## Department for Transport

# Climate Change and Transport Choices 

## Segmentation Study - Interim Report by TNS-BMRB:

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## Content

Key Findings ..... 1
Executive Summary ..... 2

1. Introduction ..... 7
2. Climate change: knowledge, attitudes and perceived behaviour ..... 12
2.1 Knowledge and attitudes to climate change ..... 12
2.2 Beliefs about climate change and its impact ..... 16
2.3 Current perceived environmental behaviour ..... 19
3. Private vehicles and current transport behaviour relating to specific journeys ..... 28
3.1 Introduction ..... 28
3.2 Current transport behaviour relating to specific journeys ..... 31
3.3 Private vehicles ..... 35
3.4 Vehicle use ..... 54
3.5 Eco and Smarter driving ..... 59
3.6 Car sharing ..... 61
3.7 Barriers to using alternative methods ..... 63
3.8 Motivators for using alternative modes ..... 74
4. Public transport ..... 81
4.1 Buses ..... 81
4.2 Trains ..... 96
4.3 Trams, underground, metro and light rail ..... 107
4.4 Planes ..... 109
5. Cycling and walking ..... 112
5.1 Cycling ..... 112
5.2 Walking ..... 129
6. Trip avoidance and reduction ..... 131
6.1 Trip chaining and combining ..... 131
6.2 Home-working ..... 133
6.3 Internet shopping and home delivery ..... 136
7. Conjoint analysis ..... 139
8. Respondent characteristics ..... 152
8.1 Key demographic factors. ..... 152
References ..... 157
APPENDICES ..... 158
APPENDIX A: Final fieldwork figures ..... 159
APPENDIX B: Regional fieldwork response rates ..... 160
APPENDIX C: Introductory Letter ..... 161
APPENDIX D: Questionnaire ..... 162

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## Key Findings

- The survey has provided a nationally-representative picture of public attitudes to climate change; transport; and the motivators and barriers to more sustainable transport behaviours. The findings have provided a rich, robust source of evidence for analysis to inform sustainable transport initiatives.
- Overall, the survey found a wide variety of challenges to be addressed in order to enable and encourage more sustainable transport behaviour. These challenges varied for different groups of people and different types of locations:
o The findings suggested that people tend to travel by car out of habit, particularly if aged 40-69 or living in rural areas. Those living in rural areas tended to show particularly high levels of car travel, more positive attitudes about cars and less positive attitudes about alternative modes.
o Frequent (at least every 15 minutes) bus services were associated with regular bus travel. A lack of suitable routes and slow, infrequent services were the key barriers to travelling by bus.
o Lack of suitable routes and a lack of infrastructure emerged as the key barriers to travelling by train for regular journeys such as travelling to work.
o Safety concerns / 'too much traffic' were a key barrier to cycling. For many regular cyclists, three miles tended to be the maximum distance cycled. Only $14 \%$ of those who could cycle did so regularly. Older age groups and women cycled less and tended to hold greater concerns about cycling.
o Lack of time, inconvenience, the weather and having to carry things emerged as key barriers to walking journeys of less than two miles.
- Higher income groups showed less sustainable transport behaviour, tending to own more cars; own cars with larger engines; travel by car more often; travel more miles a year by car; and fly by plane more often; than lower income groups.
- Better educated respondents tended to hold more 'pro-environmental' attitudes.
- The links between education and income led to an apparent disconnection between attitudes and behaviour, with higher income, highly educated respondents tending to be more pro-environmental in their attitudes but less sustainable in terms of their actual transport behaviour than lower income, less well educated respondents.
- Individuals tended to overstate their willingness to change their transport behaviour and would rather save energy at home. CO2 emissions were found to be of very low importance in determining transport choices for specific journeys.


## Executive Summary

This interim report and accompanying dataset outline the findings from the survey conducted to inform the development of the Department for Transport segmentation model of public attitudes to climate change and transport choices. The findings are based on 3,923 face-to-face, in-home interviews conducted between November 2009 and June 2010 with adults (aged 16 plus) living in England. The findings will be a useful evidence source for local authorities and the voluntary, communities and social enterprises sector seeking to develop sustainable transport initiatives. The academic community will also find the report and dataset useful evidence sources for further research and analysis.

## Climate change and the environment

Around two thirds of respondents believed that the climate was changing and that human activity was a cause of this change. Fewer than one in ten felt that climate change was not happening.

Most respondents (66\%) correctly identified that 'transport is one of the major contributors to climate change', although $12 \%$ felt this was false. Respondents were less clear about the contribution of private vehicles - a third incorrectly believed that 'overall in the UK buses, lorries and trains together emit more CO2 than cars'

Around half (58\%) of all respondents said they would be interested in learning more about what they could do personally to tackle climate change, but only $11 \%$ were very interested. Most respondents were positively disposed towards taking action personally on climate change - the majority felt what they did personally would have an impact. However, the findings on respondents' actual transport behaviour tended not to reflect this apparent willingness to change behaviour.

## Car ownership and use

The majority ( $82 \%$ ) of respondents lived in a household with at least one private vehicle. Most respondents (55\%) used private vehicles as their predominant mode of transport. Fewer (42\%) frequently used any form of public transport. Although mode of transport did vary by type of journey, private vehicles were the predominant mode used for all journey types covered by the survey.

Reliability, cost, safety and comfort were the main determining factors in individuals' vehicle purchasing decisions. Environmental factors were cited as influencing purchasing decisions by around one in five. Respondents with higher incomes were more likely to say their vehicle purchasing decisions were influenced by environmental factors. However, they were also more likely to say their car purchasing decisions were influenced by speed / performance than those with lower incomes. Those with higher incomes were more likely to own more than one car; own a newer car (under 5 years old); and own a car with a larger engine (1801 cc or more); than those with lower incomes.

## Barriers to changing mode

The most important factors in the decision-making process about how to travel were transport mode and time. For all but the shortest and simplest journeys, the car was the preferred option and CO2 emissions were generally of very low importance. A range of structural, attitudinal, behavioural, and financial factors appeared to encourage car travel at the expense of other modes:

- Structural factors: lack of suitable or direct routes emerged as a key barrier to both bus and train travel; with slow, infrequent services also emerging as a key barrier to bus travel. Safety concerns relating to 'too much traffic' and distance emerged as barriers to cycling; lack of time, perceived 'inconvenience', the weather and having to carry things emerged as barriers to walking journeys of less than two miles. The findings suggested that the impact of such issues varied by location, with respondents living in rural locations being most likely to agree that 'for me, there are no practical alternatives to travelling by car'.
- Attitudinal factors: car owners tended to say they would miss the 'sense of freedom' if they did not have a car, while nearly three quarters (73\%) of those with a driving license agreed that they enjoyed driving. The findings suggested that differences in attitudes appeared to relate to variations in structural factors, with those in rural locations tending to have more positive attitudes about car travel and less positive attitudes about alternative modes.
- Behavioural factors: the findings suggested that people tend to travel by car out of habit ${ }^{1}$ and without consideration of the alternatives, particularly if aged 40-69 or living in rural areas.
- Financial factors: respondents tended to perceive travelling by car as cheaper than travelling by public transport in general. Respondents were more likely to agree that they found train travel expensive in general than that they found bus travel expensive in general; although when those who travelled to work by car were asked why they did not travel to work by train, less than one in ten (8\%) cited cost (with $11 \%$ citing cost as a barrier to travelling to work by bus). In relation to cycling, cost was seen as an incentive to cycle rather than a barrier, due to cycling been seen as cheap or 'free'.


## Public transport and flying

Looking at regular trips such as the journey to work, the findings suggested that both train and bus travel tended not to be realistic alternatives to the car (for example, due to a lack of services covering the routes travelled). In particular, a lack of infrastructure emerged as a barrier to train travel, with stations being too far from respondents' homes or workplaces. A quarter (24\%) of those who travelled to work by car felt that bus services were too slow or infrequent; the importance of the frequency of bus services was further highlighted by the finding that having a bus service run at least every 15 minutes appeared to relate to more frequent bus travel. Some respondents said they may be motivated to travel by public transport to get to work if the infrastructure was improved - better routes, frequency, reliability, speed. Cheaper costs were also cited, although costs were far less likely to be cited as a barrier to travelling to work by bus or train than lack of suitable services. More generally, most respondents (60\%) agreed that they '...would only travel by bus if they had no other choice' and around half of respondents agreed that 'successful people tend to travel by car rather than by bus'. However, those who regularly used buses (including people in London) were less likely to agree with these sentiments and many regular bus passengers claimed to like travelling by bus. Most (64\%)

[^0]claimed to like travelling by train. Two-thirds (66\%) agreed that they found 'travelling by train expensive', with $43 \%$ agreeing that they found travelling by bus expensive.

There were some links between respondents' environmental attitudes and willingness to change mode - those who did 'not want to do more' (i.e. the least likely to be motivated by environmental factors) were very likely to say nothing would encourage them to change to public transport. However, even among those who held the most 'pro-environmental' attitudes, nearly half said that nothing would encourage them to travel by public transport instead of their car.

Half of all respondents had taken at least one flight in the 12 months prior to the survey. Some of the least environmentally-friendly people (in terms of self-reported behaviour and interest) tended to take the least number of flights. In contrast, while people with higher levels of education tended to be more positive about environmental issues, they also had higher incomes and tended to fly more regularly.

## Cycling

Around half of respondents owned or had regular use of a bicycle, with ownership varying according to gender, age, socio-economic group, household income and location. Around a quarter (27\%) of bicycle owners cycled regularly (at least once a week). Only $5 \%$ of bicycle owners who made a regular journey to work usually cycled to work, despite $42 \%$ of them living less than five miles from their usual workplace. Respondents with higher household incomes were more likely to own a bicycle and more likely to cycle at least once a year than those with lower household incomes. However, there was little difference by household income in levels of regular (at least once a week) cycling and in the likelihood of cycling to work regularly; rather, having a high household income appeared to increase the likelihood of infrequent cycling (cycling less than once a week but at least once a year). The relationship between number of vehicles in the household and frequency of cycling was not straightforward. While having a car in the household appeared to reduce the likelihood of cycling regularly, the likelihood of cycling less frequently (but cycling at least once or twice a year) increased with the number of vehicles owned, with those owning two or more cars being the most likely to engage in such infrequent cycling.

Of the small number who usually cycled to work, the main reasons for doing so appeared to be because it was cheap or free; it was quick; and it was a way to keep fit or exercise. They were less likely to cite environmental factors as a motivator.

Most respondents who used a car to get to work or a place of study (but also owned a bike) said they had not considered using their bike for the journey or had rejected the idea. For every three respondents who had tried cycling to work, two had reverted back to using their car. The likelihood of cycling to work varied by commuting distance: living three miles from the workplace appeared to be the distance at which the proportion cycling to work reduced considerably. The average (mean) commuting distance for those who worked was 8.8 miles; at this distance, only $3 \%$ of those who owned/had regular access to a bicycle usually cycled to work. In contrast, $16 \%$ of those who owned/had regular access to a bicycle and who lived less than three miles from their usual place of work, usually cycled to work.

The findings suggested that safety concerns, notably 'too much traffic', were a key barrier to cycling to work. More generally, six in ten (60\%) of those who could cycle agreed that 'it's too dangerous for me to cycle on the roads'. Around half (52\%) of respondents who could cycle agreed they would cycle (more) if there were more dedicated cycle paths.

## Trip avoidance

A quarter of those who travelled to work or a place of study by car said they usually combined this with other trips, such as food shopping (and commonly giving lifts to children), to reduce the amount they travelled overall. A further third said they did this sometimes, but the largest group (39\%) said that they could not combine their trip.

Around one in eight (12\%) said they worked from home at least once a week, with the proportion doing so varying by occupation and industry. Nearly two-thirds of those who already worked at home at least once a year said they could do so at least a bit more and one in five (20\%) said they could do so a lot more. Two thirds of respondents did a main (e.g. a weekly or fortnightly) food shop and around a quarter of these had used home delivery. However only around one in ten used it regularly use was most common in urban areas (especially in London) and among higher income groups. Use of home delivery for non-food shopping was more common with around one in five having used this regularly.

## Next steps

Further work is currently being undertaken, using the survey data to create a segmentation model of public attitudes to climate change and transport choices. A final report of the segmentation model will be published in 2011.

## 1. Introduction

This interim report provides an overview of the survey findings from the Department for Transport's (DfT) segmentation model of public attitudes to climate change and travel choices.

The survey was commissioned by the Department to develop a full segmentation model of public attitudes to climate change and travel choices. The project was designed to deliver a segmentation model that identifies and quantifies groups within the population that differ in terms of their attitudes and behaviour relevant to reduced CO 2 emissions from personal transport use. The segmentation model is the subject of a final report which will be delivered in 2011.

Prior to the development of the segmentation model, this report provides an overview of the main survey findings, giving a commentary on the key findings and trends in the data.

The report and accompanying dataset are being published with the aim that they will be a useful evidence source for local authorities and the voluntary, communities and social enterprises sector seeking to develop sustainable transport initiatives. The academic community will also find the report and dataset useful evidence sources for further research and analysis.

## Background

This research was designed to build upon the Department's social research evidence base in this area. Since 2006, DfT has been developing a research programme to further understand how individuals' attitudes to climate change relate to their transport behaviour. The programme began with an evidence base review of public attitudes to climate change and travel ${ }^{1}$. The review observed that the population is not homogeneous in terms of its attitudes and motivations to reduce CO2 emissions from personal transport use; consequently, attempts to both engage the public on issues related to climate change and to influence transport behaviour change need to reflect and respond to differences across different groups or segments within the population. To this extent a 'one size fits all' solution to improving public attitudes towards climate change and influencing travel choices towards more sustainable behaviours is unlikely to be effective. The review supported the view that the
segments that exist will not be defined or differentiated by demographic features alone. However, the review noted that existing (pre-2006) research studies to segment the population according to its transport use had not accounted for attitudes, motivations and wider psychographic factors. The review concluded that this is primarily due to the absence of a detailed understanding of public attitudes towards climate change and their relation to travel choices; the motivations or barriers that exist in relation to transport behaviour change; or how psychographic factors relevant to both differ across the population.

Based on the conclusions and recommendations from the evidence base review the Department commissioned an 18-month qualitative study to explore in depth public attitudes, informational needs and motivations and barriers to behavioural change relevant to climate change and personal transport related CO2 emissions ${ }^{2}$. This study, which focussed on a range of transport-related behaviours, considered differences in psychographic variables including intentions, moral obligation, beliefs, and norms that will provide an important foundation to the development of the segmentation. A key finding of the deliberative study was that while increasing individuals' understanding of climate change appeared to increase their willingness to change their transport behaviour, there was little corresponding change in actual transport behaviour.

The current DfT segmentation study has also built on the Department for Environment, Food and Rural Affairs (Defra) segmentation of pro-environmental behaviours published in January $2008^{3}$ together with other previous studies and regular surveys including the National Travel Survey ${ }^{4}$; a 2008 knowledge review of public attitudes to transport ${ }^{5}$ and a number of other regular and ad-hoc surveys of public attitudes to transport commissioned by $\mathrm{DfT}^{6}$. The need for a transport specific segmentation model was highlighted due to the Department's existing evidence base concluding that the barriers to more sustainable transport behaviour are particularly complex, requiring a range of challenges to be addressed simultaneously. Although the Defra segmentation did include general questions on transport, the DfT study has focused on a far wider range of transport behaviours and influencers, which enables a greater understanding of the range of relevant issues in order to inform DfT policy development.

## Research aims and objectives

There were four main objectives for the research.

1. To develop a fully tested quantitative survey tool for use in the collection of data to underpin a robust segmentation of public attitudes to climate change and travel choices
2. To conduct high quality fieldwork to enable a comprehensive, robust and representative segmentation model of the population to be produced
3. To produce a full segmentation model based on public attitudes, motivations, psychographic variables and behaviours relevant to climate change and travel choices
4. To produce refined survey materials and guidance to enable future conduct of segmentation fieldwork.

## Methodology

The survey was conducted by TNS-BMRB between 5 November 2009 and 27 June 2010. Fieldwork was suspended between 5 March and 21 May 2010 due to the 2010 General Election on 6 May 2010. All interviews were carried out in respondents' homes using face-to-face CAPI technology. Interviews lasted an average of 45 minutes and the questionnaire for the survey is contained in Appendix D. The survey questionnaire was designed to complement, but not duplicate, previous studies. With this aim, the questionnaire included a number of questions taken from previous studies including Defra's segmentation of pro-environmental behaviours(3); the National Travel Survey(4); and a number of other regular and ad-hoc surveys of public attitudes to transport commissioned by $\operatorname{DfT}(6)$. The survey questionnaire was designed to account for risks associated with cognitive polyphasia ${ }^{2}$ and social desirability bias ${ }^{3}$ - in particular the tendency of some respondents to 'think green' once the subjects of the environment/climate change are discussed and potentially change their responses accordingly. To counter this, three main strategies were adopted:

[^1]- Ordering the survey questionnaire so that questions on transport behaviour and attitudes to transport were asked before questions on attitudes to the environment and climate change.
- Ensuring the more sensitive sections of the questionnaire (including questions that measured respondents' attitudes towards the environment and their attitudes towards transport) were administered as a self-completion survey. During these sections of the interview, interviewers handed the CAPI machine to the respondent for them to enter their responses directly into the machine out of sight of the interviewer ${ }^{4}$.
- Including a 'choice modelling' section at the end of the questionnaire to test which of a set of factors (mode; time taken; cost; and CO2 emissions) appeared to determine respondents' transport choices in relation to a set of specific trips.

A total of 3,923 interviews were carried out during the survey period, with an overall response rate of $58 \%$. Full details of the final fieldwork figures are provided in Appendices $A$ and $B$, including a breakdown of regional response rates.

The sample for the survey was selected from the small user Post Office Address File (PAF) in England using a Random Probability approach. Interviewers were issued with a set number of pre-selected addresses constituting their 'assignment'. Interviewers posted an introductory letter to their assigned addresses around one week before attempting to make contact at the address. A copy of the introductory letter can be found in Appendix C. Upon making contact with an adult living at a selected address, interviewers were instructed to randomly select one eligible adult per household. All adults (aged 16 and over) in England were eligible to take part, no interviews were carried out in the rest of the UK. Every attempt was made to carry out an interview at each pre-selected address with interviewers required to make a minimum of six attempts to make contact at each address.

Survey data were weighted to correct for sampling and non-response bias. Sample weights were first applied to correct for known differences in the probability of selection (notably affected by the number of eligible adults the household). Subsequently non-response rates were applied to correct for potential non-response

[^2]bias. Weights were based on population estimates taken from the Labour Force Survey (April - June 2009) and included age, gender, level of education, Government Office Region (GOR), rural / urban locations, and presence of children in household.

## Report Structure

The report is divided into five main chapters, with chapters 3 to 5 presenting an analysis of transport behaviour and attitudes towards transport by specific modes:
2. Climate change knowledge, attitudes and behaviour
3. Private vehicles and current transport behaviour in relation to specific journeys
4. Public transport
5. Cycling and walking
6. Trip avoidance and reduction

The final two chapters (7 and 8) present an overview of the results of the responses to choice modelling (or conjoint) questions and a summary of key demographic factors.

## 2. Climate change: knowledge, attitudes and perceived behaviour

This chapter examines general knowledge and attitudes to climate change and respondents' views of their own behaviour and presents analysis by key sample variables. It needs to be recognised that these questions relate to general attitudes to climate change and all forms of environmental behaviour and not just to those related to travel. Understanding these broader attitudes and behaviours provides a useful context for the more specific discussion in the remaining chapters of this report on their attitudes to different modes of transport and willingness to adopt more environmentally friendly travel behaviours.

### 2.1 Knowledge and attitudes to climate change

Just over two thirds (68\%) of all respondents believed that the climate was changing and a similar proportion (66\%) that human activity was a cause of this change. Fewer than one in ten respondents (8\%) felt that climate change was not happening, with only $3 \%$ stating that it definitely was not happening. The remainder were not sure if climate change was happening. Similarly $10 \%$ of respondents stated that they did not believe that human activity was changing the world's climate with only $4 \%$ being definitely of this view and the remainder (25\%) being unsure.

Consistent with these findings, two thirds of respondents (64\%) agreed that the statement 'most scientists believe that human activity is a cause of climate change' was true (which is the case), with only $12 \%$ feeling this statement was false. However, responses to the statement 'most scientists believe that recent temperature changes are the result of a natural cycle' were more mixed, with similar proportions feeling this statement was true (30\%), false (34\%) or being unsure or not knowing what scientists felt about this issue (36\%) ${ }^{5}$.

As illustrated in Table 2.1, the higher respondents' educational attainment the greater their belief that climate change was happening and that human activity was a cause of this change. This belief was also greater amongst the higher social grades. Levels of belief were also slightly higher in London ( $79 \%$ of respondents living in London felt

[^3]climate change was happening and $76 \%$ that human activity was a cause of this change)

Table 2.1. Views about climate change by educational attainment and socioeconomic group


The majority of people (87\%) felt they knew something about climate change, although most felt they knew only 'a little' (47\%) or a fair amount (36\%). Only 5\% felt they knew a lot about this issue. Perceived knowledge was higher amongst those with higher levels of qualifications and also increased with socio economic group. ( $61 \%$ of those with a degree and $54 \%$ in the highest socio-economic groups AB felt that they knew at least a fair amount about climate change).

To further examine respondents' knowledge of climate change, respondents were asked whether a number of statements were true or false. Indicating respondents' limited knowledge of climate change issues, the proportions of respondents who were unsure or unable to give a response to these statements was high.

Most respondents (77\%) correctly stated that the statement 'CO2 is one of the gases that causes the greenhouse effect' was true and just over half (54\%) that the statement 'the greenhouse effect traps heat which is created by the sun shining on the earth's surface from escaping' was also true. Few respondents (3\% and 8\% respectively) incorrectly felt these statements were false. Over half of respondents (59\%) also correctly identified that the statement 'a two degree rise in global
temperature will not make much difference to our lives' was false but almost a fifth of respondents (18\%) felt this was true. However, only a fifth (19\%) correctly stated that the statement 'climate change is the result of the hole in the ozone layer' was false, whilst two fifths of respondents (42\%) incorrectly felt it was true.

Of particular pertinence to this study, most respondents (66\%) correctly felt that the statement 'transport is one of the major contributors to climate change' was true, although $12 \%$ felt this was false. However, responses to the statement 'overall in the UK buses, lorries and trains together emit more CO2 than cars' were more mixed. Whilst nearly a third (29\%) stated correctly that this was false, a similar proportion (34\%) stated it was true and $38 \%$ did not know. The proportion correctly identifying this statement as false was significantly higher amongst inactive drivers ${ }^{6}$ than drivers ( $42 \%$ vs. 30\%). The proportion giving a correct answer to this statement was also higher amongst those living in households with two or more cars ( $31 \%$ compared with $26 \%$ who have no car) and those driving higher annual mileages ( $33 \%$ amongst those driving 9000+ miles per year compared with $26 \%$ driving fewer than 5000 miles a year).

[^4]Table 2.2. Views / knowledge about climate change

|  |  | True | False | Unsurel <br> Don't know |
| :--- | :--- | :---: | :---: | :---: |
| Statement <br> Climate change is the result of a hole in the <br> ozone layer <br> Transport is one of the major contributors to <br> climate change | $\%$ | 42 | $\mathbf{1 9 *}$ | 39 |
| A 2 degree rise in global temperature will not <br> make much difference to our lives <br> In UK buses, lorries and trains together emit <br> more CO2 than cars <br> CO2 is one of the gases causing climate <br> change <br> Greenhouse effect traps heat from sun shining <br> on earth's surface from escaping | $\%$ | $\%$ | 18 | 12 |

Base: All respondents $(3,923)$
Notes: * Denotes correct response
The first two statements were not asked of those respondents who felt that climate change was definitely not happening (base 3801)

### 2.1.1 Knowledge about personally tackling climate change

Respondents were also asked how much they felt they knew about what they could personally do to tackle climate change and how interested they would be in learning more about what they could do.

The majority of respondents (82\%) felt they knew something about what they could personally do to tackle climate change, although most felt they knew only 'a little' (44\%) or a fair amount (35\%). Only 3\% felt they knew a great deal about what they could do. Again perceived knowledge was higher amongst those with higher levels of qualifications and also increased with socio economic group. More than half (55\%) of those with a degree and $47 \%$ in the highest socio-economic groups AB felt that they knew at least a fair amount about what they could personally do to tackle climate change compared with $24 \%$ of those with no academic qualification and $29 \%$ among the lowest socio economic groups DE.

More than half (58\%) of all respondents surveyed said they would be interested in learning more about what they can do personally to tackle climate change, but only $11 \%$ were very interested. Again the proportion of respondents that was interested in learning more was greatest amongst those with the highest educational qualifications
(first degree or higher) and the highest social economic groups $A B$ (72\% and 63\% respectively).

Table 2.3 Interest in learning more about what they can personally do to tackle climate change

Interest in learning more what can personally do to tackle climate change ... \%
Very interested 11

Fairly interested 46
Neither interested nor uninterested 22
Fairly uninterested 12
Very uninterested 7
Climate change not happening/not caused by man 2
Don't know 1
Base: All respondents $(3,923)$

### 2.2 Beliefs about climate change and its impact

The majority ( $82 \%$ ) of respondents felt that climate change will impact on the UK. Two fifths felt it was already impacting on the UK, with a further $18 \%$ feeling that whilst it was not impacting yet it would during their lifetime. A further fifth (19\%) felt it would impact in the UK but only in the future, the proportion being notably higher amongst older people aged 70 and over (32\%). Only $6 \%$ of respondents felt climate change will not impact on the UK, which included those that felt climate change was definitely not happening.

The only notable variation in these results was that the proportion of respondents who felt climate change was already impacting on the UK increased with educational attainment, being $57 \%$ amongst those educated to first degree level or higher. This is consistent with stronger views and knowledge about climate change among this group.

Table 2.4. Views on impact of climate change in the UK

|  | Impact of climate change in UK <br> $\%$ |
| :--- | :---: |
| Already impacting on UK | 40 |
| Not yet impacting on UK but will in lifetime | 18 |
| Will impact on UK, but only in future | 21 |
| Climate change will not impact on UK | 6 |
| Unsure/don't know | 15 |
| Base: All respondents (3,923) |  |

All respondents were also asked how strongly they agreed or disagreed with a number of statements which sought to illustrate some of the beliefs that underlie their views about the impact of climate change.

Most respondents agreed with the statements that 'we seem to have much more severe weather in the UK these days' and 'I have noticed a change in the seasons in the last few years'; $60 \%$ and $77 \%$ of respondents respectively agreed with these two statements, with $23 \%$ and $36 \%$ definitely agreeing. The proportion most strongly agreeing with these statements was significantly higher amongst those who felt climate change was already impacting on the UK ( $32 \%$ and $47 \%$ respectively).

Most respondents $(60 \%)$ also tended to disagree with the statement 'the effects of climate change are too far in the future to really worry me'. However, the proportion agreeing with this statement was higher amongst those who thought climate change would impact on the UK but only in the future ( $37 \%$ agreed) and those who did not feel it would impact or did not believe in climate change (48\%).

Finally half (50\%) of respondents agreed with the statement 'if things continue on their current course, we will soon experience a major environmental disaster'. Again this proportion was significantly higher amongst who felt climate change was already impacting on the UK (70\%).

Figure 2.1. Views on climate change


Base: All respondents $(3,923)$

### 2.2.1 Concern about climate change

All those respondents, except those that felt that climate change was not happening or would not impact on the UK, were asked how concerned they were about climate change. As can be seen from Table 2.5, most were at least fairly concerned, with $16 \%$ saying they felt very concerned. The proportion that were very concerned was highest amongst those who felt climate change was already impacting on the UK (29\%), those educated to degree level ( $23 \%$ - consistent with these people being the most likely to think climate change was already impacting on the UK) and inactive drivers (23\%). Only $11 \%$ of all respondents felt at all unconcerned about climate change.

Table 2.5 Level of concern about climate change

|  | Total | Impact of climate change on UK |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Already impacting on UK | Not yet impacting on UK but will in lifetime | Will impact on UK, but only in future | Unsure/Don't know |
|  | \% | \% | \% | \% | \% |
| Base |  | 1,562 | 664 | 834 | 612 |
| Very concerned | 16 | 29 | 11 | 7 | 4 |
| Fairly concerned | 53 | 60 | 64 | 51 | 34 |
| Neither concerned nor | 19 | 7 | 18 | 28 | 40 |
| unconcerned |  |  |  |  |  |
| Fairly unconcerned | 8 | 3 | 6 | 11 | 13 |
| Very unconcerned | 3 | 1 | * | 3 | 7 |
| Base: All respondents except those who think climate change definitely not happening/will not affect UK (3,864) |  |  |  |  |  |

These overall levels of concern were consistent with responses given by all respondents when asked how strongly they agreed or disagreed with the statement 'there is too much concern with the environment'. Most respondents (61\%) disagreed with this statement, this proportion being $76 \%$ amongst those who thought climate change was already impacting on the UK. Only a quarter of all respondents (24\%) agreed that there was too much concern about the environment, with only $8 \%$ definitely being of this view.

More than half (58\%) of all respondents disagreed with the statement that 'developments in technology will stop climate change, so we don't have to change how we live', with only $15 \%$ agreeing that this would be the case. Around two thirds (64\%) of respondents also disagreed with the statement that climate change is beyond our control - it's too late to do anything about it" with only $14 \%$ agreeing.

### 2.3 Current perceived environmental behaviour

To examine how respondents currently felt about their lifestyle and behaviour in relation to its impact on the environment, respondents were asked how environmentally-friendly they felt their current lifestyle was and whether they felt they were content with what they were doing or wished to do (a little or a lot) more ${ }^{7}$. The findings from these two questions were drawn together to produce a summary of current feelings about their environmental behaviour and willingness to change. Responses to the question about how interested respondents were in learning more about what they could personally do to tackle climate change were used to 'validate' those who stated they would like to do more; i.e. those being both willing to change and interested in learning more about how they could do so, being felt to show the most serious intent and thus to offer the most potential to adopt more environmentally friendly behaviours.

In terms of their current lifestyle, as shown in Table 2.6, the majority of respondents (96\%) felt they did at least something that was environmentally friendly; a third stated they did just one or 1-2 two things that were environmentally friendly, whilst $43 \%$ felt they did quite a few things.

[^5]Table 2.6 Current environmental behaviour

|  | Current environmental behaviour <br> $\%$ |
| :--- | :---: |
| Doing nothing | 4 |
| Doing 1-2 things | 33 |
| Doing quite a few things | 43 |
| Doing most/everything | 21 |
| Unsure/Don't know | $*$ |
| Base: All respondents (3,923) |  |

A fifth (21\%) felt they were environmentally friendly in most or everything they did. These were most likely to be older people aged 60 or over (31\%) and therefore to also be people who were not working (28\%), have no car in their household (29\%) and not be using cars (33\%). Furthermore, the proportion of lower income households who felt they were environmentally friendly in most/everything they do was significantly higher than in wealthier households ( $24 \%$ and $22 \%$ in the lowest two equivalised income quintiles and $16 \%$ and $18 \%$ in the highest two quintiles). The proportion that felt they were environmentally friendly in most or everything they did was not substantially higher than average amongst those who felt that climate change was already impacting on the UK ( $25 \%$ ) - who were, in turn, the most highly educated, knowledgeable and concerned about environmental issues.

The proportion who were environmentally-friendly in most/everything they do were the most likely to be very concerned about climate change (29\% compared with $13 \%$ of those who were doing less currently).

As shown in Table 2.7, overall, just under half (46\%) of all respondents surveyed felt they would like to do more to help the environment. However, only about a third (35\%) of all respondents indicated a seriousness of intent (as evidenced by the fact that they also expressed a willingness to learn more about what they could personally do to tackle climate change). Most of these ( $28 \%$ of all respondents) currently did nothing/1-2 things or only a few things in this regard.

Table 2.7 Current environmental behaviour and willingness/interest to change

|  | Current environmental behaviour <br> and willingness/interest to <br> change <br> $\%$ |
| :--- | :---: |
| Do nothing/1-2 things | 20 |
| - don't want to do more | 5 |
| - want to do more, but not interested in finding out more | 11 |
| - want to do more and interested in finding out more |  |
| Do quite a few things | 20 |
| - don't want to do more | 5 |
| - want to do more, but not interested in finding out more | 17 |
| - want to do more and interested in finding out more |  |
| Do most/everything | 13 |
| - don't want to do more | 1 |
| -, want to do more, but not interested in finding out more | 7 |
| -, want to do more and interested in finding out more |  |
| Sub-totals | 53 |
| Not willing to do more | 12 |
| Willing to do more but not interested in finding out more | 35 |
| Willing to do more and interested in finding out more |  |
| Base: All respondents (3,923) |  |

The proportion of respondents who were willing and interested in taking further action is consistent with responses to the statement 'I have already done as much as I can to reduce my CO2 emissions'. Overall a third (34\%) of respondents disagreed with this statement i.e. felt they could do more, whilst $39 \%$ agreed with the statement, feeling they had done as much as they could. The remainder had no strong views either way. Amongst those showing most willingness/interest in adopting more environmentally-friendly behaviours, over half (53\%) disagreed with this statement compared with $24 \%$ of those with no or less strong intentions.

As illustrated in Table 2.8, the group where the proportion who were willing/interested in changing their behaviour was highest was those with the highest educational level (53\%). Other groups showing greater levels of willingness/interest were those aged between 21-59 (in particular those aged 30-49); those with children (and in particular younger children), those from higher social economic groups and higher income brackets; and those living in London and, to a lesser extent, rural areas.

Levels of willingness to change/interest in finding out more were also slightly higher amongst those with a car in the household - although only among drivers and inactive drivers, not passengers. Willingness and interest were also higher among those who felt climate change was already impacting on the UK or would do in their
lifetime as well as those who were concerned about the impact of climate change and in particular those who were very concerned.
Table 2.8 Profile of respondents showing willingness/interest to change environmental behaviour
Willingness/interest to change behaviour\%
All ..... 35
Gender
Male (1800) ..... 32
Female (2123) ..... 37
Age
16-20 (197) ..... 33
21-29 (473) ..... 39
30-49 (1328) ..... 43
50-59 (561) ..... 38
60-69 (644) ..... 28
70+ (720) ..... 14
Socio-economic group
AB (1010) ..... 44
C1 (1201) ..... 38
C2 (754) ..... 29
DE (958) ..... 24
Household income
Quintile 5 (highest) (517) ..... 49
Quintile 4 (481) ..... 42
Quintile 3 (472) ..... 39
Quintile 2 (508) ..... 29
Quintile 1 (lowest) (542) ..... 27
Highest level of education
Degree (835) ..... 53
Diploma/'A' level (993) ..... 38
GCSE (963) ..... 30
None (1102) ..... 21
Children in household (youngest child)
Age 0-4 (429) ..... 43
Age 5-11 (372) ..... 44
Age 12-17 (298) ..... 40
None (2824) ..... 31

Table 2.8 (continued)
Willingness/interest to change behaviour

## Location

London (403) ..... 47
Other urban (2732) ..... 33
Town and fringe (346) ..... 27
Rural (442) ..... 36
Car in household
None (898) ..... 28
One (1663) ..... 35
Two or more (1357) ..... 37
Driving status
Driver (2543) ..... 39
Inactive driver (156) ..... 34
Passenger (457) ..... 26
Non user (742) ..... 26
Impact of climate change
Already impacting on UK (1562) ..... 49
Not yet impacting on UK but will in lifetime (664) ..... 36
Will impact on UK, but only in future (834) ..... 22
Climate change will not impact on UK (243) ..... 10
Concern about climate change
Very/fairly concerned (2651) ..... 45
Very/fairly UUunconcerned (448) ..... 6
Neither (744) ..... 16

Base: All respondents $(3,923)$

### 2.3.1 Attitudes towards own personal actions

Respondents were also asked how strongly they agreed or disagreed with a series of statements about their attitudes towards taking action on climate change. The results from these questions can be used to further explore factors that were driving respondents' actions.

The responses to the statements shown in Figure 2.2 indicate that most respondents were positively disposed towards taking action personally on climate change, consistent with their general concerns about the issue.

The first four statements covered issues which may act as barriers to behaviour change. Most respondents felt that what they did personally would have an impact, with the majority (62\%) disagreeing with the statement 'what I do in my life doesn't make any real difference to the environment' - around a quarter (23\%) agreed with this. Respondents also tended to feel that they would not be behaving in an environmentally friendly manner just to save money ( $64 \%$ disagreed that they would only do environmentally friendly things if they save money) and that having sufficient time and the need to change their habits would not be substantial barriers to making these changes. Two thirds of respondents (65\%) disagreed they would not have the time and a half (52\%) disagreed that they would find it hard to change their habits, although, in the latter case, a reasonably high proportion of respondents (31\%) agreed that they found it hard to change their habits.

Figure 2.2. Attitudes towards environment - personal involvement


Base: All respondents $(3,923)$

The next four statements in Figure 2.3 examine the impact of social norms and/or peer pressure (i.e. what others do or think and whether this influences behaviour). The responses suggest that respondents were conscious of this type of peer pressure but that this was not having a negative impact on their likelihood to adopt more environmentally friendly behaviours. Most respondents (65\%) agreed that most people they knew were doing their bit for the environment, but disagreed (57\%) that this was putting them under pressure to say they were doing more than they did. They also tended to feel that this was something that people like them should be
concerned about (62\% disagreed with the statement that 'being green isn't something people like me worry about') and also strongly disagreed (79\%) that it would embarrass them if their friends thought their lifestyle was 'purposefully environmentally friendly'.

Figure 2.3. Attitudes towards environment - social norms


Base: All respondents $(3,923)$

The responses to two final statements (shown in Figure 2.4) suggest that a slim majority of respondents had a sense of collective responsibility about taking action on climate change. Around two thirds (63\%) disagreed that they should not take actions just because others were not and a little more than half (56\%) disagreed that we should not take action in the UK as what other countries were doing might cancel this out. Nevertheless, around a quarter of respondents agreed with these statements suggesting that these perceptions were a barrier for a significant minority of respondents.

Figure 2.4. Attitudes towards environment - collective responsibility


Base: All respondents $(3,923)$

As noted at the beginning of this chapter, most of this section has examined respondents' general environmental views and behaviours and not specifically those related to transport. However, to conclude, out analysis looks at responses to two further statements which were more specifically related to travel behaviour and indicate particular challenges in relation to encouraging people to adopt more environmentally friendly travel behaviours.

Overall just under half (47\%) of respondents agreed with the statement, 'how I personally travel makes a real difference to climate change'; a smaller proportion (27\%) disagreed with this statement with only 9\% definitely disagreeing. This is consistent with findings discussed in section 2.1 that show two-thirds of respondents were aware that transport is one of the major contributors to climate change. However, comparison of results to this question with other questions about the perceived impact of behaviour more generally on the environment does suggest the association between travel behaviour and climate change may be weaker. For example, as discussed in the previous section, most people (62\%) disagreed with the statement 'what I do in my life doesn't make any difference to the environment' and a half (52\%) agreed with another similar statement expressed in the affirmative 'what I do personally can make a real difference to climate change', with $25 \%$ disagreeing but only $8 \%$ definitely disagreeing.

Furthermore, $54 \%$ agreed with the statement 'I would rather save energy at home than change how I travel', with only $16 \%$ disagreeing and $4 \%$ definitely disagreeing. This proportion was slightly higher amongst car drivers (55\%) and passengers (54\%) compared with inactive drivers and those who did not travel by car ( $45 \%$ and $47 \%$
respectively) and amongst those driving greater annual mileages (58\% amongst those driving more than 9,000 miles a year compared with 52\% driving fewer than 5,000 miles per annum). Agreement was also very high amongst those living in rural areas (61\%) - as we might expect given higher annual mileages and greater reliance on private vehicles in rural areas.

Responses to these two statements amongst the group who generally showed the most willingness/interest to adopt more environmentally friendly behaviours further highlight the challenges of attempting to change travel behaviour. Whilst two thirds of this group (66\% compared with $47 \%$ of all respondents) agreed that how they personally travelled made a difference to climate change, the difference was much less marked if we look at those who agreed that they would rather try to save energy at home than through how they travel. Around half (48\%) of those who generally showed the most willingness/interest to adopt more environmentally friendly behaviours agreed that this was the case compared with $57 \%$ for all respondents. This may be connected to the fact, as noted earlier, that the group who showed most willingness/interest in changing behaviours included some of those with the highest levels of car travel. .

## 3. Private vehicles and current transport behaviour relating to specific journeys

This chapter looks at respondents' attitudes and behaviours towards private vehicles (cars, vans, motorcycles and mopeds) and presents analysis by key sample variables. Subsequent chapters look at each of the other main modes of transport covered by the survey: buses; trains; trams / underground / metro / light rail; and cycling and walking. The key findings on specific types of journeys made by respondents are also included in this chapter as useful context to the discussion on private vehicle use. As elsewhere, sub-group analysis is limited to key findings and is not intended as an exhaustive analysis of the complete survey data set.

### 3.1 Introduction

Respondents were asked a series of questions about the frequency with which they used each of the modes of transport generally, supplemented by more detailed questions about which mode of transport they used for key journeys they made. Information was collected on mode of transport for journey to work, school or college, business trips and for smaller shopping trips (either made in addition to a main shop or more regular smaller trips made instead of a main shop).

### 3.1.1 Most frequent mode of transport

Table 3.1 summarises frequency of use of private vehicles and public transport among the survey population overall. Respondents were classified as frequent users of private vehicles and/or public transport ${ }^{8}$ if they used the mode at least once or twice a week.

Table 3.1 Summary of most frequent mode of transport use

|  | Modes use at least once or twice a week |  |  |
| :---: | :---: | :---: | :---: |
| Private vehicle only | Mixed - private vehicle and <br> public transport <br> $\%$ | Public transport only | Neither |
| $\%$ | 32 | $\%$ | $\%$ |
| 55 |  | 10 | 3 |
| Base: $(3,923)$ |  | $\%$ |  |

[^6]The majority of respondents (87\%) frequently used private vehicles, with most of this group using private vehicles as their predominant mode of transport (more than half of all respondents were frequent users only of private vehicles and not public transport). Around four in ten (42\%) frequently used some form of public transport. Only a minority (3\%) used neither private vehicles nor public transport frequently; these were likely to be people who were mainly making journeys by bicycle or on foot, but also includes a proportion of people who are housebound.

The modes of transport used most frequently were closely related to car ownership and usage (whether they drove a car or travelled as a passenger driving status).

Just over half (55\%) of respondents were frequent users of just private vehicles. As illustrated in Table 3.2, these were most likely to be people living in more rural areas and having two or more cars in the household (72\%). They were also most likely to be aged between 40 and 69 .

Use of a mix of both private vehicles and public transport was most prevalent amongst the youngest respondents aged 16-20 (45\%) and those in fulltime education (46\%). This is probably related to the fact that the youngest respondents were likely to still be in full time education and to still be living with parents who owned a car. Those living in London were also more likely to use a mix of private vehicles and public transport or to be using just public transport, consistent with the lower incidence of car ownership in London (65\% compared with the national average of $82 \%$ ). Those using public transport only as a frequent mode were also more likely to be younger (aged under 30), not working (13\%), from the lowest socio economic groups DE (19\%) and the lowest equivalised income quintile (19\%).

The minority who used neither private vehicles or public transport on a frequent basis tended to consist of the oldest (70 years old or more) and the youngest people (aged 16-20). In these age groups levels of car ownership and driving were lower than the rest of the survey population, as they were among those from the lowest socio economic groups DE (6\%) and people from lowest income quintile (6\%)

Table 3.2 Most frequent mode of transport

|  | Modes use at least once or twice a week |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Private vehicle only | Mixed - private <br> vehicle and <br> public transport | Public transport only | Neither |
| Age |  |  |  |  |
| 16-20 (197) | 33 | 45 | 14 | 7 |
| 21-29 (473) | 45 | 34 | 18 | 2 |
| 30-39 (618) | 54 | 34 | 10 | 2 |
| 40-49 (697) | 62 | 29 | 8 | 1 |
| 50-59 (561) | 60 | 31 | 7 | 2 |
| 60-69 (644) | 62 | 29 | 6 | 2 |
| 70+ (720) | 58 | 23 | 11 | 8 |
| Location |  |  |  |  |
| London (403) | 25 | 41 | 32 | 2 |
| Other urban (2732) | 55 | 32 | 9 | 4 |
| Town and fringe (346) | 67 | 25 | 5 | 3 |
| Village, Hamlet and Isolated Dwellings (442) | 72 | 24 | 1 | 2 |
| Car in household |  |  |  |  |
| None (898) | 13 | 29 | 47 | 11 |
| One (1663) | 56 | 39 | 3 | 2 |
| Two or more (1357) | 72 | 26 | 1 | 1 |
| Working Status |  |  |  |  |
| Working full time (1547) | 60 | 32 | 7 | 1 |
| Working part time (498) | 56 | 34 | 9 | 1 |
| Not working (1696) | 55 | 27 | 13 | 5 |
| In full time education (167) | 25 | 46 | 21 | 8 |
| Socio economic group |  |  |  |  |
| AB (1010) | 61 | 34 | 4 | 1 |
| C1 (1201) | 53 | 34 | 11 | 3 |
| C2 (754) | 60 | 29 | 9 | 2 |
| DE (958) | 46 | 29 | 19 | 7 |
| Household income |  |  |  |  |
| Quintile 5 (highest) (517) | 57 | 39 | 4 | 0 |
| Quintile 4 (481) | 63 | 31 | 6 | 1 |
| Quintile 3 (472) | 61 | 32 | 5 | 1 |
| Quintile 2 (508) | 56 | 30 | 12 | 3 |
| Quintile 1 (lowest) (542) | 46 | 30 | 19 | 6 |

Base: All respondents (3,923). Note percentages are based on rows not columns

### 3.2 Current transport behaviour relating to specific journeys

This study covered three specific types of journey, which previous analysis by DfT indicated offered most potential for mitigation through changes in behaviour, such as trip reduction; switching to a mode of transport which produced lower carbon emissions; and/or purchasing of lower emission cars. These four types of journey were:

- Travelling to work, school or college
- Business travel
- Regular and smaller food shopping trips

This section briefly examines the number and types of people making these trips. The mode of transport and potential for modal shift or other forms of climate change mitigation behaviour are discussed in more detail in later chapters.

