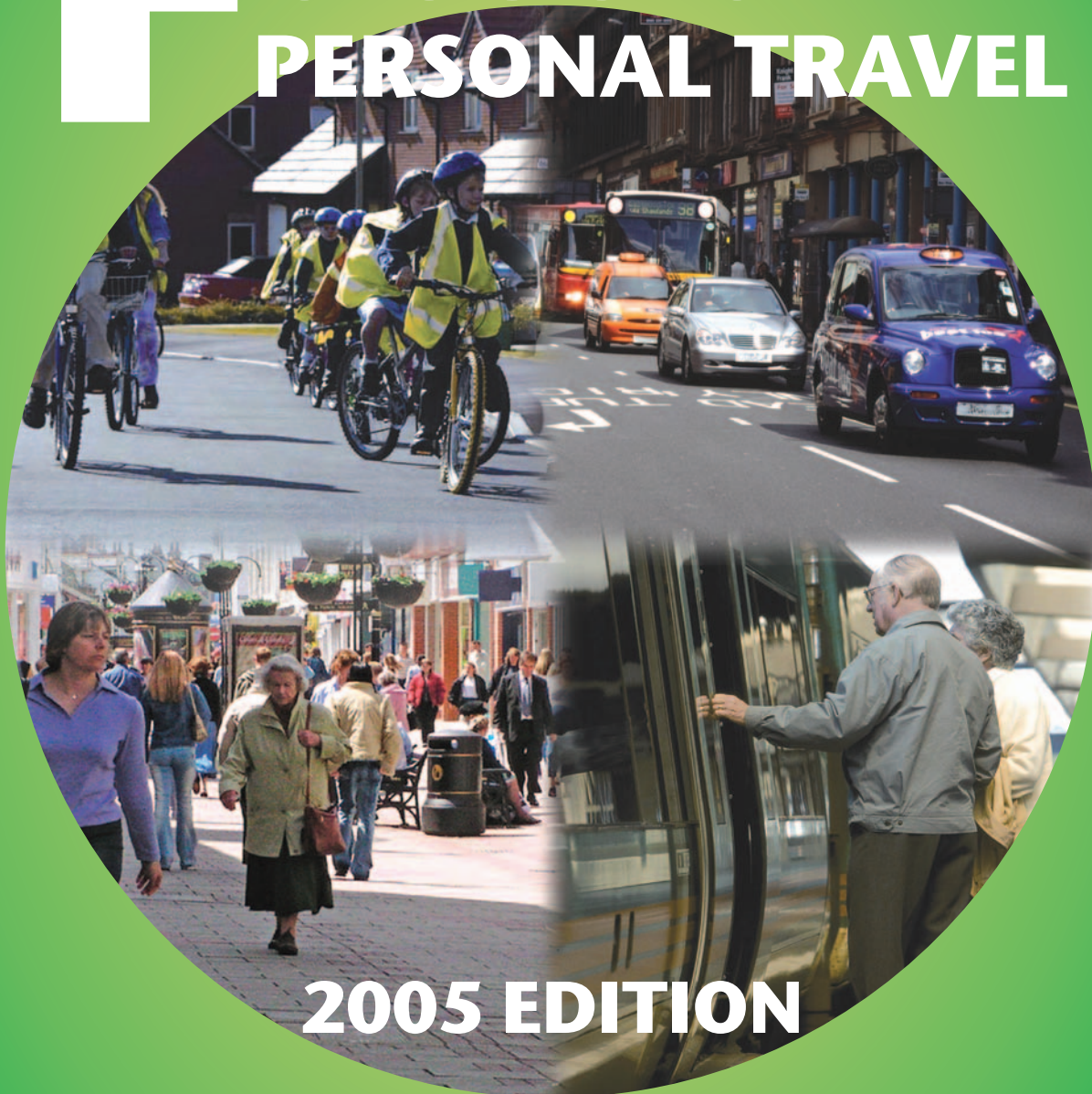


FOCUS ON **PERSONAL TRAVEL**



2005 EDITION

INCLUDING THE REPORT OF THE NATIONAL TRAVEL SURVEY 2002/2003



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Prepared by the National Travel Survey Unit, Statistics Travel,
Department for Transport

Spencer Broadley
Paul McDonnell
Christopher Mottau
Barbara Noble
Catherine O'Shea
Dorothy Salathiel
Darren Williams

Enquiries

Department for Transport,
ST2
Zone 3/09
Great Minster House
76 Marsham Street
London SW1P 4DR

Phone 020-7944 3097
E-mail: national.travelsurvey@dft.gov.uk

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FOCUS ON PERSONAL TRAVEL – 2005 EDITION

ERRATA

Where figures have changed, the relevant charts and tables have been amended in the spreadsheets available on the website but not in the pdf version of the full publication.

Table 2.7

The sub-heading, 'Average trip length' is incorrect and should be ignored.

Table 3.1 & 3.2

Figures per worker per year for trips, distance and time have been revised.

Table 3.5

The unit is miles, not trips.

Chart 4.3 & 4.4

Figures for main and other driver have been revised

Chart 4.10

The legend does not match the chart.

Tables 5.1, 5.2 & Charts 5.1, 5.6

Figures main and other driver have been revised.

Chart 6.15a

The Chart labelled South Wales should be labelled South West

Chart 6.4 & 6.6

Figures for main and other driver have been revised

Chart 7.1

The legend does not match the chart.

Table A.1

Figures for number of trips and stages in 1992/94 and 1995/97 have been revised.

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Symbols and conventions

Rounding of figures

In tables where figures have been rounded to the nearest final digit, there may be an apparent slight discrepancy between the sum of the constituent items and the total shown.

It is assumed in this report that there are 52.14 weeks in a year.

Conversion factors:

1 mile = 1.609 kilometres

1 kilometre = 0.6214 mile

1 gallon = 4.5460 litres

1 litre = 0.21997 gallon

The following symbols have been used throughout:

.. = not available

. = not applicable

– = negligible (less than half the final digit shown)

* = sample size too small for reliable estimates

0 = nil

ow = of which

Acronyms

BCS	British Crime Survey
COICOP	Classification of Individual Consumption by Purpose
DfT	Department for Transport
DSA	Driving Standards Agency
DVLA	Driver Vehicle Licensing Agency
EFS	Expenditure and Food Survey
FES	Family Expenditure Survey
GB	Great Britain
LFS	Labour Force Survey
NatCen	National Centre for Social Research
NTS	National Travel Survey
ODPM	Office of the Deputy Prime Minister
ONS	Office for National Statistics
SEH	Survey of English Housing

Key definitions

(A fuller list of definitions is given in Appendix B).

Travel:

only includes personal travel by residents of Great Britain along the public highway within Great Britain.

Cars:

normally includes 4-wheeled and 3-wheeled cars, Land Rovers, Jeeps, minibuses, motorcaravans, dormobiles AND LIGHT VANS. This is the same as the Census definition of household cars.

4-wheeled cars:

excludes all vehicles other than standard 4-wheeled car body types.

Rail:

includes surface rail (former British Rail) and the London Transport Underground service, unless otherwise specified.

Mode and main mode:

mode is the form of transport used for a stage of a journey, whilst the main mode is that used for the greatest length of the journey.

Adults:

normally persons aged 16 or more. For analyses of car driving licence holding and car ownership, analyses are restricted to those aged 17 or more.

Introduction

Focus on Personal Travel is designed to bring together information about personal travel in Great Britain and highlight some of the key issues. It aims to provide readers with an introduction to the major trends in personal transport and a greater depth of understanding of some of the current areas of interest, debate and development.

The last edition of *Focus on Personal Travel* was published in 2001. As well as updating much of the data published then to 2002/2003, this edition has been revised and restructured to look at some areas in more depth. Most of the data in the publication are drawn from the National Travel Survey (NTS), but for some areas other sources have been used to provide a broader perspective.

Each publication in the Focus series provides more background and commentary in a specific field than is possible in *Transport Statistics Great Britain*, the Department of Transport's main statistical reference volume, or in the annual NTS Bulletins.

All the data for the tables and underlying the graphics in this volume are available from the personal travel section of the DfT Transport Statistics website at www.dft.gov.uk/transtat/personaltravel. The most recent editions of all NTS publications are also available there.

NTS results are updated annually in Statistical Bulletins. Personal Travel Factsheets on specific issues (including travel by car, bus, rail, walking, cycling, motorcycling, taxi, and travel to school, work and shops) were published for 1999/2001 data in January 2003. These will be updated to 2002/2003 later in 2005.

Customised tables using unpublished NTS data can be obtained from the NTS enquiry point (telephone 020 7944 3097 or e-mail national.travelsurvey@dft.gov.uk). Charges may be made to cover the costs of data extraction.

This publication was prepared by the National Travel Survey Unit, Statistics Travel, Department for Transport:

Spencer Broadley

Paul McDonnell

Christopher Mottau

Barbara Noble

Catherine O'Shea

Dorothy Salathiel

Darren Williams

Note: Unless otherwise stated all charts refer to Great Britain and the source for the underlying data is the National Travel Survey.

Chapter 1 Travel trends

- People's travel has grown broadly in line with the increase in economic growth since 1980, but in the last 10 years there has been some uncoupling of travel growth from economic growth as travel has grown more slowly.
- In the last decade the average distance travelled per person per year increased by 6 per cent to nearly 6,900 miles. Over the same period the number of trips fell by 5 per cent to under 1,000, though the average time spent travelling stayed at around 360 hours. The average trip length rose by 12 per cent to nearly 7 miles.
- The proportion of households with access to one or more cars increased from 59 per cent in 1980 to 74 per cent in 2002.
- The average annual distance travelled by people as car drivers rose by 15 per cent during the 1990s, whereas the distance travelled by people as car passengers hardly changed during this period.
- The average distance walked fell by 20 per cent during the 1990s and the distance travelled by local bus declined by 11 per cent. Both of these declines reflect increased use of cars and that people are travelling further.
- Bus and rail fares both rose in real terms by over a third between 1980 and 2003. In contrast, the overall real cost of motoring has remained at or below its 1980 level.

Introduction

This chapter presents the key trends in personal travel in recent years, based mainly on information from the National Travel Survey (NTS), see Box 1.1. Subsequent chapters cover various aspects of personal travel in more detail: How people travel (Chapter 2), Why people travel (Chapter 3), Travel by men, women and children (Chapter 4), Social inclusion and accessibility (Chapter 5), Travel by area type and region (Chapter 6) and Travel costs and expenditure (Chapter 7). Data relate to Great Britain unless stated otherwise. Further information about the National Travel Survey and other sources used is given in the Appendices.

Travel and traffic

As people become better off they travel more. People's **travel**, as measured by **passenger** kilometres, has grown broadly in line with the increase in economic growth since 1980, but in the last 10 years there has been some uncoupling of travel growth from economic growth as travel has grown more slowly (Chart 1.1). An increase in car ownership (see Chart 1.7) has led to a decrease in walking and bus use (see Charts 1.3 and 1.4) and in car occupancy (see Table 1.2). The decrease in car occupancy has led to a slower increase in travel than **traffic**, as measured by total **vehicle** kilometres as seen in the chart below.

Trips, distance and time travelled

The National Travel Survey (NTS) has been monitoring trends in personal travel since the mid 1970s (see Box 1.1).

Chart 1.1 Passenger travel, traffic and GDP: 1980–2003

Vehicle kilometres includes cars, buses and goods vehicles.

Passenger kilometres aggregates number of passengers x distance travelled.

Source: Office for National Statistics and DfT

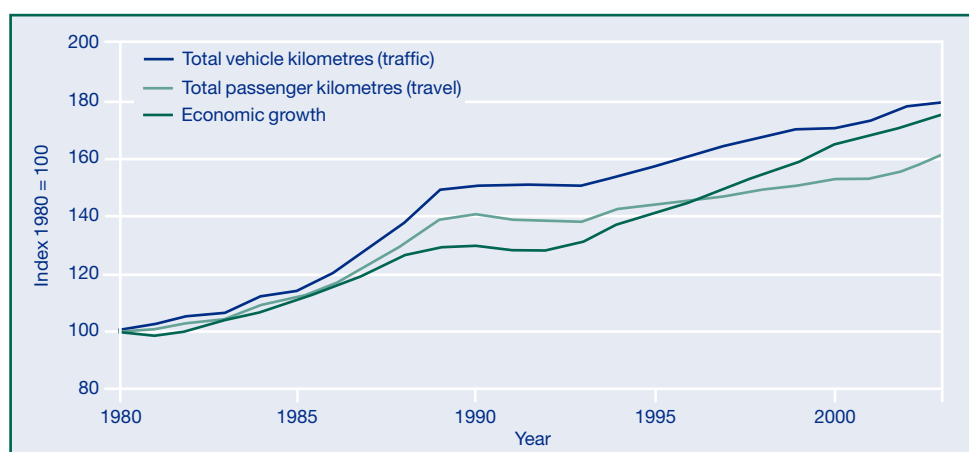


Chart 1.2 shows data from 1990 which provides evidence of a shift in travel behaviour: people are travelling further but are doing fewer trips and the amount of time they spend travelling is fairly stable.

Box 1.1 The National Travel Survey

The National Travel Survey (NTS) is a continuous household survey designed to provide a databank of personal travel information for Great Britain. This publication updates previously published data to 2002/03

The NTS is carried out in order to provide a better understanding of the use of transport facilities made by different sectors of the population, and trends in these patterns of demand. The survey is designed to pick up long-term trends and is not suitable for monitoring short-term trends.

Travel details provided by respondents include trip purpose, method of travel, time of day and trip length. People within households also provide personal information, such as their age, gender, working status, and driving licence holding, and details of the cars available for their use.

During 2002/03, individuals in nearly 15,700 households provided details of their personal travel by filling in travel diaries over a period of seven days. Data for earlier years are shown for a three year time period because of the smaller sample size.

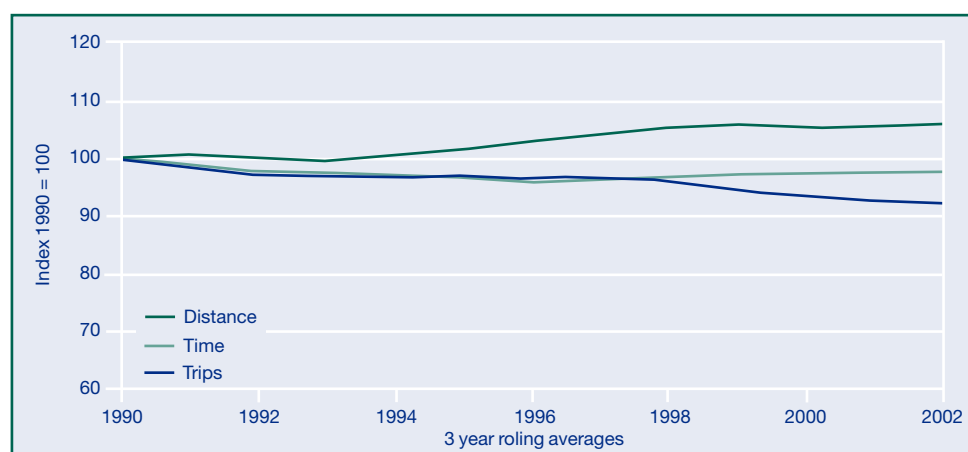
The trends shown are mainly for the period 1989–2003, either using selected years or using rolling averages to reduce fluctuations between years.

Appendix A provides further information on the NTS and Appendix B provides definitions of terms used in this publication.

Table 1.1 shows key trends back to 1972/73. The average distance people travel annually has increased by over half in the last 30 years from around 4,500 miles to nearly 6,900 miles reflecting a similar increase in the average trip lengths.

In the last decade (between 1992/94 and 2002/03) the average distance travelled increased by 6 per cent. Over the same period the number of trips per person per year fell by 5 per cent to under 1,000 trips per year and the average time spent travelling by people stayed at around 360 hours per person per year. The average trip length rose by 12 per cent to nearly 7 miles, but the average trip time rose by only 6 per cent to just under 22 minutes because of increased travel speeds, as slower trips on foot and by bus were replaced by faster and longer car trips.

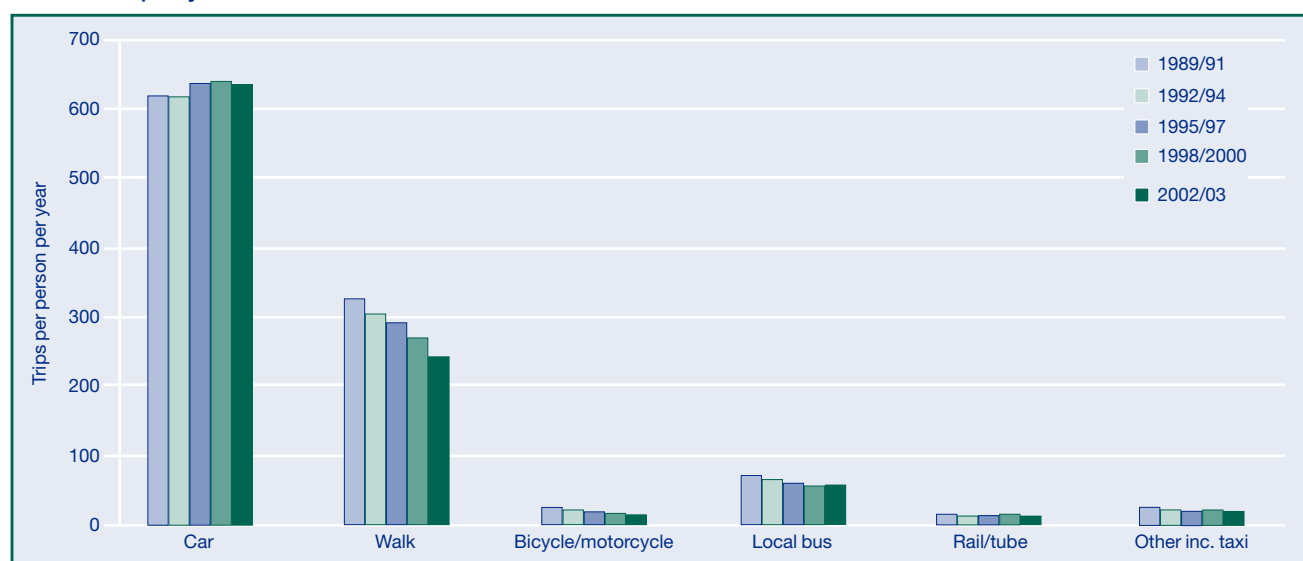
The constancy of average travel time offers some support for ‘time budget’ models of travel behaviour. Academic studies looking back over the past century suggest that the average time spent travelling over the population as a whole has been fairly constant, and the level

Chart 1.2 Trends in travel:
1990–2002Table 1.1 Distance, trips
and hours travelled per
person per year: 1972/73 to
2002/03

	Miles/trips/hours/minutes/percentage					
	Distance travelled (miles)	Number of trips		Time taken (hours)	Average trip length (miles)	Average trip time (minutes)
		All trips	Trips of 1 mile or more			
1972/1973	4,476	956	594	353	4.7	22.2
1975/1976	4,740	935	659	330	5.1	21.2
1978/1979	4,791	1,097	736	377	4.4	20.6
1985/1986	5,317	1,024	689	337	5.2	19.8
1989/1991	6,475	1,091	771	370	5.9	20.4
1992/1994	6,439	1,053	742	359	6.1	20.5
1995/1997	6,666	1,052	758	355	6.3	20.3
1998/2000	6,840	1,029	768	360	6.6	21.0
2002/2003	6,855	998	773	362	6.9	21.8
Percentage change 1992/1994–2002/03						
	6	–5	4	1	1	6

is similar in other developed countries. The time budget level varies according to age. In Great Britain, middle aged men spend the most time travelling, on average about 460 hours a year, whereas the over 60s on average spend about 300 hours a year. The time budget has been fairly stable for most age groups over the last decade, apart from the over 60s who have shown a steady increase in the amount of time they spend travelling. Further information about travel by the elderly is provided at the end of Chapter 4.

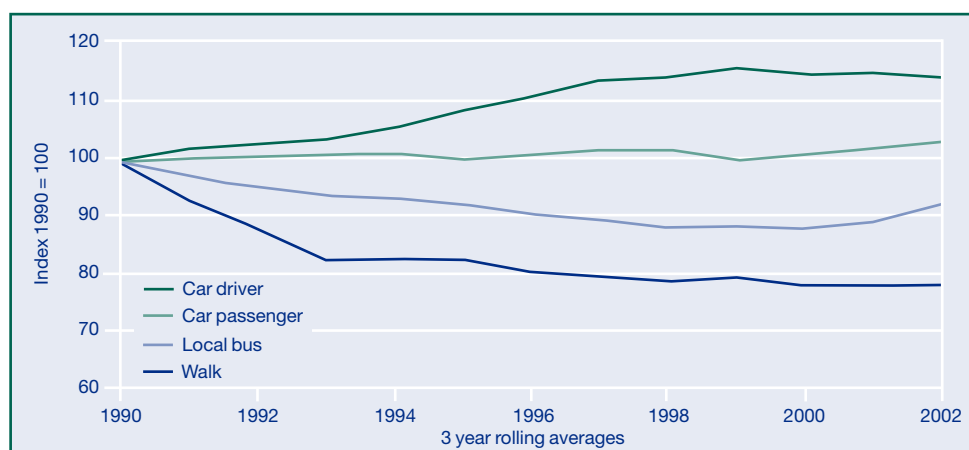
Chart 1.3 Trips by mode: 1989/91–2002/03



Although the overall number of trips people are doing has fallen, they are doing more trips by car and less by other modes, particularly on foot (Chart 1.3). Going by car means people can go faster and therefore further in the same time. People are not making more trips, but choosing to travel further. Average trip lengths have risen over the last decade for almost all purposes (see Table 3.2).

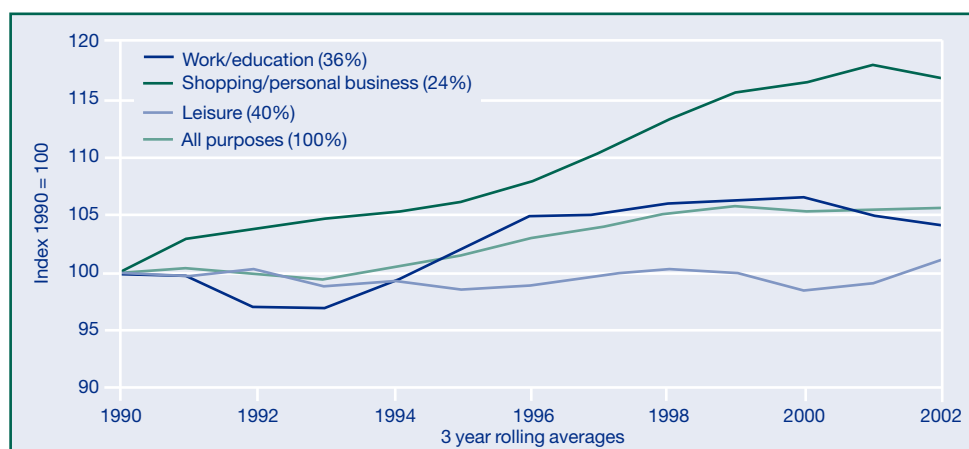
The average annual distance travelled by people as car drivers rose by 15 per cent between 1990 and 1999, whereas the distance travelled by people as car passengers hardly changed during this period (Chart 1.4). As people drove more, the distance they walked fell by 20 per cent, although this has also stabilised in recent years (but note that short walks were under-recorded in 2002/03 – see Appendix A). Distance travelled by local bus also declined, by 11 per cent to 1998 but has increased a little recently, particularly in London. Further information about how people travel is given in Chapter 2.

Chart 1.4 Trends in distance travelled by selected mode: 1990–2002



The average annual distance travelled increased more for some purposes than others (Chart 1.5). The sharpest increase during the 1990s was in the distance travelled to go shopping, by over 15 per cent. The rise in distance travelled for work and education was similar to that for all purposes, about 5 per cent, whereas the distance travelled for leisure purposes hardly changed at all.

Chart 1.5 Distance travelled by main purpose: 1990–2002

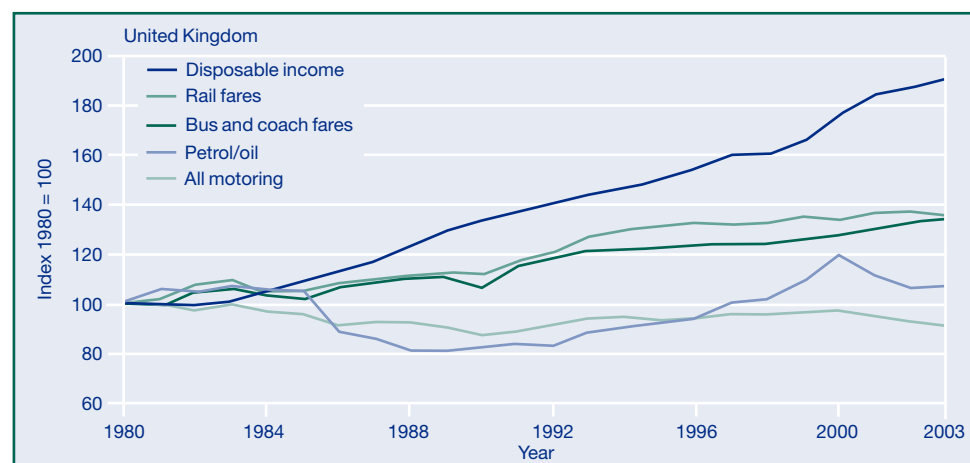


Proportion of all distance in 2002 shown in brackets

The cost of travel

Average disposable income has increased much faster in real terms since 1980 than either motoring or public transport costs, so transport by any mode has become more affordable (Chart 1.6). Whereas the overall cost of motoring has remained at or below its 1980 level, bus and coach fares rose by 34 per cent between 1980 and 2003 and rail fares by 36 per cent. However, the real cost of fuel was 7 per cent higher in 2003 than in 1980. Fuel accounts for about a quarter of household expenditure on motoring. More details about travel costs and expenditure by households are given in Chapter 7. The effect on low income households is covered there and also in Chapter 5.

Chart 1.6 Changes in the real cost of transport and in income: 1980–2003

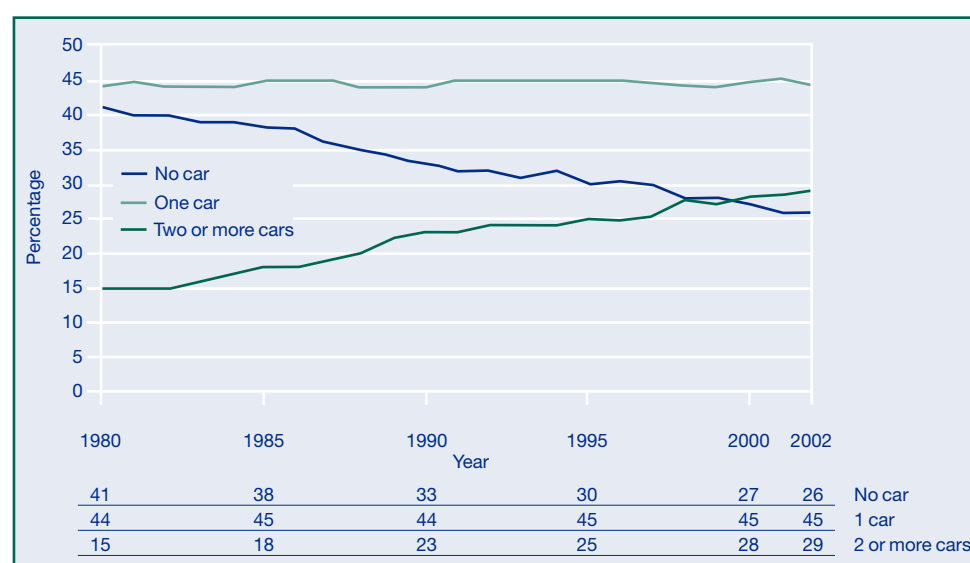


Source: Office for National Statistics

Car ownership and car occupancy

The increased affordability of motoring is reflected in the change in car ownership levels (Chart 1.7). The proportion of households with access to one or more cars increased from 59 per cent in 1980 to 74 per cent in 2002. The proportion with access to 2 or more cars nearly doubled from 15 per cent to 29 per cent over the same period, so that there are now

Chart 1.7 Household car availability: 1980–2002



Source: National Travel Survey, Expenditure and Food Survey, General Household Survey

more households with two or more cars than there are without a car. The rise of the second car has mainly benefited women, as shown at the beginning of Chapter 4. The availability of cars in different types of household is examined in Chapter 5.

As car ownership has risen, the average number of occupants on trips by car has fallen: from 1.64 in 1985/86 to 1.59 in 2002/03 (Table 1.2). This has contributed to vehicle kilometres increasing more than passenger kilometres over this period (see Chart 1.1). The proportion of car trips with a single occupant was 61 per cent in 2002/03 compared with 58 per cent in 1985/86. The increase in car driver trips relative to car passenger trips shown in Table 1.2 is reflected in the difference in trends in mileage shown in Chart 1.4.

**Table 1.2 Car occupancy:
1985/86 to 2002/03**

	Percentage/number					
	Vehicle occupancy		Status of people in car			
	Average occupancy per trip	Single occupancy rate	Driver alone	Driver with passenger(s)	Passenger	Total
1985/1986	1.64	58	35	26	39	100
1989/1991	1.62	59	37	25	38	100
1992/1994	1.62	59	37	26	37	100
1995/1997	1.61	60	38	25	37	100
1998/2000	1.59	61	39	25	36	100
2002/2003	1.59	61	39	25	36	100

Driving licences and driving tests

With the increase in household access to a car, driving licence holding rose from 57 per cent of the adult population in 1985/86 to 71 per cent in 2002/03 (Chart 1.8). This was mainly owing to an increase in driving licence holding by women, from 41 per cent to 61 per cent, as the proportion of men holding driving licences has stayed at around 80 per cent since 1989/91. The effect of this on the differences in travel between men and women are explored further in Chapter 4.

The number of driving test passes fell dramatically in 1997 with the introduction of the written theory test as a pre-requisite of the practical test (Chart 1.9). This was mainly because of a fall in applications received rather than a fall in the pass rate. The practical pass rate is higher for men, but up to 1998/1999 there tended to be more women getting their licences each year than men. In recent years more men have passed than women.

Chart 1.8 Driving licence holding by gender: 1985/86 – 2002/03

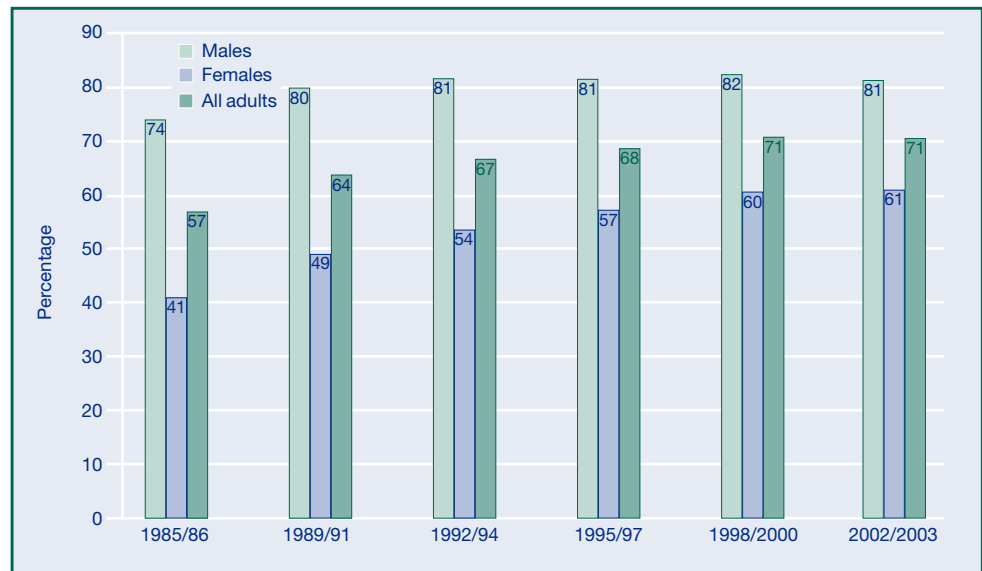


Chart 1.9 Driving test passes and pass rates by gender: 1992–2002/03



Source: Driving Standards Agency

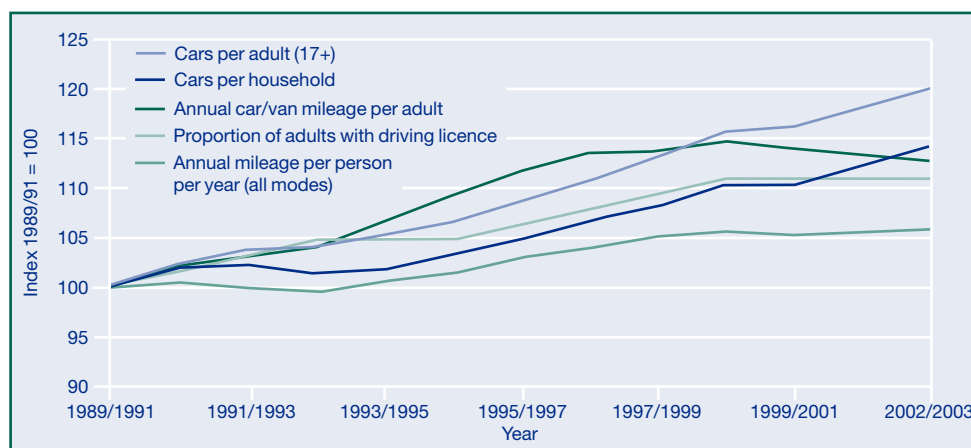
Car availability and car mileage per adult

The remainder of this chapter explores the relationship between increases in car availability and increases in car mileage. The implication of this relationship for different areas of the country is examined further in Chapter 6. As shown previously, with the rise in disposable income and the fall in the cost of motoring, the proportion of people holding driving licences and having access to a car has risen. As a consequence the volume of traffic on the roads has increased.

Chart 1.10 shows the relationship between mileage and car accessibility for selected variables. The trend in car driver mileage per adult appears to relate to the trend in cars per adult in the 1990s and then fall with the fall in licence holding. Note that licence holding and car ownership are interrelated: many people get a licence in order to get a car. Also, a person who cannot drive may be more likely to get a driving licence if they have access to a car in their household.

The relationship between car driver mileage per adult, cars per adult and driving licence holding is explored at regional level in Chapter 6.

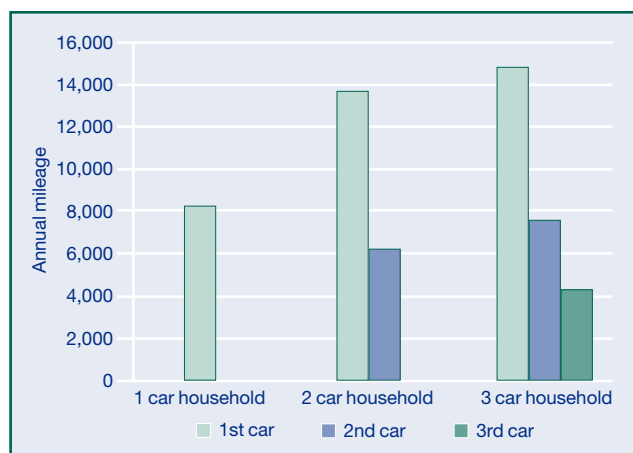
Chart 1.10 Relationship between mileage and car accessibility: 1989/91–2002/03



Annual car mileage

This section looks at changes in the mileage per car as the number of cars in a household increases. Cars are ranked within a household according to their annual mileage. Chart 1.11 shows that the average annual mileage for a one car household is about 8,000 miles. If there are two cars in the household the main car does about 14,000 miles and the second car about 6,000 miles. In a three car household the average mileage of the main car increases to 15,000 miles and that of the second car to nearly 8,000 miles, while the third car does about 4,000 miles.

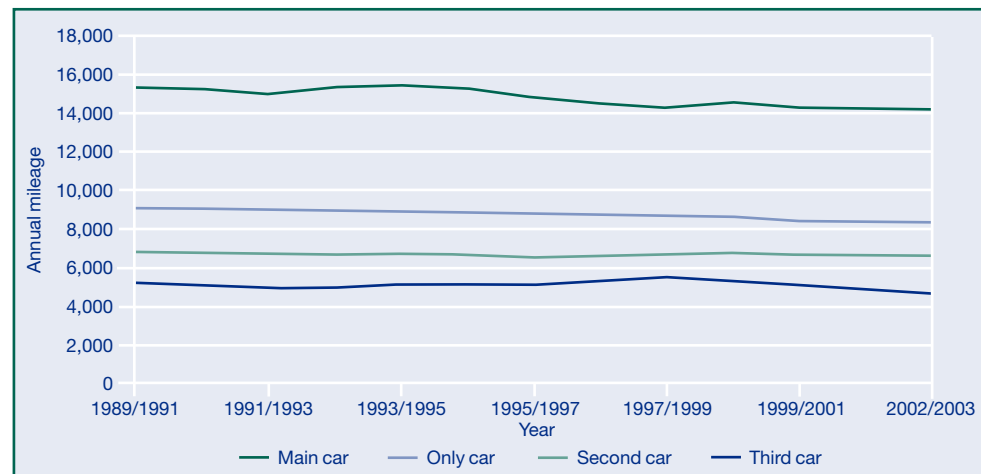
Chart 1.11 Average annual mileage by rank of car in household: 2002/03



Households may choose to acquire a second car for a particular purpose, such as a new job, or to allow children to attend a better school. Of course, the extra car is then also used for other trips, perhaps allowing more choice of shopping and leisure facilities. Note that pensioner households (who drive less) account for 29 per cent of households with one car and only 8 per cent of those with two, but that the equivalent chart for non pensioners gives a similar picture to that for all households.

With the increase in cars owned there has been a fall in the mileage by the main vehicle in the household of 7 per cent between 1989/91 and 2002/03. The mileage of cars which were the only vehicle in the household fell by 9 per cent during this period (Chart 1.12).

Chart 1.12 Annual mileage by main and other cars: 1989/91–2002/03



Future trends

This publication focuses on past trends in travel, and provides a detailed examination of travel patterns in 2002/03. Although NTS data form the backbone of DfT car ownership and traffic projections, this publication does not attempt to cover these in any detail.

However, examination of trends in driving licence holding (Chapter 4) makes it clear that the travel of women and older people will continue to increase, although it has become apparent that fewer younger people are now learning to drive. The second car is now the norm in many household types, and in many areas. Analysis of trends in areas with high car ownership (such as the South East) suggest a likely scenario in other areas as less wealthy regions (such as the North East) enjoy further economic development in the future (Chapter 6). The same applies as income levels in some household types increase. However, although it is very likely that household car ownership will continue to increase, car use may be affected by many factors in future. The introduction of the congestion charge in central London in 2003 showed that people might be persuaded to change their travel patterns. The wider introduction of road pricing, discussed in the 2004 Road Pricing Feasibility Study, may have a significant effect on travel patterns in the future.

Chapter 2 How people travel

- Although the total number of trips has fallen between 1992/94 and 2002/03, total trips made by car have increased by over 3 per cent. The distance travelled by car drivers increased by 10 per cent during this period.
- The number of walking and cycling trips both fell by 20 per cent between 1992/94 and 2002/03. Walking now accounts for less than a quarter of all trips made in Great Britain. The fall in bicycle use has taken place despite a rise in the number of people owning bicycles.
- In urban areas in 2002/03, cars taking children to school accounted for 13 per cent of car trips in the morning rush hour (8–9 am) and 21 per cent of trips at 8.50 am, the peak time for school run traffic.
- Almost three-fifths of children aged 5–16 said they walked for 20 minutes or more at least once a week, but one fifth said they had not walked that far in the last year.
- The evening peak time for personal travel is between 3pm and 4pm, when schoolchildren are leaving school. For car drivers, the peak is later, between 5pm and 6pm, when commuters are driving home from work

Introduction

This chapter provides more detail about individual modes of travel and how the increase in car use has affected travel by other modes, particularly walking and cycling. There are also sections on travel over short and long distances and how travel patterns vary across months of the year, days of the week and time of day.

