University of Derby Staff and Student Travel Survey 2010 – Analysis

1. Background to Survey

In 2003, at the outset of the travel plan, a survey was undertaken by consultants, on behalf of the University of Derby to establish the travel needs and opinions of staff and students. A further survey took place in 2007. A commitment to a pattern of a survey once every three years was then established in the 2009-2014 Travel Plan.

This survey was the third to be undertaken by the University of Derby. Much of the structure has been designed to enable direct comparison with the previous survey, in order to measure change.

2. Development and Marketing

The survey was entirely internet based, on the basis that the vast majority of staff and all students have access to University computer facilities. Opportunities were also available for people to complete the survey on a computer set up in the atrium at Kedleston Road and the Dome at Buxton.

Posters advertising the survey were designed and produced. These were displayed in public areas at all teaching sites, at residential sites and on Unibuses. An all-staff email was sent, and all students were emailed personally to request their completion of the survey.

3. Response to Survey

There were a total of 1,696 responses to the Travel survey. Of these 1,496 were based at Derby sites, 156 at Buxton and the remainder from outlying locations such as Chesterfield and Cromford. These responses are not considered in this analysis as their was a survey specific to Chesterfield undertaken earlier in the year, and only 2 responses were made for Cromford, which is to small a sample to meaningfully analyse.

The response represents a large sample of staff and students from both Derby and Buxton and we can be confident that this sample is, as before significant enough to draw conclusions about University transport and travel issues.

4. Survey Structure / Question Areas

The survey was designed with the aim to keep as many questions as possible the same for staff and students, in order to assist with analysis of data. On certain subjects, issues facing staff and students may be very different due to differing roles and policies. In order to keep the survey relevant and interesting to respondents, two tracks to the survey exist on some questions, mainly surrounding issues such as attitudes, awareness and parking.

Issues such as modal choice were covered in the survey, with an allowance for second and third choices of modes included within questions to give the broadest possible appreciation of the issues.

Arrival times, journey times and distances were also covered to give a fuller appreciation and context to the University's travel issues.

Most questions required an answer to progress the survey, and some questions allowed several answers, for example, respondents were asked to tick all the statements about parking that they agreed with. These statements would offer a spectrum of views, some of which were compatible and some contrary. This is in order to establish the most prevalent views of each group of people.

Most questions were closed, with respondents having to make a choice that was presented before them. This was in order to provide manageable and useful data to analyse. The final question gave respondents a chance to write as much or as little as they desired on travel issues.

5. Detailed Analysis

It was felt that the most logical and straightforward way to analyse the survey was on a progressive question by question basis, combining some closely related matters. However, within the answers to questions, filters have been applied to data, so that a multi-dimensional approach to analysis could be taken. This means that where relevant, detailed queries of data are pursued, for example, to establish what response car drivers may give to a certain question, compared to the overall sample.

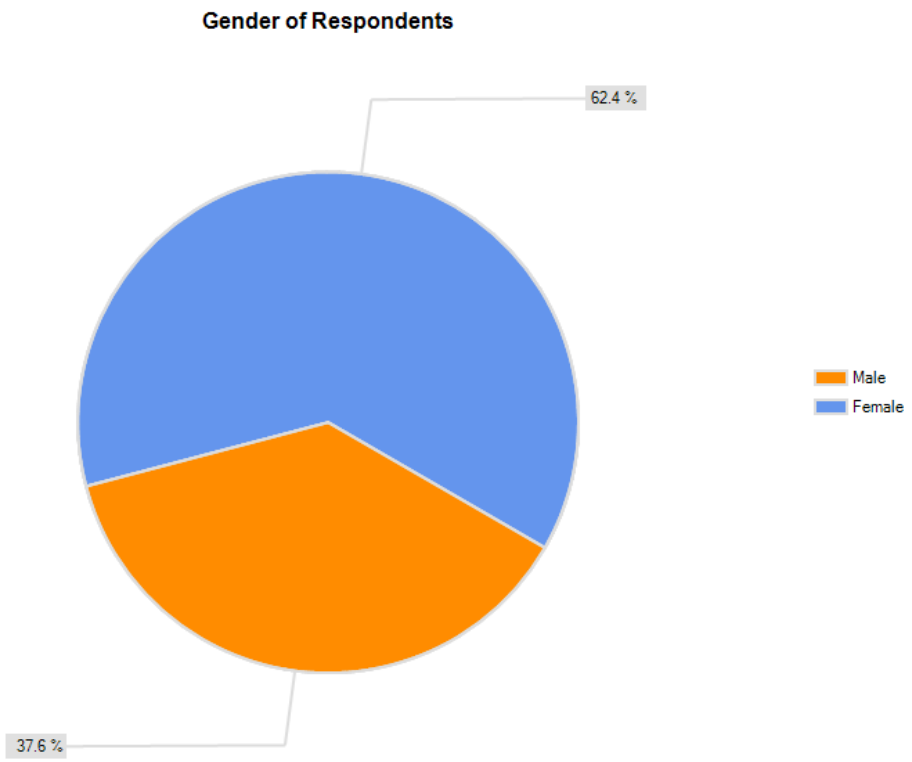
5.1 Personal Data

Respondents were asked for their name and also for a contact phone number. This was simply for the purposes of the prize draw. It was also possible to audit that no duplicate responses had been made by individuals (this is a potential problem when a prize is offered).

Once again, as in the previous surveys, there was a larger response from women than men. This is shown in figure 1. Although the majority of respondents were female in both staff and student categories, the difference is more pronounced amongst students than staff, with almost two thirds of students who responded being female. Overall the university has a 59% female to 41% male ratio for student admissions, and 58% female to 42% male ratio for staff; **University of Derby (2005)**. This accounts the majority of the difference indicated in Figure 1.

Allowing for gender ratios at the University, it still remains that, there has been a proportionally greater response from females. This may have a small influence on the nature of the results.

Figure 1



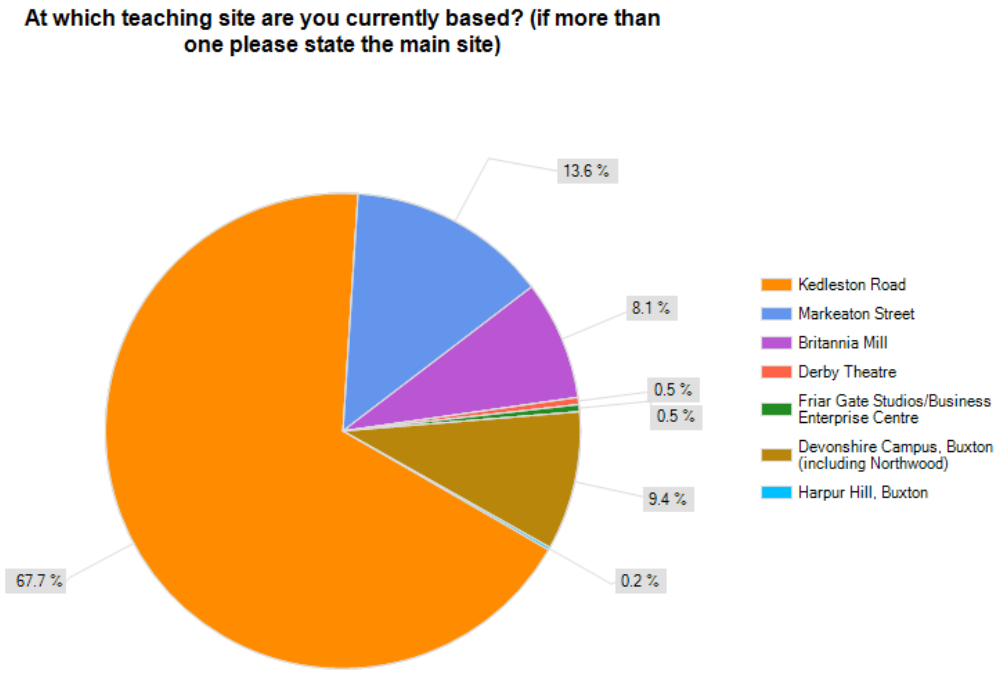
5.2 Teaching Sites

Respondents were asked the location of their current base (teaching) site. Over two thirds were based at Kedleston Road. 13.6% were at Markeaton Street and 8.1% at Britannia Mill. 9.6% were based at Buxton and the remaining 1% at other small sites.

This is quite a variation from 2007, as the University estate has changed considerably, with the consolidation of previous sites within Derby.

Unlike 2007, there was also quite a variation between the location of staff and student respondents. The student response was proportionally much higher at Markeaton Street and Britannia Mill than that of the staff. Staff responses were at a greater concentration at Kedleston Road and Buxton, which reflects the higher ratio of staff here, due to the proportionally larger amount of administrative functions in these locations.

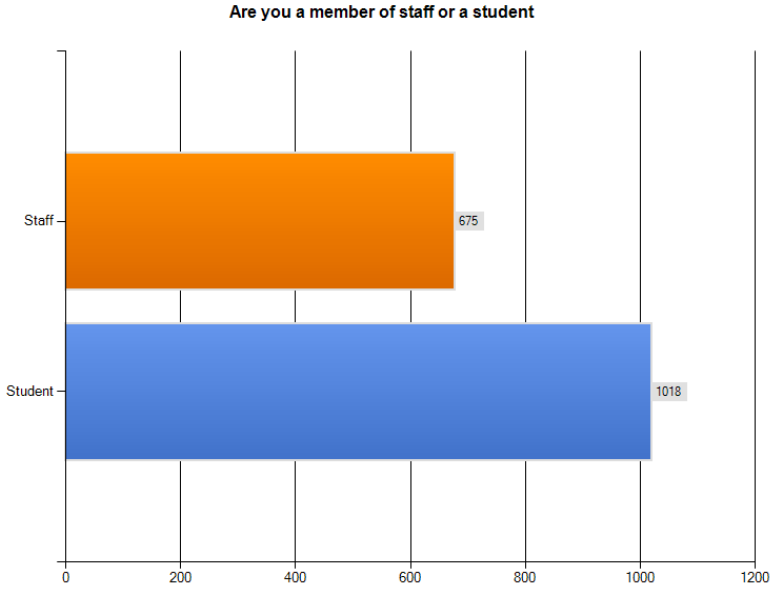
Figure 2



5.3 Staff or Students

The distinction between staff and students is perhaps the most significant in terms of analysing travel patterns. Different policies apply between the two groups on issues such as parking. Staff will usually have a higher income than students and travel at different times. Compared to many full time students, staff will have less flexibility in their days to plan their travel. Figure 3 shows the breakdown of responses.

Figure 3



Although numerically, more students responded, the proportion of students was, once again, notably lower than the proportion of staff.

