

University of Edinburgh Travel Survey 2004 - Final Report

1 Introduction

Purpose and structure of the Report

This report provides a summary of the findings of the Travel Surveys carried out in May 2004. It was distributed electronically and on paper to all 7086 staff and 22,827 students. This report also makes use of the previous survey results from 2000 and compares the two sets of results to monitor the University's progress on its commitments to the City Council. The Travel Survey results will also allow the University's Transport Advisory Group to prioritise areas that require more resources.

2.1 Methodology

Each file was transferred into individual SPSS files, where variable labels and value labels were added, to allow results to be more easily interpreted. Missing values with labels were assigned, mainly used where respondents, eg non-drivers, were routed past questions in the form. Other text was analysed individually and recoded where appropriate, ie to other locations which were pre-defined, particularly NHS sites.

Staff and student populations with locations were provided by Payroll and Registry. Staff respondents were linked to the staff population via their Staff ID number. Student respondents were matched to the student population using their Matriculation Number. Both staff and students were also given a random case number so that the Staff Id and Matriculation Number identifying individuals could be removed from the data files later.

Weighting was used to make statistical analysis more accurate by removing non-response bias: the distribution of staff categories, student types and locations across the populations differ from the distribution of these categories for respondents to each survey. For staff, the staff category and main location variables provided by Payroll were used to calculate weights. For students, basic student type (UG/PG) and gender from Registry were used, as location had little influence on response.

In this case, we calculated two weights, one which inflated the respondents to population level as per the distribution variables, and a second which re-scaled the numbers back to the response level, again distributed as per the population.

Sets of tables were run from both data files, indicating the percentage responses to all variables in the questionnaires for different groups.

2.2 Staff Response Rate

The response rate of the survey by location shows that the largest responses were from staff based at New College and King's Buildings. The lowest response rate was from those based at Pollock Halls.

Figure 1 - Staff Survey Response Rate

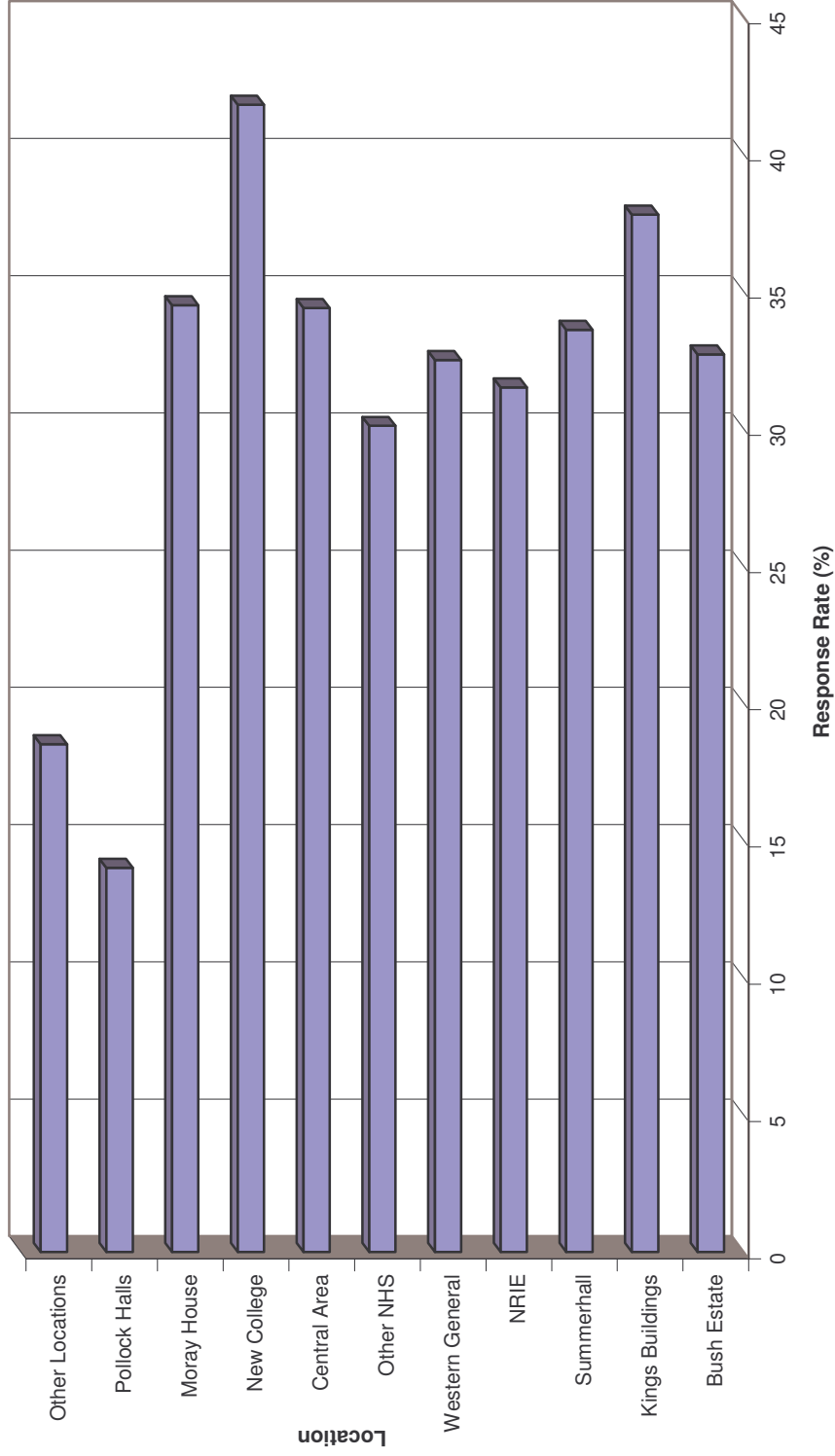


Table 1 Staff Populations at May 2004 provided by Payroll

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Bush Estate	220	3.0	3.0	3.0
Kings Buildings, Observatory	1662	22.9	22.9	25.9
Summerhall	131	1.8	1.8	27.7
NRIE, Little France	200	2.8	2.8	30.4
Western General Hospital	366	5.0	5.0	35.5
Other NHS site	103	1.4	1.4	36.9
Central Area	3553	48.9	48.9	85.8
New College, Mylne's Court	67	.9	.9	86.7
Moray House, Holyrood Road	357	4.9	4.9	91.6
Pollock Halls	477	6.6	6.6	98.1
Other Location	135	1.9	1.9	100.0
Total	7271	100.0	100.0	

2.3 Modes of Travel to the University

Table 2 – Normal mode of travel to normal workplace location (percentage)

Table 1 shows the modal split by location of work. A high proportion of staff use the bus to get to many of the locations e.g. at Summerhall (30%), Little France where (31.6%), New College (37.2%) and Pollock Halls (59.4%) the bus is the most popular method of travelling to work. A high proportion of staff cycle to work at the King's Buildings (18.5%). There are no staff based at the Bush Estate or other NHS sites that use the train to travel to work.

	Location worked at, main base										Table Total	
	Bush Estate	Kings Buildings, Observatory	Summerhall	NRIE, Little France	Western General Hospital	Other NHS site	Central Area	New College, Mylne's Court	Moray House, Holyrood Road	Pollock Halls		Other Location
	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %
Travel to work: Main method												
Walking	1.5%	15.4%	12.8%	4.1%	10.7%	21.2%	23.1%	20.7%	14.7%	7.8%	10.0%	17.6%
Car, driving alone	71.1%	27.5%	21.0%	28.2%	40.1%	49.1%	20.2%	12.0%	25.5%	20.4%	20.1%	25.5%
Car, driving with Uni passenger	.0%	6.3%	5.5%	6.7%	2.6%	.0%	3.3%	.0%	4.8%	1.0%	14.9%	4.1%
Car, dropping passengers	3.6%	9.2%	11.1%	11.5%	9.6%	8.9%	6.5%	3.5%	10.1%	.9%	5.1%	7.2%
Car, as passenger with Uni colleague	3.2%	1.4%	.0%	.0%	.0%	.0%	1.2%	.0%	.8%	5.9%	.0%	1.4%
Car, as passenger to other driver	1.1%	2.8%	4.7%	3.0%	1.5%	3.1%	1.9%	4.2%	.7%	.0%	.0%	1.9%
Motorbike	1.2%	.5%	.0%	1.8%	2.6%	5.4%	1.7%	.0%	2.3%	.9%	5.0%	1.5%
Rail	.0%	4.2%	2.1%	4.3%	0.8%	0%	9.4%	8.8%	10.8%	1.8%	5%	5.9%
Bus	3.4%	16.3%	30.0%	31.6%	17.5%	6.2%	24.0%	37.2%	21.6%	59.4%	39.8%	25.8%
University minibus shuttle	13.5%	.6%	.0%	1.5%	3.4%	.0%	.0%	.0%	.0%	.0%	.0%	.8%
Cycle	1.2%	18.5%	12.7%	7.4%	11.3%	6.2%	8.8%	13.7%	8.6%	1.8%	.0%	10.4%
Table Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