Box 2.1 Stage mode and main mode

Not all trips that we make consist of only one mode of transport. Particularly when public transport is used, there are frequently other stages in the trip. For example, when catching a train, people may have to get to the station on foot, by bus or by car. Most of the analyses presented in this publication relate to trips and the mode used for those tables is the **main mode**, which is the mode used for the longest stage of a trip. For example, a trip consisting of a short walk to the railway station, then on an inter-city train would be recorded as a single trip, with two stages, and would be counted in trip tables as a surface rail trip. Table 2.3, later in this chapter, shows the different stage modes for each main mode.

Number of trips

Over the course of recent years, the way people travel has changed markedly. As shown in Chapter 1, residents of Great Britain are making fewer trips than has previously been the case. In 2002/03, the average person made about 1,000 trips per year compared with about 1,050 in 1992/94, a fall of 5 per cent (Table 2.1 and Chart 2.1).

People use cars more and more in their everyday travel. Despite the downward trend in the total number of trips made since 1992/94, trips made by car have increased by over 3 per cent in the same period, up from 618 trips per person per year to 637 trips in 2002/03. This is mainly due to increased access to household cars, as shown in Chapter 1.

The increase in car travel is primarily at the expense of the number of walking trips, which has fallen by one-fifth since 1992/94. People now make around 244 walking trips a year, compared with 306 in 1992/94. However, use of all other forms of private transport (in particular bicycles and motorcycles) has also fallen.

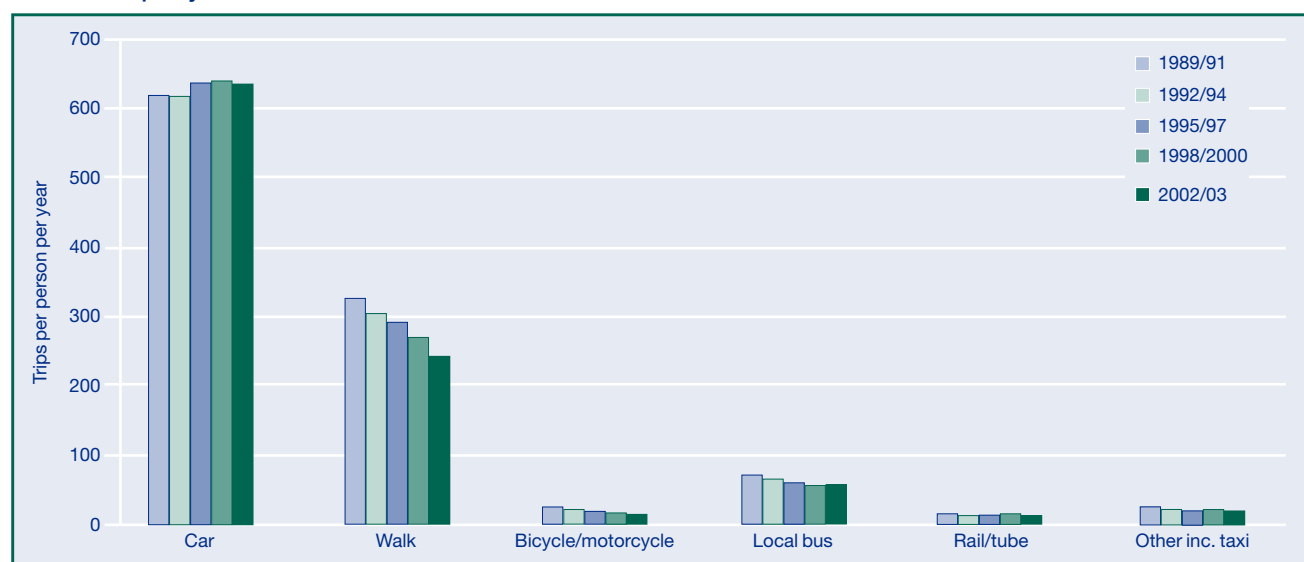
Table 2.1 Trips by main mode: 1989/91 to 2002/03

	Trips per person per year					Trips/percentage
						Percentage change 1992/94–2002/03
	1989/1991	1992/1994	1995/1997	1998/2000	2002/2003	
Walk ¹	328	306	293	271	244	–20
Bicycle	21	18	17	16	15	–20
Car/van driver	387	389	401	411	410	5
Car/van passenger	232	229	236	229	228	–
Motorcycle	6	5	4	3	3	–27
Other private ²	11	11	9	8	8	–22
Bus in London	10	12	12	11	12	–1
Other local bus	63	54	50	47	47	–14
Non-local bus	2	2	2	2	1	–49
LT underground	6	6	6	7	6	14
Surface rail	12	11	11	12	12	11
Taxi/minicab	11	9	10	12	11	22
Other public	1	1	1	2	2	43
All modes	1,091	1,053	1,052	1,029	998	–5

1. Short walks are believed to be under-recorded in 2002/03 compared with earlier years because of changes in the survey methodology.
2. Includes private hire bus.

Rail travel showed an increase in 2002/03 since 1992/94, from 11 trips a year to 12. There was a 15 per cent decrease in the use of local buses in the same period – falling from 54 trips per person per year to 47. This is not the case in London, however, where the number of trips made has remained constant.

Chart 2.1 Trips by mode: 1989/91–2002/03



Trip stages

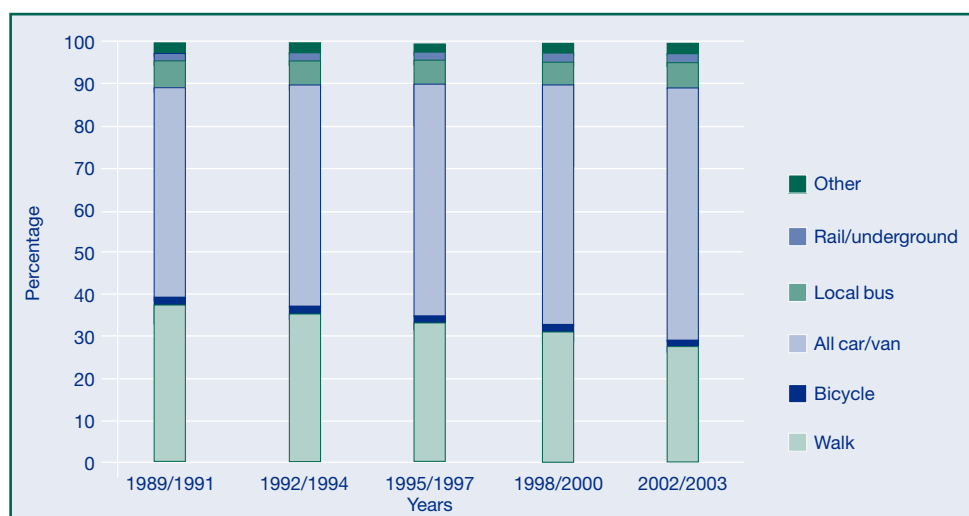
As explained in Box 2.1, the National Travel Survey also records the mode of each individual stage of a trip. The trend to drive more and walk less is just as evident here. Table 2.2 and Chart 2.2 show the percentage split between modes of transport used for each stage of travel.

Table 2.2 Stages per person per year by mode: 1989/91 to 2002/03

	Percentage/stages				
	1989/ 1991	1992/ 1994	1995/ 1997	1998/ 2000	2002/ 2003
Walk ¹	38	36	33	31	28
Bicycle	2	2	1	1	1
All car/van	50	53	55	57	60
Local bus	6	6	6	6	6
Rail/Underground	2	2	2	2	2
Other	3	2	2	3	3
All modes	100	100	100	100	100
Total stages per person per year	1,256	1,189	1,161	1,133	1,070

1. Short walks believed to be under-recorded in 2002/03 compared with earlier years.

Chart 2.2 Stages per person per year: 1989/91 to 2002/03



In 1992/94, walking accounted for 36 per cent of all stages. In 2002/03, however, only 28 per cent of stages were made on foot. The proportion of public transport stages has remained constant over the same period. Bus stages account for around 6 per cent of all stages, while rail and London Underground stages account for a further 2 per cent.

Table 2.3 shows the modes used for different stages of trips for each main trip mode in 2002/03 the main points being:

- Trips by surface rail consisted on average of three stages.
- One in five trips where the main mode of travel was by surface rail also included a stage by the London Underground.

Table 2.3 Stage modes of trips by main mode of trip: 2002/03

	Percentage/stages									
	Walk	Car driver	Car passenger	Other private	Stage bus	LT Underground	Surface rail	Taxi/minicab	Other public	Average no. of stages per trip
Main mode:										
Walk ¹	100	—	—	—	—	—	—	—	—	1.0
Car driver	2	100	—	—	—	—	—	—	—	1.0
Car passenger	2	—	100	—	—	—	—	—	—	1.0
Other private	5	1	2	100	—	—	—	—	—	1.1
Stage bus	29	—	1	—	100	—	—	—	—	1.4
LT Underground	65	4	4	—	21	100	5	1	4	2.4
Surface rail	64	17	13	3	19	21	100	6	2	2.8
Taxi/minicab	2	—	—	—	—	—	—	100	—	1.0
Other public ²	53	7	5	1	11	4	1	5	100	2.1

1. Only walks of 50 yards or more are included.

2. Includes light rail.

- In the case of both surface rail trips and London Underground trips, one in five trips also included a local bus stage.
- Nearly two thirds of rail and underground trips, and just under a third of local bus trips, included a walk stage of 50 yards or more. Car and taxi/minicab trips tended to be door to door, with only 2 per cent of all such trips containing any stages of any other description. These additional stages are almost all walk stages.

Distance travelled

The average trip length of British residents increased by 12 per cent between 1992/94 and 2002/03. (Table 2.4 and Chart 2.3) This increase was apparent across most modes, although car trips showed only a slight increase. Despite the fact that they travelled much further by car in 2002/03 than in 1992/94 (see Table 2.5), people also used their cars for more short trips (see Chart 2.7).

Table 2.4 Average trip length by main mode: 1989/91 to 2002/03

	Average trip length					Miles/percentage
						Percentage change 1992/94–2002/03
	1989/1991	1992/1994	1995/1997	1998/2000	2002/2003	
Walk ¹	0.6	0.6	0.6	0.6	0.7	25
Bicycle	1.9	2.0	2.3	2.4	2.2	11
Car/van driver	8.0	8.2	8.5	8.6	8.5	4
Car/van passenger	8.6	8.9	8.6	8.8	9.0	1
Motorcycle	6.1	7.0	8.6	9.3	10.4	47
Other private ²	14.1	14.5	16.5	17.3	18.6	28
Bus in London	3.5	3.4	3.2	3.4	3.7	8
Other local bus	3.9	4.1	4.3	4.5	4.6	12
Non-local bus	63.7	60.0	59.5	61.2	91.0	52
LT underground	7.4	8.7	7.7	7.8	8.6	–1
Surface rail	33.4	31.2	30.9	34.2	34.1	9
Taxi/minicab	3.4	3.8	3.8	4.5	4.2	11
Other public ³	56.6	31.0	65.0	29.4	40.8	31
All modes	5.9	6.1	6.3	6.6	6.9	12

1. Short walks believed to be under-recorded in 2002/03 compared with earlier years.
2. Includes private hire bus.
3. Includes trips by air within Great Britain.

Chart 2.3 Average trip length by main mode: 1989/91 to 2002/03

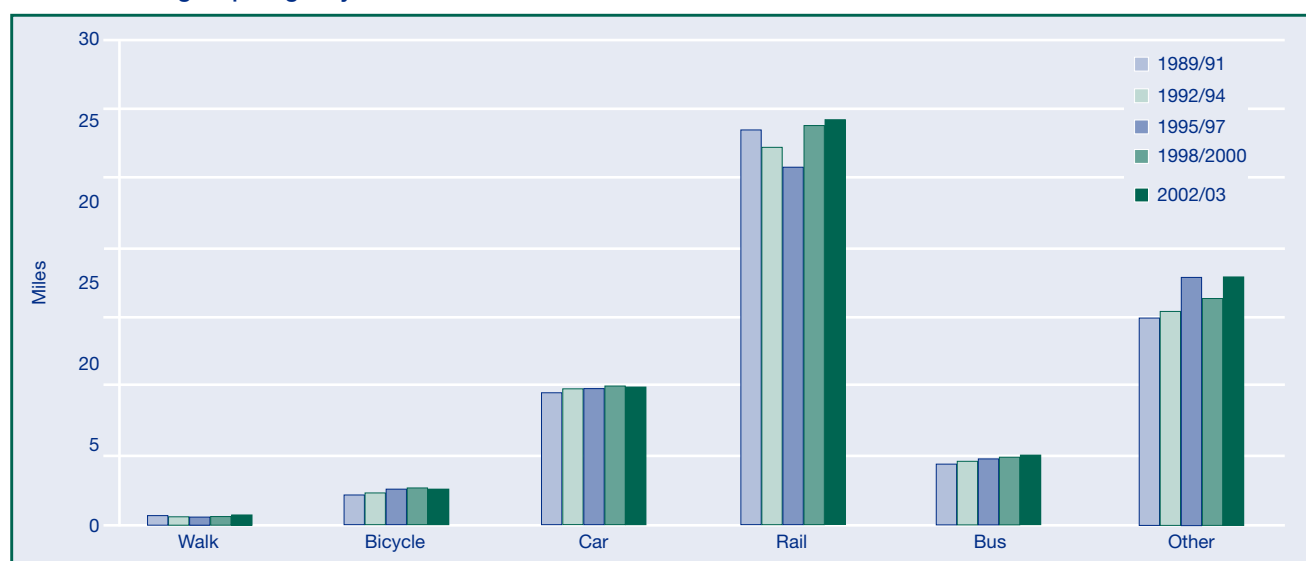


Table 2.5 Average distance travelled by mode of travel: 1989/91 to 2002/03²

	Miles/percentage					
	Miles per person per year					Percentage change 1992/94–2002/03
	1989/1991	1992/1994	1995/1997	1998/2000	2002/2003	
Walk ¹	237	199	195	192	191	–4
Bicycle	41	38	39	39	34	–11
Private hire bus	123	110	105	107	130	18
Car only driver	2,891	3,001	3,231	3,406	3,312	10
Car only passenger	1,915	1,953	1,956	1,946	1,989	2
Motorcycle/moped	37	32	30	30	34	8
Van/lorry driver	209	204	189	154	196	–4
Van/lorry passenger	91	77	73	64	66	–15
Other private vehicles	34	43	40	26	24	–44
Bus in London	36	42	39	40	47	11
Other local bus	238	217	212	205	213	–2
Non-local bus	124	96	93	99	73	–24
LT Underground	49	50	51	57	57	15
Surface rail	366	298	294	371	359	20
Taxi/minicab	42	38	43	58	52	36
Other public including air, ferries, light rail, etc.	40	41	75	45	78	89
All modes	6,475	6,439	6,666	6,840	6,855	6

1. Short walks believed to be under-recorded in 2002/03 compared with earlier years.
2. For the purposes of this table, 'stage mode' is used instead of 'main mode' (see note at beginning of chapter).

As described in Chapter 1, despite the fall in the number of trips made, the distance travelled annually has shown a gradual increase over the last ten years (Table 2.5). Largely, this reflects the increase in car use discussed above, as people with access to cars can travel faster and further in the same time and, for example, are more able to work further from their homes.

The trend for GB residents to travel longer distances than a decade ago is reflected across almost all modes of transport (Table 2.5). The only exception is for trips made by 'Other' public transport, although it should be noted that the sample of trips in this category is significantly smaller than for some other modes, causing large fluctuations in the figures.

Distribution of trip lengths

Of course, the mode of transport chosen for any particular trip depends very much upon the length of the trip to be made (Table 2.6 and Chart 2.4).

- More than half of all car trips are less than five miles in length. More than three quarters of all car trips are less than ten miles in length.
- Rail trips tend to be among the longest trips. In comparison, only six per cent of all rail trips were less than five miles in length.

The total number of trips under 1 mile in length fell by over a quarter between 1992/94 and 2002/03.

Table 2.6 Trips per person per year by distance and main mode: 2002/03

	Cumulative percentage/trips								Total number of trips
	Under 1 mile	Under 2 miles	Under 5 miles	Under 10 miles	Under 25 miles	Under 50 miles	Under 100 miles	All lengths	
Walk ¹	70	94	100	100	100	100	100	100	244
Bicycle	21	58	90	98	100	100	100	100	15
Private hire bus	2	10	35	59	82	90	96	100	7
Car/van driver	7	24	57	78	93	98	99	100	410
Car/van passenger	8	26	60	79	93	97	99	100	228
Motorcycle	3	14	42	67	91	97	99	100	3
Other private	13	31	54	69	88	93	98	100	2
Bus in London	5	25	75	96	100	100	100	100	12
Other local bus	3	21	68	90	99	100	100	100	47
Non-local bus	–	–	2	3	15	36	67	100	1
LT Underground	–	3	23	65	99	100	100	100	6
Surface rail	–	1	6	21	60	83	93	100	12
Taxi/ minicab	6	31	77	91	98	100	100	100	11
Other public	2	15	50	79	91	91	92	100	2
All trips: 2002/03	23	41	68	84	95	98	99	100	998
1989/91	29	47	73	87	96	98	99	100	1,091
1992/94	30	46	72	86	96	98	99	100	1,053
1995/97	28	45	70	85	95	98	99	100	1,052
1998/2000	25	43	69	84	95	98	99	100	1,029

1. Short walks believed to be under-recorded in 2002/03 compared with earlier years.

Chart 2.4 Trips per person per year by distance and main mode: 2002/03



Time spent travelling

The average resident of Great Britain spent about 362 hours travelling per year in 2002/03. This is equivalent to one hour per day, a figure that has changed little since the late eighties. This offers some support for 'time budget' models of travel behaviour. Even though people are travelling further, on average they do not spend more time travelling.

In this hour, on average people spent:

- 37 minutes travelling by car,
- 11 minutes walking,
- 5 minutes on the bus,
- 3½ minutes on trains and tubes and
- 3½ minutes travelling by other modes

Table 2.7 Total time spent travelling per person per year by main mode: 1989/91 to 2002/03

	Hours/percentage					
	Average trip length					Percentage change 1992/94–2002/03
	1989/1991	1992/1994	1995/1997	1998/2000	2002/2003	
Walk ¹	83	76	72	70	66	–13
Bicycle	5	5	5	5	5	–10
Car/van driver	125	130	132	138	141	8
Car/van passenger	82	81	81	80	82	2
Motorcycle	2	1	1	1	1	–8
Other private	8	7	6	6	7	–6
Bus in London	6	7	7	7	8	7
Other local bus	29	27	24	23	24	–9
Non-local bus	4	3	3	3	3	–23
LT underground	5	5	5	6	5	10
Surface rail	17	13	14	16	16	19
Taxi/minicab	3	3	3	3	3	28
Other public inc. air	1	1	1	1	2	54
All modes	370	359	355	360	362	1

1. Short walks believed to be under-recorded in 2002/03 compared with earlier years.

Table 2.7 shows the changes in the way people spend their time travelling.

Again, we see a change of behaviour, with people moving away from walking and in favour of using the car. However, the increase here does not fully reflect the increase in distance as, on average, car trips have been getting faster over the same period. Time spent travelling by some other modes has remained static in comparison. This can be seen more clearly in Chart 2.5.

Chart 2.5 Time spent travelling by main mode: 1992/94 and 2002/03

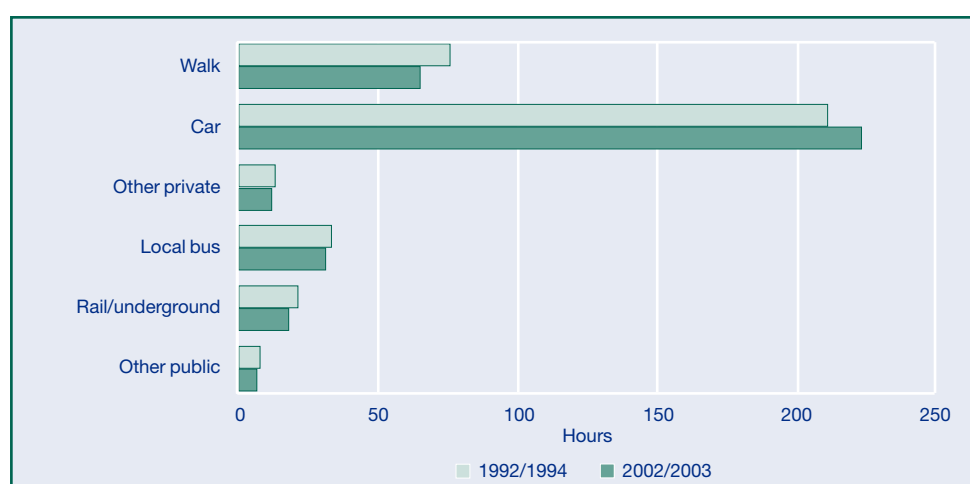
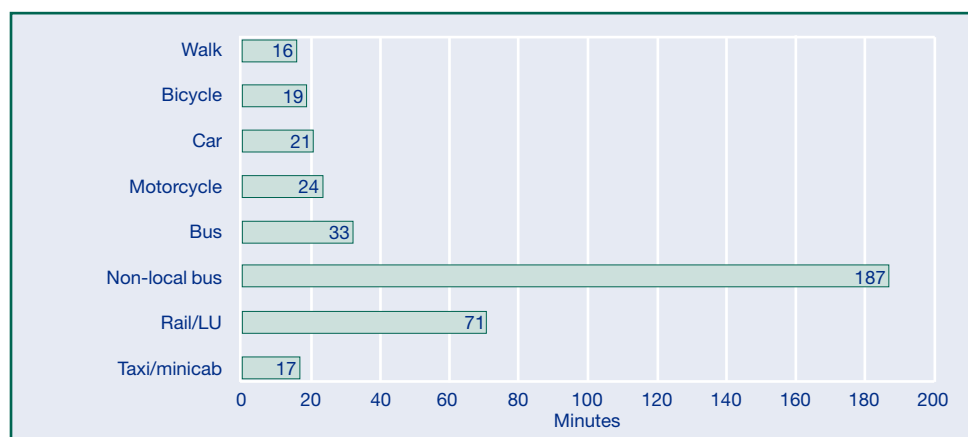


Chart 2.6 shows the average time spent travelling per trip by mode. This average has been steadily rising over time, across all modes. The overall time budget is unchanged because people are doing fewer trips.

- The average trip in 2002/03 took 22 minutes in total, 6 per cent higher than in 1992/94.
- The longest trips tended to be by public transport, with averages of over two hours by coach and 82 minutes by train. In contrast, bicycle, car and motorcycle trips took only around 20 minutes on average.

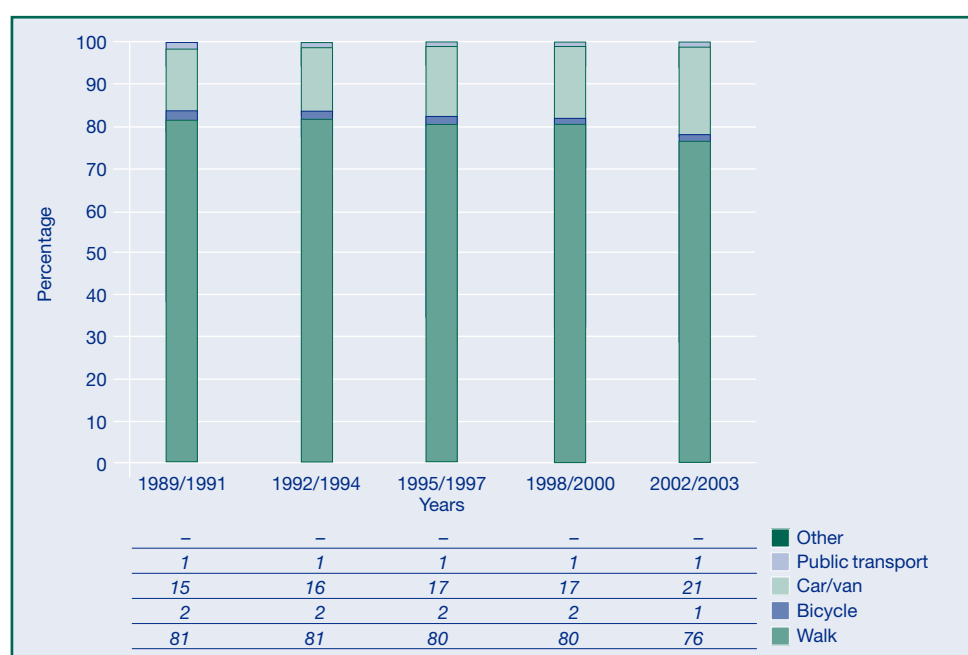
Chart 2.6 Average trip time by selected main mode: 2002/03



Short and long distance trips

Residents of Great Britain continue to prefer to walk trips of under 1 mile (Chart 2.7), carrying out four in every five trips on foot. The under-recording of short walks in 2002 and 2003 (see Appendix A) is more evident here than in other tables, but it can be seen that car use was increasing for these short distance from 1989/91 to 1998/2000 – rising from 15 per cent to 17 per cent.

Chart 2.7 Trips under 1 mile by main mode: 1989/91–2002/03



Long distance trips (defined by the National Travel Survey as a trip of 50 miles or more) are made infrequently by most people. To compensate for this, respondents are asked to give details of all trips over 50 miles made not only in the week's travel diary but also in the three preceding weeks. This gives a larger sample with which to monitor respondents' long-distance travel habits. Additionally, data from 2001 have been incorporated to provide a modal breakdown of data for 2001/03 (Chart 2.8)

Clearly, car is by far the most popular choice for long distance trips, accounting for 83 per cent of the total (Table 2.8). However, for the very longest trips, domestic flights are often preferred. In 2001/03, air travel accounted for a quarter of all trips over 350 miles. This figure has risen sharply in a comparatively short period, from just 18 per cent in 1996/2001.

Chart 2.8 Long distance trips by distance and mode: 2001/03



Table 2.8 Long distance trips within GB by main mode and length: 2001/03

						Percentage
	Car	Bus and coach	Rail	Air	Other	Total
50 to under 75 miles	84	4	10	—	2	100
75 to under 100 miles	85	4	9	—	1	100
100 to under 150 miles	85	5	9	—	1	100
150 to under 250 miles	81	7	10	1	1	100
250 to under 350 miles	74	10	12	3	1	100
350 miles and over	40	11	13	25	11	100
Total	83	5	10	1	1	100

This may be due, in part, to the increase in the availability of cheap flights and the increased ease of booking over the Internet. This has made routine air travel available to a large group of people that previously might not have considered using it.

Use of other public transport modes also increases for longer trips. Buses and coaches account for only 4 per cent of trips of 50 to 100 miles, but this figure rises to 10 per cent of trips over 250 miles. Train use follows a similar trend, rising from 9 per cent of trips under 100 miles to 12 per cent of all trips over 250 miles.

When people travel

The use of most modes of transport tends to vary little from month to month. However, some modes can show a degree of variance – often due to the weather. For example, residents of Great Britain tend to cycle more in the summer months. The peak cycling months in 2002/03, July to September, saw twice as many cycle trips than the least popular month for cycling (December).

There is a rise in the use of public transport (in particular, buses, taxis and minicabs) in the months from September to January. Chart 2.9 illustrates this in more detail.

Charts 2.10a, 2.10b and Table 2.9 show patterns in daily travel. The peak periods are very clear. Between 8–9am and 4–6pm on weekdays, more than twice as many people travel as in an average hour. The morning peak is particularly high, when both children going to school and commuters going to work are travelling.

The evening peak reaches its height between 3pm and 4pm, when schoolchildren are leaving school. However, it is interesting to note that when looking only at car drivers, the peak is later, between 5pm and 6pm: when commuters are driving home from work.

Chart 2.9 Average daily trips by month of year and selected main mode of travel: 1998/2003

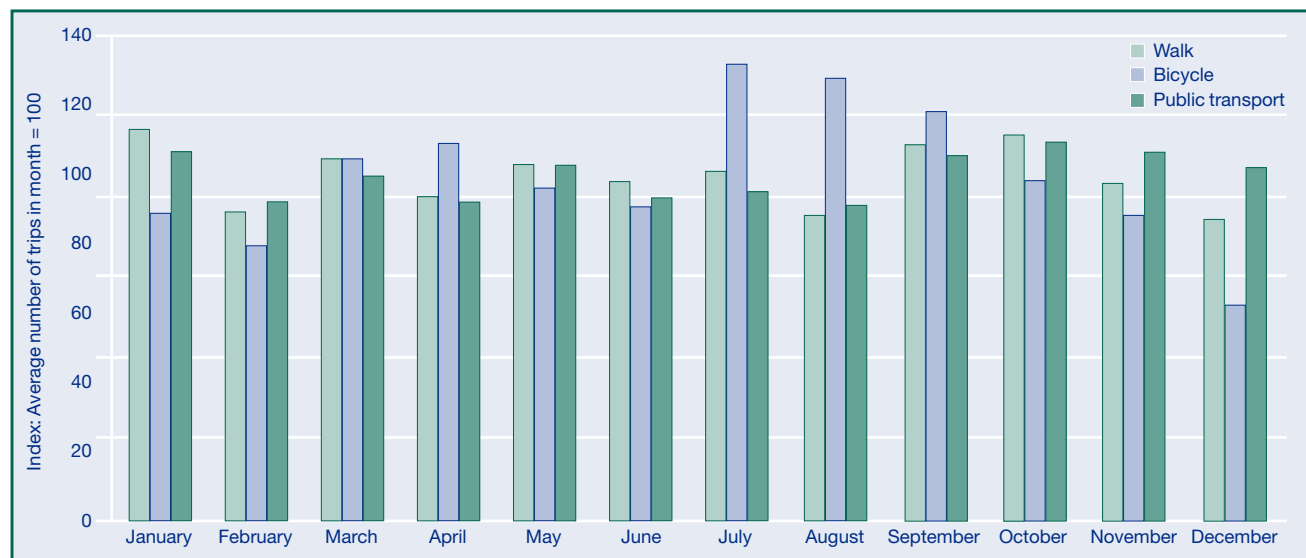


Chart 2.10a Patterns in daily travel – All trips: 1998/2003

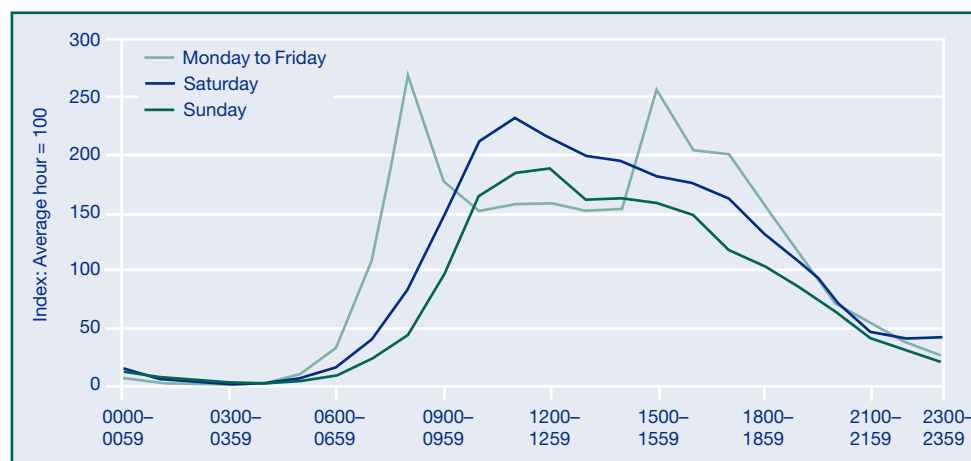
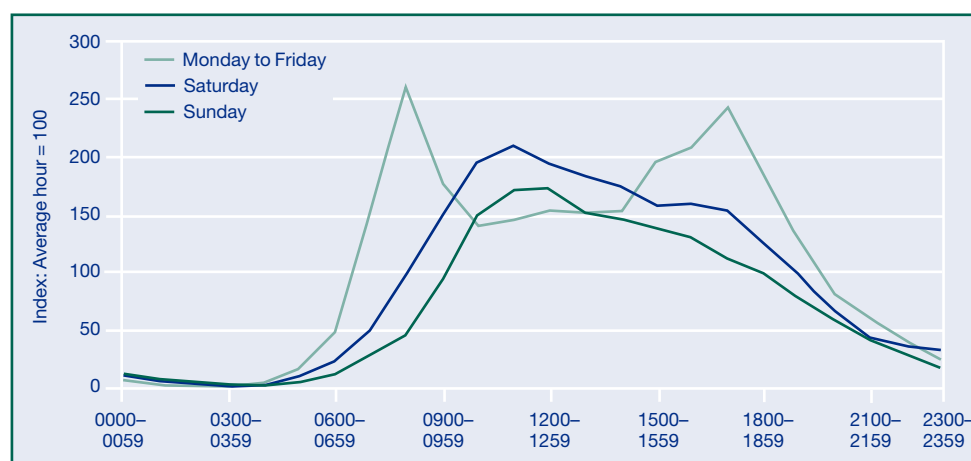


Chart 2.10b Patterns in daily travel – Car driver trips: 1998/2003



The presence of a peak is also apparent at weekends, where the period between 10am and 2pm is marked by travel around twice the average. Saturday and Sunday are very similar to each other in terms of the relative shape of the pattern, although Saturday has a higher volume of trips than Sunday.

The period between 2am and 4am shows fewer people in transit than any other, with the number of people recorded travelling only 3 per cent of the average. This figure is significantly higher at weekends than during the working week.

Table 2.9 Trips in progress by time of day and day of week: 1998/2003

	Index: Average hour = 100					
	All trips			Car drivers		
	Monday to Friday	Saturday	Sunday	Monday to Friday	Saturday	Sunday
0000–0059	6	14	12	6	12	10
0100–0159	2	5	8	2	3	6
0200–0259	1	4	5	2	2	3
0300–0359	1	2	3	2	2	2
0400–0459	3	3	2	5	4	2
0500–0559	12	7	4	17	11	6
0600–0659	34	17	9	49	23	13
0700–0759	111	41	24	148	51	29
0800–0859	272	85	44	261	98	47
0900–0959	177	147	98	177	148	92
1000–1059	151	214	166	141	195	150
1100–1159	158	232	184	145	209	171
1200–1259	158	215	189	153	194	173
1300–1359	152	200	163	151	183	152
1400–1459	153	195	163	153	175	147
1500–1559	259	183	158	195	159	139
1600–1659	205	176	148	209	160	131
1700–1759	202	163	118	243	153	112
1800–1859	158	131	105	185	127	100
1900–1959	114	109	86	130	99	79
2000–2059	73	75	66	82	66	59
2100–2159	54	46	42	61	42	41
2200–2259	38	42	31	42	36	30
2300–2359	25	43	21	24	33	18
All day	105	97	76	108	92	71

People make fewer trips on a Sunday than during the rest of the week: only three-quarters as many as an average day.

The proportion of car trips in the morning peak period that was parents on the ‘school run’ increased between 1992/94 and 2002/03 (Table 2.10). The peak time in 2002/03 was 8.50am, when 21 per cent of car trips by residents of urban areas in term time were generated by the school run, compared with 17 per cent in 1992/94. Over the whole ‘peak’ hour from 8 to 9am, 13 per cent of car trips were for ‘escort education’ (taking children to school) in 2002/03 compared with 9 per cent in 1992/94.

Table 2.10 Cars taking children to school: 1992/94 to 2002/03

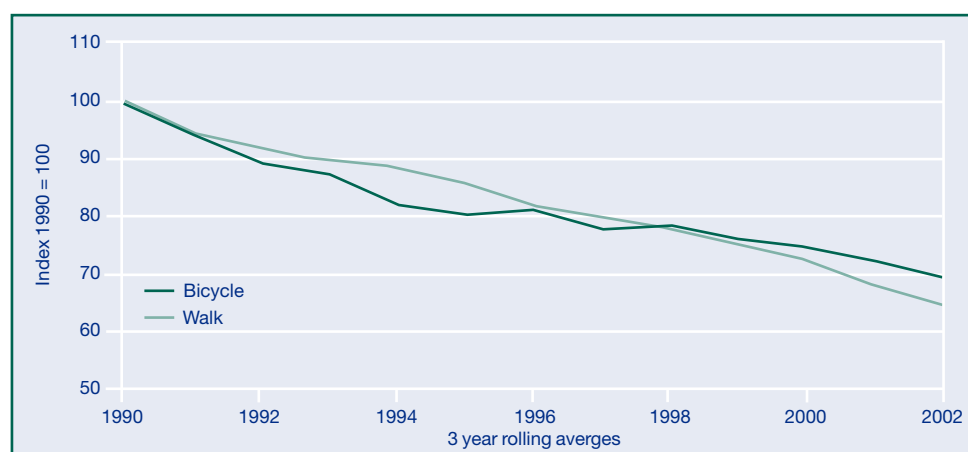
Time of morning rush hour	Percentage of car trips			
	1992/1994	1995/1997	1998/2000	2002/2003
0800 to 0859 ¹	9	11	11	13
Peak traffic time (0835) ¹	11	15	15	18
Peak percentage (0850) ¹	17	22	18	21

1. Data relate to car trips by people living in urban areas, term-time weekdays only.

Walking and cycling

Walking and cycling are environmentally friendly and good for our health, but in decline (Chart 2.11). The number of stages people walk or cycle per year has fallen by about a third since 1990.

Chart 2.11 Trends in walking and cycling stages: 1990 to 2002



Car availability has a significant impact on the distance that people walk and cycle each year (Table 2.11). Those people living in a household with a car walk less than two-thirds as far as those in a household without a car. The main driver of a vehicle walks only half the distance of a member of a non-car-owning household (Chart 2.12a).

In households with a car, adult males cycle three times as far as adult females (Chart 2.12b). In households without a car, the men cycle eight times as far as women do.

Table 2.11 Distance walked and cycled by car availability: 2002/03¹

	Miles					
	Average distance walked per person per year			Average distance cycled per person per year		
	Total	Males	Females	Total	Males	Females
Households with cars						
Main driver	139	138	141	28	38	15
Other driver	202	177	225	67	107	32
Non driver aged 17+	220	246	211	36	92	17
All aged 17+	162	153	172	36	53	18
All aged under 17	198	200	196	26	35	17
Households without cars						
All aged 17+	265	299	245	40	88	11
All aged under 17	309	304	315	11	14	9

1. For the purposes of this table, 'stage mode' is used instead of 'main mode'. (see note at beginning of chapter).

Chart 2.12a Distance walked by car availability: 2002/03

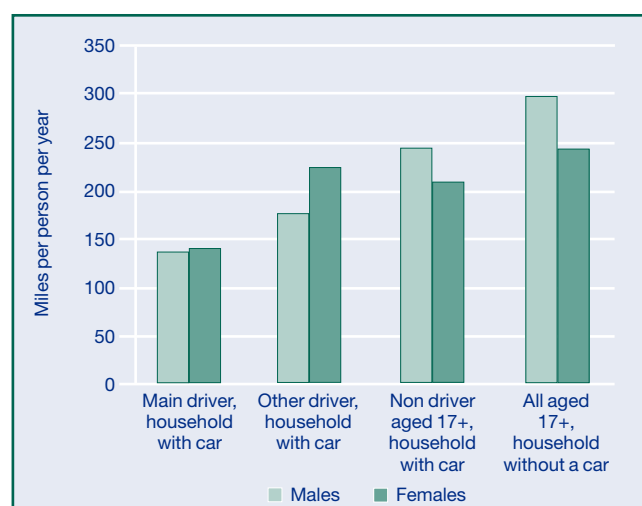
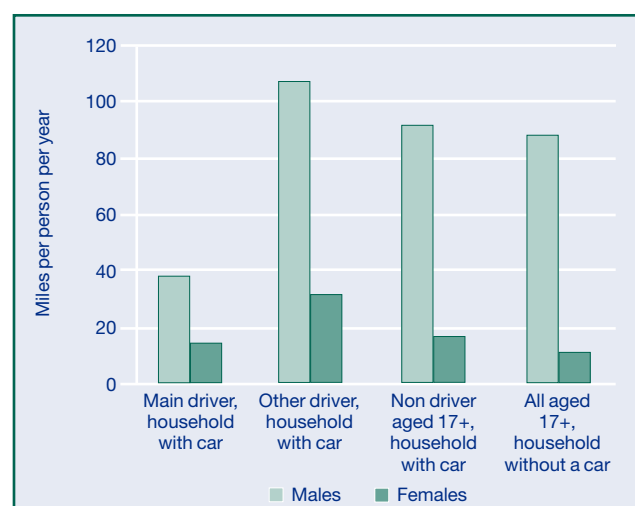


Chart 2.12b Distance cycled by car availability: 2002/03



On average, men who are not main drivers of household cars cycle significantly more miles than those who are. Men who are 'other drivers' of household cars cycle three times as far as main drivers, while men who do not drive cycle twice as far as main drivers.

