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Attitudes and Behavioural Responses to Measures to Deal with Workplace Parking: A case study of Dublin, Ireland

Séona Farrell

Centre for Transportation Research
Dept of Civil, Structural & Environmental Engineering
Trinity College Dublin
Dublin 2
Ireland
Tel: +353 1 6082084

Fax: + 353 1 6773072

Brian Caulfield

Centre for Transportation Research
Dept of Civil, Structural & Environmental Engineering
Trinity College Dublin
Dublin 2
Ireland
Tel: +353 1 6082084

Fax: + 353 1 6773072

Margaret O'Mahony (CORRESPONDING AUTHOR)

Centre for Transportation Research
Dept of Civil, Structural & Environmental Engineering
Trinity College Dublin
Dublin 2
Ireland

Tel: +353 1 6082084 Fax: +353 1 6773072

Email: margaret.omahony@tcd.ie

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ABSTRACT

It is well documented that there is a relationship between the high levels of car usage and the failure to charge car users the true costs for driving. One of these costs is the cost of parking, and what is of particular concern is the failure of employers to charge employees this cost. The aim of the paper is to investigate employees' attitudes and potential travel behaviour responses to measures selected to deal with parking in the workplace. A survey of university employees examined their potential responses to removing free car parking spaces, how they would respond to parking cash-out policies and to work place parking charges. The results tend to support related research such as that cash-out schemes are more popular if they are flexible. An analysis of the data examines the impact of a number of variables on the results; differences in responses by gender, age group and income are observed. Twenty eight percent of respondents indicated they would continue to drive to work and a similar number said they would use public transport on some days if a €5 daily charge was applied. In response to a parking cash out scheme, 66% would continue to drive to work. The preferred cash out method was to give up their car parking space on a daily basis.

INTRODUCTION

Over 40% of the Irish population resides in the Greater Dublin Area (GDA). The region is experiencing rapid economic and population growth, which has resulted in considerable traffic congestion problem for the region. Inflated house prices in Dublin have further compounded the problem as people move further from the GDA but still commute to work. Over 80% of State sponsored bodies are located in Dublin, which also is the location for about 70% of the headquarters of the major public and private companies and co-operatives. Furthermore, all of the financial institutions have their headquarters in the city (1). A survey of parking availability in Dublin City Centre revealed that over 57% of the parking spaces available were private office parking (this excludes parking within the Financial Services centre, which means the figure is likely to be higher than this) (2). Moreover, they found that 60% of this office car parking was Government parking.

Ireland's car population has grown dramatically. At the end of 2001 there were over 1.38 million private cars in Ireland, compared with less than 0.8 million in 1990 (3). In fact, private car ownership in Ireland has risen from 20 cars per 100 head of population in 1979, to 37 cars per 100 head of population in 2002 (3, 4, 5). Whilst there has only been a 16% increase in the Irish population between 1979 and 2002, car ownership has increased by 112% over the same period. Car ownership rates in the GDA are steadily increasing towards the European average and by 2016 are expected to be 48 cars per 100. An international comparison of car usage reveals that Ireland has the highest car usage in the EU with the average car in Ireland traveling 24,400 km per annum. This is 70% higher than France and Germany and 50% higher than Britain. Furthermore, and more surprising is that this figure is 30% higher than the USA (6).

Over half (54.1%) of workers in Ireland drive to work, with over three-quarters of them not carrying any passengers (7). A further 8.6% get a lift to work in a car or van. Furthermore, over 98% of workers in Ireland who travel to work by car/van never use public transport to get to work (7). In terms of parking, over 68% of car/van drivers from Dublin usually park their car in work (not designated) with a further 10% having a designated parking space at work. More importantly, only 3.6% of drivers in Dublin pay for parking when at work (7). The provision of free or cheap parking at work by employers is not treated as a benefit-in-kind taxation item in Ireland. However, Irish employees are offered tax and national insurance benefits for commuter travel, which can amount to 48% of their travel costs on public transport. Under this TaxSaver Commuter Ticket Scheme, tax and national insurance liability is deducted from the cost of the travel ticket.

EMPLOYER PAID PARKING

Although some employers may subsidise other forms of travel to work (e.g. works bus, interest free loans for public transport tickets), it is unlikely that they do this to the same extent as they do for parking provisions. This subsidy to motorists stimulates solo driving (8, 9). Shoup (8) has done a considerable amount of work in this area. He presented the results of studies of eight firms that have complied with California's parking cash out requirement. He found that for the 1694 employees of the eight firms that the number of solo drivers to work fell by 17% after cashing out. The number of car

poolers increased by 64%, the number of transit riders by 50% and the number walk or bike to work increased by 39%. Low-priced or free employer-provided parking at the workplace may discourage use of public transport (10).