## Travel to work

As discussed earlier, $58 \%$ of respondents interviewed were working at the time of the survey. Almost all those who were working, travelled to work (96\%). Only four per cent worked at home or in the same building as or grounds of their home, this being slightly higher amongst those working part time ( $8 \%$ compared with $3 \%$ working fulltime). Of those who were working, most travelled to the same place every time ( $75 \%$ ); only $15 \%$ went to different places each day e.g. customers homes or offices.

Table 3.3 Travel to work

|  | Where usually work <br> $\%$ |
| :--- | :---: |
| Same place each day | 73 |
| Same place at least two days per week | 7 |
| Different places | 15 |
| At home | 4 |
| Base: All those who work $(2,045)$ |  |

For those who travelled to the same place of work all or much of the time (at least two working days per week), the average (mean) journey length was just under nine miles, with just under half (47\%) travelling fewer than five miles and a further $23 \%$ between five and ten miles. As shown by Table 3.4, the average (mean) distance travelled to work varied considerably, with those who travelled further to work
including men; those with higher household incomes; those with higher qualifications; those living in rural areas; and those with more cars in the household.

Table 3.4 Average (mean) distance to usual place of work (in miles)

|  | Average (mean) distance to usual place of work (rounded to the nearest mile) |
| :---: | :---: |
| All who work (1659) | 9 |
| (Home) location |  |
| London (186) | 8 |
| Other urban (1153) | 8 |
| Town and fringe (151) | 11 |
| Village, Hamlet and Isolated Dwellings (170) | 11 |
| Gender |  |
| Male (797) | 11 |
| Female (862) | 7 |
| Highest level of education |  |
| Degree or higher | 12 |
| A-level or equivalent | 9 |
| GCSE or equivalent | 7 |
| No qualifications | 6 |
| Household income |  |
| Quintile 5 (highest) (330) | 14 |
| Quintile 4 (290) | 10 |
| Quintile 3 (257) | 8 |
| Quintile 2 (186) | 5 |
| Quintile 1 (lowest) (126) | 5 |
| Car in household |  |
| None (225) | 5 |
| One (699) | 7 |
| Two or more (733) | 11 |

Most respondents (85\%) who were working usually travelled straight to work. Those who were more likely to do other things on the way were those living in rural areas (23\%), women (21\%), those working part-time (23\%) and those who had children under 18 in their household (24\%) and in particular younger children up to 12 years of age (28\%).

Most respondents (77\%) who were currently working had free parking available at their place of work (regardless of whether they drove to work or not). For almost all
(72\%), free parking was available every day they worked, but for $5 \%$ free parking was only available on some days. The proportion who had free parking, at least some of the time, was significantly higher amongst those living in rural areas (90\%) and markedly lower (50\%) amongst those living in London ${ }^{9}$.

## Business travel

Of those respondents who were working at the time of the survey, a quarter ( $25 \%$ ) had made one or more business trips within the UK in the last six months. This proportion was substantially higher amongst those in the highest socio-economic groups AB (44\%), those educated to degree level or higher (40\%) and those living in rural areas. It was also slightly higher amongst men (29\%) and those working fulltime (29\%). The majority of those making business trips were personally responsible for deciding which mode of transport they used (75\%). Only a fifth (21\%) of respondents who travelled as part of their work said their mode of transport was determined by their manager or company policy.

## Regular and smaller food shopping trips

The majority of respondents (81\%) usually shopped for food. This proportion was only notably lower (60\%) amongst young people aged 16-20, who relied on other people in the household to do the food shopping.

Two thirds of respondents usually did a main shop once a week or fortnight, with over half of these ( $37 \%$ of all respondents) also making additional trips to get other items as they needed them. This proportion was slightly higher amongst women (42\%) and those working part-time (46\%) or not working (40\%). Only $13 \%$ of respondents just did more frequent smaller shops for food, this being slightly higher amongst respondents living in London (20\%).

[^7]Table 3.5 Food shopping patterns

|  | Food shopping patterns <br> $\%$ |
| :--- | :---: |
| Main shop only |  |
| Main shop plus top up trips | 30 |
| More frequent smaller trips | 37 |
| Do not shop for food | 13 |
| Base: All respondents $(3,923)$ | 19 |

Base: All respondents $(3,923)$

Of those who usually did a main shopping trip, but did not travel to work by car ${ }^{10}$, $12 \%$ regularly used home delivery (ordering by internet or telephone), so avoiding the need to travel to the shops themselves, and a further $16 \%$ regularly went in the car with other family or friends (who did not live with them). The proportion using home delivery was slightly higher amongst ABs (17\%) and those who were working (17\%). The proportion who regularly car shared was slightly higher amongst younger people (20\% amongst those under 30 years old) and those aged 70+ (19\%).

Of those doing any food shopping (main or more regular trips for food shopping) but did not travel to work by car, just over a third (37\%) combined at least some of these trips with other activities. This was particularly the case amongst older age groups (56\% of those aged 60+).

### 3.2.1 Mode of transport for key journey types

Although mode of transport did vary by the type of journey the respondent was making, private vehicles were the predominant mode for all three of the journey types covered in the survey. As shown in Figure 3.1, around two thirds of those who made these journeys usually used private vehicles for journeys to work/college/school and for business trips. While the proportion that used private vehicles for top-up shopping was lower, private vehicles were still the most common mode for this type of journey ( $56 \%$ of respondents usually used these for top-up shopping). Of the three trips covered in the survey, business trips contained the highest proportion of journeys usually carried out by public transport ( $28 \%$ of business trips) - reflecting the high proportion of business trips by train ( $26 \%$ of business trips), making train the most

[^8]heavily used mode after private vehicles. Just $6 \%$ of respondents, who made business trips, usually travelled by aeroplane.

Figure 3.1. Mode of transport usually used for the longest part of journey by journey type


Bases vary: All respondents who make this type of journey (work/college/school - 2,301, Business trips - 560, Top-up shopping trips - 2,093)

In contrast, a relatively high proportion of trips for top-up shopping were made on foot or by bicycle (around a third of respondents who did top-up shopping usually walked or cycled). Nevertheless private vehicle was still the most common form of transport for this journey.

As illustrated above, the survey data show that levels of car and other private vehicle use were high among the general population.

### 3.3 Private vehicles

This section explores the survey data relating to private vehicle use and is divided into three main sub-sections (vehicle purchasing, ownership, and use).

### 3.3.1 Vehicle purchasing

It is important to understand the factors that influence people's purchasing decision as ultimately, choice of vehicle will have a substantive impact on the CO 2 emissions the user will create. Of the 3,923 respondents interviewed, $82 \%$ lived in a household which owned or had continuous use of a vehicle. Respondents were asked a series
of questions about the vehicle they used the most (whether as a driver or passenger).

### 3.3.2 Characteristics of current vehicle

The average age of the vehicle the respondent personally used the most was 6.8 years, with nearly half ( $47 \%$ ) of all respondents using a vehicle aged between 5 and 10 years old. While a third (33\%) of vehicles were aged between 2 and 5 years old, it was relatively uncommon for respondents to be using vehicles aged 1 year or less (just 10\%). Age of vehicle used most often was linked to a range of factors including annual mileage (those driving more miles per year tended to have newer cars), social grade and household income. Those in the highest equivalised household income quintile were most likely to use newer vehicles - $37 \%$ said the vehicle they used most often was 1-3 years old, compared with $25 \%$ of the respondents overall and just $17 \%$ of those in the bottom income quintile.

Petrol and diesel fuelled vehicles accounted for nearly all vehicles which were used most often by respondents ( $69 \%$ and $30 \%$ respectively). Among households with private vehicles, those powered by alternative fuels such as LPG, biofuels, electricity and hybrids accounted for less than one per cent of those used most often. This was consistent with research carried by Defra in 2009(3).

Respondents were also asked what size the engine was in the vehicle they used most often. For analysis purposes, size has been divided into three bands, up to $1,400 \mathrm{cc}(26 \%$ of respondents), $1,401-1800 \mathrm{cc}(29 \%)$ and $1,801 \mathrm{cc}$ or more (36\%). As with age of vehicle, size of engine was associated with the respondent's household income and annual mileage. As shown by Table 3.6, those with higher household incomes tended to use cars with larger engines, with half (50\%) of those from the highest household income group (quintile 5) using a car with an engine size of 1,801 cc or more, compared with only one in five (21\%) of those from the lowest household income group (quintile 1).

Table 3.6 Engine size of the vehicle used most often, by household income

|  | Total | Income quintile |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Lowest |  |  | Highest |  |
|  |  | 1 | 2 | 3 | 4 | 5 |
| Base |  | 281 | 370 | 405 | 442 | 482 |
| 701 to 1400cc (0.7 to 1.4 litres) | 26 | 29 | 35 | 29 | 21 | 21 |
| 1401 to 1800cc (1.4 to 1.8 litres) | 29 | 32 | 31 | 30 | 30 | 24 |
| 1801cc plus (1.8 litres or more) | 36 | 30 | 29 | 37 | 41 | 50 |
| Base: All with at least one car in the household (3025) |  |  |  |  |  |  |

Half (50\%) of those who personally drove 9,000 miles or more per year used a vehicle with an engine size of 1,801 or more. This may have been linked with respondent location, with those living in urban locations tending to use vehicles with smaller engines than those in rural / semi-rural locations. Around one in three respondents in urban areas (29\%) used vehicles with engines up to 1,401cc compared with $21 \%$ of those living in town, fringe, village, hamlets and isolated dwellings. Furthermore, $44 \%$ of those living in towns, fringe areas or more rural locations used vehicles with an engine size in excess of $1,800 \mathrm{cc}$ compared with just $32 \%$ of those in urban areas.

### 3.3.3 Place of purchase

Of the 3,025 respondents who lived in a household which owned or had continuous use of a vehicle, most (69\%) said the car they used most often had been bought second hand. This compares with 29\% that had been bought new (the remaining two per cent did not know). In keeping with the findings in the previous section, whether the car had been bought new or second hand was linked strongly to household income (those with higher incomes being more likely to have bought their vehicle new). Older groups were also more likely to have bought their vehicle new, with $38 \%$ of those aged 60 or over having bought their car new compared with $21 \%$ of those aged under 40.

Most purchases had been made through a car dealer ( $70 \%$ of all cars purchased consisting of $37 \%$ new cars and $33 \%$ second hand cars), while around a quarter (23\%) had been bought via private sale, and just one per cent via auction. The remainder of this section looks at the factors which respondents felt were important in
their purchase decision and the extent to which environmental factors (such as lower CO2 emissions) were taken into account at the point of purchase.

### 3.3.4 Factors taken into account for vehicle purchase

Although most respondents ( $82 \%$ ) lived in a household with a vehicle not all of these people played an active role in purchasing decisions. In fact $19 \%$ of those living in a household with a vehicle described themselves as either having no influence over which vehicle was bought (15\%) or being a secondary decision maker (having some influence but someone else having the main say) (5\%). These respondents were not asked questions about the factors which were taken into account when they bought a new vehicle. The $80 \%$ who were involved in the purchase decision comprised joint (38\%), sole (31\%), and main (11\%) decisions makers.

Those who were decision makers were asked to look at a list of factors and select those which were important to them when they bought a car or van. The most frequently selected responses (those mentioned by $10 \%$ or more) are summarised in Table 3.7.

Table 3.7 Factors important when buying a car or van


Reliability, costs, safety and comfort were the most commonly cited factors and in this respect there was little variation by the key demographic variables. Regardless of account household income, these four factors were the most commonly cited. These factors were so predominant, they should probably be regarded as 'essential' factors.

There were a number of differences in response by household income as shown in the table above. Those with a higher household income were less likely than those with a lower income to choose cost as a factor (although cost remained the third most common answer even among quintile 5) as well as having a small engine. Whereas they were considerably more likely to select reliability, safety, interior space, environmentally-friendliness and speed / performance and generally to take a greater number of factors into account (4-5 on average compared with 3-4 for those in quintile 1).

Environmental factors appeared less important in most people's purchase decisions. Choosing a vehicle that was 'environmentally friendly' or with low emissions was mentioned by around one in five respondents (22\%). It is arguable that making sure a car has a small engine is also an indirectly 'green' decision (mentioned by $18 \%$ of respondents) although other findings in this section suggest that decisions about car and engine size were also driven by cost considerations rather than concern for the environment.

There were a number of variations in response by household income. While respondents with higher household incomes were more likely to select 'environmentally friendly' from the list of options, they were also less likely to select 'having a small engine' and more likely to select speed / performance as being important. For example those in quintile 5 were the most likely to pick 'environmentally friendly' (31\% compared with $22 \%$ overall) but a similar proportion (25\%) also selected speed / performance. This is seemingly contradictory (given high performance vehicles tend to burn more fuel). In contrast, those in quintile 1 were the least likely to select 'environmentally friendly' as a factor in their purchase decision (16\%) but were the most likely to select having a small engine (28\%) and least likely to select speed / performance (6\%) as important.

Other factors that were linked to environmentally friendliness included highest level of education; those with higher levels tended to be more likely to select environmental friendliness as an important purchasing factor. More than a quarter (27\%) of
respondents with a first degree or higher selected environmentally friendliness, compared with $19 \%$ who were educated to GCSE level and $18 \%$ who held none of the qualifications which were listed in the survey. This may be linked to the differences by income described above but is also consistent with those with higher level qualifications being the best informed and most concerned about environmental issues (as discussed in the previous chapter). In addition women were slightly more likely than men to select environmentally friendliness ( $24 \%$ compared with $20 \%$ ). As well as selecting factors from a list, those who selected 'cost' were asked to say which specific aspect of cost they thought about most when choosing a car or van. Again answers were selected from a pre-defined list and responses are summarised below. The figures are presented both as a percentage of those who selected 'cost' and the equivalent among all respondents:

- Running / fuel costs - $76 \%$ (equivalent of $27 \%$ of all respondents)
- Purchase cost - 72\% (equivalent of $26 \%$ )
- Insurance - 42\% (equivalent of $15 \%$ )
- Tax - 22\% (equivalent of 8\%)
- Resale value - $12 \%$ (equivalent of $4 \%$ )

Of the five cost elements presented, running costs and purchase cost were, by some margin, the most frequently mentioned. While running / fuel costs may have been important for predominantly economic reasons, selecting a car with lower running costs will invariably lead to lower CO2 emissions. Therefore a sizeable proportion of respondents were taking into account factors that may reduce their CO2 emissions even if the motivation was not itself environmental.

### 3.3.5 Buying cars with lower CO2 emissions

As well as asking respondents generally what the most important factors were when deciding what vehicle to buy, the survey also included specific questions about actual environmental purchasing behaviours and likelihood of choosing cars with lower emissions in the future.

Respondents were presented with a list of 11 behaviours including four purchasing behaviours and were asked which if any they had done in the last 12 months. Around one in ten (12\%) claimed to have bought a car with a smaller engine, $5 \%$ said they had looked for information about cleaner vehicles, $4 \%$ said they had switched to a car which used a cleaner source of energy and $1 \%$ said they had bought a hybrid
car. While these were small proportions of the overall population, these are substantial changes for a person to make and should not be understated. It needs to be recognised that relatively few respondents would have bought a car in the 12 months prior to the survey. The survey did not ask specifically when the respondent last bought a car but we know that fewer than 10\% of respondents had a car which was less than one year old. Even allowing for second-hand cars, it is safe to assume the proportion of car purchasers who had bought a car in the last 12 months is small. With so few people having bought a hybrid car or switched to a car with a cleaner energy source it is not surprising there is little variation by subgroup on these measures. There are however some interesting variations on the other two measures presented in Table 3.8.

Table 3.8 Purchasing behaviours in last 12 months

|  |  | Location |  | Education level |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total <br> \% | Urban <br> \% | $\begin{gathered} \text { Rural } \\ \% \end{gathered}$ | ```Degree or higher %``` | A-level equiv \% | $\begin{gathered} \text { GCSE } \\ \text { or } \\ \text { lower } \\ \% \\ \hline \end{gathered}$ |
| Base |  | 2,053 | 660 | 690 | 782 | 1,220 |
| Bought a car with a smaller engine | 12 | 12 | 10 | 12 | 12 | 11 |
| Looked for information about cleaner vehicles | 5 | 5 | 6 | 9 | 5 | 3 |
| Switch to a car with a cleaner source of energy | 4 | 3 | 4 | 4 | 3 | 4 |
| Bought a hybrid car | 1 | 1 | 1 | 1 | 1 | 1 |

Base: All with a driving license who have a car in household $(2,713)$

Buying a car with a smaller engine was linked with respondent location respondents in urban areas were more likely to have done this in the last 12 months ( $12 \%$ compared with $10 \%$ in rural areas). This is consistent with previous discussion in section 3.2.4. In addition, whether a respondent had looked for information about cleaner vehicles in the last 12 months was linked with highest level of education. In particular, those with a first degree or higher were much more likely than average to have done this ( $9 \%$ compared with $5 \%$ ). Those with A-levels or equivalent were also more likely than those with GCSEs or lower to have looked for this type of information. There was no link between level of education and the other measures shown in Table 3.6.

### 3.3.6 Future purchases

This short section presents three measures related to respondents' future purchasing intentions and likelihood of considering a car with lower emissions / a smaller engine.

Figure 3.2. Future purchasing intentions / beliefs


As shown in Figure 3.2, more than half of those asked said that 'low carbon emissions would be high' on their list if they were to buy a new car ( $56 \%$ agreed with this) and that they were likely to buy a petrol or diesel car with lower CO2 emissions / a smaller engine (67\%). However, this apparent willingness to think about environmentally-friendly options is not mirrored in respondents' attitudes towards taxation on high emission vehicles. While 43\% agreed that 'higher taxes should be imposed to try and stop people having cars with high CO2 emissions', roughly the same proportion disagreed. Agreement with this statement varied considerably among car owners depending on the size of the engine of the vehicle they used most often - those with the smallest engines (less than $1,301 \mathrm{cc}$ ) were the most likely to agree that 'higher taxes should be imposed to try and stop people having cars with high CO2 emissions' ( $55 \%$ agreed) whereas those with the largest engines (more than $2,000 \mathrm{cc}$ ) were the least likely to agree (31\%). In the case of the latter group more than half (55\%) disagreed.

For all three measures shown in Figure 3.2, responses varied with respondent location - respondents living in London tended to answer all three statements more positively than those in other parts of the country. They also varied by highest level of education - respondents with a first degree or higher tended to answer the most positively. For example, $79 \%$ of those who answered the question in London said they would be likely to buy a car with lower emissions and/or a smaller engine (compared with 64\% across all other areas). Respondents in London were also more
supportive of environmental taxes, with $50 \%$ agreeing that 'higher taxes should be imposed to try to stop people having cars with high CO2 emissions' (compared with $41 \%$ across all other areas).

Whether respondents were likely to consider buying low emission cars and their attitudes towards taxation to discourage ownership of high emission cars were also linked to their current environmental behaviours / attitudes. Those who said they were already doing a lot of environmentally-friendly things tended to be the most positive about low emission cars and taxation (see Table 3.9). Those who said they were willing to do more, and particularly those who were interested in finding out more about what they could, were similarly more likely. While this maybe selfevident, it is important to understand this connection; it suggests that people who already have an engrained pattern of pro-environmental behaviours and positive attitudes are most likely to think about environmentally-friendly vehicle choices. However, these more positive attitudes were also expressed by a substantial proportion of those who were currently doing only one or two or a few things but expressed a willingness and interest to do more. For example amongst these two groups, $62 \%$ of those who currently do nothing/1-2 things and $75 \%$ who currently do a few things but were willing and interested to do more agreed that low car emissions would be high on their list of must haves if they were to buy a car . Similarly $51 \%$ and $60 \%$ of respondents in these groups respectively agreed that higher taxes should be imposed to try and stop people having cars with high CO2 emissions and 70\% and $80 \%$ respectively would be very likely to buy a lower emission car.

## Table 3.9 Attitudes towards buying lower emissions cars by current

 environmental behaviour|  | Current environmental behaviour ${ }^{11}$ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Do nothing/1-2 things |  |  | Do quite a few things |  |  | Do most/everything |  |  |
|  | Don't want to do more <br> \% | Want to do more, but not interest ed in finding out \% | Want to do more and interest ed in finding out More \% | Don't want to do more <br> \% | Want to do more, but not interest ed in finding out \% | Want to do more and interest ed in finding out More \% | Don't want to do more | Want to do more, but not interest ed in finding out \% | Want to do more and interest ed in finding out More \% |
| Base | 824 | 188 | 396 | 841 | 176 | 636 | 509 | 51 | 266 |
| Low carbon emissions would be high on my list of must haves if I were to buy a new car (agree) | 35 | 32 | 62 | 54 | 60 | 75 | 59 | 48 | 08 |
| Higher taxes should be imposed to try and stop people having cars with high CO2 emissions (agree) | 27 | 36 | 51 | 35 | 37 | 60 | 46 | 46 | 62 |
| Likely to buy a petrol or diesel car with lower CO2 emissions / a smaller engine | 52 | 57 | 70 | 60 | 71 | 80 | 67 | 82 | 85 |

### 3.3.7 Barriers and motivators

In addition those who said they were likely to buy a petrol or diesel car with lower CO2 emissions and/or a smaller engine were asked why this was (described as motivators in this section). Similarly those who said they were not likely were asked why (described as barriers). The most common barriers against buying a car with lower emissions and / or a smaller engine were:

- They are too small (26\%)
- They are not powerful enough (24\%)
- They are more expensive (17\%)
- They are too slow (8\%)
- Already have a car with a small engine (7\%)
- I've always had the same make / model of car (6\%)

[^9]Other responses counted for five per cent or less of the response. Although the base size was limited, there were a number of variations in response which showed different opinions among various sub groups. Men were more likely than women to select 'they are not powerful enough' as a barrier (30\% compared with 16\%) and older people (particularly aged 60 and over) were more likely than the population overall to select 'already have a car with a small engine’ ( $10 \%$ compared with 7\%) and 'I've always had the same make / model of car' ( $9 \%$ compared with $6 \%$ ). People with younger children (aged 0-11) were also more likely to say they were unlikely to consider a car with lower emissions and/or a smaller engine because they were too small ( $38 \%$ compared with $26 \%$ overall).

Aside from these rather obvious differences, responses tended to vary also by household income and to a lesser extent highest level of education. As shown in Table 3.10, respondents with lower household incomes were, as we would expect, more likely than those with higher incomes to say that expense would be a barrier. In contrast those with higher incomes were more likely to choose reasons related to the design and performance of these cars - including their size, power and speed. The inference being that those with more disposable income were less likely to consider a car which they considered to be lower performance. Similar patterns can be seen when looking at highest level of education - most notably, respondents with higher levels of qualifications were more likely to select 'they are too small' and 'they are not powerful enough' as barriers.

Size was also a key barrier for those who were most willing/interested in changing their behaviour ${ }^{12}$ but would be unlikely to buy a car with lower CO2 emissions/smaller engine, with power and expense also being of concern. The proportions mentioning these barriers, $29 \%, 23 \%$ and $20 \%$ respectively, not being substantially different to the survey population overall.

[^10]Table 3.10 Barriers to buying a car with lower CO2 emissions and/or a smaller engine

|  |  |  | Income quintile |  |  |  | Education level |  |  | Desire to do more |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | \% | \% | \% | \% | $\begin{gathered} \text { Degree or } \\ \text { higher } \end{gathered}$ | $\begin{gathered} \text { A-level } \\ \text { equiv } \\ \% \end{gathered}$ | $\begin{gathered} \text { GCSE } \\ \text { or lower } \\ \text { ow } \end{gathered}$ | Want to \& interested in finding out more \% |
| Base |  | 68 | 106 | 100 | 104 | 133 | 160 | 207 | 378 | 181 |
| They are too small | 26 | 17 | 27 | 26 | 32 | 29 | 31 | 26 | 24 | 29 |
| They are not powerful enough | 24 | 16 | 15 | 18 | 31 | 43 | 30 | 32 | 16 | 23 |
| They are more expensive | 17 | 30 | 20 | 24 | 18 | 8 | 14 | 18 | 18 | 20 |
| They are too slow | 8 | 4 | 4 | 11 | 8 | 14 | 9 | 11 | 7 | 7 |

Base: All who are unlikely to consider buying a car with lower emissions and/or a smaller engine (751)

There were five main motivators for buying a car with lower CO2 emissions and/or a smaller engine which can be divided into financial and environmental. The three financial motivators consisted of being 'cheaper to run' ( $55 \%$ gave this as a reason for being likely to buy one), falling in a 'lower tax band' (20\%) and being 'cheaper to buy' (13\%). The environmental motivators were because 'I care about the environment' (43\%) and 'to reduce my CO2 emissions' (37\%).

Table 3.11 Motivators for buying a car with lower CO2 emissions and/or a smaller engine

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline \& \& \multicolumn{5}{|c|}{Income quintile} \& \multicolumn{3}{|c|}{Education level} \& Desire to do <br>
\hline \& Total

$\%$ \& \% \& 2
$\%$ \& 3
$\%$ \& 4
$\%$ \& 5

$\%$ \& Degree or higher \& A-level equiv \% \& | GCSE or lower |
| :--- |
| \% | \& Want to \&

interested in
finding out more
$\%$ <br>
\hline Base \& \& 156 \& 192 \& 255 \& 291 \& 316 \& 492 \& 510 \& 749 \& 760 <br>
\hline Because they are cheaper to run \& 55 \& 55 \& 52 \& 62 \& 66 \& 51 \& 48 \& 54 \& 59 \& 50 <br>
\hline I care about the environment \& 43 \& 34 \& 44 \& 42 \& 47 \& 55 \& 58 \& 43 \& 36 \& 54 <br>
\hline To reduce my CO2 emissions \& 37 \& 36 \& 35 \& 34 \& 30 \& 36 \& 46 \& 37 \& 31 \& 45 <br>
\hline Lower tax band \& 20 \& 16 \& 15 \& 25 \& 21 \& 23 \& 22 \& 20 \& 20 \& 22 <br>
\hline Because they are cheaper to buy \& 13 \& 13 \& 13 \& 12 \& 12 \& 12 \& 13 \& 12 \& 14 \& 10 <br>
\hline
\end{tabular}

Base: All who are likely to consider buying a car with lower emissions and/or a smaller engine $(1,763)$

Women were more likely than men to be motivated because they 'care about the environment' ( $48 \%$ gave this as a reason compared with $39 \%$ of men), otherwise differences by age and gender were minimal. However, as we have seen with barriers to buying these types of car, motivators did vary considerably by household income and more noticeably by highest level of education.

Looking at household income the most striking difference was in relation to the second reason. Those with higher incomes tended to be more likely to select 'care about the environment' as a motivator ( $55 \%$ of those in the top quintile selected this, making it the most frequently mentioned reason). Differences on other motivators were less clear cut and there was no evidence to suggest that those with lower incomes were more likely to select economic motivators than those on higher incomes (which is in contrast to the barriers discussed above).

Differences by level of education were more pronounced - those with higher levels of qualification were noticeably more likely to select environmental motivators than those with lower levels (especially those with a first degree or higher, consistent with their concern about climate change). Conversely, they were less likely to be motivated by cheaper running costs. In fact among those with a first degree or higher the most frequently mentioned motivator was 'care about the environment' (58\%), mentioned more frequently even than cheaper running costs (48\%).

Similarly, those who show most willingness and interest in adopting more environmentally friendly behaviours were more likely to select environmental motivators, with 'care about the environment the most frequently mentioned motivator (54\%).

### 3.3.8 Vehicle ownership

The majority (82\%) of all respondents surveyed lived in a household with at least one car. This proportion was slightly lower amongst those aged 21-29 (70\%), but not amongst the youngest respondents aged 16-20 (80\%), suggesting that the youngest age group were more likely to be still living at their parents home where there was a car. Linked to this, the proportion of households with a car was also higher amongst those who had children under 18 years old (86\%) and lower amongst respondents aged 70 and older (70\%).

As illustrated in Table 3.12 below, the proportion of respondents living in households with at least one car was strongly related to income and location; being higher amongst the higher socio-economic and income groups, those who were working and those living in more rural areas. The proportion of respondents living in households with a car was notably lower in London (69\%) than in other areas of the country.

Table 3.12 Profile of respondents living in households with a car


Just over two fifths (43\%) of respondents lived in households with two or more cars. These were more likely to be respondents in the highest socio-economic groups $A B$ (61\%) and those living in rural areas (72\%).

The average number of cars per household overall was 1.4 , with this rising to 1.8 among all household with cars. Consistent with findings discussed earlier, the number of cars per household was linked strongly with location but also with income quintile. In London a third of all households had no car and, even among those households that did, the average number was only 1.5 compared with 1.8 overall and 2.2 in rural areas. This pattern was echoed by the proportion of households with three or more cars. In urban areas only 5\% of household had three or more cars but this rose to just under one in five households in town and fringe locations (15\%) and a quarter in rural areas (24\%).

Table 3.13 Vehicles in households

|  |  | Location |  |  |  | Income quintile |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Lowest |  |  |  | Highest |
|  | $\begin{gathered} \hline \text { Total } \\ \% \end{gathered}$ |  |  |  |  | Urban Londo n | $\begin{gathered} \hline \text { Urban- } \\ \text { other } \\ \% \end{gathered}$ | $\begin{gathered} \text { Town } \\ \text { \& } \\ \text { fringe } \end{gathered}$ | Village, hamlet, isolated isolated \% | \% | \% | $\stackrel{3}{3}$ | $\stackrel{4}{\%}$ | \% |
| Base |  | 403 | 2732 | 346 | 442 | 542 | 508 | 472 | 481 | 517 |
| No car | 18 | 35 | 19 | 12 | 4 | 39 | 21 | 9 | 6 | 6 |
| 1 or more cars | 82 | 64 | 81 | 88 | 96 | 61 | 79 | 90 | 94 | 94 |
| 1 car | 38 | 43 | 41 | 38 | 24 | 37 | 48 | 41 | 34 | 33 |
| 2 cars | 31 | 16 | 29 | 36 | 48 | 17 | 24 | 36 | 45 | 44 |
| 3 or more cars | 13 | 6 | 11 | 15 | 24 | 7 | 8 | 13 | 16 | 18 |
| Mean number of cars (including households with no car) | 1.4 | 0.9 | 1.4 | 1.6 | 2.1 | 1.0 | 1.2 | 1.6 | 1.8 | 1.8 |
| Mean number of cars (excluding households with no car) | 1.8 | 1.5 | 1.7 | 1.8 | 2.2 | 1.6 | 1.5 | 1.8 | 1.9 | 1.9 |

Base: All respondents $(3,923)$

Household income was also a good indicator of presence and number of cars, showing that ownership or multiple vehicles was at least in part driven by economic factors. In quintiles 3 to $5,90 \%$ or more of households owned at least one car, with the average number of cars per household standing at around 2 in quintiles 4 and 5 . Both presence and number of vehicles were substantially lower in quintiles 1 and 2.

As discussed in the previous chapter, car ownership was loosely linked with people's perceptions of their own environmentally-friendliness and willingness/interest in
adopting more environmentally friendly behaviours. Whilst those who felt that most things they did were environmentally friendly were less likely to own/drive a car, those who expressed most willingness/interest in changing included those with the highest levels of car travel.

Table 3.14 shows car / van ownership and average number of vehicles split by this measure ${ }^{13}$.

Table 3.14 Vehicles in households by environmental attitude / behaviour

| Total |  | Do nothing/1-2 things |  |  | Do quite a few things |  |  | Do most/everything |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (1) Don't want to do more | (2) <br> Want <br> to do <br> more, <br> but not <br> int. in <br> finding <br> out | (3) <br> Want <br> to do <br> more and int. <br> in finding out More | (4) Don't want to do more | (5) <br> Want <br> to do <br> more, <br> but not <br> int. in <br> finding <br> out | (6) <br> Want <br> to do <br> more and int. <br> in finding out More | (7) Don't want to do more | (8) <br> Want <br> to do <br> more, <br> but not <br> int. in <br> finding <br> out | $(9)$ Want to do more and int. in finding out More |
| Base |  | 824 | 188 | 396 | 841 | 176 | 636 | 509 | 51 | 266 |
| Car in household | 82\% | 78\% | 85\% | 86\% | 84\% | 86\% | 88\% | 74\% | 72\% | 76\% |
| Mean number of cars (exc. households with no car) | 1.8 | 1.8 | 1.9 | 1.8 | 1.6 | 1.8 | 1.8 | 1.8 | 1.8 | 1.6 |

While levels of car ownership were lower than average in groups (7-9) (74\%, 72\% and $76 \%$ respectively), ownership amongst those who are most interested/willing to change (i.e. across groups 3,6 and 9 ) was slightly above the national average (85\%). Similarly, the average number of cars per household showed no consistent variation by environmental behaviours and attitudes.

### 3.3.9 Attitudes towards car ownership

This section examines attitudes towards car ownership among respondents who lived in household that had a car or van. Responses to six attitude statements are summarised in Figure 3.3.

[^11]Figure 3.3 Attitudes towards car ownership - car owners


Bases: All who lived in a household with a vehicle $(3,025)$

Overall the majority agreed with 'I couldn't manage without a car' (65\%) and 'people who don't own a car are at a disadvantage' (56\%). The majority also disagreed with 'if I could I would gladly do without a car' (61\%). These majority views point to a group of respondents who were wedded to their vehicles and considered a car to be a necessary part of life. It was interesting however, that more than half (55\%) disagreed with 'I think owning a car is a sign of success' (just $18 \%$ agreed with this). This seems contradictory to the other views expressed in Figure 3.3. However, it is worth noting that respondents living in households with no car or van (who were also asked the question) were more likely to agree that owning a car is a sign of success (30\%), although even amongst this group 47\% disagreed. Opinion was more evenly split in regard to whether not owning a car would damage their job prospects.

It is also important to understand how attitudes towards vehicle car ownership varied (considerably) by sub-group. Those who were more likely to agree that 'owning a car is a sign of success' included a high proportion of younger people ( $32 \%$ of those aged under 30 agreed compared with just $16 \%$ of those aged 30 and over), and people in socio economic groups C2DE ( $26 \%$ compared with $16 \%$ of ABC1s). The latter variation was also consistent with differences by household income - those with higher incomes being less likely to see ownership as a sign of success.

In contrast attitudes towards managing without a car were most strongly associated with location. Those living in rural areas were more likely than the wider population to disagree with 'if I could I would gladly do without a car' ( $65 \%$ disagreed) and more likely to agree that 'I couldn't manage without a car’ ( $82 \%$ agreed). In contrast, those in urban areas and particularly in London were more likely to express the opinion that they could manage without a car and would give up their car if they could. These differences in response are consistent with the need for people in rural locations to travel further on average than those in urban locations; and with the wider availability of public transport in urban locations. We know for example that the mean distance travelled to work for respondents in London was 8.2 miles compared with 11.3 in rural areas and that the number of miles driven per year among those who drive was higher in rural locations than urban locations (see section 3.3 below).

Similar differences in response can be seen in relation to 'people who don't own a car are at a disadvantage' - $51 \%$ of respondents in urban locations agreed with this, but agreement was substantially higher (63\%) in rural and semi-rural locations. Agreement with 'not having a car would seriously damage my career / job prospects' was also associated with location; in London, just $26 \%$ of respondents agreed with this, the majority actually disagreeing that this was the case. In other urban areas and town and fringe locations, agreement rose to $41 \%$ and $43 \%$ respectively and in rural areas agreement was as high as $52 \%$. Views on how car ownership affected career / job prospects were also linked with the industry the respondent worked in, although to some extent this may be linked via location (i.e. urban or rural). Specifically, those working in manual industries were more likely than respondents from other sectors to agree with 'not having a car would seriously damage my career / job prospects'. Seven in ten (70\%) agreed with this compared with $53 \%$ of respondents working in other industries.

### 3.3.10 Reasons for I attitudes towards not owning a car or van

Only four percent of respondents were inactive drivers, i.e. had a driving license but did not have a car or van in their household. When asked why they did not have a vehicle at that time, the overwhelming majority said this was either because of the cost / it was too expensive (69\%) or because they had no need for a car or van (24\%). Other reasons mentioned by a small minority of respondents included being too old or unwell (6\%), not liking driving (5\%) and being temporarily without a car or van (3\%).

The findings suggested a general ambivalence to owning a car or van among inactive drivers. Just $36 \%$ of inactive drivers said they were very or fairly keen to own a vehicle, compared with $47 \%$ who said they were not very or not at all keen (the remaining $17 \%$ indicated they were not sure).

Figure 3.4 shows the responses to a number of statements about car ownership from all those who lived in a household without a vehicle (including both inactive drivers and those who did not have a driving licence).

Figure 3.4. Attitudes towards car ownership - Non owners


Bases: All who lived in a household without a vehicle (898)

While $46 \%$ of non-owners agreed that people who don't own a car (i.e. people like themselves) are at a disadvantage a similar proportion (39\%) disagreed. Notably non-owners were less likely to agree with the statement than those who owned a car or van (of whom $56 \%$ agreed). And, while non owners were more likely than owners to agree that owning a car is a sign of success ( $30 \%$ compared with $18 \%$ of owners), a larger proportion (46\%) actually disagreed with this statement.

While only around a fifth (21\%) agreed that not owning a car or van had seriously damaged their career / job prospects, opinion varied substantially in different subgroups of non-owners. Those from the lower socio economic groups C2DE were more likely to agree that not owning a car or van had caused serious damage than were those from the higher socio economic groups ABC1 ( $24 \%$ compared with 14\%). This is may be linked to two additional factors - income and occupation - both of which are highly correlated with socio economic group. Non-owners in lower income
quintiles were more likely to agree that not owning a vehicle had damaged their career / job prospects ( $25 \%$ in quintile 1 agreed compared with $17 \%$ in quintiles 2-5). It seems reasonable to assume that non-owners with higher incomes have made a choice not to own a car and were therefore less likely to be negatively affected. Unfortunately, due to limitations on the base size for this measure it was not possible to assess whether opinions differed by industry and occupation.

### 3.3.11 Car clubs

The survey included two questions about car clubs (such as Street Car and Zip Car) and formal car sharing schemes. Just one per cent of all respondents were a member of either a car club or a formal car sharing scheme. Even in London just three per cent of respondents belonged to a car club and there were no significant variations in membership of formal car sharing schemes by location.

Reasons given for not being a member of a car club or formal car sharing scheme included already having a car ( $34 \%$ of those who were not a member of either), not being aware of such services (17\%), not having these services in their area (16\%) and having no need to use a car (10\%). Membership therefore appears limited by a lack of need for car clubs and sharing schemes as well as a lack of awareness and local availability. The proportion who had not joined a car club or sharing scheme because they were not aware of them was highest outside of London (18\% gave this response compared with $7 \%$ in London). Similarly the proportion who stated that they were not available in their area was a lot higher ( $18 \%$ compared with $2 \%$ in London, and $43 \%$ in rural areas).

### 3.4 Vehicle use

Although $18 \%$ of the survey population did not have a car or van in their household, it was not the case that these people did not travel by car or van. In fact two thirds (66\%) of all respondents were private car drivers and a further $4 \%$ were 'inactive drivers' having a driving license, but no car to drive. One in six respondents (15\%) did not have a driving license, but travelled as passengers in cars driven by other members of the household. The remaining $14 \%$ of respondents did not drive, having no driving license or car to drive.

Table 3.15 Driving status

| Driving status |  |  |  |
| :---: | :---: | :---: | :---: |
| Driver <br> $\%$ | Inactive driver <br> $\%$ | Passenger <br> $\%$ | Non-driver <br> $\%$ |
| 66 | 4 | 15 | 14 |
| Base: All respondents (3,923) |  |  |  |

As illustrated in Table 3.16 below, the profile of drivers broadly reflected that of all respondents who lived in a household with a car, being significantly higher amongst males, people aged between 30-69, people who worked and were in higher socioeconomic groups, and those living in towns and more rural areas. The proportion of drivers was lowest amongst respondents aged 16-20 (28\%), reflecting the current licensing regulations.

Table 3.16 Profile of private car drivers


Table 3.17 summarises frequency of travel by private cars and vans split by presence of car in household and location.

Table 3.17 Frequency of travel by private car or van and annual mileage


Nearly nine out of ten (87\%) respondents travelled by private car or van at least once or twice a week. A further $7 \%$ travelled less often than this but at least once or twice a month with the same proportion (7\%) travelling less than once a month. Frequency of car/van travel was, of course, associated strongly with the presence of a vehicle in the household -97\% of those who lived in a household with a car travelled by car at least once or twice a week compared with less than half (42\%) of those who did not have a car. Those who had no car in the household, (informally) received lifts from others outside the household such as friends, family, colleagues etc who had a car/van. For example, seven per cent of those who regularly drove to work/college said they gave a lift to a friend, neighbour or colleague and $16 \%$ of those who did a main shop regularly shared a car with friends or family (who did not live with them). Car sharing is discussed further later in this chapter.

This difference in car/van travel probably accounts for differences in frequency of travel by location. As discussed previously, ownership of cars and vans was lower in urban than in rural areas (particularly in London) and frequency of travel as shown in Table 3.17 is consistent with this. A similar regional variation in miles driven per year can be seen among current drivers. The proportion of drivers covering 1-4,999 miles or more was highest in urban areas ( $47 \%$ in London and $30 \%$ in other urban areas) and the proportion of drivers covering 9,000 miles or more was highest in rural areas ( $46 \%$ in both 'town and fringe' locations and 'village, hamlet and isolated dwellings' locations).

In addition to general vehicle use, the survey captured use of cars and vans for three different types of trip: regular trips to work / school / college, business trips and topup shopping trips ${ }^{14}$. Mode of transport usually used for each of these trips is summarised in Table 3.18 (in the case of the business trips this was asked in relation to last business trip made).

Table 3.18 Mode of transport used by type of trip

|  | Work / School I College \% |  |  | $\begin{gathered} \text { Business trips } \\ \% \end{gathered}$ |  |  | $\begin{gathered} \text { Top-up shopping } \\ \% \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Car | No car | Total | Car | No car | Total | Car | No car |
|  | \% | \% | \% | \% | \% | \% | \% | \% | \% |
| Base | 2007 | 1726 | 280 | 527 | 504 | 23 | 2093 | 1591 | 499 |
| Car or van as passenger or driver | 65 | 73 | 9 | 65 | - | - | 56 | 68 | 9 |
| Car / van as driver | 59 | 67 | 1 | 57 | - | - | 47 | 58 | 2 |
| Bus | 12 | 8 | 40 | * | - | - | 7 | 3 | 25 |
| Walk | 10 | 8 | 28 | * | - | - | 34 | 27 | 63 |
| Car / van as passenger | 6 | 6 | 8 | 7 | - | - | 9 | 10 | 7 |
| Railway train | 5 | 5 | 9 | 26 | - | - | * | * | * |
| Tube / metro / light rail / tram | 3 | 2 | 8 | 2 | - | - | 4 | - | 1 |
| Bicycle | 3 | 2 | 6 | * | - | - | 2 | 2 | 2 |
| Motorbike / moped scooter | 1 | 1 | 1 | * | - | - | * | - | * |
| Aeroplane | * | - | - | 6 | - | - | - | - | - |
| Long distance coach | - | - | - | * | - | - | - | - | - |

[^12]Across all three trip types travelling by car (either as a driver or passenger) was the most heavily used mode, in most cases the respondent being the driver. For business travel, train was the second most frequently used form of transport (26\%) and for small, top-up shopping trips walking (34\%) was the most frequent alternative to using a car. However, for travelling to work, school or college there was no notable alternative mode, with smaller proportions using buses (12\%), trains/trams (8\%) bicycles/motorbike (4\%) or walking (10\%).

### 3.4.1 People with disabilities and health problems

To determine if respondents had any disability or health problems that would affect their ability to use a car, all respondents were asked if they had any disability or other long standing health problems. Overall $5 \%$ of respondents said they had a disability or health problems which made it difficult for them get in and out of car. These tended to be older people ( $15 \%$ of those aged $70+$ encountered difficulties).

### 3.5 Eco and Smarter driving

Eco and Smarter driving are terms used to describe a range of driving techniques which can be adopted to reduce fuel consumption and CO2 emissions. These include things like regularly checking tyre pressure and avoiding over-revving your car to ensuring the vehicle operates an optimal level. Awareness of the specific terms eco-driving and Smarter driving was generally low among current drivers. Around one quarter of those asked said they either knew a lot (5\%) or a fair amount (20\%) about the terms, whereas $40 \%$ said they knew just a little and $35 \%$ claimed to know nothing about the terms (including 19\% who said they had never heard of them). Variation by sub-groups was minimal. Awareness of the terms was no higher among younger people - 66\% of those aged under 30 had heard of the terms compared with $65 \%$ overall.

While awareness of these types of terms may be low, the survey suggested that people may be adopting a range of techniques which may fall under the umbrella of eco or smarter driving. When presented with a list of possible actions, nearly half (45\%) of those asked said that in the last 12 months they had been driving in a more fuel efficient manner. There was significant variation on this measure by age and gender - men were more likely than women to say they had done this (52\% compared with $36 \%$ ), younger people less likely than older people ( $34 \%$ of under 30s compared with $47 \%$ of those aged 30 and over).