For women, this rise is significantly lower. Women who are 'other drivers' of household cars cycle twice as far as main drivers of household cars, but women who do not drive do not cycle significantly further at all. In fact, women in households without cars cycle nearly 25 per cent less than main drivers do.

Respondents to the survey were also asked how often they took walks of 20 minutes or more (Table 2.12). Unlike other parts of the survey, walks are included here even if they are away from the public highway.

- Around one-third of respondents make walks of 20 minutes or more at least three times a week. This rises to 43 per cent of those aged 17–20.
- The group least likely to make walks of 20 minutes or more are those over 70 years of age, of whom nearly half make 20 minute walks less than once a year.
- Almost three-fifths of children aged 5–16 said they walked for 20 minutes or more at least once a week, but one fifth said they had not walked that far in the last year.

In general, the proportion of adults walking on a weekly basis declines with age.

Bicycle travel has decreased significantly in Great Britain since 1992/94. In 1992/94, the average resident of Great Britain made 19 cycle stages a year. In 2002/03, the average was just 15 (Table 2.13). The average annual distance travelled per person by bicycle fell from 38 miles in 1992/94 to 34 miles in 2002/03.

Table 2.12 Walks of 20 minutes or more by age: 2002/03

	Percentage								
	All ages	5–16	17–20	21–29	30–39	40–49	50–59	60–69	70+
Frequency of walking:									
3 or more times a week	33	35	43	36	34	33	33	35	26
Once or twice a week	21	22	19	23	24	22	21	19	17
Less than once a week, more than twice a month	6	6	5	6	8	7	5	4	3
Once or twice a month	8	10	8	9	10	9	9	7	5
Less than once a month, more than twice a year	4	4	3	4	4	6	5	3	2
Once or twice a year	3	2	2	3	3	3	3	3	2
Less than once a year or never	25	21	21	20	17	20	24	28	44
All	100	100	100	100	100	100	100	100	100

Table 2.13 Bicycle travel in Great Britain and England: 1989/91 to 2002/03

	Miles/trips/stages				
	1989/1991	1992/1994	1995/1997	1998/2000	2002/2003
Distance travelled per person per year:					
Great Britain	41	38	39	39	34
England	43	41	42	41	35
Bicycle trips per person per year:					
Great Britain	21	18	17	16	15
England	23	20	18	17	16
Bicycle stages per person per year:					
Great Britain	21	19	17	16	15
England	23	20	19	17	16

The fall in bicycle use comes despite a clear rise in the number of people owning bicycles (Table 2.14). Forty-seven per cent of households owned at least one bicycle in 2002/03 compared with only 37 per cent in 1992/94 – a rise of nearly a third. The number of bicycles owned has risen steadily over this period also, from 29 bicycles owned per 100 people in 1992/94 to 38 bicycles in 2002/03.

In contrast, the number of “active cyclists” – respondents who recorded at least one cycle trip in their travel diary – has been steadily declining. In 1992/94, 5.6 per cent of respondents recorded a cycle trip in their diary compared with 5.1 per cent in 2002/03.

Many households own bicycles for use exclusively by children. From 2000, the NTS introduced a question asking all individuals (aged five and over) whether they *personally* owned or had access to a bicycle. In 2002/03, 41 per cent reported that they owned their own bicycle, while a further 1.5 per cent had personal access to a bicycle.

Table 2.14 Trends in bicycle ownership and usage: 1989/91 to 2002/03

	Percentage/number		
	Percentage of households with at least one cycle	Bicycles owned per 100 people	Percentage of active cyclists
1989/1991	36	27	6.3
1992/1994	37	29	5.6
1995/1997	39	32	5.6
1998/2000	41	35	5.6
2002/2003	47	38	5.1

Chapter 3 Why people travel

- Between 1992/94 and 2002/03, there was a decline in the average number of commuting trips by 5 per cent, business trips by 16 per cent, and shopping trips by 13 per cent, but the number of escort education trips rose by 8 per cent and other escort trips by 11 per cent.
- The largest percentage increase in average trip distance has been in shopping trips, rising 24 per cent from 3.5 miles to 4.3 miles in the period 1992/94–2002/03. In 2002/03, leisure accounted for 31 per cent of trips and 41 per cent of the total distance travelled.
- Three per cent of respondents always worked at home, and a further five per cent did so on at least one day in the week before being interviewed. It was possible for a further ten per cent to work at home, but for 82 per cent it was not possible to work at home at all.
- Sixty-five per cent of households ordered goods by post, phone or on the Internet. Households with cars were much more likely to do so than those without a car as these households tend to be wealthier and order more goods.
- Sixty per cent of people who travelled to work by car or motorcycle said they experienced no difficulties travelling to work, but 37 per cent said traffic congestion and roadworks caused them problems.

Introduction

This chapter looks at why people make trips, and how the purpose of our trips affects the way we travel. As well as showing general trends in trip purpose, this chapter will also look in more depth at some specific types of trips, such as those for going to work, or shopping. Trips to school are covered in more detail in Chapter 4. Other issues which vary according to trip purpose are looked at here, such as car occupancy and travel difficulties.

In broad terms, travel can be divided into four main categories, which account for roughly equal numbers of trips overall. These are

- ‘compulsory’ trips, covering work, business and education
- ‘escort’ trips not made for an individual's own purposes, but taking or accompanying someone else
- shopping and personal business trips – including trips to the bank, library, doctor etc.
- ‘discretionary’ or leisure trips – including visiting friends, watching or participating in sport, and going on day trips or on holiday

Recent trends

In Chapter 1, it was shown that the total number of trips per year was in decline. This is more the case with some types of trips than with others.

For example, as shown in Table 3.1, there has been a decline in both commuting trips (by 5 per cent from 1992/94 to 2002/03) and business trips (by nearly 16 per cent). These trips account for 18 per cent of all trips and are discussed in more detail later in this chapter. The number of shopping trips, which account for 20 per cent of all trips, has also fallen – by 13 per cent, from 225 trips per person per year in 1992/94 to 197 trips in 2002/03. In contrast, escort trips have risen in the same period. In 1992/94, escort trips accounted for

12 per cent of all trips. They now account for 14 per cent. Around 30 per cent of all trips were made for leisure purposes.

Overall, the average distance travelled on 'escort education' trips in 2002/03 was 103 miles a year, a rise of about a third since 1992/94, when the average was only 77 miles a year. These trips, mainly taking children to school, are heavily concentrated among women in their 30s (see Chapter 4).

Table 3.1 Trips and distance per person per year by trip purpose: 1989/91 to 2002/03

	Trips/miles									
	Trips per person per year					Miles per person per year				
	1989/ 1991	1992/ 1994	1995/ 1997	1998/ 2000	2002/ 2003	1989/ 1991	1992/ 1994	1995/ 1997	1998/ 2000	2002/ 2003
Commuting	176	158	162	161	150	1,273	1,182	1,310	1,351	1,280
Business	41	39	37	36	33	702	691	712	695	682
Education	64	67	68	68	65	164	184	188	198	202
Escort education	41	43	51	48	47	66	77	91	96	103
Shopping	227	225	222	216	197	747	779	836	897	843
Other escort	89	86	83	80	95	374	390	389	412	477
Other personal business	107	107	105	103	106	422	442	445	468	465
Visit friends at private home	150	145	140	134	119	1,167	1,131	1,121	1,163	1,097
Visit friends elsewhere	48	42	46	46	45	207	191	238	255	254
Entertain/ public activity	43	40	39	38	46	330	314	305	292	362
Sport: participate	21	22	23	24	19	129	131	142	149	123
Holiday: base	10	12	10	11	11	456	507	468	471	541
Day trip	21	20	21	19	24	381	374	369	341	383
Other including just walk	50	47	45	46	40	58	47	52	52	42
All purposes	1,091	1,053	1,052	1,029	998	6,475	6,439	6,666	6,840	6,855
Per worker per year:										
Commuting	387	370	381	355	329	2,798	2,774	3,081	2,973	2,811
Business	91	92	87	78	73	1,545	1,622	1,674	1,530	1,497

Table 3.2 Average trip length and time taken by trip purpose: 1985/86 to 2002/03

	Miles/minutes									
	Average trip length					Average trip time				
	1989/ 1991	1992/ 1994	1995/ 1997	1998/ 2000	2002/ 2003	1989/ 1991	1992/ 1994	1995/ 1997	1998/ 2000	2002/ 2003
Commuting	7.2	7.5	8.1	8.4	8.5	23	24	24	24	26
Business	16.9	17.6	19.2	19.5	20.6	34	36	37	38	38
Education	2.6	2.8	2.8	2.9	3.1	17	18	18	19	20
Escort education	1.6	1.8	1.8	2.0	2.2	11	12	11	12	13
Shopping	3.3	3.5	3.8	4.2	4.3	16	17	17	17	17
Other escort	4.2	4.6	4.7	5.2	5.0	15	15	15	15	16
Other pers. business	3.9	4.1	4.2	4.5	4.4	16	16	16	17	17
Visiting friends at private home	7.8	7.8	8.0	8.7	9.2	22	21	21	22	24
Visiting friends elsewhere	4.3	4.6	5.2	5.5	5.6	17	17	18	18	19
Entertainment/public activity	7.6	7.9	7.8	7.8	7.9	23	23	23	23	23
Sport: participate	6.0	5.8	6.3	6.2	6.4	19	18	18	18	19
Holiday: base	45.5	42.6	46.0	44.1	50.1	84	78	81	75	85
Day trip	18.5	18.3	17.8	18.2	15.8	47	44	43	43	37
Other inc. just walk	1.1	1.0	1.1	1.1	1.1	23	21	22	23	24
All purposes	5.9	6.1	6.3	6.6	6.9	20	20	20	21	22
Per worker per year:										
Commuting	7.3	7.6	8.2	8.5	8.6	23	24	24	25	26
Business	17.2	17.9	19.6	19.9	20.7	34	36	37	38	39

The rise in the length of trips made shown in Chapter 2 (Table 2.4) is evident across almost all trip purposes (Table 3.2).

The largest percentage increase in average trip distance is seen in shopping trips (Chart 3.1a). In 1992/94, the average trip length was 3.5 miles, but in 2002/03 the average shopping trip was 4.3 miles. This corresponds to an increase in the number of out-of-town shopping complexes, and an increase in car ownership, which make these shopping centres accessible to a greater number of people. However, the largest absolute increase was seen in business trips, for which the average trip length rose by three miles, from 17.6 miles to 20.6 miles. A large increase in distance is also seen in the categories that relate to visiting friends – up around a fifth in 2002/03 from 1992/94 figures.

The increases in trip length were mirrored by increases in trip time (Chart 3.1b).

Chart 3.1a Average trip length by purpose: 1992/94 and 2002/03

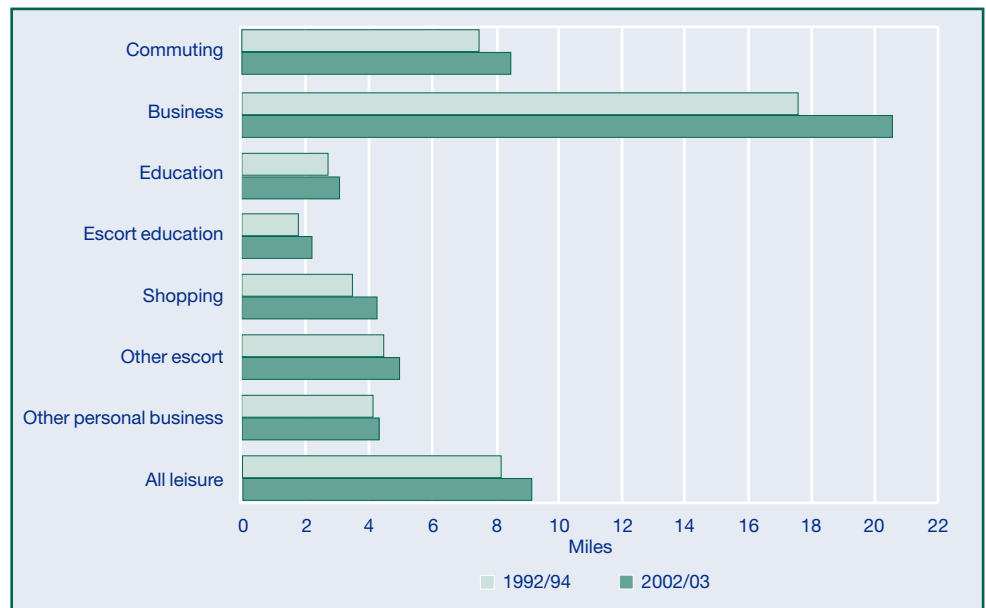
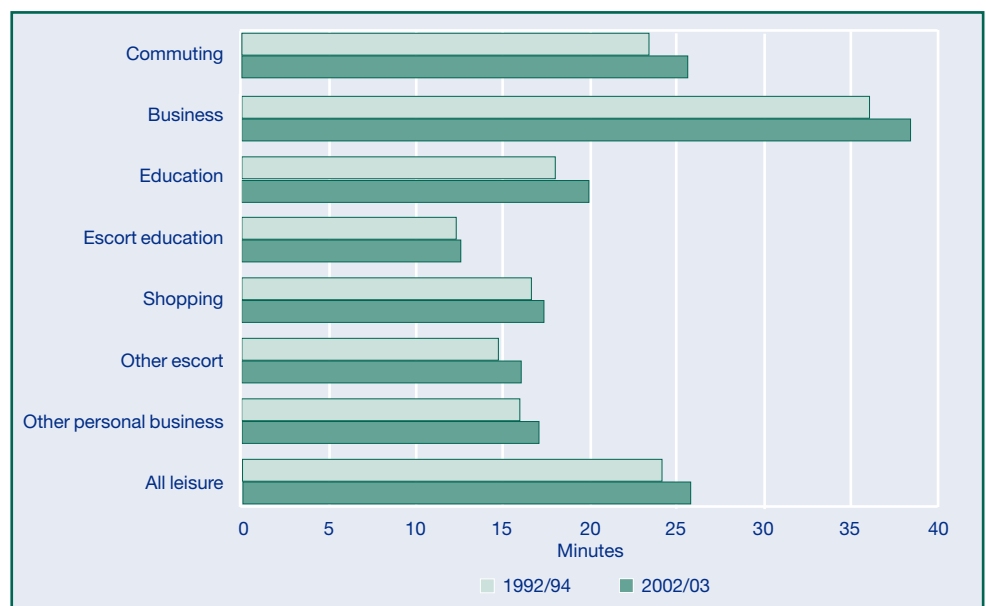


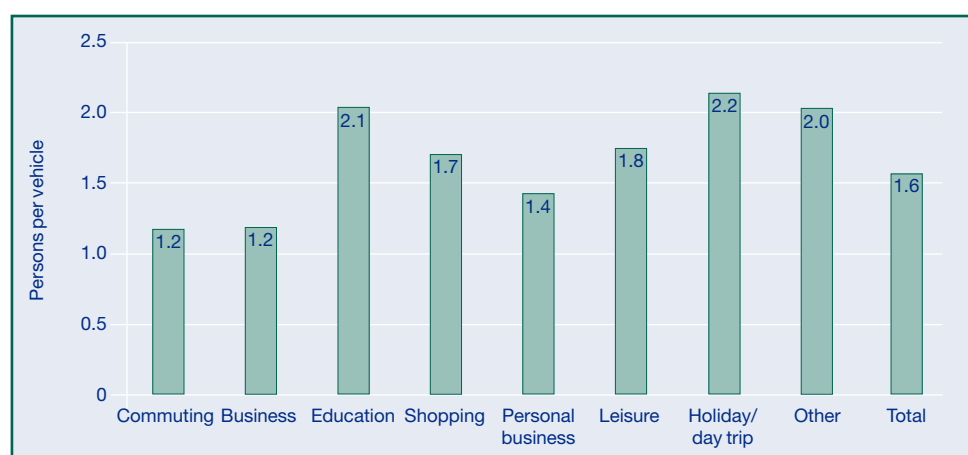
Chart 3.1b Average trip time by purpose: 1992/94 and 2002/03



Car occupancy

The number of occupants in cars varies enormously depending on the purpose of the trip (Chart 3.2). Holidays and day trips tend to be made with friends and family and, as a consequence, the average car occupancy for such trips is around 2.2 people per car. Similarly, education trips (which include escort education in the chart) usually have at least two people in the car. Conversely, the majority of people who drive to work do so alone, which means that the average car occupancy for commuting trips is only 1.2 people per car. Business trips have the same car occupancy rate – 1.2 people per car.

Chart 3.2 Average car occupancy by trip purpose: 2002/2003



Trip chaining

The National Travel Survey defines a trip as a one-way course of travel having a single main purpose. The majority of trips start or finish at home. In 2002/03, 42 per cent of all trips began at home, and 42 per cent finished there. This section considers the characteristics of trips that were not made from home.

Fifteen per cent of work and business trips made by men were followed by a further trip to work or business. This compares with eight per cent for women, who were more likely than men to follow a work or business trip with a shopping, escort education or social visit (Table 3.3).

Table 3.3 Purpose of next trip by sex and previous trip: 2002/03

	Percentage							
	Previous trip purpose							
	Males				Females			
	All purposes	Work or business	Escort education	Shopping	All purposes	Work or business	Escort education	Shopping
Next trip to:								
Work or business	14	15	8	3	9	8	8	3
Education	4	*	*	*	3	*	*	*
Escort education	2	*	*	*	4	2	3	*
Shopping	10	3	*	8	12	7	5	10
Other personal business and escort	11	4	9	3	12	6	6	4
Visit friends	9	3	*	5	10	5	3	7
Other leisure	9	2	*	2	8	2	*	2
Home	42	73	71	78	42	70	72	75
All purposes	100	100	100	100	100	100	100	100

NB: * means sample size is less than 300 trips.

Three quarters of education escort trips, (taking children to and from school) returned straight home. However, considering only those trips taking children to school in the morning, 57 per cent by women and 53 per cent by men returned straight home. 17 per cent of men's morning escort education trips were followed by a trip to work or business, and 18 per cent of those by women.

Purpose by mode

The majority of trips made in 2002/03 were by car. However, this was not the case for all trip purposes. While almost two-thirds of all trips were made by car, less than half of all education and escort education trips were made in this way, with many children walking to school or going by bus (see Chapter 4).

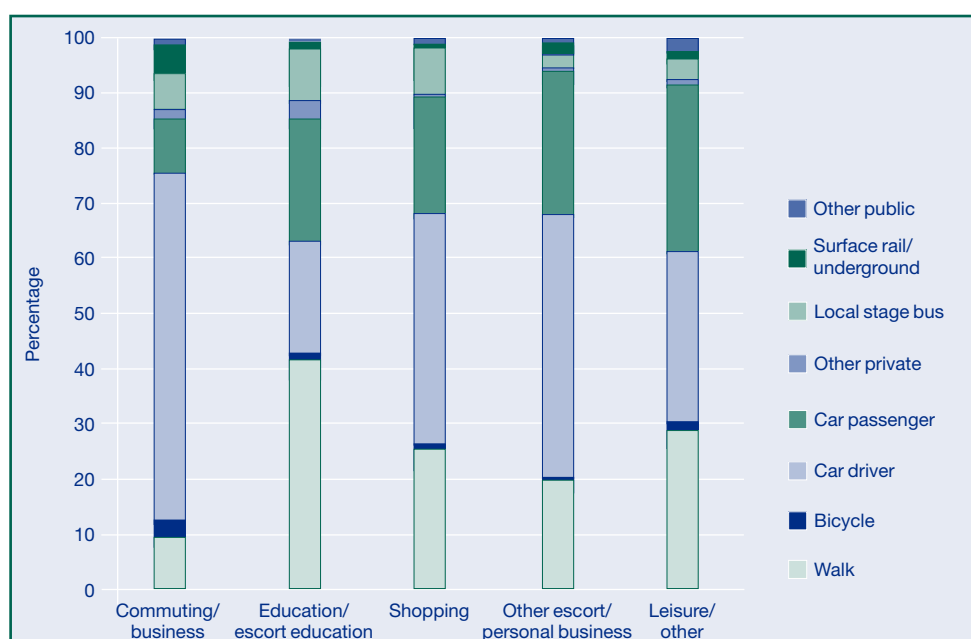
Table 3.4 and Chart 3.3 illustrate the way trip purpose affects people's choice of mode.

It is interesting to note the difference between the number of trips made as a car driver and those made as a car passenger across the different trip purposes. For leisure and education (including escort education trips), residents of Great Britain took as many trips as passengers as they did as drivers in 2002/03. However, as these figures are averaged across all ages, children account for a large number of these passengers. For commuting trips,

Table 3.4 Trips per person per year by purpose and main mode: 2002/03

									Trips
	Walk	Bicycle	Car driver	Car passenger	Other private	Local stage bus	Surface rail/ underground	Other public	All modes
Commuting/business	18	6	115	18	3	12	10	2	183
Education/escort education	47	1	23	25	4	10	1	1	112
Shopping	51	2	82	42	1	17	1	2	197
Other escort/personal business	40	1	96	52	1	8	1	2	202
Leisure/other	89	5	94	91	3	12	4	7	305
All purposes	244	15	410	228	12	59	18	14	998

Chart 3.3 Trip mode by purpose: 2002/03



however, the vast majority of those who travelled by car did so as a driver, which is reflected in the low car occupancy for these trips seen in Chart 3.2.

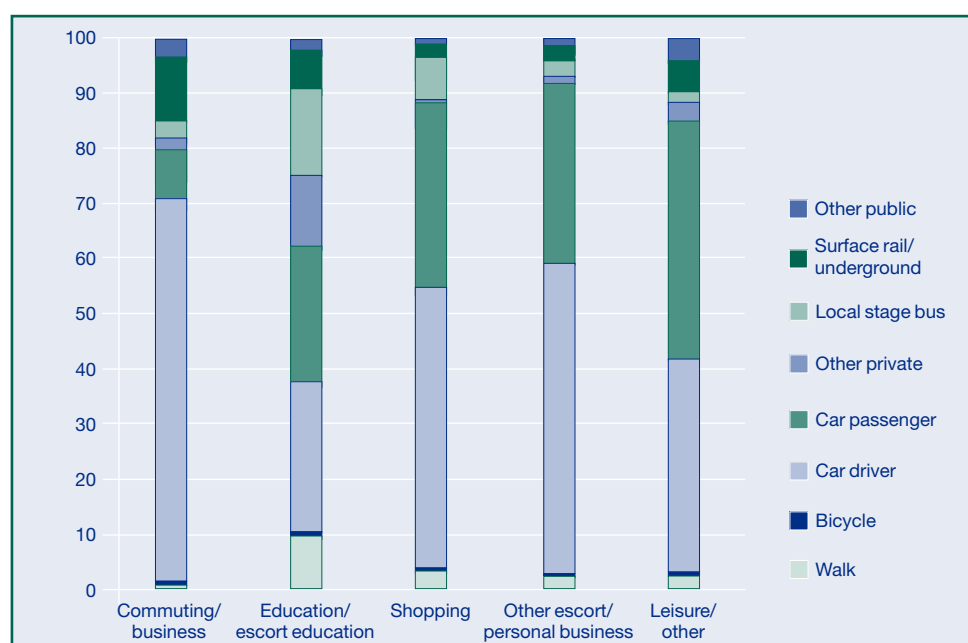
Note that more than half of all walk trips for leisure are made by people whose purpose was the trip itself. In other words, these are trips made by people simply 'going for a walk'.

Similar trends are shown in the distances travelled by each mode, across all purposes (Table 3.5 and Chart 3.4).

Table 3.5 Distance travelled per person per year by purpose and main mode: 2002/03

										Trips
	Walk	Bicycle	Car driver	Car passenger	Motorcycle	Other private	Local stage bus	Surface rail/underground	Other public	All modes
Commuting/business	14	14	1,365	172	18	22	61	229	66	1,962
Education/escort education	30	2	83	75	–	39	48	22	6	305
Shopping	29	2	430	284	1	3	65	20	8	843
Other escort/personal business	24	2	533	307	3	10	28	24	13	942
Leisure/other	71	13	1,087	1,210	12	81	56	159	114	2,803
All purposes	169	33	3,498	2,047	34	155	258	453	207	6,855

Chart 3.4 Distance travelled by mode and purpose: 2002/03



Travel to work

Travel to and from work is of particular interest, as these trips are essential, and take place at the most congested times of day. It has already been noted at the beginning of this chapter (Table 3.2) that the average commuting trip length has increased, but Table 3.1 has shown that the average number of business trips fell by 16 per cent between 1992/94 and 2002/03. As trip numbers are averaged over all people, including those who do not work, it is surprising that in a period of growth in employment that the number of commuting trips has decreased. Table 3.1 also shows that the number of commuting trips per commuter has decreased, by 11 per cent over this period. A number of factors may influence these trends,

such as more people working at home, part time, or flexible hours over fewer days. More workers are now entitled to paid leave. It is also known from analysis in the 2001 edition of *Focus on Personal Travel* that fewer people are going home for lunch, and then returning to work.

However, there is no evidence from the NTS that more people are usually working at home. In 1992/94, 4.8 per cent of working people stated that they usually worked at home (or in the same building as their home). This proportion had reduced to 3.1 per cent by 2002/03. However, over the same period there was an increase from 17 to 20 per cent in the proportion of people without a fixed workplace. It should be noted that trips from home to work made by people with no fixed workplace are counted as business trips.

There was considerable variation in usual workplace by employment status and gender (Table 3.6). Employed people and women are more likely to have a fixed workplace, but 35 per cent of self-employed people worked from home in 2002/03.

Table 3.6 also gives details of people who are occasionally able to work at home. Overall, four people in five are never able to work at home, rising to nine in ten among part time employees. No trend data are available, so it is not possible to establish if an increase in the number of people who occasionally work at home is responsible for some of the fall in commuting trips.

However, for all people whether they always work in the same place, in a variety of places or at home, there have been decreases in both the number of commuting and business trips.

Table 3.6 Workplace by employment status and gender: 2002/03

							Percentage
	All	Employment status				Gender	
		Employed		Self employed			
		Full time	Part time	Full time	Part time	Male	Female
Same place every day	77	81	88	34	27	70	85
Different places	20	18	10	51	43	27	12
Home/same building as home	3	1	2	14	30	3	4
All people	100	100	100	100	100	100	100
Always work at home	3	1	2	14	30	3	4
Worked at home on at least one day in previous week	5	4	3	14	14	6	4
Did not work at home in previous week but possible to work at home	10	12	5	7	11	11	9
Not possible to work at home	82	83	91	65	45	81	83
All	100	100	100	100	100	100	100

Evidence from the Labour Force Survey suggests that an increase in part time working may explain some of the fall in commuting trips. From 1996 to 2004, there was an increase of 13 per cent in the number of people working part time in the UK, compared with 7 per cent for full time workers. There was also a decline of 16 per cent in the number of people with second jobs. Both these trends are likely to reduce the number of commuting trips.

Table 3.7 is based upon 2001 Census data, and shows how car ownership affects the way we travel to work. As could be expected, the proportion of people driving to work increases with car ownership.

Forty-one per cent of households with one car, and at least one person working, report that all employed members of the household drive to work. This is the case for 55 per cent of

households with more than one car. There seems also to be a correlation between car ownership and the tendency of people to work at home. In particular, in households with only one employed person, six per cent of people without a car work from home. This rises to 13 per cent in households with more than one car, presumably reflecting the higher incomes of people who run their business from home.

Table 3.7 Travel to work by car ownership: 2001 Census

England and Wales		Percentage		
	All Persons	Number of household cars or vans		
		0	1	2+
One employed person in household	100	100	100	100
Driving a car or van	54	8	64	72
'Other' method of travel to work	37	86	27	14
Works at home	9	6	9	13
Two employed people in household	100	100	100	100
Both driving cars or vans	38	2	12	59
Both taking 'other' method of travel to work	13	80	16	3
Both working at home	4	2	3	4
One driving a car or van, one by 'other' method	34	9	60	19
One driving a car or van, one working at home	8	1	4	12
One by 'other' method, one working at home	4	6	5	2
All households with at least one person working	100	100	100	100
All driving cars or vans	42	7	41	55
All taking 'other' method of travel to work	23	84	22	6
All working at home	6	5	6	6
Mixture of modes by employed people in household	28	4	30	33

Source – 2001 Census.

Travel to the shops

The National Travel Survey collects data that allow comparison between food shopping trips and non-food shopping trips (Table 3.8).

In 2002/03, people made 18 per cent more non-food shopping trips than food shopping trips: 106 trips for non-food compared with 91 trips for food shopping.

Of all shopping trips, nearly two thirds were made by car. Only one in ten shopping trips was made by public transport.

Table 3.8 Shopping trips by main mode: 2002/03

	Trips/miles					
	Trips per person per year			Average trip length		
	Food shopping	Non-food shopping	All shopping	Food shopping	Non-food shopping	All shopping
Walk	23	27	51	0.5	0.6	0.6
Car/van driver	40	42	82	3.9	6.5	5.2
Car/van passenger	18	23	42	4.5	8.6	6.8
Other private	1	1	2	1.7	3.4	2.6
Local bus	7	10	17	2.9	4.6	3.9
Other public	1	2	4	3.4	11.2	8.0
All modes	91	106	197	2.3	5.6	3.7

Respondents were asked which mode they usually used to make trips for their main food shopping (Table 3.9). Over three quarters of people preferred their cars for these trips. Around half the remainder (12 per cent) usually walked.

Table 3.9 Usual means of travel to the shops¹: 2002/03

	Percentage
Car	76
Bus or coach	8
Walk	12
Taxi	3
Other	2
All modes	100

1. Trips for the main food shopping.

Deliveries of goods and services

In addition to capturing data on people's personal travel to and from shops, the National Travel Survey also asks people to tell us about any shopping they get delivered to their homes, excluding takeaways (Table 3.10).

Table 3.10 Deliveries of goods and services by car ownership: 2002/03

	Percentage			
	No car	One car	Two or more cars	All households
Types of goods ordered over the phone, by post or on the internet: (as percentage of those who ordered any goods ¹)				
Clothes	56	54	60	56
Books/CDs/software	35	48	58	49
Food and drink (not takeaways)	15	16	26	20
Furniture	21	21	25	23
Holiday/travel tickets	30	49	64	51
Any other tickets	13	29	44	32
Plants/bulbs	52	69	13	11
Health goods	10	13	8	7
Anything else	12	34	20	17
Households ordering any goods	42	67	83	65
Households not ordering any goods	58	33	17	35
How often goods are ordered over the phone, by post or the internet:				
At least once a week	6	5	8	6
More than twice a month	6	7	9	8
Once or twice a month	25	26	30	27
More than twice a year	32	35	34	34
Once or twice a year	25	23	17	21
Less than once a year	6	3	2	3

1. Percentages add to more than 100 as more than one answer can be given.

In all, 65 per cent of households said that they had ordered goods over the phone, by post or on the Internet.

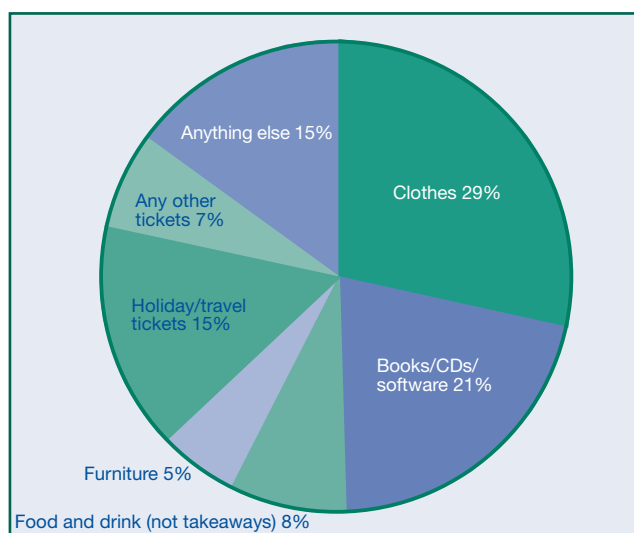
The proportion of households that ordered goods to be delivered to their homes increased significantly with car ownership, with households owning more than one car twice as likely to order goods in this way as those without a car. Although this may seem counter-intuitive, households with more cars tend to be wealthier (see Chart 5.2) and therefore be more likely to order goods. The most popular items bought were clothes, holiday/travel tickets and

books/CDs/software, which were ordered by around half of all people who ordered anything.

People who have goods delivered tended to do so infrequently, with the majority of people ordering goods less than once a month. One in seven people who ordered goods in this way, however, reported that they did so more than twice a month.

Respondents were asked what types of goods they ordered in their *last* delivery (Chart 3.5).

Chart 3.5 Goods ordered in last delivery: 2002/03



Clothes and books/CDs/software were the two most frequently ordered items.

Although more than half of all households that ordered goods reported that they had ordered holiday and travel tickets, only 15 per cent said that it was the last thing they had received, indicating that people order tickets less often than some other types of goods.

Travel difficulties going to work and shopping

Respondents were asked what kind of difficulties they experienced when using transport when going to work (Table 3.11a).

While 60 per cent of people claimed to have no major difficulties getting to work by car or motorcycle, 37 per cent reported that traffic congestion or roadworks posed problems. A

Table 3.11a Travel difficulties going to work: 2002/03

			Percentage
Travel difficulties going to work ¹ :			
Difficulties getting to work by car/motorcycle (all mentioned ²)		How easy to get to work if could not use car/motorcycle	
No difficulty	60	Very easy	14
Traffic congestion/roadworks	37	Quite easy	21
Lack of parking facilities	3	Neither easy nor difficult	6
The weather	3	Quite difficult	20
		Very difficult	38
		All car users	100
Difficulties getting to work by public transport (all mentioned ²)		Why difficult to get to work if could not use car/motorcycle (all mentioned ²)	
No difficulty	47	Not possible by public transport	47
Unreliable public transport	38	Too far	29
Traffic congestion/roadworks	11	Poor connections	30
Public transport unpleasant	11	Unreliable public transport	19
Poor connections	7	Cost of public transport or taxis	6

1. By those who work full or part time, where their usual place of work is not their home.

2. Most frequent reasons shown here. Percentages may add to more than 100 as more than one reason can be given.

higher proportion of people (53 per cent) said that they experienced problems with public transport; 38 per cent of those who responded said that public transport was unreliable on their trip to work. Other problems experienced by people included traffic congestion/roadworks (11 per cent) and unpleasant public transport (11 per cent)

More than half of all people would find it quite difficult or very difficult to get to work without using their car or motorcycle. Half of those who would find it difficult to get to work another way said that their trips to work would be impossible by public transport.

Table 3.11b Travel difficulties going shopping: 2002/03

1. By the person who does the main food shopping. 2. Most frequent reasons shown here. Percentages may add to more than 100 as more than one reason can be given.	Difficulties getting to shops by car/motorcycle (all mentioned ²)		How easy to go shopping if could not use car/motorcycle	
	No difficulty	88	Very easy	9
	Traffic congestion/roadworks	7	Quite easy	26
	Lack of parking facilities	4	Neither easy nor difficult	9
			Quite difficult	25
			Very difficult	31
			All car users	100
	Difficulties getting to shops by public transport (all mentioned ²)		Why difficult to go shopping if could not use car/motorcycle (all mentioned ²)	
	No difficulty	63	Difficulties carrying shopping	80
	Carrying shopping	22	Too far	20
	Unreliable public transport	10	Not possible by public transport	19
	Personal disability	5	Unreliable public transport	11
			Poor connection	9
			Personal disability	11
		Difficulties managing children	8	

1. By the person who does the main food shopping.
2. Most frequent reasons shown here. Percentages may add to more than 100 as more than one reason can be given.

Fewer people reported difficulties getting to the shops by car and motorcycle; 88 per cent of people had no problems (Table 3.11b). Thirty-seven per cent of people had problems using public transport to go shopping; carrying shopping was the biggest problem (22 per cent).

Fifty-six per cent of respondents would find it difficult to go shopping if they did not use their car or motorcycle. By far the most common problem was carrying shopping. Four-fifths of those reporting difficulties said that this would be a problem.

When people travel

The type of trips people do depends on the time of year (Chart 3.6). Holiday trips vary an enormous amount and people make more than twice as many trips for holiday purposes (within Great Britain) in August as in an average month. This is around four times as much as the average for the months November to February.

Education trips, of course, vary according to school holiday times. July and August are dominated by school summer holidays, and have the lowest number of education trips of any month. The August figure is especially low, with less than one-tenth as many trips taken for education purposes as an average month.

The types of trip people do also depend on the day of the week (Chart 3.7). People made more trips to visit friends at home at the weekends. Sunday was the most popular day for doing so, when people made twice as many of these trips as on the least popular days (Monday to Thursday), and a fifth more than on Saturdays. People made many more commuting trips on weekdays, and on a Sunday, made only a fifth as many trips as on an average day.