There are numerous ways to address workplace parking. Parking charges can be applied (or increased), the number of parking spaces can be reduced or some reserved for car sharers, a benefit-in-kind tax can be applied to the provision of spaces, a workplace parking levy can be applied by the local authorities, or employees can even be offered a cash-value in lieu of a parking space.

There have been a number of recent studies which addressed the business response to the implementation of workplace parking levies (11, 12, 13). Most employers stated that they would pay the levy rather than reduce the number of parking spaces or pass on the cost to their employees. Many employers are concerned that parking measures devalue the fringe benefits of their employees, and thus will compensate for any effects of the measures on their employees (14). Hence, the effectiveness of a workplace parking levy will be severely affected by whether an employer passes on the levy to employees or reduces the number of parking spaces available (15). Employers may fear potential high staff turnover or industrial action. An employer which has to survive in the commercial world might consider it a false economy to antagonise staff (16). Furthermore, an employer may not be willing to introduce parking measures that will discourage employees from travelling to work or which force them to use less convenient modes of travel to work which could have repercussions for punctuality and attendance (16).

Other studies focused on the citizen/employee attitudes and potential responses to a workplace parking levy (WPL) (17, 18). In the PATS project (17), just over 30% of respondents agreed in principle with the idea of a WPL. Based on an annual fee of stg£3000 across the extended Central London Area, 47% of people surveyed thought that a WPL would be a 'good thing', compared to 40% who thought it would be a 'bad thing' for London (18). However, when the focus was narrowed only to employees, only 13% thought it would be a good thing for London. Furthermore, approximately half the employees surveyed believed that a WPL would be of no benefit for London.

A number of studies have investigated the impact of free/subsidised parking on the mode choice decisions of employees. Taking away free parking at the place of employment can reduce the number of cars driven by solo-drivers by 40%-44% (19, 20). Furthermore, Willson (19) found that 25%-34% fewer automobiles were driven to work when workers had to pay to park, as compared to when they parked free.

Limiting the number of spaces or charging for the use of car parking spaces is widely recognised as an effective tool in any travel demand management strategy. However, such policies are often seen as unpopular, particularly in the case of workplace parking. A better approach maybe to 'bribe' drivers to use other modes of travel to work (21). One way to do this is to introduce parking 'cash-out'. Under a parking 'cash-out' scheme, an employer who offers an employee a parking subsidy also must offer that employee the option to choose between the cash equivalent of that parking subsidy (20). Presenting an employee with a cash alternative to free parking indicates that there is an opportunity cost associated with parking (20).

Shoup (22) compared the cost of providing free parking to the price commuters paid to drive to work in an attempt to investigate the extent to which free parking offered

by employers subsidised car use. He found that the subsidy for free parking at work was triple the vehicle operating costs of driving to work. Furthermore, he found that a driver's variable costs of car commuting without free parking was quadruple this cost with free parking at work. A similar calculation for Dublin (calculated by the authors of this paper) found that the subsidy for free parking at work in Dublin is almost 1.5 times the vehicle operating costs for driving to work. Furthermore, the driver's variable cost of car commuting without free parking is 2.4 times this cost with free parking.

Free parking is a fringe benefit that only applies to employees who park at work, and thus there is a strong incentive to drive to work. Paying to park at work would raise the variable costs of driving and force some commuters to reconsider their travel behaviour patterns.

A WEB-BASED SURVEY

The main aim of this study was to investigate employees' attitudes and potential travel behaviour responses to measures to deal with parking in the workplace. A web-based questionnaire was used to elicit responses from Staff at a university in Dublin, TCD. The web-link to the questionnaire was emailed to all staff (4621 employees) having a college email address, although the email made it clear that the survey was intended for staff that either currently parked at work, had done so in the past, or planned to do so in the near future. It is difficult to estimate how many employees were eligible to complete the questionnaire, as statistics on modes of travel to work are not available. However, there are a total of 457 parking spaces at the college and 1610 parking permits have been issued. The survey was conducted over a one-week period from 27th May – June 2nd 2004. A summary of the questionnaire is presented in Appendix 1.