5.4 Modes of Travel

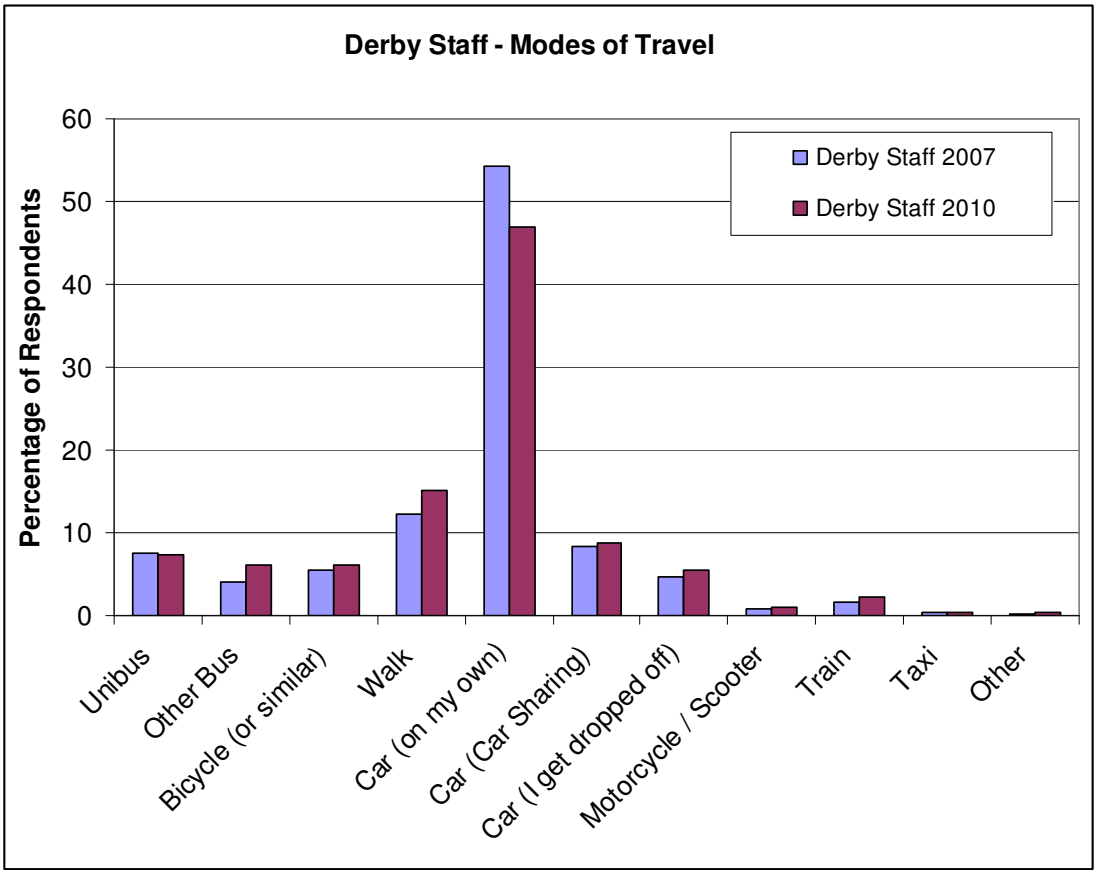
In keeping with the 2007 survey, respondents were asked how they travelled to the university. Once again, respondents could add a second most frequently used mode of travel, and also a mode of travel that they may use occasionally. This provided a more accurate picture of travel patterns, and the results clearly show that most people do not stick uniformly to one mode of transport. Responses were weighted in exactly the same way as the analysis for 2007, taking account of each level of usage with main mode being most influential on the figures.

The 2007 survey covered Derby based staff and students. In 2010 these were surveyed again. Additionally Buxton staff and students were also invited to respond. Using filters, data for Derby and Buxton staff and students were separated to give 4 sets of figures relating to mode of travel.

5.4.1 Derby Staff – Modes of Travel

Of all the staff respondents, 49.2% actually used a second mode of transport to travel to the University and 39.7% used 3 modes of transport, albeit the third may only be used occasionally.

Figure 4



Overall there is an extremely positive shift away from sole occupancy cars amongst Derby staff. Although the most frequently used mode of transport for Derby staff was ‘sole occupancy car’, unlike 2007, this mode represented only

a minority, with 47% of respondents arriving at University this way. In 2007 this figure was 54.3%, showing a strong shift away from what is perhaps the least sustainable means of commuting. This is an extremely positive outcome that is a direct result of the widespread promotion of alternatives and improved layout of the University estate. The number of people car sharing increased by 0.3%, which is also a positive, given the overall reduction in people driving.

More staff are being dropped off at work (a 0.9% increase), which could be a result of steady increases in parking charges both at University and more specifically in surrounding streets. Whilst not yielding benefits in terms of congestion and pollution, it at least, does make efficient use of the space on the University property.

Those who have transferred away from using single occupancy cars have spread out across several modes. The proportion travelling by bus rose by 1.9% (which represented a 15.6% increase in actual bus use). Despite big increases in Unibus ticket sales, all of the increase in staff bus travel came from use of non-unibus services.

Cycling amongst Derby based staff gained 0.6% of the overall share of travel. This is about an 11% increase overall and puts us on track to meet the 2013 target of a 20% increase.

Walking as a form of travel to work enjoyed the biggest absolute increase, with a 2.8% rise amongst Derby staff. This is 23% above the 2007 base level and already meets the 2003 target.

The share of train travel increased by 0.5% (29% increase) and motorcycling by 0.1% (11% increase). Interestingly, other modes increased from 0.2% to 0.5% (more than doubling). Unfortunately details of ‘other’ were not available.

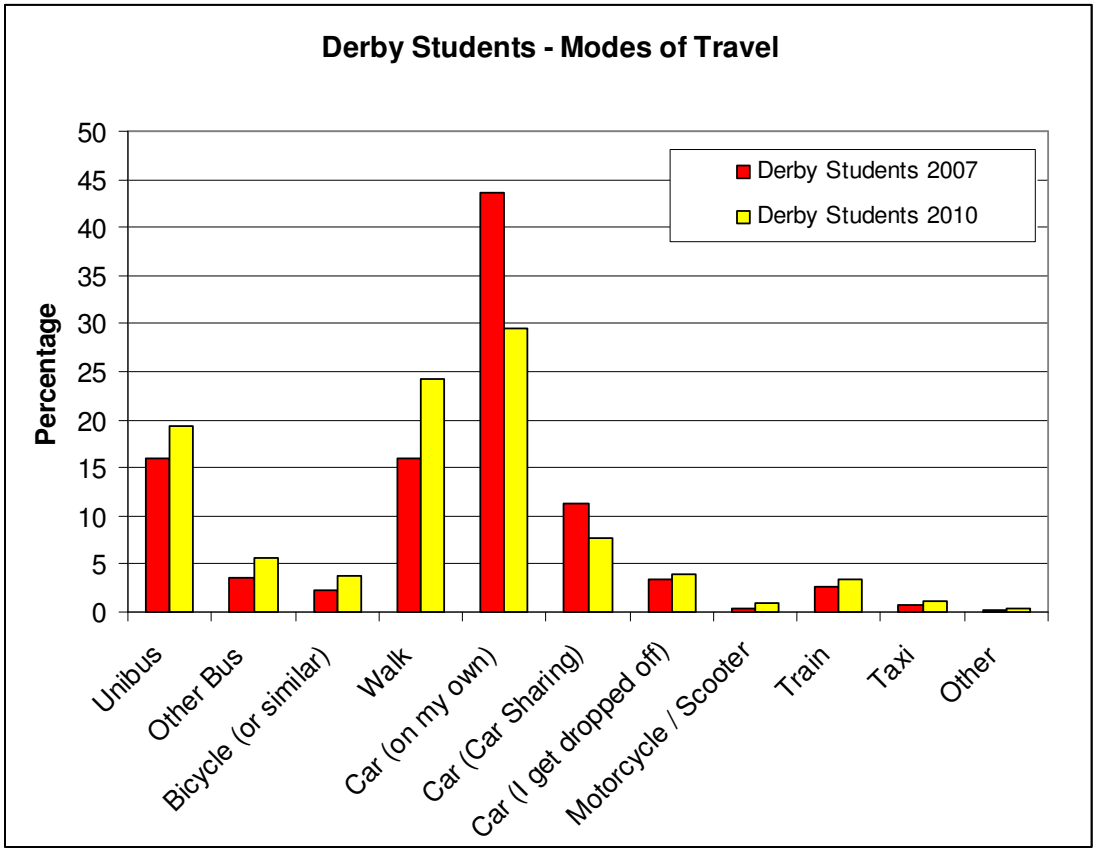
5.4.2 Derby Students – Modes of Travel

Derby based students were more likely to employ multiple modes of travel than their staff counterparts. 59.7% use a second regular mode of travel and 47.8% a third, or occasional mode.

As with the staff, there has been a shift away from sole occupancy car travel to the University. However, amongst students, this has been far more pronounced, with a proportional drop from 43.7% down to 29.5% (an approximate 33% reduction in absolute numbers). Alongside such a heavy drop in car usage is also a drop in the proportion of people car sharing from 11.2% to 7.7%, (a 32% drop in numbers), which is a marginally slower decline than that for sole occupancy cars, representing a slight increase in car sharing, as compared to overall car use.

The proportion of students travelling to University sites in Derby by bus has increased significantly from 19.6% to 25.1%. This is an increase of 28% in actual numbers. Much of this increase has been on the Unibus services, which have seen a big rise in ticket sales since 2007. The combination of a continued subsidy, improved service, pay & display parking and travel plan policies have all contributed to this impressive growth.

Figure 5



Cycling has increased at an even more impressive rate amongst Derby based students. There was a 73% rise between 2007 and 2010. Now 3.8% of students cycle to University, compared with 2.2% in 2007. Investment in cycle shelters at Markeaton Street, lockers at all sites and widespread promotion of this mode of travel has clearly paid dividends.

The numbers of students walking to University has increased by 52%. This means that 24.3% of students now travel to the University on foot. This is likely to be a consequence of removing outlying sites from the estate, alongside the increases in student parking charges. It is particularly encouraging that many short trips have been transferred away from cars.

Motorcycling has increased by 150% amongst students. This is from a low baseline, so motorcyclists still only constitute 1% of all students travelling to University.

Those being dropped off by car or taxi have also seen a modest increase, again reflecting increased parking charges, and again reducing the demands for parking on site or in adjacent streets.

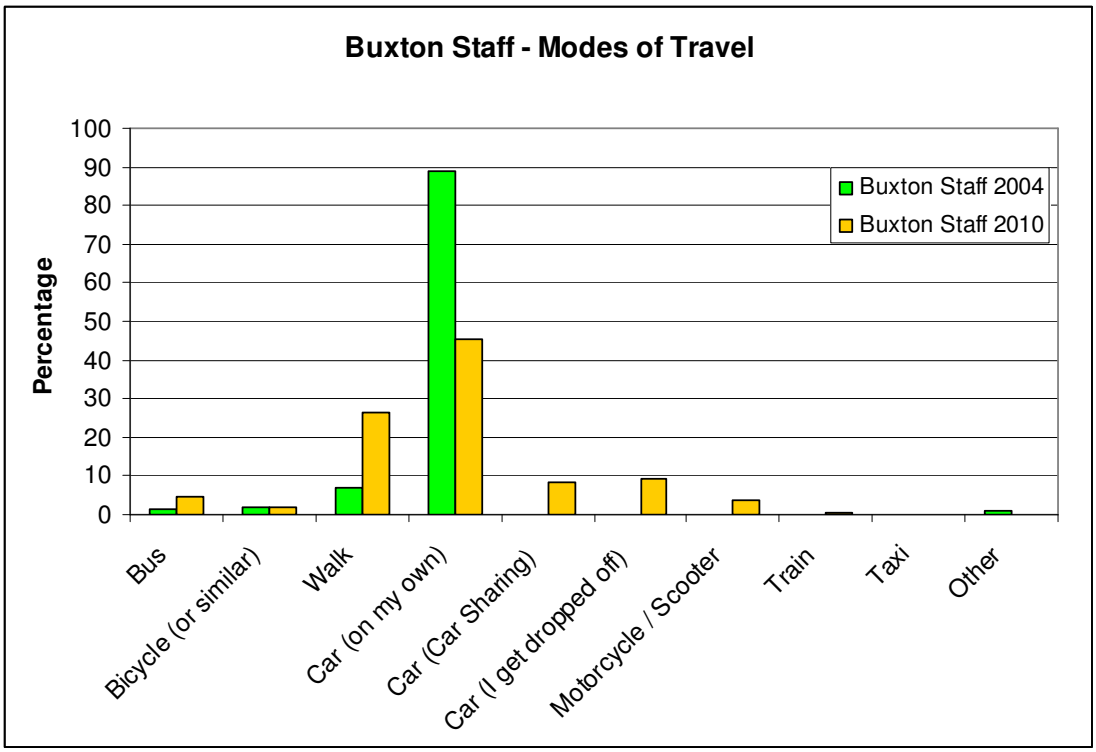
Overall the volume of the shift away from sole occupancy cars will mean that there are far fewer vehicles causing congestion on local roads and much less pressure on parking in the areas adjacent to the Derby sites. These changes also mean less carbon emissions, less pollution and cost savings for many students.

5.4.3 Buxton Staff – Modes of Travel

The previous survey of Buxton staff was in 2004. In 2004 the questions about mode varied slightly, as all types of car use were grouped into one category. In 2010 car use is divided into to highlight car sharing and drop offs. Additionally, the 2004 survey did not allow for secondary or occasional modes of transport.

The 2004 survey also took place at a time when the University in Buxton was located at Harpur Hill, a site with a large, free car park, located on the very edge of the town. In 2010 the vast majority of Buxton staff were located at the Devonshire Campus & Northwood House, near the town centre, with limited on street parking but located in an area with free, largely unrestricted on-street parking.

