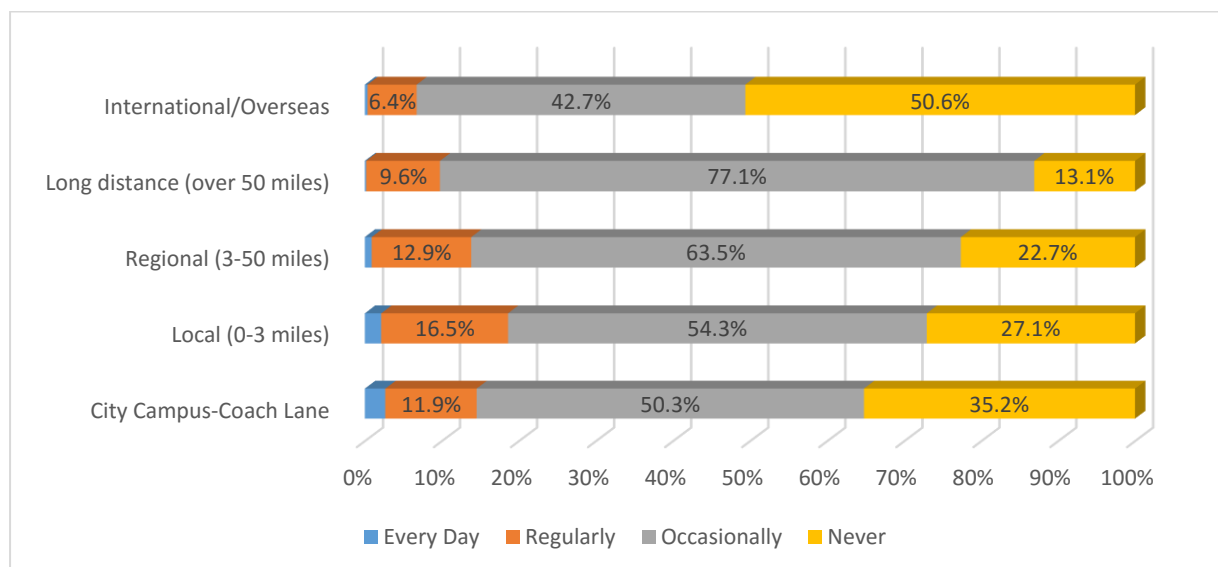
**Table 3.7: Frequency of Business Travel By Distance (n=565)**

| Frequency    | City Campus-Coach Lane | Local (0-3 miles) | Regional (3-50 miles) | Long distance (over 50 miles) | International/Overseas |
|--------------|------------------------|-------------------|-----------------------|-------------------------------|------------------------|
| Every Day    | 2.7%                   | 2.1%              | 0.9%                  | 0.2%                          | 0.4%                   |
| Regularly    | 11.9%                  | 16.5%             | 12.9%                 | 9.6%                          | 6.4%                   |
| Occasionally | 50.3%                  | 54.3%             | 63.5%                 | 77.1%                         | 42.7%                  |
| Never        | 35.2%                  | 27.1%             | 22.7%                 | 13.1%                         | 50.6%                  |





**Figure 3.20: Frequency of Business Travel By Distance (n=565)**



3.29 Staff were asked how they make business trips and this is compared for the different types of trip in **Table 3.8** and **Figure 3.21**. A substantial proportion of staff are making business trips in their own private vehicles i.e. grey fleet. This increases from 11% of long distance trips up to 41% of regional trips.

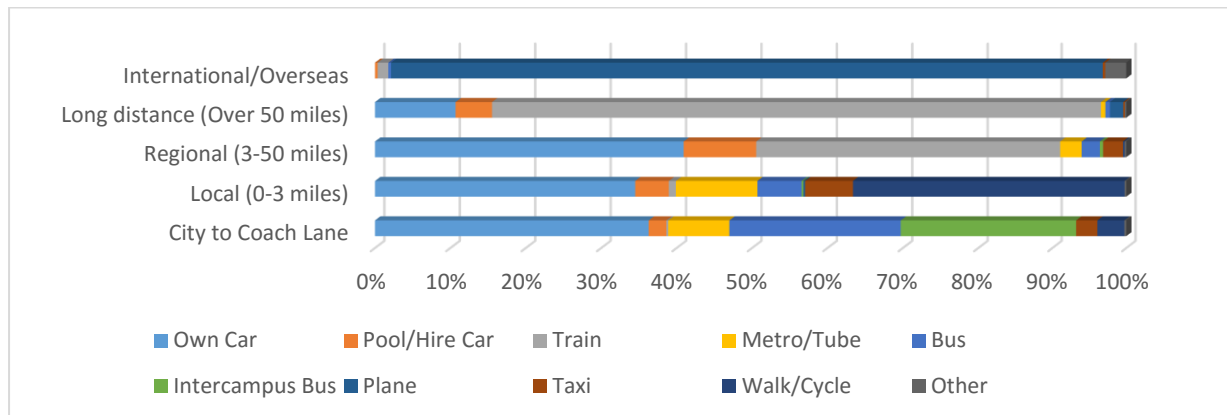
3.30 Over a third of staff are making inter-campus and local trips for work in their own cars. Further work to look at which of these journeys could and should be carried out using alternative modes and introducing policies or guidelines to influence this would be worthwhile.

**Table 3.8: Mode for Business Travel By Distance (n=565)**

| Mode            | City to Coach Lane | Local (0-3 miles) | Regional (3-50 miles) | Long distance (Over 50 miles) | International/Overseas |
|-----------------|--------------------|-------------------|-----------------------|-------------------------------|------------------------|
| Own Car         | 36.3%              | 34.5%             | 40.9%                 | 10.7%                         | 0.0%                   |
| Pool/Hire Car   | 2.3%               | 4.5%              | 9.6%                  | 4.8%                          | 0.4%                   |
| Train           | 0.3%               | 0.9%              | 40.5%                 | 81.0%                         | 1.4%                   |
| Metro/Tube      | 8.1%               | 10.8%             | 2.9%                  | 0.6%                          | 0.0%                   |
| Bus             | 22.7%              | 5.9%              | 2.5%                  | 0.6%                          | 0.4%                   |
| Intercampus Bus | 23.5%              | 0.2%              | 0.4%                  | 0.0%                          | 0.0%                   |
| Plane           | 0.0%               | 0.2%              | 0.0%                  | 1.8%                          | 94.7%                  |
| Taxi            | 2.9%               | 6.3%              | 2.7%                  | 0.2%                          | 0.4%                   |
| Walk/Cycle      | 3.7%               | 36.4%             | 0.2%                  | 0.0%                          | 0.0%                   |
| Other           | 0.3%               | 0.2%              | 0.2%                  | 0.2%                          | 2.8%                   |
| Sample (n)      | <b>383</b>         | <b>426</b>        | <b>447</b>            | <b>496</b>                    | <b>282</b>             |



**Figure 3.21: Mode for Business Travel By Distance (n=565)**



### Staff Mobike Usage

3.31 Mobikes were introduced in Newcastle on 16<sup>th</sup> October 2017. Mobike is the world's first and largest smart bike-sharing scheme. The orange and silver bikes are dotted around Newcastle and can be hired after downloading an app and picked up / left where the user chooses.

Just 1.4% (16) of staff have used the Mobikes to date. Of these 9 have used them just once, 4 have used them 2-3 times and a couple of staff members use them regularly for different journey purposes (1 weekly, 1 monthly). One respondent didn't provide further detail about using them. Respondents were asked which types of journey they have used them for and were able to select more than journey type.

**Table 3.9: Staff Use of Mobikes (n= 16)**

| Journey Type                   | Once     | 2-3 times | Once a Week | Once a Month |
|--------------------------------|----------|-----------|-------------|--------------|
| Exploring/fun                  | 5        | 1         | 0           | 0            |
| Travel to Uni                  | 1        | 1         | 1           | 0            |
| City Campus to Central Station | 1        | 0         | 0           | 0            |
| Travel During the Day at Uni   | 1        | 1         | 0           | 0            |
| Shopping                       | 0        | 1         | 0           | 1            |
| Going home from uni            | 1        | 0         | 0           | 1            |
| Going to the pub               | 0        | 0         | 1           | 0            |
| Visiting Friends/Family        | 0        | 0         | 0           | 1            |
| <b>Total</b>                   | <b>9</b> | <b>4</b>  | <b>2</b>    | <b>3</b>     |

3.32 From this point forward in the survey filters were applied so that staff were only presented with questions relevant to them based on answers given regarding how they usually travel to University.



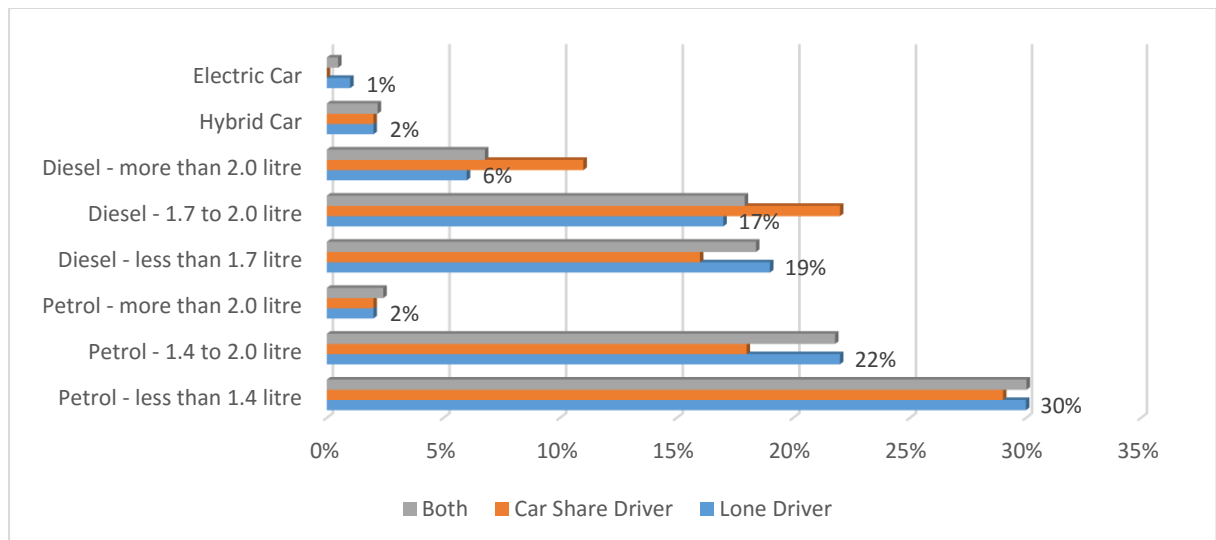
## Staff Car Users

3.33 Both staff who drive by themselves and as a car share driver were asked what sort of car they drive in terms of fuel type and engine size. This information is primarily used to calculate carbon emissions from the staff commute (see **Section 5**). However, it is also summarised in **Table 3.10** and shows that the most popular type of car amongst staff are small petrol cars. Lower proportions of staff are driving larger diesel engine cars. There are also a few staff with hybrids and electric vehicles.

**Table 3.10: Staff Car Type and Engine Size (n=368)**

| Car Type / Engine Size       | Lone Driver |     | Car Share Driver |     | Both  |     |
|------------------------------|-------------|-----|------------------|-----|-------|-----|
|                              | Count       | %   | Count            | %   | Count | %   |
| Petrol - less than 1.4 litre | 111         | 30% | 13               | 29% | 124   | 30% |
| Petrol - 1.4 to 2.0 litre    | 82          | 22% | 8                | 18% | 90    | 22% |
| Petrol - more than 2.0 litre | 9           | 2%  | 1                | 2%  | 10    | 2%  |
| Diesel - less than 1.7 litre | 69          | 19% | 7                | 16% | 76    | 18% |
| Diesel - 1.7 to 2.0 litre    | 64          | 17% | 10               | 22% | 74    | 18% |
| Diesel - more than 2.0 litre | 23          | 6%  | 5                | 11% | 28    | 7%  |
| Hybrid Car                   | 8           | 2%  | 1                | 2%  | 9     | 2%  |
| Electric Car                 | 2           | 1%  | 0                | 0%  | 2     | 0%  |

**Figure 3.22: Staff Car Type and Engine Size (n= 368)**



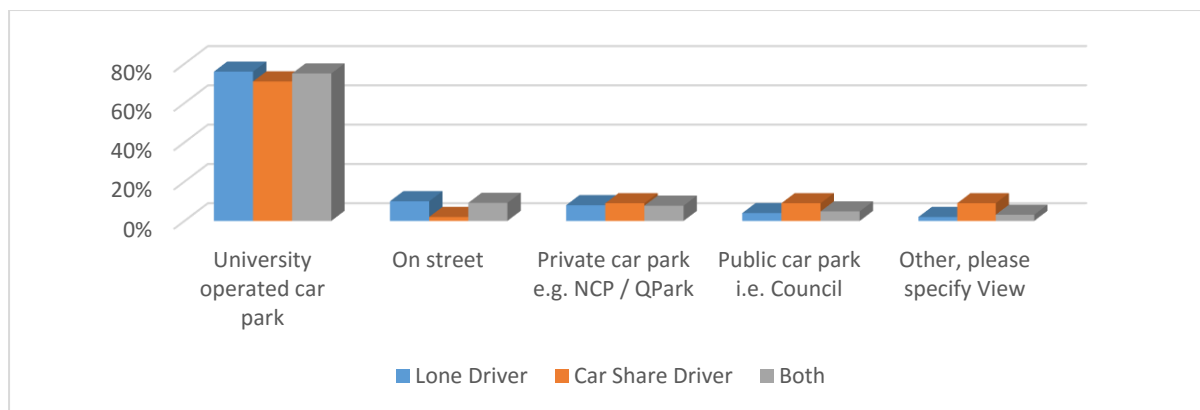
3.34 All staff drivers were asked where they park their car whilst working on Campus. The vast majority, three quarters of staff, park in a University operated car park. Much smaller proportions park off Campus either on street (9%) or other car parks (13%).



**Table 3.11: Where Staff Drivers Park (n=413)**

| Where                             | Lone Driver |             | Car Share Driver |             | Both       |             |
|-----------------------------------|-------------|-------------|------------------|-------------|------------|-------------|
|                                   | Count       | %           | Count            | %           | Count      | %           |
| University operated car park      | 278         | 76%         | 32               | 71%         | 310        | 75%         |
| On street                         | 37          | 10%         | 1                | 2%          | 38         | 9%          |
| Private car park e.g. NCP / QPark | 28          | 8%          | 4                | 9%          | 32         | 8%          |
| Public car park i.e. Council      | 16          | 4%          | 4                | 9%          | 20         | 5%          |
| Other, please specify View        | 9           | 2%          | 4                | 9%          | 13         | 3%          |
| <b>Total</b>                      | <b>368</b>  | <b>100%</b> | <b>45</b>        | <b>100%</b> | <b>413</b> | <b>100%</b> |

**Figure 3.23: Where Staff Drivers Park (n=413)**



3.35 Just staff who drive by themselves to work were asked what alternative modes they would consider using (**Table 3.12**). Half of staff who drive by themselves said they would not consider any other mode. On the one hand this is disappointing, although that does mean half of all staff who drive might use another mode, whether occasionally or all the time. The most popular alternative was bus, with 20% selecting this mode. Other modes were all similar in likelihood of being used as an alternative ranging from 5% for walking to 12% for train and car sharing.

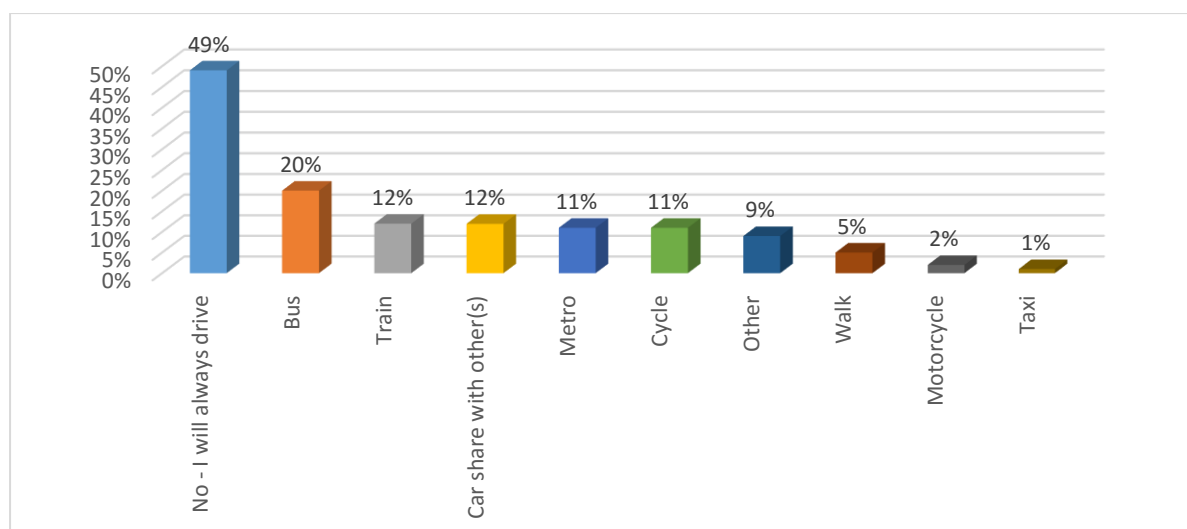
3.36 Indeed, as we have already seen in **Figure 3.19**, 55% of lone drivers do already use an alternative mode occasionally. Of those who already use an alternative mode occasionally, 38% use the bus to get to work which corroborates these results.



**Table 3.12: Staff Lone Driver Alternative Modes Considered (n=368)**

| Alternative Mode         | Count | %   |
|--------------------------|-------|-----|
| No - I will always drive | 182   | 49% |
| Bus                      | 74    | 20% |
| Train                    | 46    | 12% |
| Car share with other(s)  | 44    | 12% |
| Metro                    | 42    | 11% |
| Cycle                    | 40    | 11% |
| Other                    | 32    | 9%  |
| Walk                     | 18    | 5%  |
| Motorcycle               | 6     | 2%  |
| Taxi                     | 5     | 1%  |

**Figure 3.24: Staff Lone Driver Alternative Modes Considered (n=368)**



### Staff Car Sharers

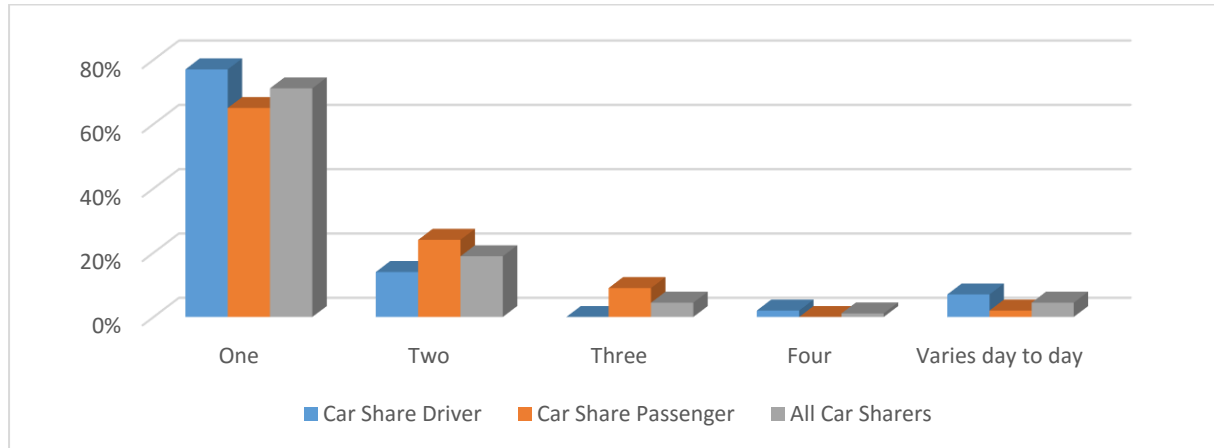
3.37 Car sharers were asked how many people they car share with and who they are. Most car pools consist of two people (71%) (Table 3.13 and Figure 3.25).

**Table 3.13: Number In Staff Car Sharing Arrangements (n= 90)**

| Number Sharing With | Car Share Driver |             | Car Share Passenger |             | All Car Sharers |             |
|---------------------|------------------|-------------|---------------------|-------------|-----------------|-------------|
|                     | Count            | %           | Count               | %           | Count           | %           |
| One                 | 34               | 77%         | 30                  | 65%         | 64              | 71%         |
| Two                 | 6                | 14%         | 11                  | 24%         | 17              | 19%         |
| Three               | 0                | 0%          | 4                   | 9%          | 4               | 4%          |
| Four                | 1                | 2%          | 0                   | 0%          | 1               | 1%          |
| Varies day to day   | 3                | 7%          | 1                   | 2%          | 4               | 4%          |
| <b>Total</b>        | <b>44</b>        | <b>100%</b> | <b>46</b>           | <b>100%</b> | <b>90</b>       | <b>100%</b> |



**Figure 3.25: Number Staff In Car Sharing Arrangements (n= 90)**

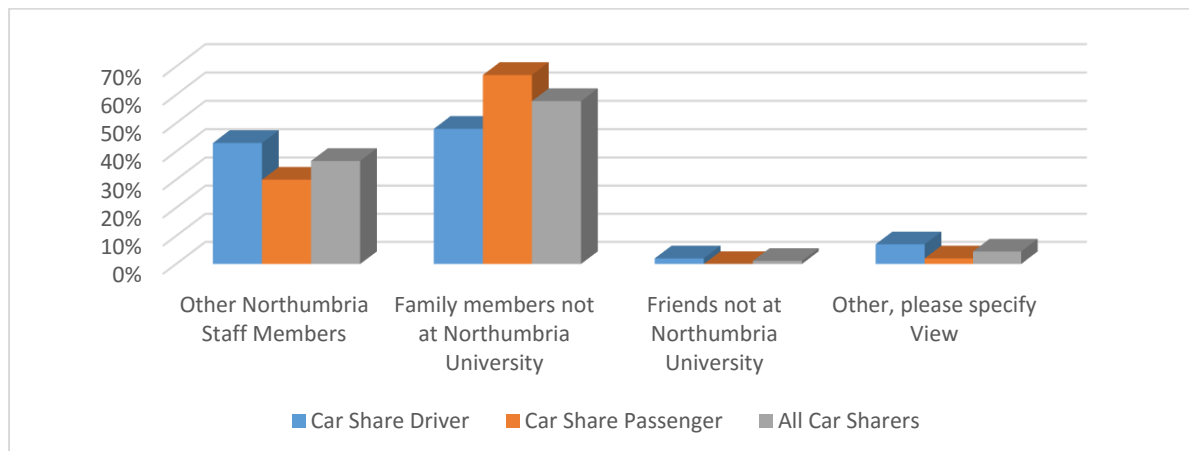


3.38 In terms of who staff car share with, family members not at the University are the most popular car share partners with 58% of all car pool arrangements working on this basis. This is particularly the case when looking at car share passengers in isolation (67%). Over a third of car shares (37%) are with other staff from the University.