2.4 Journey length and time taken

Table 3 – Average Journey Length (Miles) by location and staff category

The greatest distance travelled by staff to get to work is made by the staff travelling to work in the College of Medicine and Veterinary Medicine, with the average distance travelled by staff at Easter Bush (11.5 miles), Western General Hospital (10.23 Miles) and the NRIE at Little France (10.12 miles). The shortest distance travelled is to King's Buildings where the average is 5.81 miles. Overall the Academic, Teaching and Research related staff travel the furthest with an average distance of 10.7 miles.

		Position held within University			
		Academic, Teaching, Research, Related	Secretarial, Clerical	Technical	Manual
Location	Average				
Easter Bush	11.51	14.57	11.50	10.56	2.19
KB	5.81	5.66	6.83	6.64	4.10
Summerhall	8.98	10.29	10.39	3.86	8.00
NRIE Little France	10.12	10.66	6.61	12.59	10.98
WGH	10.23	8.28	10.10	16.17	15.76
Other NHS	5.91	4.80	9.12	-	7.70
Central	8.20	8.33	7.67	10.76	6.74
New College	5.89	2.61	10.24	5.00	13.00
Moray House	9.01	9.74	8.13	6.00	5.57
Pollock	7.99	13.89	8.35	-	6.45
Other	9.64	28.60	3.60	9.67	7.79
	Total Average	10.7	8.4	7.4	8.0

Table 4- Average Journey Length (Miles) by mode of transport

The data shows that as distance travelled to work increases above 2 miles car use increases. Car use ranged between 22% - 41.4% where journeys were between 2 and 50 miles. Most journeys (65.4%) under 2 miles involved walking.

Travel to work: Main method	How far travel to work, collapsed							
	Under 2 miles	2 miles or over, but under 5 miles	5 miles or over, but under 10 miles	10 miles or over, but under 15 miles	15 miles or over, but under 25 miles	25 miles or over, but under 50 miles	Over 50 miles	Col %
Walking	65.4%	11.4%	.6%	.0%	.0%	.0%	.0%	.0%
Car, driving alone	5.4%	22.0%	38.3%	33.8%	41.4%	40.4%	34.2%	
Car, driving with Uni passenger	1.3%	3.7%	4.5%	5.8%	9.5%	4.9%	.0%	
Car, dropping passengers	1.0%	7.5%	10.9%	9.7%	11.3%	7.4%	5.3%	
Car, as passenger with Uni colleague	1.0%	.7%	3.1%	3.1%	.4%	.5%	.0%	
Car, as passenger to other driver	.5%	2.0%	2.3%	2.4%	3.0%	3.5%	.0%	
Motorbike	.2%	1.1%	1.8%	4.5%	1.9%	3.3%	.0%	
Rail, daily ticket	.0%	.2%	1.2%	2.6%	4.9%	7.4%	24.6%	
Rail, season ticket	.0%	.3%	.9%	7.2%	17.6%	23.6%	32.2%	
Bus, daily ticket	4.8%	14.0%	11.8%	11.5%	1.1%	1.5%	.0%	
Bus, season ticket	2.6%	18.7%	21.6%	15.9%	8.9%	7.4%	3.7%	
University minibus shuttle	2.4%	.8%	.0%	.0%	.0%	.0%	.0%	
Cycle	15.3%	17.5%	3.1%	3.6%	.0%	.0%	.0%	

Table 5 – Average Journey Time (Minutes) by location and staff category

Journey times are greatest for Secretarial and Clerical staff with average times as high as 65.77 minutes at Central area sites. Overall averages for all staff types at all sites showed that staff at Central sites and the NRIE Little France have the greatest average journey times.

		Position held within University			
		Academic, Teaching, Research, Related	Secretarial, Clerical	Technical	Manual
Location	Average				
KB	25.51	25.08	29.76	26.06	20.69
Summerhall	33.00	33.04	36.38	30.63	30.00
NRIE Little France	41.00	37.77	43.13	48.08	35.00
WGH	39.68	38.14	38.75	45.95	40.00
Other NHS	28.63	27.10	36.00	-	27.50
Central	41.61	32.36	65.77	39.65	27.60
New College	31.71	26.75	41.67	20.00	32.50
Moray House	35.65	33.81	40.71	40.00	30.71
Pollock	34.94	38.00	32.89	-	35.31
Other	33.46	47.50	17.50	16.00	36.76

2.5 Preferred Mode of Transport

Table 6 – Preferred mode of travel by normal place of work (percentage)

The most popular alternative method of getting to work is walking, with staff at Kings Buildings (22.9%), Summerhall (18.4%), Western General Hospital (21.2%), Central Area (28.5%), New College (40.3%), Holyrood (18.7%) and Pollock Halls (22%) all rating it highly. Also popular is the car, this probably reflects the current obstacle of the high demand cost of parking permits. At the Kings Buildings the preferred method of transport is cycling (26.2%).

Preferred method of travelling to work	Location worked at, main base												Table Total
	Bush Estate	Kings Buildings, Observatory	Summerhall	NRIE, Little France	Western General Hospital	Other NHS site	Central Area	New College, Mylne's Court	Moray House, Holyrood Road	Pollock Halls	Other Location	Col %	
Walking	6.5%	22.9%	18.4%	12.7%	21.2%	33.5%	28.5%	40.3%	18.7%	22.0%	9.1%	24.4%	
Car, driving alone	55.5%	18.4%	29.4%	26.8%	23.0%	22.8%	16.9%	6.3%	23.4%	14.2%	25.2%	19.6%	
Car, driving with Uni passenger	1.1%	6.2%	5.5%	7.9%	5.5%	.0%	3.9%	5.6%	5.6%	5.9%	13.6%	4.9%	
Car, dropping passengers	4.7%	6.3%	9.0%	11.7%	7.0%	8.9%	5.8%	.0%	5.5%	.9%	4.7%	5.8%	
Car, as passenger to other driver	.0%	2.0%	2.6%	.0%	.0%	3.1%	2.0%	.0%	.7%	3.8%	4.5%	1.9%	
Motorbike	1.2%	1.1%	.0%	1.9%	4.7%	.0%	2.1%	.0%	2.3%	2.8%	4.5%	2.0%	
Rail, daily ticket	.0%	.5%	.0%	.0%	1.8%	.0%	1.4%	.0%	1.5%	.0%	4.5%	1.0%	
Rail, season ticket	.0%	2.0%	5.8%	1.5%	3.2%	.0%	8.3%	6.7%	11.7%	4.7%	6.7%	5.9%	
Bus, daily ticket	.0%	2.4%	.0%	1.3%	.0%	5.4%	4.2%	3.5%	1.5%	13.5%	4.5%	3.8%	
Bus, season ticket	7.6%	9.5%	11.8%	15.9%	11.2%	10.9%	10.9%	17.2%	14.0%	20.0%	18.1%	11.6%	
University minibus shuttle	15.8%	2.5%	2.6%	4.9%	3.3%	3.1%	2.2%	.0%	3.0%	8.6%	.0%	3.2%	
Cycle	7.5%	26.2%	14.9%	15.3%	19.1%	12.3%	13.8%	20.3%	11.9%	3.7%	4.5%	16.0%	
Table Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

2.6 Parking Location

Table 7 – Normal Parking Location Used

The results show that on street parking is most popular at NHS sites in particular the Western General (63.6%) and at Kings Buildings (39.3%). The highest proportion of staff paying for commercial parking is at New College/Myline's Court where 39.6% use metered parking.