Figure 6



In 2004, nearly 89% of staff travelled to the Buxton sites by car. In 2010, this figure had dropped to 62.8%. However, within this, 9.1% were dropped off and 8.3% car share. Therefore only 45.4% of staff travel to the Buxton Campus by means of sole occupancy car.

Levels of cycling and motorcycling remain largely unchanged since 2004. Motorcycling is a lot more popular than in Derby and cycling a lot less popular, perhaps reflecting the relief of the surrounding area.

Train travel is also unchanged, with a surprisingly low contingent using the train, despite the immediate proximity of the station to the new campus.

The main shift away from car travel has been to walking. This has increased nearly four-fold with the move from 6.8% to 26.3% of staff respondents. This reflects the sites proximity to more residential properties.

Finally, the proportion of staff using bus travel to commute increased from 1.2% to 4.6%, reflecting the closer proximity of the site to more services. However, Buxton is far less well served for frequent bus services than Derby, perhaps explaining the lesser take up.

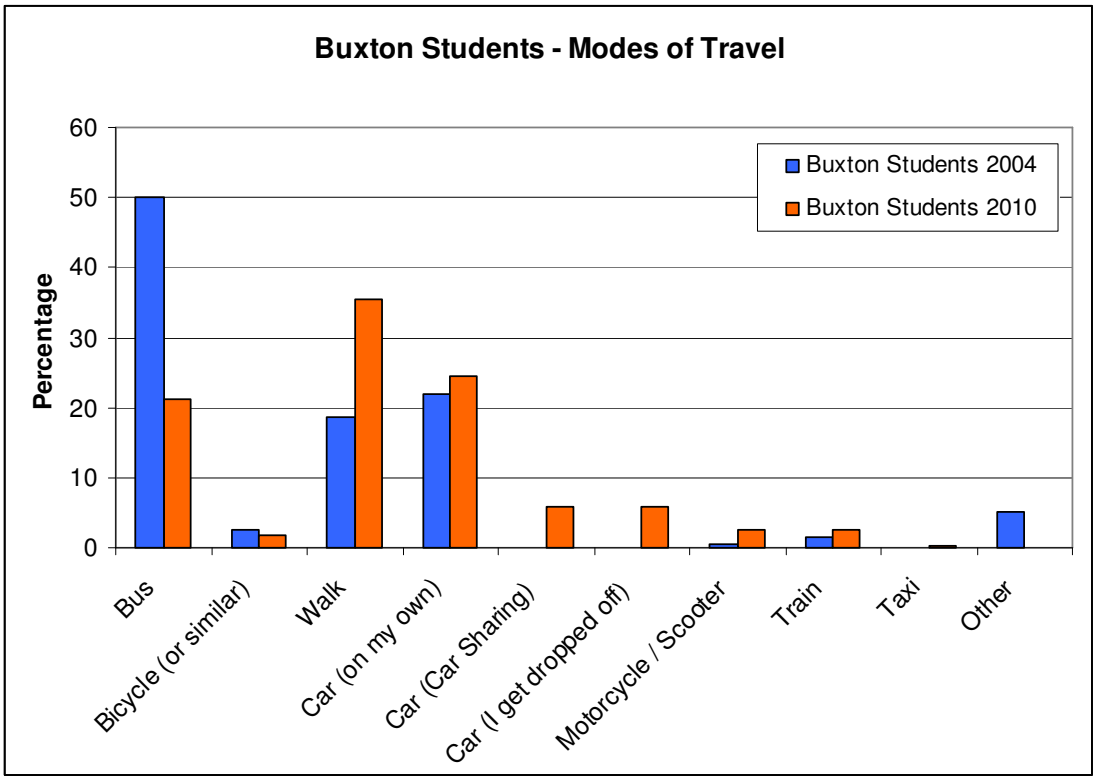
5.4.4 Buxton Students – Modes of Travel

The baseline data for Buxton students comes from the same 2004 survey as the staff data. In 2010, the level of Buxton student response was particularly poor, either reflecting underlying satisfaction with travel arrangements, apathy, or a gap in our publicity.

The figures from this limited sample suggest a large swing away from bus use (which does not reflect our experience of numbers on Unibus services, which have increased, in some cases to the point of running extra services).

The proportion of car use amongst students has increased moderately, by 2.5%, although this figure is higher if car sharing (5.8%) and drop offs (5.8%) are included.

Figure 7



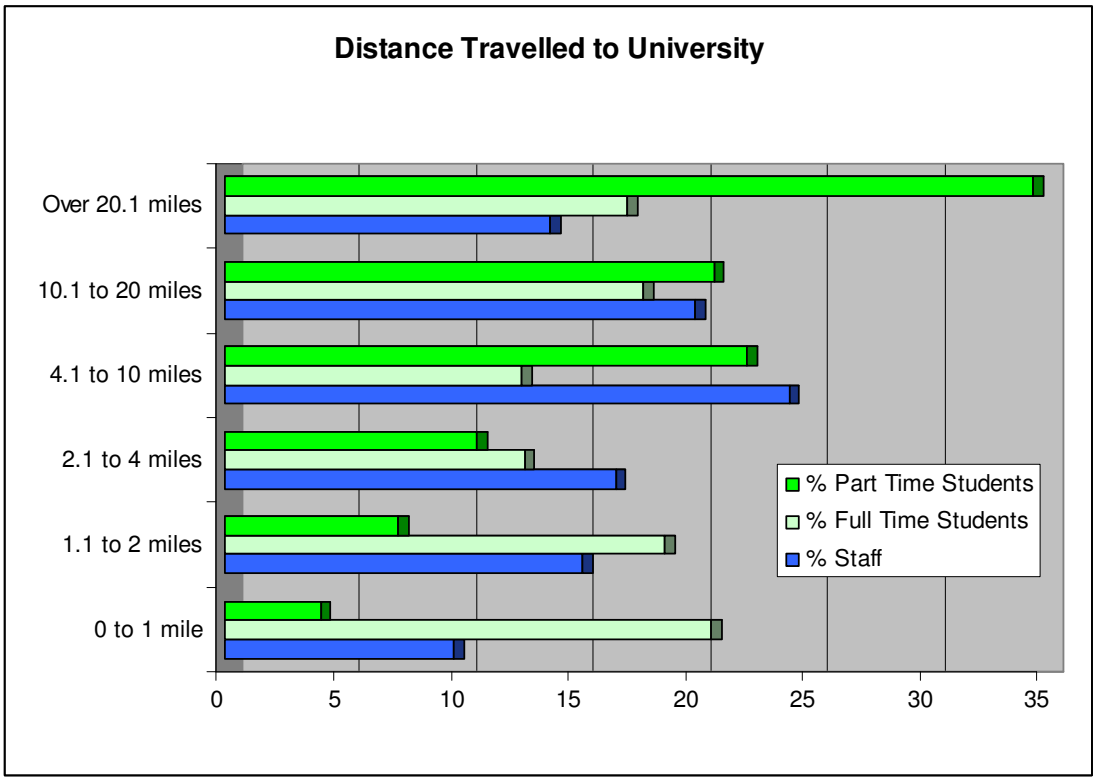
The main increase, however, has been with walking. The proportion walking to the campus has almost doubled from 18.7% to 35.4%.

Cycling has reduced and motorcycling has increased significantly amongst Buxton students. There is also evidence of an increase in train use amongst

Buxton students, although these figures should be treated with caution, as they represent a very small number of people within a small sample.

5.5 Distance Travelled

Figure 8



As in 2007 there are big variations in distance travelled between staff and students and also between different categories of student.

Full time students were most likely to live within 4 miles of their teaching site. The majority (52.4%) lived within this distance that covers all Halls of residence. It also reflects the area where the vast majority of private rented student accommodation is located. This is an increase from the 43.5% in these locations in 2007, reflecting the increased population in Halls of residence since this time. It may also reflect recruitment from all around the country, which gives greater demand for accommodation within Derby. As a consequence of the shorter distances, there are less full time students travelling over 4 miles, with the decrease spread between the 4.1 to 10 mile category and Over 20 mile category.

The distribution of part time student addresses is markedly different to those of full time students. Less than 12% lived within 2 miles and 22.3% lived within 4 miles of the University. 55.4% lived over 10 miles away and 34.5% live over 20 miles away. The longer distances travelled by part time students reflects the fact that they spend less days at the University and can perhaps justify the longer trips. It is also very unlikely that a part time student would move to live in Derby for a course that may require attendance one day a week, or perhaps once a fortnight, if they did not already live there.

The distances travelled by students illustrate the continuing challenge that is faced to manage travel.

The situation for staff is quite different to that of students. Whilst they are quite widely distributed, clearly the daily nature of their travel means that distances travelled are generally shorter than those for part-time students. A quarter of staff live within 2 miles of the University, and 40% live within 4 miles. A further 44.1% live between 4 and 20 miles away. Only 13.9% of staff travel over 20 miles to University, a much lower proportion than both full and part time students. This may be due to the permanence of employment making living so far away unattractive, compared to students who attend for a limited period of time. Large numbers of staff within the city offer great potential to use sustainable modes of transport to get to work.

There has been a marked trend towards living closer to the University amongst staff and students since 2007. The proportion of staff living less than 4 miles away from the University has increased from 33% to 42%, with a corresponding drop in those living more than 4 miles away.

The proportion of full time students living within 4 miles has increased from 42.2% in 2007 to 52.4% in 2010. This is likely to reflect increased numbers within the Halls of Residence.

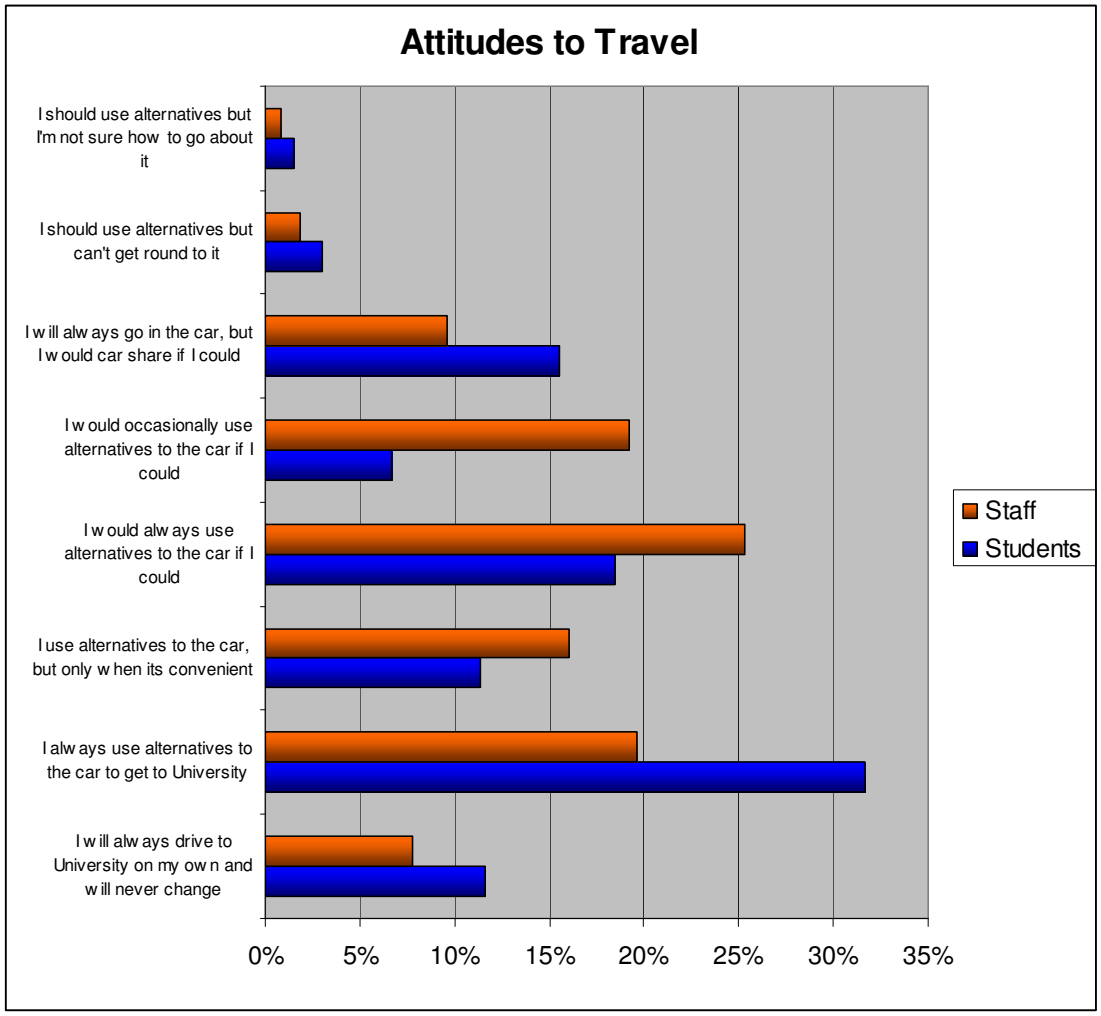
Similarly, There are also more part time students living within 4 miles of the University than in 2007. This figure is now 22.3%, compared to 18.3% in 2007.