Once, where data was collected by other survey methods, it is now being collected using web surveys (23). Some of the benefits of web-based surveys include easy tailoring of messages, immediate access to the data, more accurate data, and reduced survey costs (24). Furthermore, web-based surveys can be more user friendly, offer more simple directions, greater range and more interesting layouts for questions (25). However, a major factor for consideration is the potential sampling bias associated with web surveys (26), that is, not everyone has access to the internet. This survey was emailed to people in their place of work, and virtually all businesses in Ireland use computers and have access to e-mail and the internet (27). However, it is acknowledged that some members of staff such as cleaning and maintenance staff may not have had the opportunity to respond to the questionnaire if they did not get access to the web-survey during the week it was hosted.

SURVEY RESULTS

Summary Results

A total of 234 employees submitted the questionnaire, however, not all of the surveys were fully complete. Over 75% of respondents revealed that they regularly drove to work (53% alone and 22% taking passengers). A further 9% travelled as car/van passengers. Of the respondents, 27% stated that they regularly took the bus and they regularly came by train. Many respondents indicated that they regularly used more than

one mode of travel to work. The average distance travelled to work was 11.6 miles and over 43% of respondents departed home for work between 07:30 and 08:29. Furthermore, 51% usually departed work for home between 17:00 and 18:29.

Mode Choice and Availability of Parking

The most common reason for choosing to drive to work was that it is more convenient than other options, followed by more reliable and then by more comfortable. Notably, convenient and/or cheap parking at work was the fourth most common reason for travelling to work by car. In the case of public transport, the most common reason suggested was that it was quicker than other options. This was followed by convenience and this was followed again by 'that the distance was too far to walk or cycle'. Again, the fourth most common reason was that it was too difficult to find a parking space. Although parking issues were not the main reasons why particular modes of travel were chosen, they were amongst the most common reasons. Interestingly, for some employees parking was convenient and thus they availed of it while for others the perception was a lack of parking availability and thus other modes of travel to work were chosen.

Behavioural Response to a €5 a Day Charge to Park at Work

Respondents were asked what they would do if free parking was not available and it cost €5 per day to park at work. They could choose up to three options from a list of twelve. Continuing to drive and paying the charge and travelling by public transport some days were the most common reactions (both received almost a 28% response rate). This was followed closely by travelling by public transport everyday (26.4% response rate). Over 13% stated that they would look for another job if parking at work cost €5 per day. Less than 19% of respondents stated they would be prepared to pay for parking while at work. Of those prepared to pay, 42% would prefer a daily parking fee while 38% would prefer to pay for parking on an annual basis.

In terms of gender, no particular differences between the genders emerged for this question. The results are presented by age group in Figure 1. The largest percentage of any group who state that they will continue to drive to work and pay the extra charge is 31% for the 56-65 age group. The 17-25 age group demonstrates the largest percentages in terms of using public transport everyday as a response (28%) compared with the other groups. A much larger difference between this age group and the others is also apparent when looking at the 'would take a lift with someone' option where 22% of this group opt for this option compared with between 2-5% of the other age groups.

These data were also examined in the context of household car ownership levels but no trends emerged. Looking at the responses in terms of income, the results are presented in Figure 2. Some of the more noticeable results from this figure suggest that 31% of those in income group $\[\in \]$ 50,000-59,999 suggest that they would work from home more frequently. A smaller but sizeable proportion of the same group indicated 'other'. Some of the reasons they suggested are similar to those mentioned later when discussing the responses if all car parking spaces were removed. A small percentage, of the order of 2-3%, of the $\[\in \]$ 60,000 income group select the first of these three responses compared with 18-29% for the other groups. In the case of travelling by public transport everyday,

between 10% and 24% opted to do this; 10% of the >€60,000 and 24% of the €20,000-29,999 group.

These data were also examined in the context of occupation. The two responses favoured by the largest number of professionals were sharing a lift with someone (39%) or using public transport some days (23%). There is no noticeable difference between middle management, technical and clerical staff. A relatively large number of manual workers (29%) said they would pay the parking charge; this compared with 7-18% choosing this option in the other occupation groups.