**Table 3.14: Who Staff Car Sharers Share With (n=90)**

| Who Car Share With                           | Car Share Driver |             | Car Share Passenger |            | All Car Sharers |             |
|--|------------------|-------------|---------------------|------------|-----------------|-------------|
|  | Count            | %           | Count               | %          | Count           | %           |
| Other Northumbria Staff Members              | 19               | 43%         | 14                  | 30%        | 33              | 37%         |
| Northumbria University students              | 0                | 0%          | 0                   | 0%         | 0               | 0%          |
| Family members not at Northumbria University | 21               | 48%         | 31                  | 67%        | 52              | 58%         |
| Friends not at Northumbria University        | 1                | 2%          | 0                   | 0%         | 1               | 1%          |
| Other, please specify View                   | 3                | 7%          | 1                   | 2%         | 4               | 4%          |
| <b>Total</b>                                 | <b>44</b>        | <b>100%</b> | <b>46</b>           | <b>99%</b> | <b>90</b>       | <b>100%</b> |

**Figure 3.26: Who Staff Car Sharers Share With (n=90)**

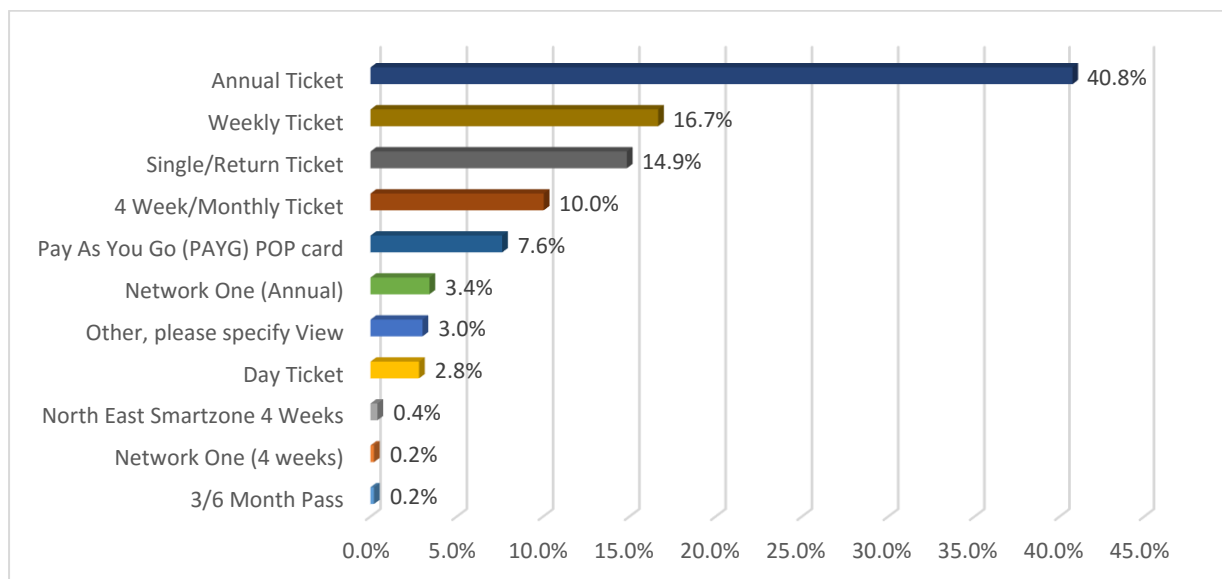




### Staff Public Transport Users

3.39 Staff public transport users were asked about their ticket types and what they think would improve their journey to work experience. Staff were asked whether they purchase their public transport tickets through the University's Corporate Travel Scheme or whether they buy them direct from the operator. Of the transport users surveyed, 45% buy them via the Staff Corporate Travel Scheme. It is a positive result that so many staff are purchasing annual passes (41%) which is likely a direct result of there being a popular Staff Corporate Travel Scheme.

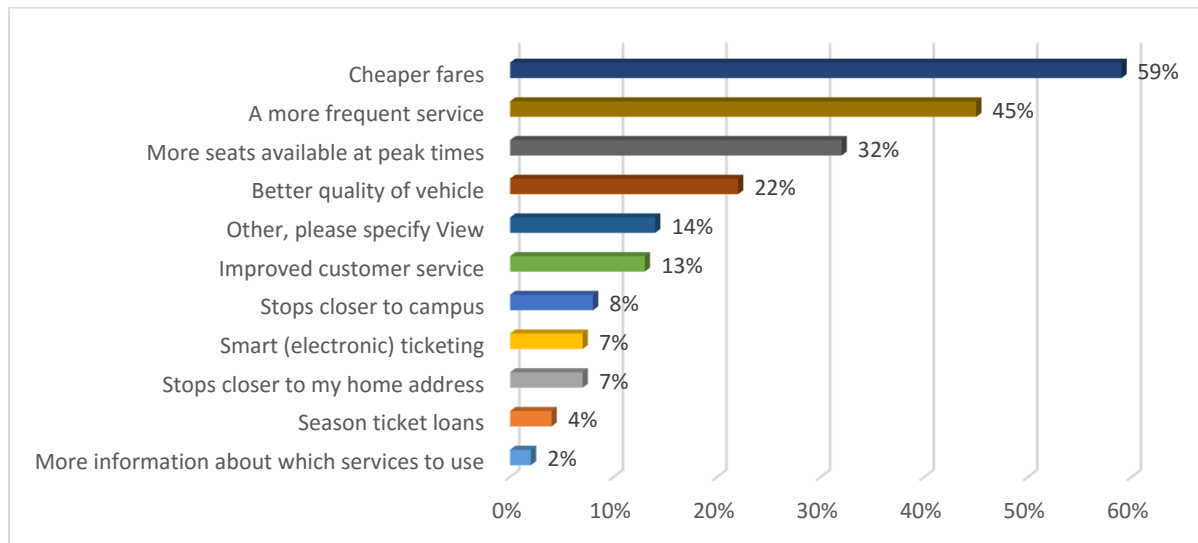
**Figure 3.27: Staff Public Transport Ticket Type (n=498)**



3.40 Asking staff who already travel by public transport what improvements they would like to see for their journey to work gives a valid insight based on existing users' experiences. All car users were also asked what public transport improvements might incentivise them to try these modes later in the survey (**Figure 3.28**). Existing public transport users would like to see cheaper fares as their top priority (59%), closely followed by more frequent services and more seats.



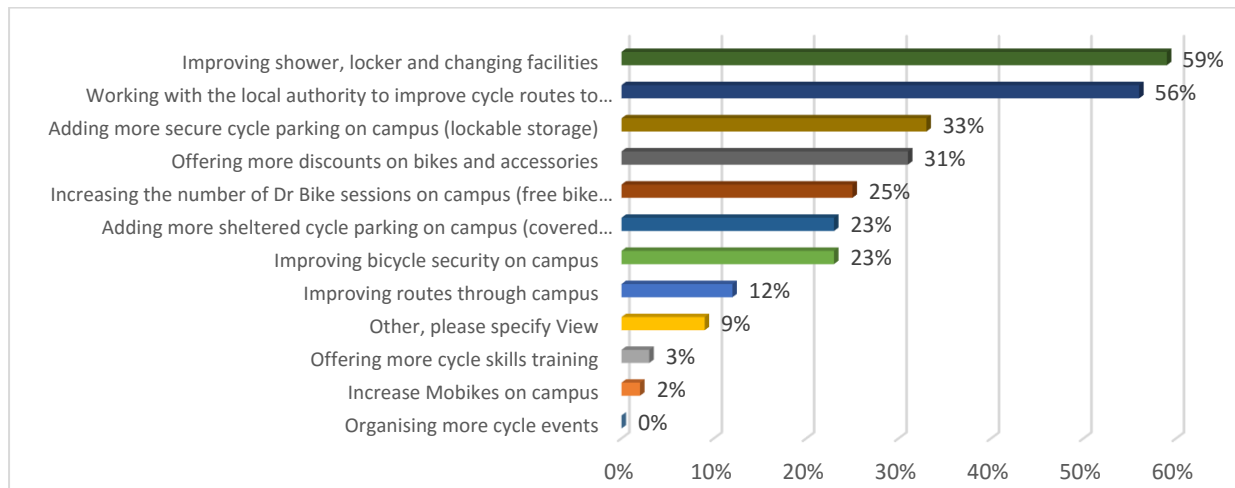
**Figure 3.28: Staff Public Transport Improvements (n= 498)**



### Staff Cyclists

3.41 Existing cyclists were also asked what improvements they would like to see for their cycle to work. Cyclists would prioritise improving the shower, locker and changing facilities on campus (59%) then working with the local authority to improve cycle routes (56%), then increase the provision of lockable cycle storage on campus (33%).

**Figure 3.29: Existing Staff Cyclists' Preferred Improvements (n= 64)**



### Potential of Sustainable Transport Incentives

3.42 The next section of the report asked survey respondents what incentives would appeal to them to encourage them to try alternative travel modes. Lone drivers were asked what would encourage them to car share, all car users were asked their opinions about public transport

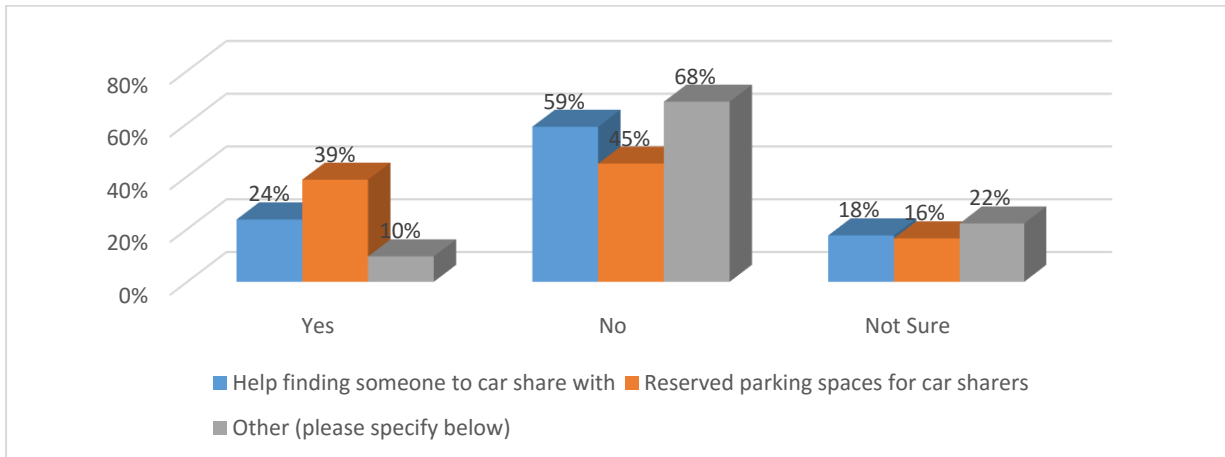




incentives and all travel mode users (except existing walkers/cyclists) were asked what would encourage them to walk and cycle.

- 3.43 Lone drivers would be more encouraged to car share by reserved car parking spaces (39%) than help identifying someone to share with (24%).

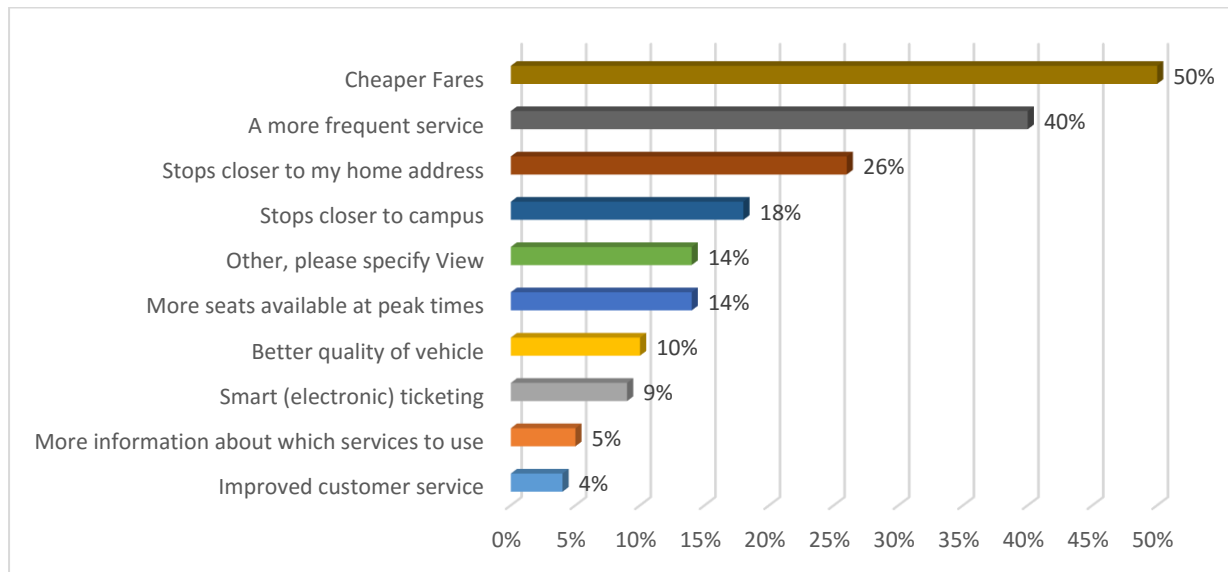
**Figure 3.30: Potential Car Share Measures (n= 347 – staff lone drivers)**



- 3.44 When staff car users were asked what measures might encourage them to use public transport, they were presented with a list of measures and asked to select up to three. They also given the option of specifying an 'other' measure.
- 3.45 The most popular incentive was cheaper fares, selected by half of car users, followed by more frequent services (40%). These are the same top two as existing public transport users. The third most popular option was stops closer to their home location (as opposed to more seats available), no doubt reflecting that some of this group do not live on or near good public transport links.

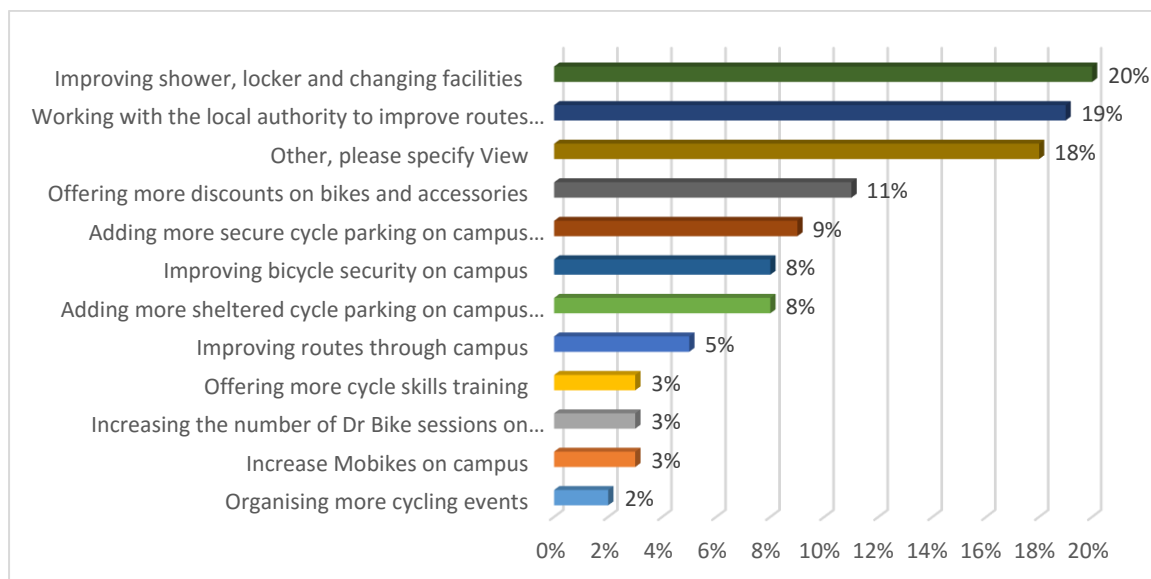


**Figure 3.31: Potential Public Transport Measures (n= 457 – staff car users)**



3.46 In terms of encouraging more staff to walk or cycle the most effective incentive from the list of measures presented is likely to be improving shower, locker and changing facilities (20%), then working with the Local Authority to improve routes (again the same as existing active travellers) (19%). The third most popular option selected was other (18%). When looking at the responses specified most answers stated reasons why they cannot cycle and most referred to living too far away. Of those who did suggest measures they suggested more storage facilities for equipment.

**Figure 3.32: Potential Walking/Cycling Measures (n= 963 – all staff)**



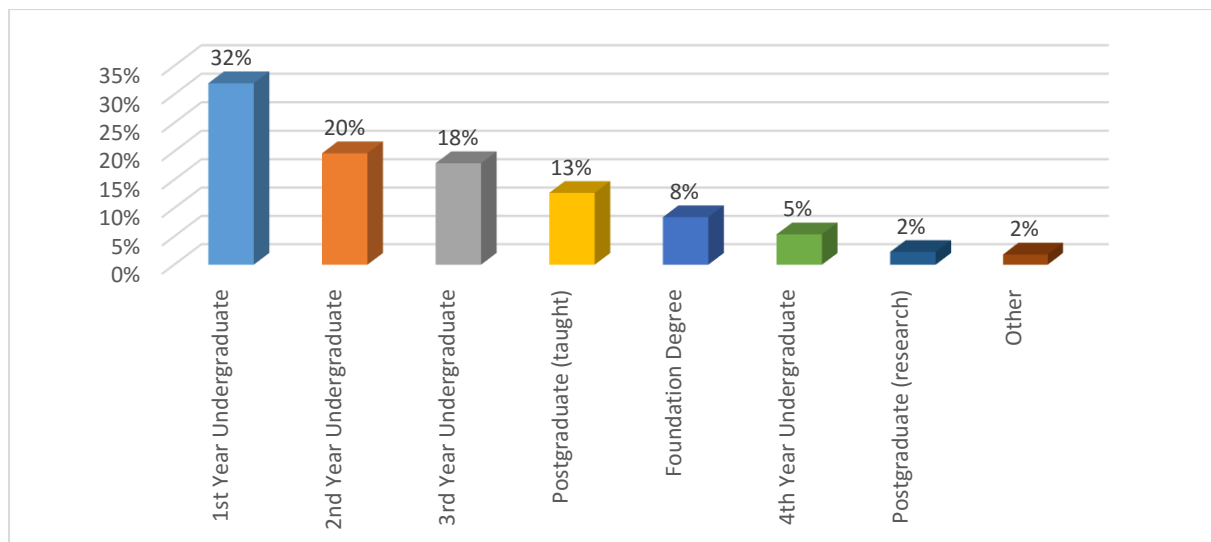


## 4. STUDENT SURVEY RESULTS

### Student Characteristics

- 4.1 Students completing the travel survey were asked question about themselves and their course before finding out about the different journeys they make to the University. Students were asked about whether and how they travel at the start of the academic year, to a more permanent address throughout the year as well as their daily/regular commute to campus for studying.
- 4.2 Just under a third of students responding to the survey were first year undergraduates, a fifth were in their second year and just under a fifth were in their third year. Postgraduates made up 13% of respondents (**Figure 4.1**)

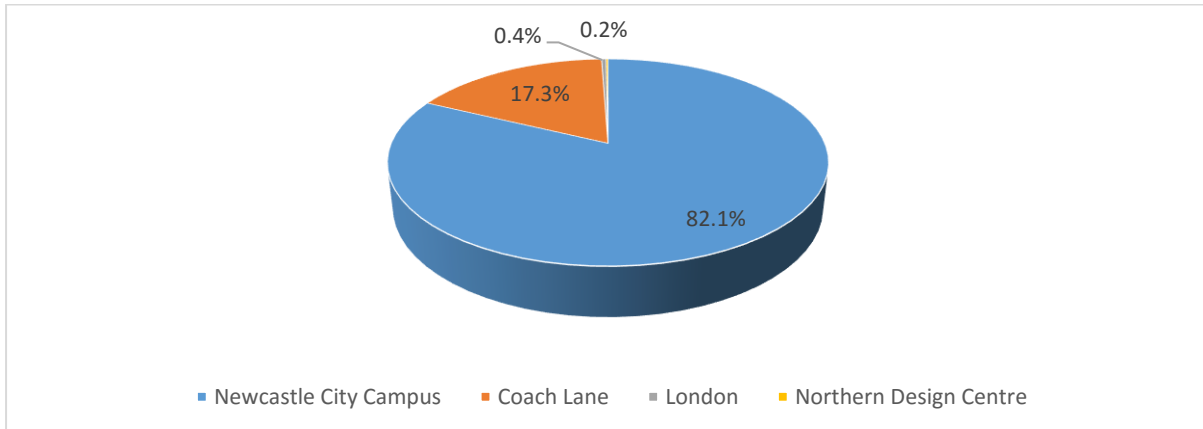
**Figure 4.1: Student Year of Study (n= 1775)**



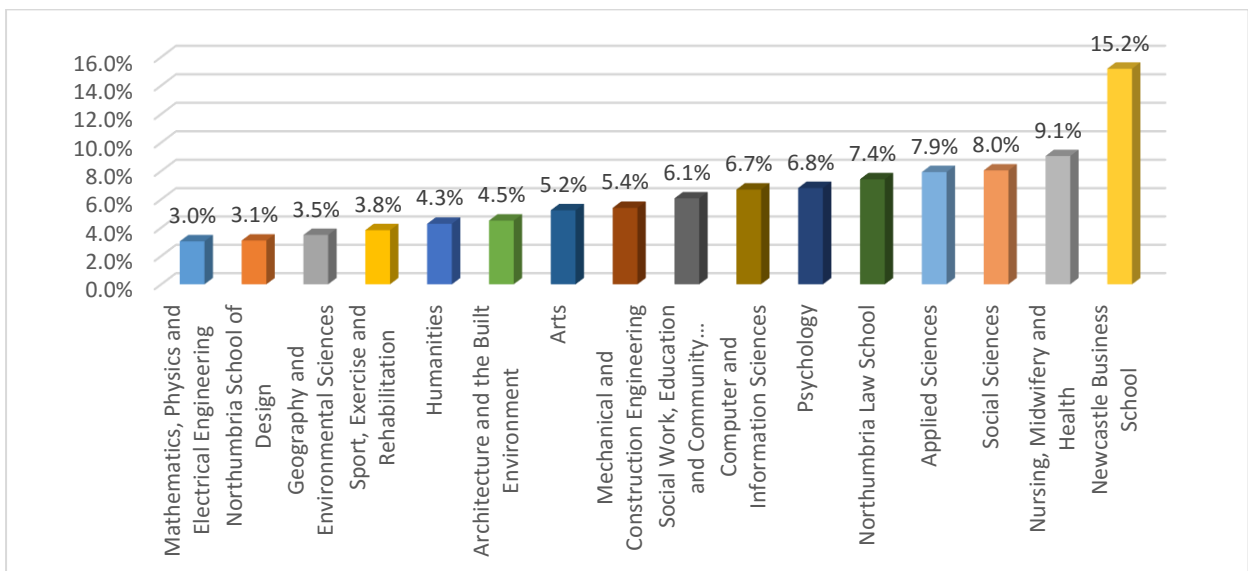
- 4.3 The majority of student respondents are based at the Newcastle City Campus (82%) with 17% based at Coach Lane and just seven students based in London completed the survey. Additionally, three students specified the Northern Design Centre in Gateshead as their base campus (**Figure 4.2**).
- 4.4 Students were asked to indicate what subject area their course is categorised under (**Figure 4.3**). The highest proportion of responses came from students studying courses at the Newcastle Business School (15%), followed by Nursing, Midwifery and Health (9%), then Social Sciences (8%) and Applied Sciences (8%).



**Figure 4.2: Student Base Campus (n=1777)**



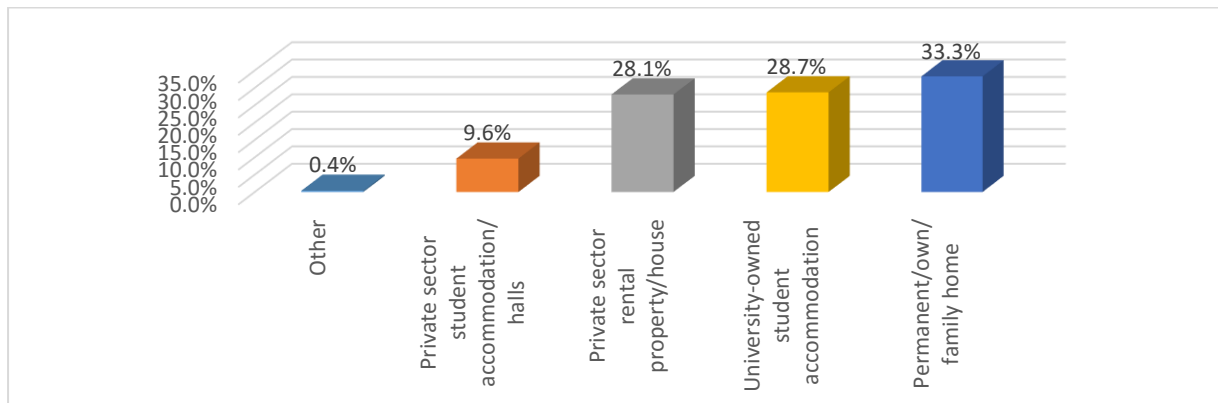
**Figure 4.3: Student Subject Area (n= 1779)**



4.5 Finally, before moving onto questions about travel and mode, students were asked about the type of the accommodation they live in during term-time (**Figure 4.4**). A third of respondents said that they live at their permanent own or family home. Similar proportions live in University owned accommodation (29%) and private rented property (28%). Later in the survey, those who said they live in University accommodation were asked which one. The results are shown in **Table 4.1** and **Figure 4.5**. Nearly half live in Trinity Square.