A greater proportion of the workforce and students living nearby allows for a greater opportunity for use of alternatives to the car, and will be a factor in some of the shift to more sustainable travel that we have seen between 2007 and 2010.

5.6 Attitudes to Travel

Both staff and students were presented with a series of statements and were asked to tick which one best reflected their attitude to travel to the University. These statements were from the extreme view that ‘I will always drive to the University on my own and will never change’, to ‘I always use alternatives to the car to get to University’, and include indicators of willingness to change, and obstacles to change. The results are reported in figure 9.

Figure 9



The answers to these questions are very encouraging from a travel planning perspective. They show a strong desire from students and staff alike to find an alternative to sole occupancy car travel. Only 11.6% of students and 7.8% of staff indicated that they would not be prepared to change travelling alone in a car to the University of Derby. This is an improvement from 2007 where 13.5% of students and 11% of staff answered in the same way. This big shift in staff attitudes means that now 92.2% of staff and 89% of students are potentially willing to either car share or use alternatives to the car in the right circumstances. Some of these were not willing to give up car travel but were interested in car sharing (15.5% of students, 9.6% of staff). As in 2007, students seem more willing to car share than staff. This may be because more students travel longer distances and would probably find a greater benefit from cost savings than a member of staff, in proportion to their overall income.

It is therefore clear that there are several groups of people who are open to the idea of modal change, which could be effected with the right measures and right help. Those who answered “I use alternatives to the car, but only when its convenient”, clearly can be helped to use more alternatives by increased convenience of bus services, improved facilities and better access to sites by alternatives. It may become possible to convince them that it is convenient to use alternatives to driving. Higher parking charges may

encourage this group out of their cars, as driving is clearly an option that is considered daily according to their circumstances.

The people who answered “I would always use alternatives to the car if I could” and “I would occasionally use alternatives to the car if I could”, represent 26% of staff and 18% of students. These people are perhaps the best to target with help. Personal travel planning would play an important role here, as clearly many of them perceive they are unable to use alternatives. However, evidence from personal travel planning shows that obstacles can be quite easily overcome in a lot of cases, if people really are willing to change.

The final groupings of people are those who answered either “I should use alternatives but can't get round to it”, or “I should use alternatives but I'm not sure how to go about it”. Although, at around 3% of overall respondents, they numerically small, these groups could all potentially give up their car, with the right motivation. These people would benefit greatly from personal travel planning, the former, to motivate them, and the latter group to educate them.

5.7 Staff – Arrival and departure at work

Staff were asked what time they arrived at and departed from work. This was in order to establish the peak times for traffic generation, and also illustrate potential for schemes such as car sharing and peak times for public transport services.

Figure 10

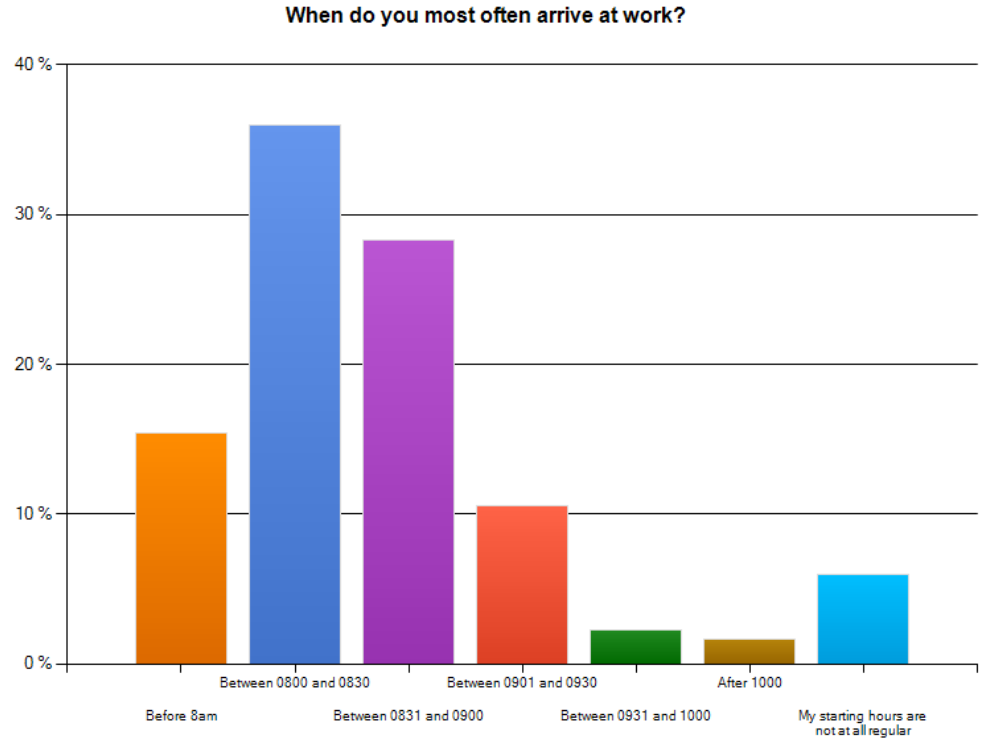
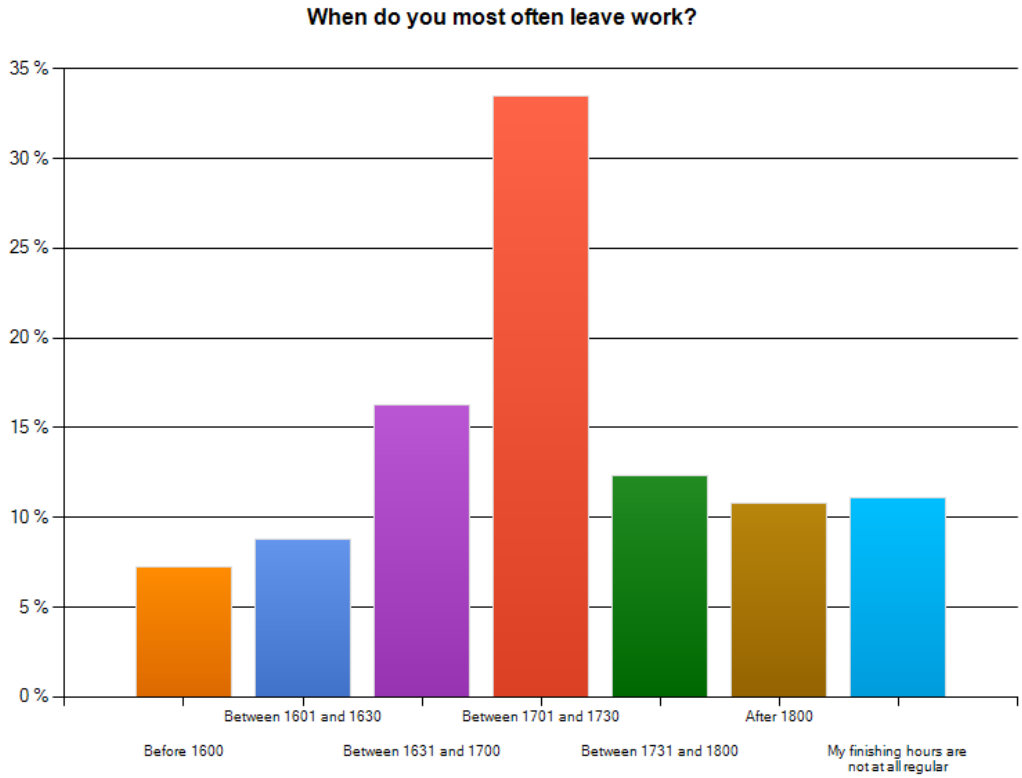


Figure 11



Arrival times of staff continue to be consistent for an institution that has teaching taking place until 9pm on most weekdays. There has been no change in the order of the busiest times and very little change in the proportions of staff starting and leaving at different times since 2007. The only significant change was the number of people leaving after 6pm has increased by about 3%.

Only 6% of staff did not claim to have a regular start time. 90% of staff arrived at the University before 0930, indeed 80% of staff arrived before 0900. About two thirds of staff arrived between 0800 and 0900. This consistency in arrival times is very helpful for the encouragement of car sharing, and could prove helpful for park and ride facilities, as it would mean a frequent service could be restricted to very specific times, thus keeping costs down, whilst making a service attractive to users. However, the downside to this is congestion in the locality, and potential delays within the site at specific times.

The consistency of morning arrival times is repeated to some extent in the evenings, with staff departure times. 50% of staff leave between 1630 and 1730. A further 12% leave between 1730 and 1800. This again creates a busy time as people leave site. Slightly more staff have inconsistent departure times, at 11.1%, and only 11% depart in the broad ‘after 1800’ category. In general, the times people start and leave work, do provide a clearly defined window for the provision of public transport, park and ride and for car sharing. Where flexible working times are applied alongside these considerations, there is potential to reduce sole occupancy car journeys.

5.8 Staff Awareness

Staff were asked if they were aware of some travel plan initiatives. This was to evaluate how much further impact existing schemes could have. However it should be noted that awareness of something does not imply action or buy-in to schemes.

By answering the question, staff would also gain a basic awareness of a scheme, even if they did not have this before. A response of 'Yes' indicates that the individual was aware of something prior to the survey and a 'No' indicates that they were not.

Figure 12

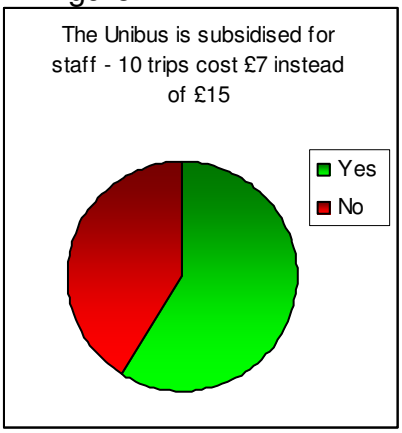


Figure 13

Figure 14

Just under 60% of staff were aware that the Unibus is subsidised for staff travel. In 2007 the figure was around 50%. Whilst this is an improvement, 40% of staff are still not aware of the bus subsidy, and may benefit from further publicity of this. Of those who use the bus 88.1% were aware of the subsidy. This means that most staff bus users know they can get cheaper tickets.

33% of staff were aware that income from University car parks was used exclusively for bus subsidy and investment in alternative modes of transport. This is double the levels of awareness in 2007. However, the impact of wider awareness is unlikely to have any broader travel benefits, unless parking charges are significantly higher. Awareness may help people who drive feel some ownership of the travel plan.

Figure 15

Figure 16

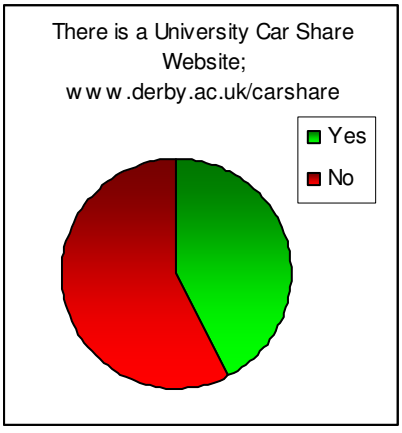
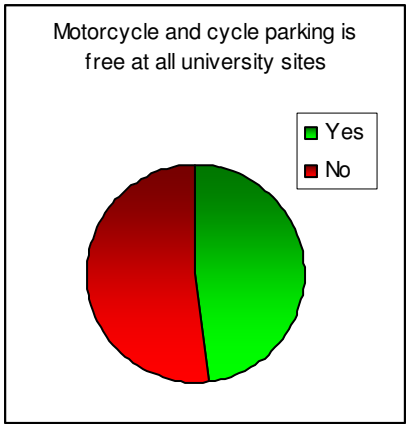


Figure 17



92% of staff were aware of the pool car scheme. This scheme continues to be a great success, is widely used and is very visible.