	Location worked at, main base											Table Total
	Bush Estate	Kings Buildings, Observatory	Summerhall	NRIE, Little France	Western General Hospital	Other NHS site	Central Area	New College, Myline's Court	Moray House, Holyrood Road	Pollock Halls	Other Location	
	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %
Where do you usually park while at work	94.9%	59.3%	71.6%	73.8%	24.4%	48.6%	72.5%	50.0%	82.1%	100.0%	66.2%	67.3%
University car park	.0%	1.0%	.0%	23.8%	8.0%	4.1%	8.0%	.0%	16.8%	.0%	.0%	5.9%
Commercial car park	.0%	.4%	7.1%	.0%	4.2%	.0%	5.5%	39.6%	1.1%	.0%	.0%	3.1%
On street, metered parking	5.1%	39.3%	21.3%	2.4%	63.3%	47.3%	14.0%	10.4%	.0%	.0%	33.8%	23.7%
On street, free parking	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Table Total												

2.7 Measures to encourage a reduction in car use
Table 8 – Measures to reduce car use (percentage)

Most staff agreed regardless of how often they used their cars that homeworking and better public transport would decrease car use. Most staff also disagreed that increasing the parking permit cost would reduce car use.

	How often do you drive a car to work				Table Total	
	Never drive to work	Yes, less than 5 days per month	Yes, 5 to 15 days per month	Yes, more than 15 days per month		
Encourage reduction in car use: flexible working day or week	Agree	58.0%	49.6%	57.4%	52.1%	54.6%
	Disagree	16.6%	17.8%	14.6%	16.8%	16.6%
	Not relevant	25.4%	32.6%	27.9%	31.1%	28.8%
Encourage reduction in car use: home working where appropriate	Agree	76.5%	72.6%	79.7%	70.5%	73.8%
	Disagree	5.6%	6.0%	2.2%	5.2%	5.2%
	Not relevant	17.9%	21.3%	18.0%	24.3%	21.0%
Encourage reduction in car use: better public transport	Agree	89.4%	90.5%	87.9%	85.1%	87.8%
	Disagree	5.3%	6.2%	5.1%	8.0%	6.3%
	Not relevant	5.3%	3.3%	7.0%	6.9%	5.9%
Encourage reduction in car use: better transport information	Agree	71.9%	68.3%	61.9%	54.1%	64.3%
	Disagree	14.4%	19.9%	18.4%	26.1%	19.4%
	Not relevant	13.7%	11.8%	19.7%	19.8%	16.3%
Encourage reduction in car use: transport awareness campaign	Agree	59.3%	47.6%	41.2%	31.1%	46.5%
	Disagree	20.8%	30.7%	31.8%	40.7%	29.7%
	Not relevant	19.9%	21.8%	27.0%	28.2%	23.9%
Encourage reduction in car use: daily parking permits	Agree	48.4%	65.4%	58.8%	42.1%	48.9%
	Disagree	29.0%	22.5%	26.0%	39.2%	31.4%
	Not relevant	22.6%	12.1%	15.3%	18.8%	19.7%
Encourage reduction in car use: reward for parking permit return	Agree	52.9%	52.0%	44.5%	33.4%	45.1%
	Disagree	22.8%	26.4%	30.7%	40.6%	30.0%
	Not relevant	24.3%	21.6%	24.8%	26.0%	24.9%
Encourage reduction in car use: pool car for Uni business	Agree	64.5%	61.6%	51.4%	47.1%	56.9%
	Disagree	14.9%	18.6%	24.1%	26.8%	20.1%
	Not relevant	20.6%	19.7%	24.4%	26.2%	23.1%
Encourage reduction in car use: increase parking permit cost	Agree	41.4%	35.9%	19.3%	14.1%	29.4%
	Disagree	40.9%	56.5%	60.7%	75.3%	56.2%
	Not relevant	17.7%	7.6%	19.9%	10.6%	14.4%
Encourage reduction in car use: car/ride share reserved spaces	Agree	70.6%	68.3%	58.4%	43.5%	59.6%
	Disagree	14.0%	19.9%	28.8%	41.0%	25.2%
	Not relevant	15.4%	11.8%	12.8%	15.5%	15.1%

2.8 How journeys have changed

Table 9 – How has your journey changed in the last 3 years (percentage)

For the majority of staff at most sites the journey to work in last years has stayed the same except for staff at NRIE (58.6%) who feel it has got more difficult. This would be as a result of the relocation of many centrally based staff to Little France.

	Location worked at, main base										Table Total	
	Bush Estate	Kings Buildings, Observatory	Summerhall	NRIE, Little France	Western General Hospital	Other NHS site	Central Area	New College, Mylne's Court	Moray House, Holyrood Road	Pollock Halls		Other Location
How has journey to work become in last 3 years	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %
Easier	8.2%	9.1%	3.8%	7.3%	7.4%	9.2%	9.8%	9.8%	7.2%	8.4%	4.7%	9.0%
More difficult	14.2%	21.9%	26.5%	58.6%	41.6%	17.4%	21.5%	28.8%	30.0%	20.3%	9.5%	23.6%
Stayed the same	72.9%	55.7%	56.7%	21.4%	39.8%	52.5%	58.6%	54.3%	56.1%	55.2%	74.0%	56.1%
Not applicable	4.7%	13.3%	13.1%	12.8%	11.2%	20.8%	10.1%	7.0%	6.8%	16.1%	11.8%	11.3%
Table Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

2.9 Reasons for Driving

Table 10 – Why staff use their cars to travel to work (percentage)

Staff mostly give the reason that it decreases journey times and that they have other commitments after work as a reason for driving their cars to work. Additionally staff at the Bush Estate 56.1% said there were no alternatives/located on a remote site. Staff at Holyrood (73.5%) and other NHS sites (75.4%), Summerhall (81.6%) and NRIE (84.1%) gave needing a car for work as a reason for bringing their cars.

	Location worked at, main base										Table Total	
	Bush Estate	Kings Buildings, Observatory	Summerhall	NRIE, Little France	Western General Hospital	Other NHS site	Central Area	New College, Mylne's Court	Moray House, Holyrood Road	Pollock Halls		Other Location
Main reasons for bringing car: go to other Uni sites	31.3%	24.2%	57.2%	52.6%	28.6%	26.4%	31.4%	12.4%	26.5%	5.4%	36.5%	28.7%
Main reasons for bringing car: go elsewhere on Uni business	20.7%	18.6%	24.4%	31.5%	17.5%	49.0%	24.6%	.0%	47.0%	.0%	21.8%	22.9%
Main reasons for bringing car: move equipment about	12.9%	11.1%	15.0%	18.2%	16.7%	14.7%	10.5%	10.4%	19.7%	.0%	4.8%	11.6%
Main reasons for bringing car: collect others on route	12.4%	26.0%	25.3%	35.0%	19.9%	26.0%	22.6%	10.4%	27.8%	17.1%	20.2%	23.5%
Main reasons for bringing car: drive to other things after work	39.3%	46.1%	38.7%	37.6%	37.4%	29.4%	38.8%	40.6%	45.6%	29.8%	18.6%	40.1%
Main reasons for bringing car: mobility problem	1.6%	1.3%	.0%	.0%	1.0%	.0%	3.0%	.0%	4.9%	2.3%	.0%	2.1%
Main reasons for bringing car: travel far, no alternative	56.1%	22.4%	20.5%	43.2%	23.6%	25.5%	23.9%	9.4%	19.6%	20.1%	21.5%	24.9%
Main reasons for bringing car: don't know timetables	4.9%	1.5%	.0%	.0%	.0%	3.9%	.5%	.0%	.0%	2.7%	.0%	1.1%
Main reasons for bringing car: car is cheapest option	19.5%	14.3%	30.1%	15.0%	14.2%	21.2%	11.9%	26.2%	13.3%	9.7%	21.9%	13.9%
Main reasons for bringing car: shorter journey time	72.2%	57.8%	57.6%	56.5%	50.3%	55.0%	45.6%	36.6%	47.3%	37.6%	46.5%	51.0%
Main reasons for bringing car: don't like public transport	15.1%	12.9%	9.9%	8.2%	6.8%	21.2%	17.3%	26.2%	9.4%	7.4%	4.8%	13.8%
Main reasons for bringing car: concerns re personal safety	8.5%	7.2%	30.6%	2.9%	4.3%	3.9%	8.3%	9.4%	7.1%	7.4%	.0%	7.6%