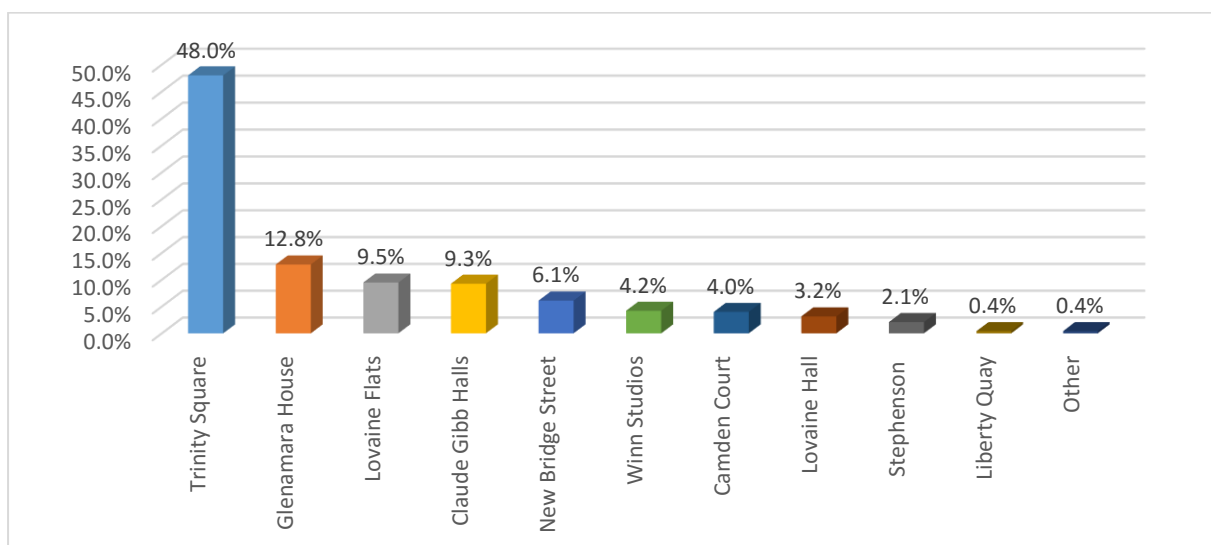
**Figure 4.4: Student Accommodation Type (n= 1674)**



**Table 4.1: Student Accommodation Name (n= 475)**

| Accommodation     | %     | Count |
|-------------------|-------|-------|
| Trinity Square    | 48.0% | 228   |
| Glenamara House   | 12.8% | 61    |
| Lovaine Flats     | 9.5%  | 45    |
| Claude Gibb Halls | 9.3%  | 44    |
| New Bridge Street | 6.1%  | 29    |
| Winn Studios      | 4.2%  | 20    |
| Camden Court      | 4.0%  | 19    |
| Lovaine Hall      | 3.2%  | 15    |
| Stephenson        | 2.1%  | 10    |
| Liberty Quay      | 0.4%  | 2     |
| Other             | 0.4%  | 2     |
| Total             | 100%  | 475   |

**Figure 4.5: Student Accommodation Name (n= 475)**





4.6 Although the biggest opportunity the University has to influence the travel behaviour habits of students is for their regular / daily commute to campus it is also important to consider how students initially travel to University (if indeed they do so and do not have the same address year-round) and how they make journeys back to any more permanent address throughout the year. Pre-arrival information sent to students can have a significant influence over whether students bring a car or bike with them for instance, which then has a knock-on influence over how they travel around Newcastle on a daily basis.

### **Student Mode at the Start of the Academic Year and Home During Term**

4.7 Students were asked how they travel to University at the start of the academic year. Of the 1,769 students who answered this question, 19% said that they do not travel home because they have the same term-time and permanent address. Experience from other HE institutions is suggesting that 'Commuter Students', those who remain at their permanent or family home to study rather than moving away is an increasing proportion and an increasing trend, possibly influenced by increasing fees and the economic climate.

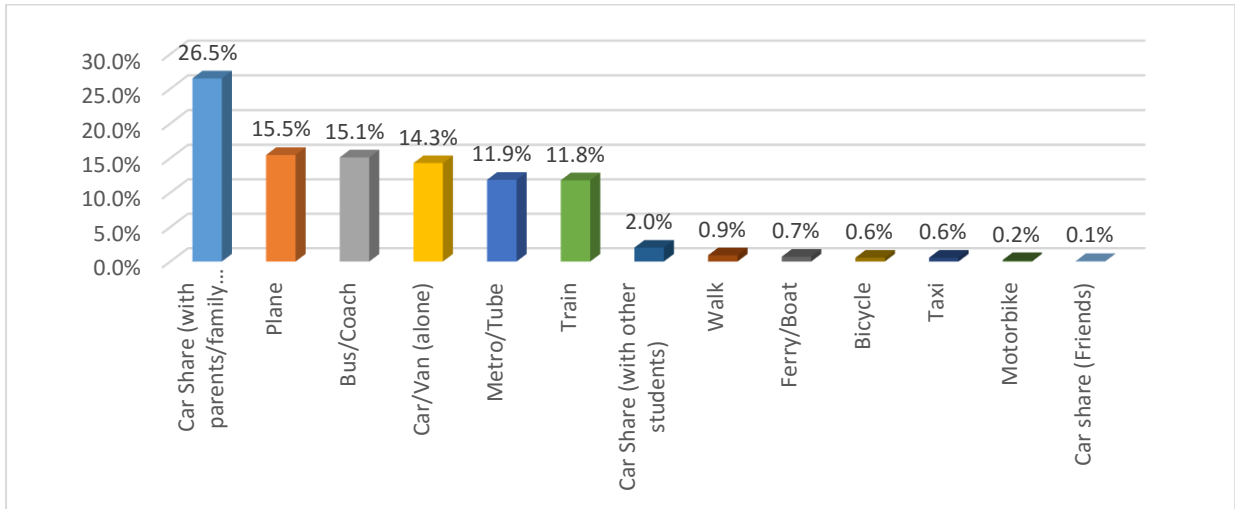
4.8 When this group of 'Commuter Students' are excluded the mode split for the start of the academic year journey is shown in **Table 4.1 and Figure 4.6**. The most popular way of getting to University at the start of academic year for those students who do so, is car sharing with parents or family, chosen by 27% of students. Including car share arrangements with other students and friends increases this proportion to 29%.

**Table 4.1: Student Mode at the Start of the Academic Year (n= 1442)**

| <b>Mode</b>                            | <b>%</b>    | <b>Count</b> |
|--|-------------|--------------|
| Car Share (with parents/family member) | 26.5%       | 382          |
| Plane                                  | 15.5%       | 223          |
| Bus/Coach                              | 15.1%       | 218          |
| Car/Van (alone)                        | 14.3%       | 206          |
| Metro/Tube                             | 11.9%       | 171          |
| Train                                  | 11.8%       | 170          |
| Car Share (with other students)        | 2.0%        | 29           |
| Walk                                   | 0.9%        | 13           |
| Ferry/Boat                             | 0.7%        | 10           |
| Bicycle                                | 0.6%        | 8            |
| Taxi                                   | 0.6%        | 8            |
| Motorbike                              | 0.2%        | 3            |
| Car share (Friends)                    | 0.1%        | 1            |
| <b>Total</b>                           | <b>100%</b> | <b>1442</b>  |

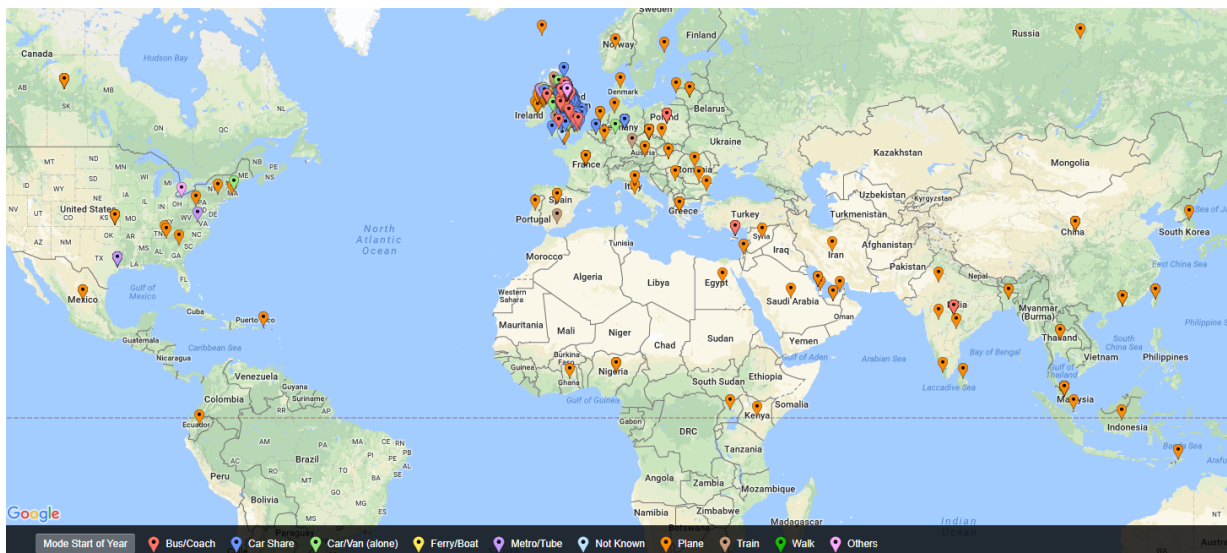


**Figure 4.6: Student Mode at the Start of the Academic Year (n= 1442)**



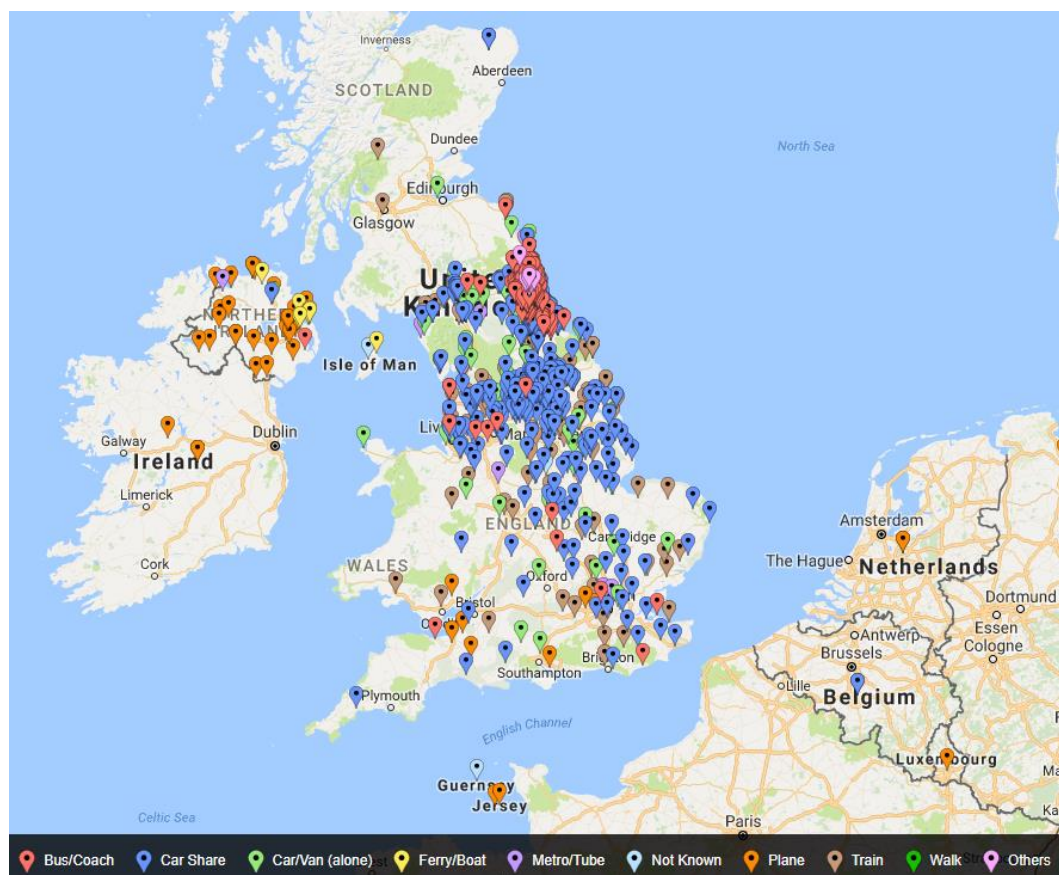
- 4.9 Considering all public transport modes together, these account for 40% of student journeys at the start of the year, with 15% arriving by bus, 12% by Metro and 12% by train. A significant proportion fly to the University at the start of the year (16%), the second most popular mode.
- 4.10 Student postcodes and the mode they use to travel to University at the start of the year have been mapped and are shown in **Figures 4.7a-b**. The spread of international students travelling by plane from around the world is immediately evident. The spread of car sharers across the UK stands out as do the concentrations of bus users closer to Newcastle.

**Figure 4.7a: Map of Student Non Term-time Postcodes and Travel Mode at the Start of the Year**





**Figure 4.7b: Map of Student Non Term-time Postcodes and Travel Mode at the Start of the Year**



- 4.11 Students were also asked how often they travel 'home' during an academic year and by what mode of travel if they do. The responses are summarised in **Table 4.2**. Of the 1,772 students who answered these questions, more than in the previous question (42.5%) said that they live at the same address during term-time and holidays or do not go home, suggesting there are a significant proportion of students who remain in Newcastle throughout the academic year even if they do have a permanent address elsewhere. The responses from the students who do travel home are summarised in **Table 4.3** and **Figure 4.8**.
- 4.12 Of those who do return home the most popular mode to do so is by train (40%), then plane (25%) then bus (14%). These proportions change when mode data is cross tabulated with the frequency with which students make these journeys. For those who travel home every weekend, they tend to do so by bus (29%) or car alone (23%). Journeys home *most* weekends are more often by train (38%), then bus (26%). In other words, the more often students travel home the more likely they are to drive by themselves, less regular trips tend to be by train and very rare trips by plane.



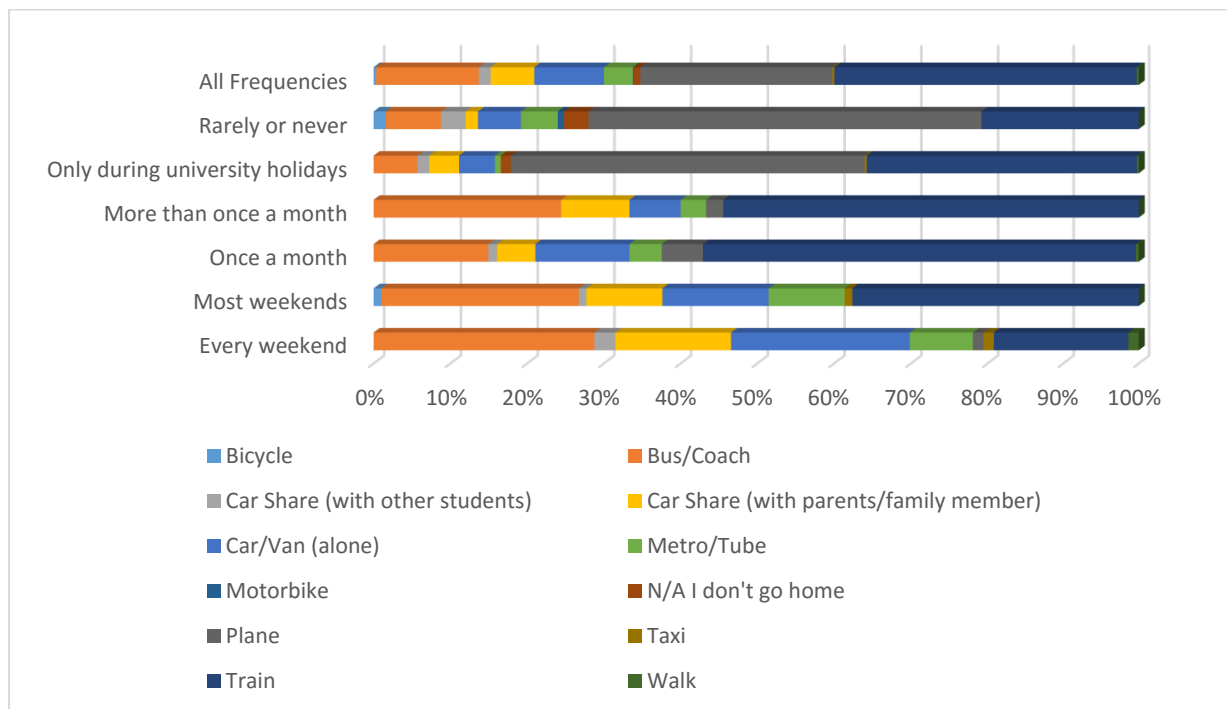


**Table 4.3: Mode and Frequency of Journeys Home During Term-time (n= 1036)**

(Note: These figures are for the 57% of students who do make journeys home during term-time. 47% do not)

| Mode                                   | Every weekend | Most weekends | Once a month | More than once a month | Only during university holidays | Rarely | All Frequencies |
|--|---------------|---------------|--------------|------------------------|---------------------------------|--------|-----------------|
| Bicycle                                | 0.0%          | 1.0%          | 0.0%         | 0.0%                   | 0.0%                            | 1.7%   | 0.3%            |
| Bus/Coach                              | 28.8%         | 25.7%         | 14.9%        | 24.4%                  | 5.8%                            | 7.4%   | 13.5%           |
| Car Share (with other students)        | 2.7%          | 1.0%          | 1.1%         | 0.0%                   | 1.6%                            | 3.3%   | 1.6%            |
| Car Share (with parents/family member) | 15.1%         | 9.9%          | 5.0%         | 8.9%                   | 3.9%                            | 1.7%   | 5.7%            |
| Car/Van (alone)                        | 23.3%         | 13.9%         | 12.3%        | 6.7%                   | 4.7%                            | 5.8%   | 9.2%            |
| Metro/Tube                             | 8.2%          | 9.9%          | 4.2%         | 3.3%                   | 0.8%                            | 5.0%   | 3.8%            |
| Motorbike                              | 0.0%          | 0.0%          | 0.0%         | 0.0%                   | 0.0%                            | 0.8%   | 0.1%            |
| Plane                                  | 1.4%          | 0.0%          | 5.4%         | 2.2%                   | 46.7%                           | 52.9%  | 25.2%           |
| Taxi                                   | 1.4%          | 1.0%          | 0.0%         | 0.0%                   | 0.3%                            | 0.0%   | 0.3%            |
| Train                                  | 17.8%         | 37.6%         | 56.7%        | 54.4%                  | 36.0%                           | 21.5%  | 40.0%           |
| Walk                                   | 1.4%          | 0.0%          | 0.4%         | 0.0%                   | 0.3%                            | 0.0%   | 0.3%            |
| Sample (n)                             | 73            | 101           | 261          | 90                     | 386                             | 125    | 1036            |

**Figure 4.8: Mode and Frequency of Journeys Home During Term-time**

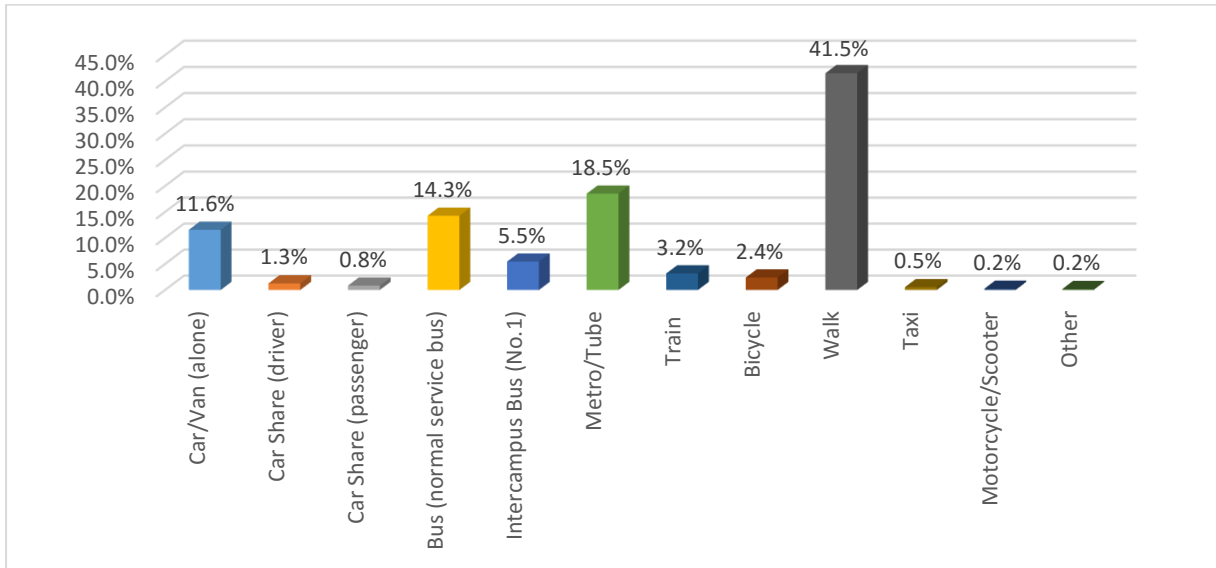




## Student Main Travel Mode

4.13 Arguably the most important and influenceable journey is the one students make on a regular or daily basis to campus for their studies and other University activities. The mode split for students' travel to University during term-time is shown in **Figure 4.9** for all Campus sites combined.

**Figure 4.9: Student Main Mode – All Campuses (n= 1668)**

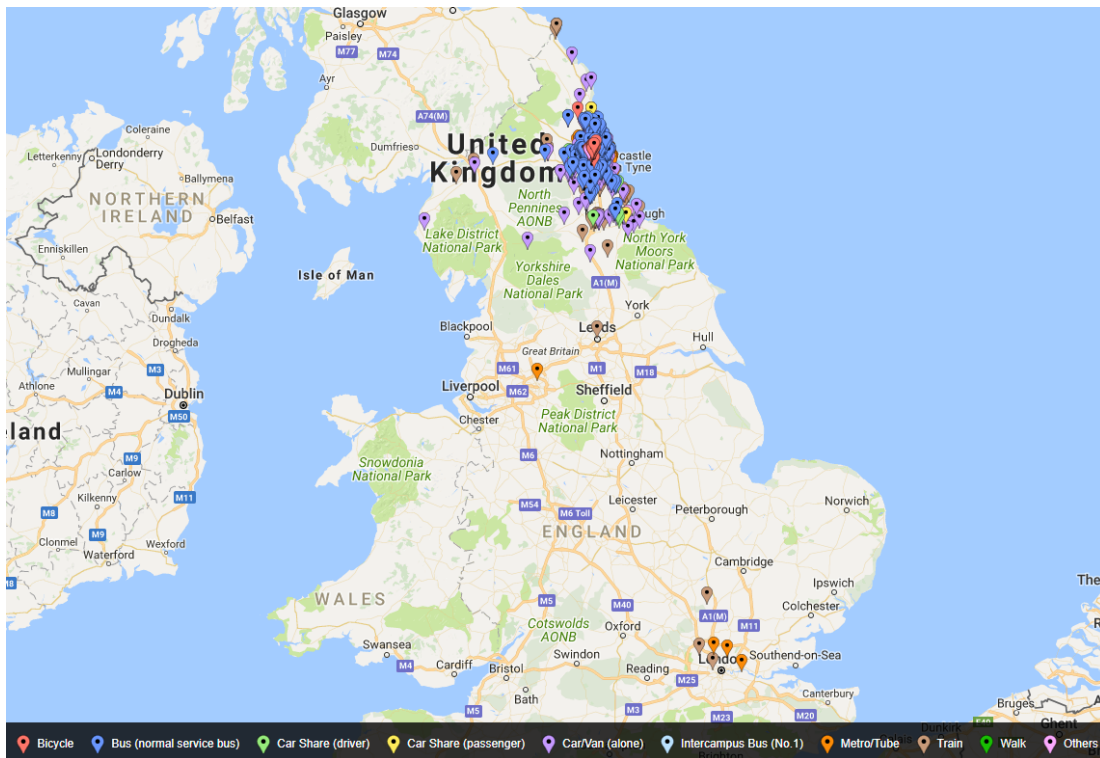


4.14 The most popular mode by far, for students is to walk, chosen by 42% of all students. The next most popular mode is Metro used by 19% of students, then a normal service bus (14%). Combined with the Intercampus service, a fifth of all students use the bus to get to University. Over two-fifths of students usually travel to University on public transport (41%). Cycling is relatively low at 2% and lower than staff (6%). Car use overall is relatively low at 14% for all Campuses.