69% of staff were aware of the parking rebate scheme for those who drive to work on an infrequent basis. This scheme could be further improved to assist car-sharers, but at present does act as an encouragement for regular use of alternatives to the car. Some further promotion of this scheme will clearly be beneficial to both employees and the University.

43% of staff were aware of the University Car Share website. Awareness has dropped slightly since 2007. This is a low proportion, given the potential benefits, and overall willingness to participate in such a scheme. Promoting this would be a very good and cost effective way of reducing sole occupancy car travel. More creative networking of individuals would be effective.

Figure 18

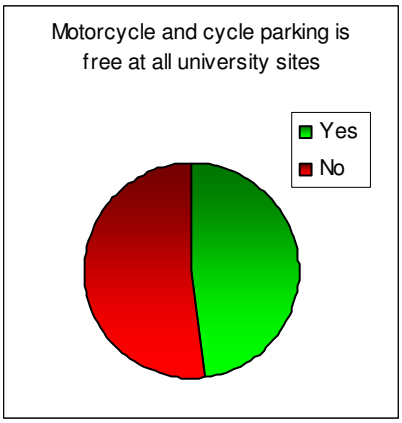
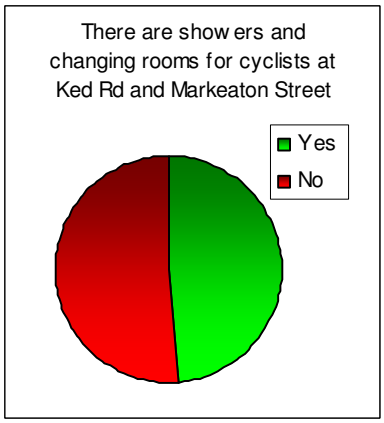


Figure 19

Figure 20



Just under half of staff were aware that parking for motorcycles and bicycles was free on all University sites. The same proportion were aware that showers and changing rooms were available for cyclists. Oddly, awareness surrounding parking dropped slightly since 2007, but awareness of shower facilities has increased significantly from around a third to a half.

Even more widely received by staff was the knowledge of the bike to work discount and loan scheme. Nearly two thirds of the staff were aware of this scheme that has been introduced since 2007, clearly illustrating a successful publicity campaign.

Figure 21

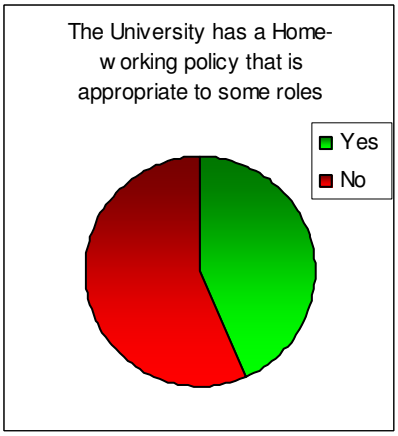


Figure 22

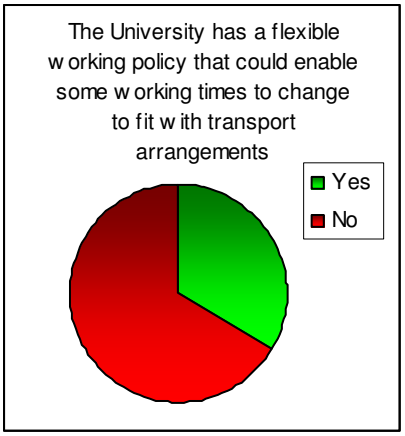
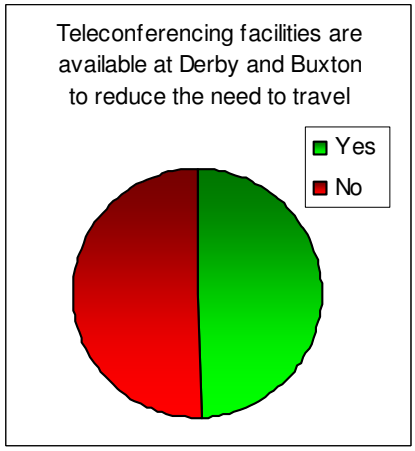


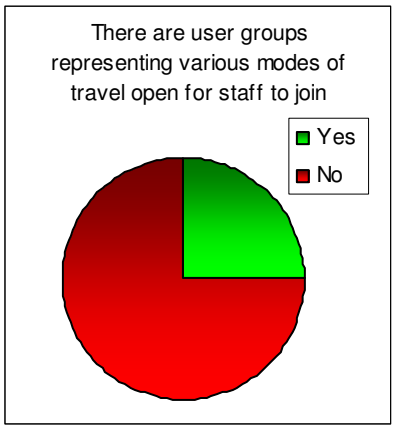
Figure 23



There has been a steady increase in staff awareness of the University's home working policy. Staff who can work at home do not travel and thus do not emit any carbon related to travel. It is not clear how many of those who aren't aware of the policy would not qualify to work under it anyway. On that basis, any promotion should be focused high up the management structure, at those who can authorise work from home.
Staff awareness of flexible working policies remains unchanged from 2007 at around a third. However, with broad differences in how this policy can be applied across roles, the benefits to sustainable travel will be vary widely, and the value of publicity may be limited.

Staff were also asked if they were aware of teleconferencing facilities, with particular reference to the Derby and Buxton sites, which have a specific link. Awareness of this facility has doubled to 50% since 2007. Usage has increased and much mileage saved through this scheme. With so many staff still driving between Derby and Buxton for meetings, its further publicity could yield even greater reductions in business mileage.

Figure 24



Finally, within this question, staff were asked if they were aware of the different user groups representing various modes of travel, open for staff to join. Only a quarter knew of this opportunity for representation, suggesting more work could be done to publicise this.

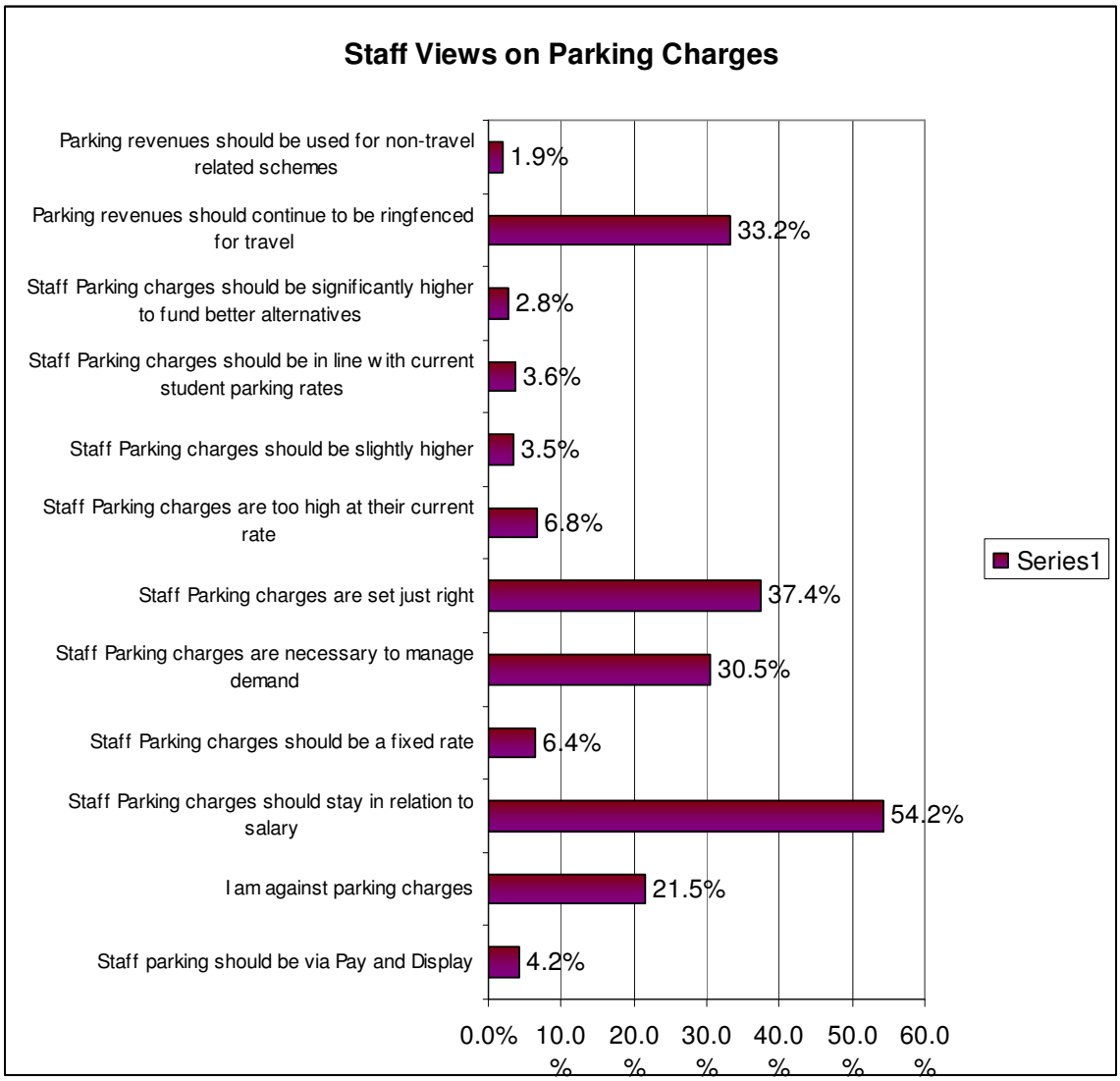
5.9 Staff – Parking Charges

When parking charges were introduced on the Kedleston Road site in 2003, it was a very controversial and emotive issue. Whilst most staff accepted action was needed to solve parking problems, a vocal minority protested and resisted the implementation of charges. By 2007 attitudes had broadly changed to accept the charges in relation to salary.

Indeed, since 2007, the acceptance of parking charges has further increased, with only 21.5% now against them (compared to 29.2% in 2007). Popularity of the current scheme that allocates charges according to salary has increased, with 54.2% now feeling that this should remain the case. (52% in 2007). Only 6.4% thought a fixed rate was a better way of managing staff parking, and 4.2% felt staff should use a pay and display system.

Relatively few people had an opinion on current charges. 7.1% felt that staff parking charges should be higher, compared to 9% in 2007. 6.8% felt that current charges are too high. The absence of opinion from the majority of respondents, suggests that most drivers are comfortable paying the current rates. This is indicative that the charges do not cause a notable deterrent to driving to the University, and perhaps people have got used to paying at current rates, which for nearly all staff, are way below comparable local parking rates. The responses to the question raise the possibility of a review of staff parking charges, if a greater travel impact is to be achieved, especially given the move to a greater acceptance of the status quo.

Figure 25



The allocation of parking revenues to travel schemes, did seem to be widely approved of, with 33.2% of staff stating that they felt this should continue. Only 1.9% felt that parking revenues should be used elsewhere, and the remainder of staff expressed no opinion on this matter. Parking revenues are clearly the main income for the travel plan, and increasing these does broaden the options available for Unibus services and for other measures that have a financial cost to them.

5.10 Students – Type of Study, Frequency of attendance

The student respondents to the survey were 85.3% Full time and 14.7% Part time. This is in contrast to the overall statistic of 65% full time and 35% part time for the University as a whole (including Buxton).

It is likely that there has been a greater response rate from full time students as they attend university more frequently and generally feel that travel to the University has a greater impact on their lives than their part time counterparts. It also means that they are more likely to have been on a University site or a Unibus and seen the publicity for the survey. Indeed, based on the responses to the survey, Full time students will attend University, on average, between 3 and 4 days a week, whereas Part time students will attend an average of between 1 and 2 days a week.