Respondents were also asked to choose from a more detailed list of specific driving techniques that they had adopted. The list covered 10 different techniques, responses to which are shown in Table 3.19. Overall 89\% of respondents said they had adopted at least one of the techniques with checking tyre pressure, going easy on the accelerator and reading the road being the most frequently mentioned. Responses to this question in isolation do not indicate the respondents' motives for adopting these behaviours but the analysis in Table 3.19 does suggest that these driving behaviours may be partly environmentally motivated.

Table 3.19 Driving techniques adopted

\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \& \& \multicolumn{3}{|l|}{Environmental behaviour} \& \multicolumn{2}{|c|}{Gender} <br>
\hline \& Total

$\%$ \& \[
$$
\begin{gathered}
\hline \text { Do only one } \\
\text { or two things } \\
\text { that are env. } \\
\text { friendly or } \\
\text { less } \\
\%
\end{gathered}
$$

\] \& | Do quite a |
| :---: |
| few things |
| that are env. |
| friendly |

$\%$ \& $\substack{\text { Env. } \\ \text { friendly yn } \\ \text { most or } \\ \text { everything । } \\ \text { do } \\ \text { do } \\ \%}$ \& Male

$\%$ \& Female

$\%$ <br>
\hline Base \& \& 906 \& 1192 \& 456 \& 1318 \& 1243 <br>
\hline Adopted any of listed techniques \& 89 \& 85 \& 91 \& 93 \& 92 \& 86 <br>
\hline Regularly checking my tyre pressure \& 56 \& 50 \& 57 \& 68 \& 65 \& 47 <br>
\hline Not accelerating too hard / going easy on the accelerator \& 56 \& 47 \& 60 \& 64 \& 61 \& 51 <br>
\hline Reading the road to avoid unnecessary acceleration and braking \& 51 \& 42 \& 53 \& 66 \& 55 \& 47 <br>
\hline Changing my speed to save fuel \& 47 \& 42 \& 49 \& 51 \& 51 \& 41 <br>
\hline Planning my journey to avoid congestion/road works/getting lost \& 41 \& 35 \& 41 \& 52 \& 43 \& 38 <br>
\hline Using air conditioning only when I really need it \& 38 \& 32 \& 40 \& 43 \& 39 \& 37 <br>
\hline Driving off from cold / Not warming up the car before driving off \& 28 \& 23 \& 29 \& 32 \& 30 \& 25 <br>
\hline Switching off my engine when stuck in a traffic jam \& 22 \& 16 \& 24 \& 29 \& 23 \& 20 <br>
\hline Checking revs / changing gear between 2000rpm and 2500rpm \& 22 \& 16 \& 24 \& 27 \& 26 \& 17 <br>
\hline Removing unused roof racks \& 7 \& 4 \& 8 \& 11 \& 10 \& 5 <br>
\hline None-l've not adopted any of them \& 10 \& 14 \& 8 \& 5 \& 7 \& 12 <br>
\hline Don't know \& 1 \& 1 \& 1 \& 1 \& 1 \& 1 <br>
\hline
\end{tabular}

The amount people claimed to be doing that was environmentally friendly is linked with driving behaviours adopted. Those who claimed to be environmentally friendly in most or everything they do were more likely to have adopted each of the 10
measures than those who said they did only one or two things (or less). In fact 93\% of the former group had adopted at least one of the measures and an average of 4-5 measures compared with $85 \%$ and an average of 3 for the latter.

Adoption of these behaviours also differed by gender, with men being significantly more likely to have adopted each behaviour ( $92 \%$ having adopted at least one and an average of four; compared with $86 \%$ and an average of just over three for women).

### 3.6 Car sharing

As discussed earlier in this chapter, membership of formal car sharing schemes was uncommon: just one per cent of all respondents belonged to such a scheme. The survey also covered more informal car sharing arrangements, for example taking work colleagues, friends and family as part of a trip to work or sharing a car for shopping trips. Those who regularly drove to work, college or school tended to usually go alone (77\%) with around a quarter (23\%) taking another person. For drivers who took another person with them this tended to be one of their children ( $9 \%$ of people who drove to work usually took a child - the equivalent of $19 \%$ of those with children) or a friend, neighbour or work colleague who didn't live with them (7\%). It was less common for a driver to take their spouse or partner (3\%) or another member of their family that they lived with (2\%).

The proportion of drivers who usually took another person on their way to work, college or school did vary by sub-group but this is mainly associated with presence of children / the proportion of drivers who took a child as part of their trip. Around one in five drivers with children in their household (19\%) took a child with them, although they were less likely than those with no children to take a friend, neighbour or work colleague with them ( $5 \%$ compared with $9 \%$ ).

Those who regularly drove to work, school or college and who made business trips as a driver were asked whether they could share their journey (either by getting a lift with someone who was going to the same place or through a car sharing scheme).

Table 3.20 Sharing cars for regular journeys and business trips

|  | Regular journey <br> to work / college l <br> school <br> $\%$ | Business trips |
| :--- | :---: | :---: |
| Either getting a lift or car share scheme | 29 | 27 |
| Getting a lift with someone else going to the same place | 25 | 25 |
| Through a car share scheme | 11 | 4 |
| Base: All who regularly drive to work, college or school(1,221) / All who make business trips as a driver (298) |  |  |

As shown in Table 3.20, the proportion who said they could get a lift was the same for regular work, college and school journeys and for business trips (25\%). Car share schemes were more likely to be available for regular journeys than they were for business trips.

Sharing cars when doing a main food shop was also relatively uncommon- just 16\% of those who did a main food shop said they regularly shared a car with people (who did not live with them). Sharing cars for food shopping seemed to be closely associated with socio economic group and household income - higher (ABC1) socio economic groups were less likely than lower (C2DE) socio economic groups to share cars for shopping ( $13 \%$ compared with $21 \%$ ) and those from higher household income quintiles 3 to 5 were less likely than those from lower household income quintiles 1 and 2 (13\% compared with 21\%).

### 3.7 Barriers to using alternative methods

This section explores the barriers (including perceived barriers) which discouraged people from using alternatives to private vehicles. The section focuses on those people who used cars and vans for trips at the time of the survey and looks at barriers to alternative methods generally as well as in the context of specific trips like regular work journeys.

### 3.7.1 General barriers to using alternative modes

Respondents who had a car in their household and travelled by car or van more than once or twice a year were asked what they would miss most about having a car. From a list of seven options the most frequently selected were 'sense of freedom' (50\%), 'ability to get to work' (21\%) and 'ability to go shopping' (12\%). In total these three options accounted for $83 \%$ of response with other options like 'visiting relatives' and 'going to a leisure activity' hardly featuring by comparison (5\% and 4\% respectively).

Whether respondents missed the ability to get to work was clearly dependent on whether or not they were working (33\% of those who were working full-time selected this option compared with $21 \%$ overall). However, even among working people who travelled by car or van at least once a day the most common response was 'sense of freedom'.

There was limited variation in response by other variables although respondents in London were less likely than those in other areas to say they would miss a 'sense of freedom' (39\% compared with $51 \%$ in the rest of the country).

## Habit

Respondents who used a car or van at least once or twice a week were asked to answer 'yes' or 'no' to a series of statements about travelling by car. The statements were designed to measure the extent to which travelling by car was a habit ${ }^{15}$ for the respondent. Response to the six statements is shown in the table below. Those who tended to travel by car out of habit have been defined as those saying yes to

[^13]statements $\mathrm{a}, \mathrm{d}$ and e . These were the people who tended to travel by car without thinking about it.

Table 3.21 Travelling by car out of habit

|  |  | Car owner? |  | Car owners only |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Travelling by car is something... | Total <br> $\%$ | Yes <br> $\%$ | No <br> $\%$ | Urban - <br> London <br> $\%$ | Urban - <br> other / <br>  <br> fringe <br> $\%$ | Village, <br> Hamet, <br> Isolated <br> Dwelling <br> $\%$ |
| Base |  | 2928 | 415 | 255 | 2667 | 426 |
| (a) That belongs to my (daily, weekly, monthly) routine | 81 | 86 | 31 | 75 | 85 | 95 |
| (b) I do frequently | 81 | 86 | 29 | 73 | 85 | 93 |
| (c) I have been doing a long time | 81 | 85 | 34 | 71 | 86 | 94 |
| (d) That's typically 'me' | 69 | 74 | 24 | 61 | 74 | 83 |
| (e) I do automatically | 69 | 74 | 20 | 57 | 74 | 86 |
| (f) That would require effort not to do it | 64 | 68 | 22 | 54 | 66 | 82 |
| Mean number of 'yes' responses | $\mathbf{4 . 5}$ | $\mathbf{4 . 7}$ | $\mathbf{1 . 6}$ | $\mathbf{3 . 9}$ | 4.7 | 5.3 |
| Those who travel by car out of habit | $\mathbf{6 1}$ | $\mathbf{6 6}$ | $\mathbf{1 5}$ | $\mathbf{4 3}$ | $\mathbf{7 1}$ | $\mathbf{7 7}$ |

Base: All who use a car or van at least once or twice a week $(3,348)$

The level of positive response to each of the six statements was quite high - the majority saying yes to each (with respondents saying yes to 4.5 of the 6 statements on average). Furthermore, using the definition above, around six in ten of those who regularly travelled by car can be described as travelling by car out of habit. Amongst those who were willing/interested in adopting more environmentally friendly behaviours, $51 \%$ travelled by car out of habit.

Response to these questions was linked strongly to presence of car in household two thirds (66\%) of those with a car or van in the household could be defined as travelling by car out of habit, compared with $15 \%$ of those with no car or van. As previously discussed ownership was linked with a number of factors like household income and location (see Section 3.1). However, it was possible to examine the effect that other factors have on habit within car / van owners specifically. The level to which travelling by car was a habit among owners was linked to a number of factors but especially to location. Owners living in rural areas were the most likely to be defined as travelling (77\%) and those living in London were the least likely (43\%). As shown in Table 3.21, over eight in ten of those living in 'village, hamlet and
isolated dwellings' locations agreed with each of the 6 statements with the average number of yes responses coming out at 5.3.

### 3.7.2 Attitudes towards travelling by car

Respondents were asked how much they agreed or disagreed with a series of statements about travelling by car and driving. The six statements presented in Figure 3.5 below point to a population with positive views of travelling by car and driving. For example, a large majority (78\%) of respondents who travelled to work by car or van agreed that it was 'usually quicker to get to work by car than use public transport' and notably two thirds (68\%) of all respondents agreed that 'people should be allowed to use their cars as much as they like'.

Figure 3.5. Attitudes towards travelling by car


Bases vary: (1) All who work and travel to the same place of work at least twice a week and own/use a car/van
$(1,434)(2)$ All with a driving license $(2,781) /(3)$ All respondents $(3,923) /(4)$ All current drivers $(2,543) /(5)$ All with a car or van in household(3,025)

In addition, among those with a car or van in the household, more than half agreed that 'in general it's usually cheaper... to go by car than use public transport' (57\% agreed while $24 \%$ disagreed) and that '... there are no practical alternatives to travelling by car' (52\% while 37\% disagreed).

The results also suggest that for a lot people, driving is an enjoyable experience hence the barriers to using alternative forms of transport are not merely practical or logistical. Nearly three quarters (73\%) of those with a driving license agreed with 'I enjoy driving’ (just 13\% disagreed) and 65\% of current drivers agreed with 'I enjoy driving on my own' ( $15 \%$ disagreed).

Attitudes towards travelling by car vary by a number of factors but it is interesting that respondents' current environmental behaviour is not necessarily a good indicator of how they feel about driving and travelling by car. Looking just at those who describe themselves as being environmentally-friendly in most or everything they currently do, the proportion who agree 'people should be allowed to use their cars as they like' is only marginally lower than the overall average (62\% compared with 68\%). Similarly they were equally as likely to agree '... there are no practical alternatives to travelling by car' (52\%) and that 'in general it's usually cheaper... to go by car than use public transport' (54\% compared with $57 \%$ overall). Similarly amongst those who are most willing/interested in improving their environmental behaviour only $55 \%$ felt 'people should be allowed to use their cars as they like', but comparable proportions to the overall average agreed that '...there are no practical alternatives to travelling by car' and that '...it is usually cheaper...', consistent with there being a significant proportion of this group living in rural areas.

Instead, some attitudes were more closely linked with gender, socio economic group, location and highest level of education. Differences in levels of agreement by these factors are presented in Table 3.22. The table shows those statements which had significant variation by these variables. These differences are probably associated with differences in travelling by car (both in terms of annual mileage and frequency of travelling by car).

Table 3.22 Attitudes towards travelling by car by demographic factors

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline \& \multicolumn{2}{|c|}{Gender} \& \multicolumn{2}{|c|}{SEG} \& \multicolumn{3}{|c|}{Location} \& \multicolumn{3}{|l|}{Level of education} <br>
\hline \& Men

$\%$ \& Women

$\%$ \& ABC1

$\%$ \& C2DE

$\%$ \& Urban London \& \[
$$
\begin{gathered}
\hline \text { Urban - } \\
\text { Other I } \\
\text { town \& } \\
\text { fringe } \\
\% \\
\hline
\end{gathered}
$$

\] \& Village Hamlet, Isolated Dwell. \% \& \[

$$
\begin{gathered}
\text { First } \\
\text { degree } \\
\text { of } \\
\text { higher } \\
\% \\
\hline
\end{gathered}
$$

\] \& | A-level equiv |
| :--- |
| \% | \& Lower none <br>

\hline It is usually quicker to get to work by car than use public transport ${ }^{1}$ \& 78 \& 77 \& 76 \& 81 \& 51 \& 80 \& 89 \& 71 \& 80 \& 80 <br>
\hline I enjoy driving ${ }^{2}$ \& 75 \& 70 \& 71 \& 73 \& 74 \& 72 \& 74 \& 73 \& 71 \& 74 <br>
\hline People should be allowed to use their cars as much they like ${ }^{3}$ \& 72 \& 65 \& 65 \& 73 \& 57 \& 70 \& 71 \& 57 \& 68 \& 73 <br>
\hline I enjoy driving on my own ${ }^{4}$ \& 64 \& 65 \& 63 \& 67 \& 65 \& 65 \& 64 \& 66 \& 65 \& 64 <br>
\hline In general it's usually cheaper... to go by car than use public transport ${ }^{5}$ \& 58 \& 56 \& 57 \& 58 \& 45 \& 57 \& 66 \& 56 \& 59 \& 56 <br>
\hline For me there are no practical alternatives to travelling by car ${ }^{5}$ \& 54 \& 50 \& 52 \& 51 \& 34 \& 49 \& 75 \& 50 \& 53 \& 52 <br>
\hline Base ${ }^{(1)}$ \& 688 \& 746 \& 982 \& 452 \& 130 \& 1137 \& 167 \& 434 \& 430 \& 557 <br>
\hline Base ${ }^{(2)}$ \& 1417 \& 1364 \& 1803 \& 978 \& 233 \& 2165 \& 496 \& 711 \& 786 \& 1263 <br>
\hline Base ${ }^{(3)}$ \& 1800 \& 2123 \& 2211 \& 1712 \& 403 \& 3078 \& 442 \& 835 \& 993 \& 2065 <br>
\hline Base ${ }^{(4)}$ \& 1308 \& 1235 \& 1682 \& 861 \& 191 \& 1983 \& 369 \& 665 \& 725 \& 1133 <br>
\hline Base ${ }^{\text {(5) }}$ \& 1458 \& 1567 \& 1925 \& 1100 \& 242 \& 2368 \& 415 \& 731 \& 843 \& 1423 <br>
\hline \multicolumn{11}{|l|}{Bases vary: (1) All who travel to work by car / van at least twice a week $(1,434)$ (2) All with a full driving license $(2,781)$ / (3) All respondents $(3,923) /(4)$ All current drivers - full driving license and car or van in household $(2,543) /(5)$ All with a car or van in household $(3,025)$} <br>
\hline
\end{tabular}

The biggest variations in response were by location - the more rural the location, the more positive respondents tended to be about travelling by car and less positive about the available alternatives; being more likely to agree that 'it is usually quicker to get to work by car than use public transport' and that 'people should be allowed to use their cars as they like'. Those in more rural locations were also more likely to agree that 'in general it's usually cheaper to go by car than use public transport' and 'there are no practical alternatives to travelling by car'.

Differences in response by socio economic group and highest level of education were generally quite small but were largest in relation to whether 'people should be allowed to use their cars as much as they like', which is consistent with more general attitudes to climate change. Those from lower (C2DE) socio economic groups were more likely to agree with this than those from higher ( $A B C 1$ ) socio economic groups ( $73 \%$ compared with $65 \%$ ) as were those with a lower level of education.

Men were more, but only very slightly, positive about travelling by car than women on four of the six of the statements discussed above.

### 3.7.3 Perceived safety of different transport modes

The survey included two questions to ascertain how safe as modes of transport respondents considered cars, buses, trains and bicycles in relation to one another. Respondents rated safety in terms of risk of accidents and risk of being a victim of crime, selecting the most safe, and second, third and least safe.

Table 3.23 Safety ratings for modes of transport

|  | Most safe <br> $\%$ | Least safe <br> $\%$ | Risk of crime | Most safe <br> $\%$ | Least safe <br> $\%$ |  |  |  |
| :--- | :---: | :---: | :--- | :---: | :---: | :---: | :---: | :---: |
| Risk of accidents | 50 | 4 | Car | 68 | 4 |  |  |  |
| Train | 25 | 2 | Bus | 14 | 14 |  |  |  |
| Bus | 22 | 7 | Train | 14 | 16 |  |  |  |
| Car | 2 | 86 | Bicycle | 4 | 65 |  |  |  |
| Base: All respondents $(3,923)$ |  |  |  |  |  |  |  |  |

Base: All respondents $(3,923)$

As shown by Table 3.23, bicycles were perceived as the least safe mode both in terms of accidents and crime. Trains were seen as the most safe mode in terms of risk of accidents, with buses and cars being seen as roughly equal in this regard (suggesting that road travel generally is seen as less safe than rail).The pattern is rather different in regard to risk of being a victim of crime. Cars were seen as the most safe by 68\% of respondents, with buses and trains being seen as equally safe (14\% picked each as the most safe mode).

Overall the results suggest that while cars were seen as low-risk in terms of crime they were seen as higher risk than buses and trains in terms of risk of accidents. Differences by sub-group were relatively small being generally consistent with factors which are linked to car ownership and use (discussed earlier in the chapter).

### 3.7.4 The regular work, college or school trip - barriers to alternative modes

The previous section has shown the majority of respondents were positive about car travel and driving. Here the discussion looks at travelling by car in relation to the regular journey to work, college or school as well as shopping trips and perceived barriers to using alternative modes.

## Reasons for travelling by car on regular journeys to work, college or school

Among all respondents interviewed, 38\% made a regular journey to work, college or school by car or van. This included drivers and passengers. These people were asked to give their reasons for usually going by car or van and conversely, their reasons for not going by bus, train, bicycle or on foot. Questions related to specific
modes were only asked of respondents where the mode was a practical alternative (for example, respondents were only asked why they didn't walk if their journey was two miles or less).

Table 3.24 Reasons for usually going to work, college of school by car / van

|  | Total <br> $\%$ | Urban <br> $\%$ | Rural / <br> semi-rural <br> $\%$ |
| :--- | :---: | :---: | :---: |
| Base | $\mathbf{4 5}$ | 1009 | 322 |
| It is quick / quickest way/ other ways take too long | $\mathbf{4 4}$ | 48 | 39 |
| It is convenient / most convenient | $\mathbf{2 1}$ | 14 | 48 |
| I cannot get there any other way | $\mathbf{2 0}$ | 22 | 38 |
| I can travel when I want to travel | $\mathbf{1 4}$ | 13 | 16 |
| I have to take things (e.g. tools, laptop, luggage etc) and | $\mathbf{1 2}$ | 14 | 10 |
| cannot carry it all | $\mathbf{1 2}$ | 11 | 13 |
| It is reliable / more reliable than other modes | $\mathbf{1 0}$ | 12 | 8 |
| I need my car for work | $\mathbf{1 0}$ | 10 | 11 |
| It is cheap / cheapest way |  |  |  |
| It gives me flexibility |  |  |  |

Base: All respondents who usually travel by car / van $(1,331)$

Reasons given for travelling by car or van are shown in Table 3.24 and tended to focus on the speed and convenience of going this way - nearly half (45\%) of respondents mentioned that car or van was the quickest way or that it was the most convenient way (44\%) In addition around one in five said it was because they couldn't 'get there any other way' (21\%) or because it meant they could travel when they wanted to travel (20\%).

Other frequent responses ( $10 \%$ or more of the response) are shown above and could all be termed practical considerations, from having to take things to work, it being more reliable than other modes, needing a car for work, cost and flexibility. Very few people said they used a car or van because they enjoy driving (2\%) or because they felt it was safer than other modes (1\%).

Differences in response by sub-group were limited. Although respondents with children in their household were more likely than those without to cite flexibility as a reason for going by car or van ( $12 \%$ compared with $9 \%$ ) and, most obviously, because they usually took their children with them (12\% compared with 0\%). Most importantly, the reasons given were associated with the type of location where the respondent lived (see Table 3.24). Respondents in rural and semi-rural locations
(including town and fringe locations) were more than twice as likely as those in urban locations to say they couldn't get there any other way (38\% compared with 14\%). Whereas respondents in urban locations were more likely than those in rural and semi-rural locations to cite it being quicker; being able to travel when they wanted and it being more reliable.

## Reasons for travelling by car on top-up food shopping trips

Respondents who made only regular little food shopping trips or top-up food shopping trips by car or van were similarly asked why they used a car or van for this trip ${ }^{16}$. Four main reasons were given: not being able to carry shopping without a car or van (50\%); it being quick / reliable or convenient (38\%), because they needed to use their car to make other trips while they were out (18\%), or there being no other way of getting there (16\%). Women were more likely than men to say it was because they would not be able to carry shopping without a car or van ( $51 \%$ compared with $48 \%$ ) and respondents in rural areas were more than twice as likely as respondents overall to say that there was no other way of getting there ( $41 \%$ compared with $16 \%$ overall).

[^14]
### 3.7.5 Behaviour change - using public transport / cycling instead of cars / vans for work journey

Respondents who regularly used a car or van to get to work were asked the extent to which they had considered using public transport as an alternative. The scale used was informed by staged models of change which describe change as a process. The best known example is Prochaska and DiClemente's trans-theoretical stages of change model which describes five stages:

1. Pre-contemplation - the subject is not aware of the behaviour or has not considered it ('I haven't really thought about doing / using [...]')
2. Rejection - the subject is aware of the behaviour and after consideration has decided not to change ('I thought about doing / using [...] but decided not to')
3. Contemplation - the subject is aware of the behaviour and is considering it but has done nothing about this ('I am thinking about doing / using [...]')
4. Maintenance - the subject has a continued commitment to maintaining the behaviour ('I do sometimes do / use [....]')
5. Relapse - the subject has resumed his/her old behaviour ('I tried to but have decided not to continue....')

These five changes can be applied to use of public transport and bicycles as an alternative to cars and vans.

Table 3.25 Staged model of change - public transport and cycling

\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \& \multicolumn{3}{|c|}{Public transport \({ }^{1}\)} \& \multicolumn{3}{|c|}{\[
\begin{gathered}
\text { Cycling }^{2} \\
\%
\end{gathered}
\]} \\
\hline \& \begin{tabular}{l}
Total \\
\%
\end{tabular} \& \begin{tabular}{l}
Urban \\
\%
\end{tabular} \& Rural / semirural \% \& \begin{tabular}{l}
Total \\
\%
\end{tabular} \& Men

$\%$ \& Women

$\%$ <br>
\hline Base \& 1331 \& 1009 \& 322 \& 713 \& 315 \& 398 <br>
\hline 1) Pre-contemplation \& 55 \& 50 \& 65 \& 62 \& 56 \& 67 <br>
\hline 2) Rejection \& 31 \& 32 \& 30 \& 24 \& 26 \& 23 <br>
\hline 3) Contemplation \& 3 \& 4 \& 1 \& 5 \& 6 \& 3 <br>
\hline 4) Maintenance \& 5 \& 6 \& 1 \& 3 \& 3 \& 3 <br>
\hline 5) Relapse \& 7 \& 8 \& 3 \& 6 \& 9 \& 4 <br>
\hline \multicolumn{7}{|l|}{Bases: All who make regular journeys to work, college or school by car or van $(1,331)^{1}$ All who make the journey (and also live within 10 miles of their workplace / place of study) (713) ${ }^{2}$} <br>
\hline
\end{tabular}

As shown in Table 3.25, the majority of those asked had either not considered (precontemplation) or rejected using public transport (86\%) or a bicycle (86\%) as an alternative to using a car or van.

It should also be noted that a small but significant proportion of those classified at the pre-contemplation / rejection stages will be accounted for by respondents who said they had a long term health problem or disability that prevented or made it difficult for them to walk, use buses or cycle. In fact a long-term health problem or disability prevented or made it difficult for $9 \%$ of respondents from walking, $6 \%$ from using buses and $16 \%$ from cycling.

Very few people said they were already sometimes using public transport (5\%) or a bicycle (3\%) and in these cases up to twice as many had relapsed (having tried using public transport or cycling but having decided not to continue). This suggests that for every three people who try these alternative ways of getting to work, two will probably revert back to using their car or van.

Analysis of sub-groups on these two measures is limited by base size and each measure is heavily skewed towards pre-contemplation and rejection, hence variations are quite small. However, use of public transport was associated with respondent location. Those living in urban locations were more likely than those in rural / semi-rural locations to have contemplated using public transport and three times as many were sometimes using public transport ( $6 \%$ maintenance compared with $2 \%$ ). Although, the larger proportion who were maintaining the behaviour in urban locations is partly offset by the proportion who had relapsed (8\%). Availability and use of public transport is dealt with in Chapter 4 (in relation to buses and trains).

Use of cycling to get to work as an alternative to cars and vans differed by gender, with men being more likely to be contemplating cycling, although the proportion who said they were sometimes using a bicycle was the same for men and women (3\%) and proportionally more men had rejected the idea of using a bicycle ( $6 \%$ compared with $3 \%$ of women) or relapsed ( $9 \%$ compared with $4 \%$ of women).

### 3.7.6 Reasons for not using alternative modes

Those who usually used a car or van for their regular work, college or school journey were asked why did not travel by bus, train, tram, cycle or on foot. Detailed analysis of these questions is presented in the relevant following sections but a summary of
the main reasons is presented in Table 3.26 (reasons for not using a tram are excluded due to a low base size). Responses are grouped into two blocks - one for cycling and walking and one for buses and trains.

Table 3.26 Reasons for not using alternative modes for work journey

|  | Walking / Cycling |  |
| :---: | :---: | :---: |
| Reason.. | $\begin{gathered} \text { Walking }^{1} \\ \% \end{gathered}$ | $\begin{gathered} \text { Cycling }^{2} \\ \% \end{gathered}$ |
| Takes too long / car is quicker | 35 | 30 |
| Not convenient / easier or more convenient by car | 18 | - |
| Weather / too hilly | 17 | 20 |
| I have to take things (e.g. tools / laptop / luggage etc.) | 15 | 14 |
| Too much traffic / worried about safety / risk of accidents | 3 | 22 |
| Don't own / have access to a bicycle | - | 17 |
|  | Bus / Train |  |
| Reason... | $\begin{gathered} \mathrm{Bus}^{3} \\ \% \end{gathered}$ | $\begin{gathered} \text { Train }^{4} \\ \hline \end{gathered}$ |
| Do not run where and when I want to travel | 38 | 37 |
| Not convenient / easier or more convenient by car | 25 | 13 |
| Journey too slow / infrequent | 24 | 5 |
| Would need to change / no direct route | 17 | 22 |
| Too expensive / cheaper by car | 11 | 8 |
| Does not stop near destination | 10 | 21 |
| I have to take things (e.g. tools / laptop / luggage etc.) | 10 | 6 |
| Not stop / station near my home | 6 | 29 |

Bases vary: All who make regular journey using a car or van, plus (1) live within 2 miles of destination and have no problems walking - 196 (2) live within 10 miles of destination and are able to cycle - 724 (3) live between 0.5 and 25 miles from destination (4) live 2 miles or more from destination - 996

Reasons for not walking / cycling are qualitatively different to reasons for not using public transport. Respondents tended to focus on the fact the journey would take longer by bicycle or on foot or on the inconvenience and/or personal risk to them. In both cases the weather and the area being too hilly were seen as barriers as was having to take things with them (which would be difficult or impossible on foot or by bicycle). For potential cyclists, worry about road safety and traffic was a barrier, with one in five (22\%) citing this as a reason for not cycling to work.

In contrast, a lot of the reasons for not using a bus or a train centred around the services not being suitable for their needs; not running where and when they needed to travel; the journey being too slow / infrequent; having no direct route; or not having
a stop or station near to their home and/or destination. Expense was also seen as an issue for around one in ten respondents (for both buses and trains).

### 3.8 Motivators for using alternative modes

This final section in the chapter looks at factors which may motivate people to use alternative modes (other than a car or van) to get around. As in the previous section, these can be divided into general factors (which motivate alternative use generally) and specific factors (which motivate alternative use for a particular trip such as the journey to work).

### 3.8.1 Disadvantages of travelling by car

Respondents who used a car at least once or twice a month were asked what they thought were the main disadvantages, if any, of travelling by car. Table 3.27 summarises responses. Congestion / traffic jams was the most frequently cited disadvantage (40\%) followed by cost (22\%). Concerns over parking were also an issue with $16 \%$ saying that parking is difficult and $10 \%$ that it is expensive. It is notable that $6 \%$ mentioned contributions to pollution and CO2 emissions as a main disadvantage of travelling by car. This made it the sixth most frequently mentioned disadvantage ahead of things like driving being stressful (3\%) or the road system being inadequate (2\%).

Responses varied with how often respondents travelled by car. Those who travelled more frequently (at least daily) were more likely to mention congestion, overall cost and uncertain journey times, due to congestion but were less likely to mention problems with parking. This is consistent with most working respondents (77\%) having free parking available at their place of work.

Table 3.27 Perceived main disadvantages of travelling by car

|  |  | Gender |  | Frequency travel by car I van |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total |  |  | Daily | At least once a week \% | Less often |
|  |  | Men \% | Women \% | \% |  | \% |
| Base |  | 1671 | 1967 | 1800 | 1548 | 290 |
| Congestion / traffic jams | 40 | 44 | 35 | 45 | 34 | 33 |
| It's expensive / the cost | 22 | 24 | 21 | 25 | 18 | 20 |
| Parking is difficult | 16 | 14 | 17 | 13 | 18 | 21 |
| Parking is expensive | 10 | 9 | 11 | 8 | 12 | 15 |
| Uncertain journey times, due to congestion | 6 | 7 | 5 | 7 | 4 | 4 |
| It contributes to pollution / CO2 emissions / bad for environment | 6 | 6 | 6 | 6 | 5 | 6 |

There was also minimal variation by gender with men being more likely to select congestion / traffic jams than women. Response varied little by location, except in London where respondents were more likely than elsewhere in the country to select congestion / traffic (62\%) and parking being either difficult (42\%) or expensive (26\%). As noted in section 3.1.2, only $47 \%$ of working people living in London had free parking at work.

### 3.8.2 Attitudes towards driving - potential motivators

Respondents were presented with three statements about travelling by car and what might encourage them to travel by car less. The first of these three statements (shown in Figure 3.6) relates to limiting car travel for the sake of the environment. More than half (53\%) of all respondents agreed with this, with just $20 \%$ disagreeing. As might be expected amongst those who were willing/interested in adopting more environmentally friendly behaviours the proportion agreeing was substantially higher (75\%). As described in Chapter 2, response to this attitudinal statement varied by factors we know are linked to environmental behaviours and attitudes. Women were more likely to agree ( $55 \%$ compared with $51 \%$ men); those from higher (ABC1) socio economic groups more than those from lower (C2DE) socio economic groups (59\% compared with 46\%); and those with qualifications equivalent or higher to A-levels more than those without ( $62 \%$ compared with $44 \%$ ).

Figure 3.6. Attitudes toward driving - potential motivators


On balance more people agreed that if they could they would prefer to drive less than they do, suggesting there was a willingness to reduce car travel if realistic alternatives were available. Responses to this statement varied with annual mileage - respondents who drove further per year were more likely to agree with the statement. Specifically, $54 \%$ of those who drove 9,000 miles or more per year agreed, compared with $46 \%$ who drove between 5,000 and 8,999 miles per year and $38 \%$ of those who drove less than 5,000 miles. Agreement was also higher amongst those who were willing/interested in adopting more environmentally friendly behaviours ( $57 \%$ agreed that they would prefer to drive less than they do), consistent with the high proportion of this group who lived in rural areas and tended to drive greater distances.

Around a third (31\%) of all drivers agreed that they found driving stressful, and while around a half disagreed with this statement, this does suggest that a substantial minority of current drivers find elements of driving a chore. As described earlier in the chapter we also know that while around three-quarters (73\%) of drivers agreed that they enjoy driving around one in eight (13\%) disagreed that this was the case. Whether respondents found driving stressful was only weakly associated with gender - women were slightly more likely to agree that it was stressful than men (33\% compared with $30 \%$ ) but more strongly associated with age - older people were more likely to agree that is was stressful than younger (33\% of those aged 40 and over compared with $28 \%$ of those aged under 40 ).

## Availability of parking

As discussed in Chapter 3, all working respondents who went to the same place of work at least twice a week were asked whether there were usually car parking spaces available there. Regardless of whether they themselves used a car to get to work, the majority (72\%) of those asked said there was a free car parking space every day they worked. A further $3 \%$ said one was available most days and $2 \%$ said one was available on some of the days they worked. Around a quarter (23\%) said a space was never available.

Availability of a car parking space was strongly associated with mode of transport usually used to get to work. As shown in Table 3.28, respondents who said there was a parking space available every day or most days were more likely to get to work by car or van compared with those who said there was one available only on some days or never.

Table 3.28 Availability of parking at place of work

|  | Availability of parking space |  |
| :--- | :---: | :---: |
|  | Every day / most days <br> $\%$ | Some days or never <br> $\%$ |
| Base | 1247 | 403 |
| Car or van as passenger or driver | 79 | 37 |
| Car / van as driver | 72 | 32 |
| Walk | 8 | 12 |
| Car / van as passenger | 6 | 4 |
| Bus | 6 | 21 |
| Bicycle | 3 | 4 |
| Railway train | 3 | 15 |
| Base: All who go the same place of work at least twice a week (1,659) |  |  |

Base: All who go the same place of work at least twice a week $(1,659)$

Among respondents who had a parking space available every day or most days $79 \%$ travelled to work by car or van. This dropped to less than half (37\%) among those who had one available on some days or never. Subsequently, use of other modes of transport to get to work is much higher among the latter group - with bus use more than three times as high (21\% compared with 6\%) and train use around seven times as high (15\% compared with 2\%).

There was some variation in availability of parking spaces according to the industry the respondent worked in. Most specifically, availability of parking spaces was highest in manual industries, with $90 \%$ of respondents working in these industries saying they had a parking space available every day (compared with $72 \%$ overall).

## Safety

As discussed in the previous section of this chapter, the survey included two questions to ascertain how safe as modes of transport respondents considered cars, buses, trains and bicycles in relation to one another. Respondents rated safety in terms of risk of accidents and risk of being a victim of crime. The results showed that risk of crime, may work as a barrier to trying alternative modes of transport with cars being seen as the safest mode by some distance ( $68 \%$ selected car as the most safe mode of transport). However, in terms of risk of accidents, cars were rated as less safe than buses ( $22 \%$ picked cars as the safest mode compared with $25 \%$ for buses) and trains ( $22 \%$ compared with $50 \%$ ). So it is possible that perceived safety in terms of risk of accidents could act as a motivator to switching from car to public transport. On both measures bicycles were rated as the least safe so safety concerns act as a barrier rather than a motivator to using a bicycle instead of a car.

### 3.8.3 Potential motivators for travelling by public transport / cycling to get to work

Respondents who usually used a private vehicle to get to work were asked what factors would encourage them to use (i) public transport and (ii) bicycles instead. In both instances the largest group of respondents said that 'nothing' would encourage them ( $60 \%$ said this of bicycles and $50 \%$ of public transport). Table 3.29 summarises the most frequent responses, excluding those people who said that 'nothing' would encourage them use each of the modes. Sub-group analysis is not presented due to the relatively low base sizes.

Table 3.29 Factors which may motivate use of public transport and bicycles

|  | $\begin{gathered} \hline \text { Public } \\ \text { transport } \\ \% \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { Bikes } \\ \% \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| If more convenient / direct / better routes | 46 | Would consider sometimes (e.g. if weather was fine) | 35 |
| It cheaper / better value | 41 | If safer / less traffic | 29 |
| If more frequent | 33 | If there were (better) cycle paths | 28 |
| If more reliable | 21 | If lived closer | 21 |
| If quicker | 21 | Would only use if problem with the car | 12 |
| If easier access to services (stop closer) | 15 | If more secure places to store bicycles | 11 |
| Base: (1) All who make regular trip to work using private vehicle (excluding those who said nothing would encourage) (675) / (2) All who make regular trip to work using private vehicle and who live within 10 miles of destination(excluding those who said nothing would encourage) (285) |  |  |  |

The most frequently mentioned motivating factors for public transport tended to focus on the infrastructure of what was currently available, with large proportions saying that better routes, frequency, reliability and speed would encourage them to use it for work. Around four in ten (41\%) also mentioned that they would be encouraged by cheaper costs or better value.

In contrast, when asked about cycling to work, many focused on safety-related aspects with around three in ten saying they would be encouraged if it were generally safer / there was less traffic, or if there were cycle paths / better cycle paths. Other common responses included the need to live closer or to have more secure places at work to store a bicycle. On a positive note, around a third (35\%) indicated that they would consider sometimes using a bicycle to get work, for example if the weather was fine.

### 3.8.4 Motivators for using public transport among current users

To conclude it is interesting to look at those people who are already travelling by modes other than the car and their reasons (motivators) for doing so. Our brief discussion is limited to motivators for bus and train use for the journey to work, college or school. More detailed analysis of motivators for each mode is presented in the relevant chapters of this report.

Motivators for travelling by bus and train were seemingly very different. Those who travelled by bus for their journey to work, college or school focused on three main
reasons - because buses ran where they wanted to travel (39\%), because they had no choice (32\%) and for general convenience (32\%). The results suggest use was partly motivated by convenience and necessity. Those who said they had no choice include a large proportion (73\%) who said they had no choice because they did not own or have access to a car (the implication being that some of these people would not use the bus if they could travel by car). In fact if we exclude those in full time education and look just at journeys to work, the proportion who said they had no choice but to use the bus increased to $34 \%$ (making it the most frequent response).

In contrast those who travelled by train to get to work, college or school focused on at least some more positive aspects - the most frequent response being that the train journey was quick / having a frequent service ( $49 \%$ of responses). This was followed by general convenience (39\%), because trains run where they wanted to travel (35\%), having a train station near their home (23\%) and having no choice (22\%). Interestingly the largest proportion of those who said they had no choice was made up of those who had no choice because there was no parking where they were travelling to ( $48 \%$ of these responses).

### 4.1 Buses

This section looks at the survey findings relating to buses and covers travelling by bus; barriers to travelling by bus; and motivators for travelling by bus.

### 4.1.1 Travelling by bus

All respondents were asked how regularly they travelled by bus. Overall $29 \%$ said they travelled by bus at least once a week. These people may be considered 'frequent' bus passengers in the analysis. Around one in seven (14\%) said they travelled by bus less than once a week but at least once a month, $18 \%$ less than once a month but at least once a year. The remaining $39 \%$ said they took buses less than once a year or never.

Most respondents (60\%) lived less than 5 minutes walk from a bus stop and more than a third (36\%) had a bus running at least once every quarter of an hour from that bus stop. Only $7 \%$ said they had no access to a bus stop at walking distance (further than 14 minutes walk from a bus stop); and $8 \%$ said buses only ran from their nearest bus stop once a day or less frequently.

These findings varied by region and location. In London, slightly more than half of respondents (58\%) travelled by bus at least once a week (herein 'frequent bus passengers') with $76 \%$ living less than a 5 minute walk from their nearest bus stop and $81 \%$ stating that buses ran at least once every quarter of an hour from there.

Table 4.1 Regular bus passenger, distance to bus stop and frequency of buses by locations

|  | Frequent bus <br> passengers | Less than 5 minutes <br> from bus stop | Buses running at least <br> once every quarter of <br> an hour <br> $\%$ |
| :--- | :---: | :---: | :---: |
| London | $\%$ | $\%$ | 81 |
| Other urban | 58 | 76 | 41 |
| Rural / semi-rural | 28 | 62 | 1 |

[^15]In other urban areas, around a third (28\%) were frequent bus passengers (travelling by bus at least once a week). More than half (62\%) lived less than five minutes walk from a bus stop but less than half (41\%) said that buses ran at least once every quarter of an hour.

In rural locations only $14 \%$ of respondents mentioned taking the bus at least once a week. Half (47\%) said they lived less than five minutes walk from their nearest bus stop. Only one per cent said that buses ran at least once every quarter of an hour from their nearest bus stop; for a quarter (25\%),buses only ran once a day or less frequently from there.

These findings suggest that frequency of bus travel was heavily dependent on the frequency of nearby bus services; although the majority of respondents (regardless of location) lived within walking distance of a bus stop, having a bus run at least every quarter of an hour appeared to be a pre-requisite for most people to use the service frequently.

As shown in Table 4.2 below, frequency of bus travel varied according to demographic characteristics. The most frequent bus passengers were those in full time education and those aged 20 or under. Non-working respondents; those from the lowest (DE) socio-economic groups; and women were also more likely to travel by bus at least once a week. The groups who travelled by bus the least frequently included men; those in work; and the highest (AB) socio-economic groups.

Table 4.2 Regular bus travel by demographic factors

|  | Gender | Age |  |  | Occupation |  |  | SEG |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Use bus | Men <br> $\%$ | Women |  |  |  |  |  |  |  |
| $\%$ | 20 or <br> under <br> $\%$ | $21-59$ <br> $\%$ | $\mathbf{6 0}$ and <br> over <br> $\%$ | Worki <br> ng <br> $\%$ | Not <br> work- <br> ing <br> $\%$ | Full <br> time <br> educa <br> tion <br> $\%$ | AB <br> $\%$ | C1 C2 <br> $\%$ | DE |
| $\%$ |  |  |  |  |  |  |  |  |  |

Most respondents (68\%) living in a household with no car were regular bus passengers (travelling by bus at least once a week). Even so, nearly half (49\%) of
car passengers (those with no full license who did not drive but had a vehicle in household) mentioned travelling by bus at least once a week.

## Travelling by bus on specific regular journeys

As well as asking about general bus travel, the survey also covered travelling by bus on specific types of journey: regular trips to work, school or college, business trips and top-up food shopping trips ${ }^{17}$.

Table 4.3 Bus travel by type of journey

|  | Regular trips to work / school / college |  |  | Top-up food shopping trips \% | Business trips\% |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total \% | Work full time \% | Full time education \% |  |  |
| Proportion who usually travelled by bus | 12 | 8 | 37 | 7 | * |
| Bases vary: All who (regularly) make this type of trip (work - 2,007 / business trips - 527 / top-up food shopping 2,093) |  |  |  |  |  |
| Note: Figures for business trips are not split by presence of car due to limited base size |  |  |  |  |  |

## Travelling by bus on regular work, college or school journeys

Among respondents who worked or were in full time education, just over one in ten (12\%) said they usually travelled by bus on their regular journey to work, college or school. This was comparable with the proportion who said they usually walked (10\%). Buses were the most heavily used mode of public transport for travelling to work, college or school (in comparison, only 5\% travelled by train). Nevertheless the proportion travelling by bus was far below the proportion travelling to work, school or college by car or van (65\%).

Levels of bus travel differed between commuting to work and journeys to school or college. While more than a third (37\%) of those in full time education said they travelled by bus for their regular journey to school/college, only $8 \%$ of those working full time said they travelled by bus to work. As expected there was a higher level of bus patronage in London than in other regions - 23\% of respondents in London who

[^16]made a regular journey to work, college or school said they usually travelled by bus compared with $10 \%$ in the rest of the country.

Levels of bus travel to work, college or school varied by other demographic characteristics (age, socio-economic group and gender) in similar ways to those described in relation to general bus travel (please see Table 4.2).

Frequency of travelling by bus was only loosely associated with general environmental behaviour. Even among those respondents who considered themselves environmentally-friendly in most or everything they did and would like to do more to help the environment ( $5 \%$ of the survey population), still more than half said they travelled by private vehicle to get to work, school or college ( $52 \%$ compared with $65 \%$ overall). The most popular alternative mode of transport among this group was bus ( $22 \%$ usually used a bus compared with $12 \%$ overall).

## Travelling by bus on food shopping trips

Travelling by bus for top-up food shopping was relatively uncommon with only $7 \%$ of respondents who made top-up food shopping trips usually travelling by bus. The preferred mode for this type of journey was, by some distance, private vehicles (56\% went by car or van as either a driver or passenger) with walking also being far more common than taking the bus (34\%). Amongst those who did not have a car or van in their household, nearly two thirds (63\%) said they walked compared with just a quarter ( $25 \%$ ) who took the bus. Of those who did have a car or van in their household, only $3 \%$ said they usually travelled by bus to do their top-up food shopping.

## Travelling by bus on business trips

Bus was not a mode of transport that was widely used for business trips. Less than $1 \%$ of business travellers said they usually travelled by bus and therefore no further analysis is presented here.

## Changes in mode of transport

Among respondents who had changed their mode of transport for their journey to work, school or college in the last year ( $9 \%$ of those who worked or were in full time education), two in ten (22\%) had stopped travelling by bus. Most had started using a car or a van instead.