Chart 3.6 Average daily trips travelled by month and trip purpose: 1998/2003

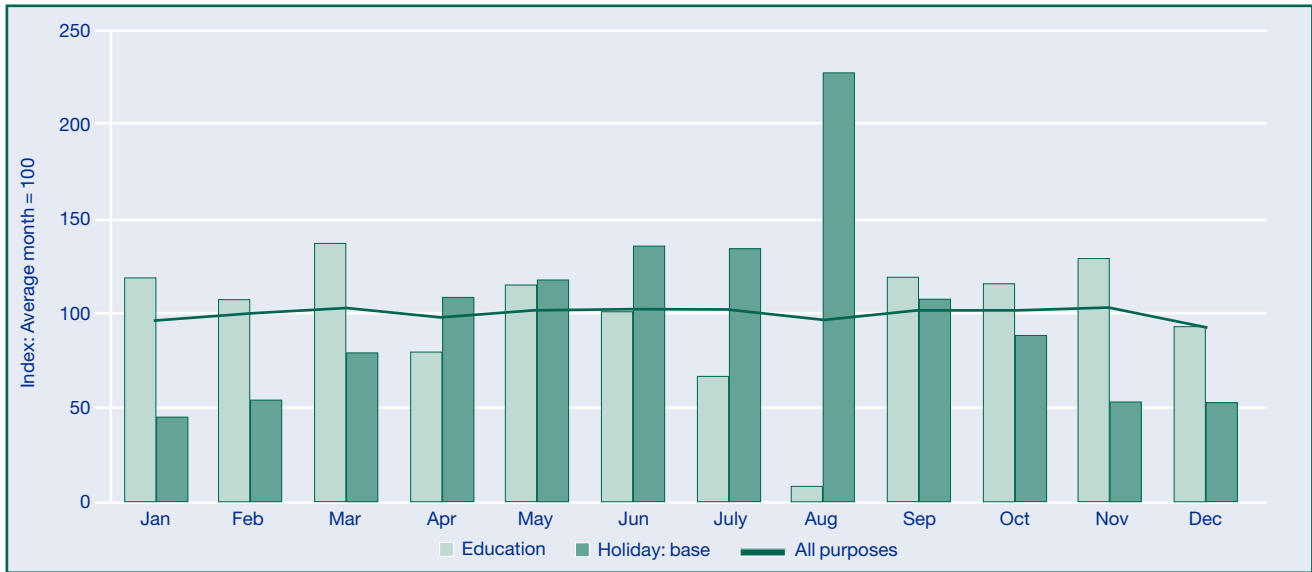
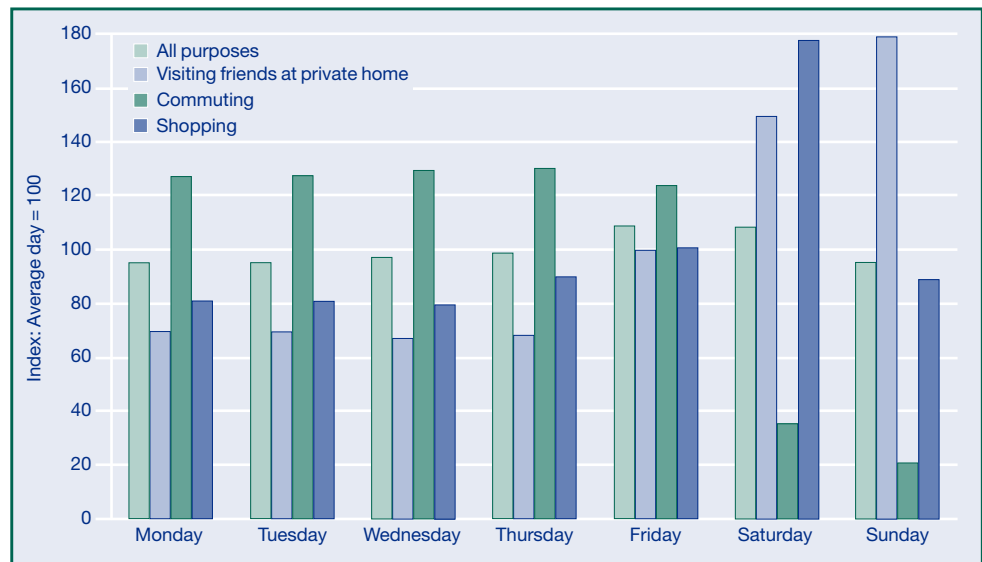


Chart 3.7 Average daily distance by day of week and trip purpose: 1998/2003



Long distance trips

The length of long distance trips varies by purpose (Table 3.12)

The most popular reason for making a long-distance trip (a trip of 50 miles or more) is to visit friends at home. One in four of all long-distance trips is made for this purpose. However, for trips over 250 miles, trips were more likely to be for holiday purposes. It should be noted, however, that the NTS definition of a holiday trip includes a trip with the intention of staying with friends for four nights or more.

Table 3.12 Long distance trips within GB by length and purpose: 2001/03 average

								Percentage
	Commuting	Business	Other essential ¹	Visiting friends at private home	Holiday	Day trip	Other leisure	Total
50 to under 75 miles	19	15	16	21	8	9	12	100
75 to under 100 miles	13	15	14	23	14	9	12	100
100 to under 150 miles	10	17	13	26	18	6	10	100
150 to under 250 miles	7	13	12	30	25	3	9	100
250 to under 350 miles	4	12	9	27	37	2	9	100
350 miles and over	10	20	9	18	34	3	6	100
Total	13	15	14	24	16	7	11	100

Chapter 4 Travel by men, women and children

- Overall, 61 per cent of women aged 17 and over in 2002/03 held a driving licence, compared with 81 per cent of men. The proportion of women holding licences has grown much more quickly than for men in recent years.
- The proportion of women who are 'main drivers' of a household car increased from 35 per cent to 45 per cent between 1992/94 and 2002/03 as the number of households with more than one car has increased. In contrast, for men this proportion has stayed at 64 per cent.
- The average length of trips made by women increased by about 18 per cent in the 1990s with a shift to car driver trips, and an increase in lengths of these car driver trips of 13 per cent. Overall, men's trip lengths increased by about the same, although this difference was accounted for more by public transport trips than by the increasing length of car trips.
- It can be shown that about 70 per cent of car traffic growth during the 1990s can be attributed to the growth in the average distance driven by women as car drivers, which increased by almost 50 per cent.
- During the 1990s, the number of bus journeys made by men declined by less than 2 per cent, but for women the decline was nearly 17 per cent. As women made nearly two thirds (63 per cent) of bus trips in 1989/91, this implies that about 95 per cent of the fall in bus use can be accounted for by women.
- Women make a greater proportion of shopping trips and are more likely to visit friends in their homes than men, whereas men make a greater proportion of commuting trips.
- For primary aged children the proportion of school trips by car increased from 30 to 40 per cent between 1992/94 and 2002/03 with a corresponding reduction of trips on foot from 61 to 52 per cent.
- Parents were most likely to give traffic danger as the reason for accompanying children aged 7–10 to school (58 per cent), followed by fear of assault or molestation (45 per cent).

Introduction

The main part of this chapter examines the differences in travel between men and women. There are also sections on travel by children and young people; on travel by older people; and on car use by men and women.

During the 1990s, the travel patterns of women in Great Britain have exhibited some profound changes. Women of all ages are increasingly likely to hold driving licences, and have full access to a car as the 'main driver'. The travel patterns of men have changed much less over this period.

These changes have been influenced by major changes in the employment of women. For many women with children, a car is considered a necessity to help manage home and work responsibilities, and car ownership has allowed women to expand their travel horizons.

Setting the scene: changing access to cars

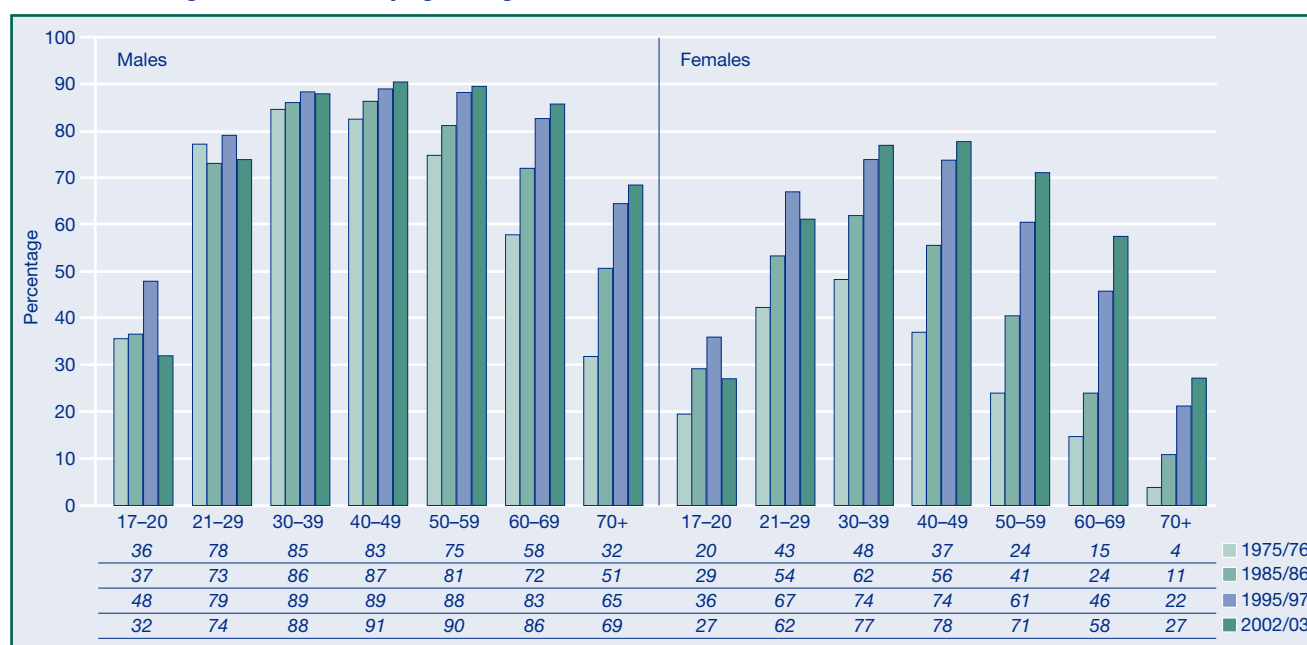
In Great Britain car use overtook bus use in the mid-1950s. Initially, men were more likely

to be able to drive a single family car. Car ownership has continued to grow steadily, particularly of second cars in recent years (see also Chart 1.7). By 1990, 23 per cent of households had two or more cars, and this proportion increased to 29 per cent by 2002. The rise of the second car has mainly benefited women.

Driving licences

Overall, 61 per cent of women aged 17 and over in 2002/03 held licences, compared with 81 per cent of men. The proportion of women holding licences has grown much more quickly than for men in recent years, leading to diminishing gender differences over time shown in Chart 4.1. Until the end of the 1990s, each generation of young women was more likely to be able to drive, and as these young women have aged, a strong cohort effect is apparent as more women in their 40s, 50s and 60s have become drivers. For example, in the mid-1980s, 56 per cent of women in their 40s held a licence. By the mid-1990s, these women were in their 50s, and 61 per cent held a licence. Many of these women are now in their 60s, and licence holding was 58 per cent in this age group in 2002/03.

Chart 4.1 Driving licence holders by age and gender: 1975/76–2002/03



Licence holding among men has changed less in recent years, and may be reaching a plateau of around 90 per cent for men in their middle ages, or 80 per cent overall.

The number of older drivers of both sexes has rapidly increased, as the cohorts of middle aged drivers reach retirement age. However, there remains a much greater disparity between the sexes among drivers over the age of 70 (with 69 per cent of men, but only 27 per cent of women holding licences), partly as this group contains more very old women than men.

It is also noticeable that younger women's levels of driving licence holding by age are no longer catching up quite as quickly as in the last few decades of the twentieth century. For example, for those aged 30–39 in 2002/03, there was a difference of 11 percentage points in driving licence holding between men (88 per cent) and women (77 per cent). This difference was the same in 1998/2000.

Young drivers

A recent change has become apparent, with fewer young people (of both sexes) now holding licences (as shown previously in Chart 1.9). Various reasons have been suggested: young people are finding it more difficult to pass driving tests, with the introduction of a theory test in GB; more young people are students and cannot afford cars; and insurance costs are high for drivers under 25. This phenomenon has also been noted elsewhere in Europe.

Chart 4.2 Licence holding by 17 to 20 year olds by selected economic status: 1991–2001

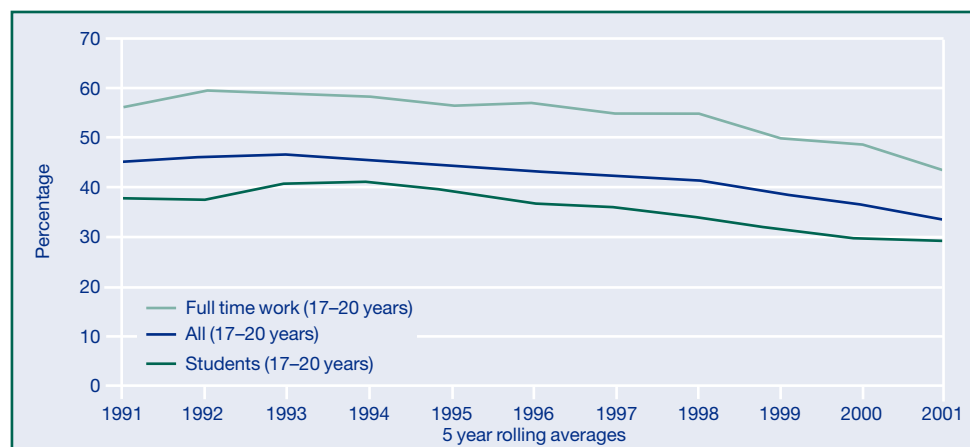


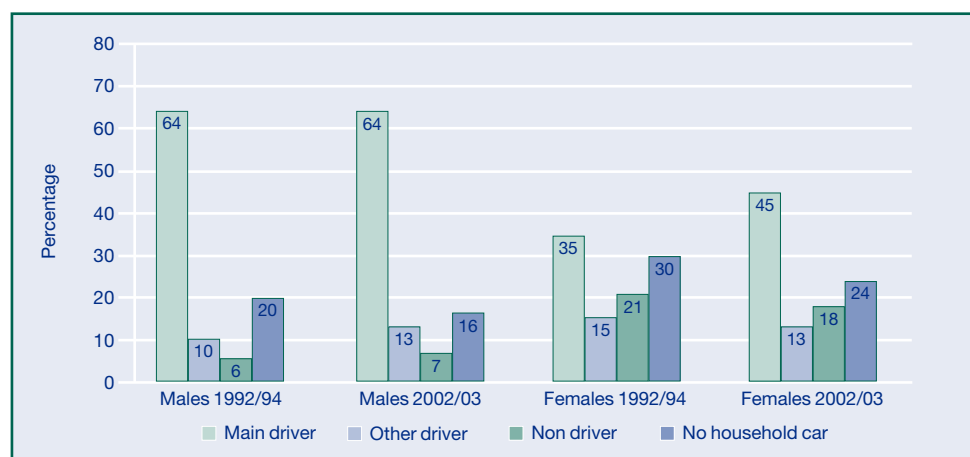
Chart 4.2 shows that licence holding is, not surprisingly, higher among young people who are working full time than among non-working students, although rates have fallen in both groups. Since the proportion of young people who are students has risen rapidly during the 1990s, the overall rate has fallen faster than in either of these separate groups.

Who drives the sole family car?

In the National Travel Survey, the person who does most mileage in each car available to a household is designated the 'main driver' of that car. Usually, a two car household will have two different main drivers, and so on. The 'personal access' to a car of each household member is classified as main driver, other driver, non-driver in a household with a car, and no household car.

Chart 4.3 shows the changes in personal car access during the last decade. The proportion of women who are main drivers has increased from 35 per cent to 45 per cent. In contrast, for men this proportion has stayed at 64 per cent. Interestingly, for men the proportion of 'other drivers' has increased.

Chart 4.3 Personal access to cars by adults (17+) by gender: 1992/94 and 2002/03



Two different trends have increased car availability for women. The first, as noted above, is the increase in households with two or more cars. The second is more interesting, and clearly illustrates the changing role of women in society. In single car households in 2002/03, with two or more adults (Table 4.1), 65 per cent of men are main drivers, rather more than twice the proportion of women (27 per cent). A decade ago, the ratio was more than to three to one, as 70 per cent of men in these single car households were main drivers, but only 22 per cent of women. However, 43 per cent of women in single car households (often pensioner households) are still non-drivers, although this proportion is declining.

Table 4.1 Personal car access by adults (17+) by car availability: 1992/94 and 2002/03

Households with two or more adults								Percentage
	Male				Female			
	Main driver	Other driver	Non driver/ no car	Total	Main driver	Other driver	Non driver/ no car	Total
1992/94								
No cars	0	0	100	100	0	0	100	100
One car	70	19	10	100	22	32	46	100
Two cars	90	6	4	100	75	11	14	100
Three or more cars	92	3	5	100	79	11	11	100
All persons	66	11	22	100	37	19	44	100
2002/03								
No cars	0	0	100	100	0	0	100	100
One car	65	22	13	100	27	30	43	100
Two cars	82	13	5	100	79	9	12	100
Three or more cars	82	11	6	100	81	9	10	100
All persons	65	15	20	100	47	17	36	100

In households with two or more cars, about 80 per cent of women were main drivers in 2002/03, showing clearly how women benefit from the second household car. This proportion also increased considerably during the 1990s.

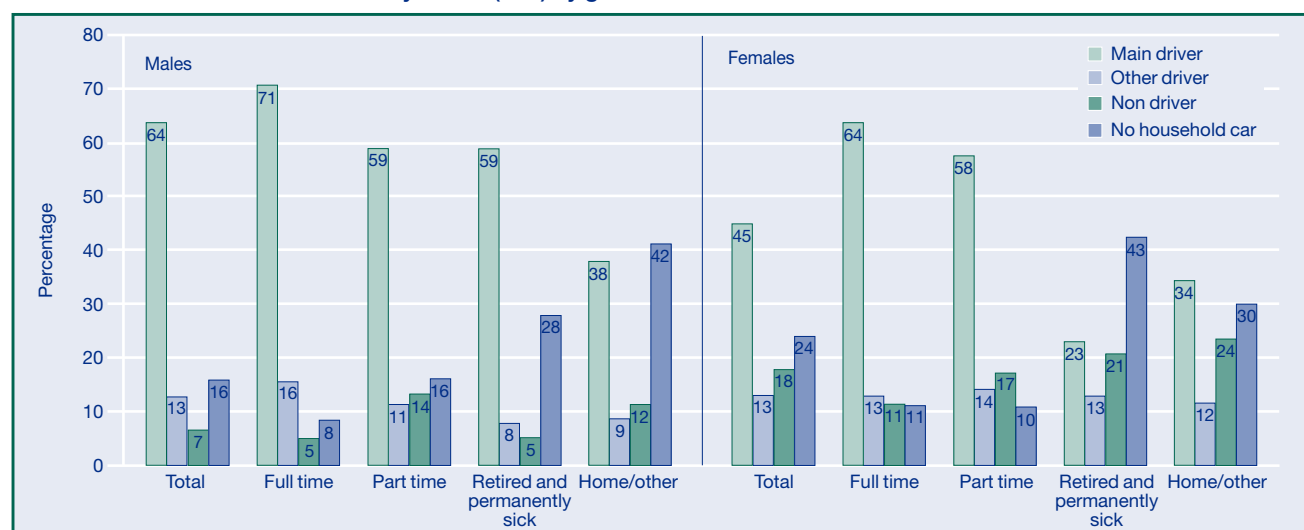
Lone mothers are still less likely to have access to cars, but their position has improved considerably. In 1992/94, only a third had a car, but this proportion had increased to a half by 2002/03.

Economic activity

Chart 4.4 illustrates that differences in economic activity are one of the main reasons for the remaining differences between personal car access. There is little difference in access between men and women who are working full time – 71 per cent of men and 64 per cent of women were main drivers in 2002/03. 58 per cent of women working part time were also main drivers.

The main differences between men and women were among those who were retired or permanently sick, where less than a quarter of women were main drivers. This difference is likely to be because many retired women have never held a driving licence (see Chart 4.1), and car availability is lower in such households.

Chart 4.4 Personal access to cars by adults (17+) by gender and selected economic status: 2002/03



How men and women travel

Trends in trips by mode

Since 1990, there has been a 30 per cent increase in the number of trips women made as car drivers, although the total number of trips made by women fell by 4 per cent over this period. In contrast, the total number of trips made by men fell by 11 per cent, including a fall of 7 per cent in the number of trips made by men as car drivers. Chart 4.5a and 4.5b (in

Chart 4.5a Trends in trips by main mode: 1990–2002

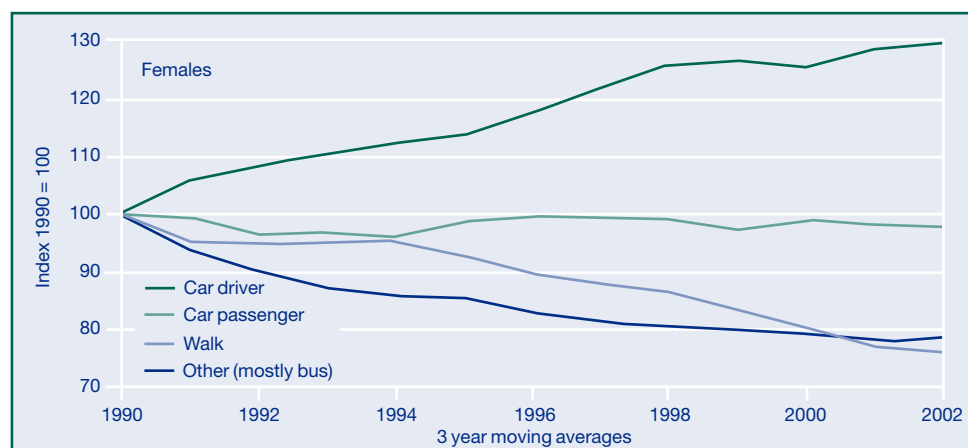
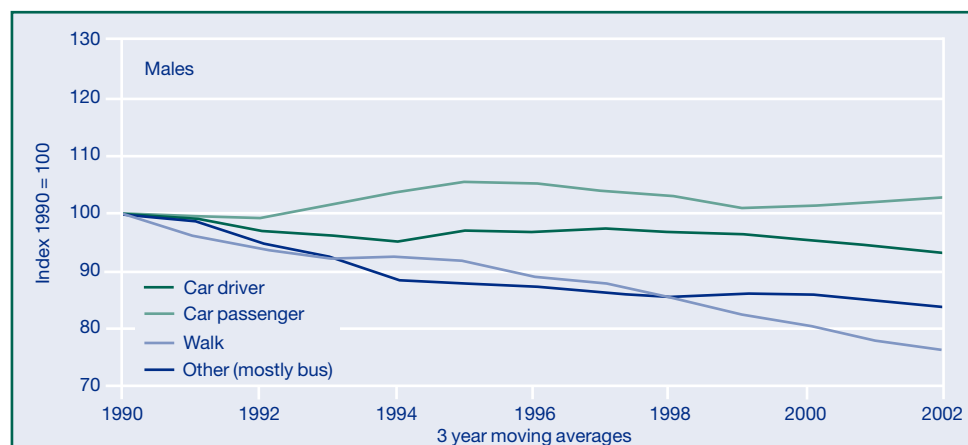


Chart 4.5b Trends in trips by main mode: 1990–2002



index form) shows these trends in the average number of trips made by women and men (all ages) from 1990 to 2002, for selected main modes. There were declines of over 20 per cent in trips on foot for both men and women, and by women on other modes (mostly local bus, but also including some cycling and rail trips).

Differences in modes used

Table 4.2 shows the total number of trips made by age and gender and mode in 2002/03. Women aged up to 50 make more trips than men, and older women make fewer trips. Women in their 30s who are most likely to be combining work with family responsibilities make nearly 20 per cent more trips. There is little difference in mode split for young men and women (aged less than 17).

Disparities in travel between men and women increase with age and for those over 70, about half of men's trips are as car drivers, compared with only one in five of women's trips. Men walk more after retirement, with nearly a quarter of their trips are on foot for men in their 60s. Men aged over 70 are more likely to travel as car passengers and by bus than younger men. More detailed analysis of travel by older people is included later in this chapter.

Averaged over all ages, men make nearly half of their trips as car drivers, increasing to about two thirds for men aged 30–59. Men also make a greater proportion of their trips by bicycle (2 per cent overall) and by rail (also 2 per cent) than women. In spite of the recent increases in car availability, women on average make only about a third of their trips as car drivers.

Table 4.2 Trips per person per year by age, gender and main mode: 2002/03

	Percentage/trips/miles									
	All ages	<17	17–20	21–29	30–39	40–49	50–59	60–69	70+	Mean trip length
Males:										
Walk ¹	22	34	26	21	16	16	18	24	27	0.7
Bicycle	2	2	3	3	2	2	2	1	2	2.4
Car driver	48	–	25	49	65	69	69	63	51	10.2
Car passenger	17	53	23	12	8	6	5	6	10	8.9
Other private transport	1	2	2	1	1	1	1	1	1	15.9
Bus and coach	5	7	15	7	3	2	3	4	8	6.0
Rail	2	1	3	5	4	3	2	1	1	25.8
Taxi and minicab	1	1	2	2	1	1	1	1	1	4.9
Other public transport	–	–	–	1	–	–	–	–	–	55.8 ²
All modes	100	100	100	100	100	100	100	100	100	7.9
All trips (number)	994	881	890	957	1,063	1,130	1,132	1,061	803	.
Distance travelled (miles)	7,899	4,327	5,984	8,470	11,102	11,054	10,823	7,435	4,448	.
Females:										
Walk ¹	26	33	26	28	24	20	23	28	29	0.7
Bicycle	1	1	1	1	1	1	1	1	–	1.8
Car driver	34	–	18	39	52	55	45	29	18	6.4
Car passenger	28	54	31	18	15	16	23	31	33	9.1
Other private transport	1	2	1	1	–	–	1	1	2	16.8
Bus and coach	7	8	16	7	4	4	5	8	15	5.4
Rail	1	1	3	4	2	1	1	1	1	24.2
Taxi and minicab	1	1	4	2	1	1	1	1	2	3.7
Other public transport	–	–	–	–	–	–	–	–	–	26.5 ²
All modes	100	100	100	100	100	100	100	100	100	5.9
All trips (number)	1,003	915	978	1,078	1,256	1,245	1,045	914	594	.
Distance travelled (miles)	5,891	4,247	5,781	7,142	7,405	7,713	7,128	5,524	3,150	.

1. Short walks believed to be under-recorded in 2002 and 2003 compared with earlier years.

2. These estimates have a large sampling error because of the small sample.

Women make more trips as car passengers (28 per cent), on foot (26 per cent), and by bus (7 per cent) than men.

Bus travel

Increasing car use has led to decreasing bus use, particularly by women and older people. During the 1990s, the number of bus journeys made by men declined by less than 2 per cent, but for women the decline was nearly 17 per cent. As women made nearly two thirds (63 per cent) of bus trips in 1989/91, this implies that about 95 per cent of the fall in bus use can be accounted for by women.

Some bus services are of marginal profitability, and continued increases in women's car travel may lead to reductions in bus availability for women who still do not have access to cars – especially older women and single parents.

Trip length and total distance travelled

Table 4.2 also shows the variations in the total distance travelled, by age and sex, and the average trip length by main mode.

The average length of trips made by women increased by about 18 per cent in the 1990s with a shift to car driver trips, and an increase in lengths of these car driver trips of 13 per cent. Overall, men's trip lengths increased by about the same (17 per cent), although this difference was accounted for more by public transport trips (up 21 per cent) than by the increasing length of car trips (up 11 per cent).

Increasing trip lengths have led to an increase in the total distance travelled. Together with the increasing car use by women, this led to a huge increase of almost 50 per cent during the 1990s in the average distance travelled by women as car drivers. It can be shown that about 70 per cent of car traffic growth in the 1990s can be attributed to the growth in women's travel.

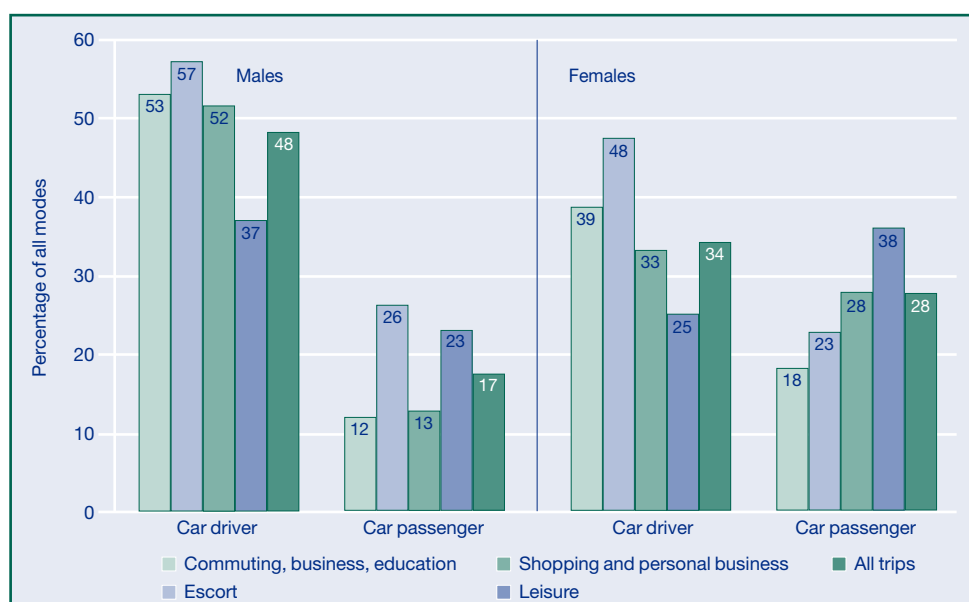
Car driver and passenger trips

Averaged over all ages, men make 48 per cent of their trips as car drivers, and 17 per cent as passengers (Table 4.2). The comparable figures for women are 34 and 28 per cent. However, there are interesting variations in the type of trips made as drivers and passengers, shown in Chart 4.6.

Men are more likely to be drivers than passengers for all types of trip. Women are more likely to be drivers for most trip types, but for leisure trips, they are more likely to be passengers.

Interestingly, the average length of trips made by a female car driver is shorter than for trips as a passenger. In 2002/03 these trip lengths were 6.4 and 9.1 miles long respectively. The reverse is true for men, with equivalent trip lengths of 10.2 and 8.9 miles. These differences can be accounted for by the type of trips women make as car drivers, with fewer long business trips and more shorter shopping and escort trips (see the next section). Women make longer holiday and day trips predominately as car passengers.

Chart 4.6 Car trips by broad purpose and gender: 2002/03



Why men and women travel

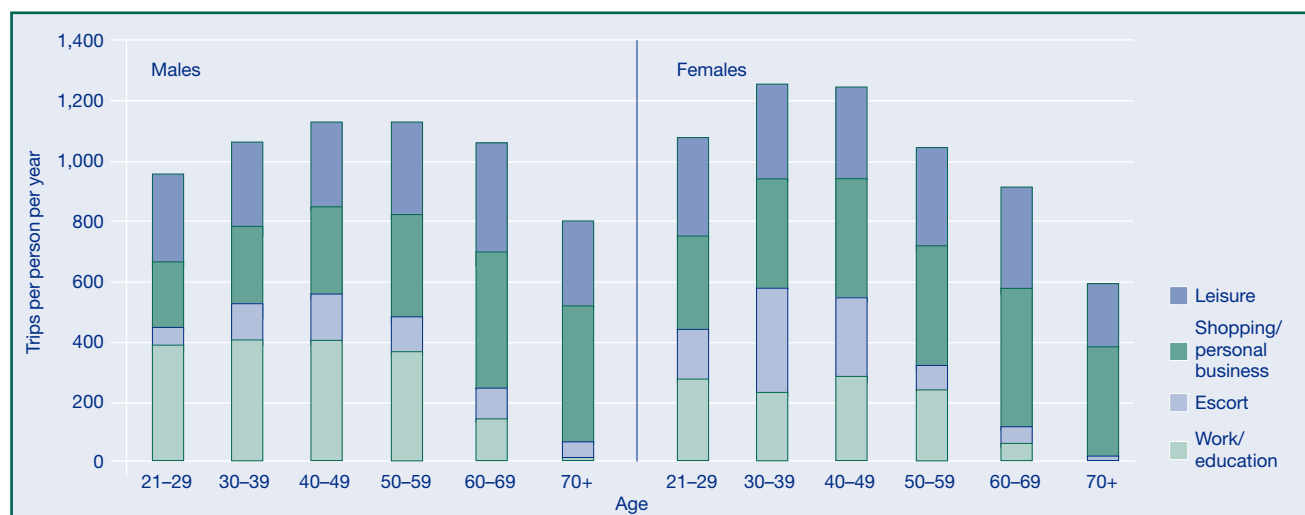
Trip purposes mirror how people spend their lives, and different work, social and family responsibilities are clearly reflected in the travel patterns of men and women.

Chart 4.7 illustrates travel by broad categories for people aged 21 and over, separating also escort trips which are such a feature for some age groups. Travel by children and young people is covered in more detail in the next section.

Table 4.3 gives a fuller breakdown of why men and women travel. Up to the age of 17, differences in travel purpose between young men and women are slight, but are becoming more noticeable for young people aged 17–20. Women make a greater proportion of shopping trips, and are more likely to visit friends in their homes than men. Men make a greater proportion of commuting trips. These differences persist through all age groups.

By the time women reach their 20s, ‘escort education’ trips (taking children to school) are becoming more apparent, and together with general escort trips, these account for over a quarter of all trips for women in their 30s. This age group of women also makes the smallest

Chart 4.7 Travel purpose by age (21+) and gender: 2002/03



proportion of commuting trips among those of working ages. Trips to visit friends tend to decline for both women and men aged between 21 and 49, increasing again in their 50s.

Once women are in their 50s, they make fewer trips than men, and the proportion of escort trips declines considerably, and men make more escort trips than women. For both men and women aged 60 and over, shopping, personal business, and visiting friends are the main trip purposes, and the trip patterns of men and women aged over 70 are similar.

Table 4.3 Trips per person per year by age, gender and purpose: 2002/03

Percentage/miles										
	All ages	<17	17–20	21–29	30–39	40–49	50–59	60–69	70+	Average trip length
Males:										
Commuting	18	1	25	32	30	27	24	10	1	10.3
Business	5	–	2	5	8	8	9	3	–	23.6
Education	7	28	14	3	–	–	–	–	–	3.0
Escort education	3	4	1	1	3	4	2	1	1	2.7
Shopping	18	7	11	15	16	16	19	28	37	4.3
Other escort	9	15	4	5	7	10	9	8	6	5.5
Other personal business	10	8	6	8	8	9	11	15	19	4.8
Visit friends at private home	11	16	15	12	9	8	8	10	10	9.9
Visit friends elsewhere	5	3	9	7	5	5	5	6	6	5.3
Sport/entertainment	7	10	9	7	6	5	6	7	8	8.3
Holiday/day trip	4	4	2	2	3	3	4	5	4	27.2
Other including just walk	4	3	2	2	3	4	5	7	7	1.1
All purposes	100	100	100	100	100	100	100	100	100	7.9
Females:										
Commuting	12	1	19	21	15	19	20	6	1	6.2
Business	2	–	1	2	3	4	3	1	–	13.7
Education	6	27	14	3	1	–	–	–	–	3.2
Escort education	7	5	1	7	15	10	2	2	–	2.0
Shopping	22	9	17	20	19	21	26	34	39	4.3
Other escort	10	16	5	8	13	11	6	5	3	4.6
Other personal business	11	8	7	9	10	10	12	16	21	4.0
Visit friends at private home	13	17	19	15	11	9	11	13	12	8.7
Visit friends elsewhere	4	3	8	5	4	4	4	4	5	6.0
Sport/entertainment	6	8	5	5	5	5	6	8	8	6.5
Holiday/day trip	3	4	2	2	3	3	4	5	4	25.5
Other including just walk	4	3	3	3	3	4	6	6	6	1.0
All purposes	100	100	100	100	100	100	100	100	100	5.9

Travel by children and young people

Mode of transport

Chart 4.8 shows details of how children and young people travel, by single year of age. Note that sample sizes are fairly small, so there are some 'jumps' in the data that are not significant.

Until the age of about 10, there is little difference between travel by boys and girls. Both make similar numbers of trips, and travel mainly as car passengers. Most of the rest of their travel is on foot (which includes travel in pushchairs for the very young).

At around the age children start secondary school, some changes become apparent. Car

travel decreases, and bus use begins to increase. Boys are more likely to make trips by bicycle. Girls also start to make more trips overall than boys.

Travel by other modes, including rail and taxi, become more significant from the age of about 16, and car travel increases again as some young people start to drive.

Chart 4.8a Trips by main mode and age (0–20): 2002/03

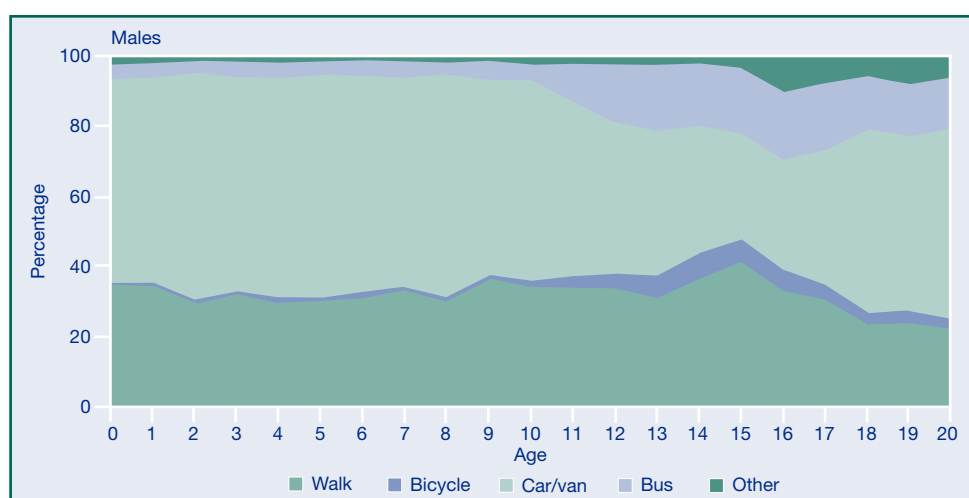
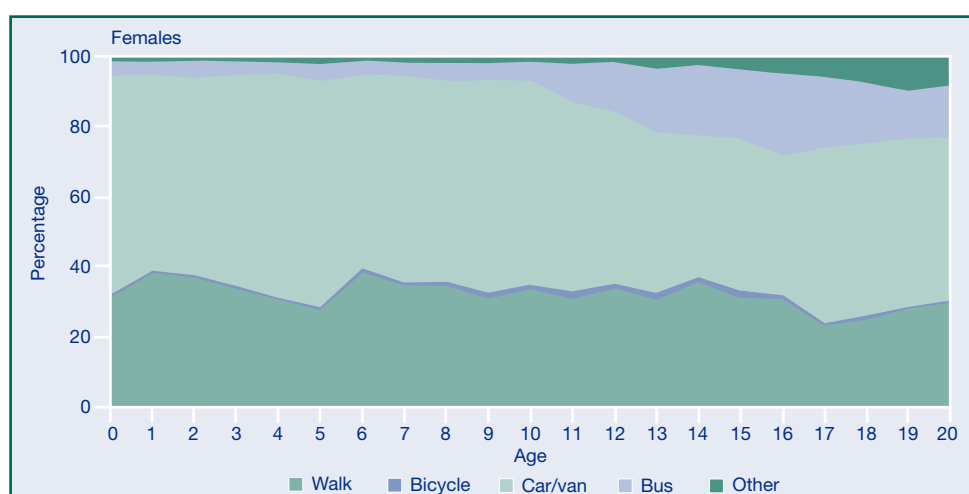


Chart 4.8b Trips by main mode and age (0–20): 2002/03



Purpose of travel

Chart 4.9 shows how the purpose of travel varies by age. There is little difference between the travel purposes of boys and girls up to the age of about 10. For young children, over half of their trips are 'escorting', that is they are accompanying others on trips (usually their parents), rather than going out for their own purposes. Most other trips are for shopping, personal business and leisure. From the age of about 2, escort trips decline, and education trips increase.

From the ages of 5 to 15, education accounts for about 35–40 per cent of trips. From 15, work trips start to feature. The differences between teenage men and women are mainly on the higher proportion of shopping trips made by young women. These variations are greater than the differences by mode shown above.

School travel*

There are clear differences between the travel to school of primary (5–10) and secondary

* Note that 'education' trips of over 50 miles are excluded, as these are likely to be school outings, or trips taking children to boarding schools.