2.10 City of Edinburgh Council's Modal Travel Targets

Figure 2 - A Comparison between City of Edinburgh Council (CEC) 2010 Work Related Modal Travel Targets and University of Edinburgh Staff Survey Results for 2000 and 2004

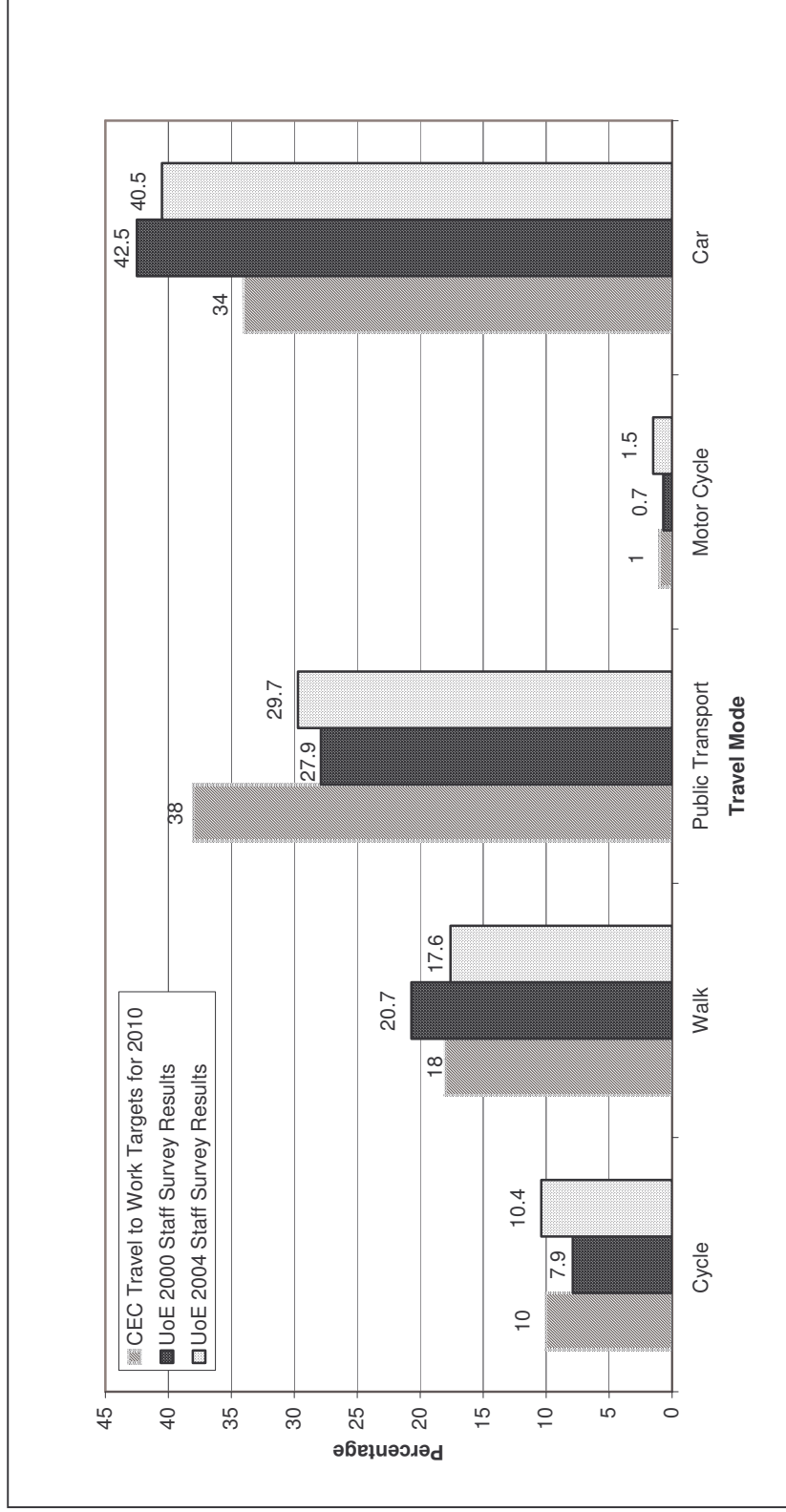


Figure 2 shows that the University compares favourably with the City Council targets. However areas where there could be improvements is with public transport. To meet the City Councils target for this mode it requires an increase of 8.3% in public transport users. As in the report on the Staff Travel Survey in 2000 there are many future changes to the work locations of staff planned in the next few years that could change the current travel patterns of staff. Many more staff are due to move to the new site at Little France in Spring 2005 and the Veterinary School move to Easter Bush could increase the pressure on car use.

2.11 Attitudes to Alternative modes of Transport

Figure 3 shows the overall results for the normal mode of transport and the preferred mode of transport use by staff to travel to work. Encouragingly walking is the most popular preferred mode with staff. As table 6 shows this varies very little between sites, although staff at the Kings Buildings the preferred method to travel is cycling.

The survey has also identified factors that would encourage regular car drivers to use alternative methods of transport. Those areas that the University could assist with are more direct routes and increased frequency of public transport. When asked about RideSharing and cycling most staff responded that nothing would encourage them to change to these modes of transport.

Figure 3 – Staff Attitudes to Alternative modes of Transport

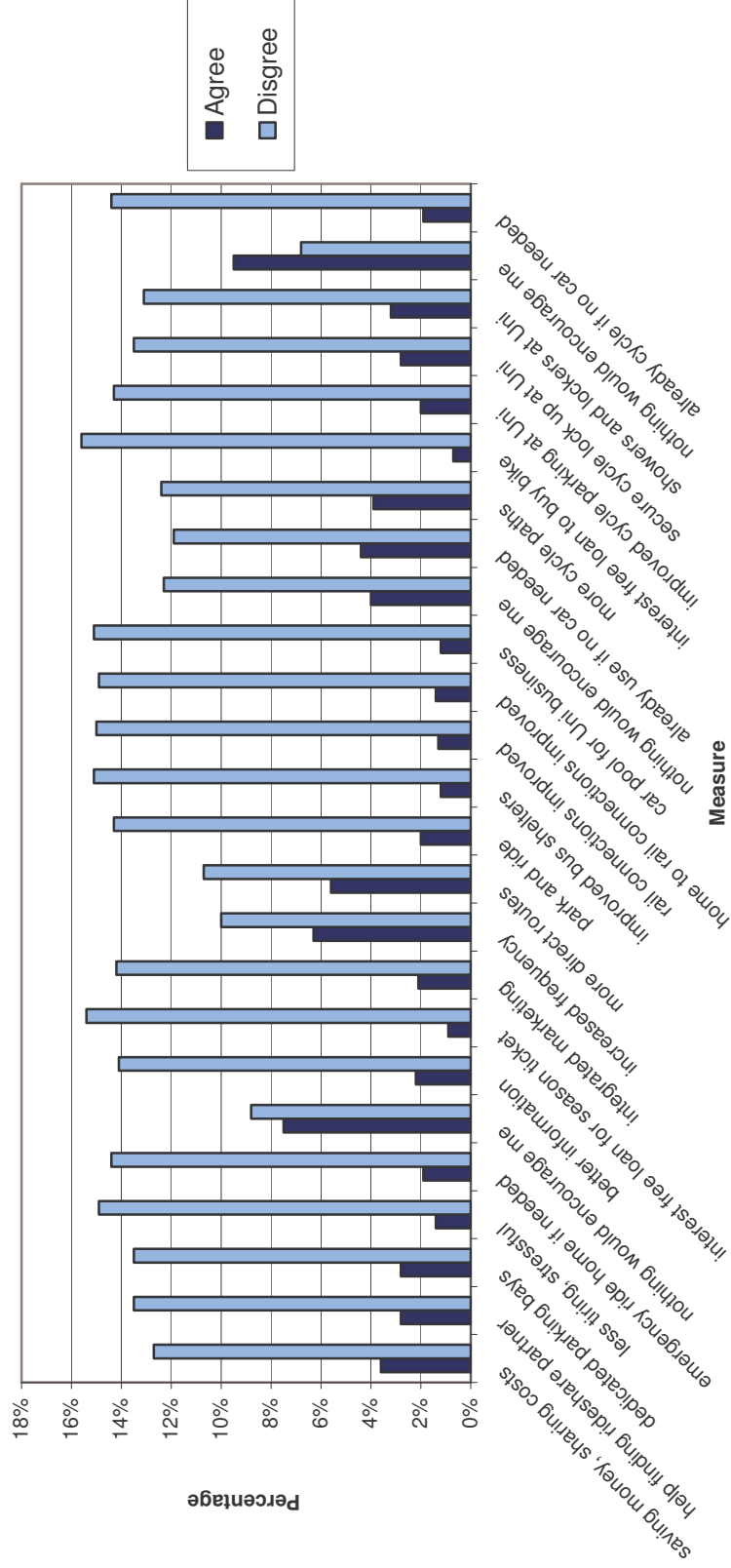


Table 11 - A Summary of the comments received with the Staff Travel Survey (Unweighted frequencies)