### 4.1.2 Barriers to travelling by bus

All respondents were asked if they had any disability or other long standing health problems that would make it difficult for them to use local buses. Only $6 \%$ indicated that this was the case, although this rose significantly in the older population (as high as $23 \%$ among those aged 70 and over).

More generally, respondents were shown a series of statements about buses and were asked how much they agreed or disagreed with them. The six statements in Figure 4.1 below relate to attitudes toward buses in general and reveal some of the barriers to increased bus travel.

Figure 4.1. Attitudes towards travelling by bus


Bases: $(3,923)$

Most respondents (60\%) agreed that they '...would only travel by bus if they had no other choice' with around half this number disagreeing. We know from previous discussion, that when it is possible to use a car a large proportion of respondents do so - of those who owned or had use of a car around half (46\%) mentioned that they
took buses less than once a year or never; this proportion was even higher amongst respondents who travelled by car out of habit ${ }^{18}$, of whom $57 \%$ travelled by bus less than once a year or never. However, car and vans were not the only mode of transport that respondents preferred to buses: around half (51\%) agreed that 'when I have the choice, I would rather walk or cycle than go by bus'.

Around half of respondents (52\%) agreed that 'successful people tend to travel by car rather than by bus'. It is interesting to note that respondents living in London, who travelled by bus more frequently than those in the rest of the country and were less likely to own a car, agreed slightly less with this statement (42\%).

People's views on how enjoyable it is to travel by bus were fairly evenly balanced: overall, $37 \%$ agreed with the statement 'I like travelling by bus' and the same proportion (37\%) disagreed. Response to this statement differed by respondent age with older people being more likely to agree and younger groups being more likely to disagree. More than half (55\%) of people aged 60 or above agreed with 'I like travelling by bus' but those aged 20 years old or under were more likely to say they disagreed (52\% compared with the 37\% average). Respondents in London were also more likely to agree that they liked travelling by bus than those in the rest of the country ( $48 \%$ compared with the $37 \%$ average). These differences may be caused by variation in bus travel among sub-groups in the population - people's views being related to how frequently they travelled by bus. Those who travelled by bus more frequently tended to hold more positive attitudes towards bus travel. For example, those who travelled by bus at least once a week were twice as likely to agree that they enjoyed travelling by bus as those who travelled by bus less frequently (59\% compared with $28 \%$ respectively).

Respondents also gave financial reasons for not travelling by bus with 43\% agreeing with the statement 'travelling by bus is expensive'. This was particularly seen as an issue among those aged 20 or under (59\%).

When asked if they found travelling by bus stressful, the largest proportion (46\%) disagreed, although a third (32\%) did agree. The youngest age group (aged 20 or under) were more likely to agree (44\%) this was the case. Agreement was also higher in London (40\%) than elsewhere in the country.

[^17]Although respondents' aged 20 or under (and therefore those in full time education) were often regular bus passengers ( $48 \%$ travelled by bus at least once a week compared to $29 \%$ overall) they were also the group with the most negative attitudes towards buses. They tended to say they didn't like travelling by bus; and many found it expensive; stressful; unsafe; and were not happy with the journey time.

## Safety on buses - risk of being a victim of crime

As discussed in Chapter 3, travelling by car was seen by the majority (68\%) of respondents as the safest mode of transport in terms of the risk of being a victim of crime, with only $14 \%$ citing buses as the safest mode. Concerns over the safety of buses in terms of the risk of being a victim of crime appeared to be accentuated among younger people, with around a quarter (23\%) of those aged 20 or under rating buses as the least safe mode of transport compared with $14 \%$ in the general survey population. In contrast, just 5\% of people aged 60 and over rated buses as the least safe mode of transport. Looking at differences by location, respondents in London were significantly more likely than those in the rest of the country to rate buses as least safe ( $21 \%$ compared with $13 \%$ ).

## Reasons for not travelling by bus to work, school or college

The survey also captured the reasons why respondents who usually travelled to work, school or college by car or van didn't travel by bus. This question was only asked of those who lived between 0.5 and 25 miles from their place of work, school or college. The main reasons cited were practical and varied slightly by gender and location as detailed in Table 4.4. Explanations were also dependent on whether respondents were commuting to work or going to school / college.

Table 4.4 Main reasons for not travelling by bus to work, school or college

|  | $\begin{gathered} \text { Total } \\ \% \end{gathered}$ | Gender |  | Locations |  | Occupation |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Men | Women | $\begin{gathered} \hline \text { Urban } \\ \text { (incl. } \\ \text { London) } \\ \% \end{gathered}$ | Rural I <br> semi- <br> rural <br> \% | Work <br> full <br> time \% | Full time education \% |
| Base |  | 481 | 549 | 790 | 240 | 759 | 33 |
| Buses do not run where/ when I want to travel | 38 | 39` | 36 | 34 | 48 | 38 | 12 |
| Generally not convenient by bus/ easier or more convenient by car | 25 | 24 | 26 | 24 | 26 | 26 | 21 |
| Bus journey is too slow / infrequent | 24 | 19 | 29 | 24 | 24 | 24 | 26 |
| I would need to change my bus / no direct route | 17 | 15 | 19 | 18 | 13 | 18 | 15 |
| Buses are expensive / more expensive / do not offer good value for money/ It's cheaper by car | 11 | 9 | 13 | 13 | 6 | 11 | 21 |
| Bus stop is not near to destination | 10 | 11 | 10 | 8 | 16 | 11 | 8 |
| I have to take things (e.g. tools, laptop, luggage etc) and cannot carry it all | 10 | 11 | 9 | 9 | 12 | 10 | 7 |
| Buses are not reliable and punctual | 9 | 7 | 10 | 9 | 7 | 9 | 21 |
| Bus stop is not near home | 6 | 4 | 8 | 4 | 10 | 5 | 15 |
| Can never be sure what time the bus will arrive/how long it will take | 6 |  | 8 | 7 | 3 | 5 | 8 |
| Base: All respondents who usually travel by car / van / motorbike for regular work journey to work/school college and live 2 miles or less from work/school college $(1,030)$ |  |  |  |  |  |  |  |

Buses not running where or when respondents wanted to travel was the most frequently given reason by respondents overall (38\%) for travelling to work, school or college by car or van rather than by bus. The proportion giving this reason was even higher in rural / semi-rural locations (49\%). Several other answers also related to bus services not enabling respondents to travel to work with $17 \%$ stating there were no direct routes for their journey to work, school, college; 10\% saying the required bus stop was not near to their destination; and $6 \%$ saying the required bus stop was not near their home. Together these types of logistical or structural issues accounted for nearly three quarter of the answers (70\%).

The perceived general convenience of travelling by car versus travelling by bus was the second most common barrier selected overall (25\%) and this was regardless of respondent location.

Respondents in full time education appeared to have different motives for not travelling by bus to go to school or college than those in work (although the base size for this group does not support reliable analysis). Tentatively, the main barriers for this group related to journey time with 'bus journey is too slow / infrequent' being selected by a quarter (26\%) and buses not being 'reliable and punctual' selected by a further $21 \%$. More generally, women were also more likely than men to agree that buses were too slow or infrequent (29\% compared with 19\%)

Financial barriers were also important for respondents in full time education with two in ten (21\%) agreeing that 'buses are expensive / more expensive / do not offer good value for money/ it's cheaper by car'.

## Distances travelled to work and travelling by bus

Bus travel was very dependent on the distance travelled to work as shown in Table 4.5 below (please note, the question that these results come from did not include respondents travelling to school or college).

Table 4.5 Distance travelled to work by bus

|  | Less <br> than 2 <br> miles | $2-3.9$ <br> miles | $4-5.9$ <br> miles | $6-8.9$ <br> miles | $8-10.9$ <br> miles | 11-15.9 <br> miles | 16 miles <br> or more |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \% Usually use bus for journey | 7 | 36 | 28 | 17 | 7 | 4 | 1 |
| Base: All respondents who go to the same place of work every time or at least 2 working days each week and who <br> travel there by bus (154) |  |  |  |  |  |  |  |

Among the respondents who said they were taking the bus to work, most of them (64\%) lived between 2 and 5.9 miles from their work. However, even among those who lived between 2 and 5.9 miles from work, car or van was still the most popular mode of transport (69\% usually used this) followed by bus (19\%). Respondents living less than two miles from their workplace were still more likely to use a car or van (43\%); to walk (43\%); or to cycle to work (8\%); than they were to travel by bus (4\%). Those living 6 miles or more from work were even more likely to use a car or van as a driver or passenger (78\%).

It should also be noted that distance to work was heavily linked to location. In urban areas, respondents travelled on average 8.1 miles to get to work compared with 11.0 miles in semi-rural and rural locations. Notably, a large majority (84\%) of those taking the bus to work lived in urban area.

## Reasons for ceasing to travel by public transport to work

Respondents who said they made regular journeys to work, school or college using a car or van were asked the extent to which they had considered travelling by public transport. The question asked used the same 'stages of change' model approach as described in Chapter 3 (in relation to car travel). Although the question referred to consideration of public transport in general, it is covered in this section because buses were the most heavily used form of public transport, including for regular journeys to work, school or college.

As previously mentioned, the vast majority ( $86 \%$ ) of those who were asked if they had considered travelling by public transport as an alternative to travelling by car or van had either not considered the option ('I haven't really thought about travelling by public transport') or had rejected the idea of travelling by public transport ('I thought about travelling by public transport but decided not to'). Only 5\% said they were already travelling by public transport sometimes and 7\% said they had 'tried to travel by public transport but [...] decided not to continue'.

The latter group was asked why they had stopped travelling by public transport. In line with the barriers previously described in Chapter 3, most of the main reasons could be described as logistical. A third (33\%) mentioned that public transport 'was not convenient because there is no direct service to where I want to go', $29 \%$ said it 'was not frequent enough', $27 \%$ it 'was too slow' and $26 \%$ it 'was too unreliable'. However, the single most common reason given for stopping travelling by public transport was financial (45\% saying it was too expensive). Some respondents also cited it being 'too difficult with equipment/papers I need to take' (16\%) and public transport not being \comfortable/ safe/clean' (15\%). Please note, sub-group analysis is not possible due to the small base size.

## Main reasons for not travelling by public transport for top-up food shopping

 tripsThe survey also covered the reasons why respondents who made top-up food shopping trips by car, didn't travel by public transport instead. Again, this question refers to public transport in general rather than buses in particular. Although buses were rarely used for top-up food shopping (only $7 \%$ usually used it) they still constituted the most heavily used form of public transport for this purpose. The most common barriers against travelling by public transport instead of car for top-up food shopping are listed below:

- I have shopping and cannot carry it all (50\%)
- There is no direct route (19\%)
- It is generally more convenient by car (18\%)
- It is too slow / service too infrequent (16\%)
- Public transport not near home (9\%) / near destination (8\%)
- Public transport is not reliable / punctual (7\%)
- It is expensive/ it is cheaper by car (5\%)

Women were more likely than men to say they did not travel by public transport because they could not carry all the shopping ( $55 \%$ compared with $44 \%$ of men). In contrast, men were more likely to cite having no direct public transport route as a barrier ( $21 \%$ compared with $16 \%$ of women). Although, 'I do not feel safe on public transport' was only stated as a barrier by $1 \%$ of respondents, those aged 20 or under were five times more likely than average to mention this (5\%). This is in keeping with findings from earlier in this section, which suggest younger people are less likely to think of public transport (and specifically buses) as a safe mode of travel.

### 4.1.3 Motivators for bus travel

This section covers what motivates people to use buses and what might encourage them to use buses more. Most of the questions included in this section were asked specifically in relation to the journey to work, school or college. It should be noted that potential motivators were asked in relation to public transport generally not buses specifically. The findings are included in this section because buses were the most heavily used form of public transport.

## Reasons for travelling by bus

As previously described $12 \%$ of those who worked, or were in full time education, usually travelled by bus to get to work, school or college. These respondents were asked why they did so. Their answers were not prompted and have been summarised in the Table 4.6 below.

Table 4.6 Reasons for travelling by bus to go to work, school, college

|  | Total |
| :--- | :---: |
| Buses run where I want to travel / direct route | $\%$ |
| No other choice (net) | 39 |
| No choice - I don't own / have access to a car | 32 |
| No choice - other reason | 23 |
| Bus journey is quick / service is frequent | 5 |
| Buses are cheap / cheaper / offer good value for money | 4 |
| Bus stop is near home | 22 |
| Bus stop is near to destination | 18 |
| Buses run when I want to travel | 16 |
| Buses are accessible / easy to get on | 14 |
| Buses are reliable / punctual | 14 |
| Good for the environment / low CO2 emissions | 10 |

Base: All respondents who use buses for their regular journey to travel to work, school, college (222)

The main reasons for travelling by bus to get to work, school, or college were linked to availability of suitable bus services and good infrastructure. Four in ten respondents (39\%) said they travelled by bus because there was a service running where they wanted to travel. A fifth (22\%) mentioned they were travelling by bus because the bus journey was quick / frequent and $5 \%$ because it was reliable / punctual. Around one in six also cited having a 'bus stop [...] near home' (16\%) having a 'bus stop [...] near to destination' (14\%) or that 'buses run when I want to travel' (also 14\%). Considering bus services are most widespread in urban rather than rural areas (as discussed earlier in this section) it is probably the case that respondents giving these reasons tended to live in urban areas, although the base sizes do not support definitive analysis. For example,17\% of those who answered the question in urban areas said they travelled by bus because they had a stop near to
their home, while just two respondents out of twenty in town and fringe, and rural locations said this was the case.

Although many people mentioned positive reasons for travelling by bus, a third of respondents said they were travelling by bus because they had no other choice (32\%). This includes people who didn't own or didn't have access to a car (23\%) and some with no parking where they needed to go (4\%). As shown in Table 4.6, having no choice was the second most common response.

The relative low cost of a bus journey compared to other modes of transport ('buses are cheap / cheaper / offer good value for money') and the accessibility of bus services ('buses are accessible / easy to get on') were also cited as reasons to use buses to go to work, school, colleges (18\% and 10\% respectively).

It should also be noted that 3\% of those asked spontaneously mentioned that one of the reasons why there were taking the bus was because it was 'good for the environment / low CO2 emissions'.

## Potential motivators to travel by public transport instead of car

On the other hand, respondents who said they usually used a car or van for their regular journey to work, school, college (65\% of these regular journeys were made this way) were asked what would encourage them to travel by public transport instead.

As previously mentioned in Chapter 3 (in relation to alternatives to car travel), half (50\%) of respondents said nothing would encourage them to exchange travelling by car for travelling by public transport. This included many people who said 'nothing' without giving further clarification (41\%) but also included those with reasons that prevented them for using other alternatives forms which were external to public transport. These included having to take equipment/papers to work (5\%) and having to drop children at school on the way to work (2\%).

These results varied slightly by subgroup as shown below in Table 4.7. Women were slightly more open to the idea of travelling by public transport with just under half $47 \%$ saying nothing would encourage then to change compared with $53 \%$ of men. Answers also varied according to respondents' highest level of education: while only around a third (36\%) of those with a first degree or higher said 'nothing' would
encourage them to travel by public transport; six in ten (60\%) of those whose highest qualification was at GCSE level or lower said this was the case.

Table 4.7 Potential motivators to travel by public transport

|  | Total | Gender |  | Highest level of education |  |  | Desire to do more envfriendly things |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Men | Women | $\begin{gathered} \text { Degree } \\ \text { or } \\ \text { higher } \end{gathered}$ | A-level equiv | GCSE or lower | Do not want to do more | Want to do more <br> - but not interest ed in finding out | Want to do more - and interest ed in finding out... |
|  | \% | \% | \% | \% | \% | \% | \% | \%. | \% |
| Base |  | 702 | 648 | 349 | 433 | 558 | 621 | 174 | 552 |
| Nothing (Net) | 50 | 53 | 47 | 36 | 49 | 60 | 57 | 48 | 42 |
| If more convenient / direct / better routes | 23 | 21 | 25 | 34 | 22 | 18 | 20 | 19 | 27 |
| It cheaper / better value | 21 | 21 | 21 | 26 | 22 | 17 | 17 | 20 | 25 |
| If more frequent | 16 | 15 | 18 | 18 | 18 | 13 | 14 | 15 | 19 |
| If more reliable | 10 | 9 | 12 | 13 | 10 | 9 | 9 | 11 | 12 |
| If quicker | 10 | 11 | 10 | 17 | 12 | 7 | 9 | 13 | 12 |
| If easier access to services (stop closer) | 7 | 6 | 10 | 10 | 7 | 8 | 7 | 6 | 8 |

Base: (1) All who make regular trip to work using private vehicle $(1,350)$

## Environmental links

In addition, the survey data can be used to look at potential motivators for travelling by public transport by people's general attitudes and behaviours towards the environment. Respondents who said they 'did not want to do more' (i.e. the group who are least likely to be motivated by environmental factors) were very likely to say nothing would encourage them to change to public transport (57\%). This dropped to $48 \%$ among those who said they wanted to do more but were not interested in finding out how to do this. However, even among those who claimed they wanted to do more and were interested in finding out how to do this, still nearly half (42\%) said that nothing would encourage them to travel by public transport instead of their car.

Among those in the most 'pro-environmental' group (who wanted to do more and were interested in finding out how to do this) more people said they would be encouraged to travel by public transport if the service and the infrastructure were better. For example, $27 \%$ said they would be encouraged 'if it was more
convenient/direct services/better routes'; $19 \%$ if it were more 'frequent'; $12 \%$ if it were more 'reliable'; $12 \%$ if it were 'quicker'; and $8 \%$ if they 'had easier access to services'.

It is also possible to look directly at people's current use of buses by environmental attitudes to assess the extent to which protecting the environment may be a motivator to bus travel. For instance, respondents were asked how much they agreed with the statement 'I should try to limit my car use for the sake of the environment'. Around half agreed with this - two in five (38\%) tending to agree and $15 \%$ definitely agreeing.

It is interesting to note that $38 \%$ of those who expressed strongest agreement (definitely agree) travelled by bus at least once a week, compared with $29 \%$ in the general survey population. People who tended to agree or were neutral about limiting their car use for the sake of the environment showed similar levels of bus travel to the general population ( $24 \%$ used them at least once a week). Those who disagreed with the statement were only slightly less likely to be a frequent bus passengers than average ( $20 \%$ used them at least once a week). Therefore, for a small proportion of the survey population, limiting their car use to protect the environment may be a motivator to travel by bus regularly.

## Safety on buses - risk of accidents

As discussed in the previous section, buses were not seen as a particularly safe mode of transport in terms of risk of being a victim of crime. In contrast, when looking at safety in terms of the risk of accidents, a quarter of the survey population (25\%) actually perceived buses as the safest mode of transport - just ahead of cars and vans (which were mentioned by 22\%). Trains were seen as the safest overall selected as the most safe by $50 \%$ of respondents). Additionally, when asked which mode of transport was the second safest, bus was selected by half (50\%) of respondents indicating that it was seen as safer than cars and vans by most people (these were selected by just $21 \%$ of respondents). So overall, bus was considered a safer mode than cars / vans in terms of the risk of accidents.

### 4.2 Trains

This section presents survey findings in relation to trains and train travel. It follows the same structure as the preceding section on buses - looking at train travel and barriers to / motivators for train travel. Findings are related to mainline, overground trains and exclude light rail, underground and tram services (which are the subject of the next section of the report).

### 4.2.1 Travelling by train

Train travel was less commonplace than bus travel. Only around one in ten (9\%) of all respondents travelled by train at least once a week, with the largest group of respondents (38\%) saying they used them less than once a year or never. Levels of train travel varied considerably by location, being highest in London (with $27 \%$ of respondents living in London being 'regular train travellers', i.e. travelling by train at least once a week). As shown in Table 4.8, there was little variation in frequency of use between urban areas outside of London and semi-rural or rural areas (around four in ten travelled by train less than once a year or never).

Table 4.8 Frequency of train travel by location

|  | Total | London | Urban - <br> other <br> $\%$ | Semi-rural | Rural |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Base | $\%$ | $\%$ | 2732 | 346 | 442 |
| 'Regular train travellers' - at least <br> once a week <br> At least once or twice a month | $\mathbf{9}$ | $\mathbf{2 7}$ | 6 | 7 | 6 |
| At Least once a year | 16 | 21 | 16 | 12 | 11 |
| Less than that / never | 37 | 31 | 37 | 39 | 42 |

Differences in frequency of train travel may be attributable to a number of factors including levels of car ownership and access to cars. We know from previous discussion that levels of car ownership were far lower in London than in other areas of the country and this may mean that train travel was borne from necessity in some cases. However, the findings suggest that it was most likely to be related to the availability and prevalence of trains in London compared with the rest of England. Table 4.9 shows how the proportion of regular train passengers by location and the length of time it would take to walk from the respondent's home to the nearest railway
station. This is explored further later in this section as a barrier to train travel (not having a train station near to the home appeared to be one the main barriers).

Table 4.9 Regular train passengers, distance to nearest station and frequency of train services by location

|  | Base | Frequent train <br> passengers | Train station within <br> $\underline{\mathbf{6} \text { minutes walk }}$ | Train station 44 <br> minutes or more away |
| :--- | :---: | :---: | :---: | :---: |
| London (\%) | 403 | 27 | 29 | 12 |
| Other urban (\%) | 2732 | 6 | 8 | 33 |
| Rural / semi-rural (\%) | 788 | 6 | 6 | 66 |
| Base: (3,923) |  |  |  |  |

Levels of train travel also differed by a range of demographic factors including gender, age, and social grade - men were more likely than women to use trains at least once a week ( $12 \%$ compared with $7 \%$ ); as were those aged under 50 compared with those aged 50 and over ( $12 \%$ compared with $5 \%$ ); and higher (ABC1) socioeconomic groups compared with lower (C2DE) socio-economic groups (12\% compared with 5\%).

It is also worth noting variations in train travel by how important respondents said that public transport links were in their decision to move to their home. Those who said this had been important were much more likely to travel by train frequently than those who said it was 'neither important nor unimportant' or not at all or not very important (see Table 4.10).

Table 4.10 Regularity of train travel by how important public transport links were in decision to move

|  | Very <br> important <br> $\%$ | Fairly <br> important <br> $\%$ | Neither <br> $\%$ | NET: Not <br> important <br> $\%$ |
| :--- | :---: | :---: | :---: | :---: |
| Base | 936 | 668 | 170 | 2125 |
| 'Regular train traveller' - at least once <br> a week | 18 | 15 | 11 | 4 |
| At least once or twice a month | 17 | 19 | 19 | 4 |
| At Least once a year | 31 | 35 | 38 | 40 |
| Less than that / never | 34 | 31 | 33 | 42 |

## Travelling by train on specific regular journeys

In total, just 5\% of the population who made regular journeys to work or study usually travelled by train for the longest part of their regular journey to work, school or college. This made trains the fourth most common form of transport after private vehicles; buses; and walking. In contrast, trains were the second most common form of transport used for business trips - $26 \%$ of those who made business trips as part of their work travelled by train on their last business trip. This made travelling by train on business trips far less prevalent than travelling by car or van (65\%) but far more prevalent than any other mode (aeroplane being the third most common mode used, accounting for $6 \%$ of the last business trips made).

Consequently there is a notable link between frequency of train travel and whether or not respondents made regular journeys to work, school or college, and/or business trips. As shown in Table 4.11, those who made regular journeys to work, school or college were only slightly more likely to travel by train regularly than those who made neither regular journeys to work nor business trips. However, those who made both regular journeys to work and business trips as part of their work were a lot more likely to travel by train regularly.

Table 4.11Frequency of train travel by types of journey made

|  | Total | Make regular journeys AND business trips | Make regular journeys for work, school, college NO business trips | Make neither |
| :---: | :---: | :---: | :---: | :---: |
|  | \% | \% | \% | \% |
| Base |  | 462 | 1383 | 2078 |
| 'Regular train traveller' - at least once a week | 9 | 16 | 10 | 7 |
| At least once or twice a month | 16 | 21 | 16 | 8 |
| At Least once a year | 37 | 45 | 38 | 20 |
| Less than that / never | 38 | 17 | 37 | 46 |
| Base: $(3,923)$ |  |  |  |  |

Respondents who had made a business trip by car or by aeroplane of 25 miles or more in the six months prior to the survey were asked if they would more generally consider travelling by train for a business trip of this length. Nearly half (47\%) of those asked said they would not consider travelling by train. However, $9 \%$ said they usually did travel by train for business trips of 25 miles or more; $28 \%$ said they
sometimes did; and $16 \%$ said they would consider it but did not use trains for this type of journey at the moment.

### 4.2.2 Barriers to train travel

First in this section we look at reasons why people did not take the train to work, school or college. All respondents who made a regular journey of this nature by car or van and who lived two miles or more from their usual workplace, school or college were asked to give the reasons why they didn't go by train. The reasons given are summarised in Table 4.12.

Table 4.12 Reasons for not travelling by train to work, school or college

|  | Total \% | Urban <br> \% | Town \& Fringe <br> \% | Rural \% |
| :---: | :---: | :---: | :---: | :---: |
| Base |  | 745 | 109 | 142 |
| NET: Trains do not run where I want to travel / train station not near destination | 45 | 45 | 42 | 49 |
| Trains do not run where I want to travel | 30 | 29 | 28 | 34 |
| Train station not near destination | 21 | 20 | 19 | 26 |
| Train station is not near home | 29 | 18 | 35 | 61 |
| No direct route - would have to change train or use bus and train | 22 | 24 | 20 | 17 |
| Trains do not run when I want to travel | 16 | 14 | 17 | 19 |
| Generally not convenient / car more convenient | 13 | 12 | 11 | 16 |
| Trains are too expensive | 8 | 9 | 5 | 5 |

Base: All who made a regular journey to work, school or college by car / van and who lived two miles or more from
destination (996)

The most frequently mentioned barriers related to not having trains or train services covering the journey or the route that they needed to travel. Nearly half (45\%) said either there was no train service that went to the destination (30\%) or near enough to it (21\%). Furthermore, three in ten said the train station was not near enough to their home. The findings therefore seem to be suggesting that availability of suitable train services is the largest barrier to travelling to work, school or college overall. To validate responses that the train station is not near enough to their home it is possible to look at this by how long respondents said it would take for them to walk to their nearest train station. There was a strong link between distance and the proportion who gave this proximity as a barrier to train travel. No respondents who lived within a 7 minute walk gave distance as a barrier; this rose to $5 \%$ among those
who lived within a 7-13 minute walk; and to $35 \%$ among those who lived 14 minutes or more away. As discussed in section 4.2.1, the findings also suggested a strong link between overall frequency of train travel and proximity of the nearest train station.

As shown in Table 4.13, barriers to travelling by train for a regular work, school or college journey varied substantially by location. Most specifically, those in rural and semi-rural locations were more likely to say they didn't use the train because the train station was not near their home ( $61 \%$ in rural locations and $35 \%$ in semi-rural). However it is noteworthy that, regardless of location, the most frequently mentioned barrier to train travel was not having trains that went to their destination or near enough to their destination (even in urban locations $45 \%$ of respondents gave this as their answer). It is not possible to look at findings specifically within London due to the small base size (due itself to the high proportion of respondents in London who travel by public transport to get to work, school or college).

Those who made business trips by private vehicle or by plane and who said they would not consider travelling by train (for meetings that were 25 miles or more away) were asked why this was. Reasons given were slightly different compared with those given for the regular work, school or college trip. While not having access to trains that go to, or near enough to, the required destination was mentioned by $30 \%$ of these respondents, it was at least as common for them to say they had to take things with them (35\%) or because it was not generally convenient to travel by train (30\%). Expense was also mentioned by a significant number of respondents ( $16 \%$ - around twice the proportion who mentioned this in relation to the regular work, school or college journey).

Table 4.13 Reasons would not consider travelling by train for business trips

|  | Total |
| :--- | :--- |
| I have to take things (e.g. laptops, tools, luggage) | 35 |
| Generally not convenient / easier by car | 30 |
| NET: Trains do not run where I want to travel / train station not near  <br> destination 30 |  |
| $\quad$Trains do not run where I want to <br> travel <br> Train station not near destination | 23 |
| Train station not near home | 20 |
| Trains do not run when I want to travel | 18 |
| No direct route - would have to change train or use bus and train | 16 |

Base: All who make business trips but wouldn't consider travelling by train for business trips over 25 miles in distance (152)

## Barriers to travelling by train in general

Although expense was not seen as the main issue in relation to travelling by train to get to work, school or college (and the same is true to a lesser extent for business trips) the survey findings suggest that expense is a key barrier to train travel more generally. Three-quarters of the survey population (66\%) agreed that they found 'travelling by train expensive', four in ten definitely agreeing with this. This is consistent with findings among those respondents who usually used a car or van to get to work, school or college but who had tried travelling by public transport only to revert back to a car or van. Among this group, the most common reason for stopping travelling by public transport was because 'it was too expensive' (given by 49 of 90 respondents).

Figure 4.2. Barriers to train travel


Whether people agreed that travelling by train was expensive varied by a number of factors including (counter-intuitively) by income - with those with the highest household incomes (quintile 5) being the most likely to agree (77\%) and those with the lowest household incomes (quintiles 1 and 2) being the least likely to agree (62\%). This difference appeared to relate to variations in response by regularity of train travel. Those who travelled by train more often were more likely to agree that travelling by train is expensive (and those who travelled by train regularly tended to have higher incomes). One in five (20\%) of those with the highest household incomes (quintile 5) travelled by train at least once a week, compared with $9 \%$ overall and as a low as $5 \%$ and $6 \%$ among those with the lowest household incomes (quintiles 1 and 2 respectively). The findings suggested the difference may also relate to use of trains to get to work: $82 \%$ of those who said they usually travelled to work by train agreed with the statement 'I find travelling by train expensive' (compared with $66 \%$ of all respondents) and respondents with the highest household incomes (quintile 5) were three times more likely to say they travelled to work by train than those with the lowest household incomes (quintiles 1 and 2 - with $12 \%$ of all respondents in quintile 5 saying they usually travelled to work by train compared with $4 \%$ of all those in both quintiles 1 and 2).

Nearly half (46\%) of respondents agreed that they would only travel by train if they had no choice, which is higher than the proportion who disagreed (37\%).

It is also worth noting that trains were not seen as the safest form of transport in terms of the risk of being a victim of crime. After bicycles (65\% of respondents said bicycles were the least safe), trains were the second most often chosen as the least safe form of transport in terms of the risk of being a victim of crime (16\%): considerably less safe than cars (4\%) but comparable with buses (14\%). Only 14\% said that trains were the most safe mode in terms of the risk of being a victim of crime, compared with $68 \%$ who said cars. Variations in response by sub-group were relatively small, but it is worth noting that respondents in rural areas were more likely than those in urban and semi-rural areas to regard trains as the least safe form of transport in relation to crime $-20 \%$ selected it as the least safe compared with $15 \%$ elsewhere.

### 4.2.3 Motivators for train travel

As shown in the previous section, proximity to the nearest train station and whether public transport links had been important in the respondent's decision to move to
their home both related to frequency of travelling by train. These factors have so far been discussed as barriers to train travel but can equally be seen as motivators, as living closer to a train station and having considered transport links before moving appeared to increase the frequency of travelling by train.

Frequency of travelling by train and more specifically whether the respondent usually travelled by train to get to work varied considerably by industrial sector (for those who worked). As can be seen in Table 4.14, regular train travel (at least once a week) was highest among those who worked in financial and business services (20\%) and public administration, education and health (10\%). This difference is even more pronounced if we look specifically at respondents' regular journeys to work. Those working in financial and business services (which tend to be city-based) were nearly three times as likely than average to usually use a train to get to work (12\% compared with $5 \%$ overall).

Table 4.14 Train travel by industry worked in

| General frequency of train travel... | Total | Manual industries \% | Service industries \% | Financial and business services, \% | Public administrati on, education, health, community and social activities $\%$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Base |  | 363 | 513 | 236 | 804 |
| 'Regular train traveller' - at least once a week | 9 | 5 | 9 | 20 | 10 |
| At least once or twice a month | 16 | 14 | 16 | 21 | 17 |
| At Least once a year | 37 | 45 | 40 | 37 | 42 |
| Less than that / never | 38 | 35 | 35 | 22 | 31 |
| Use of trains to get to work... |  |  |  |  |  |
| Base |  | 329 | 459 | 207 | 746 |
| Usually use | 5 | 3 | 4 | 12 | 4 |

Base: All respondents $(3,923)$ / All working who make a regular journey to work $(1,850)$

Looking further at reasons given by respondents for making specific journeys by train, all 110 respondents who usually took the train to work, school or college were asked what their reasons were for taking the train. As shown in Table 4.15, the reasons given are consistent with the factors already discussed in relation to barriers to train travel.

Table 4.15 Reasons for taking the train to work, school or college

|  | Total |
| :--- | :---: |
| $\%$ |  |
| Train journey is quick / service is frequent | 49 |
| General convenience | 39 |
| Trains run where I want to travel / direct route | 35 |
| Train station is near my home | 23 |
| No choice (NET) | 22 |
| No choice - no parking where I need to go | 10 |
| No choice - I don't own / have access to a car | 8 |
| No choice - other reason | 3 |
| Trains run when I want to travel | 17 |
| Train station is near to destination | 16 |
| Trains a reliable / punctual | 11 |
| Trains are cheap / cheaper / offer good value for money | 10 |
| Base: All who usually took the train to work, school or college (110) |  |

While one in five (22\%), said they took the train because they had no choice, a range of more positive reasons for taking the train were given. It was most common for respondents to cite the speed / quickness of the train service (49\%) or the general convenience (39\%) of travelling by train as the reason. This was followed by more logistical factors (as seen in relation to barriers to train travel) including having no trains which go to where they needed to travel (35\%), not having a station near their home (23\%), having no trains that run when they need to travel (17\%) and not having a train station near the destination (16\%). Although we have seen that the majority of respondents overall felt that travelling by train was expensive (see section 4.2.2), $10 \%$ of those who travelled by train to get to work, school or college said one of the reasons they use trains was because they were cheaper or offered better value for money. A similar proportion (11\%) said it was because trains were reliable or punctual.

### 4.2.4 General motivators for train travel

More generally, although relatively few people travelled by train regularly (for work or otherwise), there was evidence that overall, all respondents tended to see some positive aspects of travelling by train. The majority agreed that they liked travelling by
train (64\% agreed compared with just $14 \%$ who disagreed) and disagreed that they found travelling by train stressful (59\% disagreed compared with 18\% who agreed).

Figure 4.3. Motivators for travelling by train


Base: All respondents $(3,923)$

Thirdly, while opinion was divided, more respondents disagreed that 'successful people tend to travel by car rather than train' than agreed with this ( $40 \%$ agreeing compared with $27 \%$ disagreeing).

Whether people agreed that they liked travelling by train and disagreed that travelling by train was stressful did not vary significantly by frequency of train travel differences between regular train passengers and those who travelled by train infrequently were minimal. Instead attitudes towards trains on these measures did vary by age, socio-economic group and income. As shown in Table 4.16, older people tended to be slightly more positive about train travel than younger people, as did those from higher socio-economic groups. Differences by income are not presented as these are likely to relate to variation by age and socio-economic group (older people and those from higher socio-economic groups tending to earn more on average).

Table 4.16 Attitudes towards trains by age and socio-economic group


Base: All respondents $(3,923)$ / All working who make a regular journey to work $(1,850)$

Finally, trains tended to be seen as the safest form of transport in terms of risk of accidents. Half ( $50 \%$ ) of respondents selected trains as the safest in terms of risk of accidents, ahead of buses (25\%), cars (22\%) and bicycles (2\%). Just 4\% chose trains as the least safe form of transport.

### 4.3 Trams, underground, metro and light rail

This short section looks at travel by trams, underground, metro and light rail and the factors that motivated or appeared to create barriers to travelling by trams, underground, metro or light rail. Analysis is mainly limited to headline findings as these modes of transport were not heavily used by respondents overall, consistent with the prevalence of private vehicles, buses and, to a lesser extent, trains. Access to these forms of transport was also limited outside major urban areas (most specifically London).

Around one in ten (11\%) said they had an underground, metro, tram or light rail stop nearer to their home than the nearest railway station with half (51\%) of these people living in London. Those who had a railway station nearer to their home were excluded from most questions about underground, metro, tram or light rail use. In fact if we look at use of these modes for specific trips, levels of use were very low. Just $3 \%$ of those who made a regular journey to work usually used underground, metro, tram or light rail, while 2\% of business travellers had used them for their last business trip and less than $1 \%$ of shoppers usually used them for smaller food shopping trips.

Table 4.17 summarises use of underground, metro, tram or light rail in terms of general frequency among those who had a stop or station nearer than the nearest train station (or in the same location as their nearest train station). Amongst this group, a considerable proportion - 41\% said they travelled by underground, metro, tram or light rail at least once a week, with $14 \%$ doing so at least once a day and just $20 \%$ saying less than once a year or less.

Table 4.17 Use of underground, metro, tram or light rail

| Frequency of (general) use... | Total | Distance to nearest stop / station |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | \% | $\begin{gathered} 6 \text { minutes } \\ \text { or less } \\ \% \\ \hline \end{gathered}$ | $\begin{gathered} 7-13 \\ \text { minutes } \\ \% \end{gathered}$ | $\begin{gathered} 14 \text { minutes } \\ \text { or more } \\ \% \end{gathered}$ |
| Base | 354 | 132 | 110 | 97 |
| At least once or twice a week | 43 | 57 | 46 | 19 |
| At least once a day | 16 | 23 | 17 | 5 |
| Less than once a day but at least 3 times a week | 11 | 13 | 13 | 5 |
| Once or twice a week | 16 | 21 | 16 | 9 |
| Less than that but more than twice a month | 5 | 5 | 5 | 4 |
| Once or twice a month | 17 | 22 | 16 | 14 |
| Less than that but more than twice a year | 11 | 8 | 11 | 17 |
| Once or twice a year | 7 | 1 | 5 | 18 |
| Less than that or never | 16 | 8 | 16 | 29 |

Base: All with a station / stop nearer than nearest train station (354)
Note: Base size does not support analysis of specific trips by distance to stop / station

Frequency of travel using these modes was very strongly associated with the distance to the nearest stop or station. Use was most frequent among those who lived within a 6 minute walk and was least frequent among those who lived a 14 minute walk or more away. Among those who lived a 14 minute walk away or more, only around one in five used underground, metro, tram or light rail once a week (half the overall average) which is not surprising given that a 14 minute walk equates to a distance of around a kilometre. The results suggest that distance to the nearest stop or station acts as a barrier to using these modes on a frequent basis.

As so few people (just 49 respondents) used underground, metro, tram or light rail for their regular journey to work, school or college it is not possible to analyse their reasons for choosing these modes for their journey. For indicative purposes it is worth noting that the most common responses were because they were quick and/or the service was frequent ( 28 of the 49 respondents said this); because the services ran direct to where they wanted to go (18 of 49); and because of general convenience (18 of 49).

### 4.4 Planes

The survey included a small number of questions about plane use - primarily to find out how often people flew and the whether people would consider using rail as an alternative to flying.

### 4.4.1 Current behaviour

A half of all respondents (49\%) had taken at least one flight in the 12 months prior to the survey with short-haul international flights being the most common ( $36 \%$ of respondents had taken one in the last 12 months), followed by long-haul (20\%) and domestic flights (5\%). As shown in Figure 4.4, among those who had taken flights in the last 12 months, it was most common for them to have taken just one flight. Relatively few people had taken two, three or more flights. Limiting the analysis to the $49 \%$ who had taken at least one flight in the 12 months prior to the survey, $73 \%$ had taken a short-haul flight (with $52 \%$ of these people taking just one flight), $41 \%$ a longhaul and $10 \%$ a domestic flight (with $62 \%$ of these people taking just one flight).

Figure 4.4. Flights taken in last 12 months


Base: All respondents $(3,923)$

Factors which are linked with the number of flights people take each year are well documented and not the focus of the analysis here. Predictably, the amount people fly tended to vary by factors such as social grade, income and age.

Table 4.18 presents an analysis of how many flights respondents took per year by their wider environmental attitudes and behaviour. It seems reasonable to assume that people who consider themselves to be environmentally-friendly may fly less than
those who do not. However, the survey findings do not support this assumption as there is no clear pattern in response by environmental behaviour and attitude.

Table 4.18 Flights taken in last $\mathbf{1 2}$ months

| Domestic flights |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Summary of environmental behaviour and attitude |  |  |  |  |  |
|  | Total | Don't really do anything / only one or two things and happy with this | Don't really do anything / only one or two things but would like to do more | Do quite a few things and happy with this | Do quite a few things but would like to do more | Most things I do are env- friendly and happy with this | Most things I do are env- friendly but would like to do more $/$ everything I do is env- friendly |
| Base |  | 824 | 584 | 841 | 812 | 509 | 217 |
| No flights Any flights | $\begin{gathered} 95 \% \\ 5 \% \end{gathered}$ | $\begin{gathered} 96 \% \\ 4 \% \end{gathered}$ | $\begin{gathered} 96 \% \\ 4 \% \end{gathered}$ | $\begin{gathered} 96 \% \\ 4 \% \end{gathered}$ | $\begin{gathered} 93 \% \\ 7 \% \end{gathered}$ | $\begin{gathered} 96 \% \\ 4 \% \end{gathered}$ | $\begin{gathered} 95 \% \\ 5 \% \end{gathered}$ |
| Short-haul flights |  |  |  |  |  |  |  |
|  | Total | Don't really do anything / only one or two things and happy with this | Don't really do anything / only one or two things but would like to do more | Do quite a few things and happy with this | Do quite a few things but would like to do more | Most things I do are env- friendly and happy with this |  |
| No flights | 64\% | 67\% | 61\% | 65\% | 57\% | 70\% | 74\% |
| Any flights | 36\% | 33\% | 39\% | 35\% | 43\% | 30\% | 26\% |
| Long-haul flights |  |  |  |  |  |  |  |
|  | Total | Don't really do anything / only one or two things and happy with this | Don't really do anything / only one or two things but would like to do more | Do quite a few things and happy with this | Do quite a few things but would like to do more | Most things I do are envfriendly and happy with this |  |
| No flights | 80\% | 83\% | 77\% | 82\% | 76\% | 83\% | 81\% |
| Any flights | 20\% | 17\% | 23\% | 18\% | 24\% | 17\% | 19\% |
| Base: All respondents $(3,923)$ |  |  |  |  |  |  |  |

Those who claimed to be environmentally friendly in most or everything they do were among the least likely to have taken short-haul flights (28\% had taken one compared with $36 \%$ overall). But, the same group of people were really no less likely to have taken either domestic or long-haul flights. In fact it was respondents who said they were doing quite a few things but would like to do more who were the heaviest users of flights. In the 12 months leading up to the survey, they were the most likely to have taken domestic (7\%), short-haul (43\%) and long-haul flights (24\%). Equally
respondents who fall into the apparently least-environmental group ${ }^{19}$ were among the least likely to have taken domestic, short-haul and long-haul flights. It is also possible to look at the group of people who expressed the greatest level of willingness and interest in changing their behaviour - i.e. those who said they wanted to do more and were interested in finding out more about how to do this. Even among this group 52\% had taken a flight in the last 12 months - 5\% domestic, $37 \%$ short-haul and $21 \%$ long-haul. This is perhaps unsurprising given analysis elsewhere in the report (see Chapter 2) which highlights a number of differences in attitudes and behaviours by level of education, household income and social grade. People with higher levels of education tended to be more positive about environmental issues and tended to have higher self-reported knowledge of environmental attitudes. Yet at the same time these same people tended to have higher levels of household income and therefore the means to fly more regularly.

### 4.4.2 Flights for business purposes and possible alternatives

Very few people who made business trips as part of their work usually used planes for these trips (just 6\% usually used a plane). As described earlier in the report, the most common modes of transport for such trips were private vehicles and trains. In fact the total number of people who usually travelled by plane was just 33 . So, although the survey included some questions about travelling by train instead of planes for business travel, with such a small number of people it is not possible to present findings on alternatives to using a plane for these trips.

[^18]
## 5. Cycling and walking

Leaving aside the impact of bicycle production, both cycling and walking arguably represent zero carbon alternatives to private vehicles and public transport for a range of journeys. Respondents were asked a series of questions about these ways of travelling. This chapter presents findings related to cycling followed by walking.

### 5.1 Cycling

### 5.1.1 Ability to cycle

Overall, one in ten respondents (10\%) said that riding a bicycle was impossible for them due to a disability or long-standing health problem, with a further $6 \%$ saying a disability or health problem made it difficult (but not impossible) for them to cycle. Nearly all respondents (92\%) said they had learnt to ride a bicycle at some point in their lives.

Table 5.1 shows the variation in the proportions of all respondents who either had a disability or long term health problem which would make it impossible for them to cycle, or who had no such condition but had never learnt to cycle. As shown by table 5.1, those aged 60 or more and those in the lowest (quintile 1) household income or lowest (DE) socio-economic groups were the most likely to have a long term disability or health problem which made it impossible for them to cycle.

Groups that were more likely to have never learnt to cycle but who could potentially learn to cycle (i.e. who did not have a disability or long term health problem which would make it impossible for them to cycle) included women; those from the lowest (DE) social economic group and lowest (quintile 1) household income households; and those living in London.