5.11 Student Awareness

Following on from the questions on staff awareness of travel plan schemes, students were asked what they knew of travel plan schemes. There have been fewer schemes that directly affect students, hence fewer questions within the survey. However, there are significant variations between staff and student levels of awareness.

Figure 26

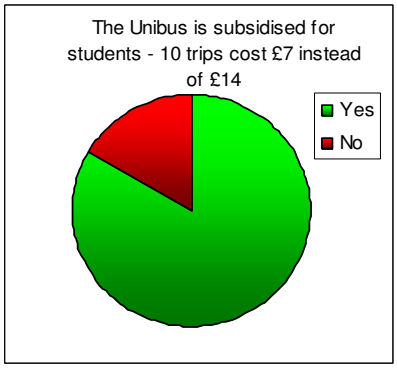
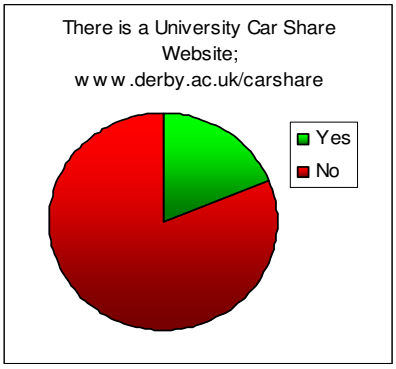


Figure 27

Figure 28



Over 83% of students were aware of the subsidy on the Unibus. This is a far greater level of awareness than staff. It is likely to be because many students live in Halls of Residence for their first year, where the buses pick up outside, more students travel on Unibuses than staff and also because of 'word of mouth' is likely to pass money saving information on between students. On this basis, it seems that the main time to promote bus subsidies should be at the start of a new academic year, when new students arrive. In contrast, only 22% of students were aware that car parking revenues pay for the subsidy and for travel schemes. This awareness is double what it was in 2007.

Less than 20% of students were aware of the University Car Share website. This contrasts to 43% of staff. Awareness has dropped since 2007, largely due to less publicity. There is a direct link between publicity and the level of scheme awareness, however, the knock on effect on car share figures is small, suggesting that much car sharing takes place informally, outside of the

scheme. It may well be worth looking at ways of promotion of car sharing outside of the scheme as well as within it.

Figure 29

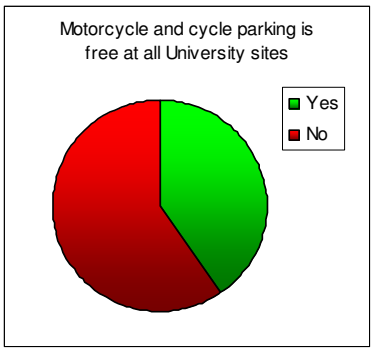


Figure 30

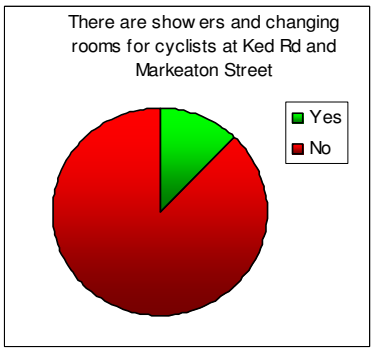
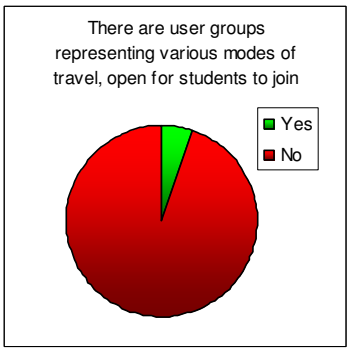


Figure 31

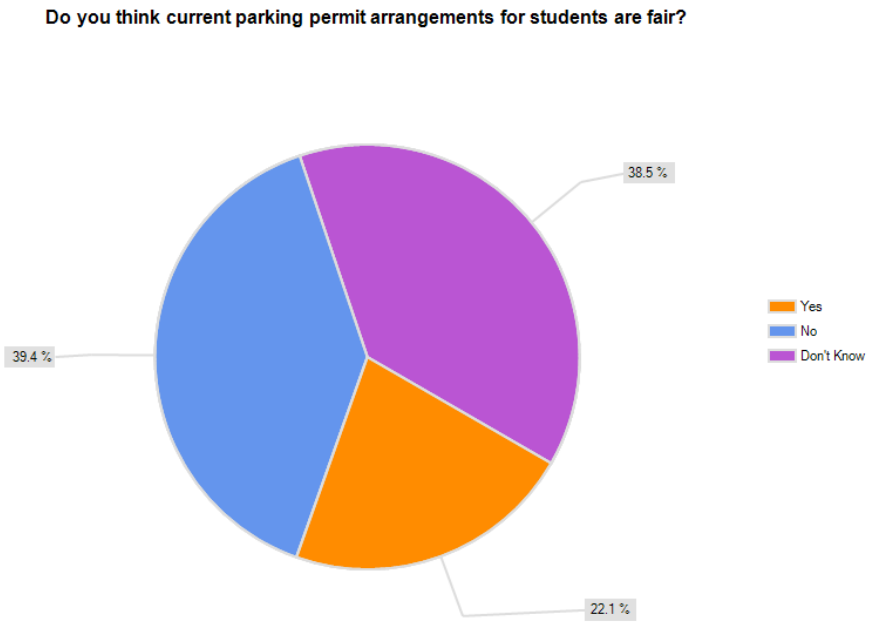


Around 40% of students were aware that motorcycling and cycle parking was free on site. It may be that this information is not considered relevant by a large number of people, as they may have no intention of using either mode of travel. However, it could be that this aspect would benefit from further periodic publicity campaigns. Even fewer students (12%) compared to nearly half of staff were aware that there are shower facilities for cyclists at the main sites. This awareness is double that of 2007 but shows a gap in information that needs to be plugged.

Finally, within this question, students were asked if they were aware of the different user groups representing various modes of travel, open for them to join. Only 5% knew of this opportunity for representation, suggesting a lot more could be done to publicise this.

5.12 Student Parking

Figure 32



Students were asked if they felt that the current parking permit system operated at the University was fair. Parking permits are allocated only to part time students who apply for them. Full time students do not qualify for a permit unless they meet certain criteria upon appeal. These students have the opportunity to buy a permit to park at Markeaton Park. In Buxton no student permits are allowed, due to more limited on-site parking space.

The system has undergone a major overhaul since 2007 when all Kedleston Road parking was permit controlled and other sites were not. Steps were taken to make the system better. This has resulted in a change from 14% of students feeling that the system was fair, to 22%. The proportion who thought the system was unfair have dropped from 55% to 39%. Slightly fewer answered that they 'don't know'.

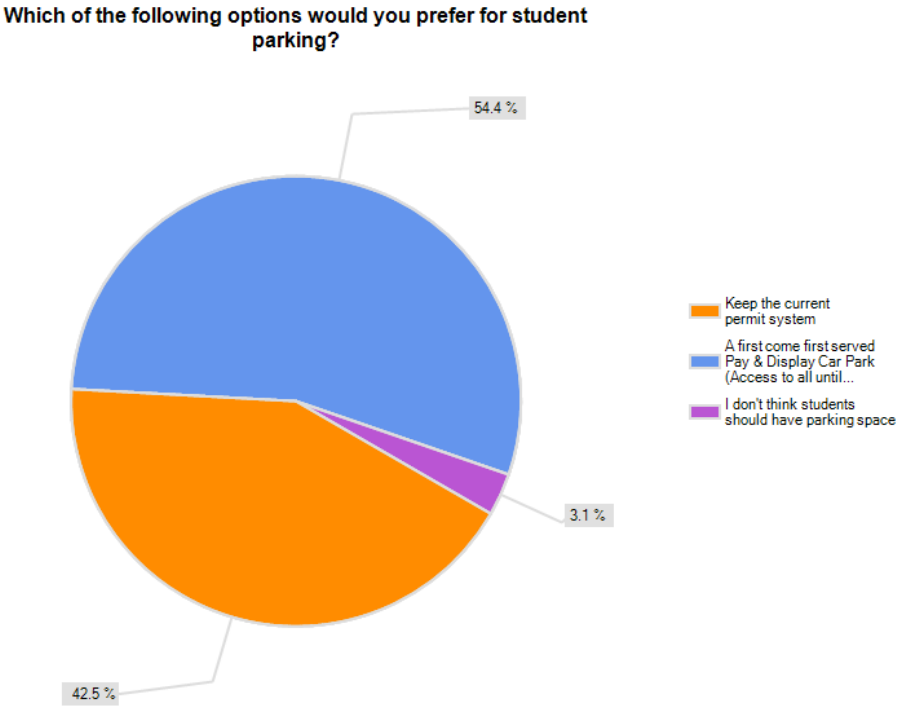
Overall, it can be seen that the new system of permit application is seen in a more favourable light by students, but what is clear, is that something which tries to allocate a limited resource between a large number of people is not going to please everyone!

Interestingly, only 10.2% of students were actually on site parking permit holders (with a further 4% having a Markeaton Park Permit) – which means a lot of students who do not have parking permits think that the system is fair.

5.12.1 Students Preferred Options for Parking

Students were asked what they felt to be their preferred option for the management of parking at the University.

Figure 33



Clearly a majority favoured a pay and display system that enables first come first serve access. This will reflect in part that the majority of student respondents do not have a parking permit, and many would like to park on site. Those favouring the current system were still highly represented at 42.5%. Only a very small proportion were opposed the issue of student parking permits.

5.13 Views on Markeaton Car Park Parking

40 student respondents use the Markeaton Park facility, and these were asked their views on various aspects of the service.

Table 1

Aspect of Service	Very Good	Good	OK	Poor	Very Poor
Park and Ride Service	9	13	9	4	2
Cost of Parking	10	10	17	1	2
Quality of Facilities	5	6	18	7	4
Availability of Space	14	16	8	2	0

Key

1-5 Responses	6-10 Responses	11-15 Responses	16-20 Responses

The general feeling about the parking facilities at Markeaton Park were positive. The availability of space was particularly good, the results suggesting nearly all respondents had never struggled to find a space, and probably got parked quite near to the bus stop.

The park and ride service was generally viewed positively, with The vast majority of respondents thinking it was OK, Good or Very Good. Only a small number found the service poor or very poor.

Parking costs were generally seen as OK to good, with only 3 negative response. Whilst the permit costs around £50 a year, this is more expensive than the free on-street parking many were enjoying in previous years.

The most negative response was concerning the quality of the parking – this probably reflects the inadequacy of lighting at that time, which has subsequently been improved and replaced.

23 Specific comments were received from respondents on the parking at the Park. Some were positive praise for the scheme or general neutral comment.

7 related to the finish time of the buses and associated lighting levels in the park (an evening bus and lighting have now addressed this).

A further 3 comments related to bus times were made, concerning reliability and clarity of timings.

5.14 Reasons for driving

All respondents who drive to the University were asked to give the reasons why they did so. 11 options were given, covering a whole spectrum of reasons. Only 3 responses could be made and these had to be in a ranked order of importance.

In order to analyse the response in an effective manner responses were weighted. A 'Most important reason' response was given 3 points, a "2nd most important reason" response, 2 points and a "3rd most important reason" response was given 1 point. These figures were totalled up for each category, and a ranking assigned according to the score achieved.

The responses were ranked in the following order (Table 3), with the most important reason for driving to work given first. The green shade illustrates a reason with an outstanding high score, and red shade illustrates a reason with an extremely low score.

Table 2

Rank	Reason	Score	Rank in 2007
1	Time Savings	1555	1 ↔
2	More Convenient and Flexible than other modes	1162	2 ↔
3	There's no alternative available	678	3 ↔
4	Dropping off / collecting children or partner	558	5 ↑
5	Cheaper than other modes	493	7 ↑
6	Too many bags / books to use an alternative	488	6 ↔
7	Combine journey with others	407	9 ↑
8	I need my car for work purposes	377	4 ↓↓
9	Personal Security	192	8 ↓
10	Not sure if there is an alternative	61	11 ↓
11	Because parking is provided	56	10 ↑

These reasons for driving could also be viewed as the source of obstacles to the use of alternatives to the car. If these obstacles can be tackled, then more people would be able to travel using alternatives to the car. Different issues can be tackled to varying extents, and the change in rankings shows that some progress has been made in some areas, since 2007.