Many of the responses to the survey included additional comments, these have been grouped into themes and analysed by the location of work. The comments highlight the large number of staff that have caring responsibilities or do not work a set 9-5 day, which affects the way they travel to work. Many staff also have concerns about safety when using certain forms of transport, this was particularly apparent at King's Buildings. Many staff particularly in the Central area felt that more cycle facilities would be beneficial. Daily charges for parking have been highlighted as a popular idea for staff based in the Central area and King's Buildings.

	Bush	KB	Summerhall	NRIE	WGH	Other NHS	Central	New College, Myline's Court	Moray House, Holyrood Road	Pollock Halls	Other Location
No alternatives available	23	37	5	9	7	1	26	1	11	1	0
Parking Issues	6	12	1	1	7	0	29	0	3	0	0
Need car for University business	7	17	1	3	4	1	23	0	8	0	0
Travel by car problems (congestion)	2	1	0	0	0	0	0	0	0	0	0
Time constraints/convenience	4	20	1	3	10	2	49	1	6	5	0
Caring responsibilities	9	37	2	7	11	3	55	1	5	1	0
Health reasons (positive)	1	0	0	0	0	0	1	0	0	0	0
Health reasons (negative)	1	2	0	0	3	0	9	0	0	1	0
Cost constraints	1	8	2	0	3	0	23	0	1	0	1
Seasonally/weather dependent	1	7	0	0	0	0	5	0	0	0	0
Need financial incentives	1	8	1	2	2	0	22	0	1	2	1
Need cycle facilities	0	36	2	5	4	4	67	0	2	0	0
Need awareness campaigns/information/feedback	2	5	0	0	0	0	4	0	2	1	0
Safety concerns	0	35	0	2	4	0	19	1	5	0	0
Transport loads/heavy materials	0	8	1	0	0	1	8	0	6	0	0
Work outside of the 9-5 structure	0	12	1	2	3	1	30	0	2	0	0
Positive comments on alternatives	0	15	0	1	0	0	13	1	2	0	0
Need daily charges/ticketing system	0	7	0	1	0	0	14	0	2	0	0
Need m/c facilities	0	1	0	1	0	0	0	0	1	0	0
University shuttle buses/dedicated buses	0	19	0	2	4	0	18	1	2	1	0
Flexible working hours/home working	0	4	0	0	0	0	14	0	1	1	0
Need pool car system	0	4	1	0	0	0	13	0	0	0	0
Other	0	88	7	8	11	4	134	3	14	4	3

3.1 Student Response Rate

The largest response rate for the survey were from students primarily based at Western General Hospital, NRIE, Kings Buildings and the Bush Estate. The lowest response was from those students primarily based at Moray House.

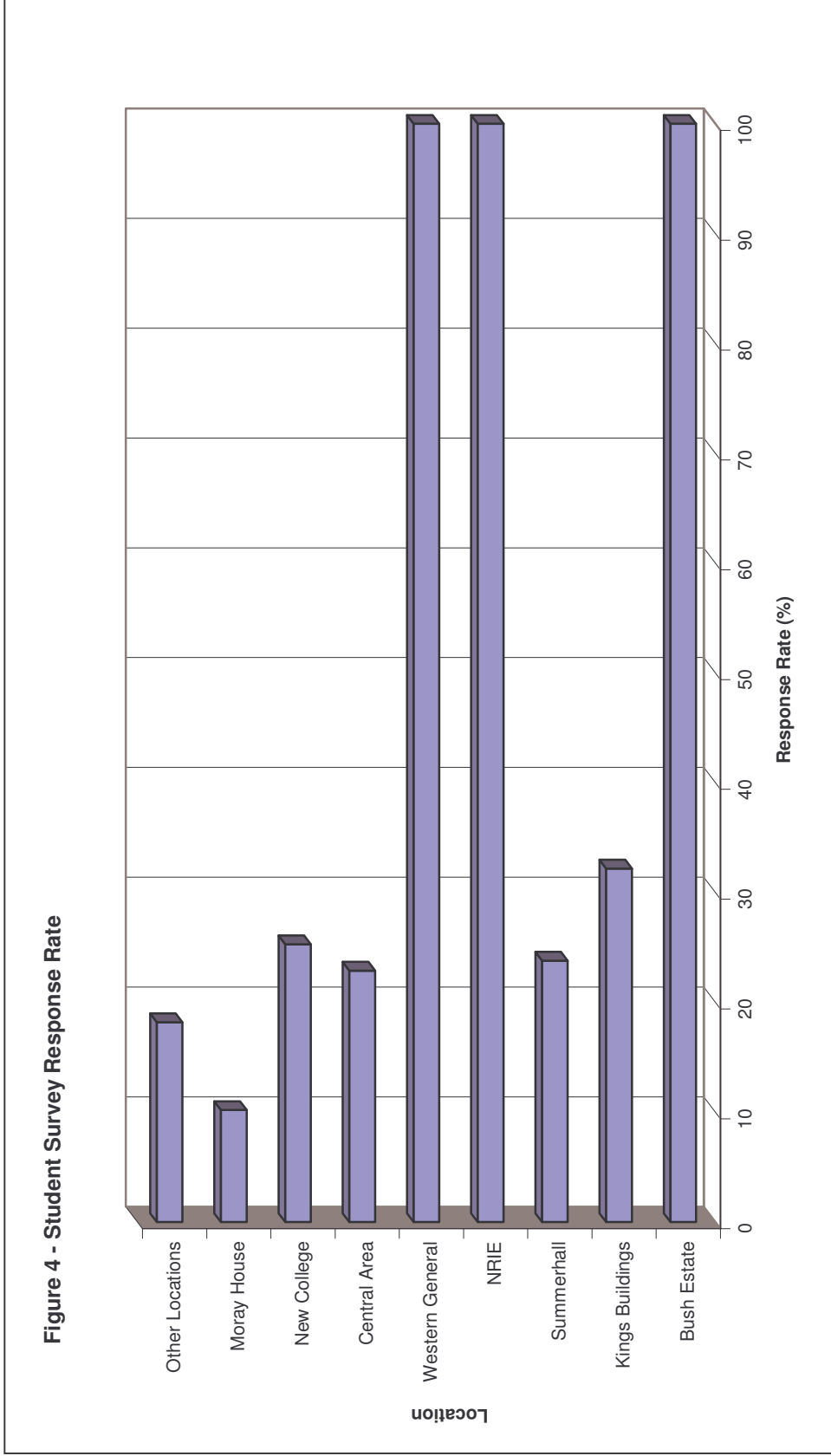


Table 1 Student Populations at May 2004 provided by Registry

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Kings Buildings, Observatory	1423	26.3	26.3
	Summerhall	147	2.7	29.0
	Western General Hospital	1	.0	29.0
	Central Area	3182	58.7	87.7
	New College, Mylne's Court	112	2.1	89.7
	Moray House, Holyrood Road	555	10.2	100.0
	Other Location	2	.0	100.0
	Total	5421	100.0	100.0

3.2 Modes of travel to University

Table 1 shows the modal split by student location.

The results show that overall walking (62.5%) is the main mode used by students to travel to the University. This is the most popular mode in all but four locations; the Bush Estate where car sharing (28.6%) is the most common mode used, the NRIE where cycling (24.5%) is the most popular mode, Western General Hospital where most students drive their cars driving alone (36.3%) and other unspecified locations where again car driving alone (39.8%) is most common.