Table 5.1 Variations in factors preventing cycling

|  | Impossible to cycle due to disability I long-term health problem | Never learnt to cycle (but could potentially learn) ${ }^{20}$ |
| :---: | :---: | :---: |
| All respondents (3923) | 10 | 6 |
| Age |  |  |
| 16-20 (197) | 1 | 8 |
| 21-29 (473) | 0 | 8 |
| 30-39 (621) | 1 | 7 |
| 40-49 (707) | 3 | 6 |
| 50-59 (561) | 9 | 7 |
| 60 or over (1364) | 28 | 4 |
| Gender |  |  |
| Men (1800) | 7 | 3 |
| Women (2123) | 12 | 9 |
| Socio-economic group |  |  |
| AB (1010) | 6 | 4 |
| C1 (1201) | 9 | 7 |
| C2 (754) | 8 | 5 |
| DE (958) | 17 | 11 |
| Household income (quintiles) |  |  |
| (Highest) 5 (517) | 2 | 2 |
| 4 (481) | 3 | 4 |
| 3 (472) | 5 | 4 |
| 2 (508) | 12 | 8 |
| (Lowest) 1 (542) | 13 | 11 |
| Location |  |  |
| London (403) | 7 | 16 |
| Other urban (2732) | 11 | 6 |
| Town and fringe (346) | 10 | 3 |
| Village, Hamlet and Isolated Dwellings (442) | 9 | 2 |
| Base: All respondents (3,923). In | ual bases are presented in brackets |  |

[^19]
### 5.1.2 Ownership of / access to a bicycle owned by someone else

Those who had ever learnt to ride and who did not find it impossible to ride a bicycle due to disabilities or health problems were asked if they owned or had regular access to a bicycle owned by someone else. Only around half either owned (49\%) or had regular access to a bicycle owned by someone else (4\%), with ownership of / access to a bicycle varying by age; gender; socio-economic group; income; and location (see Table 5.2).

Table 5.2 Ownership and access to bicycles (among those who could cycle)

|  | Own a bicycle I access to a bicycle | Own | Access to a bicycle owned by someone else | Neither |
| :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |
| 16-20 (181) | 58 | 50 | 7 | 43 |
| 21-29 (437) | 42 | 37 | 5 | 59 |
| 30-39 (564) | 58 | 54 | 4 | 42 |
| 40-49 (650) | 66 | 64 | 3 | 34 |
| 50-59 (465) | 61 | 59 | 3 | 39 |
| 60 or over (858) | 37 | 35 | 2 | 63 |
| Gender |  |  |  |  |
| Men (1578) | 58 | 54 | 4 | 42 |
| Women (1577) | 48 | 44 | 4 | 52 |
| Socio-economic group |  |  |  |  |
| AB (887) | 60 | 57 | 3 | 40 |
| C1 (975) | 55 | 51 | 4 | 45 |
| C2 (631) | 52 | 48 | 4 | 48 |
| DE (662) | 41 | 37 | 4 | 59 |
| Household income (quintiles) |  |  |  |  |
| (Highest) 5 (487) | 65 | 63 | 2 | 35 |
| 4 (438) | 56 | 52 | 5 | 43 |
| 3 (418) | 57 | 54 | 3 | 43 |
| 2 (388) | 58 | 54 | 5 | 42 |
| (Lowest) 1 (394) | 47 | 43 | 4 | 53 |
| Location |  |  |  |  |
| London (310) | 43 | 40 | 3 | 57 |
| Other urban (2167) | 50 | 46 | 3 | 50 |
| Town and fringe (292) | 57 | 53 | 4 | 43 |
| Village, hamlet and isolated dwellings (386) | 70 | 65 | 4 | 30 |

Base: All who can ride a bicycle / do not find it impossible due to disability or health problem $(3,155)$. Individual bases are presented in brackets

As shown by Table 5.2, men were slightly more likely than women to own or have access to a bicycle (58\% compared with 48\%). Variations by age were more pronounced than by gender, with those aged 60 or over being less likely than younger people to own or have regular use of a bicycle. Ownership was highest among those aged between 40 and 59 - of whom two thirds (64\%) owned or had use of a bicycle. Looking at ownership/access to a bicycle by socio-economic group and income, the findings broadly suggested that the highest (AB) socio-economic groups and highest household income (quintile 5) group were the most likely to own or have regular access to a bicycle; with the lowest (DE) socio-economic and lowest household income (quintile 1) groups having the lowest levels of ownership/regular access. Levels of ownership and regular use also varied considerably by respondent location; the more rural the location the more likely they were to own or have use of a bicycle. Ownership and use were lowest in London (43\%) and highest in 'village, hamlet and isolated dwellings' locations (70\%).

### 5.1.3 Frequency of cycling

There were relatively few genuinely regular cyclists in the survey population with just $14 \%$ of those who were able to ride a bicycle using one at least once a week (equivalent to $12 \%$ of all respondents). This may reflect the fact that nearly half (47\%) of those who were able to ride did not own or have regular use of a bicycle. If we limit the analysis to those who own or have regular use of a bicycle the proportion of regular cyclists (cycling at least once a week) is nearly twice the overall figure (27\% compared with 14\%).

Frequency of cycling varied by some of the same factors described above in relation to bicycle ownership - including location. As shown in Table 5.3, groups that were more likely to cycle regularly (at least once a week) included: those aged 30-49; men; and those with the highest (quintile 5) household incomes.

Levels of 'infrequent' cycling (defined as cycling less than once a week but at least once a year) also varied, with the oldest age groups (age 60 or more); and the lowest household income group (quintile 1) and lowest (DE) social grade groups; being the least likely to engage in infrequent cycling.

Table 5.3 Frequency of cycling

|  | Regular cycling <br> (at least once a <br> week) | Infrequent cycling <br> (less than once a <br> week but at least <br> once a year) | Non-cyclist <br> (cycles less than once <br> a year or never - but <br> could cycle) |
| :--- | :---: | :---: | :---: |
| A1 |  |  |  |

[^20]Among those who could cycle and owned or had regular access to a bicycle, frequency of cycling also appeared to vary depending on whether respondents lived in a household with a vehicle. As shown by Table 5.4, the findings suggested that those who lived in a household without a vehicle were more likely to cycle regularly than those who lived in a household with a vehicle. Half (53\%) of those who owned or had access to a bicycle but who did not have a car cycled at least once a week, with a quarter (23\%) saying they cycled at least once a day. Frequency of cycling was substantially lower amongst respondents who had a car in their household with a quarter (24\%) saying they cycled at least once a week but just $3 \%$ saying they cycled at least once a day.

Table 5.4 Frequency of cycling and car ownership

|  |  | Car in household? |  |
| :--- | :---: | :---: | :---: |
| $\%$ |  | Total <br> $\%$ | No <br> $\%$ |
| Base | $\mathbf{2 7}$ | $\mathbf{2 4}$ | $\mathbf{5 3}$ |
| At least once a week | 5 | 3 | 23 |
| At least once a day | 7 | 7 | 12 |
| Less than once a day, but at least 3 times a week | 14 | 14 | 17 |
| Once or twice a week | 6 | 6 | 7 |
| Less than that but more than twice a month | 19 | 19 | 14 |
| Once or twice a month | 12 | 13 | 7 |
| Less than that but more than twice a year | 15 | 16 | 6 |
| Once or twice a year | 22 | 22 | 14 |
| Less than that or never |  |  | 7 |

Base: All who owned of had regular use of a bicycle $(1,571)$

## Use for specific trips

Of the three journey types covered by the survey, bicycles were only really used for regular journeys to work, school or college ( $3 \%$ who made this journey usually used a bicycle) and for top-up food shopping ( $2 \%$ who did top-up food shopping trips usually used a bicycle). Less than $1 \%$ of respondents who made business trips had used a bicycle for their last trip (in fact just one single respondent).

Of those who owned or had access to a bicycle, $5 \%$ usually cycled to work, school or college with $3 \%$ usually cycling when making top-up food shopping trips. Of those
who owned or had access to a bicycle and who did not have a car in their household, nearly one in five (19\%) usually cycled to work, school or college and 9\% usually cycled when making top-up food shopping trips.

As well as capturing current use of bicycles, the survey also asked respondents who used a car or van to get to work, school or college the extent to which they had considered using a bicycle for this journey. This information was captured using the stages of change model laid out in Chapter 3. As shown in Table 5.4, those who lived more than 10 miles away from their place of work or study were excluded as it was deemed this would be too far for most people to consider cycling.

Table 5.5 Staged model of change - cycling

|  |  | Gender <br> car out of habit |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Total | Men | Women | Yes | No |
|  | $\%$ | $\%$ | $\%$ | $\%$ | $\%$ |
| Base |  | 315 | 398 | 536 | 177 |
| 1) Pre-contemplation | $\mathbf{6 2}$ | 56 | 67 | 66 | 48 |
| 2) Rejection | $\mathbf{2 4}$ | 26 | 23 | 21 | 34 |
| 3) Contemplation | $\mathbf{5}$ | 6 | 3 | 5 | 6 |
| 4) Maintenance | $\mathbf{3}$ | 3 | 3 | 2 | 5 |
| 5) Relapse | $\mathbf{6}$ | 9 | 4 | 6 | 8 |

Base: All who made regular journeys to work, college or school by car or van and live within 10 miles of their workplace / place of study (713)

The majority of those asked had either not considered (pre-contemplation) or rejected using a bicycle (86\%) as an alternative to a car or van for their journey. Overall, very few people said they were already sometimes using a bicycle (3\%) and around twice as many had relapsed (having tried cycling but having decided not to continue). This suggests that for every three people who had started cycling to work, two had reverted back to using their car or van.

The extent of considering cycling to get to work as an alternative to travelling by car or van differed by gender, with men being more likely to be contemplating cycling, although the proportion who said they were sometimes using a bicycle was the same for men and women (3\%). Proportionally more men had rejected the idea of cycling ( $26 \%$ compared with $23 \%$ of women) or relapsed ( $9 \%$ compared with $4 \%$ of women).

Use of bicycles also varied according to whether the respondent could be described as travelling by car out of habit (see section 3.6). Those who travelled by car out of habit were more likely than others who regularly travelled by car to be at the precontemplation stage (i.e. having not really thought about cycling). In contrast, those who regularly travelled by car but did not do so out of habit were more likely to have thought about cycling but rejected the idea; although more positively, they were also twice as likely to be maintaining use of a bicycle (by sometimes using a bicycle to get to work, school or college).

Those who said they were thinking about using a bicycle instead of a car or van to get to work, school or college were asked what actions, if any, they had taken. The base size here does not support quantitative analysis (just 38 respondents said they were thinking about this) but it is worth noting that 14 of the 38 said they had done a 'trial run'.

### 5.1.4 Barriers to cycling

The previous section described how only a minority of respondents were regular cyclists. The following discussion looks at the potential barriers to cycling.

## Distance as a barrier

One of the most obvious barriers to cycling is the distance that potentially needs to be covered. This can be explored in the context of the regular journey to work. Table 5.6 summarises the proportion of respondents that usually used a bicycle to get to work by the distance between their home and their place of work. There was a very strong relationship between cycling and distance - with cycling to work being more prevalent among those who lived closer to where they usually worked. The findings suggested that the likelihood of cycling to work decreases considerably if the journey to work is longer than three miles. Nearly one in ten (8\%) of those whose regular journey was less than three miles usually cycled to work (the equivalent of $16 \%$ who owned or had regular access to a bicycle). In contrast, only $2 \%$ of those with journeys of 3-4.9 miles usually cycled to work (equivalent to $3 \%$ of those who owned or had regular access to a bicycle). Among those who needed to travel 10 miles or more, cycling to work was extremely uncommon.

Table 5.6 Use of bicycles for regular work journey by distance travelled

|  | $\begin{gathered} \hline \text { Less than } 3 \\ \text { miles } \\ \% \\ \hline \end{gathered}$ | $3-4.9 \text { miles }$ \% | 5-7.9 miles \% | 8-9.9 miles $\%$ | $\begin{gathered} 10-14.9 \\ \text { miles } \\ \% \\ \hline \end{gathered}$ | 15 miles or more \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Usually cycle to work ${ }^{1}$ | 8 | 2 | 3 | 2 | 1 | 0 |
| ${ }^{1}$ Base: All who go to the same place of work at least twice a week $(1,659)$ |  |  |  |  |  |  |
| Usually cycle to work ${ }^{2}$ | 16 | 3 | 6 | 3 | 2 | 0 |
| ${ }^{1}$ Base: All who go to the same place of work at least twice a week and who own / have access to a bicycle(864) |  |  |  |  |  |  |

This should be viewed in the context of the finding that the average (mean) distance travelled to work among working respondents was 8.8 miles (and at this 'average' distance we can see that only around $2 \%$ of the population chose to cycle). Overall, nearly three in ten (29\%) working respondents lived less than three miles away from their work - the distance at which the largest proportion choose to cycle.

### 5.1.5 Safety as a barrier

As demonstrated in Figure 5.1, concerns about the safety of cycling appeared to be an issue for a large number of potential cyclists. Of those who were able to cycle, a clear majority agreed that they would 'find cycling on the roads stressful' (63\%) and that it was 'too dangerous to cycle on the roads' (60\%) and that they 'would cycle (more) if there were more dedicated cycle paths' (52\%). The majority also disagreed that they would 'feel confident cycling on the roads' (52\%), with under half (45\%) agreeing that they would be willing to cycle on roads.

Figure 5.1. Attitudes towards cycling and safety


Base: All who can ride a bicycle / do not find it impossible due to disability or health problem $(3,155)$

Attitudes towards cycling and safety varied most significantly by age and gender. As shown in Table 5.7, older people tended to be more concerned about the dangers associated with cycling - the proportion who agreed that 'it's too dangerous for me to cycle on the roads' was at its lowest among the under 40s (53\%) and this proportion rose steadily with age (as high as $72 \%$ among those aged 60 or more). Women tended to be more worried than men about the dangers of cycling - 71\% agreeing that 'it's too dangerous for me to cycle on the roads' compared with $51 \%$ of men.

Table 5.7 Attitudes towards safety by demographics

\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{It's too dangerous for me to cycle on the roads} \& \multirow[b]{2}{*}{Total} \& \multicolumn{3}{|c|}{Age} \& \multicolumn{2}{|c|}{Gender} <br>
\hline \& \& Under 40
\% \& 40-59

$\%$ \& 60 or more \% \& Male
\% \& Female

$$
\%
$$ <br>

\hline Base \& \& 1182 \& 1115 \& 858 \& 1578 \& 1577 <br>
\hline Agree \& 60 \& 53 \& 63 \& 72 \& 51 \& 71 <br>
\hline Disagree \& 26 \& 31 \& 25 \& 17 \& 34 \& 18 <br>
\hline \multicolumn{7}{|l|}{Base: All who can ride a bicycle / do not find it impossible due to disability or health problem $(3,155)$} <br>
\hline
\end{tabular}

There was little or no variation in response to the statement 'it's too dangerous for me to cycle on the roads' by location - the proportion who agreed that it was too dangerous to cycle on the roads was similar in urban locations (61\%) to that in 'town and fringe' and 'village, hamlet and isolated dwellings' locations (59\%). In London, respondents were only marginally more likely than the national average to agree (66\% compared with 60\% overall).

The results in this section are consistent with findings in section 3.6 which showed that bicycles were seen as the least safe mode of transport ${ }^{22}$ both in terms of risk of accidents ( $86 \%$ selecting bicycles as least safe) and risk of being a victim of crime (65\% selecting bicycles as least safe). In contrast, cars were seen as the safest by the majority of respondents. Such findings suggest that safety concerns are a significant barrier both to cycling in general and to cycling as an alternative to travelling by car.

It is also worth noting that slightly fewer than half (41\%) of respondents who were able to cycle agreed that they would 'cycle (more) if there were more secure places to store bicycles', suggesting that fear of having a bicycle stolen may also be a barrier to cycling.

### 5.1.6 Whether or not cycling 'is for me’

The survey also contained statements to assess how much the respondent identified themselves as someone who cycles and whether they preferred to cycle rather than travel by public transport. The results from these measures are presented in Figure 5.2.

[^21]Figure 5.2. Attitudes towards cycling


Base: All who can ride a bicycle / do not find it impossible due to disability or health problem $(3,155)$

Only around a third (35\%) of those asked agreed that in general they 'would rather cycle than travel by public transport' with a larger proportion (46\%) disagreeing with this statement. Opinion was fairly evenly divided as to whether people felt they were the kind of person who rode a bicycle. A slim majority disagreed that 'l'm not the kind of person who rides a bicycle' (53\%) but a third (34\%) did agree with this suggesting that not seeing oneself as a cyclist was a barrier for a significant proportion.

Whether people thought of themselves as the kind of person who rides a bicycle varied by age, gender and by socio-economic group. As shown in Table 5.8, those aged between 30 and 59 were the most likely age group to disagree that they were 'not the kind of person who rides a bicycle' and the least likely to agree. Men were more likely to disagree with the statement than women, as were those from higher (ABC1) socio-economic groups compared with those from lower (C2DE) socioeconomic groups.

Table 5.8 Attitudes towards cycling by demographics

| I'm not the kind of person who rides a bicycle... | Total | Age |  |  | Gender |  | Socio-economic group |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Under 30 | 30-59 | 60 or | Male | Female | ABC1 | C2DE |
|  |  | \% |  | more |  |  |  |  |
|  | \% |  | \% | \% | \% | \% | \% | \% |
| Base |  | 618 | 1679 | 858 | 1578 | 1577 | 1862 | 1293 |
| Agree | 34 | 37 | 27 | 47 | 27 | 41 | 29 | 40 |
| Disagree | 53 | 52 | 59 | 39 | 58 | 47 | 58 | 46 |

[^22]
### 5.1.7 Barriers to cycling to work

Respondents who could cycle ${ }^{23}$, who lived less than ten miles from where they usually worked and who usually travelled to work by car or van, were asked to give the reasons why they did not cycle to work ${ }^{24}$. Overall, the responses varied according to how far respondents lived from where they usually worked. As shown by Table 5.9, the reason cited most often by those who lived less than five miles from where they worked was 'too much traffic / too dangerous' (20\%), suggesting that safety concerns related to traffic and the risk of accidents was a greater barrier than safety concerns related to crime. Among those who lived between 5 and 9.9 miles away, the main reason cited was 'it takes too long / too far away' (43\%).

Table 5.9 Reasons for not cycling to work

|  | Those who travelled less than 5 miles to work \% | Those who travelled 5 to 9.9 miles to work \% |
| :---: | :---: | :---: |
| Too much traffic / too dangerous | 20 | 25 |
| Don't own / have access to a bicycle | 19 | 12 |
| Weather | 18 | 14 |
| It takes too long / too far away | 17 | 42 |
| I have to take things (e.g. tools, laptop etc) and cannot carry it all | 14 | 14 |
| No particular reason | 7 | 2 |
| Too old / not fit enough to cycle | 6 | 7 |
| Too hilly round here | 5 | 6 |
| Not my style | 5 | 3 |
| Worried about crime / personal safety / being attacked | 5 | 3 |
| Bases: All who had learnt to cycle and did not have a disability or long term health problem which made it impossible for them to cycle and who currently travelled to work by car or van, split between: those who lived up to five miles from where they usually work (394); and those who lived 5 to 9.9 miles from where they worked (234). |  |  |

[^23]
### 5.1.8 Motivators of cycling

The survey revealed a number of potential motivators for increasing cycling. As discussed earlier, safety concerns both in terms of road safety and risk of crime emerged as barriers to cycling. Related to this, the findings suggested that some people may be encouraged to cycle if actions could be taken to reduce these risks.

As shown in Figure 5.3, more than half (52\%) agreed they would cycle (more) if there were more dedicated cycle paths, with just $30 \%$ disagreeing with this. A slightly smaller proportion (41\%) agreed they would cycle (more) if there were more secure places to store bicycles, with a similar number disagreeing with this (36\%). These findings suggest that improving road safety is a better motivator than increasing secure cycle storage, which supports the finding (above) suggesting that safety concern about 'too much traffic' was more of a barrier to cycling to work than safety concerns related to crime. However, investment in the infrastructure to improve road safety for cyclists is costly and needs to be offset against the potential gains. For instance, it is worth noting that the proportion of the survey population who make a regular journey to work, school or college by car and for whom this journey is less than five miles is relatively small ( $12 \%$ of all respondents), with the findings (see Table 5.9 above) suggesting that further than five miles is considered too far to cycle by many people. Furthermore, as discussed in section 5.1 .3 we know that the proportion of those who usually use a car to get to work, school or college who have contemplated using a bicycle is very low.

Figure 5.3. Motivators for cycling - reducing risk


Base: All who can ride a bicycle / do not find it impossible due to disability or health problem $(3,155)$

The motivators presented above focus on addressing the risks associated with cycling, i.e. reducing the risk of being a victim of crime or being involved in a traffic accident. However, the survey also looked at more positive motivators which are summarised in Figure 5.4.

Figure 5.4. Motivators for cycling - enjoyment and saving time

```
\square\mp@code{Dinitely agree m Tend to agree m Neither agree nor disagree ■ Tend to disagree ■ Definitely disagree m Don't know / N/A}
```



Base: All who can ride a bicycle / do not find it impossible due to disability or health problem $(3,155)$

The majority of respondents who were able to ride a bicycle agreed that they 'would enjoy cycling as a leisure / holiday activity' (66\%). So although the findings suggest that a lot of people have concerns about the safety of cycling on the roads, the findings also suggest that riding a bicycle in itself tends to be seen as an enjoyably leisure activity.

These various motivators varied by gender, age and location as shown in Table 5.10. Men were more likely than women to agree that they would enjoy cycling as a leisure or holiday activity and that they would cycle (more) if there more secure places to store bicycles. Younger people responded more positively on all three of the measures presented; specifically, those aged below 50 were more likely to agree, suggesting that these types of motivator are likely to be more effective among younger people.

Access to secure storage was more of an issue in London compared with the rest of the country, with $57 \%$ of respondents in London agreeing they would cycle (more) if there more secure places to store bicycles (compared with $39 \%$ elsewhere). There was less of a regional difference in terms of a desire for more cycle paths, although those in London were again slightly more likely than the rest of the country to agree that they would cycle (more) if there were more dedicated cycle paths.

Table 5.10 Attitudes towards cycling by demographics

| I would cycle (more) if there were more dedicated cycle paths | Total$\%$ | Age |  |  | Gender |  | Location |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Under } \\ 30 \end{gathered}$ | 30-49 | $\begin{aligned} & 60 \text { or } \\ & \text { more } \end{aligned}$ | Male | Female | London | Rest of country |
|  |  | \% | \% | \% | \% | \% | \% | \% |
| Base |  | 618 | 1679 | 858 | 1578 | 1577 | 310 | 2845 |
| Agree | 52 | 51 | 57 | 42 | 52 | 52 | 63 | 51 |
| Disagree | 30 | 30 | 25 | 44 | 28 | 33 | 23 | 31 |
| I would cycle (more) if there were more secure places to store bicycles |  |  |  |  |  |  |  |  |
| Agree | 41 | 45 | 45 | 27 | 44 | 38 | 57 | 39 |
| Disagree | 36 | 32 | 31 | 52 | 31 | 41 | 26 | 37 |
| I would enjoy cycling as a leisure or holiday activity |  |  |  |  |  |  |  |  |
| Agree | 66 | 67 | 74 | 45 | 69 | 62 | 74 | 65 |
| Disagree | 23 | 20 | 16 | 41 | 19 | 26 | 17 | 24 |
| Base: All who can ride a bic | / do | d it imp | sible d | disab | r hea | problem |  |  |

Respondents who usually used a private vehicle to get to work were asked what factors would encourage them to cycle to work instead. As previously discussed, respondents most frequently said that 'nothing' would encourage them ( $60 \%$ said this), showing a lack of willingness at an overall level to replace this regular car journey with a bicycle ride. This in itself is not particularly helpful and it is more interesting to look at the more positive responses, excluding those people who said that 'nothing'.

Table 5.11Factors which would encourage use of bicycles for regular journey

|  | $\%$ |
| :--- | :---: |
| Would consider sometimes (e.g. if weather was fine) | 35 |
| If safer / less traffic | 29 |
| If there were (better) cycle paths | 28 |
| If lived closer | 21 |
| Would only use if problem with the car | 12 |
| If more secure places to store bicycle | 11 |

Base: All who make regular trip to work using private vehicle and who live within 10 miles of destination(excluding those who said nothing would encourage) (285)

In keeping with other findings in this section, many respondents focused on safety issues related to the risk of traffic accidents, with around three in ten saying they
would be encouraged to cycle if it were generally safer / there was less traffic, or if there were cycle paths / better cycle paths. Other common responses included the need to live closer or to have more secure places at work to store a bicycle. On a positive note, around a third (35\%) indicated that they would consider sometimes using a bicycle to get work, for example if the weather was fine.

It is also possible to look at motivating factors among those who usually cycled to work, school or college - although, only a very small number of respondents actually did this ( 67 out of a total of 2,212 who made a regular work, school or college journey). As a result, the findings discussed here should be treated as indicative only. The most frequent responses when asked 'what are the reasons why you cycle to work, school or college?' were because it was cheap / free (40 respondents); quick (39); because they enjoyed cycling (32); and to keep fit (31). Although environmental reasons were less frequently mentioned, 18 respondents did say they cycled because it was better for the environment or because it reduced CO2 emissions.

Finally, it is possible to look at the findings to determine the extent, if any, to which differences in environmental attitudes appeared to be associated with variations in frequency of cycling. As summarised in Table 5.12, there was only limited evidence that cycling was motivated by environmental factors. Among all those who owned a bicycle or had regular access to a bicycle owned by someone else, 27\% used a bicycle at least once a week. This rises to a third (33\%) if we look just at those who definitely agreed that 'I should try to limit my car use for the sake of the environment' but the differences for those who agree less strongly or disagree were quite small.

Table 5.12 Frequency of cycling by attitudes towards environment

| Frequency of cycling | Total | I should try to limit my car use for the sake of the environment |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Definitely agree | Tend to agree / neither agree nor disagree \% | Tend to / definitely disagree <br> \% |
| Base |  | 260 | 944 | 284 |
| At least once a week | 27 | 33 | 26 | 22 |
| At least once a year | 52 | 52 | 53 | 52 |
| Less often / never | 22 | 15 | 22 | 26 |
| Base: All who owned a bicycle or had regular access to a bicycle owned by someone else $(1,571)$ |  |  |  |  |

### 5.2 Walking

Walking was covered by the survey but to a lesser degree than the other modes discussed elsewhere in the report. The extent to which respondents walked and the barriers to walking more were covered only in relation to the three specific journeys (regular journeys to work, school or college; business trips; and top-up food shopping trips). It should be noted that $9 \%$ of all respondents indicated that they had a disability or long standing health problems that made it difficult for them to go out on foot. These types of difficulty were more prevalent among older respondents with $31 \%$ of those aged 70 and over saying this was the case compared with $2 \%$ of those aged below 40 .

One in ten (10\%) of those who made a regular journey to work, school or college usually walked, making this the third most common way of getting there after private vehicles and buses. Unsurprisingly walking to work, school or college was largely limited to those who lived close to their place of work or study. In the case of those who worked, half (51\%) of those who lived less than a mile from their place of work usually walked there; this dropped to $39 \%$ among those who lived 1-1.9 miles away; to $4 \%$ at 2-4.9 miles; and to less than $1 \%$ of those who lived 5 miles or more away from where they usually worked..

Walking to do top-shopping was more common: a third (34\%) of those who made top-up food shopping trips or more regular little shops usually did so on foot, making it the second most common mode, after private vehicles, for this type of journey. While the survey did not collect distance to the nearest shop, it seems safe to assume that prevalence of walking is linked to the availability of (nearby) local shops. Differences in walking to do top-up food shopping by location suggest this may be the case. Walking to do top-up food shopping was most common in London, where nearly half ( $47 \%$ ) of respondents usually walked such journeys. This compared with $37 \%$ of those living in other urban areas; $36 \%$ of those living in 'town and fringe' locations; and $7 \%$ of those living in 'village, hamlet and isolated dwellings' locations. The average distance to a local shop or supermarket is of course shorter in urban locations compared with more rural locations. These location differences are also consistent with differences in car ownership - there being higher levels of ownership in rural compared with urban areas (see section 3.2).

As we would expect, almost no respondents who had to make business trips walked - less than $1 \%$ said they usually went on foot (just one respondent).

### 5.2.1 Barriers to walking to work, school or college

Those who usually travelled to work, school or college by car or van and lived within 2 miles of their place of work or study were asked why they didn't walk. The top 7 reasons given are shown in Table 5.13.

Table 5.13 Barriers to walking to work, school or college

|  | Reasons cited for not walking to work, <br> school or college <br> $\%$ |
| :--- | :---: |
| Takes too long / car is quicker | 35 |
| Not convenient / easier or more convenient by car | 18 |
| Weather / too hilly | 17 |
| I have to take things (e.g. tools / laptop / luggage etc.) | 15 |
| Walking takes too much effort / can't be bothered | 9 |
| Need car for school run / lifts for family members | 6 |
| Worried about personal safety | 5 |
| Bases vary: All who make regular journey using a car or van, plus (1) live within 2 miles of destination and have |  |
| no problems walking (196) |  |

The most common response was that it took too long to walk or that travelling by car was quicker, suggesting that a lack of time may be the key barrier to walking even short journeys of up to two miles. Convenience was also cited as a major reason for choosing a car over walking. Other reasons given suggested that walking was seen as too much effort - 9\% said that walking took too much effort but an additional 17\% said the walk was either too hilly or that they were worried about the weather ${ }^{25}$. The practicality of walking was also questioned by some, with $15 \%$ saying they could not walk because they needed to take things (e.g. tools or a laptop) with them to work and could not carry it all; and $6 \%$ saying they needed to go by car so they could do the school run or give lifts to family members. Concerns about personal safety were only mentioned by $5 \%$ of those who were asked. It is not possible to look at the findings by sub-group due to the relatively small base size.

[^24]
## 6. Trip avoidance and reduction

This sixth chapter looks at the extent to which respondents were avoiding making trips and/or reducing the amount they travelled. The results come from a small number of questions which mainly related to regular journeys to work and shopping trips.

### 6.1 Trip chaining and combining

Respondents who made a regular journey to work, school or college by car or van were asked whether they could combine this with other trips, such as food shopping, to reduce the amount they travelled overall. A quarter (25\%) said they usually did this already, while a third (34\%) said they did this sometimes already. The largest group (39\%) said that they could not combine their trip and a further $2 \%$ said that they could combine their trip but had not done this yet. The results from the question are summarised in Table 6.1.

Table 6.1 Combining journey to work, school or college with other trips

| Could you combine your trip to work, school or college with other trips? .... | Total | SEG |  | Gender |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | ABC1 | C2DE | Men - with child in HH <br> \% | $\begin{gathered} \text { Men - No } \\ \text { child in } \\ \text { HH } \\ \% \end{gathered}$ | ```Women - with child in HH %``` | Women - <br> No child <br> in HH <br> \% |
| Base |  | 850 | 481 | 249 | 436 | 273 | 373 |
| Yes - I usually do this | 25 | 28 | 19 | 16 | 19 | 39 | 28 |
| Yes - I do this sometimes | 34 | 35 | 32 | 32 | 34 | 30 | 40 |
| Yes - I do this sometimes, <br> but could do it more | 23 | 23 | 21 | 22 | 22 | 21 | 25 |
| Yes - I do this sometimes, but could not do it more | 12 | 12 | 11 | 10 | 12 | 9 | 16 |
| Yes - but I have not done this yet | 2 | 2 | 2 | 3 | 2 | 2 | 1 |
| No | 39 | 34 | 46 | 49 | 45 | 29 | 30 |

Base: All who make regular journeys to work, school or college by car or van $(1,331)$

The extent to which respondents were already combining / could combine trips was associated with socio-economic group, gender and presence of children. Those from higher (ABC1) socio economic groups were more likely than those from lower (C2DE) socio economic groups to say they were already or sometimes combining their regular journey with other trips ( $28 \%$ of those from ABC1 groups said they
usually did this compared with 19\% of those from C2DE groups). They were also less likely to say that it would not be possible to combine their regular trip (34\% compared with 46\%).

Women were almost twice as likely as men to say that they already usually combined their regular trip to work, school or college with other trips (33\% of women compared with $18 \%$ of men). Differences in gender were not wholly attributable to presence of children and school trips (which traditionally we might expect mothers to be more likely to be involved in than fathers). While women with children in their household were the most likely group to be combining trips ( $39 \%$ said they usually combined their regular trip with something else while $30 \%$ said they sometimes did this), women with no children in their household were also more likely than men to combine trips.

A similar pattern of response by gender and presence of children can be seen when we look at whether or not respondents usually went straight to work or did other things on the way like taking children to school or shopping (as briefly noted in section 3.1.2). All respondents who went to the same place of work at least twice a week were asked this question. The results in Table 6.2 suggest that taking children to school, nursery or other locations make up the majority of additional trips.

Table 6.2 Combining journey to work, school or college with other trips

|  |  | Gender |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Do you usually go straight to <br> work or do you do other things <br> on the way? .... | Total | Men - with <br> child in <br> household <br> $\%$ | Men - No <br> child in <br> household <br> $\%$ | Women - <br> with child in <br> household <br> $\%$ | Women - No <br> child in <br> household <br> $\%$ |
| Base | $\%$ | 270 | 527 | 363 | 499 |
| Usually go straight to work | 85 | 88 | 95 | 63 | 92 |
| Usually do other things | 13 | 10 | 4 | 2 | 2 |

Those living in rural areas who made a regular journey to work, school or college by car or van were also more likely to combine this with other trips, such as food shopping, to reduce the amount they travelled overall; 68\% did this at all, with $31 \%$ usually doing it and a further $27 \%$ doing it at least some of the time. Similarly, a higher proportion than average (20\%) usually did other things on the way to work.

### 6.2 Home-working

Those who worked and did not usually work from home were asked how often, if at all, they worked from home instead of going to their usual place of work. Homeworking was relatively common with about a quarter (26\%) of those asked saying that they worked from home at least once a year, and $13 \%$ saying they worked from home at least once a week.

Survey data showed that home-working varied by a wide range of factors including, but not limited to, respondent location (i.e. rural or urban), distance to work and mode of transport usually taken to work. For instance, those who usually travelled to work by public transport were more likely than those who travelled by car or van, to work from home at least once a week ( $16 \%$ compared with $12 \%$ ). Differences also occurred by respondent occupation and/or industry. As shown in Table 6.3, homeworking was most prevalent in the finance and business sector where nearly half (47\%) said they worked from home at least once a year (compared with $26 \%$ overall) and $17 \%$ worked from home at least once a week (compared with $13 \%$ overall).

Table 6.3 Home-working by Industrial Sector

\begin{tabular}{|c|c|c|c|c|c|}
\hline \& \& \multicolumn{4}{|c|}{Industrial sector ${ }^{26}$} <br>
\hline \& Total

\% \& Manual Industries
\% \& Service Industries

\% \& | Finance and business, administration |
| :--- |
| \% | \& Public admin, education, health, other community / social services \% <br>

\hline Base \& \& 324 \& 458 \& 202 \& 742 <br>
\hline At least once a week \& 13 \& 9 \& 10 \& 17 \& 14 <br>
\hline At least once a month \& 8 \& 9 \& 4 \& 19 \& 7 <br>
\hline At least once a year \& 6 \& 5 \& 3 \& 10 \& 6 <br>
\hline Less / Never \& 74 \& 77 \& 83 \& 53 \& 74 <br>
\hline
\end{tabular}

Base: All who work but don't usually work at home (excluding don't know and not stated responses) $(1,834)$

[^25]Levels of home-working were similar to the national average in the public administration, education, health, community and social sectors. In contrast homeworking was relatively uncommon in manual and service industries.

Respondents who indicated that they worked from home less than three times a week but at least once a year (i.e. those who worked from home but not very regularly) were asked whether it would be possible to do more of their type of work from home. At the same time, those who worked from home less than once a year or never were asked if it would be possible to do (any of) their kind of work at home.

Table 6.4 Potential to do (more) work at home

|  | Total <br> $\%$ |  | Total <br> $\%$ |
| :--- | :---: | :--- | :---: |
| (Almost) never work at home |  | Occasionally work at home |  |
| Yes - could do all at home | 1 | Yes - could do all at home | 8 |
| Yes - could do most at home | 1 | Yes - could do a lot more at home | 20 |
| Yes - could do some at home | 7 | Yes - could do a bit more at home | 34 |
| No - could not do any at home | 90 | No - could not do any more at home | 38 |
| Base: All who work at home less than once a year / <br> never (1,334) | Base: All who work at home at least once a year but not <br> three or more times a week (369) |  |  |

Among those who worked at home less than once a year or never, the potential to increase home-working appeared to be limited - $90 \%$ said that they could not do any of their work at home, with very few people saying they could do most (1\%) or all (1\%) at home. This was very different among those who already worked at home at least once a year, with most (62\%) saying they could do at least a bit more of their work at home and around three in ten (28\%) saying they could do either a lot more (20\%) or all (8\%) of their work at home. Those who were most likely to already be working at home and who appeared to have the most potential to increase the amount they work from home were those in the finance and business sectors (i.e. those who are traditionally office-based) and, to a lesser degree those working in the public administration, education, health, community and social sectors.

## Tele and video/web-conferencing

Those who made business trips were asked a short series of questions about tele and video / web-conferencing to assess the extent to which these services were being and could be used to reduce the amount they travelled. As these questions
were asked just of those who made business trips the base size is relatively small and does not support detailed sub-group analysis.

Business travellers were split fairly evenly into those who had ever used conferencing services (47\%) and those who had not (53\%). Of the services covered by the survey, tele-conferencing was the most common (used by $37 \%$ of all business travellers); followed by video-conferencing (24\%); and web-conferencing (22\%).

Table 6.5 Reducing travel through conferencing services

| How easy of difficult would it be... to use <br> video, web or tele-conferencing to reduce <br> the number of meetings you travel to?... | Total <br> $\%$ | Already use <br> conferencing <br> $\%$ | Do not use <br> conferencing <br> $\%$ |  |
| :--- | :---: | :---: | :---: | :---: |
| Base | 22 | 270 | 257 |  |
| Very easy | 21 | 29 | 6 |  |
| Fairly easy | 14 | 17 | 16 |  |
| Fairly Difficult | 37 | 16 | 12 |  |
| Very Difficult | 3 | 2 | 55 |  |
| Don't know / not stated |  |  |  |  |
| Base: All who made business trips (527) |  | 10 |  |  |

As shown in Table 6.5, slightly more business travellers said that it would be difficult to reduce the number of meetings they travelled to by using conferencing services than said it would be easy (51\% compared with 43\%). Responses to this question varied according to whether respondents were already making use of conferencing services. Those who said they had ever used conferencing services were three times as likely as those who had never used them to say it would be easy to reduce the number of meetings they travelled to (66\% compared with 23\%).

Those who said it would be difficult to reduce the number of meetings they travelled to by using conferencing services were asked why this was. The reasons given were varied but the most common responses related to a desire to meet face to face $32 \%$ saying they just preferred to meet face to face and $30 \%$ saying that it was more effective to meet face to face. A further $20 \%$ said it was more convenient to meet face to face. After this, it was most common for respondents to mention lack of access to conferencing services as a barrier to using them - saying that they were not available at or near their workplace (26\%) or that they were not easily accessible
(10\%). A further $14 \%$ indicated that the people that they met did not have the technology.

Others indicated that it was not practical to carry out meetings over the phone or via video or web $-18 \%$ saying they needed to take things with them to meetings and $10 \%$ saying that the type of work they did could not be done over the phone.

### 6.3 Internet shopping and home delivery

Around two thirds (67\%) of respondents did a main (e.g. a weekly or fortnightly) food shop, with slightly more than half (55\%) of these people doing top-up food shopping trips. We also know that the most common form of transport used for top-up food shopping trips was a car or van. One way of trying to reduce CO 2 emissions associated with food shopping trips is through the promotion of home delivery.

All respondents who were involved in doing food shopping were asked how often they used home delivery for (i) food shopping and (ii) any other non-food shopping (e.g. books, CDs, clothes, holidays and insurance).

Around a quarter (27\%) of respondents had used home delivery for food shopping but only $9 \%$ said they used this regularly, with a similar proportion (10\%) saying they used it sometimes and $8 \%$ saying they had only ever used it once or twice. Use of home delivery for non-food shopping was more common with more than half (56\%) of respondents saying they had used this, with $21 \%$ indicating they did this regularly.

As we might expect there was a fairly strong link between use of non-food and food home delivery. People who had used home delivery for non-food shopping were more likely to have also used it for food shopping. As shown in Table 6.6, 50\% of people who said they regularly used home delivery for non-food shopping said they used home delivery for food shopping (24\% using it regularly). This compares with just $10 \%$ of people who never used home delivery for non-food shopping.

Table 6.6 Comparison of home delivery for food and non-food shopping
CN76. And how often nowadays, if at all, do you use home delivery (e.g. internet shopping / telephone ordering) for any non-food shopping,

| CN75. How often, if at all, do you use <br> home delivery (e.g. internet shopping / <br> telephone ordering) for your food <br> shopping nowadays? | Regularly | Sometimes | Have only <br> done this once <br> or twice | No |
| :--- | :---: | :---: | :---: | :---: |

Variations in levels of home delivery (both food and non-food) were associated with a range of demographic factors including age; location; and socio-economic group (see Table 6.7). Not having a car did not increase the likelihood of using home delivery those with no car or van in their household were no more likely to use home delivery than those with a car. Indeed, those with two or more vehicles in their household were more likely to use home delivery (32\%) for food shopping than those who had either one vehicle (24\%) or no vehicles (25\%) in their household.

Table 6.7 Use of home delivery by demographic factors

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline \& \& \& Age \& \& \& \& \& Loc \& On \& \\
\hline CN75. How often, if at all, do you use home delivery for your food shopping nowadays? \& \begin{tabular}{l}
Total \\
\%
\end{tabular} \& \[
\begin{gathered}
\text { Under } \\
30 \\
\%
\end{gathered}
\] \& 30-49
\(\%\) \& 50 or over \% \& ABC1

$\%$ \& C2DE

$\%$ \& | Urban London |
| :--- |
| \% | \& | Urban |
| :--- |
| Other \% | \& \[

$$
\begin{gathered}
\text { Town } \\
\& \\
\text { Fringe } \\
\%
\end{gathered}
$$
\] \& Rural

$\%$ <br>
\hline Base \& \& 501 \& 1171 \& 1654 \& 1888 \& 1438 \& 367 \& 2325 \& 282 \& 352 <br>
\hline Regularly \& 9 \& 10 \& 14 \& 5 \& 11 \& 7 \& 11 \& 8 \& 11 \& 11 <br>
\hline Sometimes \& 10 \& 11 \& 15 \& 6 \& 12 \& 9 \& 14 \& 10 \& 10 \& 8 <br>
\hline Have only done this once or twice Never \& 7
73 \& 9
69 \& 9
62 \& 5
84 \& 9
68 \& 5
79 \& 10
65 \& 8 \& 4
74 \& 6
75 <br>
\hline Ever Used \& 27 \& 31 \& 38 \& 16 \& 32 \& 21 \& 35 \& 26 \& 26 \& 26 <br>
\hline CN76. How often nowadays, if at all, do you use home delivery for any non-food shopping? \& Total

$\%$ \& $$
\begin{gathered}
\text { Under } \\
30 \\
\%
\end{gathered}
$$ \& $30-49$

$\%$ \& 50 or over \% \& ABC1

$\%$ \& C2DE

$\%$ \& Urban London \% \& Urban Other \% \& Town \& Fringe \% \& Rural

$\%$ <br>
\hline Regularly \& 21 \& 22 \& 30 \& 13 \& 28 \& 12 \& 20 \& 21 \& 18 \& 29 <br>
\hline Sometimes \& 29 \& 36 \& 30 \& 25 \& 33 \& 24 \& 29 \& 28 \& 32 \& 32 <br>
\hline Have only done this once or twice Never \& 6
44 \& 5
36 \& 5
35 \& 6
56 \& 6
33 \& 5
59 \& 5
46 \& 6
46 \& 4
46 \& 7
32 <br>
\hline Ever Used \& 56 \& 64 \& 65 \& 44 \& 67 \& 41 \& 54 \& 54 \& 54 \& 68 <br>
\hline \multicolumn{2}{|l|}{Base: All who do food shopping $(3,326)$} \& \& \& \& \& \& \& \& \& <br>
\hline
\end{tabular}

Younger people, specifically those aged under 50, were more likely to use home delivery for both food and non-food shopping, with home delivery being most prevalent among those aged $30-49$. This age group were the most likely to use home delivery for food - $38 \%$ ever used it and $14 \%$ used home delivery regularly. They were also the most regular users of home delivery for non-food shopping ( $30 \%$ said they used this regularly compared with $21 \%$ overall).

Likelihood of using home delivery was also strongly associated with social-economic group. Those from higher (ABC1) socio-economic groups were around one and a half times as likely as those from lower (C2DE) socio-economic groups to have ever used home delivery for food shopping ( $32 \%$ compared with $21 \%$ ) and non-food shopping ( $67 \%$ compared with $41 \%$ ). To an extent this difference may be linked via working status as home delivery was more prevalent among those who worked full or part-time than those who were not currently working. However, the findings suggested it was also a result of differences in levels of home internet access: nearly all those from the highest (AB) socio-economic groups (92\%) had internet access at home compared with $81 \%$ of those from the C1C2 socio-economic groups and just $60 \%$ of those from the lowest (DE) socio-economic groups.

Looking at the findings by location, use of home delivery for food shopping was quite a lot higher in London than in other areas of the country. However, this was not the case for non-food shopping. In fact use of home delivery for non-food shopping was at its highest in more rural (village, hamlet and isolated dwellings) locations.

## 7. Conjoint analysis

This chapter briefly presents an overview of the results of the responses to choice modelling (or conjoint) questions which were included in the study to examine the extent to which people were prepared to use different modes of transport to reduce their carbon emissions.