4.15 **Figure 4.10** shows the distribution of all student postcodes and the mode they use to travel to University. The students based at London Campus are included for completeness, but more detailed mapping of the main two campuses is provided in the following sections.

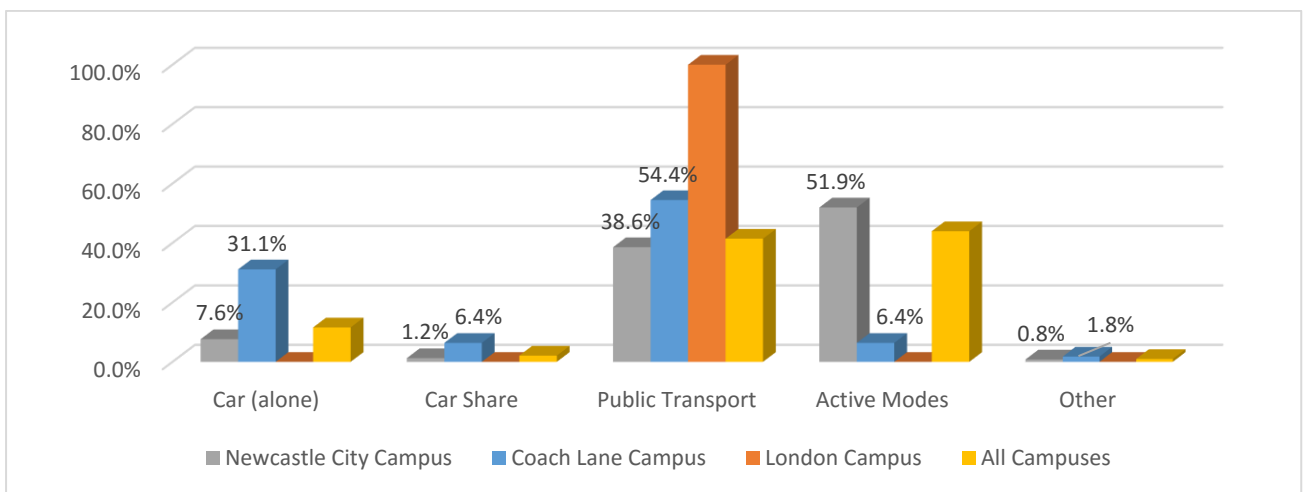


**Figure 4.10: Map of All Students Main Mode and Term-time Postcodes**



4.16 The mode split varies between the two main Campuses as conveyed in **Figure 4.11** and the sections below. Lone drivers account for only 8% of students based at Newcastle Campus compared to 31% at Coach Lane. This is largely attributable to the much higher proportion of students using active modes to get to Newcastle Campus where 52% of students usually walk/cycle, compared to just 6% of students based at Coach Lane Campus.

**Figure 4.11: Student Term-time Main Mode (All) (n= 1668)**



4.17 A more detailed breakdown of students' main mode by Campus is provided in **Table 4.4** and **Figure 4.12**. Cross tabulating modes by campus reveals some distinct variations. For example,

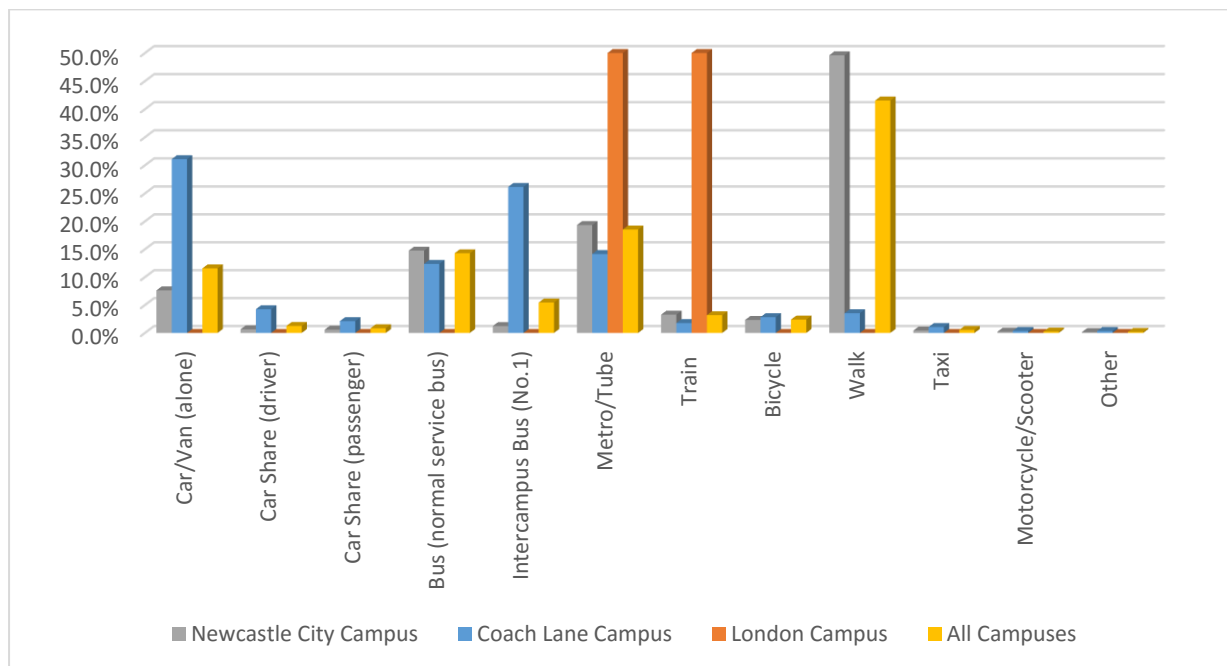


although 6% of all students use the intercampus bus to get to University, this increases to 26% of Coach Lane students and is the second most popular mode after single occupancy car use. The biggest difference, as already alluded to is in the proportions walking to Newcastle City (50%) contrasted with only 4% waking to Coach Lane. However, cycling is very slightly higher at Coach Lane (3%) compared to Newcastle City (2%). The 6 responses for London campus are included but quoted with caution as this is by no means a representative sample.

**Table 4.4: Student Term-time Main Mode (By Campus) (n= 1668)**

| Mode                     | Newcastle City Campus | Coach Lane Campus | London Campus | All Campuses |
|--------------------------|-----------------------|-------------------|---------------|--------------|
| Car/Van (alone)          | 7.6%                  | 31.1%             | 0.0%          | 11.6%        |
| Car Share (driver)       | 0.7%                  | 4.2%              | 0.0%          | 1.3%         |
| Car Share (passenger)    | 0.6%                  | 2.1%              | 0.0%          | 0.8%         |
| Bus (normal service bus) | 14.7%                 | 12.4%             | 0.0%          | 14.3%        |
| Intercampus Bus (No.1)   | 1.2%                  | 26.1%             | 0.0%          | 5.5%         |
| Metro/Tube               | 19.3%                 | 14.1%             | 50.0%         | 18.5%        |
| Train                    | 3.3%                  | 1.8%              | 50.0%         | 3.2%         |
| Bicycle                  | 2.3%                  | 2.8%              | 0.0%          | 2.4%         |
| Walk                     | 49.6%                 | 3.5%              | 0.0%          | 41.5%        |
| Taxi                     | 0.4%                  | 1.1%              | 0.0%          | 0.5%         |
| Motorcycle/Scooter       | 0.2%                  | 0.4%              | 0.0%          | 0.2%         |
| Other                    | 0.1%                  | 0.4%              | 0.0%          | 0.2%         |
| <b>Total</b>             | <b>100%</b>           | <b>100%</b>       | <b>100%</b>   | <b>100%</b>  |

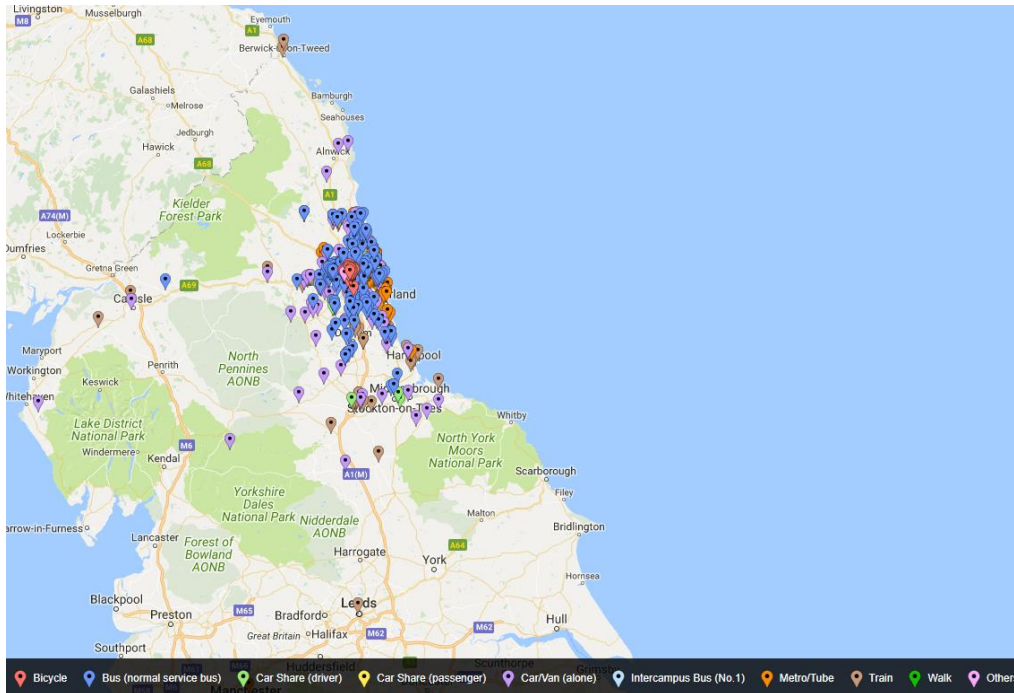
**Figure 4.12: Student Term-time Main Mode (By Campus) (n= 1668)**



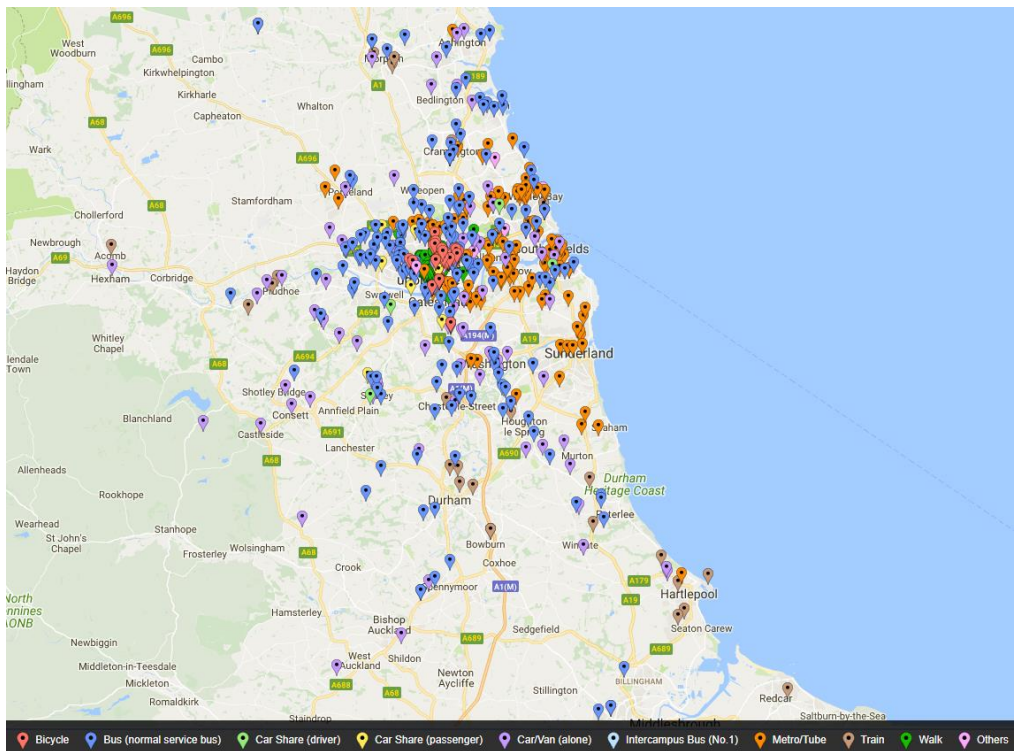


4.18 The postcodes and modes of students base at Newcastle City Campus have been mapped in **Figures 4.13a-c**. The dominance of bus use from around Tyne and Wear is immediately evident in **4.13a**. Zoomed in versions show those cycling and walking more clearly (**4.13b-c**).

**Figure 4.13a: Map of Student Main Mode and Term-time Postcode – Newcastle City Campus**



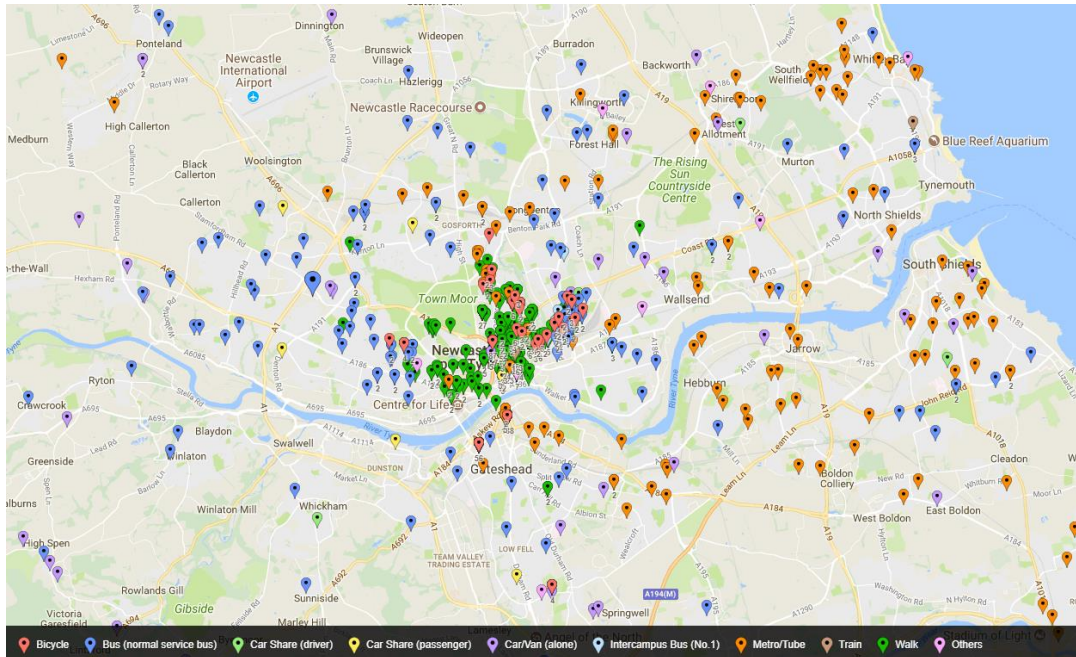
**Figure 4.13b: Map of Student Main Mode and Term-time Postcode – Newcastle City Campus**





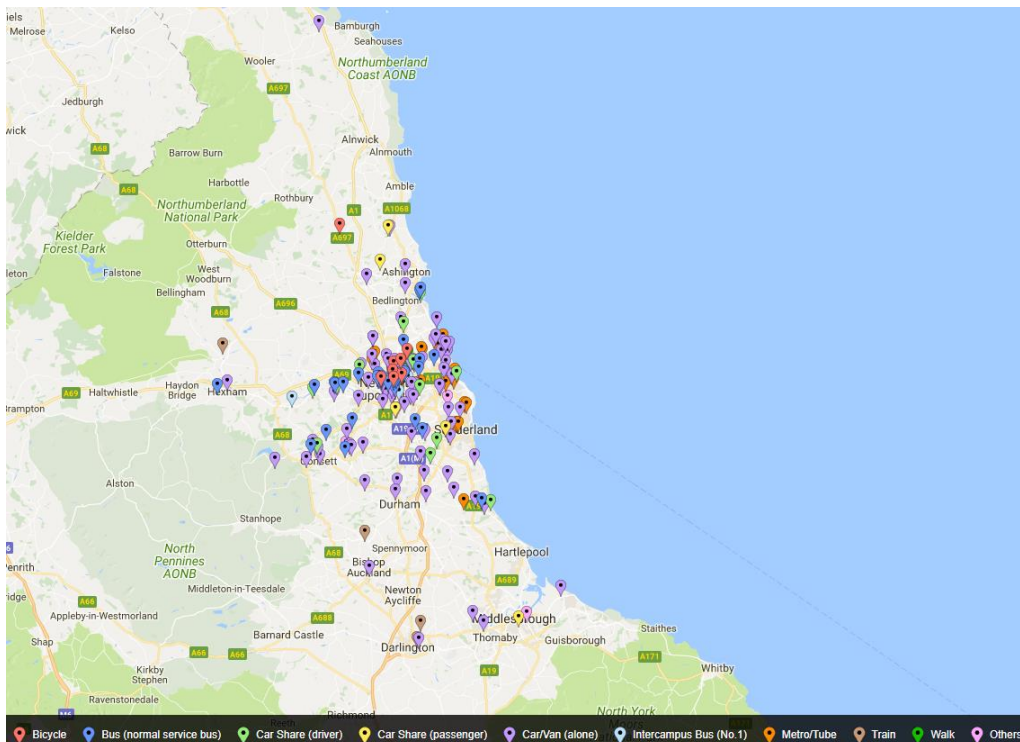


**Figure 4.13c: Map of Student Main Mode and Term-time Postcode – Newcastle City Campus**



4.19 By contrast, when mapping postcodes and mode for the Coach Lane Campus the stand out feature is the scattering of lone driving students, with a few clusters travelling in from locations such as Whitley Bay and South Shields but also from as far away as Belford near Bamburgh.

**Figure 4.14: Map of Student Main Mode and Term-time Postcode – Coach Lane Campus**





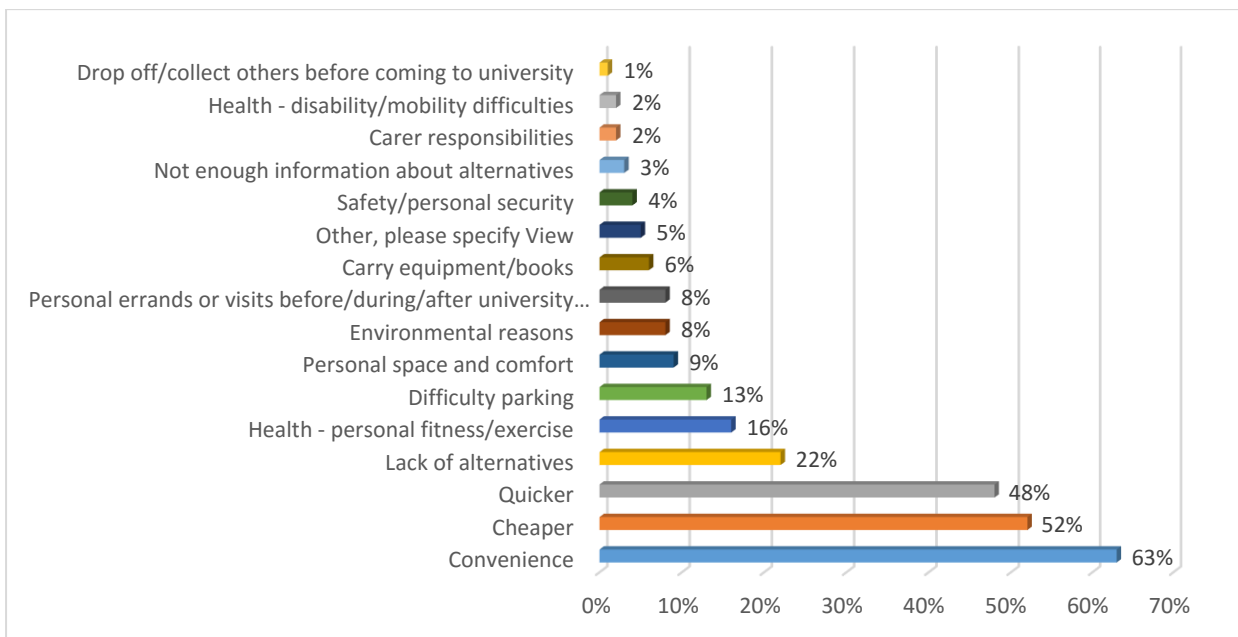
4.20 The handful of respondents from London Campus who travel by tube or train are mapped in **Figure 4.15**.

**Figure 4.15: Map of Student Main Mode and Term-time Postcode – London Campus**



4.21 As with staff, students were asked why they choose the mode they do to commute to University and invited to select their top three from a list. The top four ranking reasons are the same as for staff, although in a slightly different order; convenience (63%), cost (52%), speed (48%) and a lack of alternatives (22%).

**Figure 4.16: Student Reasons for Main Mode (n= 1674)**

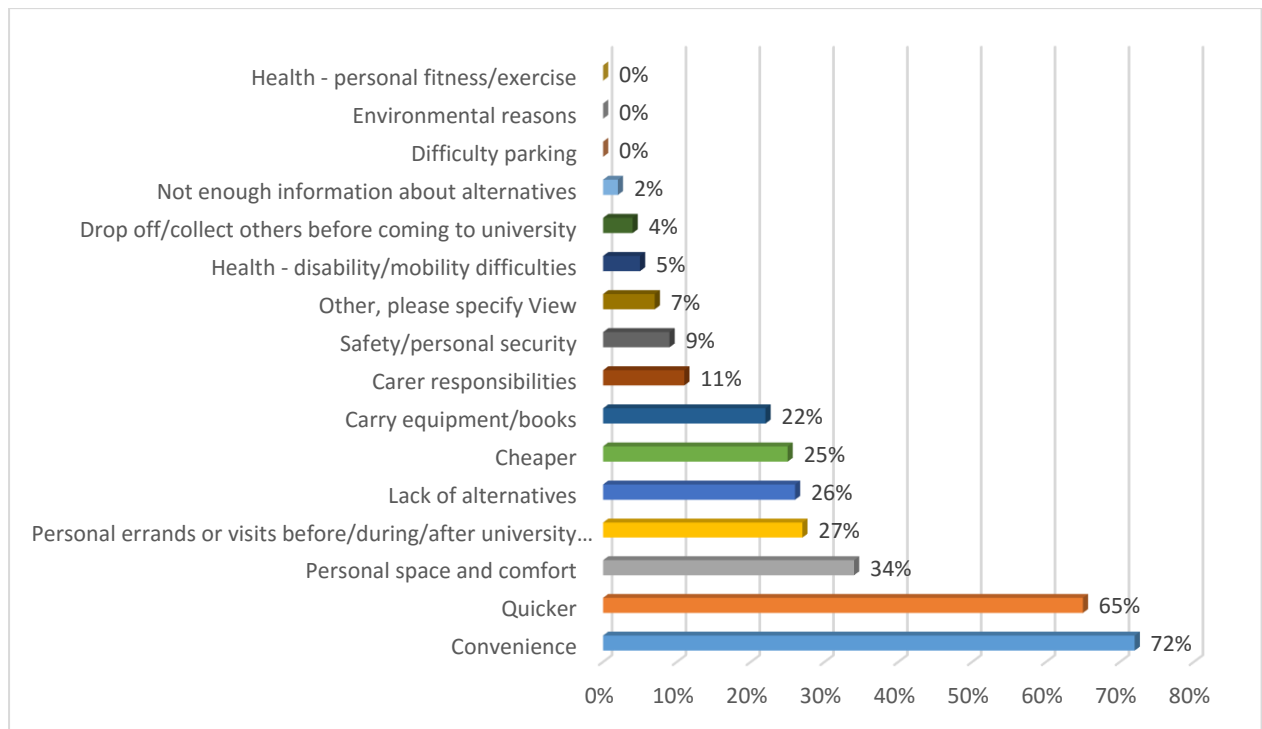




4.22 There are a few differences between staff and students. For example, students are more concerned about health and fitness as it was selected by 16% of student respondents, ranking it 5<sup>th</sup>. This compares to a 7<sup>th</sup> ranking by staff and 13% selecting it as a reason. This also seems logical given that more students walk. However, environmental reasons are cited by 14% of staff, giving it a 6<sup>th</sup> ranking, compared to 8% of students who rank it 8<sup>th</sup>.