Table 1 - Modal split by location

	Which location do you study at, Main Base											Table Total
	Bush Estate Col %	Kings Buildings, Observatory Col %	Summerhall Col %	NRIE, Little France Col %	Western General Hospital Col %	Other NHS site Col %	Central Area Col %	New College, Myline's Court Col %	Moray House, Holyrood Road Col %	Other Location Col %	Col %	
Walking	6.8%	54.0%	77.8%	12.4%	12.2%	23.9%	74.6%	64.1%	42.5%	25.5%	62.5%	
Car, driving alone	17.6%	5.4%	2.7%	6.1%	36.3%	23.9%	3.1%	5.0%	8.9%	39.8%	5.1%	
Car, driving with Uni passenger	28.6%	2.2%	2.7%	3.2%	.0%	22.1%	.9%	.7%	4.4%	21.1%	2.2%	
Car, dropping passengers	.9%	.9%	1.4%	.0%	.0%	7.0%	.3%	.0%	2.2%	.0%	.7%	
Car, as passenger with Uni colleague	13.7%	.9%	1.4%	.0%	.0%	.0%	.1%	.0%	.6%	.0%	.6%	
Car, as passenger to other driver	.9%	.2%	.0%	.5%	.0%	.0%	.4%	.7%	.9%	.0%	.4%	
Motorbike	1.2%	.4%	.0%	.8%	.0%	.0%	.1%	.0%	.0%	.0%	.2%	
Rail, daily ticket	.0%	.5%	.0%	.0%	.0%	.0%	1.3%	4.5%	9.9%	4.2%	2.0%	
Rail, season ticket	.0%	.6%	1.4%	.5%	.0%	.0%	.8%	2.3%	4.7%	.0%	1.1%	
Bus, daily ticket	3.5%	4.6%	4.3%	19.1%	4.6%	4.9%	4.5%	13.1%	12.3%	6.5%	5.9%	
Bus, season ticket	9.5%	6.7%	4.5%	12.3%	.0%	4.9%	6.5%	5.1%	9.4%	3.0%	6.9%	
University minibus shuttle	16.1%	7.3%	.0%	20.5%	30.4%	7.0%	.5%	.0%	.0%	.0%	3.1%	
Cycle	1.2%	16.3%	4.0%	24.5%	16.5%	6.5%	6.9%	4.5%	4.2%	.0%	9.2%	
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

3.3 Journey length and time taken

Table 2 shows the distances travelled by students to get to the University. As expected by the large number of students walking to the University, the majority of students are travelling less than 2 miles to the University. Table 3 shows the time taken by students to travel to the University. The average time travelled by all student types is between 11 and 20 minutes, although most Undergraduate part-time students (36.2%) take less than 10 minutes to travel to the University.

Table 2 - Distance travelled by students.

	Which best describes your course				Table Total
	Undergraduate, full time	Undergraduate, part time	Postgraduate, full time	Postgraduate, part time	
	Col %	Col %	Col %	Col %	Col %
How far travel to work, collapsed	64.9%	57.5%	53.5%	38.0%	61.0%
Under 2 miles	22.6%	13.3%	32.9%	31.4%	25.1%
2 miles or over, but under 5 miles	4.8%	23.9%	5.6%	7.9%	5.3%
5 miles or over, but under 10 miles	1.9%	.0%	1.7%	4.5%	2.0%
10 miles or over, but under 15 miles	2.5%	3.1%	1.9%	9.0%	2.8%
15 miles or over, but under 25 miles	2.0%	.0%	2.8%	6.1%	2.4%
25 miles or over, but under 50 miles	1.3%	2.2%	1.7%	3.0%	1.5%
Over 50 miles	100.0%	100.0%	100.0%	100.0%	100.0%
Table Total					

Table 3 - Time taken to travel to the University

	Which best describes your course				Table Total
	Undergraduate, full time Col %	Undergraduate, part time Col %	Postgraduate, full time Col %	Postgraduate, part time Col %	
How long does journey take (collapsed)					
10 minutes or less	25.2%	36.2%	26.3%	13.0%	24.9%
11 to 20 minutes	35.5%	19.3%	29.6%	28.9%	33.8%
21 to 30 minutes	24.6%	29.9%	24.3%	20.7%	24.4%
31 to 45 minutes	8.9%	2.7%	13.1%	23.0%	10.4%
46 to 60 minutes	3.6%	8.8%	3.6%	10.8%	4.1%
Over 1 hour	2.2%	3.1%	3.0%	3.6%	2.4%
Table Total	100.0%	100.0%	100.0%	100.0%	100.0%

Table 4 – Average journey length (miles) by mode of transport
 This table shows that the percentage of students walking reduces for journeys over 5 miles. The bus is used most commonly for journeys of between 5 and 15 miles and the car and train for those journeys greater than 15 miles.

	How far travel to work, collapsed					
	Under 2 miles	2 miles or over, but under 5 miles	5 miles or over, but under 10 miles	10 miles or over, but under 15 miles	15 miles or over, but under 25 miles	25 miles or over, but under 50 miles
	Col %	Col %	Col %	Col %	Col %	Col %
How make main part of journey to Uni	84.9%	38.9%	6.7%	.0%	1.1%	.9%
Walking						
Car, driving alone	1.0%	7.1%	12.8%	19.9%	30.4%	23.8%
Car, driving with Uni passenger	.7%	1.8%	13.6%	11.5%	5.4%	7.8%
Car, dropping passengers	.0%	1.5%	4.1%	.6%	.6%	1.1%
Car, as passenger with Uni colleague	.2%	.6%	3.8%	1.6%	1.1%	.0%
Car, as passenger to other driver	.2%	.3%	.9%	3.1%	.0%	1.9%
Motorbike	.0%	.3%	.7%	2.3%	.0%	.5%
Rail, daily ticket	.0%	.1%	1.0%	10.6%	22.6%	36.2%
Rail, season ticket	.0%	.3%	.4%	4.2%	18.5%	19.1%
Bus, daily ticket	2.1%	11.0%	22.8%	12.6%	5.7%	5.8%
Bus, season ticket	1.6%	15.0%	22.0%	26.2%	12.9%	2.5%
University minibus shuttle	1.3%	7.5%	7.2%	3.7%	1.1%	.0%
Cycle	8.0%	15.6%	4.3%	3.7%	.5%	.5%

3.4 Preferred mode of transport

Table 5 shows the mode the respondents would prefer to use to travel to the University. There is very little variation between what the students would prefer to use and what they are currently using, the highest number selected walking as their preferred mode of transport. The biggest difference is amongst students based at the Western General Hospital who instead of using the car on their own would prefer to be able to use a University Shuttle Bus to travel to the site.

Table 5 - How prefer to travel to the University

	Which location do you study at, Main Base											Table Total
	Bush Estate	Kings Buildings, Observatory	Summerhall	NRIE, Little France	Western General Hospital	Other NHS site	Central Area	New College, Mylne's Court	Moray House, Holyrood Road	Other Location	Col %	
How prefer to travel if given the choice	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %
Walking	14.6%	32.3%	66.6%	28.6%	27.1%	42.9%	64.5%	56.5%	37.5%	24.9%	51.6%	
Car, driving alone	17.8%	6.3%	.0%	5.1%	2.0%	11.8%	5.4%	4.0%	8.4%	36.1%	6.2%	
Car, driving with Uni passenger	29.3%	5.7%	8.6%	6.1%	6.6%	16.9%	2.8%	1.4%	14.1%	10.6%	5.3%	
Car, dropping passengers	1.2%	.4%	.0%	.8%	.0%	.0%	.3%	.0%	1.4%	.0%	.5%	
Car, as passenger with Uni colleague	5.7%	2.9%	.0%	.0%	.0%	.0%	1.5%	1.4%	3.1%	.0%	2.0%	
Car, as passenger to other driver	.9%	.1%	.0%	.0%	2.0%	.0%	.7%	.0%	.3%	.0%	.5%	
Motorbike	2.1%	1.3%	2.7%	.8%	.0%	.0%	.9%	.0%	.6%	.0%	.9%	
Rail, daily ticket	.0%	.1%	.0%	.0%	.0%	4.9%	.5%	3.2%	6.0%	.0%	1.0%	
Rail, season ticket	.0%	1.2%	1.4%	1.1%	2.8%	.0%	1.1%	2.9%	7.4%	.0%	1.8%	
Bus, daily ticket	.9%	1.2%	1.4%	.8%	.0%	4.9%	.9%	6.5%	4.0%	3.0%	1.4%	
Bus, season ticket	9.8%	4.3%	5.6%	5.6%	14.3%	.0%	4.7%	7.5%	6.5%	10.9%	5.1%	
University minibus shuttle	13.8%	21.6%	1.3%	24.9%	28.7%	5.1%	2.9%	6.6%	1.3%	7.0%	8.3%	
Cycle	3.9%	22.6%	12.5%	26.4%	16.5%	13.5%	13.6%	10.0%	9.5%	7.4%	15.4%	
Table Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

3.5 Parking location

Table 6 shows the locations that car users are parking at the University. The majority are using on street free parking where available at sites such as the Kings Buildings, Summerhall and the hospital locations. In the Central Area due to the lack of free on street parking most car drivers are instead using the on street metered parking. The University car parks are most frequently used at the New College site and other unspecified locations. At Moray House most car drivers use the commercial car park to park their cars.