A conjoint (or stated preference) approach was used to understand the underlying factors which influenced respondents' travel choices and most specifically to understand the extent to which respondents took into account CO2 emissions when choosing how to travel. This type of approach was favoured to minimize the effect of social desirability bias ${ }^{27}$. As discussed in previous chapters, the survey findings suggest there is a disparity between how people claim to feel about the environment / whether they feel a responsibility to reduce their CO2 emissions and how they actually choose to travel. The conjoint section of the questionnaire was designed to measure the importance of CO2 emissions in travel choice, relative to mode, time taken and cost of journey.

Conjoint analysis is a technique which determines how people value different features that make up an individual product, service or experience (in this case a specific journey). The objective of the analysis is to determine what combination of a limited number of attributes is most influential on respondent choice. By analyzing how respondents make choices, the implicit valuation of the individual elements making up the product, service or experience can be determined.

Respondents were presented with one of six travel scenarios, selected at random from list below (the sixth scenario was only shown if the respondent was working):

1) A 1-mile trip to the shops, carrying shopping in fair weather
2) A 1-mile trip to the shops, carrying shopping in bad weather
3) A 10-mile trip from the supermarket, with shopping
4) A 25 mile trip to meet a friend in a town, travelling on your own
5) A 25 -mile trip to meet a friend in a town, travelling with 2 others
6) A 5-mile journey to work each day
[^26]Each respondent was presented with 10 screens relating to their selected scenario, with each screen showing three possible ways in which the respondent could choose to make the journey. These options varied according to four separate factors, namely:

- The mode of transport used - car, bus, cycling or walking
- The cost of the journey (including any parking fees if these applied)
- How long the journey would take to complete
- And, the CO2 emissions associated with the journey (in Kgs of CO2)

Respondents were able to select their favoured option of the three or indicate that they would travel some other way / not make the journey at all. By way of example, Figure 7.1 shows one of the possible screens that a respondent could be shown for scenario 1.

Figure7.1. Example of a screen shown to a respondent in the conjoint module

Imagine you were going to the shops, which are about one mile from where you live and you expect to come back with one bag of shopping. The weather is fine. There are three ways in which you could travel, which are shown on the following screens, together with how much it would cost you, the amount of carbon dioxide emissions that would be created, and the time it would take. These can all vary depending on the type of vehicle, traffic conditions, and so on. Car costs cover the cost of fuel but not maintenance costs. Parking is free.

Bus times include waiting time.
These are all for a single journey. Not return. Assume that there would be short walk to the bus stop at each end of the journey.

Assume an ideal world in which all of the three options are available to you. If you don't have a car or a bike, suppose that you did have one. If you had to choose from one of these, which one would you choose?

Figure 7.1. (continued)
From these three options which one would you choose?
(1 mile from shops, with shopping, fair weather)
Option 1 Option 2 Option 3

| Mode | Car | Walk | Bus |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cost | $£ 1.00$ | - | 25p | None |  |
| CO2 | 0.2 kg | - | 0.1 kg | options |  |
| Time | 20 min | 10 min | 25 min |  |  |
|  | 1 | 2 | 3 | 4 |  |
| Please, click on the option (or enter the number of the option) you would choose. |  |  |  |  |  |

Cost, CO2 and time taken varied within pre-defined parameters for each mode covered, so that these were appropriate and realistic for each mode. Notably, the financial cost and CO2 emissions for all cycling and walking options were kept at zero to reflect the reality of these modes.

The resulting analysis aggregates responses from all choices made by all respondents and imputes the relative importance / influence of each of the four factors (mode, cost, CO2 and time). The rest of this section looks at this within each of the six scenarios.

Overall, the findings showed that CO2 emissions were of relatively little importance to respondents when making decisions about how to travel. In contrast, they tended to make their choice based largely on the mode and, to a lesser extent, the time it would take to make the journey. In the case of selecting by mode, people tended to favour cars over buses and travelling by bicycle or on foot. CO2 emissions and financial costs tended to be of secondary importance. These findings help to explain the significant 'attitude-behaviour' gap as they suggest that people are tending to make decisions based on mode itself and general convenience. This is consistent with findings in section 3.6 .1 which suggested that around six in ten (61\%) of those who regularly travel by car do so out of habit - tending to describe travelling by car
as something they 'do automatically' and something that is 'typically me'. In contrast, people tend to only take into account CO2 and cost to a very low degree. This suggests a message based primarily on the need to reduce CO2 emissions may not be effective in achieving significant modal shift.

### 7.1.1 Shopping trips - Scenarios (1) \& (2)

Figure 7.2 below presents the importance scores for each of the four attributes within scenario 1 and 2 ( 1 mile shopping trips in fair and bad weather). Importance scores indicate the proportion of the decision that each attribute accounted for - with a 100 indicating the attribute accounted for the whole decision and 0 indicating that it was not taken into account at all. Importance scores can be viewed relative to one another such that a score of 20 shows the attribute was twice as important as another attribute that scored only 10.

As shown in Figure 7.2, mode was by far the most important attribute in the decision making process - respondents tending therefore to choose their preferred mode regardless of the time, cost and CO2 emissions associated with this choice. With importance scores of 67 (scenario 1) and 66 (scenario 2), this made mode around three times as important as the time the journey would take ( 22 and 21 respectively). In comparison, cost and CO2 emissions were of very little importance in the decision. This is perhaps to expected, given that the financial costs and CO2 emissions for such a short journey are relatively small - respondents opting for convenience as a result. In scenario 2 (in which the weather is described as bad rather than fair), CO2 became slightly more important than cost but still remained unimportant relative to mode and time.

Figure 7.2. Average importance scores - Shopping - Scenarios (1) \& (2)


Base: All who answered this scenario (713 / 650)

The importance scores shown in Figure 7.2 are averages taken across all respondents who answered this scenario. We might expect the importance of each attribute to vary within different sub-groups. While there were some variations, it is most important to note there was little or no variation in the importance granted to CO2, even if we look at those who had the most 'pro-environmental' attitudes. Taking those who described themselves as being environmentally-friendly in all or most things that they do, the importance rating for CO2 was really no higher (8\%) than those who said they only did quite a few things (8\%) or nothing / one or two things (7\%). Similarly, what the respondent believed about climate change had little or no effect on this - the importance rating for CO2 among those who thought the UK was already being affected by climate change was no higher than among those who said
that climate change was not happening. This suggests that even for people who claim to be environmentally-friendly and believe in climate change, CO2 emissions are of minimal importance when choosing how to travel for a specific trip.

Table 7.4. Logit scores for each attribute - Shopping - Scenarios (1) \& (2)


The 'logit counts' shown for each of the attributes show the order of preference high positive scores indicating a strong preference among respondents for that particular mode, amount of time, cost or amount of CO2 emitted. Conversely, high negative scores indicating a strong dislike. Looking at time taken for the journey, the cost and the CO2 emissions, the differences in score are entirely self-explanatory: respondents preferred options that were quick, costed less and resulted in lower CO2 emissions. What is notable is the relatively small differences in score for cost of journey and CO2 emissions - whether the journey costs 25 p instead of $£ 1$ makes
little difference to respondents, and whether the journey results in CO2 emissions of 0.1 kg instead of 0.4 kg makes little difference.

In contrast, the logit scores shown for mode illustrate how strongly respondents preferred to either walk (the most preferred mode) or use a car, compared with taking a bus or cycling.

Otherwise the only substantive difference between scenarios 1 and 2 is that car overtook walking as the preferred mode in bad weather. Bus and bicycle remained less appealing than walking even in bad weather with cycling become even less popular. As discussed in the remaining sections, car was the preferred mode for all of the other scenarios presented as part of the conjoint analysis.

### 7.1.2 Supermarket shopping - Scenario (3)

Scenario 3 looked at supermarket shopping specifically - and for a longer journey of 10 miles. As with the previous shopping scenarios, mode was the most important attribute in the decision making process, although time was much closer in importance. Again this shows respondents tended to choose based on preferred mode. Cost and CO2 emissions associated with the journey had little importance by comparison. With an importance score of 47, mode was around three times as important as cost (13) and six times as important as CO2 emissions (8). This shows that mode accounted for nearly half of the decision making process on average. The results show that CO2 emissions were of no more importance than for the shorter shopping trips already covered above.

Figure 7.3. Average importance scores- Supermarket shopping - Scenario (3)

Average Importance Scores (Scenario 3)


Base: All who answered this scenario (623)

As described previously there was little variation in importance rating for CO2 by environmental behaviours and beliefs. The scores shown in Table 7.5 indicate that cars, as we would expect, were the preferred mode by a large distance.

Table 7.5. Logit scores for each attribute - Supermarket - Scenario (3)

| (1) Mode | Score |
| :---: | :---: |
| Car | +105 |
| Bus | -46 |
| Train | -59 |
| (2) Time |  |
| 20 min | +60 |
| 35 min | +29 |
| 50 min | -6 |
| 65 min | -25 |
| 80 min | -58 |
| (3) Cost |  |
| £2 | +26 |
| £3 | +16 |
| £4 | -1 |
| £5 | -13 |
| £6 | -28 |
| (4) CO2 emissions |  |
| 1 kg | +9 |
| 2 kg | +5 |
| 3 kg | -3 |
| 4 kg | -2 |
| 5 kg | -9 |
| Base: All who answered this scenario (623) |  |

### 7.1.3 Leisure trips - Scenarios (4) \& (5)

Scenarios 4 and 5 looked at leisure trips; described as going to meet a friend in town which is located 25 miles away. In scenario 4 the respondent was travelling alone and in scenario 5 they were travelling with two other people. The results for the two scenarios were very similar indicating that travelling with others makes little difference in the decision making process for this type of journey. Figure 7.4, once again shows that mode and time were the most important factors, with time now rivalling mode as the most important factor. This is consistent with the longer journey length compared with the previous scenarios and the greater potential for time saving. Cost was the third most important factor (at around half the level of importance as mode and time), with CO 2 being the least important factor. Overall the figures indicate that mode and time accounted respectively for $38 \%$ and $35 \%$ of the
decision-making process for this type of journey (and therefore around three quarters of the process combined).

Figure 7.4. Average importance scores- Leisure trips - Scenarios (4) \& (5)


Base: All who answered this scenario (663 / 648)

Although CO2 remained the least important factor, its importance rating was higher than for the shorter journeys covered in the three previous scenarios. This suggests respondents were more likely to take CO2 emissions into account for longer journeys. There were no substantive differences in the stated importance of CO2 between sub-groups.

Table 7.6. Logit scores for each attribute - Leisure trips - Scenarios (4) \& (5)

| $(1)$ Mode | Scenario (4) Score | Scenario (5) Score |
| :---: | :---: | :---: |
| Car | +42 | +48 |
| Train | -13 | -19 |
| Bus | -29 | -28 |
| (2) Time |  |  |
| 40 min | +66 | +60 |
| 60 min | +36 | +34 |
| 80 min | -6 | -6 |
| 100 min | -33 | -31 |
| 120 min | -63 | -58 |
| (3) Cost |  |  |
| £7.00 | +33 | +31 |
| £8.50 | +18 | +20 |
| £10.00 | +1 | +3 |
| £11.50 | -20 | -14 |
| £13.00 | -33 | -40 |
| (4) CO2 emissions |  |  |
| 1.0 kg | +11 | +10 |
| 2.0 kg | +7 | +11 |
| 3.0 kg | +4 | -2 |
| 4.0 kg | -4 | -6 |
| 5.0 kg | -17 | -14 |
| Base: All who answered this scenario (663/648) |  |  |

### 7.1.4 Regular journey to work - Scenario (6)

The sixth and final scenario focused on a regular five-mile journey to work (that the respondent made each day). As previously mentioned, the scenario was only presented to respondents who worked. This scenario was the only one of the six where time was found to be of equal importance to mode of transport (both have a rating of 42 indicating that they each accounted for around $40 \%$ of the decision making process). This is to be expected given that a journey to work is repeated each day, there and back, increasing the appeal of quick, time-saving options. Equally a repeated journey to work probably offers the greatest potential for CO2 savings out of any of the six types of journey covered in the conjoint analysis. But, CO2 emissions remain of little importance in the decision making process when
compared with time and mode. More encouragingly, CO2 emissions appeared to be at the same level of importance as cost.

Figure 7.5. Average importance scores- Regular work journey- Scenario (6)


Base: All who answered this scenario (626)

The scores in Table 7.7 show that cars were by far the preferred mode, over public transport and cycling.

Table 7.7. Logit scores for each attribute- Regular work journey- Scenario (6)

| (1) Mode | Score |
| :---: | :---: |
| Car | +48 |
| Train | +1 |
| Bus | -6 |
| Bike | -43 |
| (2) Time |  |
| 30 min | +42 |
| 45 min | -4 |
| 60 min | -43 |
| 75 min | -80 |
| (3) Cost |  |
| £1.50 | +16 |
| £2.00 | +7 |
| £2.50 | -8 |
| £3.00 | -15 |

continued...

Table 7.7. (continued)

| (4) CO2 emissions | +8 |
| :---: | :---: |
| 1 kg | +3 |
| 2 kg | -2 |
| 3 kg | -11 |
| 4 kg |  |

Base: All who answered this scenario (626)

### 7.1.5 Summary

In summary, across all six journey types covered in the conjoint analysis, mode and transport were found to be the most important factors in the process of deciding how to travel. For all but the shortest and simplest journeys, the car tended to be the preferred option for most people. CO2 emissions were of relatively low importance but did have some role to play in the decision-making process - with their importance increasing only slightly in relation to longer and therefore higher emission journeys. The most important finding within this section is the lack of variation in importance given to CO2 emissions by sub-group. Even among the seemingly proenvironmental, CO2 emissions remained of low importance particularly when compared with mode and time. At best CO2 was a peripheral factor in respondents' decision-making.

## 8. Respondent characteristics

This short final chapter looks at key demographic factors that might affect travel behaviour, notably employment, income, education, household composition and where people live. As elsewhere, analysis is limited to key findings and is not intended as an exhaustive analysis of the complete survey data set.

### 8.1 Key demographic factors

### 8.1.1 Working status:

As shown in Table 8.1, just over half (58\%) of those interviewed were working; 44\% were working full-time (over 30 hours per week) and $14 \%$ part-time. Those working full-time were more likely to be male ( $56 \%$ of men worked full-time compared with $32 \%$ of women), aged between 21-60 years and in the highest socio-economic groups $A B$ (53\%). Women were more likely to work part-time ( $20 \%$ compared with $7 \%$ of men). Those who were not working included people who were retired ( $22 \%$ of all respondents), those caring for other family members (6\%), people who were unemployed and looking for work (4\%) and those who were unable to work due to long term ill-health or disability (3\%). Those who were not working were more likely to be women (58\%), aged 60 or over and in the lowest socio-economic groups DE (55\%). Seven per cent of respondents were currently in full time education, including most (61\%) of those aged 16-20.

Table 8.1: Work status by age of respondent

|  |  | Age |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | $16-20$ | $21-29$ | $30-39$ | $40-49$ | $50-59$ | $60-69$ | $70+$ |
| $\%$ | $\%$ | $\%$ | $\%$ | $\%$ | $\%$ | $\%$ | $\%$ |  |
| Base |  | 197 | 473 | 621 | 707 | 561 | 644 | 720 |
| Work full-time | 44 | 23 | 54 | 59 | 66 | 58 | 22 | 1 |
| Work part time | 14 | 9 | 15 | 19 | 17 | 19 | 11 | 1 |
| Not working | 35 | 6 | 19 | 21 | 16 | 22 | 68 | 98 |
| Full-time education | 7 | 61 | 11 | 1 | 1 | - | - | - |

Base: All respondents (3923)

Amongst those that were working, $58 \%$ were employed in the private sector including a fifth (18\%) who were employed in manual industries, $27 \%$ in service industries and $12 \%$ in finance and business services. Just over a third (36\%) of respondents who were working were employed in the public sector, including $6 \%$ in public
administration and $30 \%$ in education, health and other community and social activities.

As shown in Table 8.2, there were some notable differences by key demographic groups. Part-time working was higher amongst those working in the service and public sectors; $33 \%$ of people working part-time were employed in the service sector and $45 \%$ in the public sector. Respondents in the higher socio-economic groups (ABC1) were more likely to be working in financial intermediation and business services and the public sector, whilst those in the lower socio-economic groups (C2DE) were more likely to be employed in manual and service industries. Those working in financial intermediation and business services were also more likely to be living in London (24\% of respondents living in London, worked in this sector), whilst those working in manual industries were more likely to be living in rural areas (28\% of those living in rural areas were employed in manual industries).

Table 8.2. Standard Industrial Classification (SIC92) by demographics

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \& \& \multicolumn{2}{|l|}{Full or Parttime} \& \multicolumn{4}{|c|}{Location} \& \multicolumn{2}{|l|}{Socioeconomic group} <br>
\hline \& Total

\% \& | Fulltime |
| :--- |
| \% | \& Parttime \% \& UrbanLondon


\% \& | UrbanOther |
| :--- |
| \% | \& Town and Fringe \% \& Village, Hamlet and Isolated Dwellings \% \& ABC1 \& C2DE <br>

\hline Base \& 2,045 \& 1,547 \& 498 \& 205 \& 1,491 \& 141 \& 208 \& 1,318 \& 727 <br>
\hline Manual industries \& 18 \& 22 \& 6 \& 10 \& 18 \& 20 \& 28 \& 14 \& 25 <br>
\hline Service industries \& 27 \& 25 \& 33 \& 23 \& 28 \& 31 \& 26 \& 20 \& 38 <br>
\hline Financial and \& 12 \& 13 \& 9 \& 24 \& 10 \& 12 \& 10 \& 18 \& 3 <br>
\hline Public administration, education, health, community and social activities \& 36 \& 34 \& 45 \& 36 \& 38 \& 34 \& 31 \& 42 \& 28 <br>
\hline Other \& 6 \& 5 \& 7 \& 7 \& 6 \& 4 \& 5 \& 6 \& 5 <br>
\hline
\end{tabular}

As illustrated in Table 8.3, just over a third of respondents (36\%) were employed in management or professional occupations - this proportion being higher amongst those working full-time ( $40 \%$ compared with $23 \%$ working part-time).

Table 8.3. NS-SEC by work status

|  | Total \% | Full or Part-time |  |
| :---: | :---: | :---: | :---: |
|  |  | Full-time \% | $\begin{gathered} \text { Part-time } \\ \% \\ \hline \end{gathered}$ |
| Base | 2045 | 1,547 | 498 |
| Large employers and higher managerial occupations | 7 | 8 | 3 |
| Higher professional occupations | 7 | 8 | 4 |
| Lower managerial \& professional occupations | 22 | 23 | 17 |
| Intermediate occupations | 15 | 15 | 17 |
| Small employer \& own account workers | 8 | 8 | 6 |
| Lower supervisory \& technical occupations | 4 | 4 | 2 |
| Semi-routine occupations | 22 | 18 | 34 |
| Routine occupations | 11 | 10 | 14 |
| Others | * | * | 0 |
| Unclassified | 4 | 4 | 4 |

Base: All currently working $(2,045)$

### 8.1.2 Household income

Table 8.4 below shows equivalised household income for all respondents surveyed. Equivalised household income is adjusted for the size and make-up of the household to better reflect the relative amount of income available and is expressed in quintiles. Quintile 1 had the lowest average equivalised income and quintile 5 the highest. The majority of those in the lowest quintile (quintile 1) had an income of between $£ 5,000$ and $£ 15,000$ per year (no one in this quintile had an equivalised household income of more than $£ 30,000$ per annum). Conversely the majority ( $83 \%$ ) of those in the top quintile (quintile 5) had an income of $£ 50,000$ or more per annum (everyone in this quintile had an annual equivalised household income of $£ 25,000$ or more).

Equivalised income was closely related to socio-economic group. As also shown in Table 8.4, just over half (54\%) of those in quintile 1 were in the lowest DE socioeconomic groups, whilst almost two thirds (66\%) of respondents in quintile 5 were in the highest (AB) socio-economic groups. Similarly, over half (59\%) of respondents in quintile 2 were in the lower C2DE socio-economic groups, $61 \%$ of those in quintile 3 were in groups C1C2 and 73\% of those in quintile 4 were in the higher (ABC1) socioeconomic groups.

Table 8.4 Equivalised income by annual household income and socioeconomic group

|  | Quintile 1 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| $\%$ | Quintile 2 |  |
| $\%$ | Quintile 3 |  |
| $\%$ | Quintile 4 | Quintile 5 |
| $\%$ | Unclassified |  |
| $\%$ |  |  |

### 8.1.3 Education

As illustrated in Table 8.5, over three-quarters of respondents (77\%) had an educational qualification. A fifth of respondents (20\%) had a first or higher degree; this proportion being significantly higher (49\%) amongst those in the highest ( $A B$ ) socio-economic groups and slightly higher amongst those working full-time (27\%). Highest level of education was also higher amongst those living in London (37\%). Almost a third (30\%) of respondents had ' $A$ ' levels, diploma or equivalent; these being more likely to be in socio-economic group C1 (39\%) and still in full-time education (52\%). Those whose highest qualification was at GCSE level or equivalent (27\%) were more likely to be in socio-economic group C2 (37\%). Those without any qualifications were most likely not to be working (42\%) and to be the lowest (DE) socio-economic groups (50\%).

Table 8.5 Highest level of Education by socio-economic group and work status

|  | Total | Socio-economic group |  |  |  | Work status |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | AB $\%$ | C1 <br> \% | C2 <br> \% | DE <br> \% | $\begin{aligned} & \hline \text { Full- } \\ & \text { time } \\ & \% \end{aligned}$ | $\begin{gathered} \text { Part- } \\ \text { time } \\ \% \end{gathered}$ | $\begin{gathered} \text { Not } \\ \text { working } \\ \% \end{gathered}$ | FT education \% |
| Base |  | 1010 | 1201 | 754 | 958 | 1547 | 498 | 1696 | 167 |
| Highest level of education |  |  |  |  |  |  |  |  |  |
| First or higher degree | 20 | 49 | 19 | 3 | 4 | 28 | 20 | 11 | 18 |
| ' $A$ ' level/diploma or equivalent | 30 | 29 | 39 | 30 | 16 | 33 | 30 | 21 | 52 |
| GCSE or equivalent | 27 | 14 | 28 | 37 | 29 | 27 | 33 | 24 | 23 |
| None | 23 | 7 | 13 | 29 | 50 | 12 | 16 | 42 | 7 |

### 8.1.4 Household composition

Only $13 \%$ of respondents lived by themselves. Over a third (35\%) of respondents lived with one other person and a further $40 \%$ lived in households with 3-4 people. The majority of those living in households with at least one other person, lived with a spouse or partner (79\%). A third (34\%) of all respondents lived in households with one or more children aged under 18 , including $12 \%$ who had at least one child aged under 5 . As might be expected, the majority of older respondents (aged 50 or over) did not have any children aged under 18 living in their home. Over eight in ten (82\%) of respondents aged $50-59$ years and $98 \%$ of respondents aged 60 or over had no children under 18 living in their household).

### 8.1.5 Location

Almost three quarters of respondents (73\%) lived in urban areas, including $14 \%$ who lived in London ${ }^{28}$. A further $12 \%$ of respondents lived in towns or fringe areas and $15 \%$ in more rural areas (villages, hamlets and isolated dwellings). Younger respondents aged under 40 and those in the lowest (DE) socio-economic groups were slightly more likely to live in urban areas ( $80 \%$ of respondents aged under 40 lived in urban areas and $79 \%$ of DEs). Conversely, older people aged 60 or over and those in the highest (AB) socio-economic groups were slightly more likely to live in rural areas (20\% and 21\% respectively).

[^27]
## References

${ }^{1}$ Anable, J. Lane, B. and Kelay, T. (2006) An Evidence Base Review of Public Attitudes to Climate Change and Transport Behaviour, available here: http://www.dft.gov.uk/pgr/sustainable/climatechange/areviewofpublicattitudestocl573 1
${ }^{2}$ King, S. Dyball, M. Webster, T. Sharpe, A. Worley, A. DeWitt, J. (2009) Exploring public attitudes to climate change and travel choices: deliberative research, available here:
http://webarchive.nationalarchives.gov.uk/+/http://www.dft.gov.uk/pgr/scienceresearc h/social/climatechange/
${ }^{3}$ Alex Thornton (2009). Public attitudes and behaviours towards the environment tracker survey: A report to the Department for Environment, Food and Rural Affairs. TNS. Defra, London, available here:
http://www.defra.gov.uk/evidence/statistics/environment/pubatt/download/report-attitudes-behaviours2009.pdf
${ }^{4}$ The National Travel Survey (NTS) provides up-to-date and regular information about personal travel within Great Britain and monitors trends in travel behaviour. First commissioned in 1965/1966, it has been a continuous survey since 1988. Further information can be found on the DfT website here:
http://www.dft.gov.uk/pgr/statistics/datatablespublications/nts/
${ }^{5}$ Lyons, G. Goodwin, P. Hanly, M. Dudley, G. Chatterjee, K. Anable, J. Wiltshire, P. Public attitudes to transport: Knowledge review of existing evidence, available here: http://webarchive.nationalarchives.gov.uk/+/http://www.dft.gov.uk/pgr/scienceresearc h/social/evidence.pdf
${ }^{6}$ Further information about regular DfT surveys on public attitudes to transport is available here: http://www.dft.gov.uk/pgr/statistics/datatablespublications/trsnstatsatt/

## APPENDICES

## APPENDIX A: Final fieldwork figures

| Interviewing month | Nov | Dec | Jan | Feb | Mar | Apr | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Overall response rate | 56\% | 54\% | 58\% | 61\% | 61\% | 60\% | 58\% | Note, this indicates how many full and partial interviews were achieved as a proportion of those eligible for the survey. |
| Full response rate | 56\% | 54\% | 58\% | 61\% | 61\% | 60\% | 58\% | This is similar to the overall response rate calculated above, but only full interviews are included (i.e. partial interviews are excluded) |
| Contact rate (any household member) | 93\% | 92\% | 94\% | 97\% | 93\% | 96\% | 94\% | The contact rate (any household member) measures the proportion of cases in which any household member has been contacted directly (i.e. spoken to by the interviewer) |
| Selected addresses (Total) | 866 | 1689 | 1689 | 1009 | 1009 | 1008 | 7270 | This is the total number of addresses selected for the survey |
| Eligible addresses (Total) | 815 | 1567 | 1580 | 933 | 946 | 934 | 6775 | This is the total number of addresses inhabited by at least one eligible household |
| Number of households contacted (Total) | 761 | 1442 | 1481 | 904 | 881 | 894 | 6363 | This indicates the total number of households who have been contacted directly (spoken to) by an interviewer |
| Number of non-contact with any household member | 54 | 125 | 99 | 29 | 65 | 40 | 412 | This indicates the number of eligible addresses (i.e. addresses which appear to be inhabited, residential addresses) where an interviewer at attempted to make contact but with no success |
| Total number of ineligible addresses | 50 | 122 | 108 | 76 | 61 | 73 | 490 | This indicates the total number of households who have been contacted directly (spoken to) by an interviewer and have been found to be ineligible |
| Total number of refusals (automatic) | 300 | 583 | 540 | 329 | 299 | 306 | 2357 | This indicates the total number of households who have been contacted directly (spoken to) by an interviewer and have refused the interview |
| Hard refusals | 162 | 245 | 231 | 136 | 167 | 128 | 1069 |  |
| Soft refusals | 138 | 338 | 309 | 193 | 132 | 178 | 1288 |  |
| HQ refusal | 24 | 23 | 24 | 22 | 18 | 9 | 120 | This indicates the number of refusals received either by TNS Freephone line or via DfT (Ben Savage) |
| Completed full interviews (Total) | 453 | 838 | 921 | 572 | 581 | 558 | 3923 | This indicates the number of full interviews completed overall |
| Completed partial interviews (Total) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | This indicates the number of partial interviews completed overall |
| Deleted interviews | 1 | 5 | 3 | 3 | 1 | 3 | 16 | Interviews that have been quarantined for quality reasons or respondent requests |

## APPENDIX B: Regional fieldwork response rates

| Interviewing month | Nov | Dec | Jan | Feb | Mar | Apr | Total | Notes |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :--- |
| North East | $60 \%$ | $59 \%$ | $55 \%$ | $49 \%$ | $47 \%$ | $68 \%$ | $56 \%$ | This indicates how many full and partial interviews were achieved as a proportion of those <br> eligible for the survey (within the North East region) |
| North West | $58 \%$ | $60 \%$ | $59 \%$ | $72 \%$ | $64 \%$ | $71 \%$ | $64 \%$ | This indicates how many full and partial interviews were achieved as a proportion of those <br> eligible for the survey (within the North West region) |
| Yorkshire and Humberside | $51 \%$ | $60 \%$ | $60 \%$ | $63 \%$ | $65 \%$ | $48 \%$ | $58 \%$ | This indicates how many full and partial interviews were achieved as a proportion of those <br> eligible for the survey (within the Yorkshire and Humberside region) |
| East Midlands | $57 \%$ | $53 \%$ | $59 \%$ | $64 \%$ | $62 \%$ | $62 \%$ | $60 \%$ | This indicates how many full and partial interviews were achieved as a proportion of those <br> eligible for the survey (within the East Midlands region) |
| West Midlands | $64 \%$ | $62 \%$ | $61 \%$ | $62 \%$ | $63 \%$ | $56 \%$ | $61 \%$ | This indicates how many full and partial interviews were achieved as a proportion of those <br> eligible for the survey (within the West Midlands region) |
| South West | $72 \%$ | $54 \%$ | $63 \%$ | $59 \%$ | $62 \%$ | $73 \%$ | $64 \%$ | This indicates how many full and partial interviews were achieved as a proportion of those <br> eligible for the survey (within the South West region) |
| East of England | $47 \%$ | $45 \%$ | $68 \%$ | $74 \%$ | $68 \%$ | $55 \%$ | $60 \%$ | This indicates how many full and partial interviews were achieved as a proportion of those <br> eligible for the survey (within the East of England region) |
| London | $45 \%$ | $39 \%$ | $44 \%$ | $45 \%$ | $42 \%$ | $30 \%$ | $41 \%$ | This indicates how many full and partial interviews were achieved as a proportion of those <br> eligible for the survey (within the London region) |
| South East | $60 \%$ | $60 \%$ | $62 \%$ | $55 \%$ | $62 \%$ | $66 \%$ | $61 \%$ | This indicates how many full and partial interviews were achieved as a proportion of those <br> eligible for the survey (within the South East region) |

## APPENDIX C: Introductory Letter

Address1
Department for Transport
Address2
Address3
Postcode

## Dear Sir/Madam,

I am writing to ask for your help with an important government research study.
The Department for Transport (DfT) is the government department with overall responsibility for transport strategy in England. We are interested in finding out people's views and experiences of transport, and this research study will help us do this. The results of the study will be important in helping the government plan for the future of transport in England.

The research is being carried out by an independent research organisation, TNS-BMRB. An interviewer working on behalf of TNS-BMRB will contact you in the next few weeks to see if you will be able to take part. The interviewer will carry an identification card.

Your address has been randomly selected from the Post Office's national list of addresses. TNS-BMRB would like to interview one person aged 16 or over from your household. If there is more than one person who is eligible, the interviewer will randomly select one to interview. You may wish to show this letter to other people in your household just in case they are selected.

It is very important that TNS-BMRB speak to the selected member of your household. This will ensure that the study's results represent everyone's views and experiences. We rely on people's voluntary co-operation in this study and I do hope that your household will be able to take part.

All information given will be treated in the strictest confidence. No information identifying you or your household will be passed to DfT or to any other organisation without your consent.

If you wish to know more about the study, or ever need to change the interview time you arrange with an interviewer, please ring TNS-BMRB on Freephone 08000181234 (please note, calls from mobile telephones may be charged, please consult your network provider for details) or email: transportsurvey@tns-global.com.

If you would like to speak to the Department for Transport about the study, please call me, Ben Savage, on 02079446342.

Yours faithfully,


Ben Savage
Senior Research Officer, Department for Transport

## APPENDIX D: Questionnaire

## Introduction

Good morning/afternoon/evening. My name is ... and I work for TNS-BMRB - a social research company. We are conducting a survey for the Department for Transport on how people travel these days. You should have received a letter about the survey.

Even if you don't go out much, it is important that we talk to you to ensure that our research is representative of everyone in England. The interview will take about 45 minutes to complete. Are you able to take part now?

IF NECESSARY ARRANGE A TIME TO RETURN TO DO THE INTERVIEW
THROUGHOUT ALL QUESTIONS ARE ASKED WITH THE SCREEN SHOWN TO THE RESPONDENTS UNLESS OTHERWISE STATED (DO NOT SHOW SCREEN)

## SECTION A

The first few questions are about your home and the area you live in...
ASK ALL
DO NOT SHOW SCREEN
A1 How long have you lived in your current home?

1. Up to 1 year
2. More than 1 year, up to 2 years
3. More than 2 years, up to 5 years
4. More than 5 years, up to 10 years
5. More than 10 years, up to 20 years
6. More than 20 years
7. Don't know
8. Refused

## DO NOT SHOW SCREEN

A2 Can I just check, what is the postcode of this address?
ENTER
IF DK ENTER FULL ADDRESS INCLUDING STREET NAME, TOWN/CITY AND COUNTY. REFUSED

## SHOW SCREEN

A3 How important would you say public transport links were in the decision to move here?

1. Very important
2. Fairly important
3. Neither important nor unimportant
4. Not very important
5. Not at all important
6. Don't know/not sure

## SHOW SCREEN

A4 Looking at the following list which of the following best describes your current situation?
SINGLE CODE - CODE FIRST THAT APPLIES
INTERVIEWER - IF RESPONDENT HAS A JOB OR BUSINESS THEY ARE CURRENTLY AWAY FROM (E.G. DUE TO BEING MATERNITY LEAVE), CODE AS WORKING.

1. Working full time ( 30 hours or more per week)
2. Working part time (less than 30 hours per week)
3. On a local or government training scheme (GTS)
4. On an Apprenticeship
5. Registered unemployed/signing on for jobseekers allowance
6. Not registered unemployed but seeking work
7. Looking after family or home/not seeking work
8. Long-term sick or disabled
9. Retired
10. In full-time education
11. Other [WRITE IN]
12. Don't know
13. Refused

IF A4 = 3 OR 4, ASK:
DO NOT SHOW SCREEN
A4a Can I just check, is your training scheme or Apprenticeship full time or part time?
INTERVIEWER: IF NECESSARY, CLARIFY: FULL TIME MEANS 30 HOURS OR MORE PER WEEK. PART TIME MEANS LESS THAN 30 HOURS PER WEEK.

1. Full time ( 30 hours or more per week)
2. Part time (less than 30 hours per week)
3. Don't know

## IF CODED 1 OR 2 AT A4 [WORKING FT/PT] ASK A5 OTHERS GO TO INSTRUCTION AT A6 DO NOT SHOW SCREEN <br> A5 Are you working as an employee or are you self-employed?

1. Employee
2. Self-employed

IF A4 $=1,2,3$ OR 4, ASK:
SHOW SCREEN
CN5 (C34a) [Thinking about your main job and from the following list], when you go to work do you
usually..... READ OUT "
INTERVIEWER NOTE: CODE FIRST THAT APPLIES.
ONLY CODE WORKS AT HOME/SAME BUILDING AS HOME IF THIS IS THE ONLY PLACE OF WORK.

1. Go to the same place every time,
2. Go to the same place at least 2 working days each week
3. Go to different places (for example, customers' homes etc.),
4. Or work at home or in the same building or grounds as your home.

IF CODED 1 OR 2 OR 3 OR 4 AT A4 AND CN5 = 1 OR 2, ASK:
DO NOT SHOW SCREEN
CN5a Thinking about your workplace, that is, the place you work at most often, are there usually free car parking spaces available there which you can/could use (if you needed to) on the days you work? INTERVIEWER - PROBE FOR WHETHER AVAILABLE FOR ALL, MOST OR SOME OF THE DAYS THEY WORK THERE. IF RESPONDENT DOESN'T DRIVE (TO WORK), ASK IF THEY CAN ANSWER IN RELATION TO GENERAL PARKING AVAILABILITY AT THEIR WORKPLACE.

1. Yes - every day I work there
2. Yes - most days I work there
3. Yes - some of the days I work there
4. No - never
5. Don't know

> IF (A4 = 1,2,3, OR 4) AND (CN5 =1 OR 2) ASK:

DO NOT SHOW SCREEN
A7a And generally speaking, about what time of day do you usually arrive at work?
IF VARIES, PROBE WHETHER THERE IS AN AVERAGE TIME (E.G. ABOUT 09.30AM OR 14:05PM). IF TIME VARIES CONSIDERABLY (E.G. IF RESPONDENT WORKS DIFFERENT SHIFTS) CODE AS 'VARIES TOO MUCH TO SAY'.

1. Enter time
2. Varies too much to say

IF CODED 1 OR 2 OR 3 OR 4 AT A4 AND CN5 = 1 OR 2, ASK::
DO NOT SHOW SCREEN
A8 About how far, in miles, do you live from your usual place of work?

INTERVIEWER: ANSWER CAN BE GIVEN TO ONE DECIMAL PLACE IF NECESSARY. IF JOURNEY IS LESS THAN ONE MILE ENTER AS A DECIMAL. E.G. 0.5 FOR HALF A MILE. IF RESPONDENT GIVES ANSWER TO EXACT MILE LEAVE SECOND BOX BLANK.
PROBE IF NECESSARY: Please give your best estimate
Range - 0-99.9
ENTER NUMBER OF MILES
IF DOES NOT APPLY ENTER '0’
INTERVIEWER: IF DISTANCE IS MORE THAN 99.9 MILES ENTER 99.9

IF CODED 1 OR 2 OR 3 OR 4 AT A4 AND CN5 = 1 OR 2, ASK:
SHOW SCREEN
A9a And do you usually go straight to work or do you do other things on the way (e.g. take children to school; do some shopping etc)
INTERVIEWER: CODE ONE ONLY

1. I usually go straight to work
2. I usually do other things on the way to work
3. It varies too much to say
4. Don't know

IF A4=10 [IN FT EDUCATION], ASK:
DO NOT SHOW SCREEN
A10a About how far, in miles, do you live from where you usually attend classes?
INTERVIEWER: ANSWER CAN BE GIVEN TO ONE DECIMAL PLACE IF NECESSARY. IF JOURNEY IS LESS THAN ONE MILE ENTER AS A DECIMAL. E.G. 0.5 FOR HALF A MILE. IF RESPONDENT GIVES ANSWER TO EXACT MILE LEAVE SECOND BOX BLANK.

Range - 0-99.9
PROBE IF NECESSARY: Please give your best estimate
ENTER NUMBER OF MILES
IF DOES NOT APPLY ENTER '0'
INTERVIEWER: IF DISTANCE IS MORE THAN 99.9 MILES ENTER 99.9

## SECTION B - ACCESS TO, USE OF, AND ATTITUDES TOWARDS WALKING, BUSES, TRAINS AND TUBE/LIGHT RAIL

READ OUT - DO NOT SHOW SCREEN
B2 Do you have any disability or other long standing health problem that makes it difficult for you to do any of the following... READ OUT...
NOTE: INTERVIEWER CODE ALL THAT APPLY.
INCLUDE PROBLEMS DUE TO OLD AGE

1. Go out on foot
2. Use local buses
3. Get in or out of a car
4. None of these (SPONTANEOUS)

## Turning now to cars and motorcycles.

DO NOT SHOW SCREEN
B3 Do you hold a licence valid in England to drive either a car, or a motorcycle, scooter or moped?
INCLUDE: DISQUALIFIED DRIVERS AND INTERNATIONAL PERMITS/OTHER LICENCES VALID IN THE UK.
CODE ALL THAT APPLY

1. Yes, full licence for car
2. Yes, full licence for motorcycle, scooter or moped
3. Yes, provisional licence for car
4. Yes, provisional licence for motorcycle, scooter or moped
5. Currently disqualified
6. No - too young [SPONTANEOUS]
7. No (SINGLE CODE)

ASK ALL
DO NOT SHOW SCREEN
B4 Do you at present own or have continuous use of a motorcycle, scooter or moped?
CODE ALL MENTIONED

1. Yes, motorcycle / scooter with sidecar
2. Yes, motorcycle / scooter
3. Yes, moped
4. No (SINGLE CODE ONLY)

## ASK ALL

DO NOT SHOW SCREEN
B5 How many vehicles does your household own or have continuous use of at present?
INTERVIEWER: INCLUDE COMPANY CARS (IF AVAILABLE FOR PRIVATE USE). INCLUDE ANY
BROKEN DOWN VEHICLES WHICH MAY BE IN USE WITHIN THE NEXT MONTH.

INTERVIEWER: If the respondent refuses or says 'don't know' encourage a response as much as possible. This question is one of the most important in the survey. Explain that you need an answer to make sure the questions are as relevant as possible.

INTERVIEWER: If more than 9 cars, enter 9

ENTER NUMBER (LIMIT TO 99 MAXIMUM - 0-9 RANGE)
Don't know
Refused

## IF NONE GO TO INSTRUCTION AT B15

## INTRODUCTION TO B7a

Thinking now about the one car or van that you personally use the most, whether as driver or passenger:
INTERVIEWER: IF RESPONDENT SAYS THEY USE TWO OR MORE CARS/VANS EQUALLY, ASK THEM TO THINK ABOUT THE ONE THEY USED MOST RECENTLY (OUT OF THOSE THEY USE THE MOST).

SHOW SCREEN
B12 Looking at the following list, which statement best describes your use of this car/van?

1. Main driver (the person who drives the most miles in it per year)
2. Other driver (someone who drives it, but less than the main driver)
3. Passenger only (someone who travels in it, but only ever as a passenger)
4. Other
5. Refuse

SHOW SCREEN
B9 What fuel does the engine use?

1. Petrol
2. Diesel
3. Compressed natural gas
4. Biofuel blends over 5\% (includes E85 (85\% ethanol)
5. Electric/battery
6. Liquefied petroleum gas (LPG)
7. Hybrid (petrol/electric)
8. Other [WRITE IN]
9. Don't know

SHOW SCREEN
B6 What is the make of this car/van?
INTERVIEWER: PROMT/PROBE AS NECESSARY
DROP DOWN LIST
(DON'T KNOW)
B7 And what model is it?
INTERVIEWER: PROMT/PROBE AS NECESSARY
DROP DOWN LIST
(DON'T KNOW)
DO NOT SHOW SCREEN
B8 What is the approximate age of the car/van?
ENTER YEARS
INTERVIEWER: THIS SHOULD BE THE AGE OF THE CAR NOT HOW LONG IT HAS BEEN OWNED. IF DK ASK FOR FIRST FOUR NUMBERS AND/OR LETTERS OF REGISTRATION NUMBER
INTERVIEWER: If more than 50 years, enter 50
IF CODE 3-8 (ANYTHING OTHER THAN PETROL OR DIESEL) AT B9 GO TO B13
SHOW SCREEN
B10 Looking at the following list, what is the engine size?

1. Up to 700 cc ( 0.7 litre)
2. 701 to 1000 cc ( 0.7 to 1 litre)
3. 1001 to 1300 cc ( 1.0 to 1.3 litres)
4. 1301 to 1400 cc ( 1.3 to 1.4 litres)
5. 1401 to 1500 cc ( 1.4 to 1.5 litres)
6. 1501 to 1800 cc ( 1.5 to 1.8 litres)
7. 1801 to 2000 cc ( 1.8 to 2.0 litres)
8. 2001 to 2500 cc ( 2.0 to 2.5 litres)
9. 2501 to 3000 cc ( 2.5 to 3.0 litres)
10. 3001cc and over (3 litres and over)
11. Don't know

DO NOT SHOW SCREEN
B13 Was this car/van bought/obtained new or second hand? IF NECESSARY, CLARIFY: BY YOUR HOUSEHOLD OR (IF OWNED BY NON-HOUSEHOLD MEMBER) THE PERSON WHO NOW OWNS IT.

1. New
2. Second hand
3. DK/not sure

## DO NOT SHOW SCREEN

B14 Where was this car/van bought/obtained?
INTERVIEWER NOTE - IF CURRENT OWNER DID NOT BUY THE CAR (E.G. IF THEY WERE GIVEN IT BY A FAMILY MEMBER/FRIEND), CODE AS ‘OTHER’ AND WRITE IN HOW THEY RECEIVED THE CAR AND WHO/WHERE THEY RECEIVED IT FROM) SINGLE CODE ONLY

1. Private sale
2. New car dealer
3. Second hand dealer
4. Auction
5. Other
6. DK/not sure

## DO NOT SHOW SCREEN

IF HOLDS DRIVING LICENCE FOR A CAR OR VAN (B3=1) BUT NO CAR OR VAN IN HOUSEHOLD AT B5 ASK B15, OTHERS GO TO INSTRUCTION AT B16
B15 Why don't you have a car or van at the moment?
CODE ALL THAT APPLY. DO NOT PROMPT

1. Cost / it's too expensive
2. I don't like to drive
3. I am too old/unfit/unwell
4. I am currently banned from driving
5. I am temporarily without car / van (e.g. temporarily off the road/will be getting a car soon/between cars)
6. I have access to someone else's car/van whenever I need one
7. I have given it up because of climate change/to reduce my Co 2 emissions
8. I have no need of a car / van
9. Other

IF HOLDS DRIVING LICENCE FOR A CAR OR VAN (B3=1) BUT NO CAR OR VAN IN HOUSEHOLD AT B5 ASK B15a
SHOW SCREEN
B15a Looking at the following list, overall, how keen would you say you are to own a car?

1. Very keen
2. Fairly keen
3. Not sure/it depends
4. Not very keen
5. Not at all keen

IF B5 = 1 OR MORE, ASK:
SHOW SCREEN
B16 Generally speaking, which one of the following statements best describes your role when it comes to buying a car or van for your household?
SINGLE CODE. PROBE

1. Sole decision maker (I alone decide which car/van to buy)
2. Main decision maker (I have the main say, but take others' views into account)
3. Joint decision maker (I have equal say in which car/van to buy)
4. Secondary decision maker (I have some influence, but someone else has the main say)
5. No influence (I have no say in which car was bought)
6. Don't know/not sure [SPONTANEOUS]

IF B16 = [1, 2 OR 3], ASK B17 OTHERS GO TO B19
SHOWN SCREEN
B17 Looking at this list, which of these things are important to you when buying a car or van?
CODE ALL THAT APPLY. PROBE [ANYTHING ELSE?]