4.23 As was carried out for staff, the reasons given for mode choice data was then cross tabulated with mode to reveal any differences between these groups. The results are summarised in **Figures 4.17 to 4.1** . Of the 193 students who usually drive alone, nearly three quarters (71%) do so for convenience, over two thirds for speed and over a third because they prefer their own personal space.

**Figure 4.17: Reasons Given By Students For Driving Alone (n= 193)**



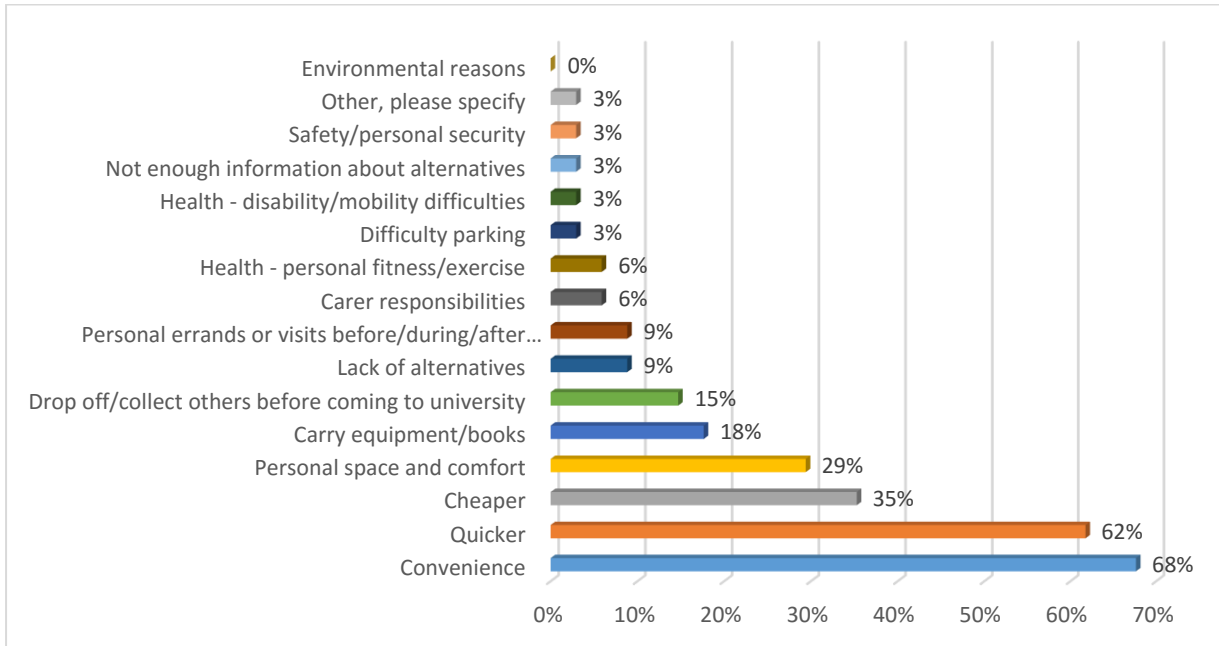
4.24 Students who car share do so for the same top two reasons as lone drivers; convenience (72%) and speed (65%). Instead of personal space the third reason given by car sharers is cost (35%) (**Figure 4.18**).

4.25 Students usually travelling to University by public transport, including on the No.1 University bus, said they choose these modes for the same top three reasons as car sharers albeit ranking cost (47%) over speed (42%).



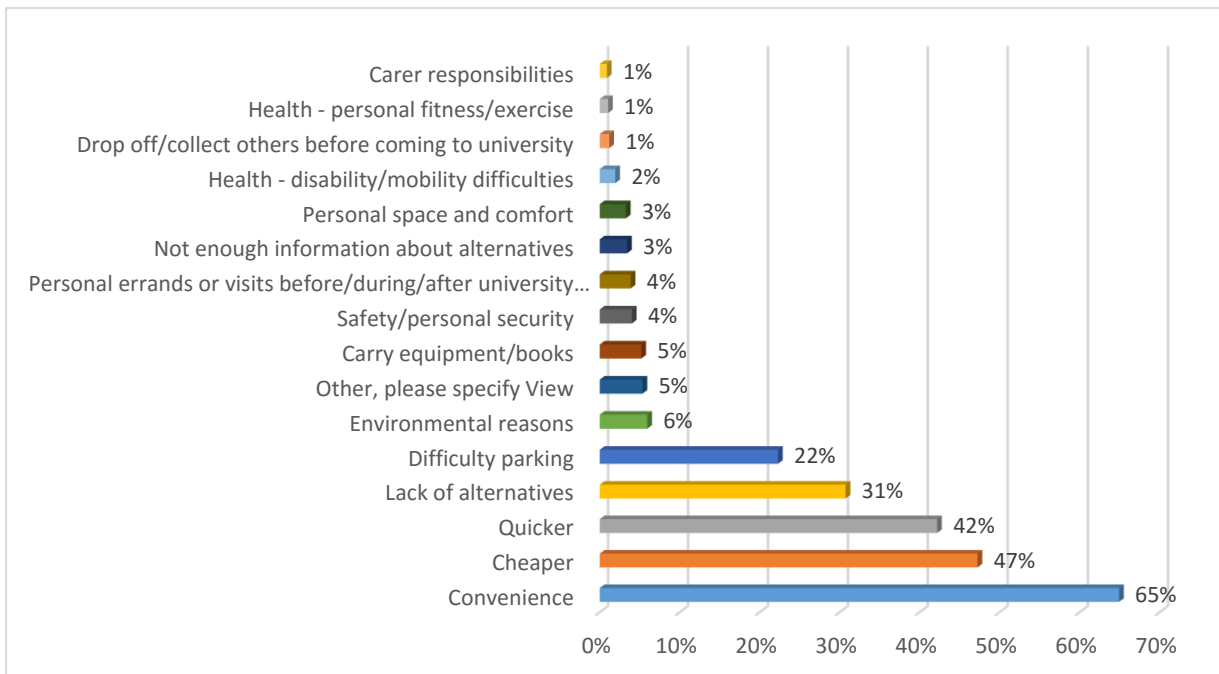


**Figure 4.18: Reasons Given By Students For Car Sharing (n= 34)**



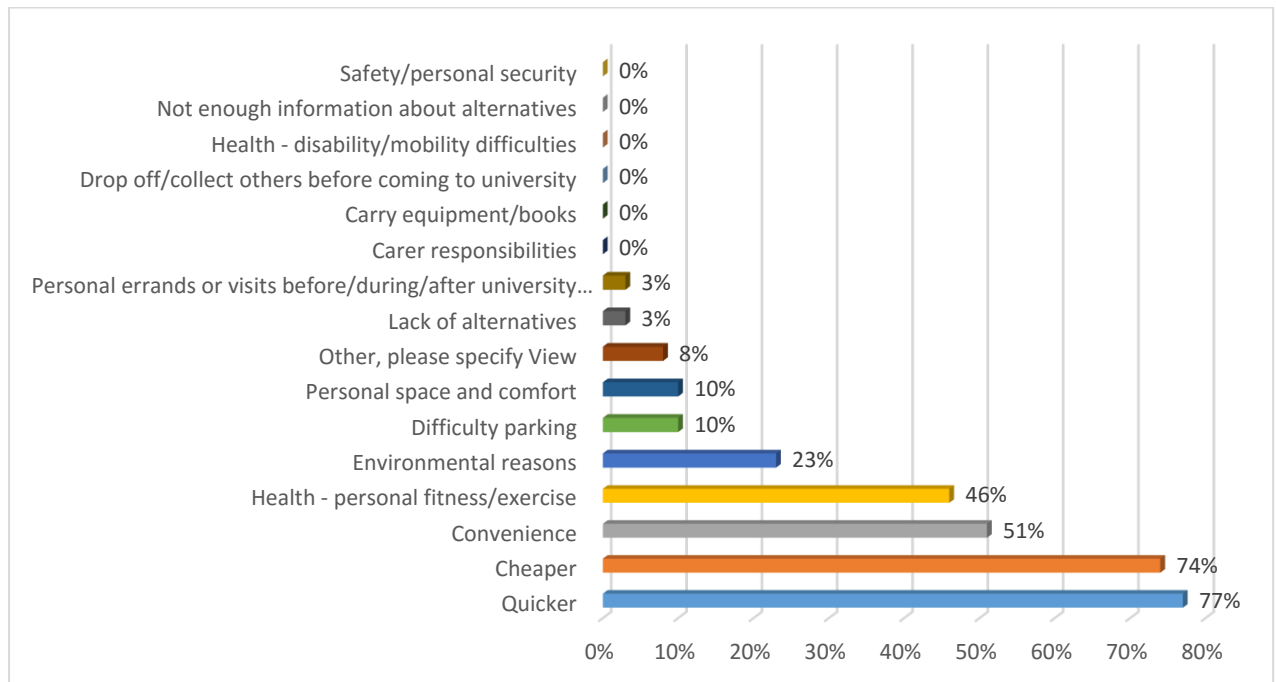
4.26 Finally, students who usually cycle said they do so because they find it quicker (77%), cheaper (74%) and more convenient (51%). The fourth ranked reason was for health and fitness (46%).

**Figure 4.19: Reasons Given By Students For Using Public Transport (n= 673)**





**Figure 4.20: Reasons Given By Students For Cycling (n= 39)**



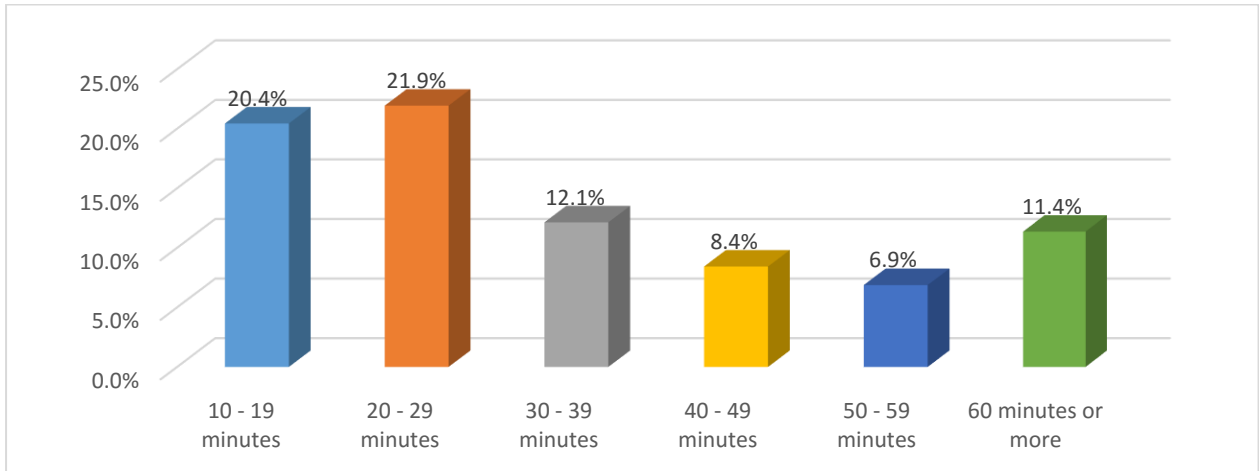
4.27 Journey times are generally shorter for students (**Table 4.5** and **Figure 4.21**) than staff (see **Section 3**). Just under two thirds (61%) of students travel to University in 0-30 minutes compared to 60% of staff taking between 20-50 minutes to commute.

**Table 4.5: Student Journey Time (n= 1170)**

| Journey Time         | %     | Count |
|----------------------|-------|-------|
| Less than 10 minutes | 18.8% | 315   |
| 10 - 19 minutes      | 20.4% | 342   |
| 20 - 29 minutes      | 21.9% | 367   |
| 30 - 39 minutes      | 12.1% | 203   |
| 40 - 49 minutes      | 8.4%  | 141   |
| 50 - 59 minutes      | 6.9%  | 115   |
| 60 minutes or more   | 11.4% | 190   |
| Total                | 100%  | 1673  |

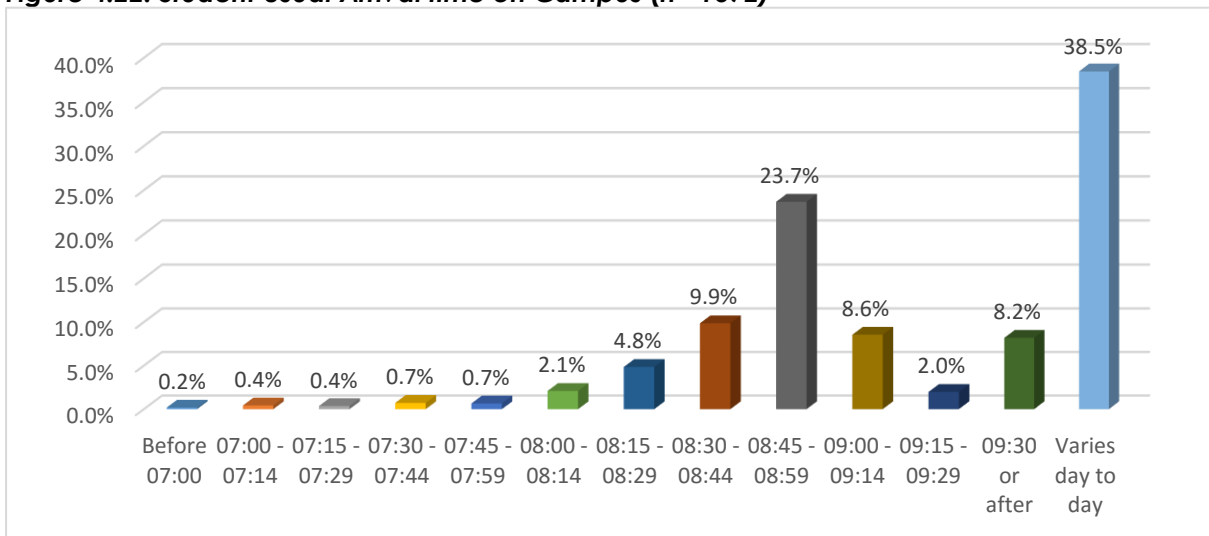


**Figure 4.21: Student Journey Time (n= 1170)**



4.28 Students were asked what time they usually arrive on campus and then how many hours each day they are usually on campus for. Although 24% of students usually arrive between 08.45 and 09.00, possibly for 09.00am lectures, the most common response was to select 'varies each day' by 39% of students. In future it may be better to ask for start and arrival times each day or retrieve data from timetabling to judge the peak demands on campus from students.

**Figure 4.22: Student Usual Arrival time on Campus (n= 1672)**



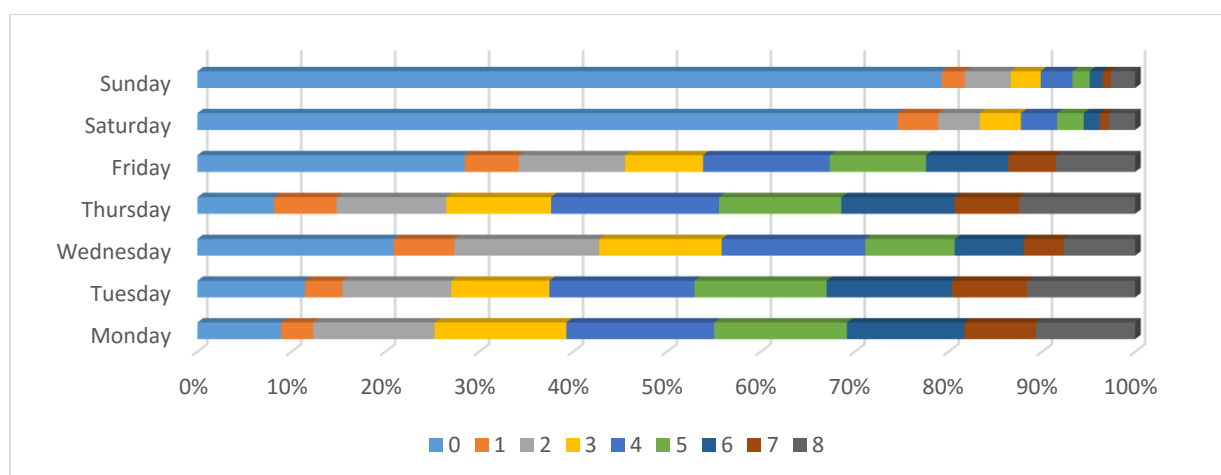
4.29 Examining the number of hours students say they spend on campus each day of the week (**Table 4.6** and **Figure 4.23**) suggests that students tend to spend 4-5 hours on campus on most weekdays with the exception of Wednesday and Friday.



**Table 4.6: Student Hours Spent On Campus Each Day (n=1656)**

| Days      | 0   | 1  | 2   | 3   | 4   | 5   | 6   | 7  | 8   | Count |
|-----------|-----|----|-----|-----|-----|-----|-----|----|-----|-------|
| Monday    | 9%  | 3% | 13% | 14% | 16% | 14% | 13% | 8% | 11% | 1639  |
| Tuesday   | 11% | 4% | 12% | 10% | 15% | 14% | 13% | 8% | 12% | 1579  |
| Wednesday | 21% | 6% | 15% | 13% | 15% | 10% | 7%  | 4% | 8%  | 1535  |
| Thursday  | 8%  | 7% | 12% | 11% | 18% | 13% | 12% | 7% | 12% | 1566  |
| Friday    | 28% | 6% | 11% | 8%  | 14% | 10% | 9%  | 5% | 9%  | 1482  |
| Saturday  | 75% | 4% | 4%  | 4%  | 4%  | 3%  | 2%  | 1% | 3%  | 1156  |
| Sunday    | 79% | 2% | 5%  | 3%  | 3%  | 2%  | 1%  | 1% | 3%  | 1144  |

**Figure 4.23: Student Hours Spent On Campus Each Day (n=1656)**



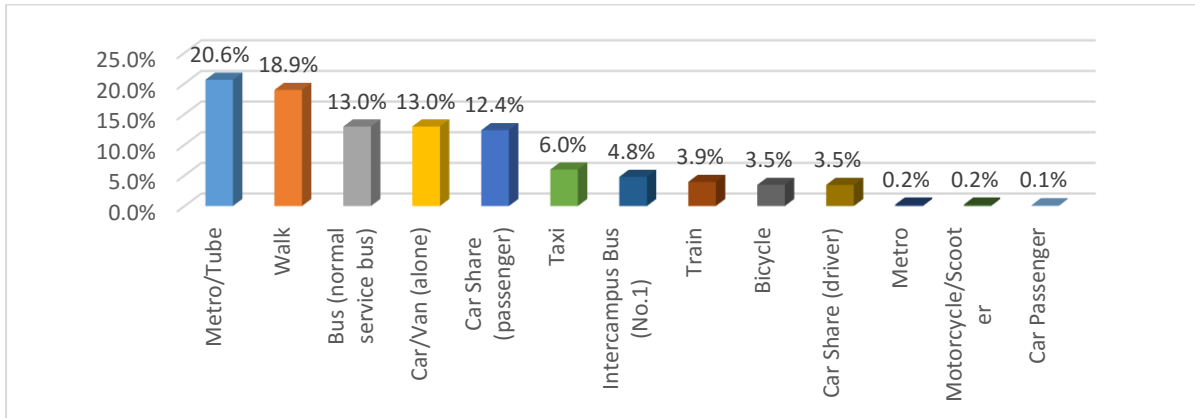
### Student Occasional Mode

4.30 Students were asked if they vary the mode they use to get to University. Around half of students use the same mode every day (49.7%) (Table 4.7 and Figure 4.24). Of those who do use a different mode occasionally, the most popular is the Metro, chosen by 21% of these students, followed by walking (19%).

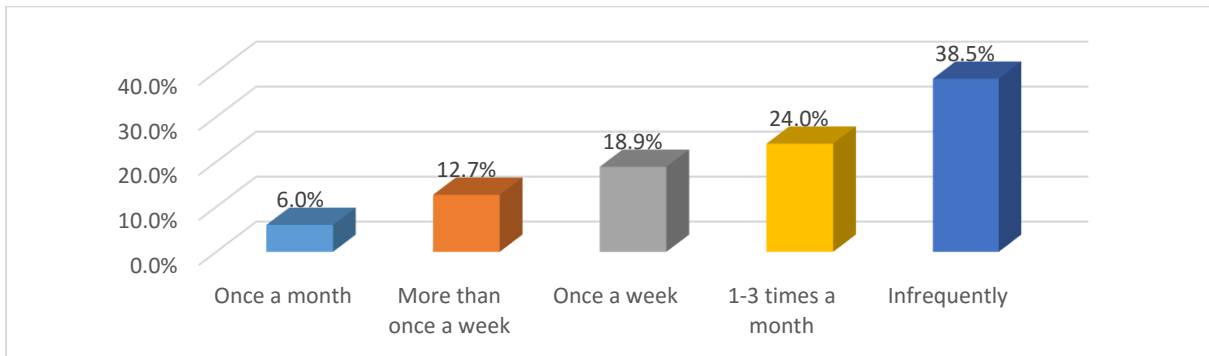
Interestingly the frequency with which students use their alternative mode is similar to staff. Most, 39% use it infrequently, but 24% use an alternative to their main mode 1-3 times a week (Table 4.8 and Figure 4.25).



**Figure 4.24: Student Occasional Mode (n= 840)**



**Figure 4.25: Student Frequency Occasional Mode (n= 837)**



4.31 The frequency with which student lone drivers use an occasional mode was cross tabulated with those occasional mode. Of the 193 student lone drivers who answered this question, the most popular occasional mode (after 54% saying they always drive by themselves), was the bus (15%), Metro/tube (10%) and the train (9%).