Table 6 - Where do you usually park at the University?

	Which location do you study at, Main Base										Table Total
	Bush Estate	Kings Buildings, Observatory	Summerhall	NRIE, Little France	Western General Hospital	Other NHS site	Central Area	New College, Mylne's Court	Moray House, Holyrood Road	Other Location	
Where usually park if bring car to Uni	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %
University car park	40.5%	16.3%	9.9%	5.7%	8.3%	6.6%	17.7%	40.0%	6.3%	62.6%	16.7%
Commercial car park	.0%	.0%	.0%	8.5%	4.9%	24.3%	22.4%	12.1%	67.7%	.0%	22.7%
On-street metered parking	.0%	1.1%	.0%	2.0%	.0%	8.9%	37.7%	17.0%	19.3%	13.1%	20.5%
On-street free parking	59.5%	82.7%	90.1%	83.7%	86.9%	60.2%	22.2%	30.9%	6.6%	24.3%	40.1%
Table Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

3.6 Encouraging the use of different modes

Table 7 demonstrates the main incentives that would reduce car use and whether respondents agreed that they would in fact influence them. The majority of respondents agreed that all the proposed incentives would reduce car use no matter how often they used the car, with the exception of increasing the cost of permits which was disagreed with by all car users.

Table 7 - What would encourage a reduction in car use?

	How often drive to Uni during term-time				Table Total
	Never drive to Uni	Less than 5 days per month	Between 5 and 15 days per month	More than 15 days per month	
	Col %	Col %	Col %	Col %	Col %
Encourage reduction in car use: better public transport	86.6%	84.1%	83.1%	89.7%	86.4%
Disagree	6.9%	7.5%	7.5%	5.2%	6.9%
Not relevant	6.5%	8.5%	9.4%	5.1%	6.7%
Encourage reduction in car use: better transport information	80.7%	69.0%	69.8%	59.3%	77.7%
Disagree	8.4%	12.6%	15.9%	19.3%	9.9%
Not relevant	10.9%	18.5%	14.3%	21.4%	12.4%
Encourage reduction in car use: transport awareness campaign	58.9%	46.1%	40.6%	38.5%	55.6%
Disagree	18.5%	28.3%	28.2%	33.2%	20.8%
Not relevant	22.6%	25.6%	31.2%	28.2%	23.6%
Encourage reduction in car use: daily parking permits	45.1%	42.5%	42.7%	44.4%	44.7%
Disagree	34.5%	38.0%	39.3%	35.9%	35.1%
Not relevant	20.4%	19.5%	18.0%	19.6%	20.2%
Encourage reduction in car use: increase cost of permits	51.7%	31.1%	27.4%	24.3%	47.0%
Disagree	35.4%	53.0%	57.3%	58.9%	39.5%
Not relevant	12.9%	16.0%	15.3%	16.8%	13.5%

3.7 How journeys have changed over the last 3 years.

Table 8 shows how respondents' journeys have changed over the last 3 years, with the exception of other NHS sites the majority of students responded that their journey had stayed the same.

Table 8 - How has your journey changed in the last 3 years?

	Which location do you study at, Main Base										Table Total
	Bush Estate	Kings Buildings, Observatory	Summerhall	NRIE, Little France	Western General Hospital	Other NHS site	Central Area	New College, Myline's Court	Moray House, Holyrood Road	Other Location	
	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %
How has journey to Uni become in last year	12.0%	15.4%	10.5%	7.4%	7.9%	.0%	19.6%	12.4%	9.0%	21.3%	16.5%
Easier											
More difficult	31.9%	15.8%	32.0%	44.1%	30.7%	62.9%	10.9%	5.2%	18.0%	19.9%	14.9%
Stayed the same	56.1%	68.7%	57.5%	48.5%	61.4%	37.1%	69.4%	82.4%	73.0%	58.8%	68.6%
Table Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

A Summary of the comments received with the Student Travel Survey (Unweighted frequencies)

Many responses again included comments, grouped into themes and analysed by study location. A high proportion of the comments were regarding the current University shuttle bus service and improvements that could be made and an increase in the number of service and locations available. There were also comments on the need for cycle facilities, mostly in the Central area and at King's Buildings. Other comments were very much location based with a large number of comments on parking issues at Easter Bush and many comments regarding the need to travel to placements for those students based in the Central area, NRIE and Holyrood.

	KB	Central	Western	Holyrood	NRIE	NC	EB	Summerhall	Other
No alternatives available	12	8	1	3	3	1	3	1	1
Issues with Parking	24	44	1	10	5	1	13	2	1
Travel by car problems (congestion)	1	0	0	1	0	0	0	0	0
Time constraints/convenience	21	20	1	2	1	1	7	0	0
Caring responsibilities	1	5	0	5	0	3	0	0	0
Health reasons (positive)	0	3	0	1	0	0	0	0	0
Health reasons (negative)	0	2	1	2	0	0	0	0	2
Cost constraints	27	59	0	10	5	6	0	1	3
Seasonally/weather dependent	7	9	0	0	0	1	0	0	0
Need financial incentives	0	3	0	1	0	0	0	0	0
Need cycle facilities	73	71	1	7	10	4	2	0	2
Need awareness campaigns/information/feedback	11	27	1	0	1	0	0	0	1
Safety concerns	13	17	0	0	3	0	1	0	1
Transport loads/heavy materials	3	4	0	0	1	2	0	0	1
Positive comments on alternatives	14	41	0	2	1	1	0	0	0
Daily charges/ticketing system	0	2	0	0	0	0	0	0	0
Need m/c facilities	0	1	0	0	0	1	1	0	0
Good University shuttle bus service	35	22	1	1	3	0	1	0	0
Need more University shuttle bus services/improve current service	213	97	3	3	7	5	22	3	2
Study unsociable hours	4	2	1	3	1	0	1	1	0
Improved public transport routes	43	33	1	11	4	1	7	1	6
Placements/other sites	1	35	2	10	17	0	0	0	5
Issues with accommodation	5	15	0	1	0	2	1	0	0
Car pooling	2	5	0	4	0	0	2	0	1
Other	59	141	2	17	3	2	1	1	4
	569	666	16	94	65	31	62	10	30