1. Comfort
2. Costs - purchase/running/resale value/tax/insurance
3. Small engine
4. Large engine
5. Environmentally friendly/low CO2 Emissions
6. Image of brand / brand preference
7. Image of model / model preference
8. Interior space/functionality/boot size
9. Reliability
10. Safety
11. Speed/performance,
12. Style/design
13. Features - sat nav; CD player; music system; power steering etc (all features mentioned)
14. Other [WRITE IN]
15. Don't know

IF (B17 = 2)
SHOW SCREEN
B18b Looking at the following list of costs, which do you think about most when choosing a car or van to buy? Please choose up to three.
CODE UP TO THREE
a) Purchase costs
b) Running / fuel costs
c) Resale value
d) $\operatorname{Tax}$
e) Insurance
f) Other (SPECIFY)
g) Don't know (SINGLE CODE)

ASK ALL WITH DRIVING LICENCE AT B3 AND CAR/VAN IN HOUSEHOLD AT B5 AND B12 $=1$ OR 2 FOR ANY VEHICLE MENTIONED AT B5, ASK:

## SHOW SCREEN

B19 Looking at the following list, approximately how many miles a year do you personally drive in the cars/vans owned/used by your household?
INTERVIEWER: IF NECESSARY, CLARIFY: INCLUDE ALL CARS/VANS USED BY THE HOUSEHOLD, INCLUDING COMPANY CARS. EXCLUDE COMMERCIAL VEHICLES, E.G. HEAVY GOODS VEHICLES; TAXIS; BUSES; AMBULANCES; POLICE CARS ; FIRE TRUCKS ETC.

INTERVIEWER: IF DK ENCOURAGE ESTIMATE.
OBTAIN EXPECTED MILES IF STARTED DRIVING LESS THAN A YEAR AGO.
IF NIL ENTER 0"

## SINGLE CODE

1. 0
2. 1 -499 miles
3. 500-999 miles
4. 1,000-1,999 miles
5. 2,000-2,999 miles
6. $3,000-3,999$ miles
7. 4,000-4,999 miles
8. 5,000-6,999 miles
9. $7,000-8,999$ miles
10. $9,000-11,999$ miles
11. 12,000-14,999 miles
12. $15,000-17,999$ miles
13. 18,000-20,999 miles
14. 21,000-29,999 miles
15. 30,000 miles and over
16. Don't know / not sure

ASK ALL
SHOW SCREEN
B20 How frequently do you travel by private car or van - whether as a driver or passenger? .
Is it.....
PLEASE COUNT EACH SINGLE TRIP AS ONE JOURNEY AND EACH RETURN TRIP AS TWO.
NOTE: ONLY INCLUDE TRAVEL WITHIN GREAT BRITAIN, OVER THE LAST YEAR OR SO.

1. At least once a day
2. Less than once a day, but at least 3 times a week
3. Once or twice a week
4. Less than that but more than twice a month
5. Once or twice a month
6. Less than that but more than twice a year
7. Once or twice a year
8. Less than that or never

## IF WORK/STUDENT/ SELF-EMPLOYED (A4=1,2,3,4,10) <br> SHOW SCREEN

B21 How frequently do you travel by private car or van to or from [work] or [school/college]..
Is it.....
PLEASE COUNT EACH SINGLE TRIP AS ONE JOURNEY AND EACH RETURN TRIP AS TWO. NOTE: ONLY INCLUDE TRAVEL WITHIN GREAT BRITAIN, OVER THE LAST YEAR OR SO.

## [CAPI SCREENS OUT OPTIONS ACCORDING TO RESPONSE AT B2O - ONLY SHOWS APPLICABLE CODES]

1. At least once a day
2. Less than once a day, but at least 3 times a week
3. Once or twice a week
4. Less than that but more than twice a month
5. Once or twice a month
6. Less than that but more than twice a year
7. Once or twice a year
8. Less than that or never

IF B20 = 1, 2, 3, 4, 5 OR 6 AND B5 $=1$ OR MORE, ASK:
SHOW SCREEN
B26b Looking at the following list, what would you miss most if you did not have a car in your household?
CODE ONE ONLY

1. Sense of freedom
2. Ability to go shopping
3. Ability to get to work
4. Going to a leisure activity
5. Visiting relatives
6. Going on holiday
7. Taking children to school
8. Other (SPECIFY)
9. Don't know

IF B20 = 1-5, ASK:
DO NOT SHOW SCREEN
B27 What, if any, do you think are the main disadvantages of travelling by car for you personally? DO NOT PROMPT. PROBE.(Anything else?)
CODE ALL MENTIONED

1. Congestion / traffic jams
2. Uncertain journey times, due to congestion
3. It's stressful / I'm a nervous driver
4. It's time-consuming / slow / frustrating / boring / tiring
5. It's expensive / the cost
6. Parking is difficult
7. Parking is expensive
8. It contributes to pollution / CO2 emissions / bad for environment
9. Children get irritable
10. Drivers can't drink alcohol
11. Drivers can't read / use mobile phone / play games
12. Maintenance / having to look after it / keep tyres inflated
13. Other [WRITE IN]
14. None - there are no disadvantages for me personally (SINGLE CODE ONLY)
15. Don't know

IF USE CAR 1-2 DAYS PER WEEK OR MORE OVERALL - (IF (B20 = 1, 2, or 3) OR (B21= 1, 2, or 3 ) OTHERS GO TO B24
SHOW SCREEN
B23 I am going to show you a number of statements and would like you to say whether they apply to you personally, answering 'Yes' or 'No' for each.

When I have to choose how I will travel, choosing the car is something...

1. Yes
2. No
3. Don't know
a) I do frequently.
b) I do automatically.
c) That would require effort not to do it.
d) That belongs to my (daily, weekly, monthly) routine.
e) That's typically "me."
f) I have been doing for a long time.

## START OF SELF-COMPLETION

## SHOW SCREEN

B24 Here are some statements people have made about cars. For each, please try to give your initial feeling rather than thinking about it too much, and say whether you:

1. Definitely agree,
2. Tend to agree,
3. Neither agree nor disagree,
4. Tend to disagree,
5. Definitely disagree,
6. Don't know
7. Not applicable
a) I think most people judge others by the car they drive
b) I think owning a car is a sign of success
c) People who don't own a car are at a disadvantage
d) People should be allowed to use their cars as much as they like

## IF B3 = 1, ASK:

e) I enjoy driving
f) I find driving stressful

IF NO CAR IN HOUSEHOLD (B5 = 0), ASK:
g) Not having a car has seriously damaged my career / job prospects

IF CAR/VAN IN HOUSEHOLD (B5 = 1 or more), ASK:
h) Not having a car would seriously damage my career / job prospects
i) For me, there are no practical alternatives to travelling by car
j) In general, it's usually cheaper for me to go by car than use public transport
k) If I could, I would gladly do without a car
I) I couldn't manage without a car
m) I would like to own a larger or faster car

IF (A4 = 1, 2, 3 OR 4) AND (B5 = 1 OR MORE) AND (CN5 = 1 OR 2), ASK:
n) It's usually quicker for me to get to work by car than use public transport

IF B3 = 1 AND B5 = 1 OR MORE AND B12 $=1$ OR 2 FOR AT LEAST ONE OF HOUSEHOLD CARS/VANS, ASK:
o) I enjoy driving on my own
p) If I could, I would prefer to drive less than I do

IF CAR/VAN IN HOUSEHOLD (B5 = 1 or more) AND MAKE CAR PURCHASING DECISIONS (B16 = 1, 2 OR 3), ASK:
q) I tend to buy the same brand of car (e.g. Ford; Toyota)
r) I tend to buy the same type / size of car (e.g. small car; family estate; sports car)

## END OF SELF-COMPLETION

The next few questions are about buses.
ASK ALL
DO NOT SHOW SCREEN
B28 About how long would it take (me) to walk from here to the nearest bus stop or place where I could get on a bus? I am interested in the nearest one even if it isn't the main one you use.

INTERVIEWER: REMEMBER WE WANT TO KNOW HOW LONG IT WOULD TAKE AN AVERAGE PERSON (APPROX. 3 MPH /5KPH), SO IF THE RESPONDENT IS OBVIOUSLY ELDERLY OR INFIRM THEN ASK HOW LONG IT WOULD TAKE "ME (I.E. YOU THE INTERVIEWER) TO WALK THERE. RECORD TO NEAREST MINUTE

TEMPORARY BUS STOPS DO NOT COUNT
INTERVIEWER: IF DK ENCOURAGE ESTIMATE.

1. 2 minutes or less
2. 3-4 minutes
3. 5-6 minutes
4. 7-13 minutes
5. 14-26 minutes
6. $27-43$ minutes
7. 44 minutes or longer
8. DK

## DO NOT SHOW SCREEN

B29 How frequent are the buses from that bus stop during the day? Is there ... READ OUT ...
IF 'VARIES' TAKE WEEK DAY OFF-PEAK FREQUENCY

1. ...Less than one a day,
2. at least one a day,
3. at least one an hour,
4. at least one every half-hour,
5. or, at least one every quarter of an hour?

## 6. DK

## SHOW SCREEN

B30 How frequently do you use an ordinary bus?
READ OUT: PLEASE COUNT EACH SINGLE TRIP AS ONE JOURNEY AND EACH RETURN TRIP AS TWO.
INTERVIEWER: ONLY INCLUDE TRAVEL WITHIN GREAT BRITAIN, OVER THE LAST YEAR OR SO.

1. At least once a day
2. Less than once a day, but at least 3 times a week
3. Once or twice a week
4. Less than that but more than twice a month
5. Once or twice a month
6. Less than that but more than twice a year
7. Once or twice a year
8. Less than that or never

## START OF SELF COMPLETION

B31 Here are some statements people have made about buses. For each, please try to give your initial feeling rather than thinking about it too much, and say whether you:

1. Definitely agree,
2. Tend to agree,
3. Neither agree nor disagree,
4. Tend to disagree,
5. Definitely disagree,
6. Don't know
7. Not applicable
a) In general, I think that successful people tend to travel by car rather than by bus
b) I would only travel by bus if I had no other choice
c) In general, when I have the choice I would rather walk or cycle than go by bus
d) I find travelling by bus is expensive
e) I like travelling by bus
f) I find travelling by bus stressful

## END OF SELF COMPLETION

## The next few questions are about overground trains.

ASK ALL

## DO NOT SHOW SCREEN

B32 About how long would it take (me) to walk from here to the nearest railway station? I am interested in the nearest one even if it isn't the main one you use.

INTERVIEWER: REMEMBER WE WANT TO KNOW HOW LONG IT WOULD TAKE AN AVERAGE PERSON (APPROX. 3 MPH /5KPH), SO IF THE RESPONDENT IS OBVIOUSLY ELDERLY OR INFIRM THEN ASK HOW LONG IT WOULD TAKE "ME" (I.E. YOU THE INTERVIEWER) TO WALK THERE. RECORD TO NEAREST MINUTE. IF DK ENCOURAGE ESTIMATE.

1. 2 minutes or less
2. 3-4 minutes
3. 5-6 minutes
4. 7-13 minutes
5. 14-26 minutes
6. 27-43 minutes
7. 44 minutes or longer
8. DK

## SHOW SCREEN

B33 How frequently do you use a train, not including underground, tram or light rail?
PLEASE COUNT EACH SINGLE TRIP AS ONE JOURNEY AND EACH RETURN TRIP AS TWO.
NOTE: ONLY INCLUDE TRAVEL WITHIN GREAT BRITAIN, OVER THE LAST YEAR OR SO.

1. At least once a day
2. Less than once a day, but at least 3 times a week
3. Once or twice a week
4. Less than that but more than twice a month
5. Once or twice a month
6. Less than that but more than twice a year
7. Once or twice a year
8. Less than that or never

## START OF SELF COMPLETION

B34 Here are some statements people have made about overground trains. For each, please try to give your initial feeling rather than thinking about it too much, and say whether you:

1. Definitely agree,
2. Tend to agree,
3. Neither agree nor disagree,
4. Tend to disagree,
5. Definitely disagree,
6. Don't know
7. Not applicable
a) In general, I think that successful people tend to travel by car rather than by train
b) I would only travel by train if I had no other choice
c) I find travelling by train is expensive
d) I like travelling by train
e) I find travelling by train stressful

## END OF SELF COMPLETION

The next set of questions are about light rail, trams, the metro or the underground depending on what service is available nearby.

ASK ALL
SHOW SCREEN
B35 Is there a London Underground/metro/light rail/tram stop which is closer than your nearest railway station?
READ OUT

1. Yes
2. No
3. Or, is it in the same place
4. Don't know

IF B35 = 1, ASK:
DO NOT SHOW SCREEN
B37 Approximately how long would it take (me) to walk to your nearest [tube/metro/light rail/tram stop]? INTERVIEWER: IF DK ENCOURAGE ESTIMATE
[IF YES AT B35 - ONLY PRESENT OPTIONS WHICH ARE RELEVANT BASED ON DISTANCE TO RAILWAY STATION]

1. 2 minutes or less
2. 3-4 minutes
3. 5-6 minutes
4. 7-13 minutes
5. 14-26 minutes
6. 27-43 minutes
7. 44 minutes or longer
8. DK

IF B35 = 1 OR 2, ASK:
SHOW SCREEN
B38 Looking at the following list, how frequently do you use the tube/metro/light rail/tram?
PLEASE COUNT EACH SINGLE TRIP AS ONE JOURNEY AND EACH RETURN TRIP AS TWO
NOTE: ONLY INCLUDE TRAVEL WITHIN GREAT BRITAIN, OVER THE LAST YEAR OR SO.

1. At least once a day
2. Less than once a day, but at least 3 times a week
3. Once or twice a week
4. Less than that but more than twice a month
5. Once or twice a month
6. Less than that but more than twice a year
7. Once or twice a year
8. Less than that or never

## And now l'd like to ask you about bicycles.

ASK ALL:
DO NOT SHOW SCREEN
B39a Have you ever learnt how to ride a bicycle?

1. Yes
2. No
3. Don't know

ASK ALL:
DO NOT SHOW SCREEN
B39b Do you have any disability or other long standing health problem that makes it/would make it difficult or impossible for you to ride a bicycle?
INCLUDE PROBLEMS DUE TO OLD AGE
IF RESPONDENT SAYS YES, PROBE FOR WHETHER IT WOULD BE DIFFICULT OR IMPOSSIBLE FOR THE RESPONDENT TO RIDE A BICYCLE

CODE ONE ONLY

1. Yes - impossible
2. Yes - difficult
3. No
4. Don't know

IF B39a $=1$ AND B39b $=2$ OR 3, ASK:
DO NOT SHOW SCREEN
B39 Excluding exercise bikes do you currently... READ OUT...

1. ...own a bicycle yourself,
2. have regular use of a bicycle owned by someone else,
3. or have no regular use of a bicycle?

IF B39a $=1$ AND B39b $=2$ OR 3, ASK:
SHOW SCREEN
B40 How frequently do you use a bicycle?
PLEASE COUNT EACH SINGLE TRIP AS ONE JOURNEY AND EACH RETURN TRIP AS TWO
NOTE: ONLY INCLUDE TRAVEL WITHIN GREAT BRITAIN, OVER THE LAST YEAR OR SO.

1. At least once a day
2. Less than once a day, but at least 3 times a week
3. Once or twice a week
4. Less than that but more than twice a month
5. Once or twice a month
6. Less than that but more than twice a year
7. Once or twice a year
8. Less than that or never

## START OF SELF COMPLETION

IF B39a = 1 AND B39b = 2 OR 3, ASK:
B42 Here are some statements people have made about cycling. For each, please try to give your initial feeling rather than thinking about it too much, and say whether you:

1. Definitely agree,
2. Tend to agree,
3. Neither agree nor disagree,
4. Tend to disagree,
5. Definitely disagree,
6. Don't know
7. Not applicable

IF B39a $=1$ AND B39b $=2$ OR 3, ASK:
a) I'm not the kind of person who rides a bicycle
b) I (would) feel confident cycling on the roads (e.g. to work/school/the shops)
c) It's too dangerous for me to cycle on the roads
d) I would cycle (more) if there were more dedicated cycle paths
e) I would cycle (more) if there were more secure places to store bicycles
f) In general, I would rather cycle than use public transport
g) I (would) enjoy cycling as a leisure / holiday activity
h) I am willing to cycle on the roads (e.g. to work/school/the shops)
i) I (would) find cycling on the roads stressful

IF (B39a = 1) AND (B39b = 2 OR 3) AND (A4 = 1, 2, 3 OR 4) AND (A8 = 10 miles OR LESS) AND (CN5 = 1 OR 2), ASK:
j) I'm not the kind of person who cycles to work

IF (B39a = 1) AND (B39b = 2 OR 3) AND (A4 = 1, 2, 3 OR 4) AND (B5 = 1 OR MORE) AND (A8 = 10 miles OR LESS) AND (CN5 = 1 OR 2), ASK:
k) It would be quicker for me to cycle to work than go by car

## END OF SELF-COMPLETION

## ASK ALL

SHOW SCREEN
B45 Thinking about safety in terms of the risk of accidents (INTERVIEWER STRESS ACCIDENTS
VERSUS CRIME), please rate these forms of transport in order of safety from the most safe to the least safe. So which one would you say is most safe / second most safe / third most safe.
INTERVIEWER If asked, this question is referring to incidents such as road and rail collisions

1. Bus
2. Overground train (NOT including underground/tube/metro systems)
3. Car
4. Bicycle

## ASK ALL

## SHOW SCREEN

B46 Thinking now about personal safety, that is the risk of being a victim of crime, please rate these forms of transport in order of safety from the most safe to the least safe. So which one would you say is most safe / second most safe / third most safe.

1. Bus
2. Overground train (NOT including underground/tube/metro systems)
3. Car
4. Bicycle

## Thinking now about flying by aeroplane

## SHOW SCREEN

B47 Looking at this list, what types of flights starting from the UK have you taken in the last 12 months?
INTERVIEWER: UK INCLUDES ENGLAND, WALES, SCOTLAND AND NORTHERN IRELAND. SHORT-HAUL MEANS CONTINENTAL EUROPE, INCLUDING EIRE (REPUBLIC OF IRELAND). LONG-HAUL MEANS OUTSIDE EUROPE.

CODE ALL THAT APPLY

1. Domestic - to other UK locations
2. Short-haul international - to somewhere else in Europe
3. Long-haul international - to somewhere outside Europe
4. None (SINGLE CODE ONLY)
5. Don't know (Spontaneous only)

IF B47 = 1, ASK:
SHOW SCREEN
B48 Looking at this list, how many flights within the UK, did you make by plane during the last 12 months? Please count the outward and return flight and any transfers as one trip. If you don't know the exact number please give your best guess.
Flights should start in the UK.

1. One
2. Two
3. Three or more

## IF B47 = 2, ASK:

## SHOW SCREEN

B50 Looking at this list, how many short-haul flights starting from the UK did you make to Europe during the last 12 months? If you don't know the exact number please give your best guess.
Flights should start in the UK.

1. One
2. Two
3. Three or more

IF B47 =3, ASK:
SHOW SCREEN
B51 Looking at this list, how many long-haul flights starting from the UK did you make during the last 12 months? If you don't know the exact number please give your best guess.
Flights should start in the UK.

1. One
2. Two
3. Three or more

## SECTION C STAGES OF CHANGE MODEL

The next section is about the types of journeys you make and how you chose to make them.

## SHOW SCREEN

CN1 (C1) Which of the following journeys have you made in the last six months?
WE ARE ONLY INTERESTED IN TRIPS WITHIN ENGLAND, WALES AND MAINLAND SCOTLAND IE WHERE THERE IS NO LARGE EXPANSE OF WATER TO CROSS

CODE ALL MENTIONED
INTERVIEWER: REGULAR JOURNEYS TO WORK SHOULD ONLY BE INCLUDED IF THEY WORK FROM THE SAME LOCATION AT LEAST HALF OF THE TIME

1. Regular journeys to work (IF WORKING A4=1, 2, 3 OR 4) school/college (IF IN FULL TIME EDUCATION A4=10) (OTHERWISE HIDE RESPONSE CODE)
2. Business trips as part of your work within the UK - but not including your regular journey to work) (IF WORKING A4=1 or 2) (OTHERWISE HIDE RESPONSE CODE)
3. None of these

THOSE CODED 3 AT CN1 GO TO CN56 (Shopping).

## DO NOT SHOW SCREEN

CN2a (C2) When you usually make regular journeys to work which mode of transport do you use for the longest part of the journey?
INTERVIEWER: IF NECESSARY, SAY 'THE LONGEST PART OF THE JOURNEY IN TERMS OF DISTANCE, OR MILES TRAVELLED'

INTERVIEWER: IF RESPONDENT USUALLY VARIES THE MODE USED FOR THE LONGEST PART OF THE JOURNEY AND IS UNABLE TO SELECT A RESPONSE, SELECT THE MODE THEY USED THE LAST TIME THEY MADE THE JOURNEY. IF RESPONDENT USUALLY USES MORE THEN ONE MODE WITHIN THE SAME JOURNEY, (E.G. DRIVES TO THE TRAIN STATION, THEN TAKES THE TRAIN), PROBE FOR WHICH MODE IS USED FOR THE LONGEST PART OF THE JOURNEY

SINGLE CODE

1. Walk
2. Bicycle
3. Motorbike/moped/scooter
4. Car/van as driver
5. Car/van as passenger
6. Bus
7. Tube/metro/light rail/tram
8. Railway train
9. Long distance coach
10. Aeroplane

## DO NOT SHOW SCREEN

CN2b (C2) Thinking about the last time you made a business trip within the UK, which mode of transport did you use for the longest part of the journey?
INTERVIEWER: IF NECESSARY, SAY 'THE LONGEST PART OF THE JOURNEY IN TERMS OF
DISTANCE, OR MILES TRAVELLED'
SINGLE CODE

1. Walk
2. Bicycle
3. Motorbike/moped/scooter
4. Car/van as driver
5. Car/van as passenger
6. Bus
7. Tube/metro/light rail/tram
8. Railway train
9. Long distance coach
10. Aeroplane

## MODULE A: [WORK] OR [SCHOOL/COLLEGE] (ONLY CN1=1)

IF A4 $=1,2,3$ OR 4 AND CN5 $=1,2$ OR 3, THEN ASK:
SHOW SCREEN
CN6 (C35a) Looking at the following list, how often, if at all, do you work from home INSTEAD of going to your [usual] place of work?
INTERVIEWER: DO NOT INCLUDE IF ADDITIONAL TO NORMAL WORKING HOURS E.G. ADDITIONAL WORK AT HOME IN EVENING/WEEKENDS

1. 3 or more times a week
2. Once or twice a week
3. Less than that but more than twice a month
4. Once or twice a month
5. Less than that but more than twice a year
6. Once or twice a year
7. Less than that or never
8. Don't know

IF CN6 = 7 (WORKS AT HOME LESS THAN ONCE A YEAR OR NEVER), ASK:
DO NOT SHOW SCREEN
CN7 (C35b) Can I check, in your (main) job, would it be possible to do your kind of work at home instead of travelling to work?
NOTE: IF IN THEORY IT WOULD BE POSSIBLE BUT THE EMPLOYER DOES NOT ALLOW CODE
'YES'. IF IN THEORY WOULD BE POSSIBLE IF HAD NECESSARY EQUIPMENT (E.G. LAPTOP,
SEWING MACHINE), CODE YES

1. Yes - could do all of my work from home
2. Yes - could do most of my work from home
3. Yes - could do some of my work from home
4. No - could not do any of my work from home
5. Don't know

## IF CN6 = 2, 3, 4, 5 OR 6, ASK:

DO NOT SHOW SCREEN
CN8 (C35c) Can I check, in your (main) job, would it be possible for you to do more of your type of work from home than you do now?
NOTE: IF IN THEORY IT WOULD BE POSSIBLE BUT THE EMPLOYER DOES NOT ALLOW CODE 'YES'. IF IN THEORY WOULD BE POSSIBLE IF HAD NECESSARY EQUIPMENT (E.G. LAPTOP, SEWING MACHINE), CODE YES"

1. Yes - could do all of my work from home
2. Yes - could do a lot more work from home
3. Yes - could do a bit more work from home
4. No - could not do any more of my work from home
5. Don't know

## THOSE TRAVELLING BY CAR OR CAR AND MOTORBIKE

IF CN1 $=1$ AND CN2 $=4$ (GO BY CAR/VAN AS DRIVER) ASK:
DO NOT SHOW SCREEN
CN10 (C3) And when you drive to [work] or [school/college], do you usually go alone or do you take anyone with you for all or part of the journey?
INTERVIEWER: PROBE FOR WHO THEY TAKE. IF THEY SAY IT VARIES, PROBE FOR WHETHER THEY USUALLY TAKE SOMEONE OR NOT. CODE ALL THAT APPLY.

1. Usually go alone [SINGLE CODE ONLY]
2. Usually take my child/children
3. Usually take my husband/wife/partner
4. Usually take another family member I live with
5. Usually take housemate / any other non-family household member I live with
6. Usually take a family member I do not live with
7. Usually take friend/neighbour/work colleague (anyone else I don't live with)
8. It varies - but I usually take someone [SINGLE CODE ONLY]
9. It varies too much to say [SINGLE CODE ONLY]
10. Don't know

# IF CN1 = 1 AND IF CAR/VAN AS DRIVER OR PASSENGER (CODE 4 OR 5 AT CN2) <br> DO NOT SHOW SCREEN <br> CN12 (C7) What are the reasons for you usually going by car/van to [work] or [school/college]? <br> DO NOT PROMPT. PROBE FULLY (ANYTHING ELSE?) CODE ALL MENTIONED 

I can travel when I want to travel
It is quick / quickest way/ other ways take too long
It is reliable / more reliable than other modes
It is cheap / cheapest way
It is convenient / most convenient
it is comfortable / most comfortable
I cannot get there any other way
I enjoy driving
I have to take things (e.g. tools, laptop, luggage etc) and cannot carry it all
0. I usually take my partner with me

1. I usually take my children with me
2. I usually take someone else with me
3. I need my car for work
4. I use my car to make other trips while I'm out
5. It gives me flexibility
6. The weather
7. Other, specify

## DO NOT SHOW SCREEN

IF USE CAR/VAN OR MOTORBIKE FOR REGULAR WORK JOURNEY (CN1 = 1) AND (CN2 = 3, 4 OR 5)
CN13 (C43) What, if anything, would encourage you to use public transport for your journeys to [work] or [school/college]?
DO NOT PROMPT. CODE ALL THAT APPLY. PROBE FULLY [ANYTHING ELSE?]

1. If there was better integration between buses and trains (railway and light rail/underground)
2. If it was cheaper/better value
3. If it was more reliable
4. If it was more frequent
5. If it was quicker
6. If it was more convenient/direct services/better routes (go to where I want to go)
7. If i had easier access to services (if bus stop / station was closer, easier to get to)
8. If it was more comfortable/safer/cleaner
9. If I had more/better information
10. Nothing
11. Nothing - I drop my child(ren) at school on the way
12. Nothing - too difficult with equipment/papers I need
13. Nothing - too difficult because of disability/poor mobility
14. Nothing - don't like travelling with public/other people
15. Would only use if problem with car / motorbike
16. Other [Record verbatim]

[^28]13. Other (SPECIFY)
14. Don't know

IF CN1 = 1 AND TAKE CAR (AS DRIVER OR PASSENGER) OR MOTORBIKE TO WORK/COLLEGE (CN2 = 3, 4 OR 5), AND (A8 OR A10a $=0.5$ miles -25 miles) ASK ...
DO NOT SHOW SCREEN
CODE ALL THAT APPLY. DO NOT PROMPT. PROBE FULLY [ANYTHING ELSE?]
CN14 (C8) What are the reasons why you don't take the bus to get to [work] or [school/college]?
CODE ALL THAT APPLY

1. I have to take things (e.g. tools, laptop, luggage etc) and cannot carry it all
2. I would need to change my bus / no direct route
3. I don't know what bus services are available
4. Can never be sure what time the bus will arrive/how long it will take
5. Buses do not run when I want to travel
6. Buses do not run where I want to travel
7. Bus journey is too slow / infrequent
8. Buses are not reliable and punctual
9. Bus stop is not near home
10. Bus stop is not near to destination
11. Buses are expensive / more expensive / do not offer good value for money/ It's cheaper by car
12. Generally not convenient by bus/ easier or more convenient by car
13. Buses are uncomfortable / poor condition / not clean / overcrowded /too cold or hot
14. I do not feel safe on the bus / at bus stations
15. Buses are not accessible/easy to get on
16. No particular reason (SINGLE CODE ONLY)
17. Other [WRITE IN]
18. Don't know

IF CN1 = 1 AND TAKE CAR (AS DRIVER OR PASSENGER) OR MOTORBIKE TO WORK/COLLEGE (CN2 = 3, 4 OR 5), AND (A8 OR A10a $=2$ miles OR MORE) ASK ...
DO NOT SHOW SCREEN
CN16 (C12) What are the reasons why you don't take the train to get to [work] or [school/college]?
CODE ALL THAT APPLY. DO NOT PROMPT. PROBE FULLY [ANYTHING ELSE?]

1. I have to take things (e.g. tools, laptop, luggage etc) and cannot carry it all
2. No direct route - I would need to change train or use bus and train
3. I don't know what train services are available
4. Can never be sure what time the train will arrive/how long it will take
5. Trains do not run when I want to travel
6. Trains do not run where I want to travel
7. Train journey is too slow / infrequent
8. Trains are not reliable and punctual
9. Train station is not near home
10. Train station is not near to destination
11. Trains are expensive / more expensive / do not offer good value for money/ It's cheaper by car
12. Generally not convenient by train/ easier or more convenient by car
13. Trains are uncomfortable / poor condition / not clean / overcrowded / too cold or hot
14. I do not feel safe on the train / at train stations
15. Trains are not accessible/easy to get on
16. No particular reason (SINGLE CODE ONLY)
17. Other [WRITE IN]
18. Don't know

IF CN1 = 1 AND TAKE CAR (AS DRIVER OR PASSENGER) OR MOTORBIKE TO WORK/COLLEGE (CN2 = 3, 4 OR 5), AND (A8 OR A10a $=0.5$ miles -25 miles) AND (B35 = 1 OR 2), ASK ... DO NOT SHOW SCREEN
CN16 (C12) What are the reasons why you don't take the tube/metro/light rail/tram to get to [work] or [school/college]?
CODE ALL THAT APPLY. DO NOT PROMPT. PROBE FULLY [ANYTHING ELSE?]

1. I have to take things (e.g. tools, laptop, luggage etc) and cannot carry it all
2. No direct route - I would need to change tube/metro/light rail/tram or use bus and tube/metro/light rail/tram
3. I don't know what tube/metro/light rail/tram services are available
4. Can never be sure what time the tube/metro/light rail/tram will arrive/how long it will take
5. Tube/metro/light rail/trams do not run when I want to travel
6. Tube/metro/light rail/trams do not run where I want to travel
7. Tube/metro/light rail/tram journey is too slow / infrequent
8. Tube/metro/light rail/trams are not reliable and punctual
9. Tube/metro/light rail/tram station is not near home
10. Tube/metro/light rail/tram station is not near to destination
11. Tube/metro/light rail/trams are expensive / more expensive / do not offer good value for money/ It's cheaper by car
12. Generally not convenient by tube/metro/light rail/tram/ easier or more convenient by car
13. Tube/metro/light rail/trams are uncomfortable / poor condition / not clean / overcrowded / too cold or hot
14. I do not feel safe on the tube/metro/light rail/tram / at tube/metro/light rail/tram stations
15. Tube/metro/light rail/trams are not accessible/easy to get on
16. No particular reason (SINGLE CODE ONLY)
17. Other [WRITE IN]
18. Don't know

IF CN1 = 1 AND TAKE CAR (AS DRIVER OR PASSENGER) OR MOTORBIKE TO WORK/COLLEGE (CN2 = 3, 4 OR 5), AND DISTANCE AT [A8]/[A10a]= 10 MILES OR LESS AND IF B39a = 1 AND B39b = 2 OR 3, ASK:
DO NOT SHOW SCREEN
CN18 (C16) What are the reasons why you don't cycle to [work] or [school/college]?
CODE ALL THAT APPLY. DO NOT PROMPT. PROBE FULLY [ANYTHING ELSE?]

1. I have to take things (e.g. tools, laptop, luggage etc) and cannot carry it all
2. Don't own / have access to a bicycle
3. Can't ride a bicycle
4. Can ride a bicycle but not confidently enough to ride to work
5. It takes too long to cycle / too far away
6. Too much traffic / it's too dangerous
7. Weather
8. Too hilly round here
9. Too dark
10. Nowhere to park a bicycle securely
11. Worried about bike being stolen
12. No showers
13. Too old / Not fit enough to cycle
14. Cycle lanes/paths are limited / poor quality/unsafe
15. Worried about crime/personal safety/being attacked
16. Not my style
17. No particular reason (SINGLE CODE ONLY)
18. Other [WRITE IN]
19. Don't know
```
IF CN1 = 1 AND CAR/VAN AS DRIVER (CODE 4 AT CN2)
SHOW SCREEN
CN21 (C36) In which of the following ways, if any, could you make the journey to [work] or
[school/college]?
CODE ALL MENTIONED
```

1. By getting a lift with someone going the same way / going to the same place
2. Through a car share scheme
3. Neither
4. Don't know

IF CAR/VAN AS DRIVER OR PASSENGER (CODE 4 OR 5 AT CN2) AND CN1=1
SHOW SCREEN
SHOW SCREEN
CN22 (C37) Answering from the following list, could you combine the trip to [work] or [school/college] with other trips (e.g. food shopping) to reduce the amount you travel overall?
PROMPT/PROBE AS NECESSARY

1. Yes - I usually do this
2. Yes - I do this sometimes, but could do it more
3. Yes - I do this sometimes, but could not do it more
4. Yes - but I have not done this yet
5. No
6. Not sure / Don't know

IF USE CAR/VAN FOR REGULAR WORK JOURNEY (CN1 = 1) AND (CN2 = 4 OR 5). JOURNEYS USING OTHER MODES GO TO C45 (CYCLING QUESTIONS) SHOW SCREEN.
CN23 (C41) Thinking about your journey to [work] or [school/college] , which of these statements best describes your current attitudes towards using public transport?
SINGLE CODE

1. I haven't really thought about using public transport

I thought about using public transport but decided not to
I am thinking about using public transport but I haven't thought about when I will start
I am thinking about using public transport more often quite soon
I tried to use public transport but have decided not to continue
6. SPONTANEOUS ONLY: I do sometimes use public transport

## DO NOT SHOW SCREEN

IF CODES 3 OR 4 AT CN23 ASK CN24, OTHERS GO TO CN26
CN24 (C42) So have you... READ OUT CODE 1, 2 AND 3
CODE ALL THAT APPLY

1. Actually done a 'trial run'
2. Researched timetables, routes, fares
3. Discussed with friends or colleagues who use public transport on that route
4. SPONTANEOUS ONLY. Done something else - specify
5. SPONTANEOUS ONLY. None of these - have only just started thinking about it

## ASK FOR CODE 5 AT CN23 (ONLY THOSE WHO HAD TRIED BUT STOPPED USING PUBLIC

 TRANSPORT)DO NOT SHOW SCREEN
CN25 (C44) What were the reasons why you decided to stop using public transport?
CODE ALL MENTIONED

1. It was too expensive
2. It was too unreliable
3. It was not frequent enough
4. It was too slow
5. It was not convenient because there is no direct service to where i want to go
6. It's too far to the bus/tram stop/station
7. It is not comfortable/safe/clean
8. Too difficult with children
9. Too difficult with equipment/papers I need to take
10. Too difficult because of disability/poor mobility
11. Don't like travelling with public/other people
12. Moved house
13. Changed job
14. Other [Record verbatim]

IF USE CAR/VAN FOR REGULAR WORK JOURNEY AND HAVE EVER LEARNT TO RIDE A BIKE AND COULD RIDE A BIKE (CN1 = 1) AND (CN2 = 4 OR 5) AND (B39a = 1) AND (B39b = 2 OR 3), AND DISTANCE AT [A8]/[A10a] = 10 MILES OR LESS ASK:
SHOW SCREEN
CN26 (C45) Thinking about your journey to [work] or [school/college], which of these statements best describes your current behaviour?
SINGLE CODE

1. I haven't really thought about cycling
2. I thought about cycling but decided not to
3. I am thinking about cycling but I haven't thought about when I will start
4. I am thinking about cycling quite soon
5. I tried to cycle but have decided not to continue
6. SPONTANEOUS ONLY: I do sometimes cycle

FOR CODES 3 AND 4 AT CN26, OTHERS GO TO CN28
DO NOT SHOW SCREEN - READ OUT (1, 2 AND 3 ONLY)
CN27 (C46) So have you...
CODE ALL MENTIONED

1. Actually done a 'trial run'
2. Researched routes
3. Discussed with friends or colleagues who use public transport on that route
4. SPONTANEOUS ONLY. Done something else - specify
5. SPONTANEOUS ONLY. None of these - have only just started thinking about it

## DO NOT SHOW SCREEN

IF TRIED CYCLING TO WORK BUT STOPPED (CODE 5 AT CN26)
CN29 (C48) Why did you decide to stop cycling to [work] or [school/college]?
CODE ALL MENTIONED

1. Bike broke
2. Bike was stolen
3. I had an accident
4. It was too slow
5. It is not safe / too much traffic
6. I have to drop my child(ren) at school on the way
7. Too difficult with equipment/papers I need to take
8. Too difficult because of disability/poor mobility
9. Not fit enough / it was too tiring
10. Weather reason
11. Seasonal reason (Autumn/winter started / it started getting dark/cold when I wanted to travel)
12. Other [Record verbatim]

## DO NOT SHOW SCREEN

IF USE CAR/VAN FOR REGULAR WORK JOURNEY AND HAVE EVER LEARNT TO RIDE A BIKE
AND COULD RIDE A BIKE (CN1 = 1) AND (CN2 = 4 OR 5) AND (B39a = 1) AND (B39b = 2 OR 3), AND DISTANCE AT [A8]/[A10a] = 10 MILES OR LESS, ASK:
CN28 (C47) What, if anything, would encourage you to cycle to [work] or [school/college]?
DO NOT PROMPT, PROBE FULLY (Anything else?)
CODE ALL MENTIONED

1. Would consider sometimes (e.g. if weather fine)
2. Would only use if problem with car
3. If there were cycle paths / better cycle paths
4. If there were (more) secure places to store bicycles
5. If it was safer / there was less traffic
6. If I lived closer
7. If there was any/better cycle training available to me
8. Nothing
9. Nothing - too far
10. Nothing - I drop my child(ren) at school on the way
11. Nothing - too difficult with equipment/papers I need
12. Nothing - too difficult because of disability/poor mobility
13. Other [Record verbatim]

## THOSE TRAVELLING BY BUS

## IF CN1 = 1 AND CN2 = 6, ASK ... <br> DO NOT SHOW SCREEN

CN30 (C5) 'What are the reasons for you taking the bus to get to [work] or [school/college]?
CODE ALL THAT APPLY. DO NOT PROMPT. PROBE FULLY [ANYTHING ELSE?]

1. Buses run where I want to travel / direct route
2. Buses run when I want to travel
3. Bus journey is quick / service is frequent
4. Buses are reliable / punctual
5. Bus stop is near home
6. Bus stop is near to destination
7. Buses are cheap / cheaper / offer good value for money
8. General convenience
9. I feel safe on the bus / bus stops /bus stations
10. Buses are accessible / easy to get on
11. Good for the environment / low CO2 emissions
12. Good information on timetables/routes/fares
13. I feel safe at bus stops/stations
14. No choice - I don't own / have access to a car
15. No choice - no parking where I need to go
16. No choice - other reason
17. No particular reason
18. Other [WRITE IN]
19. Don't know

## THOSE TRAVELLING BY TRAIN OR TUBE/METRO/LIGHT RAIL/TRAM/TRAIN

IF CN1 $=1$ AND CN2 $=8$, ASK $\ldots$
DO NOT SHOW SCREEN
CN32 (C10) 'What are the reasons for you taking the train to get to [work] or [school/college]?
CODE ALL THAT APPLY. DO NOT PROMPT. PROBE FULLY [ANYTHING ELSE?]

1. Trains run where I want to travel / direct route
2. Trains run when I want to travel
3. Train journey is quick / service is frequent
4. Trains are reliable / punctual
5. Train station is near home
6. Train station is near to destination
7. Trains are cheap / cheaper / offer good value for money
8. General convenience
9. I feel safe on the train / at train stations
10. Trains are accessible / easy to get on
11. Good for the environment / low CO2 emissions
12. Good information on timetables/routes/fares
13. No choice - I don't own / have access to a car
14. No choice - no parking where I need to go
15. No choice - other reason
16. No particular reason
17. Other [WRITE IN]
18. Don't know

IF CN1 = 1 AND CN2 = 7, ASK ...
DO NOT SHOW SCREEN
CN32a (C10) 'What are the reasons for you taking the Tube/metro/light rail/tram to get to [work] or [school/college]?
CODE ALL THAT APPLY. DO NOT PROMPT. PROBE FULLY [ANYTHING ELSE?]

1. Tube/metro/light rail/trams run where I want to travel / direct route
2. Tube/metro/light rail/trams run when I want to travel
3. Tube/metro/light rail/tram journey is quick / service is frequent
4. Tube/metro/light rail/trams are reliable / punctual
5. Tube/metro/light rail/tram station is near home
6. Tube/metro/light rail/tram station is near to destination
7. Tube/metro/light rail/trams are cheap / cheaper / offer good value for money
8. General convenience
9. I feel safe on the tube/metro/light rail/tram / at tube/metro/light rail/tram stations
10. Tube/metro/light rail/trams are accessible / easy to get on
11. Good for the environment / low CO2 emissions
12. Good information on timetables/routes/fares
13. No choice - I don't own / have access to a car
14. No choice - no parking where I need to go
15. No choice - other reason
16. No particular reason
17. Other [WRITE IN]
18. Don't know

IF CN1 = 1 AND CN2 = 8, ASK:
DO NOT SHOW SCREEN
CN34 (C30) When you catch a train to go to work/school/college, how do you usually get to the train station?

1. Walk all the way
2. Walk to bus stop and catch a bus to station
3. Bicycle
4. Motorbike/moped/scooter
5. Car/van as driver
6. Car/van as passenger
7. Taxi
8. It varies too much to say
9. Other

IF CN1 $=1$ AND CN2 $=8$ AND CN34 $=5$ OR 6 [CAR/VAN TO TRAIN STATION], ASK:
DO NOT SHOW SCREEN
CN35 (C31) What are the reasons you don't walk to the train station?
DO NOT PROMPT, PROBE FULLY (WHY ELSE?), CODE ALL THAT APPLY

1. It takes too long / too far away
2. Too much traffic / it's too dangerous
3. Weather
4. Too hilly round here
5. Too dark
6. Too old /Not fit enough to walk
7. Worried about crime/personal safety/being attacked
8. I'm not the kind of person who walks to the train station / Not my style
9. No particular reason
10. Other [WRITE IN]
11. Don't know

IF CN1 = 1 AND CN2 = 8 AND CN34 = 5 OR 6 [CAR/VAN TO TRAIN STATION], AND HAVE EVER
LEARNT TO RIDE A BIKE (B39a = 1) AND COULD RIDE A BIKE (B39b = 2 OR 3 )
ASK:
DO NOT SHOW SCREEN
CN36 (C32) What are the reasons why you don't cycle to the train station?
DO NOT PROMPT, PROBE FULLY (WHY ELSE?), CODE ALL THAT APPLY

1. I have to take things (e.g. tools, laptop, luggage etc) and cannot carry it all
2. Don't own / have access to a bicycle
3. Can't ride a bicycle
4. Can ride a bicycle but not confidently enough to ride to work
5. It takes too long to cycle / too far away
6. Too much traffic / it's too dangerous
7. Weather
8. Too hilly round here
9. Too dark
10. Nowhere to park a bicycle securely
11. Worried about bike being stolen
12. No showers
13. Too old / Not fit enough to cycle
14. Cycle lanes/paths are limited/poor quality/unsafe
15. Worried about crime/personal safety/being attacked
16. I'm not the kind of person who cycles to the train station / Not my style
17. No particular reason
18. Other [WRITE IN]
19. Don't know

## THOSE TRAVELLING BY CYCLE

IF CN1 = 1 AND CN2 = 2, ASK $\ldots$
DO NOT SHOW SCREEN
CN37 (C14) What are the reasons why you cycle to [work] or [school/college]?
CODE ALL THAT APPLY. DO NOT PROMPT. PROBE FULLY [ANYTHING ELSE?]

1. It is quick
2. It is the cheap / cheapest way / free
3. It is the most convenient way
4. It is easy to park / lock up
5. I enjoy cycling
6. I use my cycle at work
7. To keep fit / exercise
8. There is a choice of routes / can take routes which I couldn't otherwise
9. It's better for the environment / reduces $\mathrm{CO}^{2}$ emissions
10. Flexibility / freedom / no waiting around
11. No choice - I don't own / have access to a car
12. No choice - no parking where I need to go
13. No choice - I can't walk where I need to go
14. No choice - bus services don't meet my needs
15. No choice - train services don't meet my needs
16. No particular reason
17. Other [WRITE IN\}
18. Don't know

## ALL TRAVELLING TO WORK, SCHOOL OR COLLEGE

## IF CN1 = 1

DO NOT SHOW SCREEN
CN39 (C38) Have you changed the method of transport (e.g. going by car/train/bus/or cycling) that you use to travel to [work] or [school/college] in the last year?