Time savings and convenience remained overwhelmingly the main reasons cited for driving to University. A lot of this will be correct sentiment, but there is likely to still be a lot of people who don't realise how quick cycling is from many locations.

The lack of alternative was also still given as the third most important reason for driving to University, though the level of response had reduced, suggesting knowledge, access and use of alternatives had improved – something backed up by results earlier in the survey.

The main change in the responses was the drop in the need of a car for work purposes. The main driver of this reduction will be the growth of the University pool car scheme, which means staff no longer need a car on site. Most of the remaining responses are likely to be students who may study and also have a job where they need to get to and from studies.

The factors of combining journeys and dropping off or collecting a child or a partner have grown slightly in significance since the last survey.

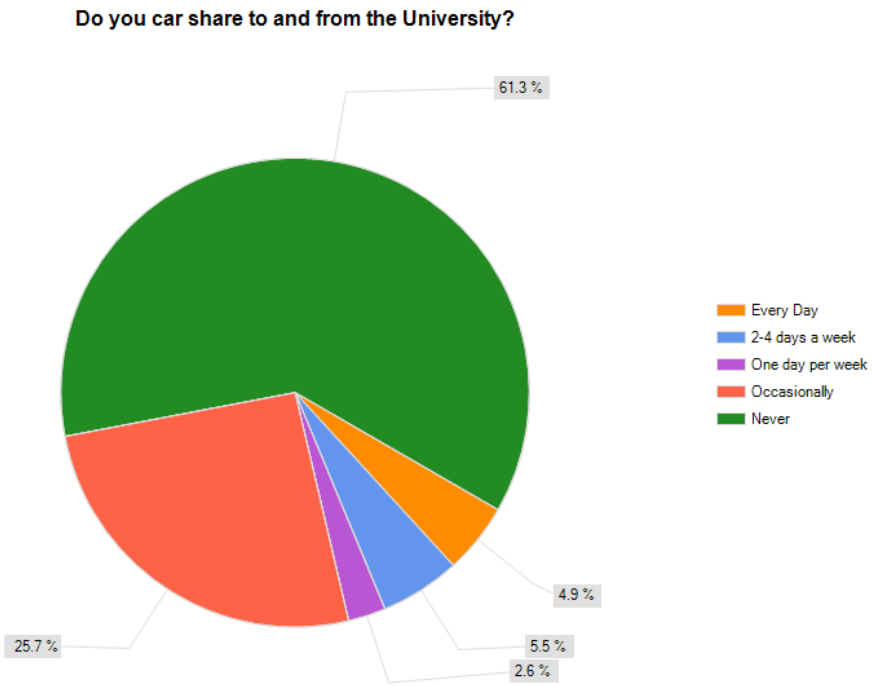
The feeling that driving was cheaper than other modes of transport has also climbed the rankings, too. This may be due to the continued rise in rail fares, above the rate of inflation. However, these responses do not reflect the sharp rise in fuel prices recorded in late 2010 and early 2011.

5.15 Car Share Questions

All respondents were asked specifically whether they car share, if they would consider car sharing, and what measures would encourage them to either start car sharing, or car share more often.

Current levels of car sharing were very similar for staff and students (see sections 5.4.1 and 5.4.2)

Figure 34



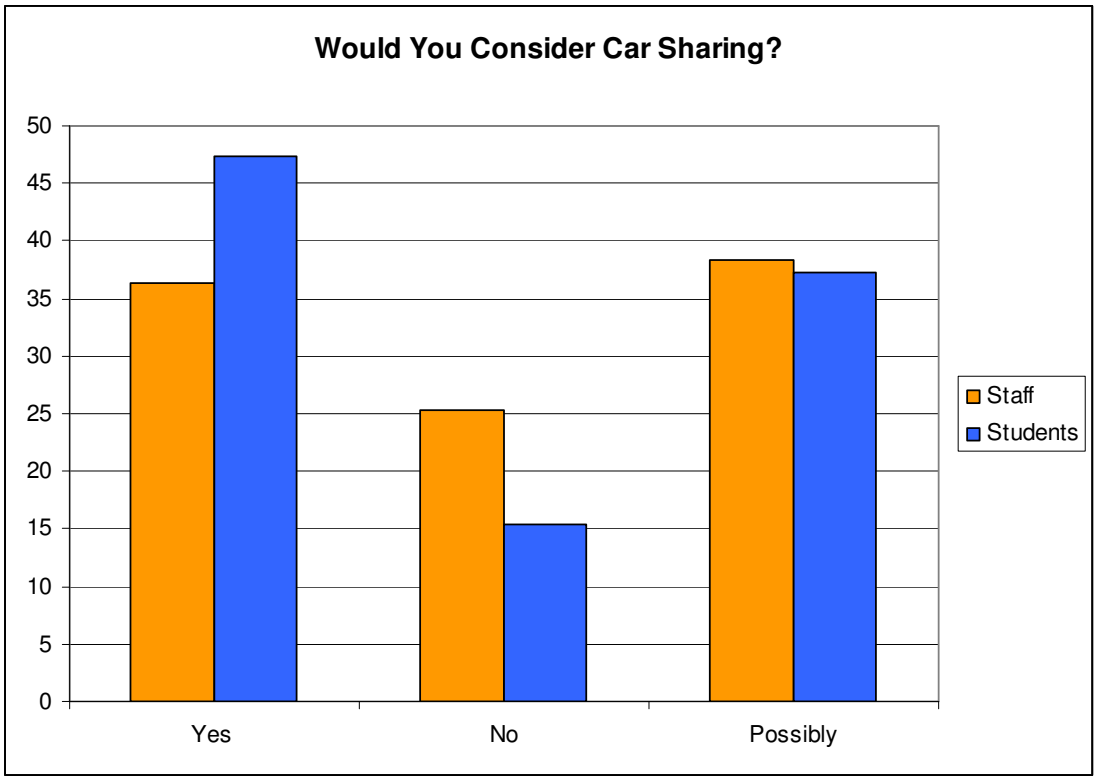
The response to this question is very similar to that for the same question in 2007. None of the proportions have changed by more than 1%

The majority of people do not car share whilst travelling to the University of Derby. This majority include many who do not drive, but nevertheless, it still represents a majority of drivers. Nearly a quarter car share 'occasionally'. This may be if they have a problem with their car, or if the circumstances make it easy, or perhaps when they offer someone else a lift. These people can do it, and probably need the encouragement and motivation to do it as a matter of routine.

13% of people car share on a regular basis. Given that the average time for full and part time students to be on site is 3 to 4 days and 1 to 2 days respectively, it would be hard to view any regular car sharing arrangement as needing improvement. However, car sharing is often seen as two people travelling together, but there is no reason why 3, 4 or even 5 people couldn't get together to further reduce the costs and impact of their travel.

The relatively low levels of car sharing certainly do not reflect a lack of willingness to take up car sharing. The students lead the way in this area, with 48% decisively stating that they would like to car share. A further 37% indicated that they would 'possibly' car share. This is an increase from 2007. Staff were also quite interested in car sharing, with a 36% answering 'yes' they would car share and a further 38% who would possibly do so. This represents a massive opportunity for a shift away from sole occupancy travel. It is clear that any promotion of car sharing would be highly likely to deliver reductions in sole occupancy car travel.

Figure 35



Of the measures seen as important for improving car share, over half wanted to see dedicated car share parking bays and 41.6% a guaranteed lift home. Nearly a quarter wanted coffee mornings to enable networking with people living on their route.

Of the additional comments, most were general, relating to an individuals situation, many suggesting better opportunities to find personalised matches were required. Some suggested some kind of financial reward, which could be achievable through adjusting the parking rebate scheme.

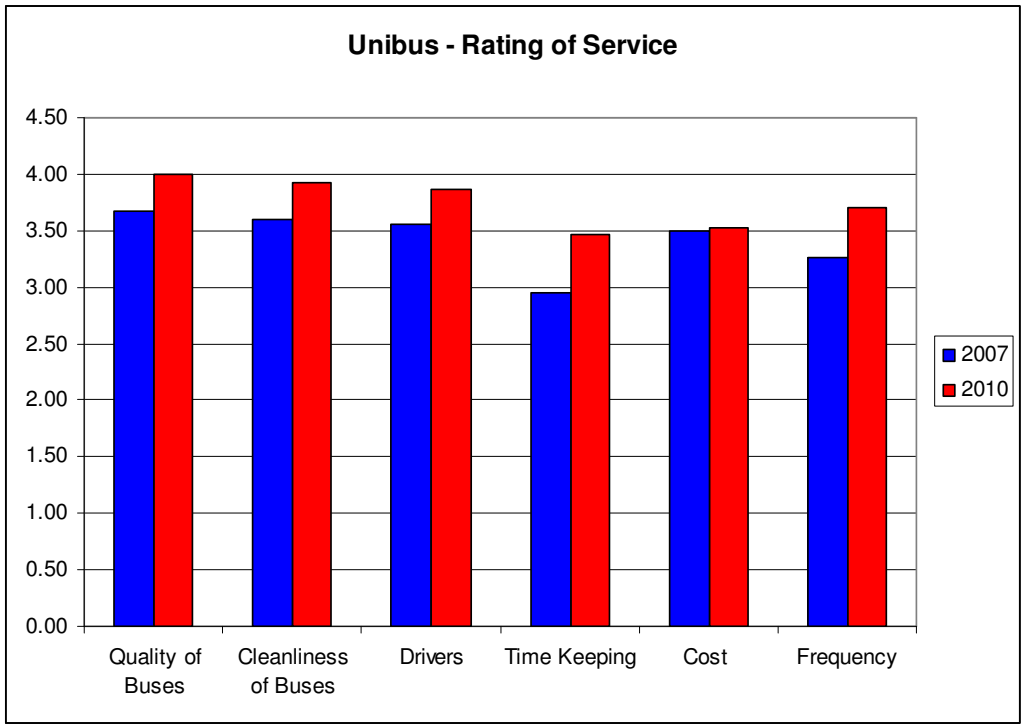
5.16 Bus Travel Questions

45.4% of respondents sometimes use the bus to get to University within Derby. 2% used a service to get to Buxton and the remaining 52.6% do not ever use either service.

The Derby based bus users represented a sample of both regular and occasional users of all the Unibus services (4,5 and 6) as well as a number who use the Allestree service and other connecting services. On each route, there were more respondents who described themselves as 'occasional' users than 'regular' users. The presence of a high proportion occasional users means that there are many people who could use the bus who clearly don't do so on a regular basis. Respondents could claim to be users of more than 1 of the listed services. The most used service was the number 6 (30% of all respondents), followed by the number 4 and then the number 5.

Unibus users were asked to rate various aspects of the service on a five point scale, ranging from Very Poor to Very Good. Using the response data, an average score for each aspect of the service has been calculated. Usefully, this can be compared directly to data from 2007.

Figure 36



The Unibus service received fairly good feedback in 2007. However, there was a marked improvement between 2007 and 2010 in all areas. Quality of the buses had improved from a score of 3.67 to 4.00. This reflects the addition of new low floor buses into all 3 services. A similar improvement from 3.6 to 3.93 was received for cleanliness of buses. This likely reflects the fresh trim and refurbished floors on the buses used.

Views of the performance of bus drivers have also improved, from a rating of 3.56 to 3.87, which is particularly pleasing, reflecting good management of the staff on the service. Time keeping also improved from 2.95 to 3.46 – moving up from an average rating of OK into the realms of 'good'. This is likely to have been helped by the redesign of the Cock Pitt junction and the presence of the Kedleston Road bus lane, at the time of the survey.

The only aspect of the service to record a very small improvement was cost. This score was up very slightly at 3.53 (it was 3.49 in 2007). This is despite two significant price rises. Clearly, with other improvements, bus users still feel they are getting fairly good value for money.

A large improvement was also recorded in the views on frequency (up from 3.26 to 3.7). This is likely to reflect a doubling of buses on the number 5 route. The improved timekeeping of services will also increase satisfaction with existing bus frequencies that had not changed on the No.4 and No.6 services.