Behavioural Response to a Parking Cash-Out Scheme

Respondents were given details of how a parking cash-out scheme would operate. They were informed that the value of the cash-out would depend on the particulars of the scheme (i.e., whether parking spaces were given up on an annual basis, daily basis etc.). Surprisingly, 66% of respondents would continue to drive to work, while 16% would use public transport and 11% would walk or cycle to work. These latter two percentages are significant in that if they both were realised on a city-wide basis the reduction in work vehicle trips could be sizeable. Only 1% said they would car-pool even though a car parking space would be available. It is important to note that this question did not state the value of the parking cash-out, which is likely to influence response to such a scheme. When designing the survey, the authors were conscious of the fact that the 'cashing out' concept would not have been familiar to people in Ireland in the same way that it is in the US. Therefore they were cautious in terms of how the information about the scheme was presented to the respondents. In hindsight it may have been more useful to indicate a cost for cash-out but the concerns mentioned above were given priority and less rather than more information was presented at the time.

The answers were analysed in more detail such as the impact of gender; results for 146 males and 172 females were examined. 38% of males said they would give up their parking space and cycle or walk instead of travelling by car compared with only 16% of females. Of females, 46% said they would keep their space compared with 23% of males.

When examining the responses by age, the numbers wishing to keep their car parking space are sizeable. In percentage terms, 49% of those in the 46-55 age group wish to keep their space, followed by 36.5% of the 36-45 age group followed by the 56-65 group at 34% with the 26-35 age group at 32%. The 17-25 age group followed at 21.5% but this may be due to the possibility of a lower car ownership rate in this group (car ownership data per household, not person, was sought in the study so no comment can be made on the personal car ownership rate of the respondents).

These data were also analysed in terms of household car ownership and the results are presented in Figure 3. Those without a car are far more likely to give up their space with 80% of this group opting to do so. The indications from the figure in relation to the 3+ car households are misleading because there were only 7 households of that type. In relation to 1 and 2 car households, about 33% of 1 car households would keep their free parking space and another 28% would give up space and either cycle or walk. In comparison, close to 40% of 2 car households would wish to keep their free space with only 21% of this group opting to cycle or walk. The data were also examined in the

context of income levels and the results are presented in Figure 4. A sizeable proportion of each age group, ranging from 57%-75%, chose to keep their free parking space. A larger group, 25%, of income group €20,000-29,999 chose to give up their space and receive the value of the space so that they could offset this against public transport fares compared with the others ranging from 8%-17%. No noticeable differences were found for different occupation groups in relation to this question.

In a subsequent question, respondents were asked about their preferences for a parking cash-out scheme. The options presented were 1) permanently giving up a space 2) give up space on an annual basis, 3) give up space on a monthly basis, or 4) give up space on a daily basis.

These data were examined by variable; the first being gender, the results of which are presented in Figure 5. Rank 1 is the most favoured option followed in order by 2, 3 and 4. Looking at Ranks 1 and 2 in particular, 4.8% of males compared with 1.6% females give a preference of 1 for permanent surrender of a car space. A larger number of males then females give a first preference to giving the space up on an annual basis; 5.3% compared with 1.6% but for both genders the largest number of 1st preferences are given to the option of giving the space up on a daily basis; 15.4% of males and 18.4% of females. A similar trend is observed for the rank 2 columns although sizeable numbers give this rank to giving the space up on a monthly basis; 12% of males and 19% of females. The results were also analysed to examine whether distance between home and work had an impact on responses but no trends emerged.

The same data were analysed per age group. The largest percentage of 1st preferences in all groups is for the option of giving up a space on a daily basis and averages at 19-20% for all groups except in the case of the 17-25 and 56-65 which were at 12% each. The least favourite option is giving up a parking space permanently; 20% in each group between the ages of 25 and 55 giving it a preference of 4 with 14-16% of the other groups giving this rating.

These data were also examined to see if household car ownership levels influenced choices but the rankings had a similar distribution for each car ownership group as they had when examined by income group. The data were also analysed in terms of occupation group and the results are presented in Table 1. Almost 20% of all occupation groups gave a first preference to surrendering their space on a daily basis except for the professional and middle management groups where the proportion was between 10% and 12%. A large proportion of each group gave a 2nd preference to giving up their space on a monthly basis (15-18%) except the professional group had a lower percentage at 11%. As expected, sizeable proportions of each group gave preference 4 to giving up their space permanently; the maximum was 25% for the middle management and clerical groups.

Behavioural Response to all Car Parking Spaces Being Removed from the Workplace

Respondents were questioned about their potential responses if all parking spaces were removed from the workplace. Again, respondents could choose up to three options. Almost 34% stated that they would travel everyday by public transport, while almost 31% stated that they would travel by public transport some days. Almost 19% stated that they would look for another job.