Chart 4.9a Trips by purpose and age (0–20): 2002/03

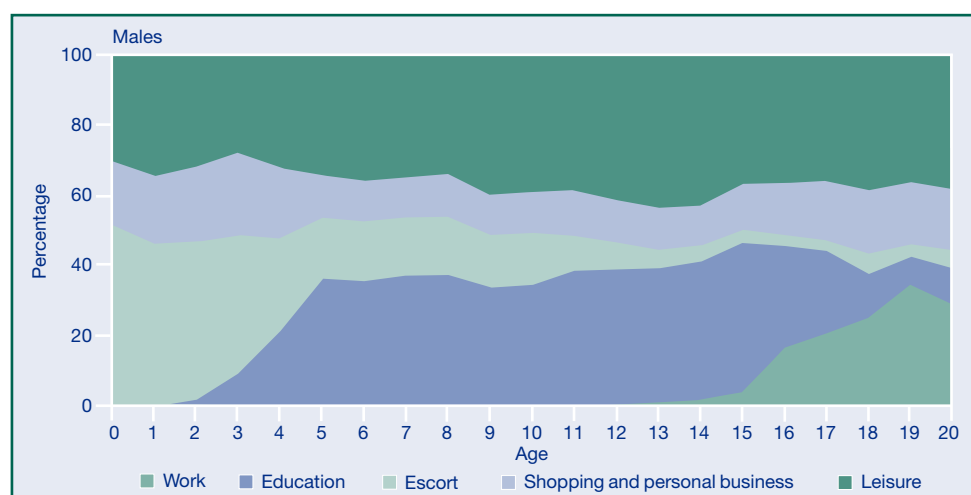
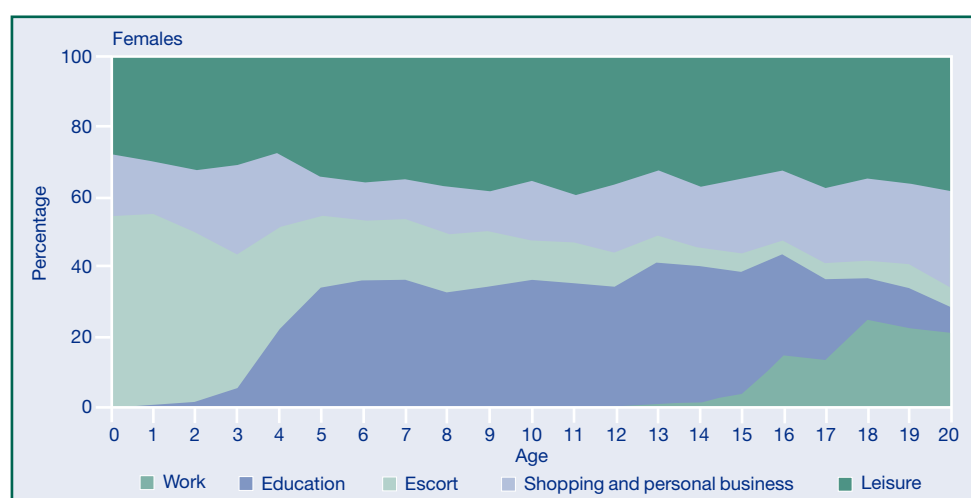


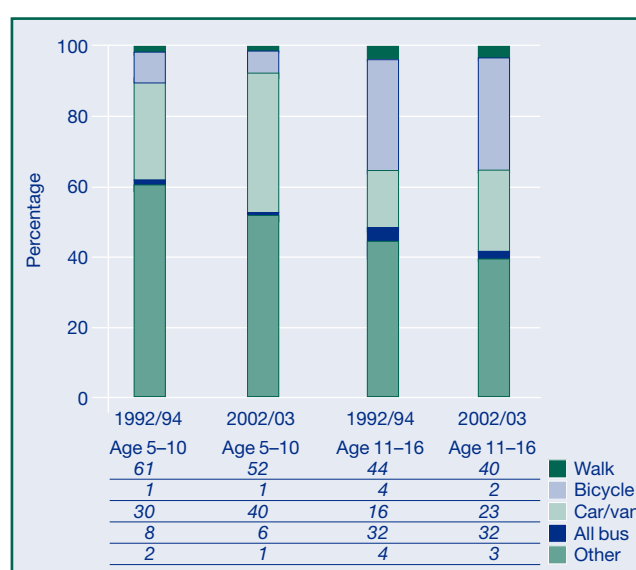
Chart 4.9b Trips by purpose and age (0–20): 2002/03



(11–16) aged children (Chart 4.10). In each age group, more walk than use any other single mode. For primary aged children, the next most used mode for school travel is the car, but for older children, buses are used more frequently than cars.

Chart 4.10 also shows the change in children's travel to school since the early 1990s. For primary aged children, the proportion of school trips by car increased from 30 to 40 per cent

Chart 4.10 Trips to school¹ by age group: 1992/94 and 2002/03



1. Short walks believed to be under-recorded in 2002 and 2003 compared with earlier years.

over this period, with a corresponding reduction of trips on foot from 61 to 52 per cent. However, 82 per cent of trips of less than a mile were on foot in 2002/03.

Secondary school pupils use a wider range of travel options, and there has been less change in their travel. More walk to school (40 per cent in 2002/03) than use any other mode, and there has been less decline in this proportion than for primary age children. 89 per cent of trips of less than a mile were on foot. About a third of secondary school pupils use local or school buses, and this proportion has been fairly stable over the last decade. Just under a quarter are driven to school (23 per cent in 2002/03, up from 16 per cent in 1992/94).

Not surprisingly, children's travel to school varies considerably according to household car ownership (Chart 4.11). About one child in six in the 2002/03 NTS sample lived in a household without a car, with roughly equal percentages living in households with one and two (or more) cars.

Even in households without a car, some school trips were by car; about 5 per cent for children aged 5–10, and 7 per cent children aged 11–16. For primary aged children, 36 per cent travelled by car in households with one car, and 58 per cent in households with more than one car. For secondary aged children, there was less variation by car ownership, notably for travel by other modes (mostly bus), which was almost constant across the different car owning groups.

Chart 4.11 Travel to school by age and household car ownership: 2002/03



Chart 4.11 also shows the wide variation in the average length of the school trip. Children living in households with two or more cars travel much further to school than those in single car households, who travel further than those in households without cars. Some of these variations are associated with the area type of residence. For example, households in rural areas are more likely to have two or more cars, and in inner cities, households are more likely to have no car (see Chapter 6). The need to own cars is closely linked to the need to travel to a variety of services, including taking children to school, and this need is much less in cities where services are normally closer to hand.

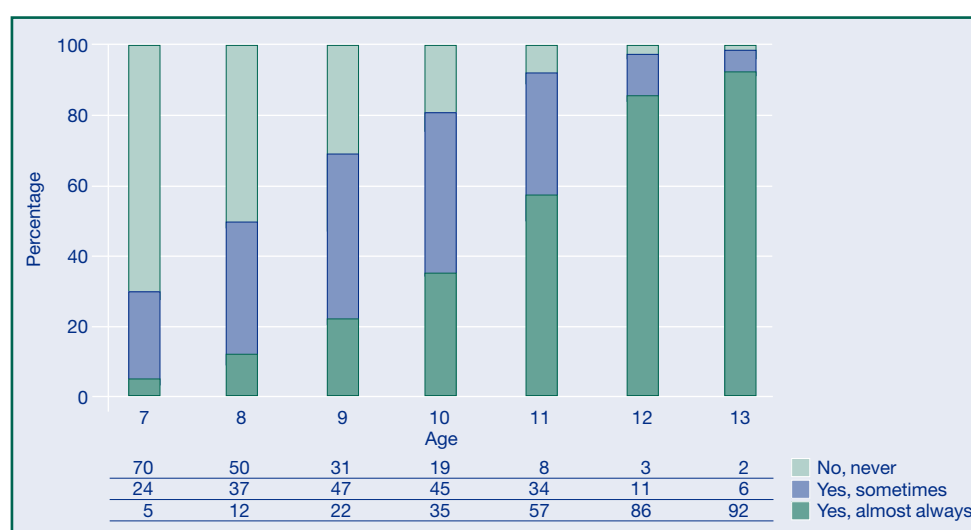
However, having a car also enables families to have a greater choice of school for their children, and some families may buy a second car so that their children can attend a particular school not easily accessible in other ways.

Children's independence

Parents of children aged 7–13 are also asked if they are accompanied to school. For children aged 7–10, 79 per cent were usually accompanied by an adult in 2002/03, compared with only 29 per cent for those aged 11–13. For the younger children, parents were most likely to give traffic danger as the reason for accompanying children to school (58 per cent), followed by fear of assault or molestation (45 per cent). The most common reason for accompanying the older children was that the school was too far away (32 per cent), followed by traffic danger (30 per cent) and fear of assault or molestation (26 per cent).

Parents were also asked more generally about whether their children were allowed to cross roads alone. Chart 4.12 shows the variation with age. Only 5 per cent of 7 year olds were always allowed to cross roads on their own, increasing to 92 per cent of 13 year olds. 42 per cent of children aged 7–11 were not allowed to cross roads alone, but only 4 per cent of children aged 11–13.

Chart 4.12 Children crossing roads alone: 2002/03



Travel by older people

Earlier sections of this chapter include aggregate details of travel of people aged 60–69 and 70+. It should be noted that the NTS does not cover some people in the oldest age groups, who no longer live in households. These people are likely to travel less.

Chart 4.13 shows travel by main mode, which has different patterns for men and women. For men, car travel declines steadily from age 60, and is replaced to some extent by an increase in bus trips. Men aged 80–84 make an average of 79 bus trips a year, compared with only 37 for men aged 65–69. The number of walk trips stays roughly constant, except for the oldest men aged 85 and over.

For women, travel by all modes (except bus to age 75–79) declines with age, and in each age group women make fewer trips than men.

As for younger people, car availability is the most significant factor affecting older people's travel. In each age group shown in Table 4.4, the proportion of men who are main drivers was about ten percentage points higher in 2002/03 than in 1992/94, except for the least elderly. Over a quarter (28 per cent) of men aged 85 and over were main drivers in 2002/03. There were even greater increases for women, except for the most elderly.

Chart 4.13 Older people's travel by age and main mode: 2002/03

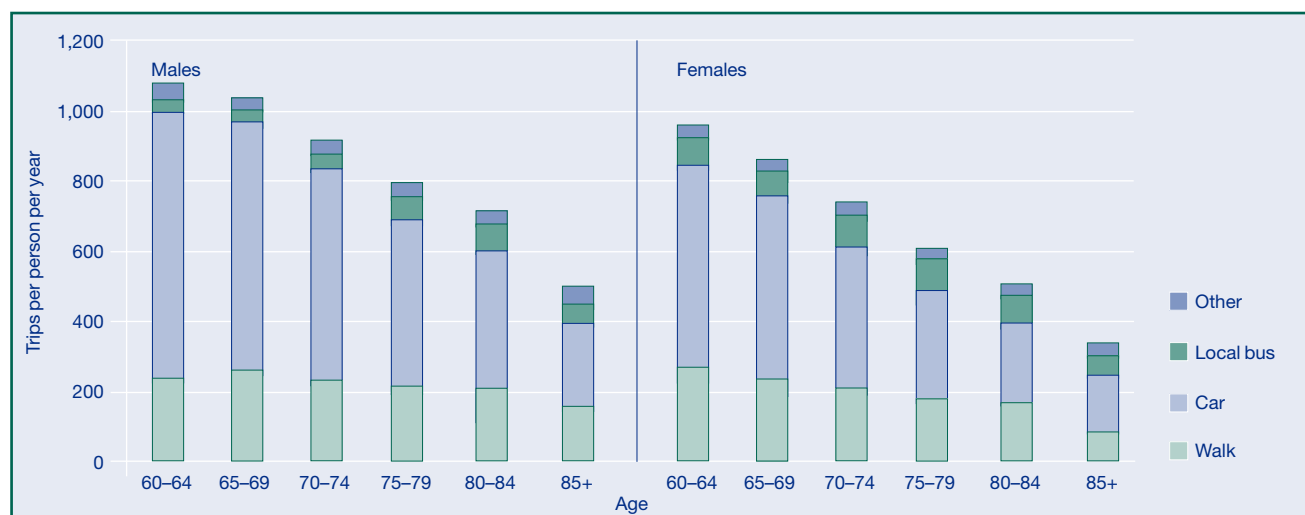


Table 4.4 also shows the proportion of people holding concessionary bus passes. This proportion increases with age, peaking between the ages of 75 and 84, before declining, perhaps as the most elderly travel find themselves less able to use buses.

There has been a clear decline in bus use among older people, in spite of the improved availability of concessionary fares*. For example, the number of bus boardings made by people aged 60 and over declined by about 20 per cent from 1993 to 2003. Most of the decline in bus use during the 1990s can be attributed to the increase in car availability shown above. Chart 4.14 shows how bus use is strongly associated with car availability.

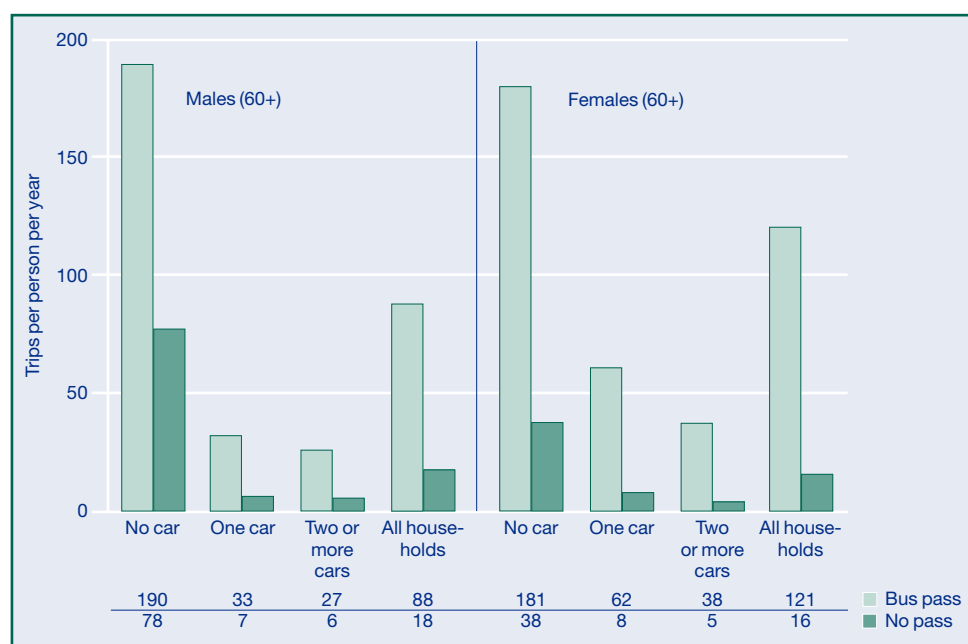
Not surprisingly, the heaviest users of buses are those who have a bus pass, in households without a car. Men in this group made an average of 190 bus trips a year in 2002/03,

Table 4.4 Travel characteristics of older people (60+): 1992/94 and 2002/03

Personal car accessibility	Percentage											
	Males						Females					
	60-64	65-69	70-74	75-79	80-84	85+	60-64	65-69	70-74	75-79	80-84	85+
1992/94												
In a household with a car:												
Main driver	68	64	55	46	36	20	21	17	12	8	6	1
Other driver	6	5	4	3	2	2	15	13	7	4	2	2
Non-driver	4	4	4	3	8	8	31	26	27	19	13	13
No household car	22	27	37	48	54	70	32	44	54	70	79	84
All households	100	100	100	100	100	100	100	100	100	100	100	100
2002/03												
In a household with a car:												
Main driver	70	73	67	56	47	28	36	30	24	18	14	6
Other driver	11	8	8	6	6	6	21	20	11	7	4	1
Non-driver	3	3	4	6	6	9	22	24	23	22	14	16
No household car	15	16	21	32	42	57	22	26	41	53	68	77
All households	100	100	100	100	100	100	100	100	100	100	100	100
2002/03												
Proportion with bus pass	–	46	56	61	65	49	53	61	66	68	67	52

* In June 2001, a statutory minimum half fare scheme became available for all women aged 60+ and all men aged 65+ in England. This was expanded to include all men aged 60+ in April 2003.

Chart 4.14 Bus use by household car ownership and bus pass availability, aged 60+: 2002/03



compared with men in two car households without bus passes, who average only 6 trips a year. The pattern for women is similar. Overall, women aged 60 and over make more bus trips, as more live in households without a car.

Cars used by men and women

Table 4.5 shows details of usage of the cars, according to the gender of the main driver. More than one in four women's cars average less than 5 thousand miles a year, compared with one in five of men's cars. At the other end of the scale, less than one car in ten used mainly by a women averages more than 15 thousand miles a year, compared with around one in five for men's cars.

Annual mileage is about a quarter lower for women. On average, men drive further as commuters and on business (more than three times as far), but the private use of cars by men and women differs less.

Table 4.5 Characteristics of cars used by men and women: 2002/03

	Percentage/miles	
	Males	Females
Average annual mileage		
<5,000	21	27
5,000–6,999	17	22
7,000–8,999	13	14
9,000–11,999	18	19
12,000–14,999	12	10
15,000+	19	8
All mileage	100	100
Mileage by purpose		
Commuting	3,000	2,300
Business	1,700	500
Private	5,300	4,900
Total	10,000	7,700
Commuting	30	30
Business	17	6
Private	53	64
Total	100	100

Chapter 5 Social inclusion and accessibility

In 2002/03:

- People in households with a car made around 50 per cent more trips than people living in households without a car. Those in households with one car travelled more than twice the distance of those in households without a car, and those households with two or more cars did over three times the distance of those without a car.
- The lowest levels of household car ownership were in single pensioner households, where around two thirds were without a car, and lone parent families, where half did not own a car. The highest levels were in households with three or more adults and households with two or more adults with children.
- About half of trips in households with no car were on foot, compared with a quarter in one car households, and one in six in households with two or more cars. Even in households without cars, 16 per cent of trips were by car (mostly as passengers).
- Compared with 1992/94 car ownership rose in all income quintile groups. The proportion of households in the lowest income quintile with a car rose from 33 to 41 per cent. The proportion of households with two or more cars increased across all income quintiles.
- About a fifth of households without access to a car had some difficulty accessing supermarkets and doctors.
- In the 10 per cent most deprived areas of the country, around 55 per cent of households did not have access to a car. Residents made three quarters of the trips and travelled less than half of the distance of those in the 10 per cent least deprived areas.
- Mobility difficulties increased with age. 48 per cent of people aged 70 and above reported some difficulty, compared with 6 per cent of those aged less than 50. Of those with mobility difficulty, 10 per cent did not record any trips in their travel week, increasing to 15 per cent for those aged 70 and above.
- In 2001, a fifth of households of Indian origin did not have access to a car compared with a quarter of households of white ethnic origin and almost half of black origin. In 2003, 72 per cent of people of white ethnic origin travelled to work by car compared with about 60 per cent of Indian, Pakistani or Bangladeshi origin and 46 per cent of people of black origin. These differences may reflect geographical variations in areas of residence and workplace.
- Theft from vehicles was the most common vehicle crime, affecting around 7 per cent of vehicle owning households, and overall around 11 per cent experienced some vehicle crime.

Introduction

A socially inclusive society is one with sustainable communities and a good quality of life for its members, including those from disadvantaged groups. Work, education, health, shopping and leisure activities are some of the factors which can affect our quality of life, and transport is a key element in our ability to access these. Different sections of society have differing travel needs, some of which may depend on physical mobility, and have varying access to different modes of transport, such as cars and public transport.

This chapter provides some insight into the travel aspects of social inclusion and accessibility. Car access, which is a major factor affecting access to facilities, is looked at in

some detail. Other factors such as type of household, income, ethnic group and area type illustrate the variations in the total amount and types of travel made by individuals.

The chapter also covers the quality of public transport; ease of access to facilities; people who do not travel; people with mobility difficulties; and vehicle crime. Sources used in addition to the NTS include the Survey of English Housing, the Labour Force Survey, the 2001 Population Census and the British Crime Survey.

Travel by car availability and personal car access

Access to cars is the most important factor affecting travel patterns. Members of car owning households of all ages travel more than those in non-car owning households. There are also significant differences in travel between people within car owning households according to whether they drive or not (Table 5.1).

Personal access to cars is an important factor affecting travel patterns. In the NTS, personal access to a car is assessed by allocating a 'main driver' to each identified household car – this is the person who does the most mileage in that car. Other people in the household who also use the car are referred to as an 'other driver'. So, in a household with two cars, there may be two different main drivers, one for each vehicle.

Table 5.1 Variations in travel by household car availability and personal car access: 2002/03

	Trips/miles/hours		
	All persons		
	Trips per person per year	Distance per person per year (miles)	Time per person per year (hours)
Persons in households with:			
No car	724	2,845	291
One car	1,031	6,518	358
Two or more cars	1,106	9,329	404
Persons in households with a car			
Main driver	1,199	9,952	432
Other driver	1,010	7,900	389
Non driver	889	4,683	297
All with a car	1,066	7,842	380
All persons	998	6,855	362

In 2002/03, people in households with a car made around 50 per cent more trips than people living in households without a car. In car owning households, the non-drivers made fewer trips than drivers, though these non-drivers still made about 25 per cent more trips than people in households without a car. A similar pattern was present for distance, though the differences were more marked. Those in non-car owning households did around a third of the distance of those individuals in car owning households. Interestingly, when we consider time spent travelling, the variation is not as marked. Although those in car owning households travel much further, they do not spend proportionately as much time travelling, as their extra travel is mostly by car, rather than the slower modes of bus and foot, which are more frequently used amongst people in households without cars (Chart 5.1 & Table 5.1).

The number of cars a household owns also has an impact on the average distance travelled. In 2002/03, those in households with one car travelled more than twice the distance of those in households without a car. The average distance is even greater in households with two or more cars where over 3 times the distance is made each year (Chart 5.2 & Table 5.1).

Chart 5.1 Travel variations by personal car access: 2002/03

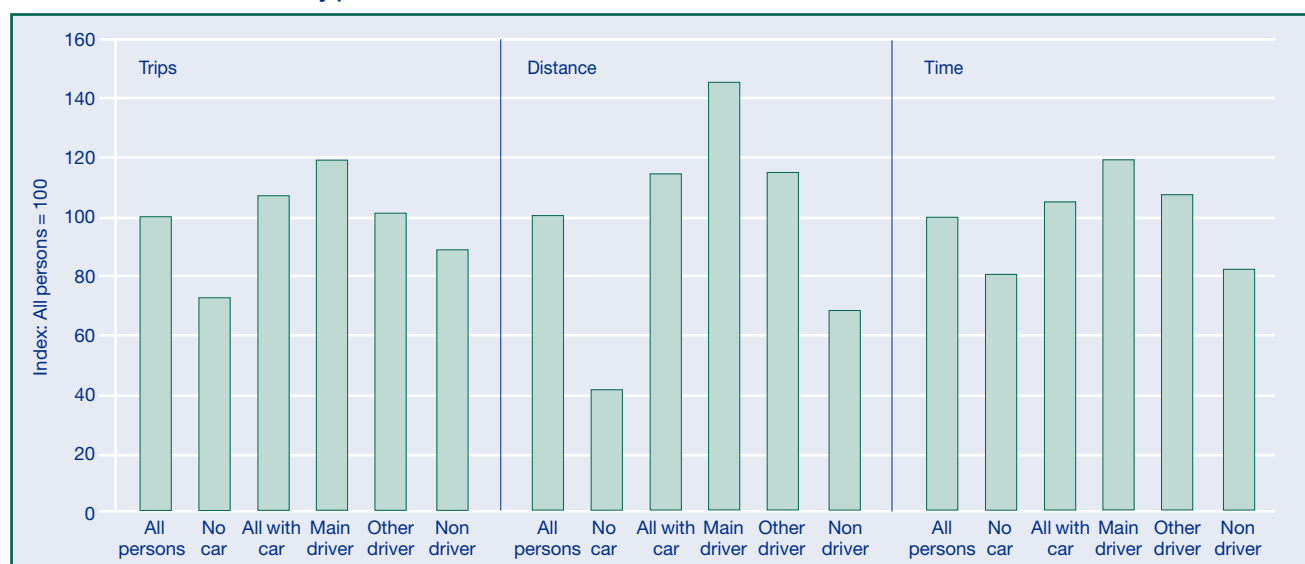
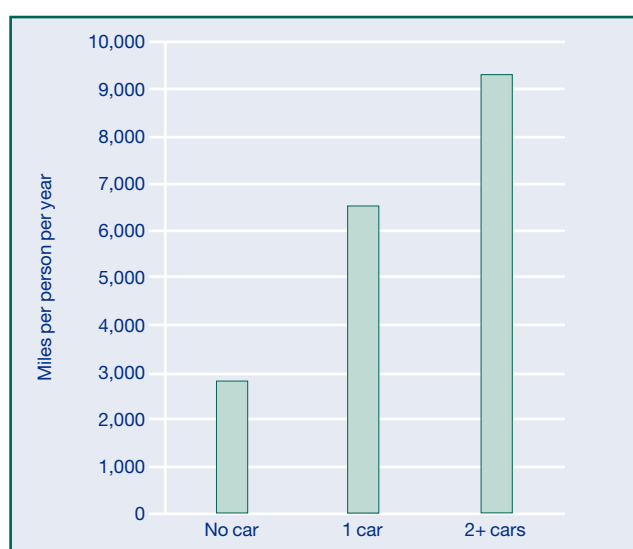


Chart 5.2 Distance travelled by household car availability: 2002/03



Household car availability by household type

In 2002/03, around a quarter (27 per cent) of households did not have a car, almost a half (44 per cent) had one car and the remainder (29 per cent) had two or more. However, this share varies considerably by household type. The lowest levels of household car ownership are in single pensioner households, where around two thirds are without a car, and lone parent families, where half do not own a car. The highest levels are in households with three or more adults and households with two or more adults with children (Chart 5.3).

Levels of car ownership amongst pensioners and lone parent families in 2002/03 are significantly greater than in the previous decade. During the 1990s, for both pensioners and lone parent families, the proportion of households without a car has fallen from around two thirds to around a half. In the same time period there has been a small fall in the proportion of all households without a car (Chart 5.4).

Although there has been little change in the proportion of two parent households without a

Chart 5.3 Household car availability by family structure: 2002/03

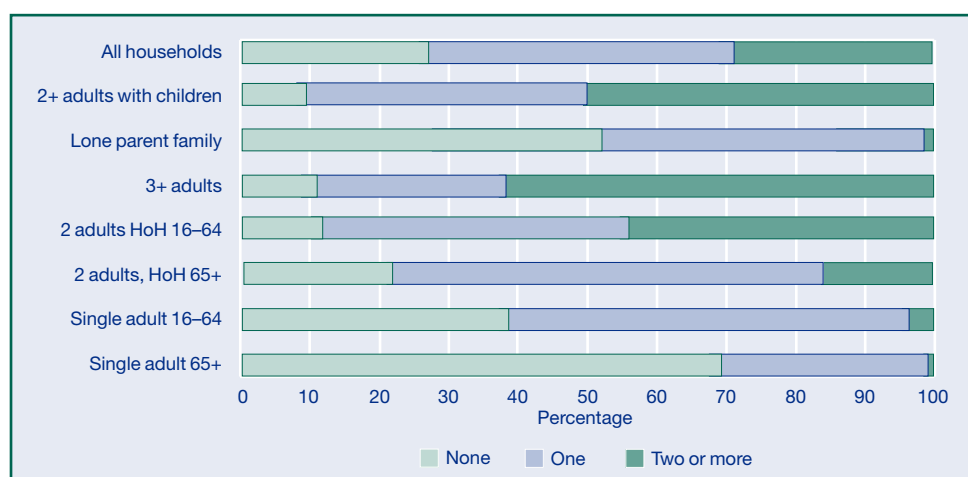


Chart 5.4 Households with no cars: 1990–2002

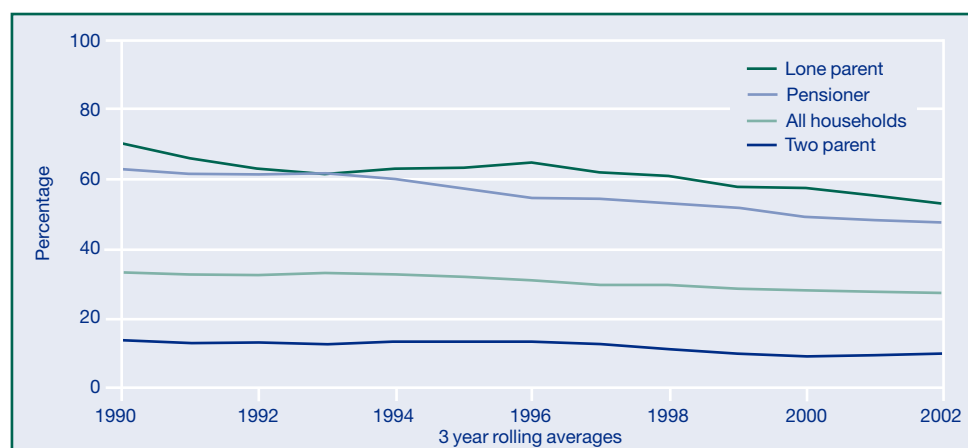
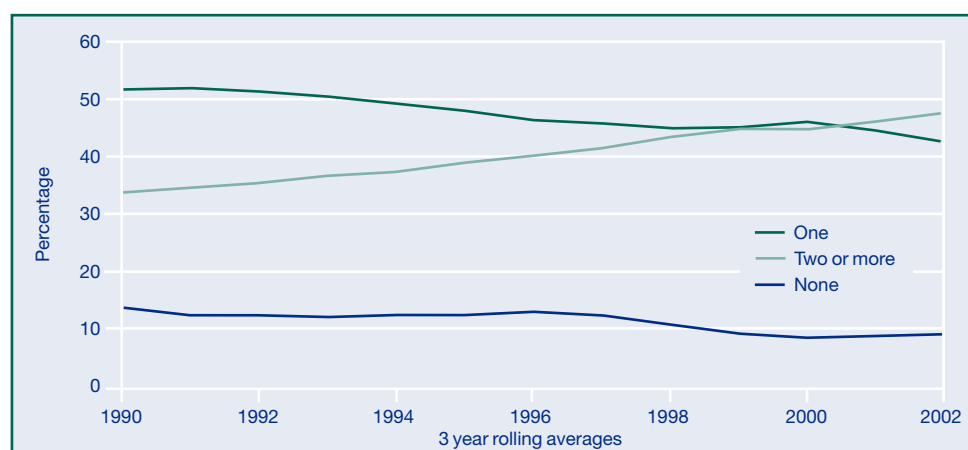


Chart 5.5 Two parent households' car availability: 1990–2002



car over the last decade there has been a significant shift from one car to two or more cars. During the 1990s the proportion with two or more cars increased from a third to around a half (Chart 5.5).

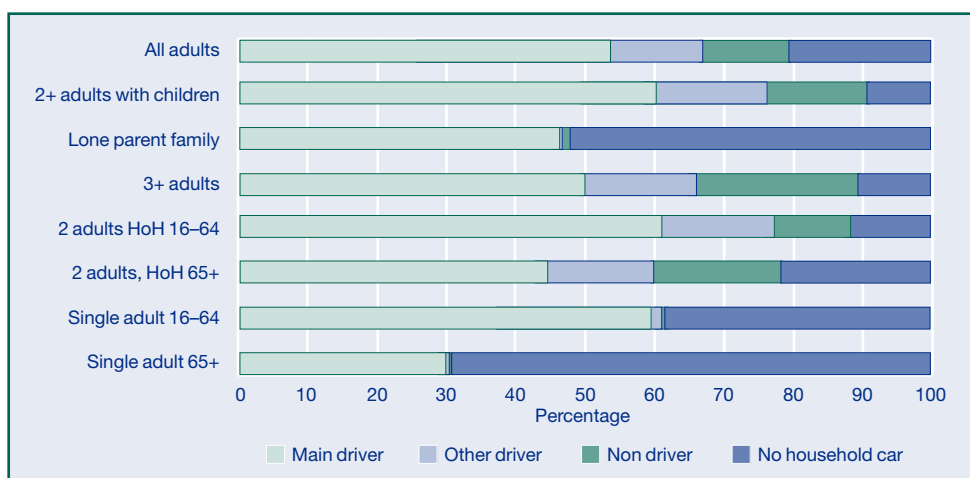
Personal car access by household type

Personal access to cars varies considerably between different household types (Table 5.2, Chart 5.6). As would be expected there is a relationship between individual access and household car ownership when both are analysed by household type.

In households with two adults of a working age, 61 per cent of adults were 'main drivers' and

16 per cent were 'other drivers'. The level was similarly high, around 60 per cent, in households with two or more adults with children, and those with a single adult of a working age.

Chart 5.6 Personal car access by household type (age 17+): 2002/03



There has been a large increase in personal car access amongst pensioners in the last decade, which is related to the rise in car ownership described above. Just 19 per cent of single adults of a pensionable age had access to a car in 1992/94, but in 2002/03 this had risen to 30 per cent (Table 5.2).

Table 5.2 Personal car access for 17+ year olds by household type: 1992/94 and 2002/03

		Persons in households with a car				Percentage
	Persons in households without a car	Main driver	Other driver	Non driver	All	All persons
1992/1994						
Single adult 65+	81	19	–	–	19	100
Single adult 16–64	48	52	–	–	52	100
2 adults, HoH 65+	36	34	10	19	64	100
2 adults HoH 16–64	14	58	15	13	86	100
3+ adults	13	48	16	22	87	100
Lone parent family	62	37	–	–	38	100
2+ adults with children	12	56	17	15	88	100
All households	25	48	13	14	75	100
2002/2003						
Single adult 65+	69	30	–	–	31	100
Single adult 16–64	39	60	1	–	61	100
2 adults, HoH 65+	22	45	15	18	78	100
2 adults HoH 16–64	12	61	16	11	88	100
3+ adults	11	50	16	23	89	100
Lone parent family	52	46	–	1	48	100
2+ adults with children	10	60	16	14	90	100
All households	20	54	13	13	80	100

Income and car availability

Income and car availability are clearly related. Chart 5.7 illustrates how significant the relationship is, and how this has changed since the early nineties.

From 1992/94 to 2002/03, car ownership rose in all income quintile groups. The proportion of households in the lowest income quintile with a car rose from 33 to 41 per cent. The proportion of households with two or more cars increased across all income quintiles (Chart 5.7).

Chart 5.7 Household car availability by income quintile: 1992/94 and 2002/03



Travel purpose and mode

In earlier sections of this chapter it was noted that those in households without cars did less trips than those with cars and that car ownership was higher among people of a working age. This is borne out by Table 5.3 which shows that those with cars make significantly more commuting, business and escort trips. Also, people in households without a car make far fewer leisure trips, which may mean they are more socially isolated. The number of shopping trips does not appear to depend on car availability.

In pensioner households, those without a car do far fewer trips to visit or meet friends and for other leisure purposes than those with a car. Amongst adults of a working age without children, commuting and business trips account for a greater proportion of trips compared with all other households (Table 5.3).

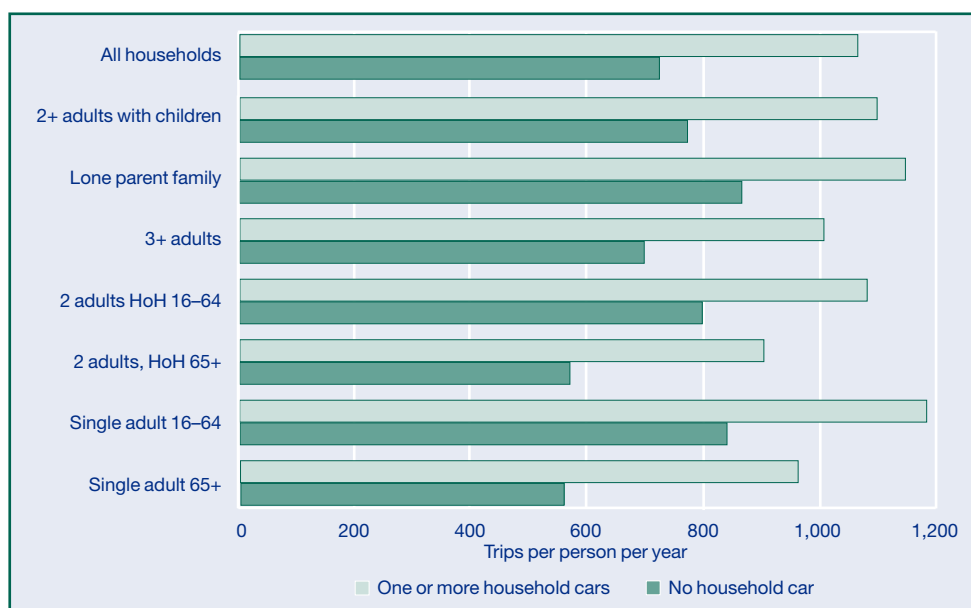
Overall, those in car owning households made 47 per cent more trips than those in households without cars. This difference varies across household types. The biggest difference was for single pensioner households, where those with a car made 72 per cent more trips than those without cars (Chart 5.8).

Clearly household car availability impacts upon the mode of transport an individual will

Table 5.3 Trip purpose by car availability and household type: 2002/03

	Percentage/number							
Trips per person per year	Single adult 65+	Single adult 16–64	Two adults, Hoh 65+	Two adults Hoh <65	Three or more adults	Lone parent family	Two+ adults with children	All persons
No household car								
Commuting and business	1	24	4	31	27	5	14	14
Education	–	2	–	3	11	17	17	8
Shopping	40	27	46	24	26	17	17	27
Escort	1	2	2	2	1	22	18	9
Other personal business	22	12	20	8	9	7	8	12
Visit or meet friends	18	21	12	18	17	22	17	18
Other leisure	17	13	16	14	10	9	8	12
All purposes	100	100	100	100	100	100	100	100
All purposes (number)	560	842	570	799	699	868	775	724
One or more household cars								
Commuting and business	3	31	5	31	31	8	16	21
Education	–	–	–	–	4	15	11	6
Shopping	30	19	34	21	19	11	14	19
Escort	6	5	8	7	8	26	23	15
Other personal business	19	10	17	9	8	6	7	9
Visit or meet friends	21	20	17	16	16	21	15	16
Other leisure	21	15	20	15	14	11	13	14
All purposes	100	100	100	100	100	100	100	100
All purposes (number)	964	1,186	905	1,084	1,009	1,151	1,100	1,066

Chart 5.8 Travel by car availability and household type: 2002/03



use, and this is not just for the number of car trips. Chart 5.9 illustrates the difference car availability creates.

Figures for 2002/03 show that even in households without a car around 16 per cent of trips were made by car, though the figure is much higher in car owning households. In one car households 66 per cent of trips were by car, whilst it was 78 per cent in households with two or more cars. There was a much greater use of taxis in households without a car, some 4 per cent of trips, four times as many as in car owning households. About half of trips in households with no car were on foot, compared with a quarter in one car households, and one in six in households with two or more cars. Bicycle use is not significantly higher in

Chart 5.9 Travel by household car availability and main mode of transport: 2002/03

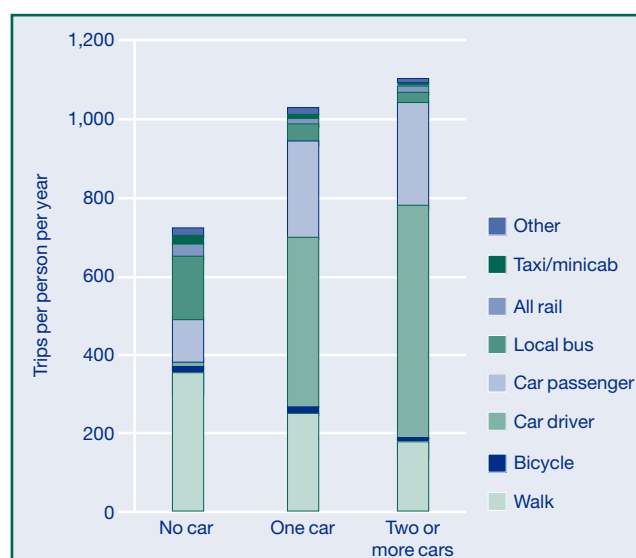


Table 5.4 Trip purpose by car availability and mode of travel: 2002/03

										Trips
Trips per person per year	Walk	Bicycle	Car driver	Car passenger	Other private	Local bus	Surface rail/under-ground	Taxi/minicab	Other public	All modes
No household car										
Commuting and business	28	6	3	12	3	29	13	3	1	98
Education	38	1	–	3	2	13	2	1	–	60
Shopping	98	3	1	24	1	55	2	7	2	193
Escort	42	–	1	7	–	10	–	2	–	64
Other personal business	45	1	1	14	2	20	2	4	–	88
Visit or meet friends	56	2	2	34	1	25	5	8	1	134
Other leisure	48	2	1	15	2	11	4	3	2	88
All purposes	355	16	10	109	11	162	28	28	6	724
One or more household cars										
Commuting and business	20	6	151	20	3	8	9	1	1	219
Education	26	1	2	23	4	9	1	–	–	66
Shopping	39	2	102	46	1	7	1	–	–	198
Escort	27	1	91	41	–	1	–	–	–	161
Other personal business	21	1	45	25	1	2	1	–	–	96
Visit or meet friends	33	2	69	59	1	4	2	3	–	172
Other leisure	52	3	48	43	2	2	2	1	1	154
All purposes	216	14	508	257	12	33	16	7	2	1,066

households without a car. In households without cars, buses were used quite a lot, for 22 per cent of trips, whilst bus use was low in households with cars, at less than 5 per cent of trips.