Overall, the improvements seen here have no doubt fuelled some of the increase in bus travel. If these can be sustained and built upon, with costs kept reasonable, we can expect further increases in patronage in the future, especially as fuel and parking charges continue to rise.

5.17 Bus Services to Buxton

A very small sample of students answered similar questions on the bus services to Buxton. These services are a mix of buses provided by the University through a contractor and some public services that students receive a season ticket to travel on. Users were asked to rate the service concerning various aspects on a five point scale, ranging from Very Poor to Very Good. Using the response data, an average score for each aspect of the service has been calculated.

Aspect of Service	**Average Rating**
Quality of Buses	3.70
Cleanliness of Buses	3.64
Drivers	4.19
Time Keeping	3.35
Cost	3.39

The quality and cleanliness of buses are closely associated and received similarly good scores. Despite the buses being quite old, they obviously still appear generally satisfactory to the users.

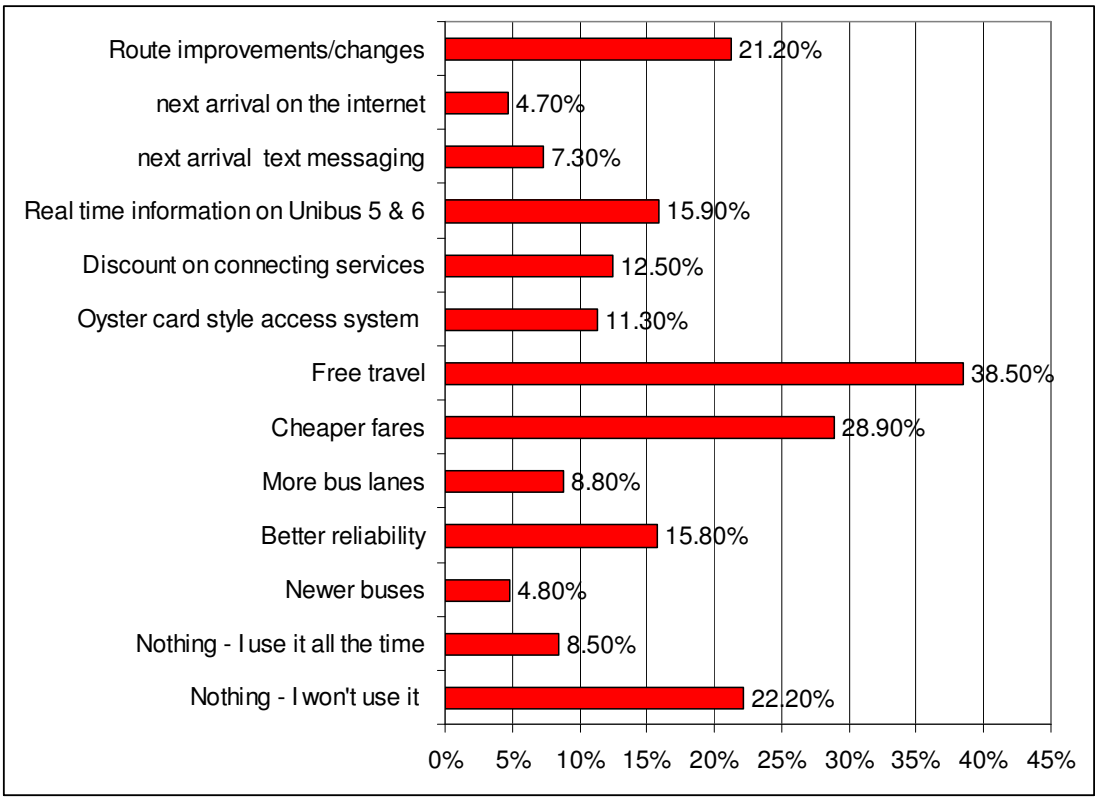
Drivers scored very highly. This is likely to be a result of regular drivers on the same route, getting to know the students and clearly building of a positive relationship with them.

Time keeping and cost scored lowest on the Buxton buses, though these scores represent something slightly better than 'ok'. The buses all travel on very long distance routes, with many variables, which will have a potential to affect time keeping. Interestingly, the cost of the buses is actually heavily subsidised, but the payment upfront for the whole year, clearly creates an impression of it being expensive. The application of a proportionate daily charge, would no doubt give the perception of travel costs being better value than a large up front fee.

5.18 Bus Improvements

All respondents, including non-bus users were asked what would encourage them to either start using the bus to travel to University more often, or what would encourage them to use the bus even more than they already do. Respondents could tick as many or as few boxes as were applicable to them.

Figure 37



Overall, 22.2% of people said that nothing could convince them to use the bus more. So however convenient, cheap or improved a bus service may be, they would not consider using it. This is a 15% drop from 2007, showing a significant shift in attitudes towards considering bus use. The proportion saying they use the bus all the time was more or less unchanged from 2007.

The main incentive that would attract an increase in bus use was free travel. 38.5% of all the survey respondents said this would encourage them to use the bus or use it more. The impact of cheaper fares was only marginally less at 28.5%. This makes it clear that many people do not think current fare levels make it worth travelling by bus.

Better reliability was cited by 15.8% as something that would encourage their usage of the Unibus. This is much lower than in 2007, suggesting that Unibus reliability has improved significantly since then, backing up the findings in section 5.16.

Real time information on Route 5 and 6, combined with internet and text messaging for the next bus time would bring some increase in patronage, with 15.9%, 4.7% and 7.3% respectively answering that this would increase their usage of unibus services. Unfortunately, recent developments within the local authority infrastructure make the expansion of the RTI system seem highly unlikely.

A card swipe for boarding the bus would encourage 11.3% of respondents to use the bus more. Cashless purchase of tickets would fit well with student culture, and would make spending on buses feel like it has a slightly less direct impact on the money their pocket. It would also enable ‘recharging’ of balances from remote locations (i.e. students parents, or home), speeding up time taken for people to board the bus.

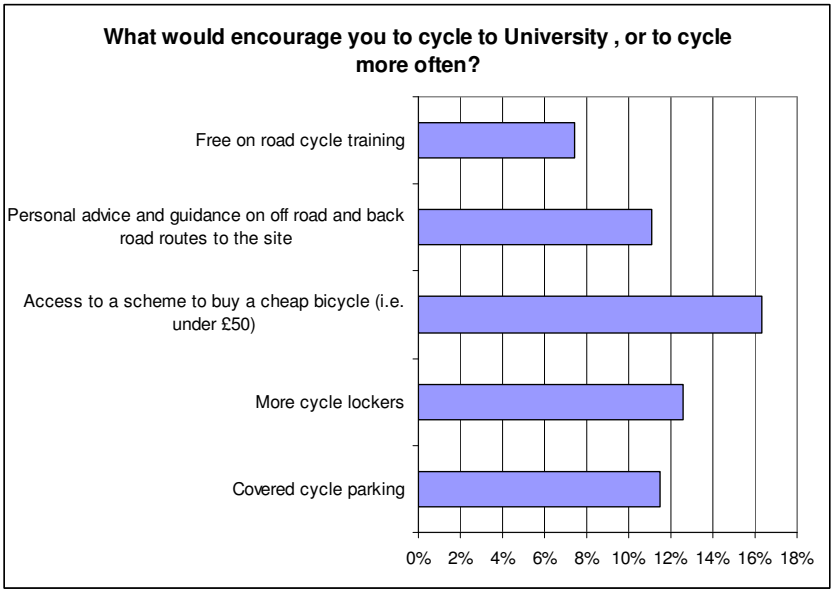
Route improvements were cited by 22.2% as necessary for their take up or increased use of bus services. The general feel of suggestions was that where two buses had to be caught, there became a big obstacle to bus travel, and if a direct bus could serve more locations, people would use it more.

5.19 Cycling Questions

All respondents were asked if they either owned or had access to a bicycle. They were also asked if they considered themselves to be within cycling distance of the University.

49.7% of respondents do have access to a bicycle (an increase of 2% since 2007). However, there has been a much bigger swing towards people saying that they do live within reasonable cycling distance of the University. In 2007, only 36% considered this to be the case, yet in 2010 this had increased to 47.8%. This reflects the fact that overall, distances travelled to University have decreased (section 5.5), but this shift also suggests that the perception of what is a reasonable cycling distance has also increased.

Figure 38



Finally, people were asked what would encourage them to cycle to University or to cycle more often. Just over half said that nothing could change their view and that they would not cycle to University. However, this means that over 700 respondents were open to being encouraged to cycle to University or to cycle more often.

The most popular encouragement would be access to buy a cheap bicycle (for under £50). As a direct response to this, we invited the groundworks bike recycling scheme to regularly sell their bikes at the University. This has been a real success and something that needs to be secured as a long term scheme.

12.6% felt that more secure bike parking lockers would encourage them to cycle more, addressing a frequently voiced concern over security. More Covered cycle parking would also encourage 11.5% of respondents to increase the amount of cycling they do. In particular, the Kedleston Road site suffers from a lack of covered cycle parking.

Personal advice and guidance on off road and back road cycle routes would encourage 11.1% to cycle more to University and a further 7.4% would cycle more if free on-road cycle training was available to them.

292 respondents made additional comment in answer to this question. The vast majority were people giving reasons why they cannot cycle more (mostly due to distance or childcare arrangements). There were also a lot of comments as to why people are happy cycling. The main suggestions from this section were improved cycle lanes (referring to routes to the University), better and more widely promoted shower facilities. In addition, postcoding of bikes, access to repairs on site and a London style bike sharing scheme were each put forward by one person.

5.20 Suggestions and Ideas to help reduce motor vehicle usage.

492 respondents made a response to this question. Some of these simply answered the question ‘no’ or ‘none’. Of the remaining responses, many of these were a justification of an individuals need to drive to University. There were also a number of comments specifically regarding frustration at on-street and University parking restrictions, especially from those who live further away and feel they have no alternative to driving.

A notable number of people called for better reliability and lower prices on the Unibus, as well as a broader coverage for Unibus services.

Of the remaining answers, the most notable highlights are detailed below:

- Subsidised parking permits for the owners of more environmentally friendly cars…
- Bike servicing on site, that you can leave and go to lectures. A Dr Bike session to teach mebasic bike maintenance. A cycle lane - seperate from walkers on entrance road
- Fare stages on the Unibus would be fairer!
- Possible student fares within trent barton or arriva bus companies
- Bus drivers to wear name tags so they feel more accountable and are more approachable
- I bought the university bus pass for the 58 service and the drivers tell me it's only valid during the FE terms, I'm on a HE course and don't get half term holidays off. could the pass be extended to cover the HE semesters? it'd be useful if it worked at weekends too so I could come in and use the Library without using the car.
- Would it be possible to sort out car sharing with students in the same course at the beginning of the next Semester?
- SECURE PERSONAL LOCKERS ON SITE. I use my car only because it gives me a base and saves me carrying all my gear…
- cable car system between campuses
- A student bicycle rental scheme would be cool, rent a bike for a year?
- the Unibus from Markeaton st to Kedleston rd should be scrapped. we're becoming a lazy society - it isn't very far for people to walk. a different scheme for disabled people could be adopted.
- I have looked into the current university car share scheme but it doesn't work…
- The bus drivers could turn there engines off when stopped at bus shelter , I'm sure that could save us hundreds of pounds in diesel a year!!!
- SHOWERS AT DEVONSHIRE CAMPUS PLEASE
- I dont think I will ever reduce car usage (too far away) but I might consider low carbon/ electric cars if the university helped somehow. They tend to be a significant upfront investment with a long payback, ie cash flow issue. Will we ever have electric charging points?
- Read some really good case studies on cycle to work schemes and I think we are only playing at it, it should be feasible to get 50% of the 5 mile journey people onto a bike based on schemes in place in the UK…

6. Conclusion

This survey has shown that since 2007, really significant progress has been made through the travel plan in reducing the proportion of staff and students who are travelling to University as sole occupancy car drivers. Some of this is due to a greater proximity of residential locations, but it also shows a broad shift in attitudes to look more favourably on alternatives to the car for travel to University.

Despite improvements across nearly all areas, it is clear there is much work still to do to reduce the environmental impact of our travel and further ground can still be gained through use of positive encouragements to use alternatives. It is also clear that a massive potential reduction in car use can be achieved through wider and better implementation of car sharing measures.