**Figure 4.26a: Occasional Mode and Frequency for Staff Lone Drivers (n= 193)**

| Frequency                                | No - I always use the same mode | Bus (normal service bus) | Metro/ Tube | Train | Car Share (passenger) | Car/Van (alone) | Car Share (driver) | Walk | Intercampus Bus (No.1) | Bicycle | Metro | Taxi | Total |
|--|---------------------------------|--------------------------|-------------|-------|-----------------------|-----------------|--------------------|------|------------------------|---------|-------|------|-------|
| 1-3 times a month                        | 1                               | 9                        | 2           | 2     | 2                     | 0               | 0                  | 1    | 1                      | 0       | 0     | 0    | 18    |
| Infrequently                             | 0                               | 14                       | 11          | 13    | 1                     | 0               | 2                  | 2    | 1                      | 1       | 1     | 1    | 47    |
| More than once a week                    | 1                               | 1                        | 1           | 0     | 1                     | 1               | 1                  | 0    | 0                      | 0       | 0     | 0    | 6     |
| N/A I always use the same mode of travel | 101                             | 0                        | 0           | 0     | 0                     | 2               | 0                  | 0    | 0                      | 0       | 0     | 0    | 103   |
| Once a month                             | 0                               | 0                        | 1           | 1     | 1                     | 0               | 0                  | 0    | 0                      | 0       | 0     | 0    | 3     |
| Once a week                              | 1                               | 4                        | 4           | 2     | 2                     | 1               | 1                  | 0    | 0                      | 1       | 0     | 0    | 16    |
| Grand Total                              | 104                             | 28                       | 19          | 18    | 7                     | 4               | 4                  | 3    | 2                      | 2       | 1     | 1    | 193   |



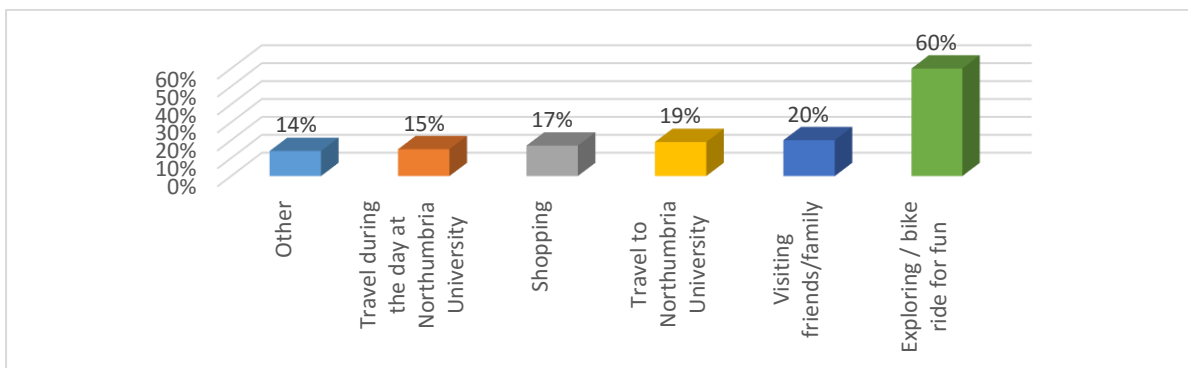
**Figure 4.26b: Occasional Mode and Frequency for Staff Lone Drivers (n= 193)**

| Frequency                                | Mode | No - I always use the same mode | Bus (normal service bus) | Metro/ Tube | Train | Car Share (passenger) | Car/Van (alone) | Car Share (driver) | Walk | Interampus Bus (No.1) | Bicycle | Metro | Taxi | Total  |
|--|------|---------------------------------|--------------------------|-------------|-------|-----------------------|-----------------|--------------------|------|-----------------------|---------|-------|------|--------|
| 1-3 times a month                        |      | 0.5%                            | 4.7%                     | 1.0%        | 1.0%  | 1.0%                  | 0.0%            | 0.0%               | 0.5% | 0.0%                  | 0.5%    | 0.0%  | 0.0% | 9.3%   |
| Infrequently                             |      | 0.0%                            | 7.3%                     | 5.7%        | 6.7%  | 0.5%                  | 0.0%            | 1.0%               | 1.0% | 0.5%                  | 0.5%    | 0.5%  | 0.5% | 24.4%  |
| More than once a week                    |      | 0.5%                            | 0.5%                     | 0.5%        | 0.0%  | 0.5%                  | 0.5%            | 0.5%               | 0.0% | 0.0%                  | 0.0%    | 0.0%  | 0.0% | 3.1%   |
| N/A I always use the same mode of travel |      | 52.3%                           | 0.0%                     | 0.0%        | 0.0%  | 0.0%                  | 1.0%            | 0.0%               | 0.0% | 0.0%                  | 0.0%    | 0.0%  | 0.0% | 53.4%  |
| Once a month                             |      | 0.0%                            | 0.0%                     | 0.5%        | 0.5%  | 0.5%                  | 0.0%            | 0.0%               | 0.0% | 0.0%                  | 0.0%    | 0.0%  | 0.0% | 1.6%   |
| Once a week                              |      | 0.5%                            | 2.1%                     | 2.1%        | 1.0%  | 1.0%                  | 0.5%            | 0.5%               | 0.0% | 0.5%                  | 0.0%    | 0.0%  | 0.0% | 8.3%   |
| Total                                    |      | 53.9%                           | 14.5%                    | 9.8%        | 9.3%  | 3.6%                  | 2.1%            | 2.1%               | 1.6% | 1.0%                  | 1.0%    | 0.5%  | 0.5% | 100.0% |

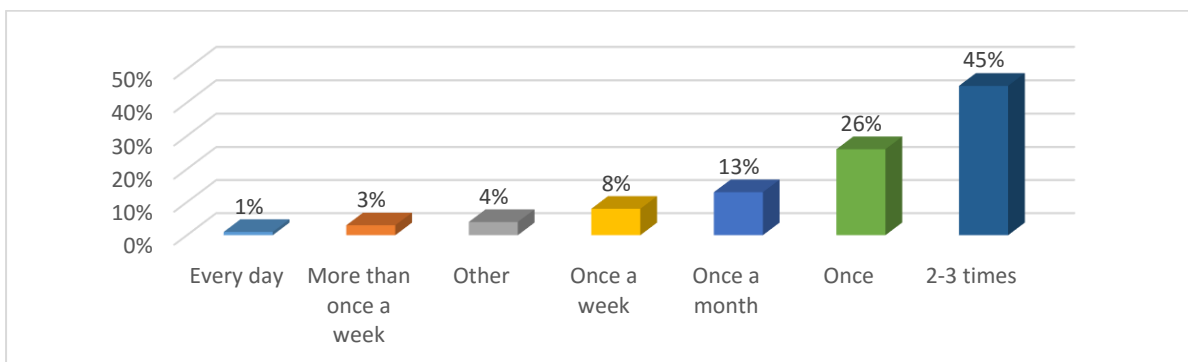
### Student Mobike Usage

4.32 Of the students who responded to the survey, 7% (102 respondents) have used the Mobike scheme to date, higher than the 1% of staff, and factored up could equate to around 1,981 students. Those students were then asked what types of journey they have used the bikes for and how often (Figure 4.27 and 4.28). Most have used them for fun or exploring (60%). A much higher proportion than staff have used them multiple times with the most common response by 45% of users being 1-3 times. Only a quarter have just used them the once.

**Figure 4.27: Student Mobike Use – Types of Journeys (n= 101)**



**Figure 4.28: Student Mobike Use – Frequency (n= 100)**



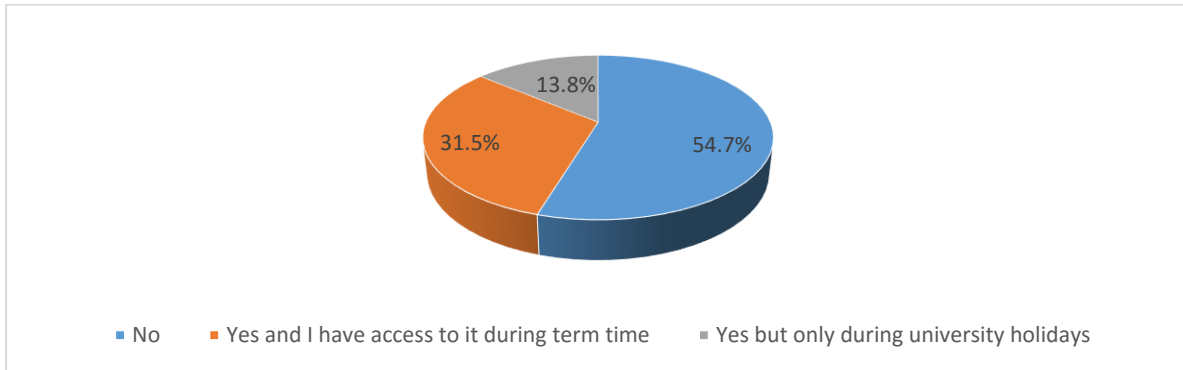
4.33 As with staff the final sections of the survey are filtered so that respondents are only asked questions relevant to the mode they usually use to commute to University by.



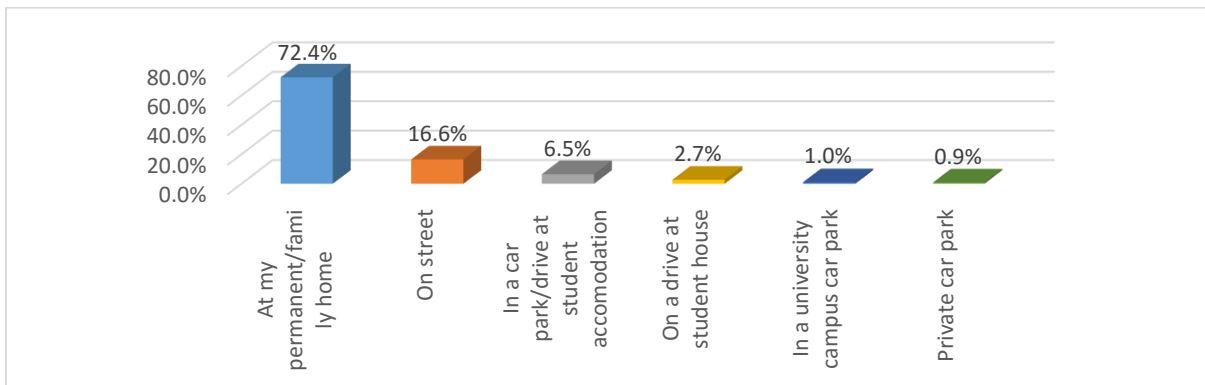
## Student Car Users

4.34 All students were first asked about their access to a car. Just under a third have access to a car that they can use during term-time. Those who do have access to a car during term-time were asked where they park their car overnight and the results are in **Figure 4.29**. The vast majority park it at their permanent or family home.

**Figure 4.29: Student Access to A Car During Term-time (n= 1673)**



**Figure 4.30: Where Students Who Have Access to a Car Park Overnight (n= 586)**



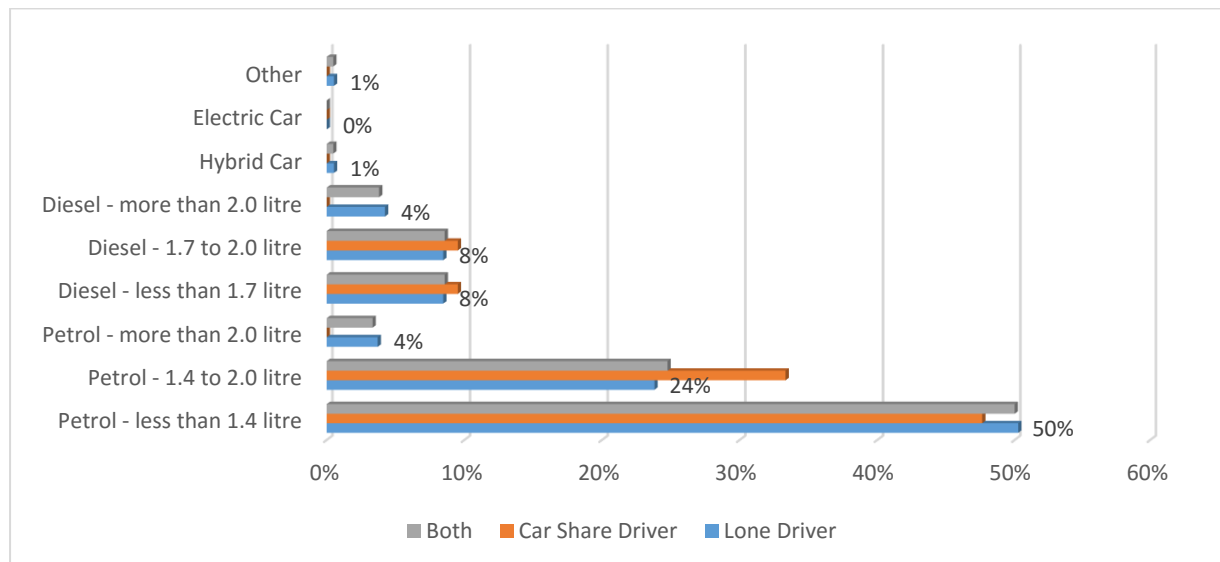
4.35 Students were asked what types of car they drive and the engine size. As with staff, most students drive small petrol cars up to 50%. Very few students drive diesels (**Table 4.7** and **Figure 4.31**).



**Table 4.7: Student Car Type and Engine Size (n= 210)**

| Car Type and Engine Size     | Lone Driver |             | Car Share Driver |             | Both       |             |
|------------------------------|-------------|-------------|------------------|-------------|------------|-------------|
|                              | Count       | %           | Count            | %           | Count      | %           |
| Petrol - less than 1.4 litre | 95          | 50%         | 10               | 48%         | 105        | 50%         |
| Petrol - 1.4 to 2.0 litre    | 45          | 24%         | 7                | 33%         | 52         | 25%         |
| Petrol - more than 2.0 litre | 7           | 4%          | 0                | 0%          | 7          | 3%          |
| Diesel - less than 1.7 litre | 16          | 8%          | 2                | 10%         | 18         | 9%          |
| Diesel - 1.7 to 2.0 litre    | 16          | 8%          | 2                | 10%         | 18         | 9%          |
| Diesel - more than 2.0 litre | 8           | 4%          | 0                | 0%          | 8          | 4%          |
| Hybrid Car                   | 1           | 1%          | 0                | 0%          | 1          | 1%          |
| Electric Car                 | 0           | 0%          | 0                | 0%          | 0          | 0%          |
| Other                        | 1           | 1%          | 0                | 0%          | 1          | 1%          |
| <b>Total</b>                 | <b>189</b>  | <b>100%</b> | <b>21</b>        | <b>100%</b> | <b>210</b> | <b>100%</b> |

**Figure 4.31: Student Car Type and Engine Size (n= 210)**



4.36 Those students who said that their usual mode of travel to University is to drive were asked where they park when they are at University. Over two fifths park in University car parks (43%) with around a quarter parking in public car parks.

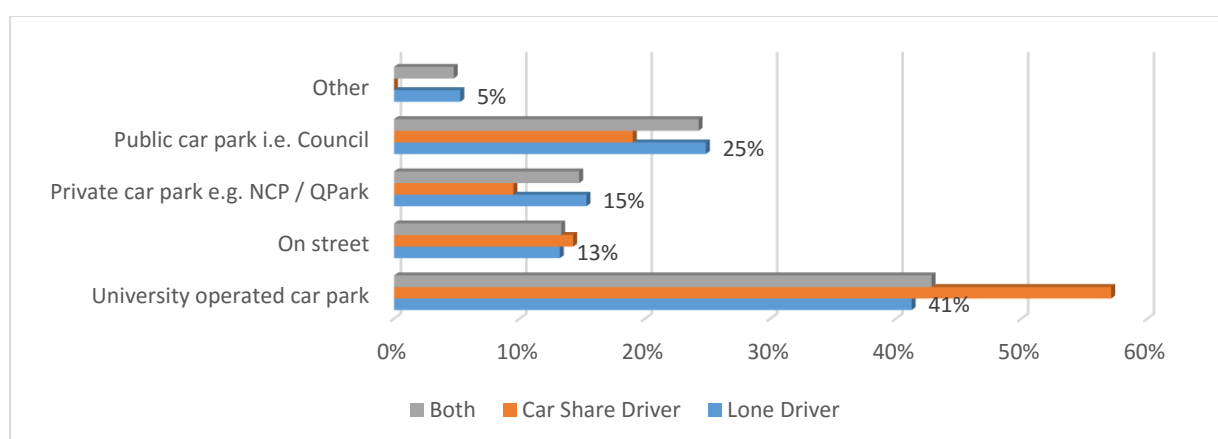




**Table 4.8: Where Students Park (n= 210)**

| Where Park                        | Lone Driver |      | Car Share Driver |      | Both  |      |
|-----------------------------------|-------------|------|------------------|------|-------|------|
|                                   | Count       | %    | Count            | %    | Count | %    |
| University operated car park      | 78          | 41%  | 12               | 57%  | 90    | 43%  |
| On street                         | 25          | 13%  | 3                | 14%  | 28    | 13%  |
| Private car park e.g. NCP / QPark | 29          | 15%  | 2                | 10%  | 31    | 15%  |
| Public car park i.e. Council      | 47          | 25%  | 4                | 19%  | 51    | 24%  |
| Other                             | 10          | 5%   | 0                | 0%   | 10    | 5%   |
| Total                             | 189         | 100% | 21               | 100% | 210   | 100% |

**Figure 4.32: Where Students Park (n= 210)**



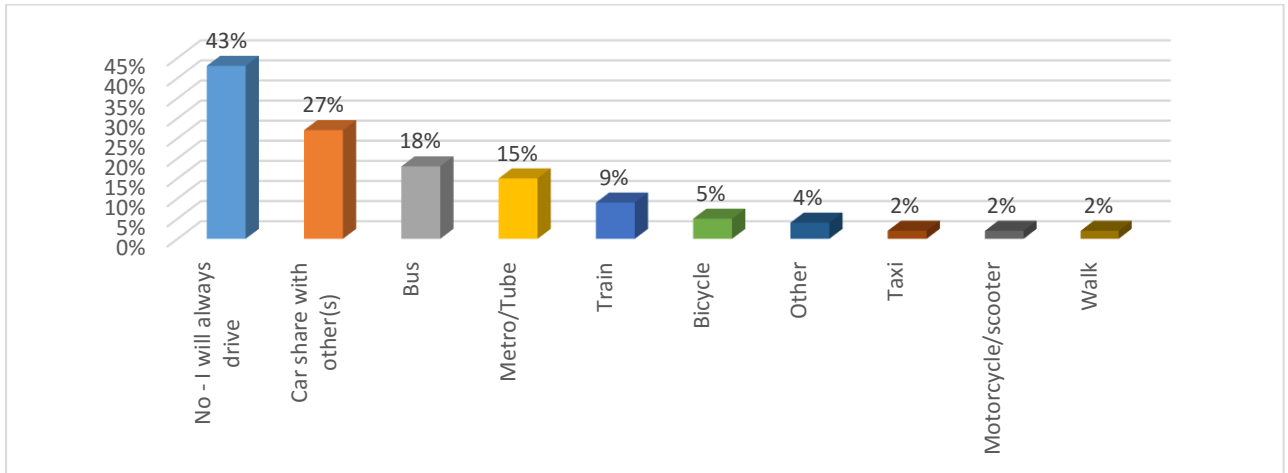
4.37 Lone driving students were asked whether they would consider any alternatives to driving by themselves. A slightly smaller proportion than staff (43 vs. 49%) said no, they will always drive. Of those who said that they may consider alternatives, the most popular mode was car sharing, followed by the bus or Metro.

**Table 4.9: Student Lone Driver Alternative Modes Considered (n=189)**

| Mode                     | Count | %   |
|--------------------------|-------|-----|
| No - I will always drive | 81    | 43% |
| Car share with other(s)  | 51    | 27% |
| Bus                      | 34    | 18% |
| Metro/Tube               | 29    | 15% |
| Train                    | 17    | 9%  |
| Bicycle                  | 9     | 5%  |
| Other                    | 8     | 4%  |
| Taxi                     | 4     | 2%  |
| Motorcycle/scooter       | 4     | 2%  |
| Walk                     | 3     | 2%  |



**Figure 4.33: Student Lone Driver Alternative Modes Considered (n=189)**



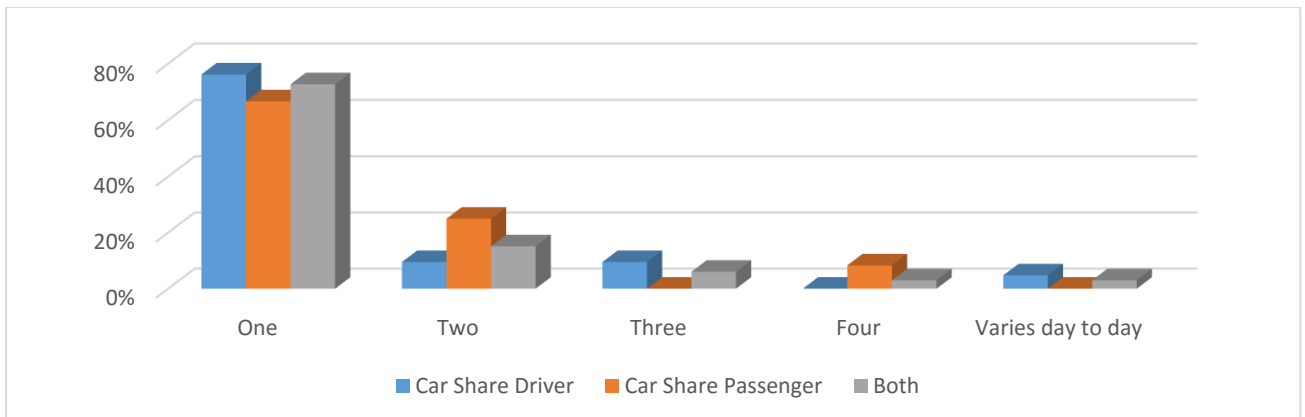
### Student Car Sharers

Car Sharers were asked about their car pool arrangements; how many people they share with and who they are. Nearly three quarters of arrangements consist of two people (**Table 4.10** and **Figure 4.33**).

**Table 4.10: Number In Student Car Sharing Arrangements (n= 33)**

| No Car Share With | Car Share Driver |      | Car Share Passenger |      | Both  |      |
|-------------------|------------------|------|---------------------|------|-------|------|
|                   | Count            | %    | Count               | %    | Count | %    |
| One               | 16               | 76%  | 8                   | 67%  | 24    | 73%  |
| Two               | 2                | 10%  | 3                   | 25%  | 5     | 15%  |
| Three             | 2                | 10%  | 0                   | 0%   | 2     | 6%   |
| Four              | 0                | 0%   | 1                   | 8%   | 1     | 3%   |
| Varies day to day | 1                | 5%   | 0                   | 0%   | 1     | 3%   |
| Total             | 21               | 100% | 12                  | 100% | 33    | 100% |

**Figure 4.34: Number In Student Car Sharing Arrangements (n= 33)**



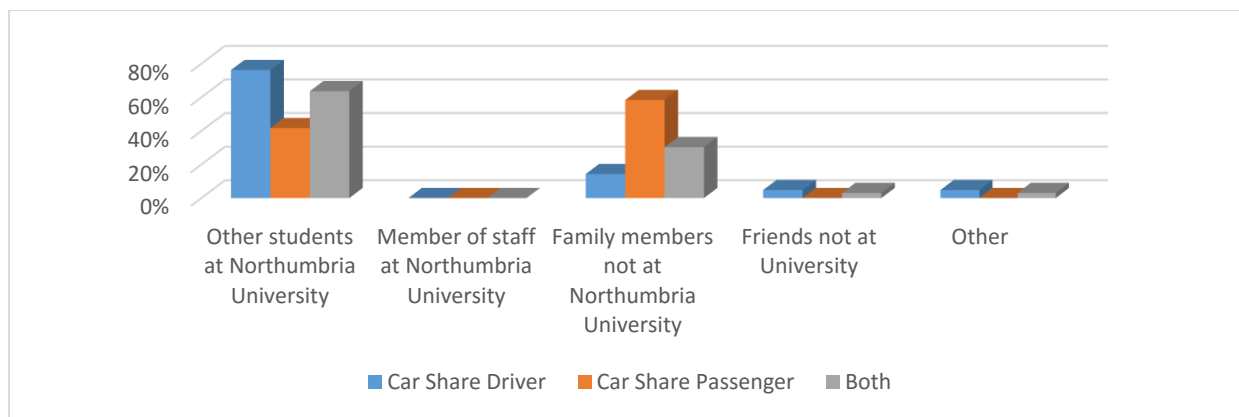


4.38 Most students unsurprisingly car share with other students at the University (64%). Although a notable proportion share with family members not at the University, particularly car share drivers, suggesting over half of car share drivers give a family member a lift somewhere first.