Figure 5 – Student Modal Split Results

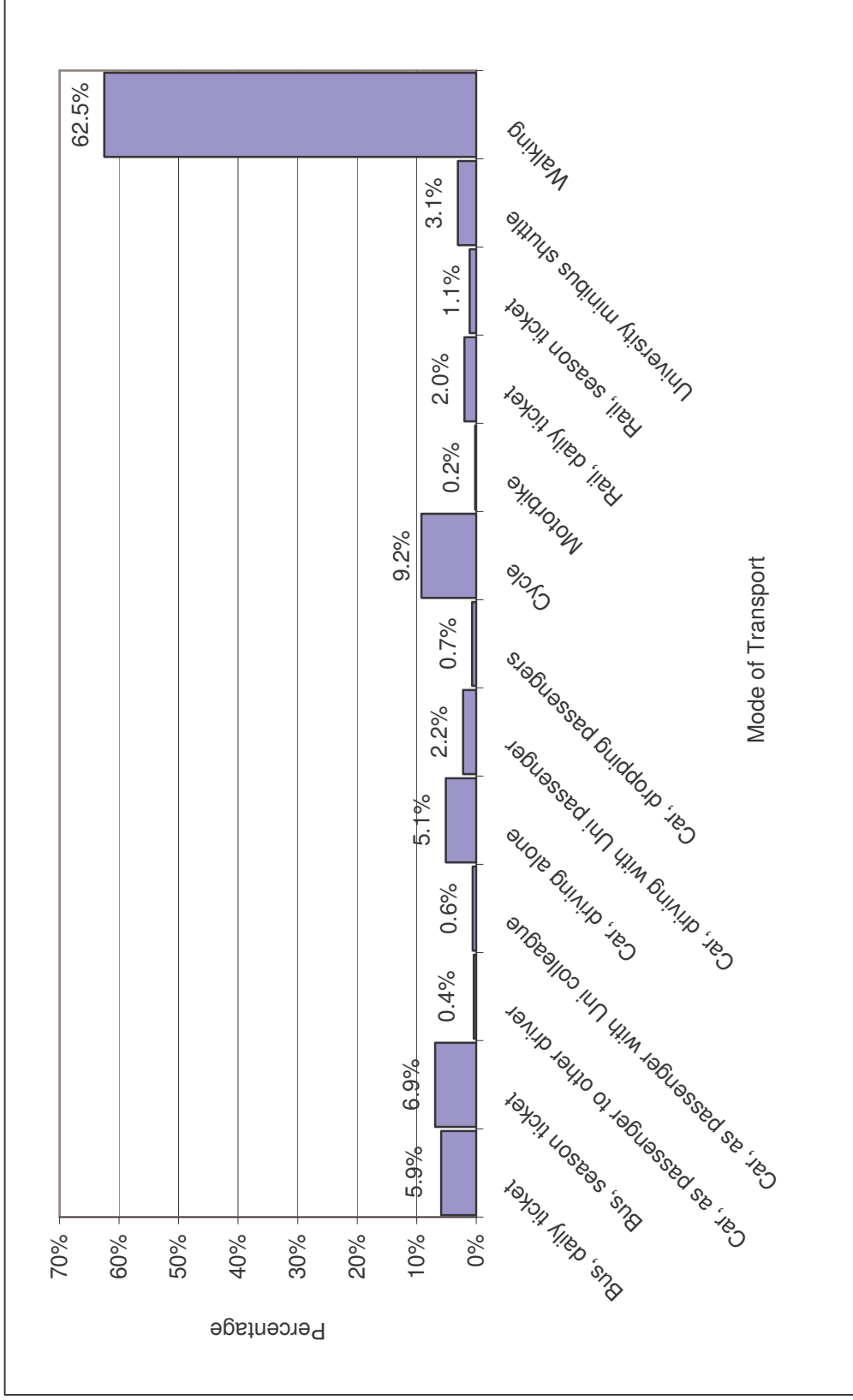
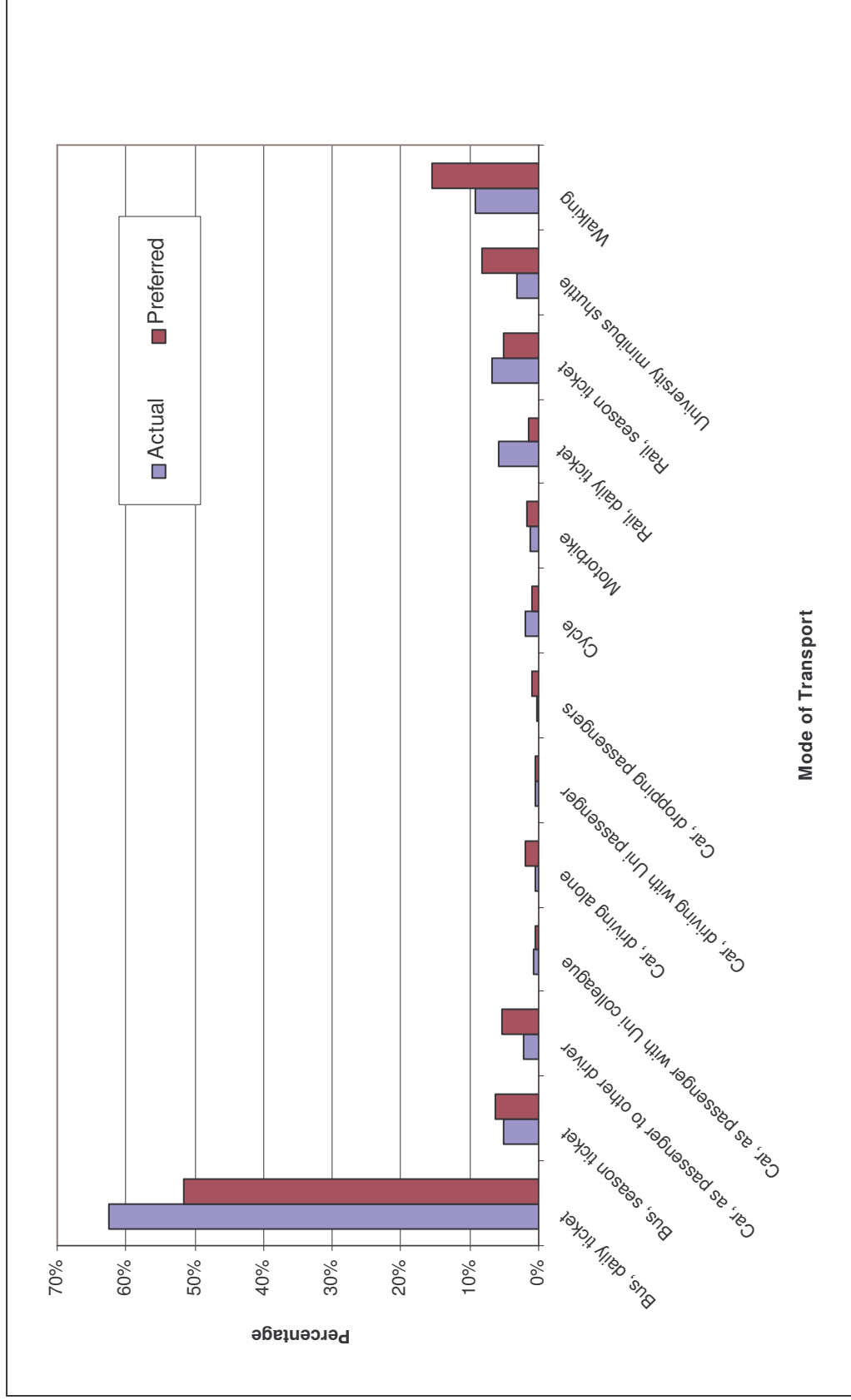


Figure 6 - Actual and Preferred Student Travel Mode



4. Conclusions and Recommendations

In summary the results of the survey show there are areas that should be identified for greater resources within the University's Travel Policy and Travel Plans for the King's Buildings and Central area. Walking has decreased as a mode of transport used to travel to work by staff between 2000 and 2004, yet most staff and students stated this mode as their preferred method of travelling. More resources should be directed at encouraging more walking. Public transport is another area that needs to be looked at more closely in order to reduce car use. This was stated as one of the areas that could be improved by regular car users and is an area where City of Edinburgh targets have not been met. The University should identify what improvements can be made internally and continue to develop dialogues with the Public Transport Operators and the City Council. Homeworking has also been identified as a measure that might reduce car use, the University could look at its current policies on homeworking and identify ways it can develop these further. Showers, lockers and improved cycle routes also featured in the responses. There is currently and will continue to be an extensive programme of improving these facilities including showers and changing areas around the University. Finally the idea of RideSharing did not feature favourably in the responses from staff, but students particularly based at the more remote sites used this method more often. The survey was carried out prior to the launch of the web based RideShare system so this may have already improved attitudes to this method of travelling, but more work could still be done, including adapting the site for the student population. The shuttle bus service was principally an issue for students whom would like to see an improvement to the service and more services available, for example to Pollock Halls. The main service, which runs between George Square and King's Buildings, has also been significantly improved since this survey was issued by providing double-decker buses for all journeys.