In households without a car, people were most likely to go by bus or walk for commuting and business trips and for shopping. In car owning households cars are much more likely to be used for these activities (Table 5.4).

We have shown that people with access to a car travel more and further (Chart 5.1) and we have seen that income is a significant factor in determining household car ownership (Chart 5.7). Thus, it is not surprising that higher income households make on average more trips and travel further on each trip, although they don't spend proportionately more time per trip. However, it is interesting to see that when these measures are disaggregated by car

ownership for both those with, and those without a household car, the relationship between income and travel holds in both cases (Charts 5.10a, b, & c)

For car owning households the relationship is in part due to there being more multiple car owning households in the higher income quintiles. The pattern amongst non-car owning households is more interesting, where the number of trips per person per year, distance per trip and trip time all increase with income, suggesting that it is not solely car ownership which accounts for the extra trips by those in higher income groups. The proportionate increase in time is due to the extra trips being on foot and by public transport.

Chart 5.10a Trips by income quintile and household car availability: 2002/03

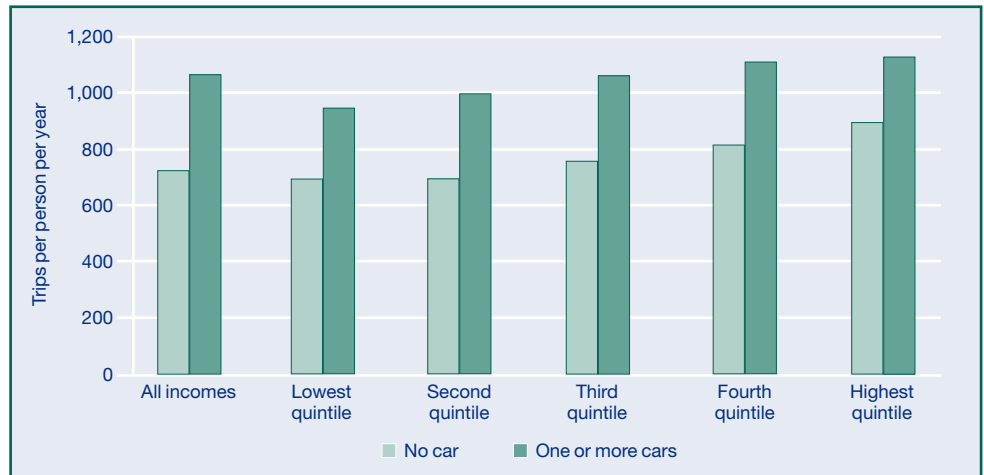


Chart 5.10b Mean trip length by income quintile and household car availability: 2002/03

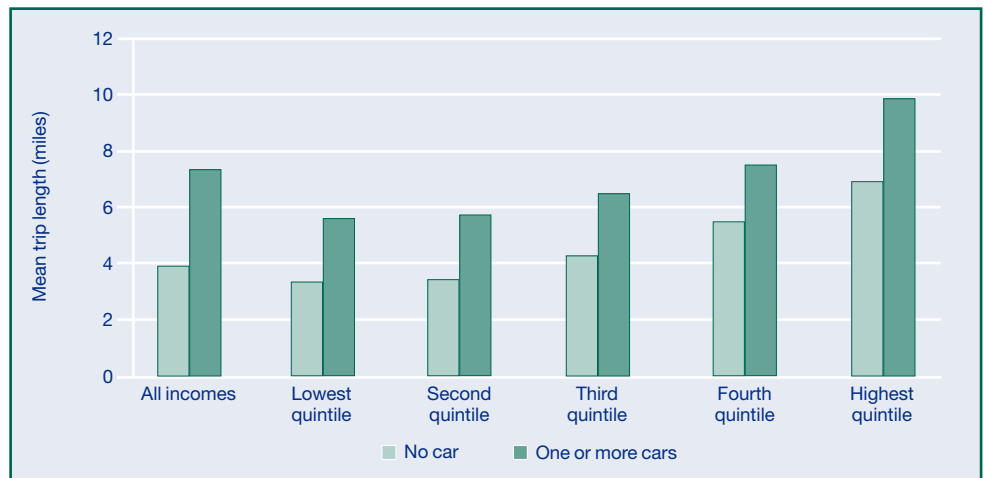
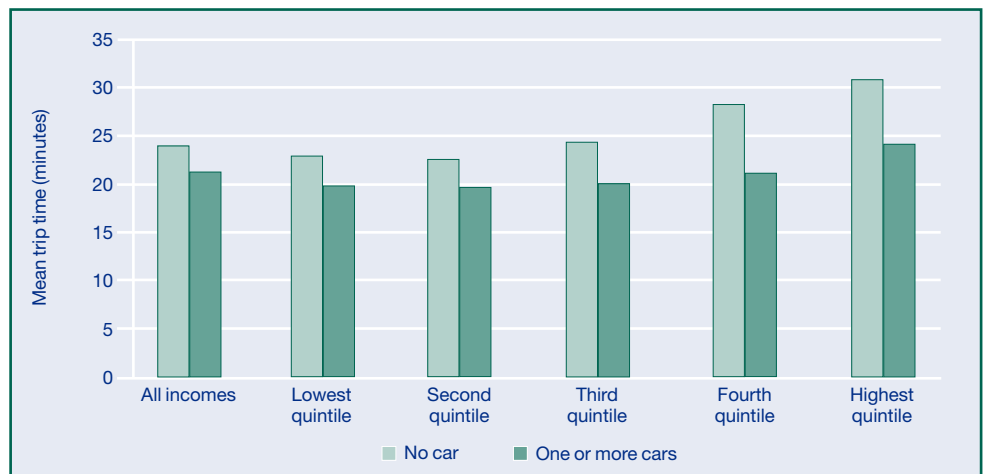
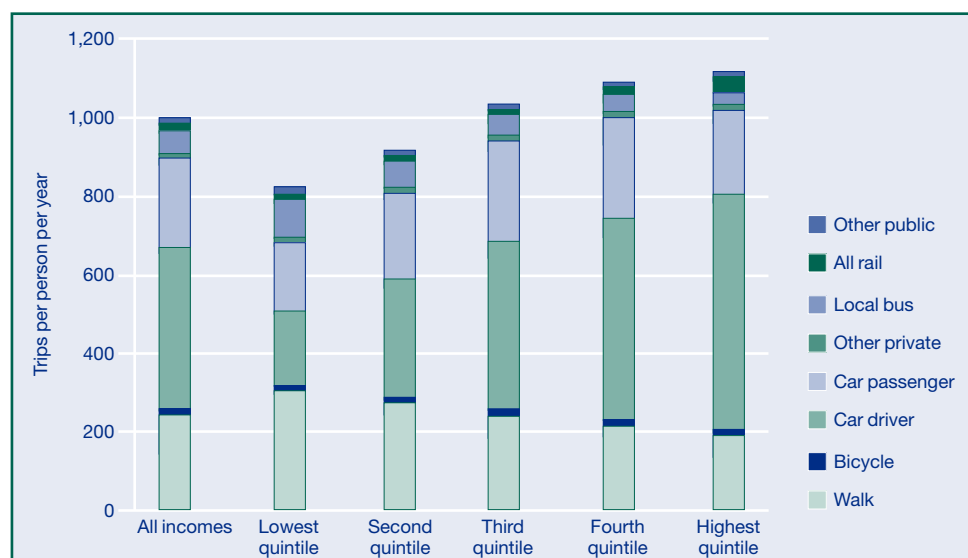


Chart 5.10c Trip time by income quintile and household car availability: 2002/03



Those people living in the lowest income quintile make the most trips on foot. In each of the income quintiles, most trips are made by car. With increasing income car use increases, and the number of trips on foot and by bus decline. Rail use (including London Underground) is highest in the highest income quintile (Chart 5.11).

Chart 5.11 Mode of transport by income quintile: 2002/03



Access to bus and rail services and local facilities

Public transport use varies with access to and frequency of service. In 2002/03, people with a very good bus service (within a 6 minute walk of a service running at least every quarter of an hour) averaged 90 trips per year by bus, whereas those with a poor service (over 13 minutes walk from a service running less than once an hour) made just 10 bus trips per year (Table 5.5a). For rail, a similar pattern occurs. People living within 6 minutes walk of a service which is frequent all day made on average 51 trips per year, compared with 6 trips a year for those with a less frequent service which is above 27 minutes walk away (Table 5.5b).

In 2002, around two thirds of households said they lived within 26 minutes walk of their doctor and 85 per cent could walk to their nearest chemist in this time (Table 5.6). As would be expected far fewer households are within such a close walk of their nearest

Table 5.5a Bus use by access to bus services: 2002/03

	Percentage of people/trips							
	Walk time to nearest bus stop							
	Percentage of people				Bus trips per person per year			
	6 minutes or less	7–13 minutes	More than 13 minutes	All walk times	6 minutes or less	7–13 minutes	More than 13 minutes	All walk times
Service frequency:								
Less than once an hour	5	1	1	8	20	15	10	18
At least hourly	16	2	1	19	37	28	15	34
At least half hourly	33	3	1	37	51	49	27	51
At least quarter hourly	33	3	–	36	90	82	77	89
All frequencies	87	9	4	100	61	50	24	59

hospital, around 20 per cent were within 26 minutes walk in 2002. In general access to food stores is better, 81 per cent of households were within a 13 minute walk in 2002/03.

As indicated above doctors, chemists, food stores and post offices are generally within a reasonable walking distance and for each of these most households said there was no bus available or it was quicker to walk. For hospitals, around half of households were 27 minutes or more away by bus (Table 5.7).

Table 5.5b Rail use by access to rail services: 2002/03

	Percentage of people/trips									
	Walk time to nearest rail station									
	Percentage of people					Rail trips per person per year				
	6 minutes or less	7–13 minutes	14–26 minutes	More than 27 minutes	All walk times	6 minutes or less	7–13 minutes	14–26 minutes	More than 27 minutes	All walk times
Service frequency:										
Frequent service all day	5	9	22	52	88	51	42	24	11	19
Other service	1	1	3	7	12	30	14	13	6	9
All frequencies	6	10	25	60	100	48	38	22	10	18

Table 5.6 Time taken to walk to local facilities: 2002/2003¹

	Percentage of households					
	Doctor 2002	General Hospital 2002	Chemist 2002	Food store 2002/2003	Post office 2003	Shopping centre 2003
6 minutes or less	16	2	31	56	40	10
7–13 minutes	20	4	28	25	32	16
14–26 minutes	31	13	26	13	21	32
27–43 minutes	14	14	7	3	4	17
44 minutes or more	18	66	9	3	2	25
Total	100	100	100	100	100	100

1. Questions asked on alternate years, the latest year asked is shown.

Table 5.7 Time taken to travel by bus to local facilities: 2002/03¹

	Percentage of households					
	Doctor 2002	General Hospital 2002	Chemist 2002	Food store 2002/2003	Post office 2003	Shopping centre 2003
No bus/quicker to walk	50	15	62	78	77	28
6 minutes or less	13	3	16	12	11	9
7–13 minutes	13	9	11	6	8	22
14–26 minutes	15	25	8	3	4	29
27–43 minutes	6	24	2	1	1	9
44 minutes or more	3	25	1	–	–	3
Total	100	100	100	100	100	100

1. Questions asked on alternate years, the latest year asked is shown.

The NTS asks respondents to rate the reliability and frequency of their local buses and trains. Those who did not use trains or buses, had no local service or no opinion were excluded.

The ratings of bus and rail services were similar with four fifths saying their public transport mode was reliable or frequent (Chart 5.12). Less than a tenth said it was very unreliable or very infrequent whilst over a fifth stated they had a very reliable and very frequent service.

The Survey of English Housing (SEH) collects information on the ease of access to

Chart 5.12a Frequency of local buses: 2002

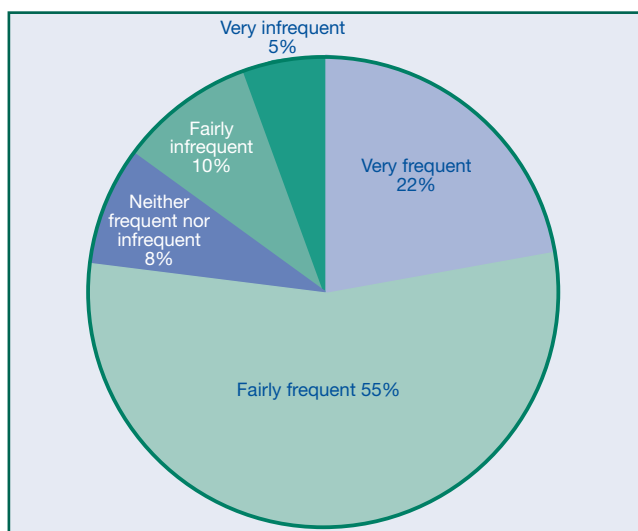


Chart 5.12b Reliability of local buses: 2002

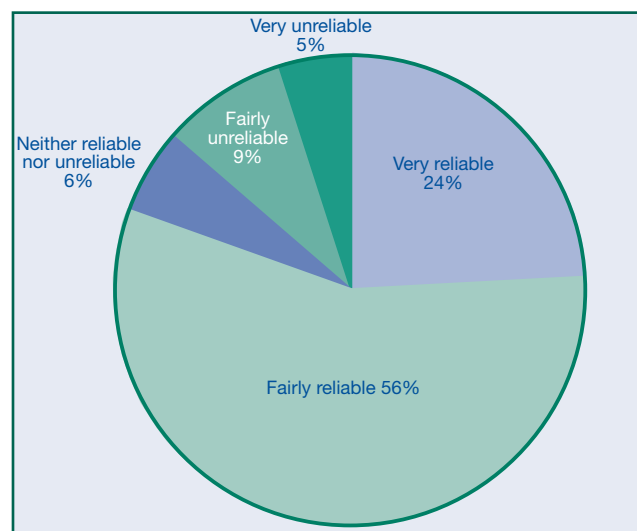


Chart 5.12c Frequency of all rail services: 2002

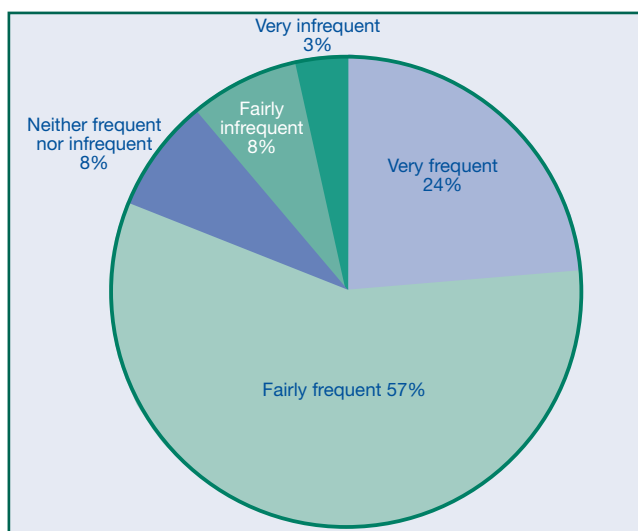
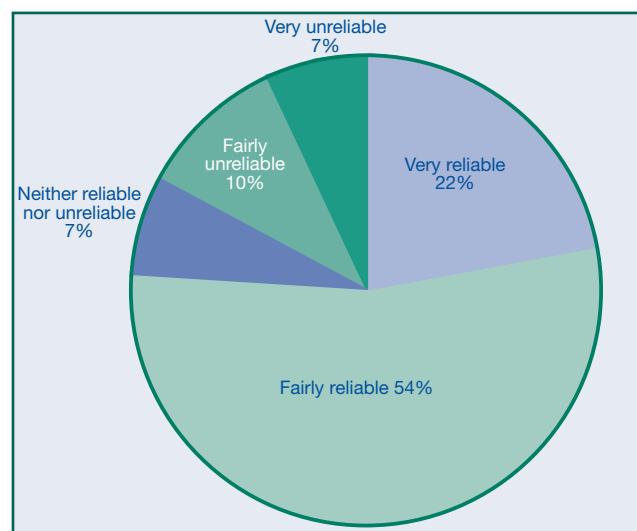


Chart 5.12d Reliability of all rail services: 2002

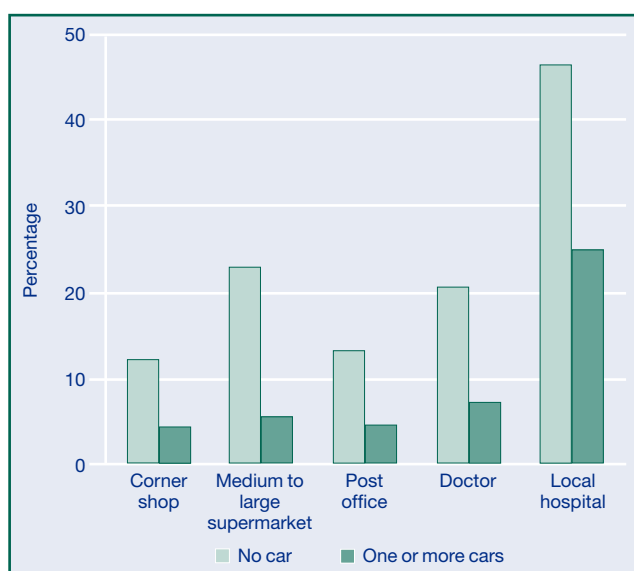


facilities, which can be disaggregated by household car ownership (Chart 5.13). The SEH shows that at least 95 per cent of households with the use of a car consider it easy to access the corner shop, supermarket, post office and doctors. In contrast, for households without the use of a car, more had difficulty accessing facilities. In particular, about a fifth of households had some difficulty accessing supermarkets and doctors.

As indicated earlier in this section, the NTS shows hospitals are not easily accessible by foot or bus and this ties in with the SEH where 47 per cent of households without the use of a car, and 25 per cent with the use of a car had some difficulty.

It is interesting to analyse those households with very difficult access to local facilities by age of the Household Reference Person (Table 5.8). Access to hospitals was the rated the most difficult, 22 per cent of households with HRP age 75 and above found it very difficult, whilst around a tenth of all other households found it very difficult.

Chart 5.13 Households with fairly or very difficult access to facilities by car availability: 2002–03



Source: ODPM Survey of English Housing.

Table 5.8 Households with very difficult access to local facilities by age: England 2002–03

All households	Thousands					
	Corner Shop	Supermarket	Post Office	Doctor	Local Hospital	All Households
Age of household reference person						
16–44	91	132	79	158	552	8,224
45–64	118	117	84	125	557	6,626
65–74	87	100	54	86	273	2,525
75 and over	237	288	203	237	544	2,502
All	533	636	420	607	1,926	19,877

Source: ODPM Survey of English Housing.

Neighbourhood characteristics

This section presents two different methods of analysing travel patterns by the characteristics of the local neighbourhood: the ONS area classification code for each

Box 5.1

ONS area classification

The 2001 Area Classification is used to group together geographic areas according to key characteristics common to the population in that grouping. These groupings are called clusters, and are derived using census data. The classification is used by government departments and academics for analysis and comparison, and by members of the public for finding out about where they live and how it compares with the rest of the country. The classification has been produced for Great Britain after each census since 1971. It has been produced for the whole of the UK for the first time after the 2001 census. The classification is available at local authority, ward and health area level, and is based on 2003 boundaries. The area classification comprises 9 super-groups, 17 groups and 26 sub-groups. For this publication the ward level based classification at super group level is used.

Index of Multiple Deprivation 2004

The Index of Deprivation 2004 (IMD 2004) is a measure of deprivation at the Super Output Area (SOA) in England. The model of multiple deprivation which underpins the IMD 2004 is based on the idea of distinct dimensions of deprivation which can be recognised and measured separately. The IMD 2004 contains seven domains of deprivation: Income deprivation; Employment deprivation; Health deprivation and disability; Education, skills and training deprivation; Barriers to Housing and Services; Living environment deprivation and Crime. IMD 2004 combines indicators in each of the domains into a single deprivation score for each SOA. Each SOA is ranked according to an overall deprivation score, and the ranking list divided into 10 equal groups, or deciles. Fuller details may be found at: <http://www.odpm.gov.uk/indices>

household (based on the postcode) and the deprivation index for households in England (IMD2004). These are described in more detail in Box 5.1.

Using the ONS area classification we can illustrate the substantial differences in household car availability between different areas (Chart 5.14). In 2002/03, the highest levels of car availability were in 'Accessible countryside' areas and 'Suburbs and small towns', with 94 and 83 per cent of households owning at least one car respectively. The lowest levels of car ownership were in 'Multicultural metropolitan' and 'Prospering metropolitan' areas where around half of households did not have access to a car. Many of these areas are in London where car availability is low – see Chapter 6.

Chart 5.14 Household car availability by ONS area classification: 2002/03

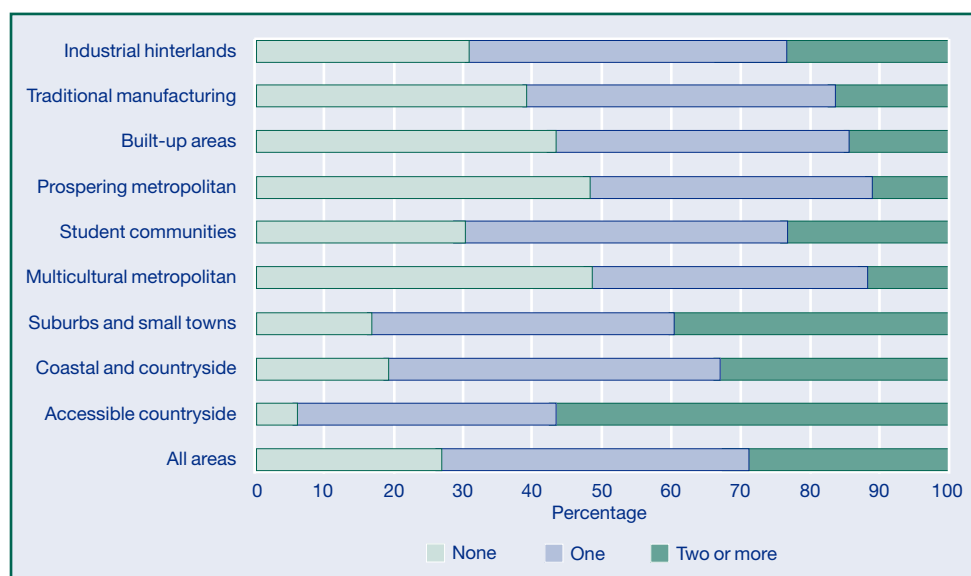


Chart 5.15 shows trips by mode for each of the ONS area categories. As perhaps would be expected the areas with the highest car ownership, 'Accessible countryside' and 'Suburbs and small towns', make the most trips. Despite 'Prospering metropolitan' areas having low car ownership, people in these areas made a similar number of trips to the national average. The reason for this is that of all the areas, 'Prospering metropolitan' walk the most (37 per cent of trips) and make the most use of public transport (25 per cent of trips). Those people

Chart 5.15 Mode of transport by ONS area classification: 2002/03

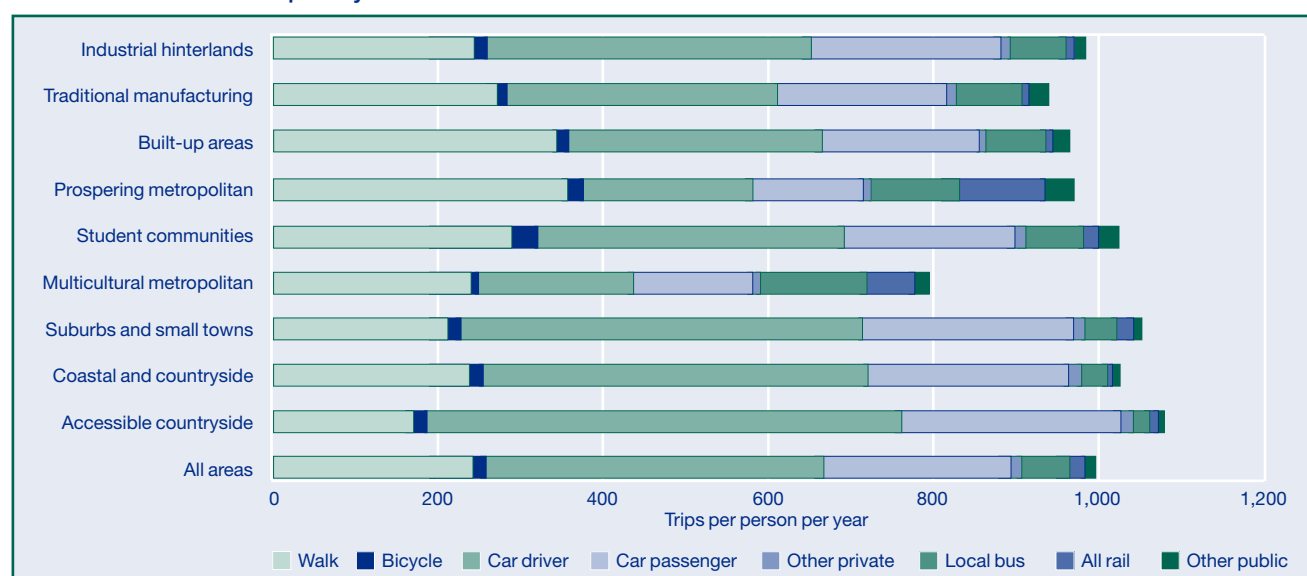
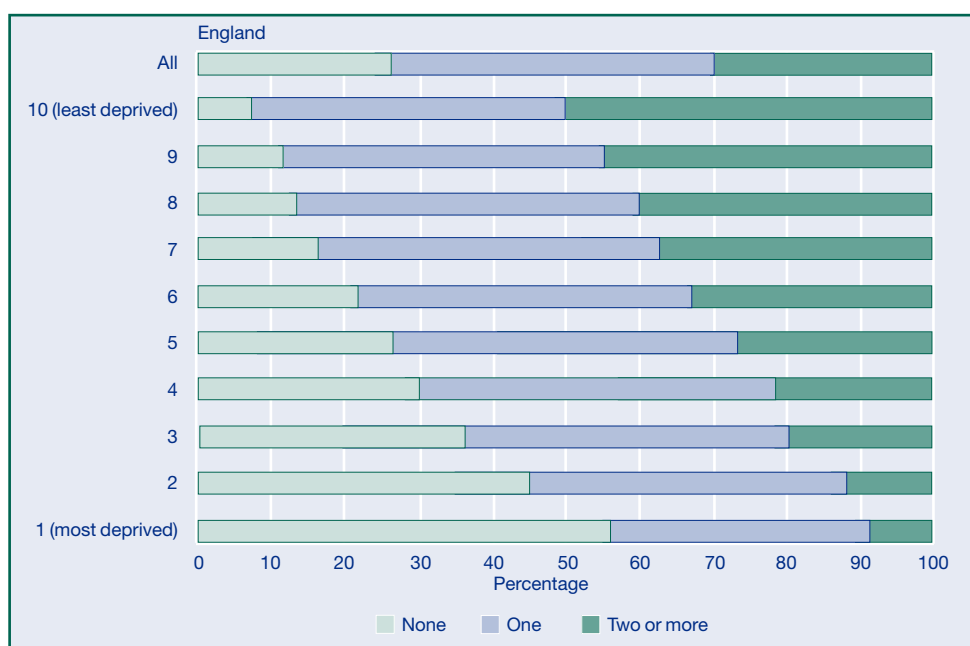


Chart 5.16 Household car availability by Index of Multiple Deprivation: 2002/03



in 'Multicultural metropolitan' areas, make the fewest trips, 20 per cent less than the national average.

Chart 5.16 shows car availability according to the overall deprivation decile (England only). There is a clear relationship between the deprivation level and household car ownership. In the most deprived areas around 55 per cent of households did not have access to a car. Just 7 per cent of households in the least deprived area did not have access to a car.

Table 5.9 Travel characteristics by ward deprivation decile: England, 2002/03

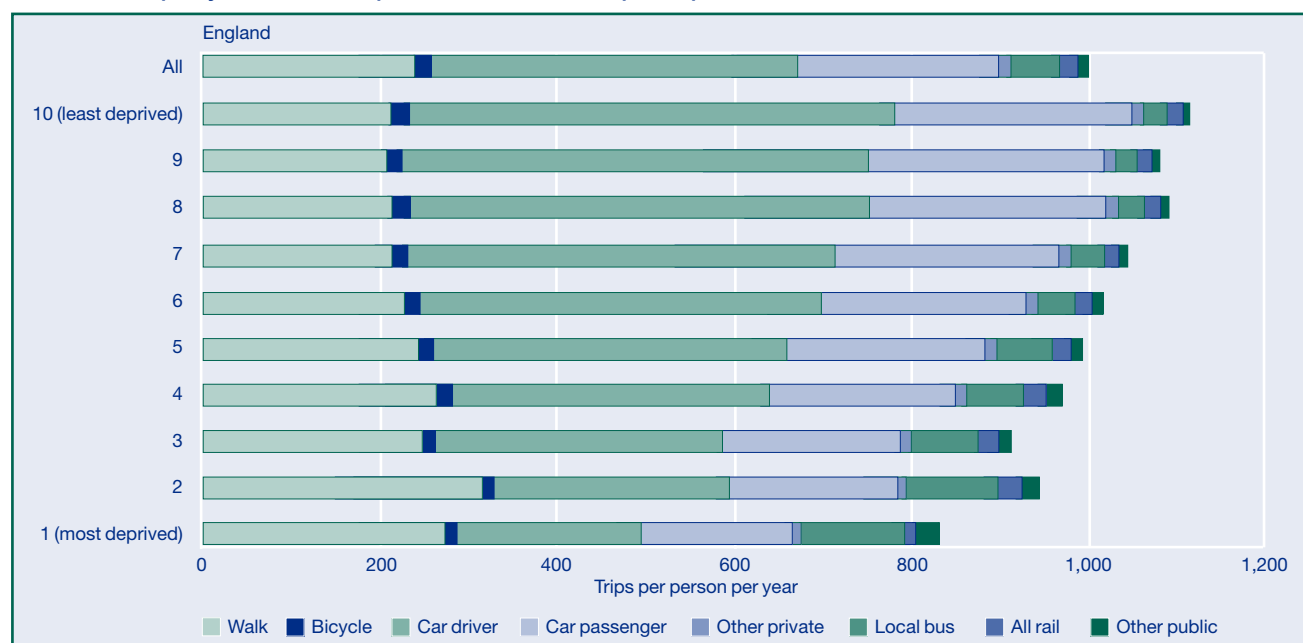
England	Percentage/number/miles/hours										
	Ward decile of Index of Multiple Deprivation										All
	1 (most deprived)	2	3	4	5	6	7	8	9	10 (least deprived)	
Trips per person per year:											
Commuting, business and education	24	26	26	27	26	25	26	25	26	25	26
Escort	14	15	14	13	13	14	14	14	15	15	14
Shopping and personal business	32	30	29	29	30	30	28	29	28	28	29
Leisure	30	28	30	30	30	31	32	31	31	31	30
All trips	100	100	100	100	100	100	100	100	100	100	100
All trips (number)	832	945	913	970	994	1,016	1,045	1,091	1,080	1,114	1,002
Average distance per person per year (miles):											
All trips	3,720	4,382	5,423	6,148	6,390	7,414	8,101	8,621	8,516	9,479	6,883
Average time spent travelling per person per year (hours):											
All trips	297	336	340	364	362	375	389	397	384	411	366

The latest figures for England in 2002/03 show those people in the most deprived areas make far less trips than those in the least deprived areas, around a quarter less on average for each person. Interestingly, the distribution of the trips by broad trip purpose, given in Table 5.9, shows little variation across the deciles. For distance, the disparity across deciles was even greater, where individuals in the most deprived areas annually travelled less than half the distance made by those in the least deprived. The extra trips and extra distance made by

those in the least deprived compared with the most deprived was done in proportionately less time, reflecting the high levels of car travel.

Chart 5.17 shows trips by mode and IMD. 2002/03 figures show that as deprivation decreased the number of car trips increased, whilst the number of trips by public transport fell. These relationships reflect the patterns in car availability over the IMD deciles mentioned earlier in this section.

Chart 5.17 Trips by mode of transport and Index of Multiple Deprivation: 2002/03



People who do not travel

Respondents to the National Travel Survey keep a travel diary for seven days, recording all their travel within Great Britain, with the exception of walks of less than a mile. These are only recorded on the last diary day, provided the walk is over 50 yards.

Overall in 2002/03, about 4 per cent of respondents did not record any trips (Table 5.10). This does not necessarily mean they have not left their homes; they may have gone on walk trips of less than a mile on any (or all) of the first six diary days. People may also have been sick, or on a trip outside GB during the travel week. However, the proportion of people who do not make any trips can be an indicator of social exclusion.

It should be noted that the NTS is a household survey, so excludes people living in communal establishments because of age or disability, who are less likely to travel than the majority of the household population.

The proportion of people who make trips in their travel week is roughly the same for men and women up to the age of 69. Women aged 70 and over are less likely to make trips than men. 10 per cent of women in this age group did not make a trip in their travel week, compared with 8 per cent of men. This is partly because the sample contains more very elderly women (over 80) than very elderly men, and very elderly people are less likely to make trips.

Table 5.10 also shows the proportion making trips for social and entertainment purposes,

Table 5.10 People making trips¹ in travel week, by age and gender: 2002/03

	Percentage					
	All trips			Social and entertainment trips		
	Male	Female	All people	Male	Female	All people
Under 17	97	97	97	80	80	80
17–20	95	97	96	80	82	81
21–29	96	97	97	78	81	79
30–39	98	98	98	78	81	80
40–49	97	98	98	78	80	79
50–59	97	97	97	77	79	78
60–69	97	97	97	79	81	80
70 or over	92	90	91	69	63	65
All people	96	96	96	78	78	78

1. Excludes short walks on days 1 to 6 of travel week – see text.

which gives some indication of their involvement in the community. This includes trips to visit family and friends, both at home and elsewhere, trips to take part in or watch sport, and entertainment trips. Overall, 78 per cent of people made trips of this type in their travel week, falling to 63 per cent for women aged 70 and over.

Table 5.11 shows the proportion of people in England who recorded trips for different purposes, according to the deprivation decile of their ward. 6 per cent of people in the most deprived areas did not record any trips, compared with 3 per cent for all people.

Some trip purposes showed a wide variation by IMD decile, especially for leisure activities. For example, people in the lowest decile were only about half as likely to make a trip for sports and entertainment as people in the highest decile. Other purposes showed less variation, in particular visiting friends at a private home, and education.

Table 5.11 People making trips¹ in travel week, by purpose and deprivation decile: 2002/03

England											Percentage
	Index of Multiple Deprivation decile										All
	1 (most deprived)	2	3	4	5	6	7	8	9	10 (least deprived)	
Commuting	26	33	34	38	38	39	40	41	41	42	37
Business	5	8	7	10	10	11	12	13	14	16	11
Education	16	16	15	15	14	13	15	15	16	16	15
Escort education	8	10	9	10	9	10	10	11	13	13	10
Shopping	61	66	65	67	68	71	70	73	70	71	68
Other escort	27	28	31	32	33	35	38	39	39	42	35
Other personal business	40	40	43	46	48	49	50	54	52	54	48
Visit friends at private home	49	50	52	50	49	52	54	55	53	51	52
Visit friends elsewhere	20	22	23	26	28	30	29	29	32	33	27
Sport/entertainment	22	26	27	31	34	35	39	41	40	43	34
Holiday/day trip	13	14	17	20	21	22	23	24	24	28	21
Other including just walk	8	9	10	11	12	13	13	14	14	14	12
All trips	94	96	95	96	96	97	97	98	97	98	97

1. Excludes short walks on days 1 to 6 of travel week – see text.

Mobility difficulties

Respondents to the NTS aged 16 and over are asked ‘Do you have a physical disability or long standing health problem that makes it difficult for you to go out on foot?’ and also ‘... difficult for you to use buses or coaches’. Table 5.13 shows details of people who replied ‘yes’

to either or both of these questions, for the period 2002/03. Again, these are likely to be underestimates of the proportion of the population with mobility difficulties, as people in communal establishments are excluded.

Mobility difficulties increase with age. In 2002/03, 48 per cent of people aged 70 and above reported some difficulty, compared with 6 per cent of those aged less than 50. Of those with mobility difficulty, 10 per cent did not record any trips in their travel week, increasing to 15 per cent for those aged 70 and above (Table 5.12).

In 2002/03, 67 per cent of those who had problems using buses found it difficult to get on and off the bus, 62 per cent found it difficult getting to the bus stop (Table 5.13).

Respondents who had difficulties getting about on foot or by bus were asked whether they knew of special transport services in their area. 41 per cent, said they were aware of a dial-a-ride service and 40 per cent of a hospital car or service. 29 per cent knew of a supermarket bus and 18 per cent of a day centre car or service (Table 5.14).

Table 5.12 People with mobility difficulties, by age and sex: 2002/03

	Percentage				
	Percentage with mobility difficulty			No trips recorded in travel week ¹	
	Male	Female	All people	No mobility difficulty	With mobility difficulty
16–49	5	6	6	2	6
50–59	14	16	15	2	7
60–69	26	26	26	2	6
70+	43	51	48	4	15
All aged 16 and over	15	18	16	3	10

1. Excludes short walks on days 1 to 6 of travel week – see text.

Table 5.13 Travel difficulties because of health or disability: 2002/03

	Percentage/number
Difficulty travelling by foot or by bus	
Difficulty travelling on foot and by bus	8
Difficulty travelling on foot only	8
Difficulty travelling by bus only	1
No travel difficulties	84
All respondents aged 16 and over	100
Difficulties travelling by bus¹	
Getting on or off buses	67
Getting to the bus stop	62
Standing waiting at the bus stop	54
Getting to and from the seat	41
Communicating with the driver/conductor	7
Finding out timetable information	5
Other	13

1. Percentages add to more than 100 as more than one reason can be given.

Table 5.14 Awareness of special transport services in local area for people who have difficulties travelling^{1,2}: 2002/03

	Percentage/number
Dial-a-ride service	41
Hospital car or service	40
Supermarket bus	29
Day centre car or service	18
Community owned minibus	12
Taxi voucher scheme	8
Shared taxi scheme	3
Postbus	1
Other special service	3
Don't know type	3
Not aware of any of these services	21

1. On foot, by bus or getting in or out of car.

2. Percentages add to more than 100 as more than one reason can be given.

Ethnic group

Table 5.15 shows the proportion of households by 0, 1 and 2 or more cars or vans by the ethnicity of the Household Reference Person (HRP). Car ownership is a characteristic of a household rather than an individual, so as a household may include people of different ethnicity, this table uses the ethnicity of the HRP.