Of females, 20% compared with 16.5% of males would use public transport everyday, almost equal numbers indicated they would use public transport some days (17.4% of males and 18.8% of females) and 9.2% of males would walk or cycle compared with 4.3% of females. The 'other' category was left open to the respondent to suggest what they might do. The suggestions included 'expect employer to pay for parking elsewhere', 'retire', 'no realistic alternative', 'would take industrial action', 'negotiate a work from home plan with boss', 'retire early' and 'relocate'.

Figure 6 shows that using public transport everyday and on some days are the two most popular responses with a large proportion of the 17-25 age group at 40% opting for the former but much less at 7% of that group opting for the latter. Not much difference is evident when comparing the respondents by age in terms of this question. These data were also examined by household car ownership level but no differences of note were found. When examined in the context of income, a larger proportion (33%) of income group €10,000-19,999 suggested they would look for another job compared with between 4-19% of the other groups. 34% of income group €20,000-29,999 indicated they would travel to work by public transport every day compared with between 7-22% of the other groups. Besides these results the responses were similar for each income group. In the context of occupation type, only one difference between groups was evident. Of clerical staff, 28% said they would find another job compared with between 5-6% for other groups except the technical group where 14% indicated they would make this choice.

Importance of Parking Related Factors

Respondents were asked to indicate the level of importance they attached to a series of parking related factors. With 'very important' and 'important' rates combined, the security of vehicles was deemed as the most important factor (95% agreement) followed closely by personal safety (over 90% agreement). In terms of 'not at all important' having a designated parking space is least important (19.1%). Walking distance from the car park to place of work was deemed neither important nor unimportant by 28.4% and a designated parking space was deemed neither important nor unimportant by 32.8% of respondents.

Level of Agreement for Employer Transport Related Initiatives

Respondents were asked to indicate their level of agreement for a series of employer transport initiatives. There is a high level of disagreement (strongly disagree/disagree) for charging to park at work (66%) and for taxing the provision of a parking space as a benefit-in-kind (70%). Surprisingly only 37% of respondents were in agreement (strongly agreed/agreed) with the that employers should offer employees the cash-value of a parking space. Even less agreed (30%) that employers should provide all employees with a free public-transport ticket for the journey to work.

There was high net disagreement (i.e. agree minus disagree) for benefit-in-kind taxation (-56%) and charging employees to park at work (-52%). There was also net disagreement for the provision of free public transport tickets to employees (-9%), and providing parking spaces with different time limits (-26%).

Conclusions

- 1. Both continuing to drive and paying the charge and travelling by public transport some days were the most common reactions (both received almost a 28% response rate) to charging €5 per day for parking. This was followed closely by travelling by public transport everyday (26.4% response rate). Less than 19% of respondents stated that they would be prepared to pay for parking while at work. Of the 56-65 age group, 31% would continue to drive to work and pay the extra charge compared with 12-13% of other groups. The 17-25 age group demonstrates the largest percentages in terms of using public transport everyday as a response (28%) and taking a lift with someone (22%). Of those in income group €50,000-59,999, 31% suggest that they would work from home more frequently in response to parking charges.
- 2. In response to a parking cash-out scheme, 66% of respondents would continue to drive to work Of females, 46% said they would keep their space compared with 23% of males. Those without a car are far more likely to give up their space with 80% of this group opting to do so. In relation to 1 and 2 car households, about 33% of 1 car households would keep their free parking space and another 28% would give up space and either cycle or walk. In comparison, close to 40% of 2 car households would wish to keep their free space with only 21% of this group opting to cycle or walk.
- 3. 15% of males and 18% of females preferred the cash out method whereby they would give up their space on a daily basis. 12% of males and 19% of females gave their second preference to giving their space up on a monthly basis. The least favourite option is giving up a parking space permanently with about 20% in each group between the ages of 25 and 55 giving it a preference of 4 with 14-16% of the other groups giving this rating. Almost 20% of all occupation groups gave a first preference to surrendering their space on a daily basis except for the professional and middle management groups where the proportion was between 10% and 12%.
- 4. Sixteen percent said they would use public transport and eleven percent said they would walk or cycle to work in response to a parking cash-out scheme. These latter two percentages are significant in that if they both were realised on a citywide basis the reduction in work vehicle trips could be sizeable. A much smaller percentage of 1% said they would car-pool even though a car parking space would be available. Again, while this is small number, this response on in addition to the other responses to move to public transport and walking or cycling could result in measurable impacts in terms of a reduction in congestion.
- 5. It is difficult to extrapolate the results to the GDA and to estimate the impacts. However, if it is assumed the percentage reduction in car trip demand resulting from the work place charging and cash-out proposals could be realised at GDA level then the reductions are the order of the reductions realised in London

recently due to congestion charging. They have reported significant reductions in congestion as a result of these impacts.