**Table 4.11: Who Student Car Sharers Share With (n= 33)**

| Who  | Car Share Driver |      | Car Share Passenger |      | Both  |      |
|--|------------------|------|---------------------|------|-------|------|
|  | Count            | %    | Count               | %    | Count | %    |
| Other students at Northumbria University     | 16               | 76%  | 5                   | 42%  | 21    | 64%  |
| Member of staff at Northumbria University    | 0                | 0%   | 0                   | 0%   | 0     | 0%   |
| Family members not at Northumbria University | 3                | 14%  | 7                   | 58%  | 10    | 30%  |
| Friends not at university                    | 1                | 5%   | 0                   | 0%   | 1     | 3%   |
| Other  | 1                | 5%   | 0                   | 0%   | 1     | 3%   |
| Total  | 21               | 100% | 12                  | 100% | 33    | 100% |

**Figure 4.35: Who Student Car Sharers Share With (n= 33)**



### Student Public Transport Users

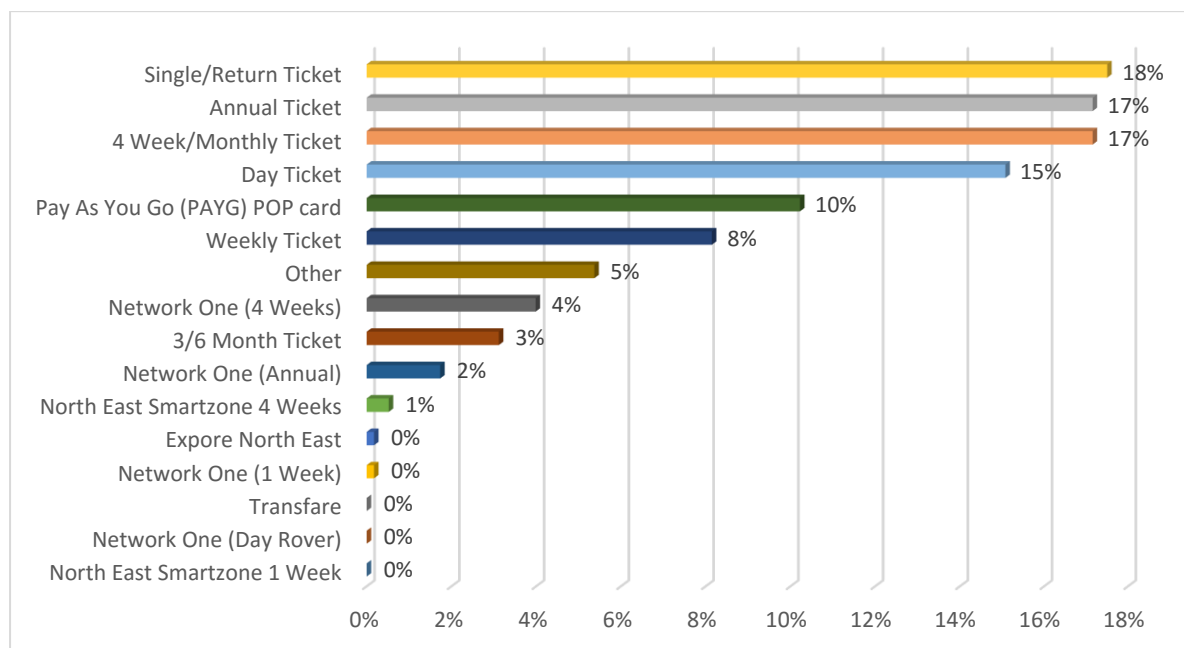
4.39 Students who usually travel to University by bus, Metro or train were asked about their ticket types and what improvements they would like to see to their commute. In contrast to staff who take advantage of season passes, students are more likely to purchase singles/returns (18%) and are therefore missing out on significant discounts. Around 17% of students opt for annual passes and the same proportion again for monthly passes. It is recommended that student ticketing discounts are more heavily promoted to students. Students were also asked an additional question of whether they benefit from a student discount on whichever ticket type they buy. The responses suggest 62% do and 38% do not.



**Table 4.12: Student Public Transport Ticket Types (n= 577)**

| Ticket Type                   | Count | %     |
|-------------------------------|-------|-------|
| North East Smartzone 1 Week   | 0     | 0.0%  |
| Network One (Day Rover)       | 0     | 0.0%  |
| Transfare                     | 0     | 0.0%  |
| Network One (1 Week)          | 1     | 0.2%  |
| Explore North East            | 1     | 0.2%  |
| North East Smartzone 4 Weeks  | 3     | 0.5%  |
| Network One (Annual)          | 10    | 1.7%  |
| 3/6 Month Ticket              | 18    | 3.1%  |
| Network One (4 Weeks)         | 23    | 4.0%  |
| Other                         | 31    | 5.4%  |
| Weekly Ticket                 | 47    | 8.1%  |
| Pay As You Go (PAYG) POP card | 59    | 10.2% |
| Day Ticket                    | 87    | 15.1% |
| 4 Week/Monthly Ticket         | 99    | 17.2% |
| Annual Ticket                 | 99    | 17.2% |
| Single/Return Ticket          | 101   | 17.5% |

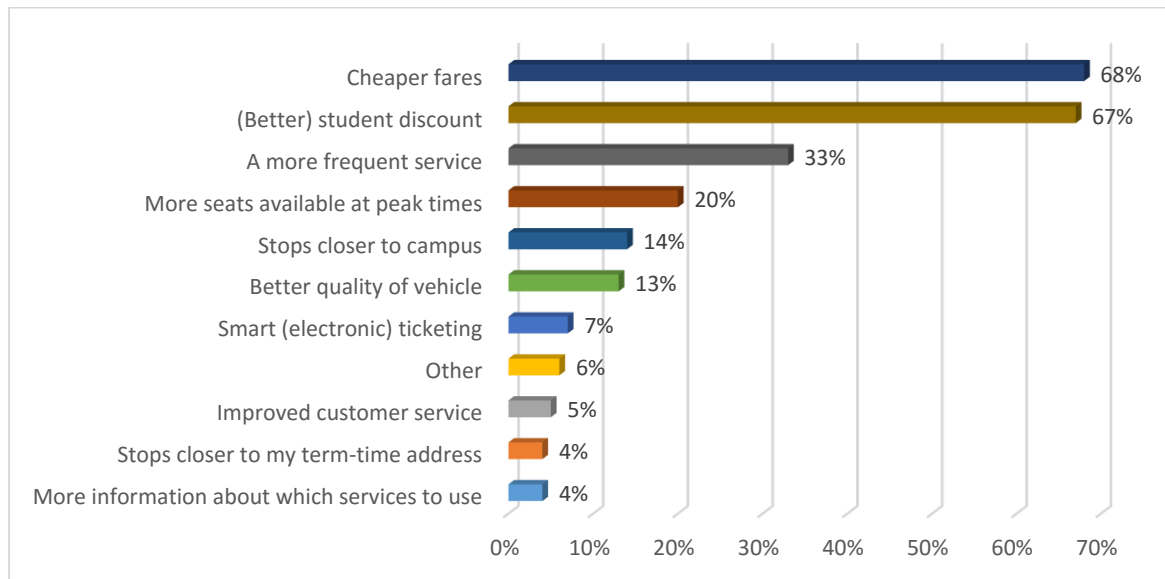
**Figure 4.36: Student Public Transport Ticket Types (n= 577)**



4.40 Respondents were asked to select up to three preferences from a list of measures to improve journeys by public transport. Students who already use public transport would most like to see cheaper fares (68%) and better student discounts (67%) by far. The next popular improvement of more frequent services was selected by 33% of students.

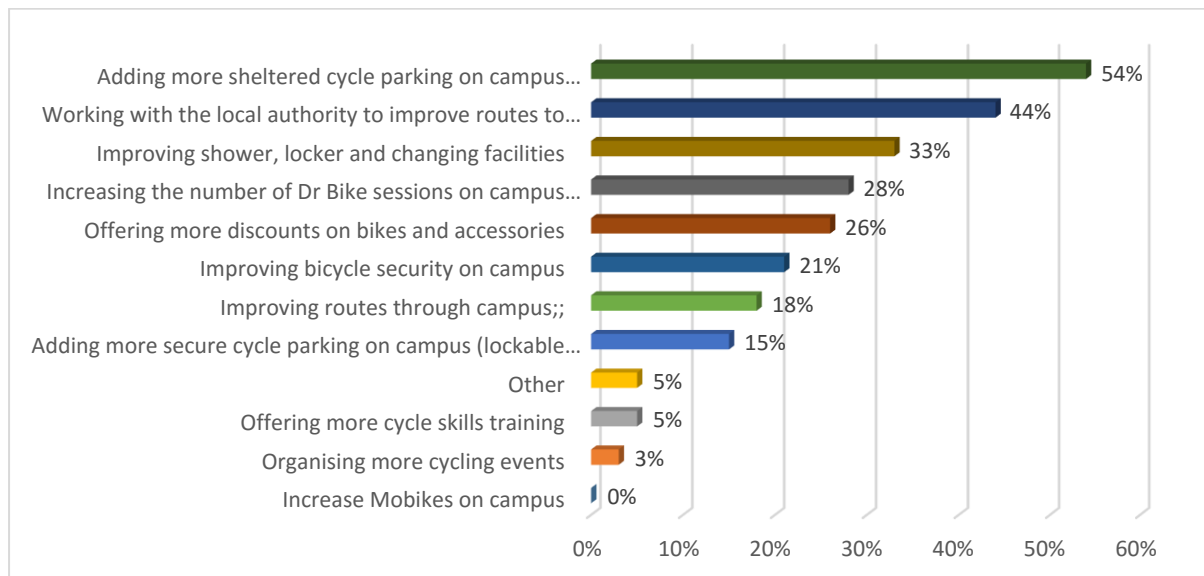


**Figure 4.37: Student Public Transport Users' Preferred Improvements (n= 577)**



4.41 Students who already cycle, of which there were only 39 people who completed this question were asked what improvements they would like to see. Over half asked for more sheltered cycle parking on campus, followed by 44% wanting the University to work with the Local Authority to improve routes to Campus.

**Figure 4.38: Existing Student Cyclists' Preferred Improvements (n= 39)**



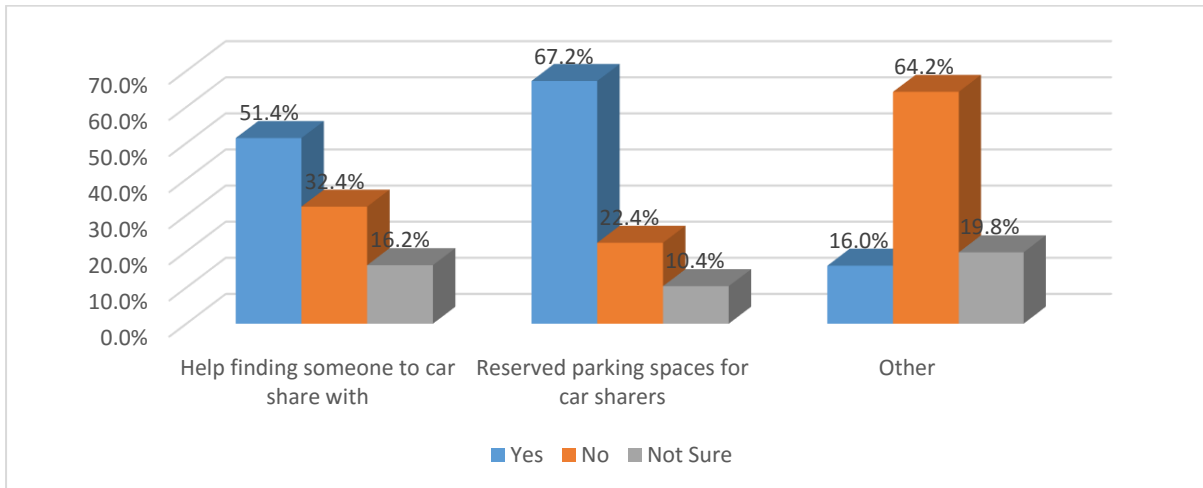
### Potential Sustainable Transport Incentives

4.42 Finally, students were asked what sustainable transport incentives would appeal to them. As with staff they were asked about modes more sustainable than their current choice.



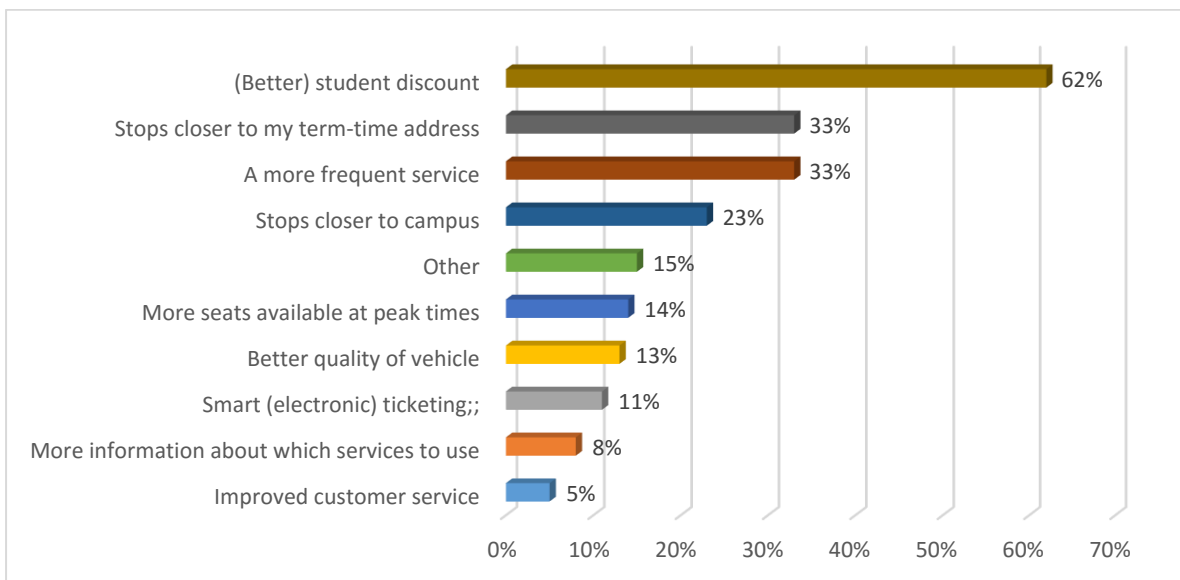
4.43 All lone drivers were asked what would encourage them to car share. Over two thirds might be persuaded to car share by reserved parking and over half would be encouraged by a car share matching service.

**Figure 4.39: Potential Car Share Incentives (n= 188 – student lone drivers)**



4.44 Students who currently travel to University by car were asked what would encourage them to use public transport. The most popular incentive by far (each respondent could select up to three), was a better student discount (62%) followed by stops closer to where they live by 33%.

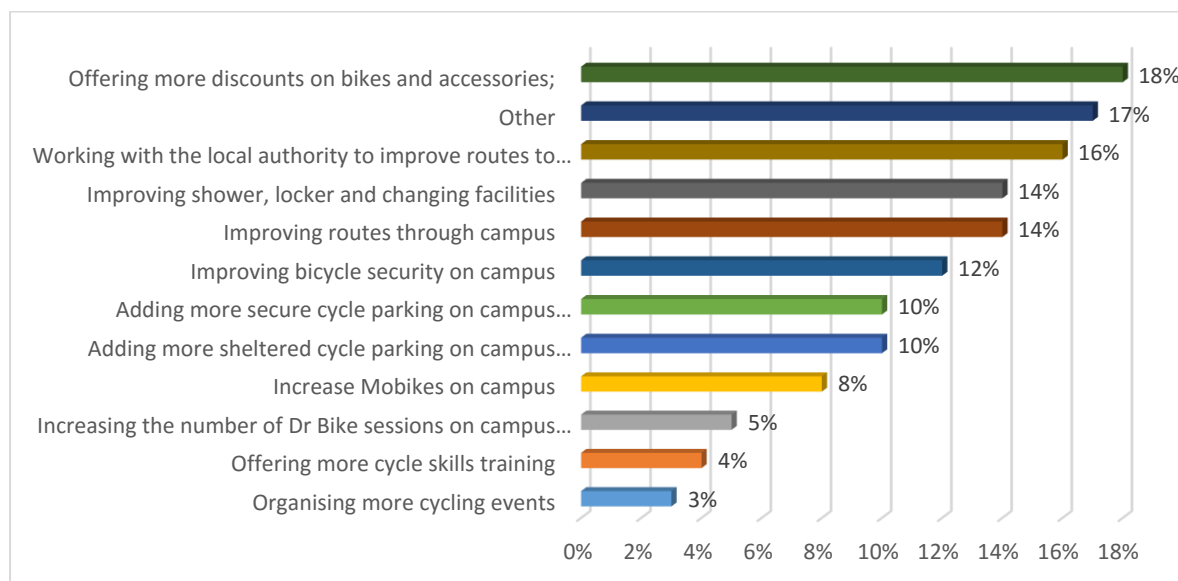
**Figure 4.40: Potential Public Transport Incentives for Students (n= 222 - all student car users)**



4.45 All car and public transport users were asked what would encourage them to walk or cycle. Again, it was a cost related response that came out on top, with 18% of students suggesting discounts (presumably on cycling gear) would encourage them.



**Figure 4.41: Potential Walking/Cycling Incentives for Students (n= 884 – all students)**





## 5. CARBON ASSESSMENT

### Introduction

- 5.1 Another benefit of undertaking the travel survey is the opportunity to capture data on the carbon impact of staff commuting to work and students making regular trips to University (from their term time address) for study. The outputs from this exercise can contribute towards the wider environmental policies of the University.

### Methodology

- 5.2 The methodology adopted was originally recommended by what was HEFCE in 2012, but using the most recent Carbon conversion factors provided by Defra in 2017. The data collated from the survey that is required to conduct a carbon assessment includes;

- Mode split for staff and students;
- Distance travelled;
- Engine size and fuel type.

- 5.3 In order to assess the carbon emissions generated by staff and students commuting, a number of assumptions have been made, as follows:

- The average full time equivalent (FTE) member of staff works 215 days per annum (taking into account annual leave, bank holidays and absence);
- The average student attends University for 155 days a year; this is an estimate based on the number of teaching weeks in the year. It recognises that not all students will attend University every week day, but that some will make trips on weekends /during holidays as well as during teaching weeks;
- Response rates have been factored up to represent the full staff and student figures of 2,878 and 28,306 respectively;
- Only the regular commute to campus for students has been considered (as per HEFCE guidance the trip from parental/family home is not required);
- The Defra 2017 conversion factors have been used to calculate carbon emissions. Conversion factors are given for each mode with some modes broken down further e.g. car by fuel type and engine size;





- For motorcyclists an average vehicle type has been adopted (due to the limited number that travel by this mode it is unlikely to impact on the result).

### Headline (Scope 3) Carbon Emissions

5.4 The following summary tables (**Table 5.1-5.3**) set out the emissions (carbon dioxide, methane and nitrogen dioxide) generated per annum, by mode of transport for the staff and student commute. The HEFCE guidance recommended that comparisons are made in tons of CO<sub>2</sub>e. **Table 5.1** shows that all staff are producing 1377.7 tons of CO<sub>2</sub>e per year from commuting to work which equates to 0.479 tons of CO<sub>2</sub>e per head.

**Table 5.1: Scope 3 Carbon Emissions from Commuting (Staff)**

| <i>Staff</i>    | <i>Total KM By Mode</i> | <i>Total Annual kg CO<sub>2</sub>e</i> | <i>Total Annual kg CO<sub>2</sub></i> | <i>Total Annual kg CH<sub>4</sub></i> | <i>Total Annual kg N<sub>2</sub>O</i> | <i>Total Annual Tons CO<sub>2</sub>e</i> |
|-----------------|-------------------------|--|---------------------------------------|---------------------------------------|---------------------------------------|--|
| Car             | 4,947,327               | 762,617                                | 727,005                               | 2,321                                 | 6,313                                 | 750.4                                    |
| Motorbike       | 104,789                 | 12,221                                 | 11,944                                | 215                                   | 62                                    | 12.0                                     |
| Bus             | 3,029,809               | 371,424                                | 368,667                               | 182                                   | 2,575                                 | 365.5                                    |
| Train           | 3,082,822               | 144,214                                | 142,920                               | 185                                   | 1,110                                 | 141.9                                    |
| Metro           | 2,281,529               | 101,437                                | 100,661                               | 183                                   | 593                                   | 99.8                                     |
| Taxi            | 52,417                  | 8,186                                  | 8,116                                 | 1                                     | 70                                    | 8.1                                      |
| <b>Total</b>    | <b>13,498,692</b>       | <b>1,400,099</b>                       | <b>1,359,312</b>                      | <b>3,085</b>                          | <b>10,723</b>                         | <b>1377.7</b>                            |
| <i>Per Head</i> | <i>4690.3</i>           | <i>486.5</i>                           | <i>472.3</i>                          | <i>1.072</i>                          | <i>3.726</i>                          | <i>0.479</i>                             |

5.5 **Table 5.2** shows that all students are producing 8937.5 tons of CO<sub>2</sub>e per year from commuting to and from University to study which equates to 0.316 tons of CO<sub>2</sub>e per head.



**Table 5.2: Scope 3 Carbon Emissions from Commuting (Students)**

| Students        | Total KM By Mode  | Total Annual kg CO <sub>2</sub> e | Total Annual kg CO <sub>2</sub> | Total Annual kg CH <sub>4</sub> | Total Annual kg N <sub>2</sub> O | Total Annual Tons CO <sub>2</sub> e |
|-----------------|-------------------|-----------------------------------|---------------------------------|---------------------------------|----------------------------------|-------------------------------------|
| Car             | 15,580,926        | 2,560,462                         | 2,470,099                       | 8,127                           | 13,706                           | 2519.5                              |
| Motorbike       | 195,021           | 22,743                            | 22,229                          | 400                             | 115                              | 22.4                                |
| Bus             | 36,651,196        | 4,493,070                         | 4,459,718                       | 2,199                           | 31,154                           | 4421.2                              |
| Train           | 14,155,969        | 662,216                           | 656,271                         | 849                             | 5,096                            | 651.6                               |
| Metro           | 28,190,787        | 1,253,362                         | 1,243,778                       | 2,255                           | 7,330                            | 1233.3                              |
| Taxi            | 582,436           | 90,959                            | 90,179                          | 6                               | 775                              | 89.5                                |
| <b>Total</b>    | <b>95,356,336</b> | <b>9,082,814</b>                  | <b>8,942,272</b>                | <b>13,836</b>                   | <b>58,175</b>                    | <b>8937.5</b>                       |
| <i>Per Head</i> | <i>3368.8</i>     | <i>320.9</i>                      | <i>315.9</i>                    | <i>0.489</i>                    | <i>2.055</i>                     | <i>0.316</i>                        |

5.6 **Table 5.3** shows both the staff and student carbon from commuting combined and that together, all commuting to the University is generating 10,315.2 tons of CO<sub>2</sub>e each year. This equates to an average of 0.331 tons of CO<sub>2</sub>e per head for staff and students.

**Table 5.3: Scope 3 Carbon Emissions from Commuting (Staff and Students)**

| Total           | Total KM By Mode   | Total Annual kg CO <sub>2</sub> e | Total Annual kg CO <sub>2</sub> | Total Annual kg CH <sub>4</sub> | Total Annual kg N <sub>2</sub> O | Total Annual Tons CO <sub>2</sub> e |
|-----------------|--------------------|-----------------------------------|---------------------------------|---------------------------------|----------------------------------|-------------------------------------|
| Car             | 20,528,252         | 3,323,079                         | 3,197,104                       | 10,448                          | 20,019                           | 3269.9                              |
| Motorbike       | 299,810            | 34,964                            | 34,172                          | 615                             | 177                              | 34.4                                |
| Bus             | 39,681,005         | 4,864,494                         | 4,828,385                       | 2,381                           | 33,729                           | 4786.7                              |
| Train           | 17,238,791         | 806,431                           | 799,190                         | 1,034                           | 6,206                            | 793.5                               |
| Metro           | 30,472,316         | 1,354,799                         | 1,344,439                       | 2,438                           | 7,923                            | 1333.1                              |
| Taxi            | 634,853            | 99,145                            | 98,294                          | 6                               | 844                              | 97.6                                |
| <b>Total</b>    | <b>108,855,028</b> | <b>10,482,912</b>                 | <b>10,301,584</b>               | <b>16,922</b>                   | <b>68,898</b>                    | <b>10315.2</b>                      |
| <i>Per Head</i> | <i>3490.7</i>      | <i>336.2</i>                      | <i>330.3</i>                    | <i>0.543</i>                    | <i>2.209</i>                     | <i>0.331</i>                        |



## 6. START OF YEAR STUDENT TRAVEL

### Introduction

- 6.1 The University are keen to monitor and set targets for the carbon generated by the travel students undertake at the start of each academic year. Students travel to Northumbria University from all over the UK (see Section 4 of the Travel Survey Report) and over 16% of students travel by plane or ferry.
- 6.2 This is the first time this exercise has been carried out using the data collected as part of the annual travel survey and as lessons are learnt about the data and parameters required, the format in which the data is collected in future years will be improved upon. There are quite a number of assumptions that needed to be made in order to calculate the carbon generated and these are described along with the methodology used, below.