Car ownership varies considerably by ethnic group. In 2001, a fifth of households of Indian origin did not have access to a car compared with a quarter of households of White British ethnic origin and almost half of Black origin (Table 5.15).

Part of the explanation may be that some ethnic groups are concentrated in urban areas, where car ownership is lower than the national average. The analysis was repeated for each region, Inner and Outer London and each Metropolitan County. In all the areas, households of Other Black origin have the highest or among the highest percentages of households without a car. However, in the North East region the percentage is 44, while it is 55 for households of Black African origin. Households of Indian origin have the lowest rates of non-car ownership in nearly all areas.

Household composition varies between ethnic groups, and this is likely to distort comparisons of households without cars, as larger households are more likely to have at least one car. For example, 30 per cent of all households consist of a single person, compared with 15 per cent for households of Indian origin and 34 per cent for Other Black origin. Among ethnic groups where there tend to be many households with three or more adults, car ownership may be higher.

Table 5.16 shows details of travel to work for the main ethnic groups. In 2003, 72 per cent of

Table 5.15 Household car availability by ethnic group of household reference person (HRP): 2001

England and Wales	Percentage		
	Persons in households with:		
	No car	One car	Two or more cars
White			
British	26	44	30
Irish	40	39	21
Other White	34	42	24
Mixed			
White and Black Caribbean	47	38	15
White and Black African	45	40	15
White and Asian	33	44	23
Other Mixed	40	41	20
Asian or Asian British			
Indian	20	45	34
Pakistani	28	51	21
Bangladeshi	43	45	12
Other Asian	27	46	28
Black or Black British			
Black Caribbean	45	41	14
Black African	47	40	13
Other Black	49	39	11
Chinese or Other			
Chinese	29	45	27
Other Ethnic Group	37	43	19
All persons	27	44	29

Source: ONS 2001 Census.

people of White ethnic origin travelled to work by car compared with about 60 per cent of Indian, Pakistani or Bangladeshi origin and 46 per cent of people of Black origin. Bus was the second most frequently used mode by people of black origin. The proportion travelling to work on foot varied from 9 to 18 per cent across the groups.

Table 5.16 also shows the variations in the time taken to travel to work. People in black ethnic groups averaged 35 minutes compared with an average of 26 minutes, reflecting their low use of cars to travel to work, and possibly also geographical variations in their areas of residence and workplace.

Table 5.16 Main mode of travel to work by ethnic origin: Autumn 2003

							Percentage/minutes/thousands	
	Car, van, minibus	Bus and coach	Rail	Walk	Other	Total	Mean time (minutes)	Number in employment (thousands)
White	72	7	5	10	5	100	25	22,870
Black	46	27	16	9	2	100	35	418
Indian	60	14	13	12	1	100	29	425
Pakistani and Bangladeshi	61	13	7	18	2	100	25	250
Mixed and other origins	50	18	16	12	4	100	30	495
All in employment (including ethnic origin not known)	71	8	6	10	5	100	26	24,475

Source: Labour Force Survey

Vehicle crime

The British Crime Survey monitors thefts of and from vehicles, which can be analysed according to the characteristics of the household owning the vehicle (Table 5.17). Figures for 2002–03 show theft from vehicles was the most common crime, affecting around 7 per

Table 5.17 Vehicle crime by household characteristics: 2002–03

England and Wales					Percentages	
	Percentage of vehicle owning households who were victims at least once				Percentage of victims:	
	Theft of vehicle	Theft from vehicle	Attempted theft	All vehicle theft	covered by insurance	who made an insurance claim
All households:	1	7	3	11	71	34
Percentage of victims covered by insurance	87	65	76	71		
Tenure:						
Owner occupiers	1	6	3	10		
Social renter	3	8	5	14		
Private renters	1	8	3	12		
Accommodation type:						
Detached houses	1	5	2	7		
Semi-detached houses	1	6	3	10		
Terraced houses	2	8	4	13		
Flats/maisonettes	3	9	6	16		
Area type:						
Inner city	3	10	5	16		
Urban	2	7	4	11		
Rural	1	5	2	8		

Source: British Crime Survey 2002–2003, covering crimes in the financial year 2002–2003 in England and Wales.

cent of vehicle owning households, and overall around 11 per cent experienced some vehicle crime. Inner city areas suffer the greatest from vehicle crime where generally higher crime levels occur. For example, 16 per cent of households experienced vehicle crime in inner cities compared with 11 per cent in urban areas and 8 per cent in rural areas. Overall, 71 per cent of victims of vehicle crime were covered by insurance, although only 34 per cent made a claim.

Chapter 6 Travel by area type and region

In 2002/03:

- In rural areas only 11 per cent of households did not have access to a car compared with 40 per cent in London, 35 per cent in Metropolitan built-up areas and 20–30 per cent in other urban areas. 46 per cent of households in rural areas had access to two or more cars compared with only 20 per cent in London.
- 83 per cent of adults in rural areas held a full driving licence compared with only 63 per cent of adults in Metropolitan areas. In the North East region less than half (46 per cent) of women held a full driving licence compared with around 70 per cent in the South East and South West.
- Only 51 per cent of households in rural areas were within 13 minutes walk of a bus stop with at least an hourly bus service compared with an average of 96 per cent in urban areas.
- People in rural areas used cars for three quarters of their trips, but the proportion of trips by car decreased by settlement size to less than half for London residents. For residents of urban areas about a quarter of trips were by foot, but in rural areas it was less than a fifth.
- People living in rural areas travelled on average over 9,500 miles a year, about 80 per cent further than London residents who only travelled 5,200 miles a year. People in London travelled much further by rail (including London Underground) than people outside London.
- Access to a car is related to income levels. As incomes rise it is likely that car access and car mileage will increase in poorer regions towards the levels currently seen in wealthier regions.

Introduction

This chapter explores variations in people's travel and access to a car depending on whether they live in urban or rural areas and which region of the country they live in. The different urban/rural area types are described in Box 6.1 and the locations of Government Office Regions are shown in Figure 6.1. Further statistics on personal travel and a regional level, and on other aspects of transport, are published in *Regional Transport Statistics: 2004* available on the DfT Transport Statistics website (<http://www.dft.gov.uk/transtat/regional>).

Distributions of regions by urban/rural type and by income

Differences between regions in car ownership levels and personal travel are related to the urban/rural composition of the region and income levels. The most urban regions, with over 40 per cent of households in cities (population greater than 250,000 population), are London, the West Midlands and those in Northern England (Chart 6.1). The South West, Scotland, Wales and the East all have less than 20 per cent of households in very urban areas and more than 25 per cent in small urban and rural areas. The South-East and the East Midlands are more evenly distributed with roughly the same proportions in both very urban areas and in small urban or rural areas.

The South East, East and South West all have a relatively high proportion of wealthier households and low proportions of poorer households (Chart 6.2). London has both

Box 6.1 Area types

Households are classified according to whether they are within an urban area of at least 3,000 population or in a rural area. Urban areas are subdivided for the purpose of this publication as follows:

- London boroughs – the whole of the Greater London Authority
- Metropolitan built-up areas – the built-up areas of former metropolitan counties of Greater Manchester, Merseyside, West Midlands, West Yorkshire, Tyne and Wear and Strathclyde (excludes South Yorkshire)
- Large urban – self-contained urban areas over 250,000 population
- Medium urban – self-contained urban areas over 25,000 but not over 250,000 population
- Small/medium urban – self-contained urban areas over 10,000 but not over 25,000 population
- Small urban – self-contained urban areas over 3,000 but not over 10,000 population
- Rural – all other areas including urban areas under 3,000 population

England and Wales

The classification specifies urban areas based on the extent of urban development indicated on Ordnance Survey maps. An urban area is a tract of continuously built-up urban land extending 20 hectares or more. Urban areas thus defined but less than 200 metres apart are combined into a single urban area.

Scotland

In Scotland postcodes were classified as urban or rural using population density. Urban postcodes were then aggregated together to form localities using a minimum population of 500 together with other rules.

The areas are based on 1991 population up to 2001, and on 2001 population from 2002.

Figure 6.1 Countries and
Government Office
Regions in Great Britain



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Chart 6.1 Urban composition of regions and countries: 2002/03

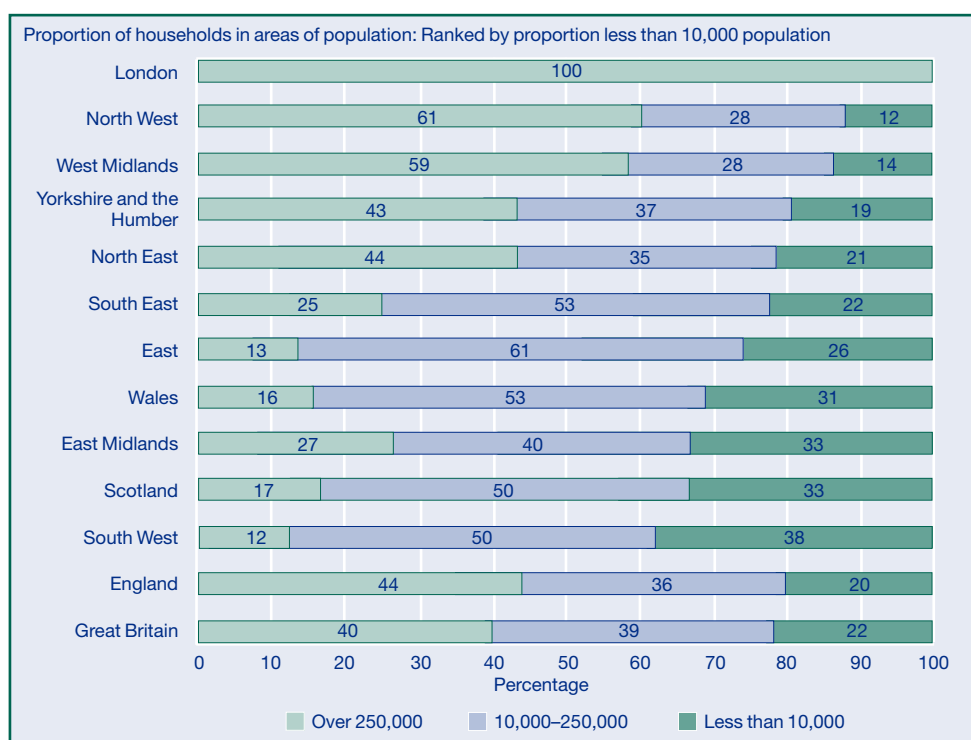
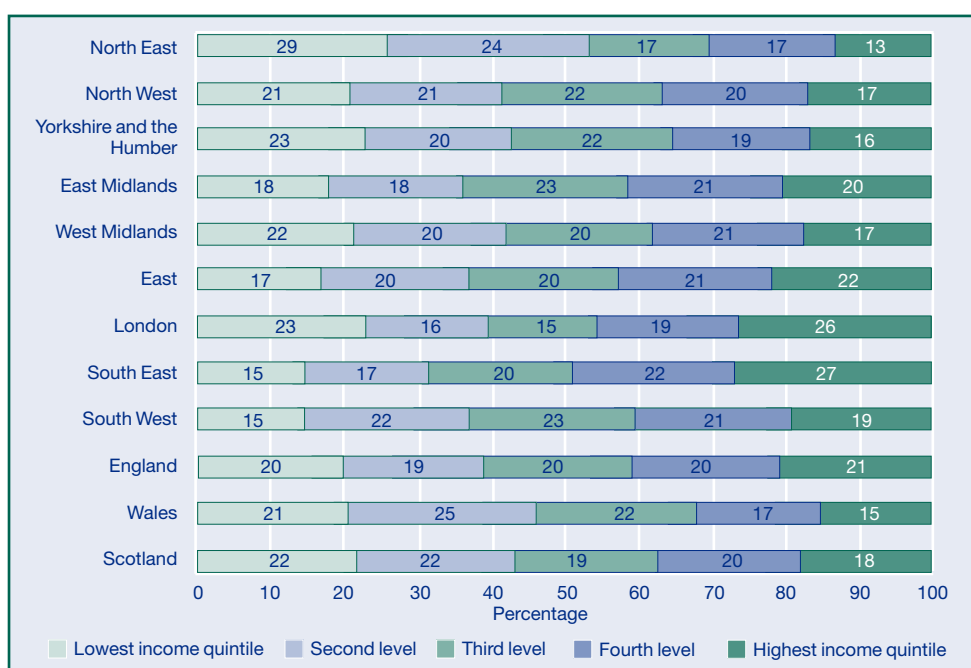


Chart 6.2 Percentage of households by income quintile by region and country: 2002/03



relatively high proportions of wealthier households and poorer households. The North East has the highest proportion of the poorest households.

Car availability

The more rural the area the more likely a household is to have access to a car (Chart 6.3). Urban areas have better access to more frequent public transport so it is easier for people to manage without a car. In rural areas only 11 per cent of households did not have access to a car in 2002/03 compared with 40 per cent in London, 35 per cent in Metropolitan built-up areas and 20–30 per cent in other urban areas. 46 per cent of households in rural areas had access to two or more cars compared with only 20 per cent in London.

Chart 6.3 Household car availability by area type: 2002/03

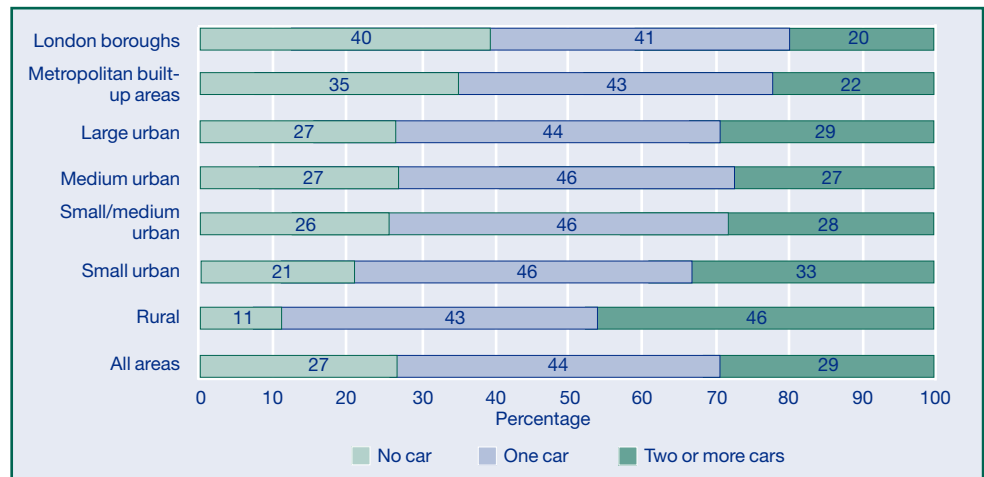


Chart 6.4 Personal car accessibility by type of area: 2002/03

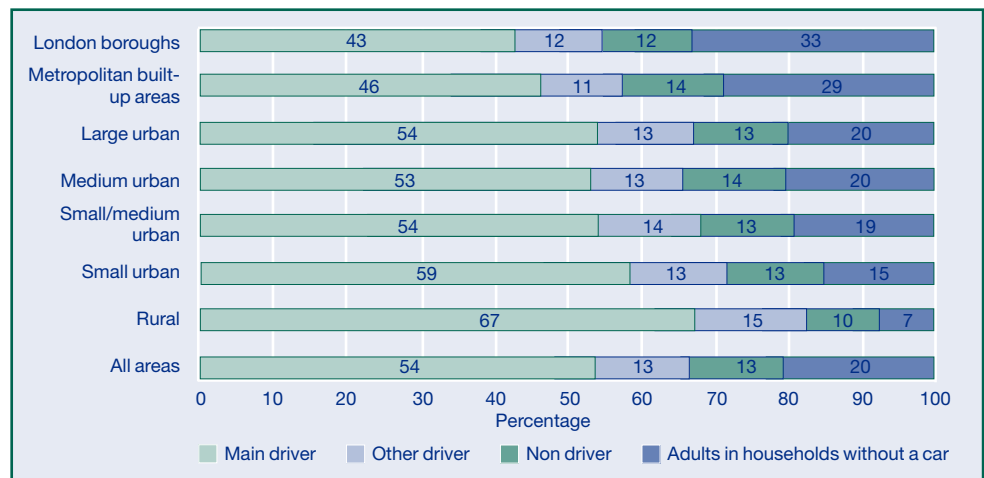
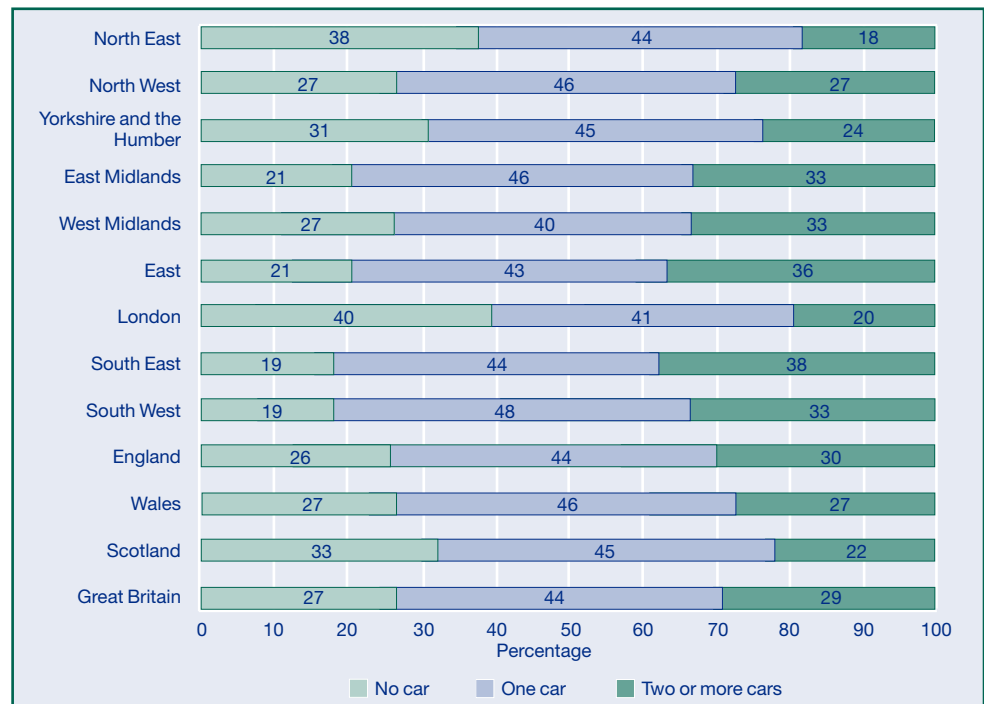


Chart 6.5 Household car availability by region and country: 2002/03



For the country as a whole, 20 per cent of adults did not have access to a car in 2002/03 (Chart 6.4). This is lower than the 27 per cent of households because of the relatively high proportion of single adult households among those with no car (see Chapter 5). The variation between type of area of main drivers, other drivers and non drivers in households with cars broadly follows the household car availability patterns.

Car availability is strongly related to income (see Chapter 5). Car availability levels in London are low as there is good access to public transport (Chart 6.5 and Figure 6.2). The lowest car availability levels outside London are in the North East which has a high proportion of poorer households and is relatively urban. The South East, South West and East regions, where people are relatively wealthy, have high car availability levels. Adult access to a car follows similar patterns to household car availability (Chart 6.6).

Driving licences

Not surprisingly, driving licence holding also shows a relationship with type of area (Chart 6.7). Only 63 per cent of adults in Metropolitan areas held a full driving licence in 2002/03 compared with 83 per cent in rural areas. It is interesting to note that although there is a higher proportion of adults in London (33 per cent) than in Metropolitan areas (29 per

Figure 6.2 Percentage of households with one or more cars by region and country of residence: 2002/03

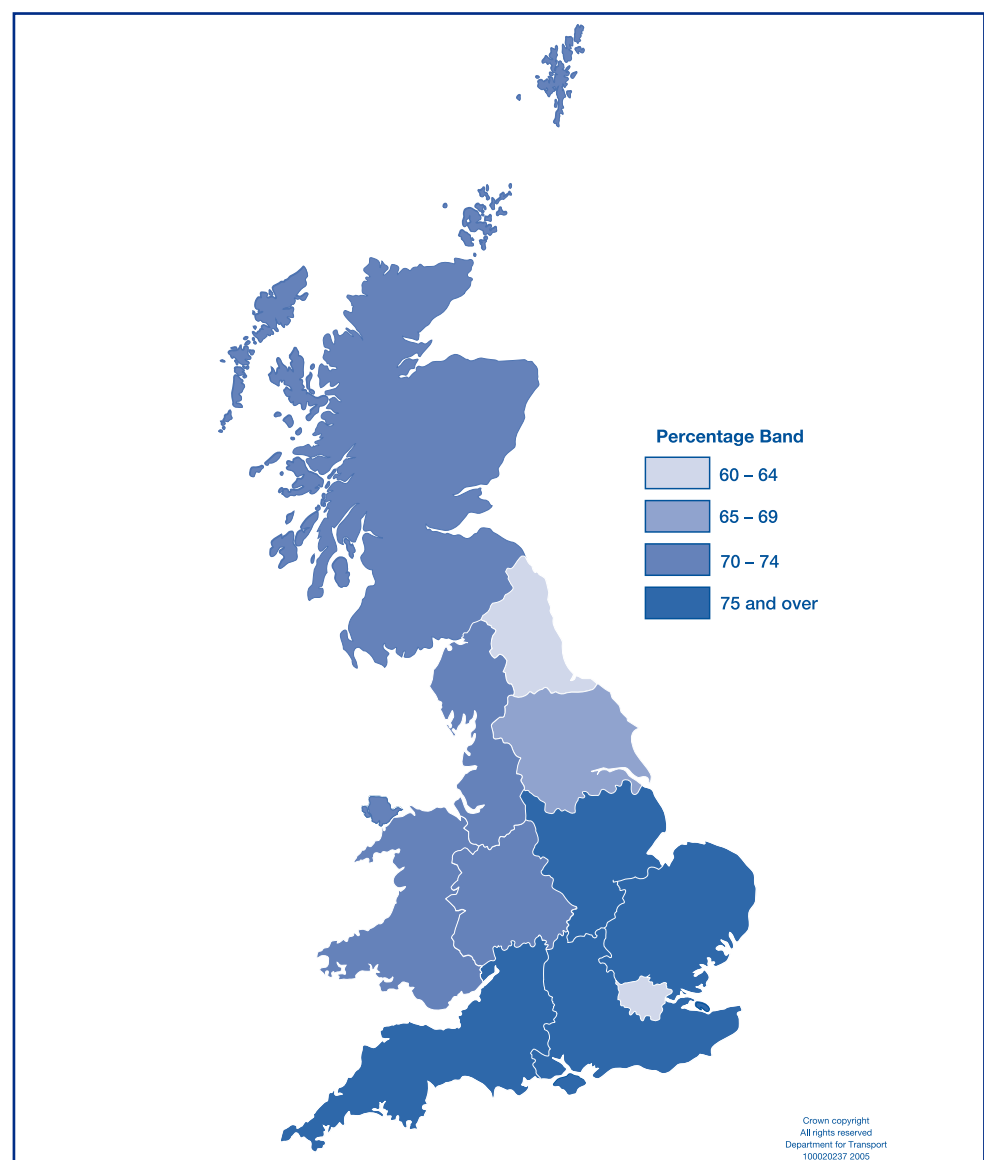


Chart 6.6 Personal car accessibility by region and country: 2002/03

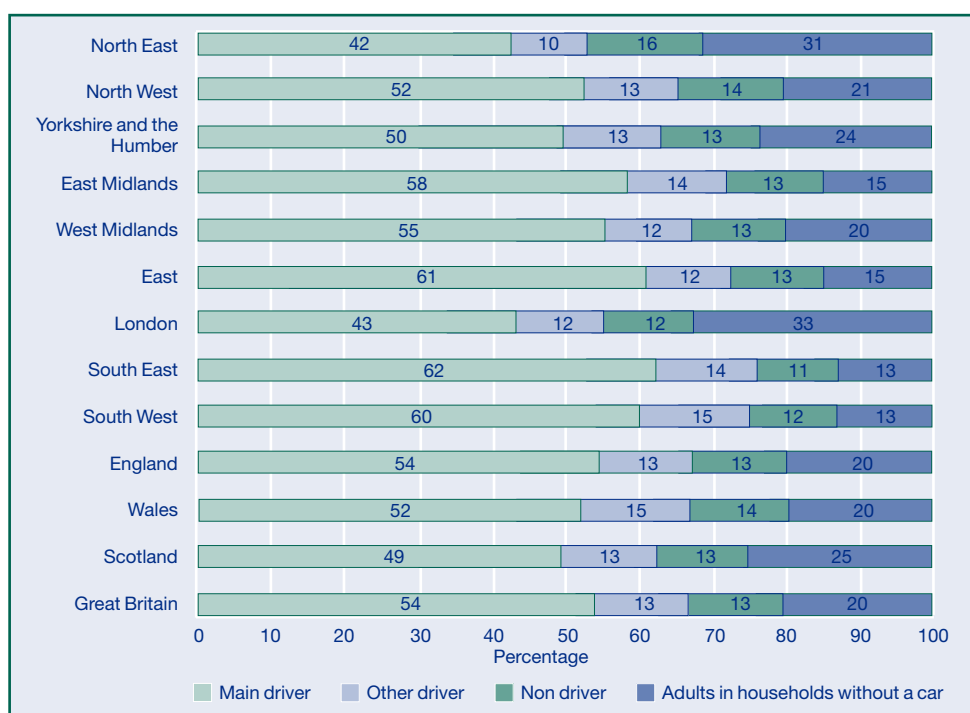
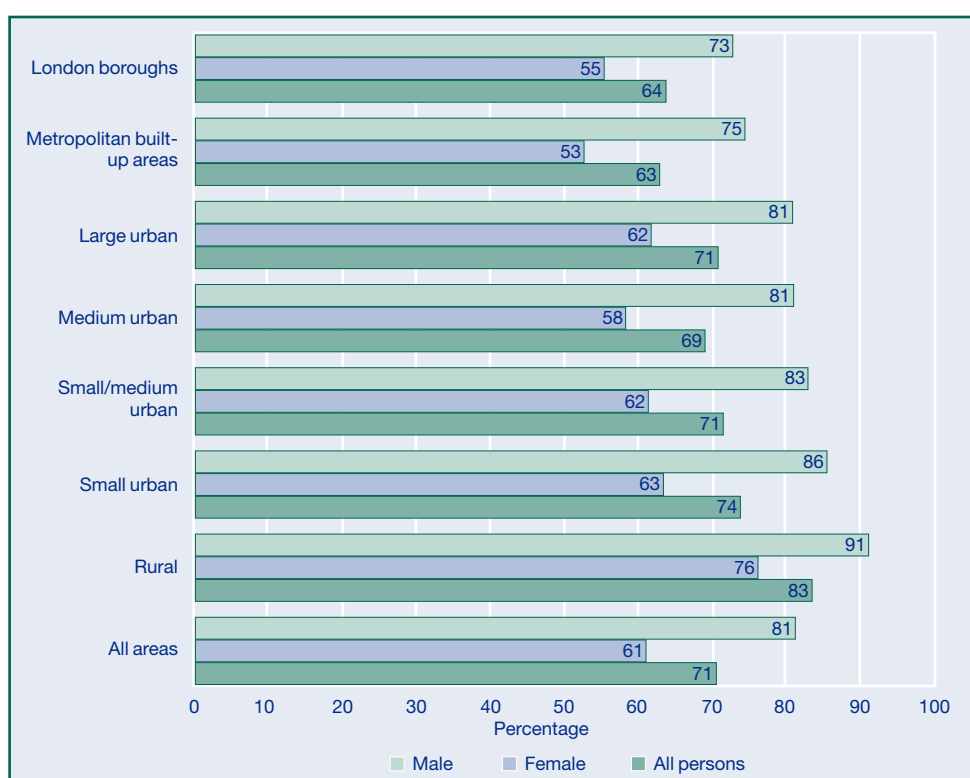


Chart 6.7 Full car driving licence holders by gender and area type (aged 17+): 2002/03

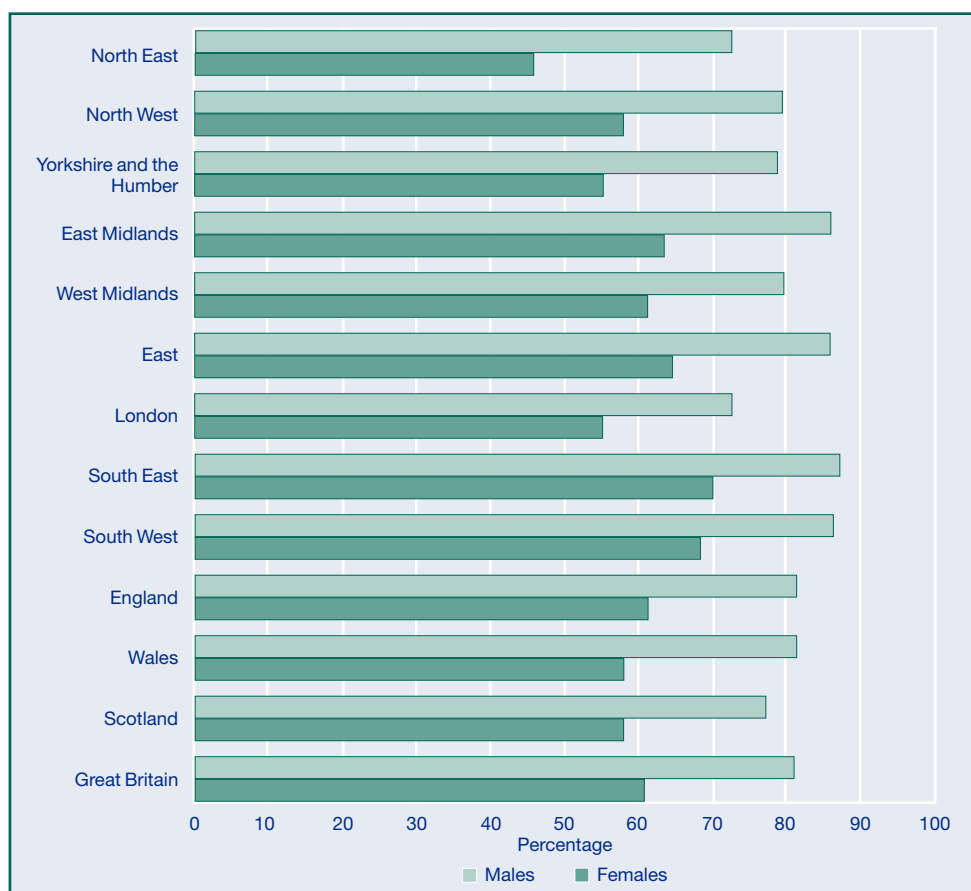


cent) who do not have access to a car (Chart 6.4), the proportions with driving licences in the two areas are about the same (64 and 63 per cent respectively). Females in Metropolitan areas have the lowest proportion of licences, 53 per cent, and males in rural areas the highest, 91 per cent.

The variation between regions for licence holding among women is greater than that for men. In the North East region in 2002/03 less than half (46 per cent) of women held a full driving licence compared with around 70 per cent in the South East and South West (Chart

6.8). For men the proportion varied from 73 per cent in the North East and London to over 85 per cent in the South East, South West, East and East Midlands.

Chart 6.8 Full car driving licence holders by region and country: 2002/03



Access to bus services

In 2002/03 almost all households in urban areas were within 13 minutes walk of their nearest bus stop compared with 85 per cent in rural areas (Table 6.1). Access to the nearest bus stop does not take account of the frequency of the bus services there, which is also important. Only 51 per cent of households in rural areas were within 13 minutes walk of a bus stop with at least an hourly bus service compared with an average of 96 per cent in urban areas.

Table 6.1 Time taken to walk to nearest bus stop and bus availability indicator by area type: 2002/03

	Percentage of households				
	6 minutes or less	7–13 minutes	14 minutes or more	All households	Availability Indicator ¹
London boroughs	88	10	2	100	98
Metropolitan built-up areas	90	9	1	100	98
Large urban	89	8	2	100	97
Medium urban	90	8	2	100	96
Small/medium urban	84	12	3	100	92
Small urban	83	13	3	100	87
Rural	74	12	15	100	51
All areas	86	10	4	100	90

1. Households within 13 minutes walk of a bus stop with a service at least once an hour.

How people travel

Residents in London did fewer trips on average than residents elsewhere in 2002/03 (Chart 6.9). Car was the main mode of transport for all areas. People in rural areas used cars for three quarters of their trips, but the proportion of car trips decreased by settlement size to less than half for London residents. For residents of urban areas about a quarter of trips were by foot, but in rural areas it was less than a fifth.

Although the average number of trips travelled per person differs little by area type, the distance travelled reflects the urban/rural gradient seen above for car accessibility (Chart 6.10). Travel by car in 2002/03 accounted for at least four fifths of all distance travelled in all regions except London where it only accounted for three fifths. People living in rural areas travelled on average over 9,500 miles a year, about 80 per cent further than London residents who only travelled 5,200 miles a year. People in London travelled much further by rail (including London Underground) than people outside London.

Chart 6.9 Trips by main mode and area type: 2002/03

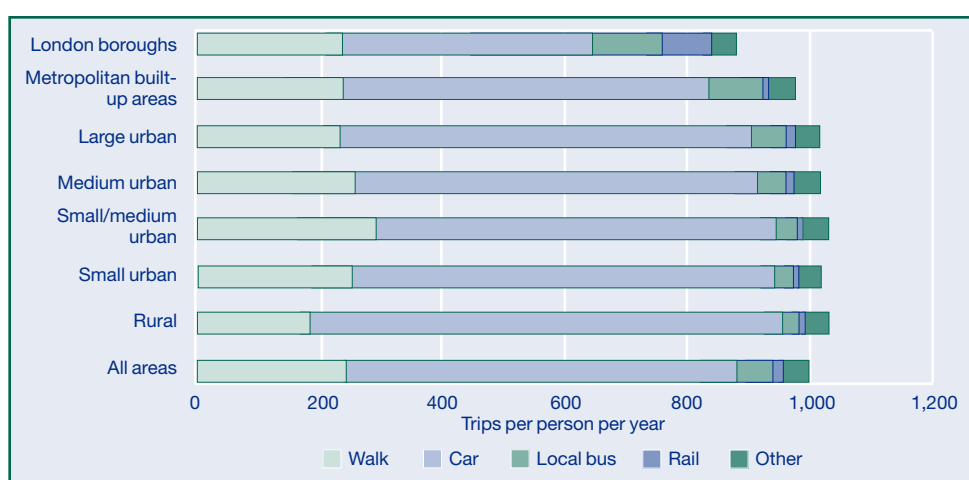
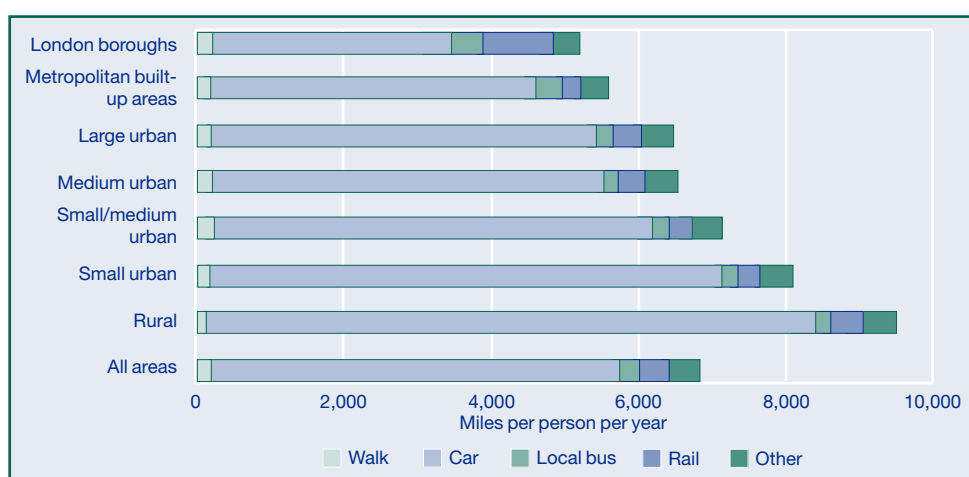


Chart 6.10 Distance travelled by mode and area type: 2002/03



The regional picture reflects that of car accessibility with the furthest distances travelled by those living in the South East, South West, East Midlands and the East and the least in London (Figure 6.3 and Chart 6.11). However, despite lower car access, people living in the North East travelled almost the same distance as those in the North West. Those living in London, Scotland and the North East travelled the furthest by bus and on foot, and those in London, the South East and East went the furthest by rail (including the Underground).

Figure 6.3 Average distance travelled by region and country of residence: 2002/03

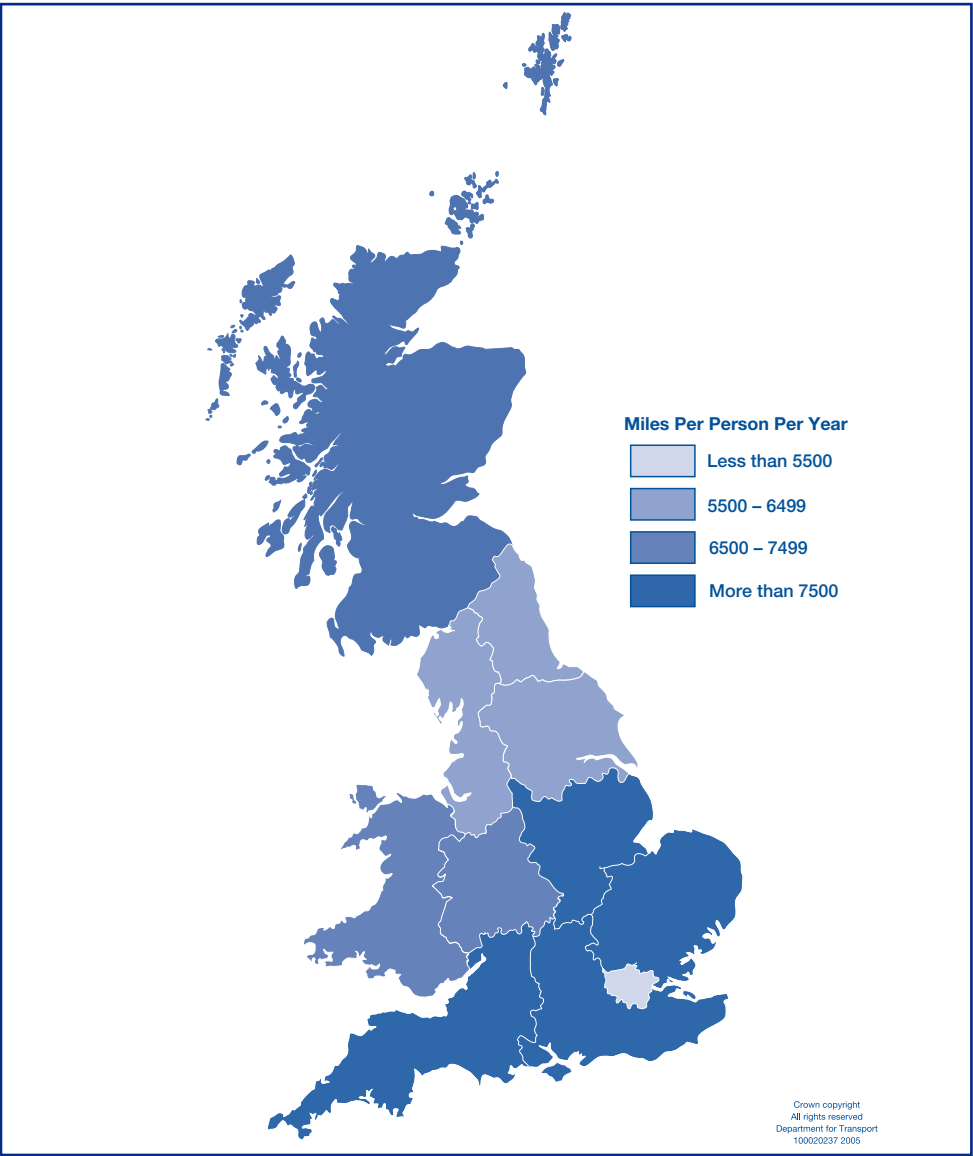
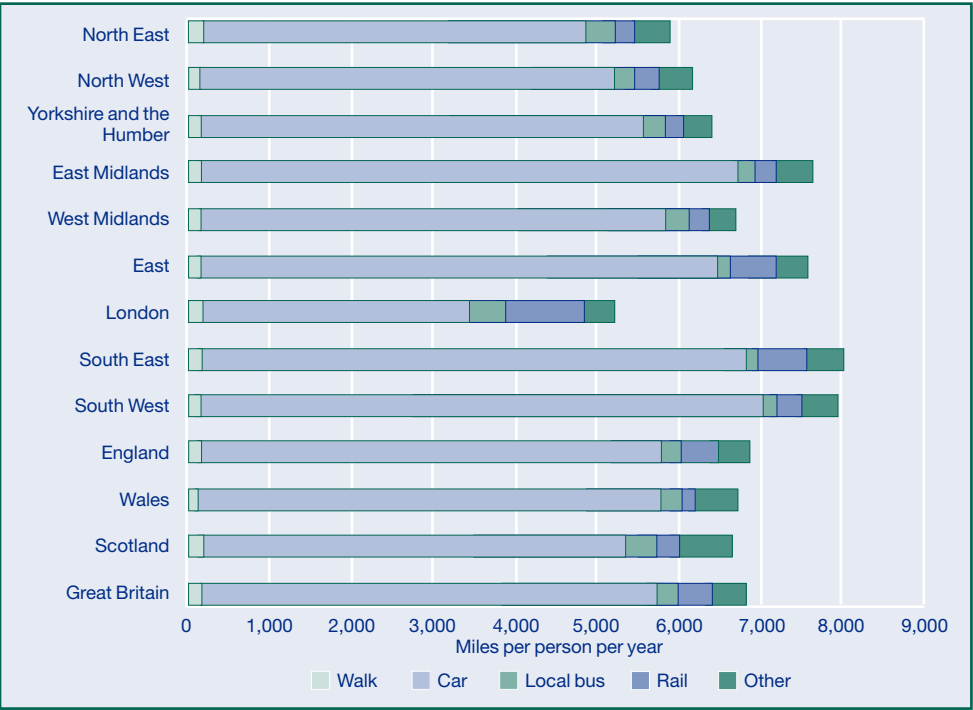


Chart 6.11 Distance travelled by mode and region and country: 2002/03



Trends in regional travel

The remainder of this chapter explores the implications of past trends for future travel in different regions of the country. Chart 1.10 in Chapter 1 showed that there was a relationship between the average mileage travelled by car per year and cars per adult and driving licence holding.