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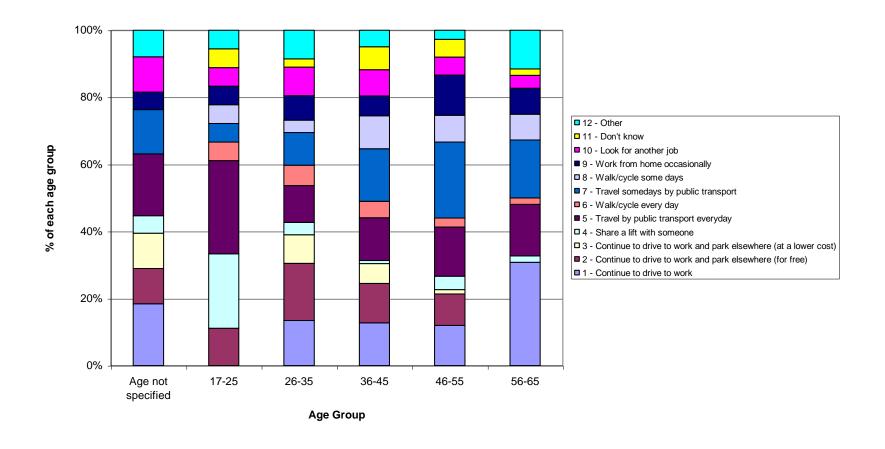