1. Yes
2. No

IF CN1 = 1 AND CN39 = YES:
DO NOT SHOW SCREEN
CN40 (C39) How did you previously travel to [work] or [school/college]? That is, which method of transport did you use for the longest part of the journey?
INTERVIEWER: PROMPT / PROBE IF NECESSARY
SINGLE CODE

1. Walk
2. Bicycle
3. Motorbike/moped/scooter
4. Car/van as diver
5. Car/van as passenger
6. Bus
7. Tube/metro/light rail/tram
8. Railway train
9. Long distance coach
10. Aeroplane (ONLY FOR REGULAR WORK / BUSINESS TRIPS)
```
IF CN1 = 1 AND CN39 = YES:
DO NOT SHOW SCREEN
CN41 (C40) Why did you change the way you travelled to [work] or [school/college]?
DO NOT PROMPT
CODE ALL MENTIONED
```

1. New job
2. Moved house
3. Change in family circumstances (e.g. had a baby/got divorced/child left school/etc)
4. I wanted to reduce my $\mathrm{CO}^{2}$ emissions
5. New method quicker / more convenient
6. New method cheaper / free
7. Health reasons
8. I bought a car
9. I bought a bicycle
10. Other [WRITE IN]

END OFMODULE A

## MODULE B: BUSINESS TRIPS (ONLY IF CN1=2)

THOSE TRAVELLING BY CAR AND AEROPLANE

## IF CN1 = 2 AND IF CAR/VAN AS DRIVER (CODE 4 AT CN2)

SHOW SCREEN
CN42 (C49) You said that you travelled by car/van the last time you made a business trip. Thinking more generally about all the business trips you made by car/van in the last six months, in which of the following other ways, if any, could you have made those trip(s)?

CODE ALL MENTIONED

1. By getting a lift with someone going the same way / going to the same place
2. Through a car share scheme
3. Neither
4. Don't know

ASK ALL WHO USE CAR OR AEROPLANES FOR BUSINESS TRIPS (CN1 = 2) AND (CN2 = 4, 5 OR 10). OTHERS GO TO C58.

FOR CN1=2 (BUSINESS TRIPS) ASK:
DO NOT SHOW SCREEN
CN43 (C53) In the last six months, have any of your business trips been....READ OUT
CODE ALL MENTIONED
INTERVIEWER: PROBE FOR AN ESTIMATE

1. 50 miles or more
2. 25 to 49 miles
3. 10 to 24 miles
4. Less than 10 miles
5. Don't know

IF CN1=2 AND CN2=4,5,10 AND (CN43=1 OR 2) OTHERS GO TO CN48
DO NOT SHOW SCREEN
CN44 (C54) You said you travelled by [car/van as a driver car/van as a passenger / aeroplane] the last time you made a business trip. Thinking more generally about business trips that are 25 miles or over, would you consider travelling by train?
INTERVIEWER - IF YES, PROBE FOR WHETHER THEY ALREADY TAKE THE TRAIN FOR LONGER BUSINESS TRIPS, AND IF SO WHETHER THEY USUALLY OR SOMETIMES TAKE THE TRAIN FOR LONGER TRIPS.

1. Yes - I usually do this already (for longer business trips)
2. Yes - I sometimes do this already (for longer business trips)
3. Yes - but I don't do this at the moment

No
5. Don't know

IF CN44 = 4
DO NOT SHOW SCREEN
CN45 (C55) What are the reasons why you wouldn't consider travelling by train?
CODE ALL THAT APPLY

1. I have to take things (e.g. tools, laptop, luggage etc) and cannot carry it all
2. I would need to change train or use bus and train / no direct route
3. I don't know what train services are available
4. Can never be sure what time the train will arrive/how long it will take
5. Trains do not run when I want to travel
6. Trains do not run where I want to travel
7. Train journey is too slow / infrequent
8. Trains are not reliable and punctual
9. Train station is not near home
10. Train station is not near to destination
11. Trains are expensive / more expensive / do not offer good value for money/ It's cheaper by car
12. Generally not convenient by train/ easier or more convenient by car/aeroplane
13. Trains are uncomfortable / poor condition / not clean / overcrowded / too cold or hot
14. I do not feel safe on the train / at train stations
15. Trains are not accessible/easy to get on
16. No particular reason
17. Other [WRITE IN]
18. Don't know

## ALL WHO MAKE BUSINESS TRIPS

ASK ALL MAKE BUSINESS TRIPS (CN1 = 2)
SHOW SCREEN
CN48 (C58) And from the following list, who mainly decides how you travel on business trips (for example, by car, train or aeroplane?)

## SINGLE CODE

1. Me personally
2. Other people I'm travelling with
3. My manager
4. My clients
5. It is company policy / decided by a central travel department
6. it varies / not possible to say

ASK ALL MAKE BUSINESS TRIPS (CN1 = 2)
DO NOT SHOW SCREEN
CN50 (C60) Do you ever use teleconferencing or video/web-conferencing?
INTERVIEWER: PROBE WHICHARE USED IF NECESSARY
CODE ALL THAT APPLY

1. Yes - video conferencing
2. Yes - web conferencing
3. Yes - teleconferencing
4. No [SINGLE CODE ONLY]
5. Don't know/not sure

## IF YES - TELECONFERENCING OR YES - VIDEO OR WEB CONFERENCING OR NO AT

 PREVIOUS QUESTION [CODE 1 OR 2 OR 3 OR 4 AT CN50] ASK:
## SHOW SCREEN

CN51 (C61a) And from the following list, generally speaking, how easy or difficult would it be for you personally to use video, web-conferencing or teleconferencing to reduce the number of meetings you travel to?

1. Very easy
2. Fairly easy
3. Fairly difficult
4. Very difficult
5. Don't know/not sure

## IF DIFFICULT TO DO THIS (CODES 3 OR 4 AT PREVIOUS QUESTION CN51) <br> DO NOT SHOW SCREEN

CN52 (C61b) Why would it be difficult?
CODE ALL MENTIONED

1. Facilities not available at/near workplace
2. Facilities not easily accessible at/near workplace
3. I am not confident enough to use these technologies
4. Prefer to meet face to face
5. The person/s I am meeting do not have the technology
6. More convenient to meet face to face
7. Cheaper to meet face to face
8. I need to take things with me to the meeting
9. It's more effective to meet face to face
10. Other [WRITE IN]

END OFMODULE B

## SHOPPING

## ASK ALL

## SHOW SCREEN

CN56 Which of the following statements best describes how you typically do your food shopping?
SINGLE CODE

1. I usually only do a main shop (e.g. a weekly/fortnightly shop)
2. I usually do both a main shop (e.g. a weekly/fortnightly shop) and top-up food shopping (e.g. getting a few food items when I realise I need them)
3. I usually do more regular little shops for food (e.g. buying food as and when I need it) rather than doing a big main shop
4. I do not usually do food shopping - someone else in my household does the food shopping (GO TO CN104)

IF CN56 = 2 OR 3 ASK:
DO NOT SHOW SCREEN
CN57 And which mode of transport do you usually use for the longest part of the journey when you...? INTERVIEWER: PROMPT / PROBE IF NECESSARY

CN56=2
Y [do top-up shopping]
CN56=3
Z [do more regular little shops]

```
CODE ONE ONLY - IF USE MORE THAN ONE MODE, PROBE FOR WHICH ONE THEY USE MOST
OFTEN
1. Walk
2. Bicycle
3. Motorbike/moped/scooter
4. Car/van as driver
5. Car/van as passenger
6. Bus
7. Tube/metro/light rail/tram
8. Railway train
```

IF CN56 = 2 OR 3 ASK:
SHOW SCREEN
CN59 And from this list, how frequently do you...?
CN56=2
Y [do top-up shopping]
CN56=3
Z [do more regular little shops]

1. Once in the last month
2. Twice in the last month
3. More or less weekly
4. Twice weekly
5. 3 to 4 times a week
6. Once a day
7. More than once a day
8. Don't know

ALL WHO TRAVEL BY CAR FOR SHOPPING (CODES 4 AND 5 FOR ANY AT Q57 X, Y OR Z) DO NOT SHOW SCREEN - DO NOT PROMPT
CN60 What are the reasons for you usually going by car/van to do...?
CN56=2
Y [top-up shopping]

CN56=3
Z [more regular little shops]

## CODE ALL MENTIONED

1. I have shopping and cannot carry it all
2. I can travel when I want to travel
3. It is quick / reliable / convenient
4. It is cheap / cheapest way
5. I cannot get there any other way
6. I prefer driving
7. I use my car to make other trips while I'm out
8. It gives me flexibility
9. Other, specify

## DO NOT ASK CN61 - CN74 IF TRAVEL TO WORK BY CAR AS DRIVER OR PASSENGER (CN=1 AND CN2=4 OR 5)

ALL WHO TRAVEL BY CAR FOR SHOPPING (CODES 4 AND 5 FOR ANY AT Q57 X, Y OR Z) DO NOT SHOW SCREEN - DO NOT PROMPT
CN61 What are the reasons why you don't use public transport to do...?
CODE ALL THAT APPLY. PROBE FULLY [ANYTHING ELSE?]
CN56=2
Y [top-up shopping]
CN56=3
Z [more regular little shops]

1. I have shopping and cannot carry it all
2. There is no direct route
3. I don't know what public transport services are available / poor information on timetables or routes or fares
4. Public transport is too slow / service too infrequent
5. Public transport is not reliable / punctual
6. Public transport services are not near home
7. Public transport services are not near destination
8. Public transport is expensive / It's cheaper by car
9. Generally public transport is not convenient/ easier or more convenient by car
10. I do not feel safe on public transport
11. Public transport is not accessible/easy to get on
12. It's always full by the time it gets to my stop
13. No particular reason
14. Other [WRITE IN\}
15. Don't know

ALL WHO TRAVEL BY CAR FOR SHOPPING (CODES 4 AND 5 FOR ANY AT Q57, Y OR Z) AND HAVE EVER LEARNT TO RIDE A BIKE (B39a = 1) AND COULD RIDE A BIKE (B39b = 2 OR 3), ASK

## DO NOT SHOW SCREEN - DO NOT PROMPT

CN63 What are the reasons why you don't you cycle to do your ...?
CODE ALL THAT APPLY. DO NOT PROMPT. PROBE FULLY [ANYTHING ELSE?]
CN56=2
Y [top-up shopping]
CN56=3
Z [more regular little shops]

1. I have shopping and cannot carry it all
2. Don't have access to a bicycle / my own bicycle
3. Can't ride a bicycle /not confident enough
4. It takes too long to cycle / too far away
5. Too much traffic / it's too dangerous
6. Weather
7. Too old /unfit
8. No/not enough cycle lanes/paths at all along my route
9. Worried about crime/personal safety/being attacked
10. I'm not the kind of person who cycles to do their shopping / Not my style
11. No particular reason
12. Other [WRITE IN\}
13. Don't know

ALL WHO DO A MAIN SHOP - IF CN56 = 1 OR 2 ASK:

## SHOW SCREEN

CN69 Thinking about your main shopping for food (e.g. your weekly/fortnightly shop), do you currently do any of the following on a regular basis?

## CODE ALL MENTIONED

1. Share a car with people (e.g. family members who do not live with you or friends) on an informal basis
2. Use a formal car share scheme
3. Use home delivery (e.g. internet shopping / telephone)
4. No [SINGLE CODE]
5. Don't know

## IF (CN56 = 1, 2 OR 3) ASK:

DO NOT SHOW SCREEN
CN71 Do you currently combine your food shopping trips with other trips (e.g. the trip to
work/school/college)?
INTERVIEWER: IF YES PROBE FOR WHETHER YES FOR ALL / MOST / SOME AS NECESSARY

1. Yes - for all shopping trips
2. Yes - for most food shopping trips
3. Yes - for some food shopping trips
4. No
5. DK

IF (CN56 = 1, 2 OR 3) ASK:
SHOW SCREEN
CN75 And from this list, how often, if at all, do you use home delivery (e.g. internet shopping / telephone ordering) for your food shopping nowadays?

1. Regularly
2. Sometimes
3. Have only done this once or twice
4. Never
5. Don't know

IF CN56 = 1, 2 OR 3
SHOW SCREEN
CN76 And how often nowadays, if at all, do you use home delivery (e.g. internet shopping / telephone ordering) for any non-food shopping, such as for buying books, CDs, clothes, holidays, or insurance? CODE ONE ONLY

1. Regularly
2. Sometimes
3. Have only done this once or twice
4. Never
5. Don't know

## ECO DRIVING

## IF HAVE DRIVING LICENCE (AT B3) AND CAR IN HOUSEHOLD (B5)

SHOW SCREEN
CN104 (C92) Looking at this list, how much, if anything, would you say you know about Eco-driving and/or Smarter driving?

1. A lot
2. A fair amount
3. Just a little
4. Nothing - have only heard of the name
5. Nothing - have never heard of it
6. Don't know

## IF HAVE A DRIVING LICENCE (AT B3) AND CAR IN HOUSEHOLD (B5)

SHOW SCREEN
CN102 (C90) Looking at this list, which, if any, of these actions have you taken in the past 12 months?
CODE ALL MENTIONS

1. Driving in a more fuel efficient manner
2. Buying a car with a smaller engine
3. Buying a hybrid car
4. Using a car less for short trips
5. Switching to a car which uses a cleaner energy source
6. Using buses, trains, or other public transport (more) instead of driving
7. Car sharing (more) instead of going in an individual car
8. Joining a car club
9. Cycling (more) instead of going by car
10. Looking for information about cleaner vehicles
11. Giving up one (or more) of the household cars - ASK IF B5 > 1
12. None of these

IF HAVE DRIVING LICENCE (AT B3) AND CAR IN HOUSEHOLD (B5) AND B12 = 1 OR 2 FOR ANY CAR/VAN MENTIONED AT B5, ASK:
SHOW SCREEN
CN105 (C93) Looking at this list, which, if any, of the following driving techniques would you say have you adopted?
DO NOT PROMPT. PROBE FULLY (Which else?). CODE ALL THAT APPLY.

1. Regularly checking my tyre pressure
2. Not accelerating too hard / going easy on the accelerator
3. Using air conditioning only when I really need it
4. Removing unused roof racks
5. Switching off my engine when stuck in a traffic jam
6. Checking revs / changing gear between 2000rpm and 2500rpm
7. Changing my speed to save fuel
8. Reading the road to avoid unnecessary acceleration and braking
9. Planning my journey to avoid congestion/road works/getting lost
10. Driving off from cold / Not warming up the car before driving off
11. None - I've not adopted any of them

ASK ALL WHO DECIDE ABOUT CAR PURCHASE (CODES 1-4 AT B16)
SHOW SCREEN
CN108 (C96) How likely would you be to buy a petrol or diesel car with lower carbon dioxide/CO2
emissions and/or a smaller engine size than your current car when you next buy a car?
INTERVIEWER - PROMPT IF NECESSARY. THIS MUST BE PETROL OR DIESEL CARS NOT
ELECTRIC, HYBRID, OR LPG CARS

1. Very likely
2. Fairly likely
3. Not very likely
4. Not at all likely
5. Don't know

## IF NOT VERY OR NOT AT ALL LIKELY (CODES 3 OR 4 AT CN108)

DO NOT SHOW SCREEN - DO NOT PROMPT.
CN109 (C97) What are the reasons for you being unlikely to consider buying a petrol or diesel car with lower carbon dioxide/CO2 emissions and/or a smaller engine size?
MULTICODE. PROBE FULLY [ANYTHING ELSE]

1. They are too small
2. They are too slow
3. They are not powerful enough
4. They look silly
5. They are more expensive
6. I don't think they are safe
7. I don't think they will make any difference to the environment
8. I don't know anything about them
9. I don't know enough about them
10. I haven't seen any second hand
11. I've always had the same make/model of car
12. Other specify

## IF VERY LIKELY OR FAIRLY LIKELY TO BUY LOW EMISSION CAR (CODE 1 OR 2 AT CN108)

DO NOT SHOW SCREEN - DO NOT PROMPT.
CN110 (C98) Why would you consider buying a petrol or diesel car with lower carbon dioxide/CO2 emissions and/or a smaller engine size?
DO NOT PROMPT. PROBE FULLY (ANYTHING ELSE?) CODE ALL THAT APPLY.

1. To reduce my $\mathrm{CO}^{2}$ emissions
2. I care about the environment
3. Because they are cheaper to buy
4. Because they are cheaper to run
5. Because cost of parking permit linked to emissions
6. I wouldn't have to pay a congestion charge
7. They are easy to park
8. Lower tax band
9. Other, specify

## ASK ALL

READ OUT
CN111 (C99) Are you a member of any of the following services?
MULTICODE 1 AND 2
INTERVIEWER - PROMPT IF NECESSARY: Formal car sharing is where a person takes part in an organised scheme that puts driers and passengers together to share car journeys.

INTERVIEWER - PROMPT IF NECESSARY: A car club is a company/organisation which provides its members with access to communal cars, which are parked at different locations near to where club members live. It's like having a hire car parked in your street for you and your neighbours to use.

1. Formal car sharing scheme
2. Car club (e.g. Street Car, Zip Car, City Car etc.)
3. Neither
4. Don't know

IF (CN111 = 3), ASK:
CN111a What are the reasons for you not currently being a member of a formal car sharing scheme or a car club?
DO NOT PROMPT. PROBE FULLY (ANYTHING ELSE?). CODE ALL THAT APPLY.
I don't need to / I have my own car
I don't need to / I don't have a car and don't need to use a car
I prefer using my own car
I don't like the idea of car sharing / joining a car club
I'm not interested (any mention)
6. I'm not the kind of person who car shares / joins a car club
7. Not aware such services existed
8. Car sharing / car clubs are not available in my area
9. Haven't ever thought about joining
10. Not sure what the benefits would be for me
11. It wouldn't benefit me
12. Too expensive
13. Too complicated
14. Don't know how to join
15. Too much effort / can't be bothered
16. Other (SPECIFY)
17. Don't know

## CHOICE MODELLING SECTION SHOWN HERE

## SECTION D ENVIRONMENTAL SECTION

## SELF COMPLETION - HAND OVER LAPTOP

D3 Here are some statements people have made about the environment. For each please say the extent to which you agree or disagree:

1. Definitely agree,
2. Tend to agree,
3. Neither agree nor disagree,
4. Tend to disagree,
5. Definitely disagree,
6. Don't know
7. Not applicable
a) There is too much concern with the environment
b) It's only worth doing environmentally-friendly things if they save you money
c) I don't have time to worry about my impact on the environment
d) I find it hard to change my habits to be more environmentally-friendly
e) Most people I know do their bit for the environment these days
f) Sometimes I feel under pressure to say that I am doing more to help the environment than I am
g) Being green isn't something people like me worry about
h) What I do in my life doesn't make any real difference to the environment
i) It's not worth doing things to help the environment if others don't do the same
j) It would embarrass me if my friends thought my lifestyle was purposefully environmentally friendly

D4 And which of these would you say best describes your current lifestyle?
CODE ONE ONLY

1. I don't really do anything that is environmentally friendly
2. I do one or two things that are environmentally friendly
3. I do quite a few things that are environmentally friendly
4. I'm environmentally friendly in most things I do
5. I'm environmentally friendly in everything I do
6. Don't know

Defra segmentation questions
D5 Which of these best describes how you feel about your current lifestyle and the environment?
CODE ONE ONLY

1. I'm happy with what I do at the moment
2. I'd like to do a bit more to help the environment
3. I'd like to do a lot more to help to environment
4. Don't know

D6. Which of the following best describes your views about climate change?
. Climate change is definitely not happening
2. Climate change is probably not happening
3. I'm not sure if climate change is happening
4. Climate change is probably happening
5. Climate change is definitely happening

D8 Thinking about the causes of climate change, which of the following best describes your views? Please note, by 'human activity' we mean everything that humans do, make or use across the world.
. Human activity is definitely not changing the world's climate
2. Human activity is probably not changing the world's climate
3. I'm not sure if human activity is changing the world's climate
4. Human activity is probably changing the world's climate
5. Human activity is definitely changing the world's climate

1. A lot
2. A fair amount
3. A little
4. Hardly anything
5. Nothing but I've heard about it
6. Hadn't heard about it before now
7. Don't know

D10 Thinking about the effects of climate change, which of the following best describes your views? SINGLE CODE ONLY

1. Climate change is already having a real impact
2. Climate change is not yet having a real impact, but will do in my lifetime
3. Climate change will not have a real impact in my lifetime, but will have a real impact on future generations
4. Climate change is not happening / will never have a real impact
5. Don't know

D11 Thinking about the effects of climate change, which of the following best describes your views? SINGLE CODE ONLY

1. Climate change will have as much of an impact on the UK as on other countries
2. Climate change will have less of an impact on the UK than on other countries
3. Climate change will have an impact on other countries, but not on the UK
4. Climate change is not happening / will not have an impact on the UK or other countries
5. Don't know

IF (D6 = 2, 3, 4 OR 5) OR (D10 = 1, 2, 3 OR 5)), ASK:
D21 How concerned are you about climate change?

1. Very concerned
2. Fairly concerned
3. Neither concerned nor unconcerned
4. Fairly unconcerned
5. Very unconcerned
6. Don't know

IF (D6 = 2, 3, 4 OR 5)
D22 Here are some statements about climate change. For each, please give the response which best fits with your view:
SINGLE CODE ONLY

1. True
2. False
3. I'm not sure / don't know
a) Climate change is the result of the hole in the ozone layer
b) Transport is one of the major contributors to climate change

ASK ALL:
D22a Here are some statements about climate change. For each, please give the response which best fits with your view:
SINGLE CODE ONLY

1. True
2. False
3. I'm not sure / don't know
c) A two degree rise in global temperature will not make much difference to our lives
d) Overall in the UK buses, lorries and trains together emit more $\mathrm{CO}^{2}$ than cars
e) $\mathrm{CO}^{2}$ is one of the gases that causes the greenhouse effect
f) The greenhouse effect traps heat which is created by the sun shining on the earth's surface from escaping
g) Most scientists believe that recent temperature increases are the result of a natural cycle
h) Most scientists believe that human activity is a cause of climate change

D23 Here are some statements people have made about the environment. For each please say the extent to which you agree or disagree:

1. Definitely agree,
2. Tend to agree,
3. Neither agree nor disagree,
4. Tend to disagree,
5. Definitely disagree,
6. Don't know
7. Not applicable
a) We seem to have much more severe weather in the UK these days
b) I've noticed a change in the seasons in the last few years
c) The effects of climate change are too far in the future to really worry me
d) It's not worth Britain trying to combat climate change, because other countries will just cancel out what we do
e) If things continue on their current course, we will soon experience a major environmental disaster
f) What I do personally can make a real difference to climate change
g) Developments in technology will stop climate change so we won't have to change how we live
h) Climate change is beyond control - it's too late to do anything about it

D24 How much do you feel you know about what you personally can do to tackle climate change?

1. A great deal
2. A fair amount
3. A little
4. Hardly anything
5. Nothing
6. Climate change is not happening/is not caused by human activity
7. Don't know

D25 How interested would you be in learning more about what you personally can do to tackle climate change?

1. Very interested
2. Fairly interested
3. Neither interested nor uninterested
4. Fairly uninterested
5. Very uninterested
6. Climate change is not happening/is not caused by human activity
7. Don't know

D26 Here are some statements people have made about the environment. For each please say the extent to which you agree or disagree:

1. Definitely agree,
2. Tend to agree,
3. Neither agree nor disagree,
4. Tend to disagree,
5. Definitely disagree,
6. Don't know
7. Not applicable
a) Low carbon emissions would be high on my list of 'must haves' if I were to buy a new car
b) I should try to limit my car use for the sake of the environment
c) I would rather save energy at home than change how I travel
d) How I personally travel makes a real difference to climate change
e) I have already done as much as I can to reduce my CO2 emissions
f) Higher taxes should be imposed to try to stop people having cars with high CO2 emissions

## END OF SELF COMPLETION SECTION

## SECTION E - MEDIA

## The next few questions are about the media

DO NOT SHOW SCREEN
E1. Do you ever listen to the radio?

1. Yes
2. No

ASK IF E1=1
SHOW SCREEN
E2. Looking at the following list, how often these days do you listen to commercial radio stations (e.g.
Classic FM; Capital 95.8; Heart FM)?
CODE ONE

1. Regularly
2. Sometimes
3. Never

ASK ALL
SHOW SCREEN
E4. Looking at the following list, on average how many hours a day do you watch TV? SINGLE CODE

1. Don't watch
2. Under 0.5 hours
3. $0.5-1$ hour
4. 1-1.5 hours
5. $1.5-2$ hours
6. 2-3 hours
7. 3-4 hours
8. 4-5 hours
9. 5-7 hours
10. 7-9 hours
11. 9 hours or more

## IF WATCHES TELEVISION [CODE 2-11 AT E4]

SHOW SCREEN
E5. In relation to the TV service in your home, which of the following applies to you?
CODE ALL MENTIIONED

1. I only receive terrestrial channels (ie via a standard roof or indoor aerial?)
2. I have Freeview digital television
3. I subscribe to Sky / BT Vision / Tiscali / Virgin Media / any other cable/satellite service

## SHOW SCREEN

## ASK ALL

E6 How often do you use, read or look at each of the following newspapers?

1. Almost always (at least 3 out of 4 issues)
2. Quite often (at least 1 out of 4 issues)
3. Occasionally (less than 1 out 4 issues)
4. Not read in past 12 months

ASK ALL EXCLUDING TITLES NOT READ IN PAST 12 MONTHS (CODE 4 AT E6)

## E6

| Almost | Quite often | Occasionally |
| :--- | :--- | :--- |
| always |  |  |
| Not read in |  |  |
| past 12 |  |  |

Daily Express
Daily Mail
Daily Mirror
Daily Record
(?)
Daily Star

The Sun
Metro (free)
The
Independent
The Times
The Guardian
The Daily
Telegraph
Financial
Times
ASK ALL
E10 How often do you use, read or look at each of the following newspapers? SINGLE CODE

1. Almost always (at least 3 out of 4 issues)
2. Quite often (at least 1 out of 4 issues)
3. Occasionally (less than 1 out 4 issues)
4. Not read in past 12 months

| E10 <br> Almost <br> always$\quad$ Quite often OccasionallyNot read in <br> past 12 <br> months |
| :--- |

## Sunday

Express
The Mail on
Sunday
Sunday Mirror
Sunday People
Daily Star on
Sunday
Independent
on Sunday
News of the
World
The Observer
Sunday
Telegraph
Sunday Times

ASK ALL:
SHOW SCREEN
CN74a Can I just check, do you have access to the internet at home?

1. Yes
2. No
3. Don't know

IF CN74a = 1, ASK:
SHOW SCREEN
CN74aa Looking at this list, how often do you use the internet at home?

1. Daily
2. A few times a week
3. Once a week
4. A few times a month
5. Once a month
6. Every 2-3 months
7. At least once a year
8. Not in past year / Never

IF (A4 = 1, 2, 3, 4, 10, 11, 12 OR 13) ASK:
SHOW SCREEN
CN74b And do you personally have access to the internet at work/school/college?

1. Yes
2. No
3. Don't know

## SHOW SCREEN

ASK ALL
E17. In the last 12 months have you...
REPEAT FOR EACH OF THE 8 STATEMENTS. READ OUT
CODE: YES/NO/DK FOR EACH

1. Watched a documentary about environmental issues?
2. Listened to programme about environmental issues on the radio?
3. Read an article about environmental issues in a science magazine like New Scientist?
4. Read an article in a general magazine or newspaper about environmental issues?
5. Discussed environmental issues with a friend or member of your family
6. Searched for information about environmental issues on the Internet?

## SECTION F - DEMOGRAPHICS

## The next few questions are about you and your household.

## SHOW SCREEN

ASK ALL
F1 Which of these life events, if any, have you experienced in the last 12 months and which do you expect to experience in the next 12 months?
CODE ALL MENTIONED FOR LAST 12 MONTHS AS F1a AND NEXT 12 MONTHS AS F1b

1. Finish school
2. Start university
3. Start first job
4. Change job
5. Move out of parental home
6. Move in with partner
7. Purchase/Sell a house/flat
8. Birth / adoption of your first child
9. Birth / adoption of your second or subsequent child
10. Child goes to university
11. Child leaves home
12. Divorce/Separate from long-term partner
13. Enter retirement

ASK ALL
DO NOT SHOW SCREEN
F2 Including yourself, how many people usually live here? Please include all adults and children. ENTER NUMBER

## IF RESPONDENT LIVES ALONE GO TO F4

IF 2 PEOPLE IN HOUSEHOLD INCLUDING RESPONDENT QUESTION TEXT TO READ:
F3 What relationship is the other person to you? So they are your...
IF 3+ PEOPLE IN HOUSEHOLD INCLUDING RESPONDENT, QUESTION TEXT TO READ: DO NOT SHOW SCREEN
F3 Please could you tell me about the other people in the household, starting with the oldest. What relationship is this person to you? So they are your...

1. Husband/Wife/Civil Partner
2. Partner (unmarried/not in a civil partnership)
3. Son/daughter (including adopted, foster, step)
4. Son/daughter (including in law)
5. Mother/father (including adopted, foster, step)
6. Mother/father (including in law)
7. Brother/Sister (including step, foster and adopted)
8. Grandparent (including step, foster and adopted)
9. Grandchild (including step, foster and adopted)
10. Other relative (including step, foster and adopted)
11. Other non relative
12. Don't know
13. Refused

DO NOT SHOW SCREEN
F4 INTERVIEWER CODE SEX OF RESPONDENT FOR OTHER HOUSEHOLD MEMBERS IF NOT OBVIOUS ASK: And are they male or female?

1. Male
2. Female

DO NOT SHOW SCREEN
F5 What was your/their age last birthday?
ENTER AGE IN YEARS TO THE CLOSEST YEAR. IF LESS THAN 6 MONTHS OLD, ENTER 0.
NUMERIC RANGE 0... 999

1. Don't know
2. Refused

## DO NOT SHOW SCREEN

F6 ASK IF NECESSARY: What is your marital status?

1. Married/civil partnership
2. Living as a couple
3. Divorced/separated, including from a civil partnership
4. Widowed
5. Single

FOR HOUSEHOLD MEMBERS OTHER THAN RESPONDENT ASK: RELATIONSHIP TO RESPONDENT, AGE, GENDER ONLY

SHOW SCREEN
F7 Which if any of these would you use to describe your ethnic group?

1. White British
2. Another white background
3. White and Black Caribbean
4. White and Black African
5. White and Asian
6. Any other Mixed background
7. Indian
8. Pakistani
9. Bangladeshi
10. Any other Asian background
11. Caribbean
12. African
13. Any other Black background
14. Chinese
15. Any other

IF (A4 = 5, 6, 7 OR 8), ASK:
DO NOT SHOW SCREEN
F9a Can I just check, have you had a paid job in the last six months?

1. Yes
2. No
3. Don't know

IF (A4 = 9) OR (F9a = 1), ASK:
DO NOT SHOW SCREEN
F9b In your last job, were you working as an employee or were you self-employed?

1. Employee
2. Self-employed

IF (A4 = 1, 2, 3, 4 OR 9) OR (F9a = 1), ASK:
DO NOT SHOW SCREEN
F9c What did/(does) the firm/organisation you work(ed) for mainly make or do (at the place where you work(ed))?
DESCRIBE FULLY - PROBE MANUFACTURING or PROCESSING or DISTRIBUTING ETC. AND MAIN GOODS PRODUCED, MATERIALS USED, WHOLESALE or RETAIL ETC."

IF (A5 = 1 OR 2) OR (F9b = 1 OR 2), ASK:
DO NOT SHOW SCREEN
F9d Including yourself, how many people work(ed) for your organisation/ employer at the place where you work(ed)? Are/were there...READ OUT...

1. "...1"
2. "2 to 24,"
3. " 25 to 499 ,"
4. "or 500 or more employees?"

IF (A4 = 1, 2, 3, 4 OR 9) OR (F9a = 1), ASK:
DO NOT SHOW SCREEN

F9e What was/(is) your (main) job?

## PROBE FOR JOB TITLE/RANK/GRADE

IF (A4 = 1, 2, 3, 4 OR 9) OR (F9a = 1), ASK:
DO NOT SHOW SCREEN
F9f What did/ (do) you mainly do in your job?
CHECK SPECIAL QUALIFICATIONS/TRAINING NEEDED TO DO THE JOB"

```
IF ((A5 = 1 OR 2) OR (F9b = 1 OR 2)) AND (F9d = 2, 3 OR 4), ASK
DO NOT SHOW SCREEN
```

F9g How many employees (if any) do/(did) you have formal responsibility for supervising? Please include all those who you manage indirectly (i.e. through managers/supervisors who report to you) as well as those who report directly to you.
INTERVIEWER: IF RESPONDENT IS/WAS SELF-EMPLOYED AND HAS/HAD PARTNERS BUT NO EMPLOYEES, CODE AS 'NONE'.
DO NOT COUNT SUPERVISION OF CHILDREN (E.G. IF TEACHER/CHILD MINDER) OR ANIMALS. IF RESPONDENT IS UNSURE HOW MANY EMPLOYEES THEY SUPERVISE, ASK FOR BEST ESTIMATE.
INTERVIEWER: IF MORE THAN 999 CODE AS 999
WRITE IN 1.... 999
None

## DO NOT SHOW SCREEN

IF CODED 1 OR 2 OR 3 OR 4 AT A4 AND CN5 = 1 OR 2, ASK
DO NOT SHOW SCREEN
A7 What is the postcode of your usual place of work?
IF DK ASK FOR NAME OF COMPANY/ORGANISATION THEY WORK FOR AND FULL ADDRESS INCLUDING STREET NAME, TOWN/CITY AND COUNTY.

1. ENTER POSTCODE OR ADDRESS
2. Don't know/can't answer

ASK ALL:
DO NOT SHOW SCREEN
F9h Can I just check, which member of your household is the Chief Income Earner, that is, the person with the largest income, whether from employment, pensions, state benefits, investments or any other sources?

1. Respondent
2. Respondent's spouselpartner
3. Other adult
4. Don't know

IF (F9h = 2 OR 3), ASK:
SHOW SCREEN
F9i Thinking about the person in your household with the largest income, is she/he... READ OUT... CODE ONE ONLY

1. Employed
2. Self-employed
3. Unemployed and seeking work
4. Looking after family or home/not seeking work
5. Long-term sick or disabled
6. Retired
7. In full-time education
8. Don't know

IF (F9i = 3, 4 OR 5), ASK:
DO NOT SHOW SCREEN
F9j Can I just check, did she/he have a paid job in the last six months?

1. Yes
2. No
3. Don't know

IF (F9i = 1, 2 OR 6) OR (F9j = 1), ASK:
DO NOT SHOW SCREEN
F9k What did/(does) the firm/organisation she/he work(ed) for mainly make or do (at the place where she/he work(ed))?
DESCRIBE FULLY - PROBE MANUFACTURING or PROCESSING or DISTRIBUTING ETC. AND MAIN GOODS PRODUCED, MATERIALS USED, WHOLESALE or RETAIL ETC."

IF (F9i = 1, 2 OR 6) OR (F9j = 1), ASK:
DO NOT SHOW SCREEN
F91 Including her/him, how many people work(ed) for her/his organisation/ employer at the place where she/he work(ed)? Are/were there...READ OUT...

1. "...1"
2. " 2 to 24, "
3. " 25 to 499 ,"
4. "or 500 or more employees?"

IF ( $\mathrm{F9} \mathrm{i}=1,2 \mathrm{OR} 6$ ) OR ( $\mathrm{F9j}=1$ ), ASK:
DO NOT SHOW SCREEN
F9m What was/(is) his/her (main) job?
PROBE FOR JOB TITLE/RANK/GRADE
IF (F9i = 1, 2 OR 6) OR (F9j = 1), ASK:
DO NOT SHOW SCREEN
F9n What did/ (does) she/he mainly do in her/his job?
CHECK SPECIAL QUALIFICATIONS/TRAINING NEEDED TO DO THE JOB"
IF ((F9i = 1, 2 OR 6) OR (F9j = 1)) AND (F9I = 2, 3 OR 4), ASK:
F9o How many employees (if any) does/did she/he have formal responsibility for supervising? Please include all those who she/he manages indirectly (i.e. through managers/supervisors who report to her/him) as well as those who report directly to her/him.
INTERVIEWER: IF CIE IS/WAS SELF-EMPLOYED AND HAS/HAD PARTNERS BUT NO EMPLOYEES, CODE AS 'NONE'.
DO NOT COUNT SUPERVISION OF CHILDREN (E.G. IF TEACHER/CHILD MINDER) OR ANIMALS. IF RESPONDENT IS UNSURE HOW MANY EMPLOYEES THE CHIEF INCOME EARNER SUPERVISES, ASK FOR BEST ESTIMATE.
INTERVIEWER: IF MORE THAN 999 CODE AS 999
WRITE IN 1.... 999
None

## SHOW SCREEN

F12 Please look at this screen and tell me whether you have any of the educational or school qualifications listed. Start at the top of the list and tell me the first one you come to that you have.

INTERVIEWER: CHECK WHETHER THIS IS THEIR HIGHEST QUALIFICATION. IF THE RESPONDENT'S HIGHEST QUALIFICATION IS NOT LISTED, ASK THEM TO SELECT THE CODE THEY THINK IS THE CLOSEST EQUIVALENT.

CODE ONE ONLY
1 University Higher Degree (e.g. MSc; PhD)
2 First degree level qualification (e.g. BA; BSc) including foundation degrees; PGCE
3 Diploma in higher education; HNC; HND; Nursing or Teaching qualification (excluding PGCE)
4 A level; AS level; NVQ level 3; GNVQ Advanced; or equivalent
5 GCSE grade A* - C; O level; CSE grade 1; NVQ level 2; GNVQ intermediate; or equivalent
6 GCSE grade D - G; CSE below grade 1; NVQ level 1; GNVQ Foundation level; or equivalent Y None of the above
Z Refuse
IF A4 $=[1,2,5,6,7,8$ OR 9] AND F12 $=$ [NONE OF THE ABOVE], ASK:
DO NOT SHOW SCREEN
F13 Can I just check, how old were you when you left full-time education?
WRITE IN AGE
Y Never attended full-time education
Z Refuse

## SHOW SCREEN

F14 Please can you tell me your overall HOUSEHOLD income from all sources in the last year? This includes earnings from employment or self-employment, income from benefits and pensions, and income from other sources such as interest and savings. I only need to know an approximate amount, to see if this influences people's views and experiences.

Please look at this card and tell me which letter represents your TOTAL HOUSEHOLD INCOME in the last year from all sources BEFORE tax and other deductions.

1. Don't know
2. Refused

## SHOW SCREEN

F15 From this list, which of these phrases comes closest to describing your feeling about your household income these days?

1. Living comfortably on present income
2. Coping on present income
3. Finding it difficult on present income
4. Finding it very difficult on present income

## RECONTACT 1

Would you be willing to be recontacted in relation to this research by the Department for Transport or their representatives in the future?

1. Yes 1
2. No 2

## RECONTACT 2

As a result of the interview you have just done and the information you have given us, TNS may like to contact you in future about this or other research projects, and therefore keep your contact details on file - is that all right?

1. Yes-OK
2. No - Respondent does not want to be contacted again.

## THANK AND CLOSE


[^0]:    ${ }^{1}$ Car travel was defined as a habit where respondents said that three statements describing the nature of travelling by car applied to them. A habit has been defined in psychological literature as the semi-automatic performance of a well-learned behaviour; one that is subconscious and triggered by environmental stimuli (Anable et al, 2006)

[^1]:    ${ }^{2}$ 'Cognitive polyphasia' refers to the ability of people to think about the same issue in contradictory terms in different situations.
    ${ }^{3}$ 'Social desirability bias' refers to the tendency of survey respondents to reply in a manner that will be viewed favourably by others.

[^2]:    ${ }^{4}$ In cases where respondents' level of literacy was too low to enable them to read the statements, interviewers administered the entire survey.

[^3]:    ${ }^{5}$ This statement is in fact false, with the balance of scientific opinion being that the recent temperature changes are not the result of a natural cycle, but are being affected by human activity.

[^4]:    ${ }^{6}$ 'Inactive drivers' were those who had a driving license but did not have a car or van in their household.

[^5]:    ${ }^{7}$ It should be noted that these questions relate to all forms of environmental behaviour and not just to those related to travel.

[^6]:    ${ }^{8}$ Buses, trains, trams / underground / metro / light rail

[^7]:    ${ }^{9}$ Analysis relating to respondent location is based on the location of their home rather than their workplace. While there is inevitably some disparity between work and home location, the accuracy of data for work location was relatively poor. Home location is therefore used as it is the most complete and accurate source of data.

[^8]:    ${ }^{10}$ Respondents who usually travelled to work by car were excluded from a number of questions relating to shopping to reduce the burden on them during the interview

[^9]:    ${ }^{11}$ The measure presented in Table $X$, is an aggregate of two survey variable. The first collected the extent to which the respondent was involved in environmentally-friendly behaviours and the second whether they were happy with what they currently did or not.

[^10]:    ${ }^{12}$ This includes those respondents who said they wanted to do more that was environmentally-friendly and were interested in finding out more about what they could do.

[^11]:    ${ }^{13}$ Respondents are divided into 9 groups as labeled in Table 4.9

[^12]:    ${ }^{14}$ Main or weekly shopping trips were not included as private vehicle is the main and only option available to most people (outside of home delivery). It was felt the potential for mode shift on main shopping was minimal.

[^13]:    ${ }^{15} \mathrm{~A}$ habit has been defined in psychological literature as the semi-automatic performance of a well-learned behaviour; one that is subconscious and triggered by environmental stimuli (Anable et al, 2006)

[^14]:    ${ }^{16}$ Regular 'main' food shops were excluded as it was deemed, in most cases, these trips could realistically only be carried out using a car or van or by using home delivery

[^15]:    Bases: London (403), other urban (2,732), rural / semi-rural (788)

[^16]:    ${ }^{17}$ Top-up food shopping refers to: small food shopping trips on top of a regular main food shopping trip; and also to more regular little shopping trips for food (i.e. for those who did not make a 'main' regular shopping trip).

[^17]:    ${ }^{18}$ Please see Chapter 3 for the definition travelling by car out of habit.

[^18]:    ${ }^{19}$ Those who don't really do anything / only one or two things and are happy with this.

[^19]:    ${ }^{20}$ Defined as all those who said they had never learnt to cycle but did not say they had a disability or health problem which would make it impossible for them to cycle.

[^20]:    ${ }^{21}$ Defined as those who have learnt to cycle and do not have a disability or long term health problem which would make it impossible for them to cycle, but who cycle less than once a year or never.

[^21]:    ${ }^{22}$ From cars, buses, trains and bicycles

[^22]:    Base: All who can ride a bicycle / do not find it impossible due to disability or health problem $(3,155)$

[^23]:    ${ }^{23}$ Defined as those who had learnt to cycle and did not have a disability or long term health problem which made it impossible for them to cycle.
    ${ }^{24}$ Respondents were not prompted (i.e. shown a list of possible answers to choose from); rather, interviewers coded what respondents said against a list that only they (the interviewer) could see. More responses (than those shown in the table) were given by smaller proportions (less than 5\%) of those asked; for clarity, only the 'main' responses (i.e. given by $5 \%$ or more of those asked) are shown here.

[^24]:    ${ }^{25}$ Whether the respondent regarded the walk as too hilly and their concerns about the weather were captured as a single code so it is not possible to distinguish between these two reasons in the survey data.

[^25]:    ${ }^{26}$ As defined by Standard Industrial Classification (SIC) (1992) - Manual Industries (A-F / Agriculture, hunting \& forestry / Fishing / Mining \& quarrying / Manufacturing / Electricity, gas \& water supply / / Construction), Service Industries (G-I / Wholesale \& retail trade; repair of motor vehicles, motorcycles \& personal \& household goods, Hotels \& restaurants, Transport, storage \& communication), Finance and Business Administration (J-K / Financial intermediation / Real estate, renting \& business activities), Public Admin etc. (L-O / Public administration \& defence/ Compulsory social security / Education / Health \& social work / Other community, social \& personal service activities).

[^26]:    ${ }^{27}$ 'Social desirability bias' refers to the tendency of survey respondents to reply in a manner that will be viewed favourably by others.

[^27]:    ${ }^{28}$ These are the population estimates that the survey findings were weighted to - taken from the Labour Force Survey (April - June 2009)

[^28]:    IF CN1 = 1 AND TAKE CAR (AS DRIVER OR PASSENGER) OR MOTORBIKE TO WORK/COLLEGE (CN2 = 3, 4 OR 5), AND (A8 OR A10a = 2 miles or less) AND ( $\mathrm{B} 2=4$ ), ASK ...
    DO NOT SHOW SCREEN
    CN13a What are the reasons why you don't walk to [work] or [school/college]?
    CODE ALL THAT APPLY. DO NOT PROMPT. PROBE FULLY [ANYTHING ELSE?]

    1. I have to take things (e.g. tools, laptop, luggage etc) and cannot carry it all
    2. Worried about safety - risk of accidents / traffic danger
    3. Worried about personal safety - risk of crime / being attacked / mugged
    4. Walking is inconvenient / car is more convenient
    5. Walking takes too long / car is quicker
    6. Walking takes too much effort / can't be bothered
    7. Lack of (well-maintained) pavements

    Lack of direct roads / pathways
    9. Lack of street lighting / poor street lighting
    10. Weather / too hilly
    11. I find walking difficult / too old / disabled
    12. No particular reason (SINGLE CODE ONLY)