### Methodology

- 6.3 Students were asked whether they have the same address during term-time and university holidays or whether they travel to Northumbria University campuses at the start of each academic year. For those students who do have different addresses, the postcodes of their permanent/non-term-time address were used to calculate the distances travelled by students.
- 6.4 Students were also asked which mode of transport they use to travel to University at the start of the year including options for plane and ferry/boat. For those who drive by themselves the information about their car fuel type and engine size given in a later question were used assuming that they drive the same vehicle. The above information was then used to calculate carbon emissions from transport following the Department for Food and Rural Affairs (Defra) guidelines and 2017 conversion factors.
- 6.5 The following assumptions were made:
- All UK journey distances were calculated using the driving distance calculation tool Doogal and are therefore the distances it would take to drive between the two postcodes rather than rail, Metro etc;
  - For those students who drove by themselves, the fuel type and engine size they provided in a later question about the type of vehicle they use to drive themselves to University each day was used where available, assuming that this is the same vehicle they used to drive at the beginning of the year;



- For all those students who car shared, Defra conversion factors for an average vehicle were used as they were not asked about the vehicle they travelled in or who was driving, only if they car shared with friends/other students/family members;
- Distances were factored up to the student population who do travel from a different address at the start of term (81% of the full student population (28,306 x 81% = 22928) and using the mode split for the start of year;
- Distances travelled by car sharers who shared with other students were halved to represent the fact they are most likely sharing with students from the same University. However, distances travelled by car sharers who shared with family members were reported as is, assuming that the purpose of this journey was to transport that student to University and would not have been made otherwise;
- As it was not known at the time of surveying that this data would be used to calculate emissions, international students were only asked which country they travel from and by which mode. Where a city was not provided (in the majority of cases), the capital city airport was used. Distances between these origin airports and Newcastle airport were calculated in all cases. The Defra conversion factors for average domestic, short-haul and long-haul business air travel were used. The guidelines recommend using factors that include for Radiative forcing (RF) which is a measure of the additional environmental impact of aviation (nitrous oxides, water vapour). This captures the maximum climate impact of air travel and substantially increases the overall results.

## Headline Emissions From Student Travel At The Start of the Academic Year

6.6 The following summary table illustrates the total CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O emissions by mode of transport for student travel at the start of each year:

**Table 6.1: Emissions from student travel at the start of the academic year**

| <i>Students</i> | <i>Total KM By Mode</i> | <i>Total Annual kg CO<sub>2</sub>e</i> | <i>Total Annual kg CO<sub>2</sub></i> | <i>Total Annual kg CH<sub>4</sub></i> | <i>Total Annual kg N<sub>2</sub>O</i> | <i>Total Annual Tonnes CO<sub>2</sub>e (Metric Tonne)</i> | <i>Total Annual Tons CO<sub>2</sub>e (Imperial UK Ton)</i> |
|-----------------|-------------------------|--|---------------------------------------|---------------------------------------|---------------------------------------|---|--|
| <i>Car</i>      | <i>1,376,708</i>        | <i>250,696</i>                         | <i>248,884</i>                        | <i>268</i>                            | <i>1,543</i>                          | <i>250.70</i>   | <i>246.74</i>  |
| <i>Bus</i>      | <i>182,679</i>          | <i>5,078</i>                           | <i>5,005</i>                          | <i>4</i>                              | <i>69</i>                             | <i>5.08</i>   | <i>5.00</i>  |
| <i>Rail</i>     | <i>518,386</i>          | <i>24,250</i>                          | <i>24,032</i>                         | <i>31</i>                             | <i>187</i>                            | <i>24.25</i>  | <i>23.87</i>   |



|                          |                   |                  |                  |             |               |                 |                 |
|--------------------------|-------------------|------------------|------------------|-------------|---------------|-----------------|-----------------|
| <b>Metro/Tube</b>        | <b>56,048</b>     | <b>2,492</b>     | <b>2,473</b>     | <b>4</b>    | <b>15</b>     | <b>2.49</b>     | <b>2.45</b>     |
| <b>Taxi</b>              | <b>2,374</b>      | <b>371</b>       | <b>368</b>       | <b>0.0</b>  | <b>3</b>      | <b>0.37</b>     | <b>0.36</b>     |
| <b>Motorcycle</b>        | <b>674</b>        | <b>79</b>        | <b>77</b>        | <b>1.4</b>  | <b>0.4</b>    | <b>0.08</b>     | <b>0.08</b>     |
| <b>Ferry</b>             | <b>61,001</b>     | <b>7,083</b>     | <b>7,028</b>     | <b>3</b>    | <b>52</b>     | <b>7.08</b>     | <b>6.97</b>     |
| <b>Plane</b>             | <b>11,170,997</b> | <b>1,137,805</b> | <b>1,126,997</b> | <b>124</b>  | <b>10,684</b> | <b>1,137.80</b> | <b>1,119.83</b> |
| <b>TOTAL (All Modes)</b> | <b>13,368,868</b> | <b>1,427,854</b> | <b>1,414,865</b> | <b>435</b>  | <b>12,554</b> | <b>1,427.85</b> | <b>1,405.30</b> |
| <b>Per Head</b>          | <b>583.08</b>     | <b>62.28</b>     | <b>61.71</b>     | <b>0.02</b> | <b>0.55</b>   | <b>0.06</b>     | <b>0.06</b>     |



## 7. MONITORING AGAINST TARGETS

7.1 The 2016 Travel Plan report set targets to be achieved by 2018 and these were reiterated in a 2017 Travel Plan Update report. The principal targets were to reduce emissions from business travel the staff and student commute and to reduce the proportion of staff and students travelling to University in a car by themselves. In this section the 2018 survey data is used to monitor progress against those targets.

7.2 The targets set out in the 2017 report were:

- Reduce emissions from Business Travel by 4% annually.
- To reduce the average emissions associated with staff and student commuter travel by 3% by 2018.
- To reduce the percentage of staff and students whose modal travel option is single occupancy car travel.

### Mode Split Targets

7.3 Comparing the modal split of the staff and student commute over time, particularly the proportion of each group who usually travel to University in a car by themselves, is a key indicator of how well the Travel Plan measures are performing. **Table 6.2** summarises the findings of the travel surveys between 2007 and 2014 for both staff and students. The results show a sustained reduction in car driver trips for students and a maintained low level of car driver trips for staff.

**Table 6.2: Summary Modal Split Statistics 2007 to 2014 (%)**

| Mode                 | 2007         |              | 2009         |              | 2010         |              | 2012         |              | 2014         |              |
|----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                      | Staff        | Student      | Staff        | Student      | Staff        | Student      | Staff        | Student      | Staff        | Student      |
| Car Driver           | 27.3%        | 25.9%        | 44.8%        | 29.4%        | 31.7%        | 28.5%        | 30.5%        | 21.4%        | 32.4%        | 19.5%        |
| Car Passenger        | 5.8%         | 7.1%         | 4.4%         | 1.4%         | 4.8%         | 2.7%         | 4.8%         | 2.2%         | 4.2%         | 2.9%         |
| <b>Car</b>           | <b>33.1%</b> | <b>33.0%</b> | <b>49.2%</b> | <b>30.8%</b> | <b>36.5%</b> | <b>31.2%</b> | <b>35.3%</b> | <b>23.6%</b> | <b>36.6%</b> | <b>22.4%</b> |
| <b>Non-Car Modes</b> | <b>66.9%</b> | <b>67.0%</b> | <b>50.7%</b> | <b>69.3%</b> | <b>63.6%</b> | <b>68.9%</b> | <b>64.8%</b> | <b>76.4%</b> | <b>62.6%</b> | <b>77.5%</b> |

7.4 Since 2016, data is available for single occupancy car travel as a mode (as opposed to 'car driver' including car share drivers) as well as by Campus. The results for 2016 and 2018 are shown in **Table 6.3** alongside the targets set to be achieved by 2018 and the progress achieved.



**Table 6.3: 2016 and 2018 Single Occupancy Car Travel and 2018 Targets**

| Campus     | 2016  |         | 2018 Target |         | 2018  |         | Variance (Target-Actual) |         |
|------------|-------|---------|-------------|---------|-------|---------|--------------------------|---------|
|            | Staff | Student | Staff       | Student | Staff | Student | Staff                    | Student |
| City       | 30%   | 30%     | 24%         | 15%     | 27%   | 8%      | 2.9%                     | -7.4%   |
| Coach Lane | 76%   | 59%     | 70%         | 50%     | 63%   | 31%     | -7.4%                    | -18.9%  |

- 7.5 The targets for students have been exceeded at both the main campuses where the proportion of lone driving students is 7 percentage points below the City Campus target and 19 percentage points below the Coach Lane target.
- 7.6 The target for staff has been exceeded at the Coach Lane Campus where there are 7 percentage points less lone drivers than the target and 13 percentage points less than in 2016. However, there is a little way to go to achieve the staff target for City Campus where the proportion of lone drivers is still 3 percentage points above the 2018 target, but still 6 percentage points lower than it was in 2016 which is a massive achievement.

### Carbon Targets

- 7.7 Using the results of this 2018 Carbon assessment as a baseline a target to reduce the average emissions associated with staff and student commuter travel by 3% is proposed, to be achieved by 2023.

**Table 6.4: 2018 Carbon Assessment and 2023 Targets**

|         | 2018                       | 2023 Targets<br>(3% decrease) |
|---------|----------------------------|-------------------------------|
| Staff   | 487 kg (CO <sub>2</sub> e) | 472 kg (CO <sub>2</sub> e)    |
| Student | 321 kg (CO <sub>2</sub> e) | 311 kg (CO <sub>2</sub> e)    |

### Travel Plan Targets for 2023

- 7.8 Given that the previous mode split targets were set to be achieved by 2018, it is proposed that new targets are set and agreed for the next reporting period. Proposed mode split targets and carbon emission targets are set out in **Table 6.5** and **6.6**.



**Table 6.5: Mode Split Targets 2018-2023**

| Campus     | 2018  |         | 2023 Target<br>(10% decrease at City<br>6% decrease at Coach Lane) |         |
|------------|-------|---------|--|---------|
|            | Staff | Student | Staff  | Student |
| City       | 27%   | 8%      | 24.2%  | 6.8%    |
| Coach Lane | 63%   | 31%     | 58.8%  | 29.2%   |

**Table 6.6: Scope 3 Carbon Emissions from Commuting Per Head Targets 2018 – 2023**

|                | 2018                                   | 2023 Targets<br>(3% decrease)          |
|----------------|--|--|
| <b>Staff</b>   | 487 kg or 0.479 tons CO <sub>2</sub> e | 472 kg or 0.464 tons CO <sub>2</sub> e |
| <b>Student</b> | 321 kg or 0.316 tons CO <sub>2</sub> e | 311 kg or 0.306 tons CO <sub>2</sub> e |





## 8. MEASURES AND IMPLEMENTATION PLAN

- 8.1 This section reviews the programme of Travel Plan initiatives and measures that have been implemented, are in progress and are still to be actioned. Where appropriate new measures are proposed to enhance the impact of the Travel Plan and help further progress towards meeting the aim, objectives in **Section 1** and the targets set out in **Section 6**.
- 8.2 An action plan has been developed and updated in previous versions of the University's Travel Plans. The proposed measures are listed in this section with further descriptions provided where necessary. These measures are also set out in **Appendix B** with recommendations of how they should be prioritised and their likely impact.

### Governance and Project Management

#### PM1 Travel Plan Coordinator

- 8.3 A TPC has been in post, as part of the Sustainability team in Estate Services since 2007 and is currently performed by Katie Ridley. This role has an oversight of the Travel Plan programme and ensures the momentum of implementing the travel plan and monitoring is maintained.

### Travel and Transport Information

|              |   |
|--------------|---|
| <b>T11-6</b> | Travel information incentivising non-car modes:                 |
| <b>T11</b>   | in student pre-arrival information                              |
| <b>T12</b>   | at student Freshers / Welcome Week events                       |
| <b>T13</b>   | in staff inductions   |
| <b>T14</b>   | in staff events such as staff benefits fayre                    |
| <b>T15</b>   | provided on campus maps   |
| <b>T16</b>   | on University web pages (external and staff/student restricted) |

- 8.4 Ensuring staff and students are making fully informed travel choices i.e. making decisions about how to travel based on knowledge and awareness of all travel mode options available to them, is a relatively low cost but high impact suite of measures. Often it is providing the most appropriate information in a meaningful way to a target audience and the most impactful time. This generally means providing succinct travel advice at the earliest opportunity for staff (as part of recruitment and induction) and students (in pre-arrival information and at Freshers). Influencing travel behaviour choice before habits are established is imperative to a successful travel plan.

#### T17 Annual Sustainable Travel Event



8.5 Engaging, fun events throughout the University calendar are an opportunity to remind staff and students about different initiatives and offers to help save them money, establish healthier daily routines etc. There is an annual programme of national and regional events that can be 'piggy backed' e.g. Bike Week, Climate Week etc.

**T18** Improve site and wayfinding signage

8.6 Improving on-campus information ensures a better understanding of where on-campus facilities are located and instils confidence in staff and students to move around University without the need for motorised transport.

### **Active Travel**

8.7 A growing list of measures are proposed to encourage as many staff and students as possible to give walking or cycling to University a go and to support those already doing so. Most of those listed below are self-explanatory.

8.8 AT4 Work is being undertaken to better understand the demand from staff for lockers and changing facilities, with the intention of then installing additional lockers across the campus in order to meet demand.

8.9 AT6 refers to self-help fix-it equipment that enable cyclists to perform their own basic repairs and maintenance on campus.

8.10 AT8 The University's first secure cycle store for students has been installed and will be available for use from September 2018.

8.11 AT12 aims to improve staff and student access to buying bikes. This may be via reductions in local stores as well as publicising access to second-hand bikes i.e. Recyke y'bikes (the University donates unwanted bikes to such organisations). Access to bikes has already been improved through the development of the Mobike cycle scheme on campus and across the city.

8.12 The university will continue to work with the Council to look at routes across campus. Improvements to the existing Council-owned, pedestrian bridge over the motorway connecting the east and west side of the campus, are possible but will depend on whether the Council can get funding to improve or replace it.

- AT1** Promote benefits of walking (information)
- AT2** Improve and maintain campus walking routes
- AT3** Improve shower and changing facilities
- AT4** Increase lockers and showers on campus
- AT5** Promote benefits of cycling (information)



- AT6** Add equipment to assist cyclists with simple bike maintenance.
- AT7** Further facilitate the purchase and use of electric bikes.
- AT8** Increase cycle parking provision across campuses
- AT9** Install secure cycle parking for students on campus
- AT10** Develop a cycle buddy scheme
- AT11** Run guided cycling tours
- AT12** Agree and publicise discounts in local cycle shops for Northumbria University staff and students
- AT13** Continue schedule of bike tagging and Dr Bike
- AT14** Continue staff Bicycle User Group and increase membership
- AT15** Develop a city-wide cycle scheme in partnership with the Council
- AT16** Promote Cycle to Work scheme to staff
- AT17** Publicise guided cycle rides/ training for staff and students
- AT18** Sell walking/cycling equipment (e.g. locks, lights) from Campus shops

## Public Transport

8.13 Similarly, there are some well-established measures to encourage the use of public transport including a free inter-campus bus and corporate travel scheme for staff that will be continued and better promoted throughout this travel plan period. Working more in partnership with operators and Nexus and inviting them to events such as Freshers Fayres may encourage the take-up of ticketing schemes.

- PT1** Continue the operation of the inter-campus shuttle bus
- PT2** Promote benefits of using public transport (information)
- PT3** Liaise with local public transport operators to develop incentives (including ticketing offers) for staff and students
- PT4** Continue discounted public transport passes for staff through monthly salary deduction
- PT5** Invite key operators to promote at University events

## Smarter Driving

- SD1** Establish and promote a Car Share Scheme online database for staff and students

8.14 There is the opportunity to develop a car share database in order to identify potential matches. This may be in-house, through a national database such as Liftshare, Blablacar, Faxe etc., or could involve establishing a private database for the University using a platform such as Liftshare or Carbon Heroes. A pairing service for those who want to car share is being looked into.

- SD2** Install EV Charging points on campus

8.15 There are currently EV charging points available at City Campus in hunt and park permit car parks and one at Coach Lane campus. Additional points will be needed to meet demand as the ownership of EVs grows. There are plans to increase EV infrastructure across the campus with the addition of extra points over the 2018 summer and infrastructure is being laid so that more points can be added as demand requires.



**SD3** Review car park management system and encourage alternative modes

- 8.16 A review of the car park management took place in 2018 resulting in the reduction of car park spaces, the removal of the option to pay for a private bay, and an increase to the price of a Hunt & Park permit. This may be reviewed further in the future i.e. if further demands on car park space arise.

## Reducing the Need to Travel

- R1** Review and promote the provision of tele and video-conferencing facilities  
**R2** Increase provision of tele and video-conferencing facilities  
**R3** Accommodate flexible working (including homeworking where appropriate) with the aim of spreading start/finish times, increasing working from home and reducing pressure on transport infrastructure (including car parks)

- 8.17 Improvements in IT and facilities on campus allow staff to carry out their roles and work without always needing to travel to a particular location. A large proportion of grades enable flexible working enabling staff some flexibility regarding work start and end times. The Citrix system, introduced by IT, also enables home working where suitable.

## Business Travel

- BT1** Add emissions from car travel to quarterly business mileage reports  
**BT2** Investigate car pool scheme options - feasibility and benefits  
**BT3** Review and improve the business fleet in terms of emissions

- 8.18 There have been several measures already implemented to ensure that when travel during the working day for work by staff is necessary it is done in the most sustainable way. These have included

- Promotion of the inter-campus bus service
- Setting targets for business travel
- Quarterly reporting on emissions from flights and rail trips
- Review of travel procedures to reduce business and first class flights.

- 8.19 Monitoring of business travel has been extended to also include travel undertaken by taxis and grey fleet. Further work may be done to analysis this and to consider whether business travel may be taken by a more sustainable means.

## Monitoring and Review



8.20 Finally, a bi-annual travel plan monitoring regime is well established at the University and set to continue using the same approach and methodology.

**M1** Full travel survey every two years



## Appendix A

### *Staff and Student Travel Survey Questionnaires*



## Appendix B

### *Implementation Action Plan*



| REF         | MEASURE / INITIATIVE  | RESPONSIBLE OWNER                  | PRIORITY (H/M/L) | IMPACT (H/M/L) | TARGET DATE | PROGRESS (Updated May 2018) |
|-------------|---|------------------------------------|------------------|----------------|-------------|-----------------------------|
| <b>PM1</b>  | Travel Plan Coordinator   | Sustainability                     | H                | H              | 2016        | Complete                    |
|             | Travel information incentivising non-car modes:   |                                    |                  |                |             |                             |
| <b>T11</b>  | in student pre-arrival information  | Sustainability and Marketing       | H                | H              | N/A         | Ongoing                     |
| <b>T12</b>  | at student Freshers / Welcome Week events   | Sustainability and Marketing       | H                | H              | N/A         | Ongoing                     |
| <b>T13</b>  | in staff inductions   | Human Resources and Sustainability | H                | H              | N/A         | Ongoing                     |
| <b>T14</b>  | in staff events such as staff benefits fayre  | Human Resources and Sustainability | H                | H              | N/A         | Ongoing                     |
| <b>T15</b>  | provided on campus maps   | Sustainability and Campus Services | M                | H              | N/A         | Ongoing                     |
| <b>T16</b>  | on University web pages (external and staff/student restricted)                                   | Sustainability and Marketing       | H                | H              | N/A         | Ongoing                     |
| <b>T17</b>  | Annual Sustainable Travel Events  | Sustainability                     | M                | M              | N/A         | Ongoing                     |
| <b>T18</b>  | Improve site and wayfinding signage   | Campus Services                    | M                | M              | Aug-18      | Complete                    |
| <b>AT1</b>  | Promote benefits of walking (information)   | Sustainability                     | M                | M              | N/A         | Ongoing                     |
| <b>AT2</b>  | Improve and maintain campus walking routes  | Sustainability                     | M                | L              | Apr-19      | In Progress                 |
| <b>AT3</b>  | Improve shower and changing facilities  | Sustainability                     | M                | L              | Apr-19      | In Progress                 |
| <b>AT4</b>  | Increase lockers and showers on campus  | Sustainability                     | H                | M              | Apr-19      | In Progress                 |
| <b>AT5</b>  | Promote benefits of cycling (information)   | Sustainability                     | M                | H              | N/A         | Ongoing                     |
| <b>AT6</b>  | Add equipment to assist cyclists with simple bike maintenance e.g. air pumps.                     | Sustainability and Campus Services | M                | H              | Mar-19      | In Progress                 |
| <b>AT7</b>  | Further facilitate the purchase and use of electric bikes.  | Sustainability and Campus Services | M                | H              | Dec-19      | In Progress                 |
| <b>AT8</b>  | Increase cycle parking provision across campuses  | Campus Services                    | H                | M              | 2017        | Complete                    |
| <b>AT9</b>  | Install secure cycle parking for students on campus   | Campus Services                    | H                | H              | Sep-17      | Complete                    |
| <b>AT10</b> | Develop a cycle buddy scheme  | Sustainability                     | L                | L              | Mar-19      | In Progress                 |
| <b>AT11</b> | Run guided cycle tours  | SU and Sport                       | L                | L              | N/A         | Ongoing                     |
| <b>AT12</b> | Agree and publicise discounts in local cycle shops for Northumbria University staff and students. | Sustainability and SU              | M                | M              | N/A         | Ongoing                     |
| <b>AT13</b> | Continue schedule of bike tagging and Dr Bike   | Sustainability                     | H                | M              | N/A         | Ongoing                     |
| <b>AT14</b> | Continue staff Bicycle User Group and increase membership   | Sustainability                     | L                | L              | N/A         | Ongoing                     |
| <b>AT15</b> | Develop a city-wide cycle scheme in partnership with the Council                                  | Sustainability                     | M                | L              | Jul-18      | Complete                    |





| REF         | MEASURE / INITIATIVE  | RESPONSIBLE OWNER                                       | PRIORITY (H/M/L) | IMPACT (H/M/L) | TARGET DATE | PROGRESS (Updated May 2018) |
|-------------|---|---|------------------|----------------|-------------|-----------------------------|
| <b>AT16</b> | Promote Cycle to Work scheme to staff   | Sustainability and HR                                   | H                | H              | N/A         | Ongoing                     |
| <b>AT17</b> | Publicise guided cycle rides/training for staff and students.   | Sustainability and HR                                   | L                | L              | N/A         | Ongoing                     |
| <b>AT18</b> | Sell walking/cycling equipment (e.g. locks, lights) from Campus shops   | Campus Services   | L                | M              | Dec-18      | In Progress                 |
| <b>PT1</b>  | Continue the operation of the inter-campus shuttle bus  | Sustainability  | H                | M              | N/A         | Ongoing                     |
| <b>PT2</b>  | Promote benefits of using public transport (information)  | Sustainability  | M                | M              | N/A         | Ongoing                     |
| <b>PT3</b>  | Liaise with local public transport operators to develop incentives (including ticketing offers) for staff and students  | Sustainability  | H                | M              | N/A         | Ongoing                     |
| <b>PT4</b>  | Continue discounted public transport passes for staff through monthly salary deduction  | HR  | M                | M              | N/A         | Ongoing                     |
| <b>PT5</b>  | Invite key operators to promote at University events  | Sustainability  | M                | M              | N/A         | Ongoing                     |
| <b>SD1</b>  | Establish and promote a Car Share Scheme online database for staff and students   | Sustainability  | H                | M              | Dec-19      | Not actioned                |
| <b>SD2</b>  | Install EV Charging points on campus  | Sustainability and Campus Services                      | H                | M              | Aug-18      | Complete                    |
| <b>SD3</b>  | Review car park management system and encourage alternative modes   | Campus Services   | H                | M              | Jun-18      | Complete                    |
| <b>R1</b>   | Review and promote the provision of tele and video-conferencing facilities  | IT Services and Head of Campus Planning and Development | M                | M              | Aug-18      | Complete                    |
| <b>R2</b>   | Increase provision of tele and video-conferencing facilities  | IT Services   | M                | M              | Dec-18      | Complete                    |
| <b>R3</b>   | Accommodate flexible working (including homeworking where appropriate) with the aim of spreading start/finish times, increasing working from home and reducing pressure on transport infrastructure (including car parks) | Human Resources   | M                | M              | N/A         | Ongoing                     |
| <b>BT1</b>  | Add emissions from car travel to quarterly business mileage reports   | Sustainability  | M                | L              | Sep-18      | Complete                    |
| <b>BT2</b>  | Investigate car pool scheme options - feasibility and benefits  | Sustainability  | H                | H              | Aug-18      | Complete                    |
| <b>BT3</b>  | Review and improve the business fleet in terms of emissions   | Mail and Transport Manager, CBRE, Chartwells            | M                | M              | Dec-19      | In Progress                 |
| <b>M1</b>   | Full travel survey every two years  | Sustainability  | H                | H              | May-20      | Ongoing                     |