Figure 2. Responses to €5 per day charge for work parking by income group

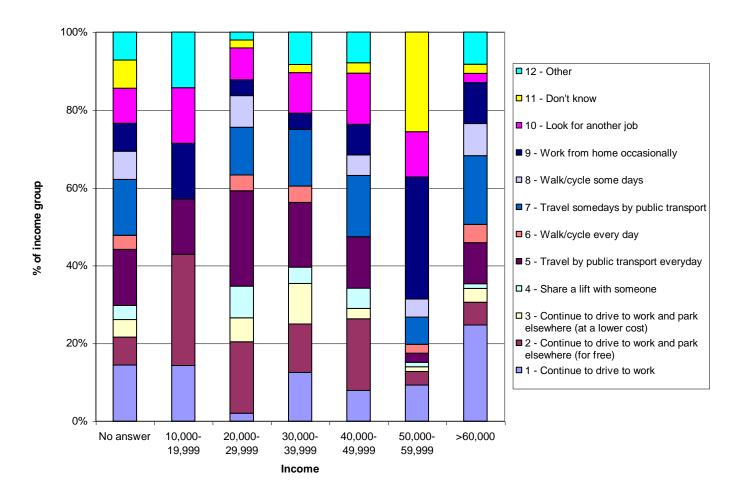


Figure 3. Cash-out option responses by household car ownership

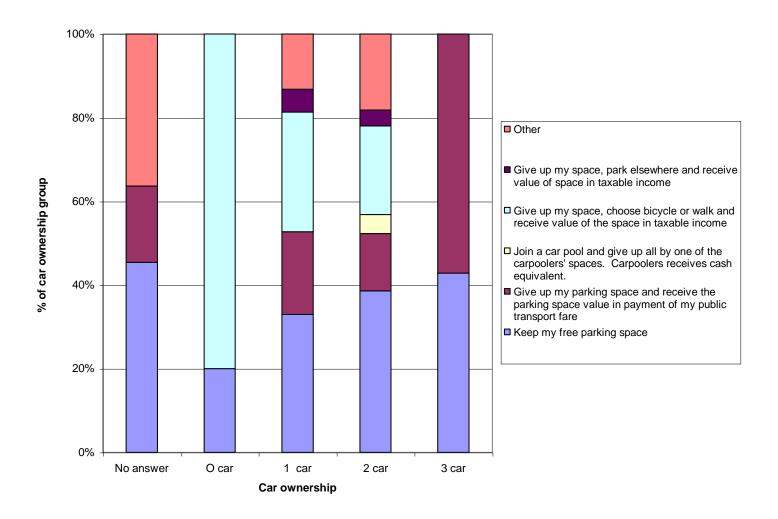


Figure 4. Responses to cash out by income group

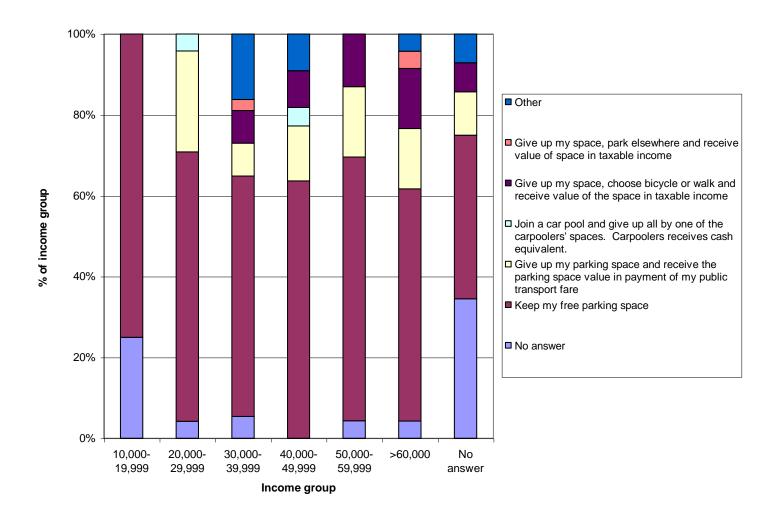


Figure 5. Preferences for cash-out method by gender

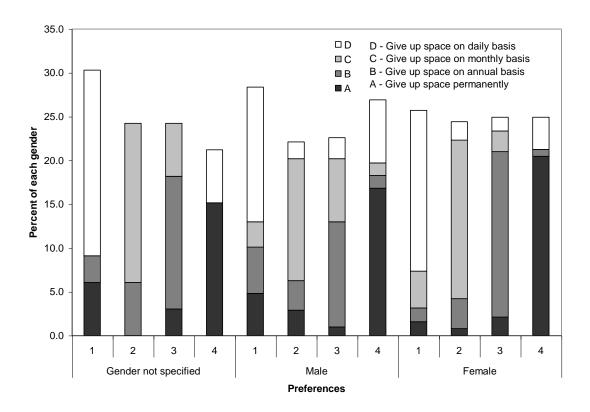


Figure 6. Responses of different age groups to proposal to remove all free car parking spaces

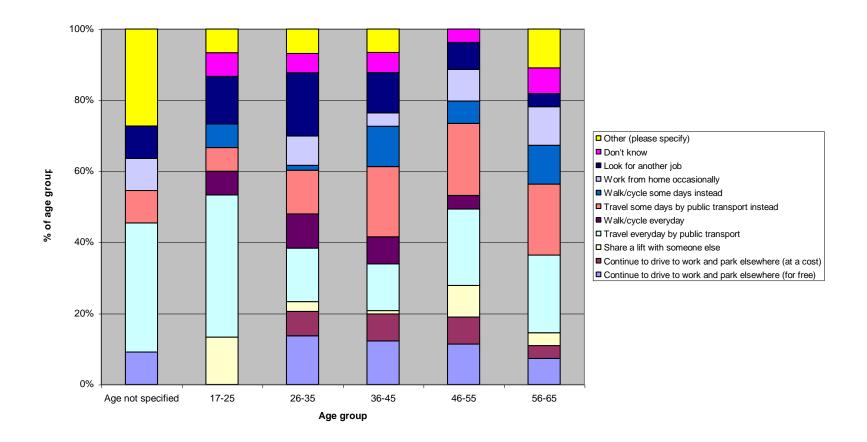


Table 1. Cash out method options by occupation

	Preference	A - Give up space permanently	B - Give up space on annual basis	C - Give up space on monthly basis	D - Give up space on daily basis
No answer	1	5.4	2.7	0.0	21.6
	2	0.0	5.4	18.9	0.0
	3	2.7	16.2	5.4	0.0
	4	16.2	0.0	0.0	5.4
Manual / trades person	1	3.1	4.4	2.6	17.1
	2	1.8	3.9	15.8	2.2
	3	1.8	14.5	4.8	2.2
	4	18.4	1.3	0.9	5.3
Clerical / adminstrative	1	1.2	1.2	4.7	18.6
	2	0.0	2.3	19.8	2.3
	3	0.0	20.9	1.2	2.3
	4	24.4	0.0	0.0	1.2
Technical	1	3.1	1.5	4.1	17.9
	2	1.5	5.1	16.8	1.0
	3	2.6	16.3	4.6	1.0
	4	16.8	1.5	0.0	6.1
Professional	1	7.1	3.6	7.1	10.7
	2	3.6	7.1	10.7	3.6
	3	3.6	14.3	0.0	3.6
	4	14.3	0.0	3.6	7.1
Middle management	1	0.0	4.2	4.2	12.5
	2	0.0	0.0	16.7	4.2
	3	0.0	16.7	0.0	8.3
	4	25.0	4.2	4.2	0.0
Other	1	2.6	5.3	2.6	18.4
	2	5.3	2.6	15.8	0.0
	3	0.0	15.8	5.3	2.6
	4	18.4	0.0	0.0	5.3

Appendix 1

Questions asked in the questionnaire (for each, a number of options are presented for selection)

How do you usually travel to work?

If you answered the previous question for more than one mode, please indicate if you use these modes of travel on the same day or on separate days.

If you use two or more modes of travel to get to work, please indicate the mode you use for the longest part of your journey.

What are your reasons for choosing the modes of travel you use to get to work?

If you answered 'other' for the previous question, please specify the other reason(s) below.

How far do you travel to work and how long does your journey take?

What time do you usually depart for work in the mornings and leave work for home in the evenings?

Where is your place of work located?

Some people drive as part of their work to deliver things, visit customers etc. In the past week, how many days did you drive your car for work purposes? This excludes driving to or from work.

If working from home was an option for you, would it be practical?

Is the 'Bus/Rail Annual TaxSaver Commuter Ticket' offered by your employer?

In relation to the ticket mentioned in the previous question, please specify which of the following categories you fall into.

Do you currently have a staff parking permit?

If you drive to work, where do you usually park?

How much time do you spend looking for a car parking space each morning?

If you pay to park while at work, how much do you usually pay per day?

Think back over your last year travelling to work. How often have the following occurred? (I have driven to work and been unable to find a parking space, I have changed my mode of travel to work because of difficulties finding a parking space, I have changed my departure time from home to work because of difficulties finding a space).

Which (if any) of these would you do if free parking was not available, and it cost you €5 per day to park at work?

The following question only applied if you do not pay for parking at work.

Are you prepared to pay for car parking while at work?

If you are prepared to pay for parking at work, which of the following would you prefer? If you are prepared to pay for parking while at work, how much are you prepared to pay? If parking charges were implemented, would you expect any changes/improvements to be made to the current parking situation? If yes, please give details below.

Which of the following would most encourage you to car share?

Parking cash-out is a programme whereby employees may choose to 'cash out' the value of employer-provided parking. This would mean that an employee could: 1) Keep their free parking space but would not receive the cash value of the parking space 2) Forego parking and receive the taxable cash value of the parking space 3) Forego parking and receive a tax-free public transport ticket. The level of the cash-out would depend on whether you give up your space permanently, annually, monthly or daily (larger values for longer periods)

Based on the information above, which of the following commuting options would you choose if you employer offered you parking 'cash-out'.

If a parking cash-out scheme were implemented, there are a number of possible ways of giving up your parking space, as follows: A) give up space permanently, given a substantial one-off cash payment BUT can never park again at the workplace B) Give up space on an annual basis given a cash value for the year BUT cannot change your mind and choose to park again until the following year C) give up space on a monthly basis, given a cash value for the month, BUT cannot change your mind and choose to park again until the following month D) give up space on a daily basis, given a cash value for the day AND can choose each day whether you would like to park or take cash value. Based on the above information, please rank from 1-4 giving the value of 1 to your most preferred option.

What do you think of the current provision of parking spaces in the workplace? What would you do if all car parking spaces were removed from the workplace? We would like to know how important you rate a number of key aspects of parking at the workplace.

How serious an issue (for you) is each of the following transport related problems?

What is your gender?

What is your age?

What is you income per annum before tax and other deductions? (ranges given to select)

What is your occupational status?

What type of employment contract do you have?

Please specify your usual working hours.

How many cars are there in your household?

Are there any additional issues regarding parking that you think need to be addressed? Are there any issue about your journey to work that you would like to discuss here? If yes, please provide the details below.

If you would like to expand on any of the questions you answered in this survey, please do so here.