Differences in the number of cars per adult and changes over the last decade are shown in Chart 6.12. The South East has the highest number of cars per adult and the North East and London the lowest. Apart from London, which showed no growth, the South East shows the least growth followed by the East (Table 6.2). The sharpest increases were in Scotland, the North East and the North West.

Chart 6.12 Cars per adult by region and country: 1992/94 and 2002/03



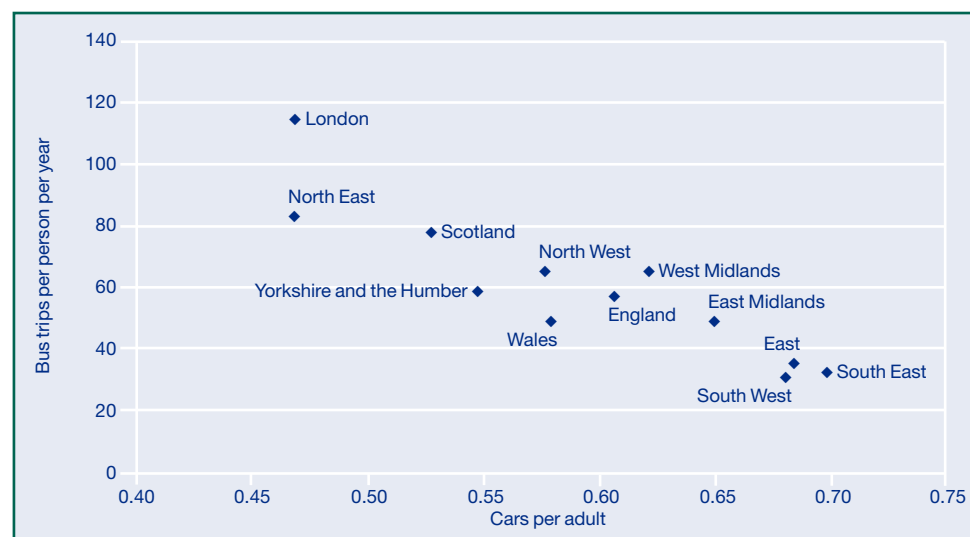
Table 6.2 Driving licence holding and changes in cars per adult by region and country: 1992/94–2002/03

	Percentage of adults (17+) holding a driving licence			Cars per adult
	1992/94	2002/03	Percentage point change	Percentage change
North East	53	58	5	23
North West	62	68	6	23
Yorkshire and the Humber	63	67	4	17
East Midlands	69	74	5	16
West Midlands	65	70	5	18
East	74	75	1	14
London	63	64	1	1
South East	76	78	2	10
South West	74	77	3	16
England	67	71	4	15
Wales	64	69	5	18
Scotland	60	67	7	25
Great Britain	67	71	4	15

A very similar regional pattern is seen in Table 6.2 for driving licence holding by residents. The highest increases in driving licence holding have been in Scotland and the North West and the lowest in London, the East and the South East.

Not surprisingly, regions with higher car access have lower bus use. Chart 6.13 plots the two variables against each other for regions for 2002/03. Bus use in London is much higher than elsewhere, reflecting higher levels of bus service, although car access there is similar to the North East. Bus use is lowest in the South East, South West and the East where car access is high.

Chart 6.13 Bus trips by car access by region and country: 2002/03



The effect on bus use of increasing car availability varies by region. Chart 6.14 shows the change in cars per adult and trips by bus between 1992/94 and 2002/03. In the northern regions and Scotland, the number of cars per adult increased by about 15–25 per cent and bus use decreased by about 20–35 per cent. In the South West and the West Midlands the number of cars per adult increased by 15–20 per cent but bus use fell by only 10 per cent, but in the East, East Midlands and Wales a similar increase had less effect. In the South East bus use increased despite an increase of 10 per cent in the number of cars per adult. For London residents, bus use increased by over 20 per cent and there was little change in car access.

Chart 6.14 Change in cars access and bus trips by region and country: 1992/94–2002/03

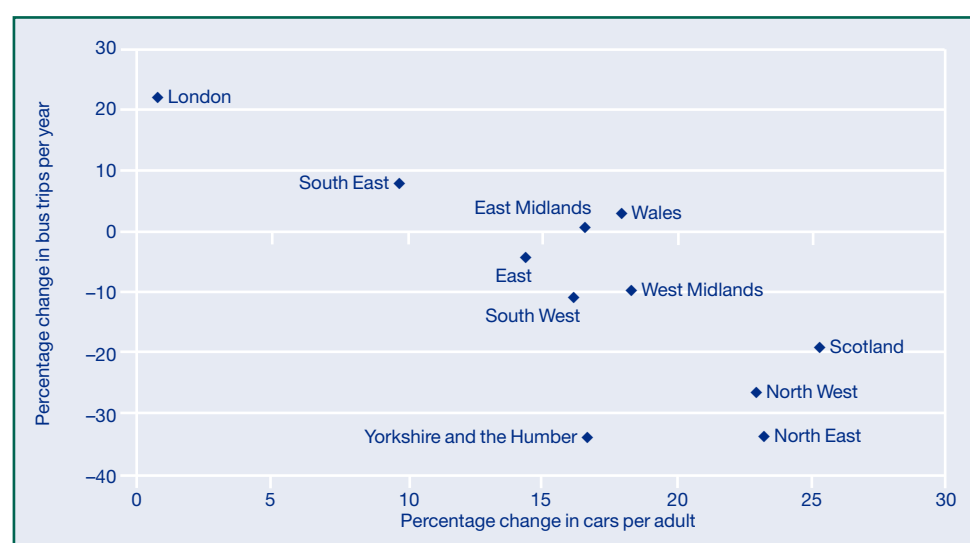


Chart 6 15a Change in car driver mileage, cars per adult and driving licence holding by region and country:
1992/94–2002/03

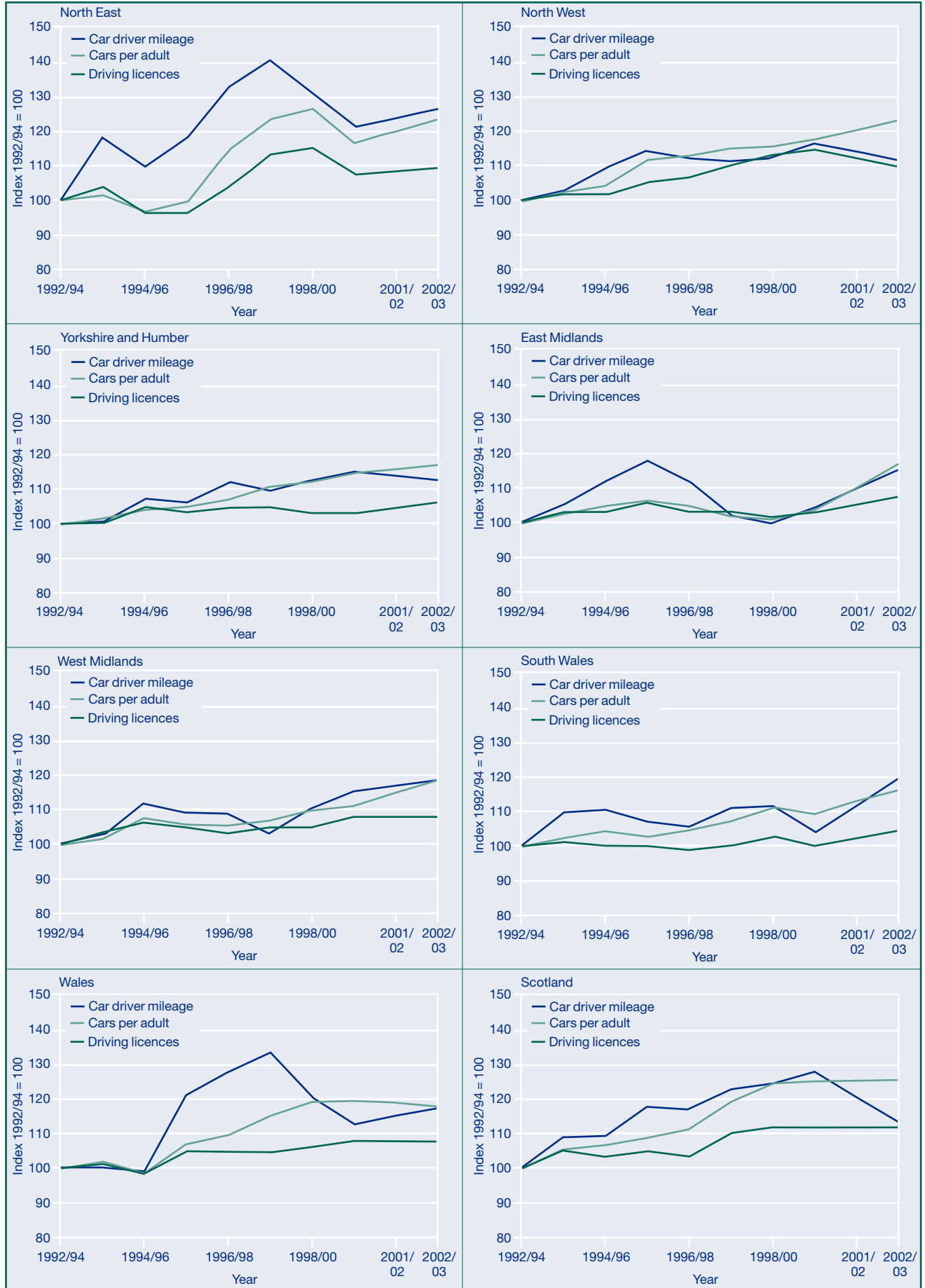
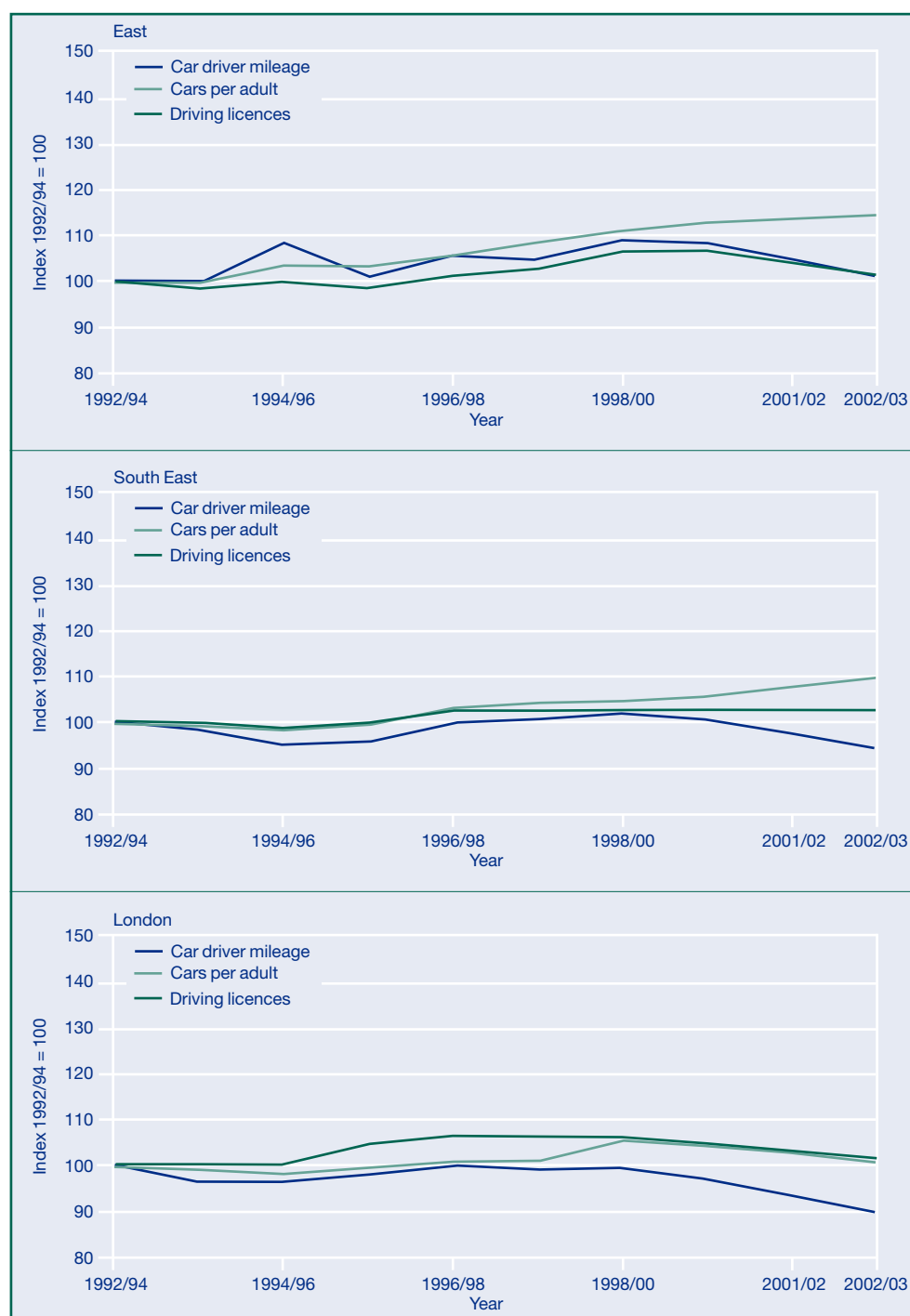


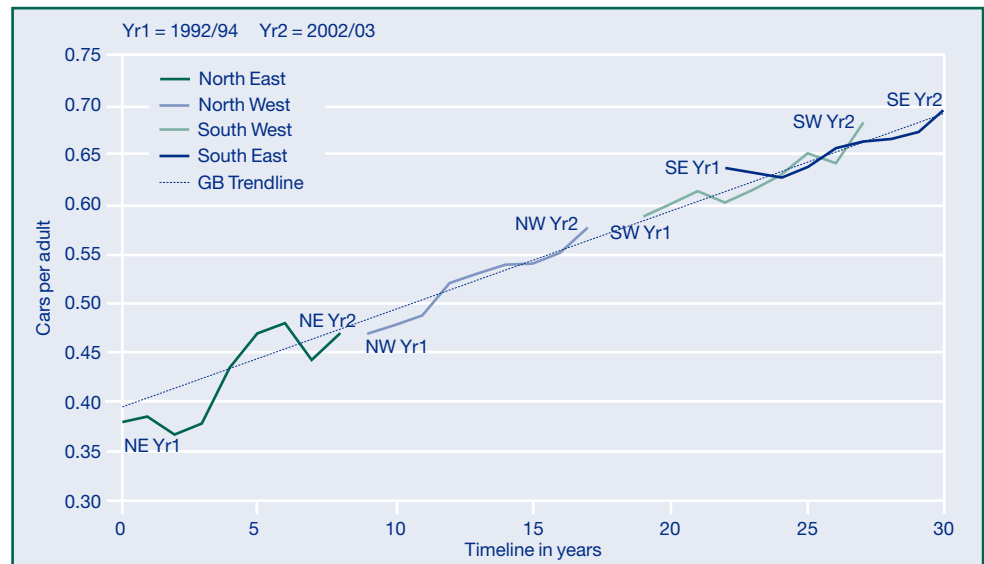
Chart 6.15b Change in car driver mileage, cars per adult and driving licence holding by region: 1992/94–2002/03



The relationship seen at national level in Chart 1.10 between car driver mileage, cars per adult and driving licence holding is explored below at regional level. For most regions the increase in car driver mileage over the last decade has been similar to that for cars per adult (Chart 6.15a).

In the East and South East (Chart 6.15b) there has been a rise in cars per adult, but car mileage did not change in the East and fell in the South East. These regions have the highest cars per adult but have shown the lowest growth over the period, which may imply that they are approaching a saturation level. These regions are also the wealthiest, are neither particularly urban nor rural and surround London. In London there was a fall in car driver mileage and little change in cars per adult or driver licence holding (Chart 6.15b).

Chart 6.16 Timeline for cars per adult by selected region: 1992/94–2002/03



If an increase in car access is an indication of a potential increase in car mileage, then what are the implications of increased car access in regions with low levels at present? Charts 6.15a and 6.15b show that the number of cars per adult has increased over the last decade in every region except London. In fact they have shown approximately the same level of growth, but from different starting points. The values of cars per adult between 1992/94 and 2002/03 can be approximately spread along a 'timeline' with the 1992/94 value of 0.38 for the North East at 'Year 0' and the 2002/03 value for the South East of 0.70 at 'Year 30'. Chart 6.16 shows the values presented in this way for 4 selected regions compared with the trendline for the country as a whole. The other regions show similar trends, apart from London, which shows no trend.

Car access is related to income levels (see Chart 5.7). As incomes rise the timeline indicates that car access will increase in poorer regions to the levels currently seen in wealthier regions. It may take many years, for example the North East seems to be about 20 years behind the South East, but the indications are that it will happen. It seems likely that car mileage will also rise, although the recent fall in car mileage for the two regions with the highest levels of car access, South East and the East, may indicate there is a limit to this increase, but it is too early to draw firm conclusions.

Chapter 7 Travel costs and expenditure

- The growth in car travel and the fall in bus patronage between 1990 and 2003 have been accompanied by stable motoring costs and rising bus fares. Bus and coach fares increased by 26 per cent in real terms, but overall motoring only rose by 4 per cent. Rail fares rose by 21 per cent.
- In 2002–03, travel accounted for 15 per cent of the average household's weekly expenditure (£59 out of a total of £406 per week), with the majority of this (12 per cent, or £51 per week) on motoring.
- Between 1996–97 and 2002–03 there was a 30 per cent increase in motoring expenditure per household in real terms, mainly because spending on new cars and vans and on insurance doubled. However, household expenditure per car hardly changed.
- Expenditure on new cars, on motorcycles and scooters, on diesel and on vehicle insurance all rose in real terms between 1996–97 and 2002–03, whether measured per household or per car. Expenditure per household on fares and other travel costs increased by 13 per cent.
- The poorest third of households spent a smaller proportion (10 per cent) of their weekly expenditure on travel than households as a whole (15 per cent).
- Rural households spent the most on travel (£73 on average per week), which was two-thirds more than that spent by households in Metropolitan built-up areas (£44 per week). In terms of expenditure per car, households in the London built-up area spent the most per car and those in less heavily populated areas the least.

Introduction

This chapter presents information on trends in travel costs, prices and household expenditure on motoring and public transport. It also covers variations in expenditure on travel by different types of household.

Travel costs are based on the transport components of the Retail Price Index and enable comparisons of the relative costs of motoring with those of bus and rail fares. Travel expenditure presents information on expenditure per week by the average household on purchasing and running vehicles and on public transport fares using data from the UK Expenditure and Food Survey (see Box 7.1 below).

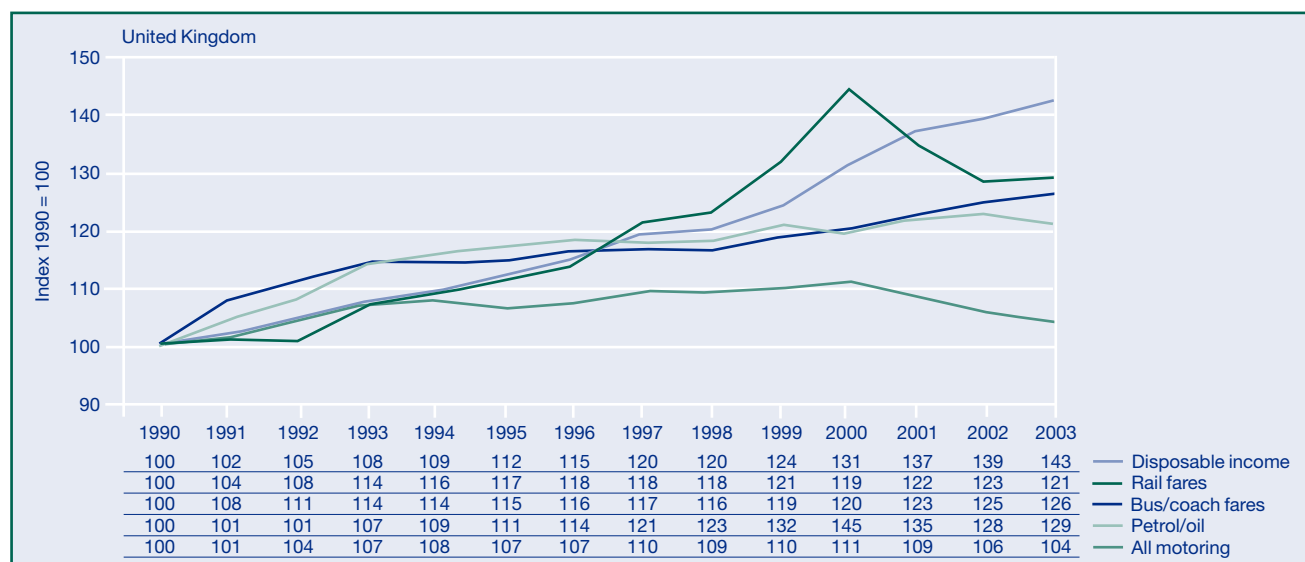
Relative costs of travel

Since 1990, average disposable income has increased in real terms by 43 per cent per cent, much faster than either motoring or public transport costs, so transport by any mode has become more affordable (Chart 7.1).

The growth in car travel and the fall in bus patronage during this period described in Chapters 1 and 2 have been accompanied by stable motoring costs and rising bus fares. Bus and coach fares increased by 26 per cent in real terms, but overall motoring only rose by 4 per cent. Rail fares rose by 21 per cent.

Motoring costs include purchase and maintenance of vehicles, petrol and oil costs, and tax and insurance. Petrol and oil costs rose by 45 per cent between 1990 and 2000 as a result of the fuel duty escalator, but then fell by about 10 per cent to 2003. This increase was mainly

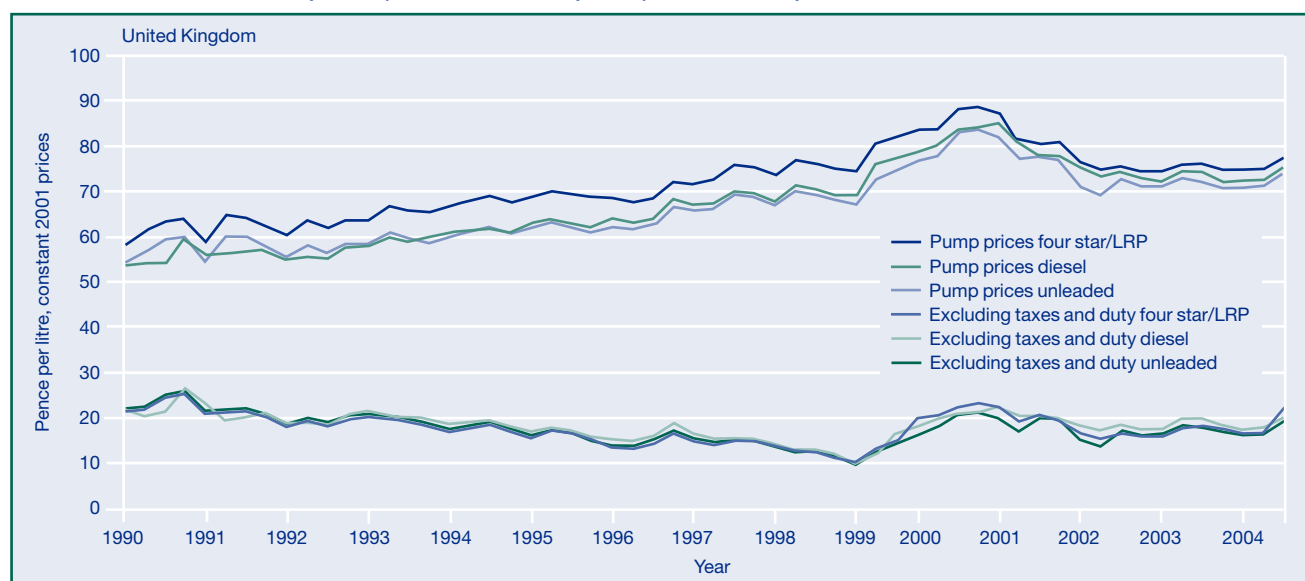
Chart 7.1 Changes in the real cost of transport and in income: 1990–2003



attributed to increased taxes and duties. Despite this recent decline, by 2003 the real cost of fuel was still 29 per cent higher than in 1990.

Diesel prices rose more sharply than petrol prices between 1990 and 2000 but since 2000 both have fallen (Chart 7.2).

Chart 7.2 Petrol and diesel prices (at constant 2001 prices): 1990–2004 quarter 2



The estimated average travel cost per passenger mile in 2002/03 was 22p by bus and 17p by rail (Table 7.1). This compares with a total motoring cost of 24p per passenger mile of which fuel cost 6p a mile. As the average car occupancy for 2002/03 was 1.6, this is not the same as the cost per car mile. The current relative costs of rail, bus and car per passenger mile should be viewed in the context of rising rail and bus costs and stable motoring costs shown above. The estimates are based on bus and rail revenue from operators, motoring costs from the FES and passenger mileage figures from the NTS.

Table 7.1 Average cost per passenger mile by mode: 2002/03

1. Includes expenditure on purchase, spares, repairs, insurance, taxation, fuel, parking, but not depreciation.

	Pence
Rail	17
Bus	22
Car	
Fuel	6
All motoring ¹	24

Household expenditure on travel

The remainder of this chapter is based on data from the Expenditure and Food Survey (see Box 7.1)

Box 7.1 The Expenditure and Food Survey (EFS)

The EFS is a result of the amalgamation of the Family Expenditure Survey (FES) and the National Food Survey (NFS) and is carried out by the Office for National Statistics. The survey is primarily used to provide information for the Retail Price Index, National Accounts, the effect of taxes and benefits, and trends in nutrition.

The basic unit of the survey is the household, and 6,342 households in Great Britain took part in 2002–03 – a response rate of 58 per cent. Each individual in the household is asked to keep a diary for two weeks, recording their daily expenditure. A household interview is conducted to find out information about regular expenditure, such as rent and mortgage payments, along with infrequent but large expenditures such as those on vehicles. Note that business expenses (including car mileage allowances) refunded by an employer and the cost of company cars are not included as household expenditure.

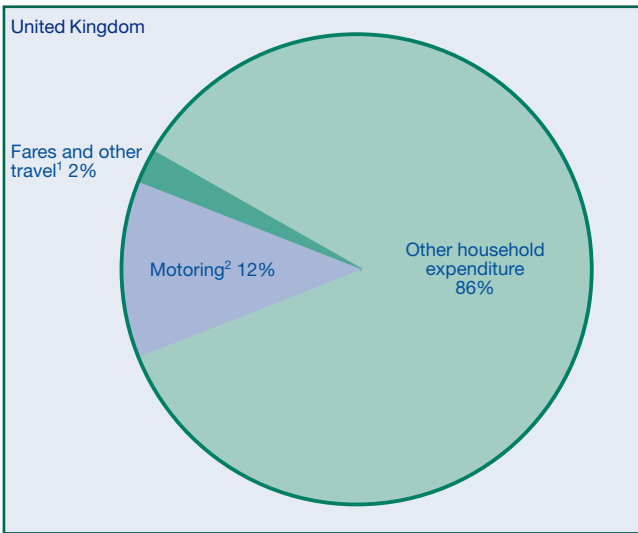
From 2001–02, the Classification of Individual Consumption by Purpose (COICOP) was introduced as a new coding frame for expenditure items. Under COICOP, vehicle taxation and insurance are excluded from transport expenditure whereas they had been included previously.

Note that, unlike NTS income data, FES income data are not ‘equivalised’.

ONS publish the results of the UK survey annually in ‘Family Spending’. Further details are given in Appendix C.

In 2002–03, travel accounted for 15 per cent of the average household’s weekly expenditure, with the majority of this (12 per cent) on motoring (Chart 7.3). On average households spent £59 per week on travel out of a total household expenditure of £406. They spent £27 per week of this travel expenditure (45 per cent) on purchase of cars and other vehicles; £24 (41 per cent) on maintaining and running vehicles; and over £8 (14 per cent) on public transport and other fares.

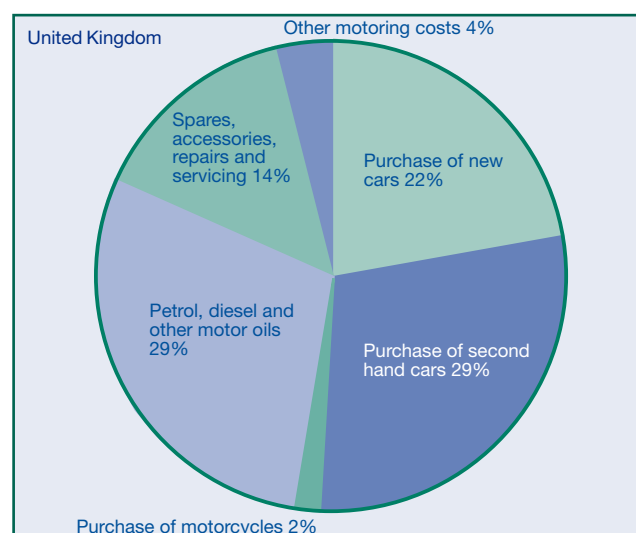
Chart 7.3 Household expenditure on travel as a percentage of total expenditure: 2002–03



1. Includes expenditure on taxis, car hire and leasing.

2. Includes expenditure on motorcycles and bicycles.

Chart 7.4 Weekly household expenditure on motoring¹: 2002–03

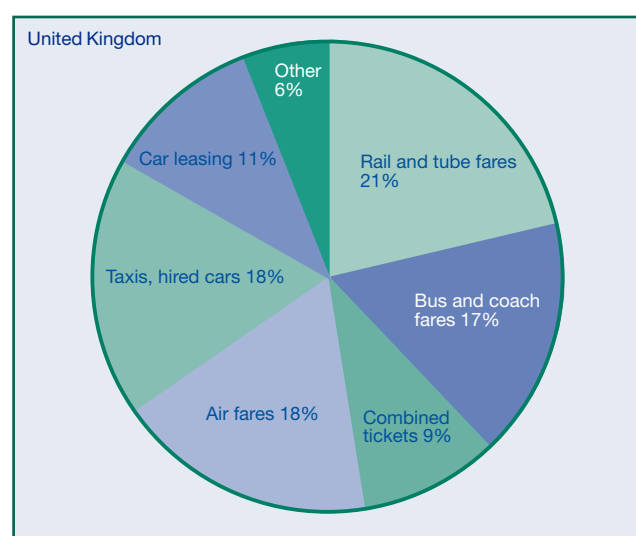


1. Includes expenditure on motorcycles and bicycles.

Purchase of vehicles accounted for over half (53 per cent) of motoring expenditure, fuel for 29 per cent and maintenance for 14 per cent (Chart 7.4).

Nearly half (48 per cent) of expenditure on fares and other travel was on bus and rail fares and almost a fifth each (18 per cent) was on air fares and on taxis or hired cars (Chart 7.5). The remainder was spent on leasing cars and on other travel such as school travel and ferries.

Chart 7.5 Weekly household expenditure on fares and other travel costs: 2002–03

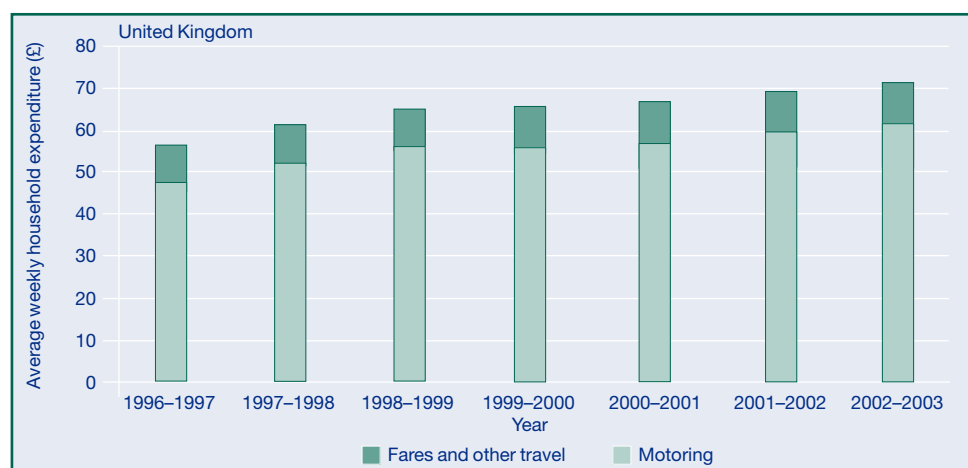


Trends in household expenditure

Real spending on travel has increased since 1996, although growth appears to have slowed in recent years (Chart 7.6). Between 1996–97 and 2002–03, spending on motoring at constant prices rose by 30 per cent whereas that on fares and other travel rose by 13 per cent. Spending on motoring as a proportion of total household expenditure rose from 13 per cent in 1996–97 to 15 per cent in 2002–03.

Note that total weekly expenditure in Chart 7.6 is different from that provided in Charts 7.3–7.5 because it is based on the old FES categories to provide consistency between years. Tables 7.2–7.5 below present both the old FES and new COICOP definitions (see Box 7.1). The FES definition is used when comparing trends in the main components (all motoring or

Chart 7.6 Travel expenditure at 2002–03 prices: 1996–97 to 2002–03



fares), but for most detailed comparisons the COICOP definition is used. A full breakdown of travel expenditure between 1996–97 and 2002–03 is given in Table 7.5 at the end of this chapter.

In real terms there was a 30 per cent increase in motoring expenditure per household between 1996–97 and 2002–03 (Table 7.2). Spending on new cars and vans and on insurance doubled. Spending on diesel increased by 75 per cent, reflecting the increase in prices and the rise of over 80 per cent in the number of diesel cars registered between 1997 and 2003. The proportion of registered private cars that were diesel rose from 11 per cent in 1997 to 17 per cent in 2003. Household spending on motorcycles and scooters has more than doubled since 1996–97, although it only makes up around 2 per cent of household transport expenditure.

Table 7.2 Average weekly motoring expenditure per household: 1996–97 and 2002–03

United Kingdom		£/percentage	
Expenditure type	1996–97 (2002–03 prices)	2002–03	Percentage change 1996–97 to 2002–03
Motoring (COICOP categories¹)			
Purchase of vehicles	18.80	26.60	41
New cars and vans	5.40	11.30	109
Second-hand cars and vans	12.60	14.50	15
Motorcycles and scooters	0.40	0.90	125
Other vehicles (mainly bicycles)	..	0.20	..
Bicycle purchase	0.40	..	..
Spares, accessories, repairs and servicing	6.90	7.30	6
Petrol, diesel and other motor oils:	13.60	14.80	9
Petrol	12.30	12.70	3
Diesel	1.20	2.10	75
Other motor oils	0.10	0.10	0
Other motoring	2.00	1.90	–5
All motoring (new definition)	41.20	50.70	23
Old FES categories:			
Included under transport and travel but excluded above:			
Motor vehicle insurance and taxation	6.90	11.00	59
Vehicle taxation	2.40	2.40	0
Vehicle insurance	4.50	8.60	91
Boat purchase and repairs	0.90	0.60	–33
All motoring (old definition)	47.60	61.70	30

1. Data for 1996–97 are based on old FES categories which include some items excluded under COICOP.

Trends in expenditure per car

Household car ownership has been steadily increasing since 1996/97. As household expenditure on transport is dependent on the number of cars available to the household, it is more useful to investigate changes in household expenditure per car rather than per household (Table 7.3). On this basis, total motoring expenditure per car hardly changed between 1996–97 and 2002–03 and that on many items fell, including on second-hand cars, spares and servicing etc, petrol and vehicle taxation. However, even on this basis there was a rise in expenditure on new cars, motorcycles and scooters, on diesel and on vehicle insurance. The increase in expenditure on new cars may reflect a shift to purchasing larger engined vehicles.

Table 7.3 Average weekly household motoring expenditure per car: 1996–97 and 2002–03

United Kingdom			£/percentage
Expenditure type	1996–97 (2002–03 prices)	2002–03	Percentage change 1996–97 to 2002–03
Motoring (COICOP categories¹)			
Purchase of vehicles	21.50	23.70	10
New cars and vans	6.20	10.10	63
Second-hand cars and vans	14.40	12.90	–10
Motorcycles and scooters	0.40	0.80	100
Other vehicles (mainly bicycles)	..	0.20	..
Bicycle purchase	0.50	..	..
Spares, accessories, repairs and servicing	7.90	6.50	–18
Petrol, diesel and other motor oils:	15.60	13.20	–15
Petrol	14.10	11.30	–20
Diesel	1.40	1.90	36
Other motor oils	0.10	0.10	0
Other motoring	2.30	1.70	–26
All motoring (new definition)	47.30	45.10	–5
Old FES categories:			
Included under transport and travel but excluded above:			
Motor vehicle insurance and taxation	8.00	9.80	23
Vehicle taxation	2.80	2.10	–25
Vehicle insurance	5.20	7.70	48
Boat purchase and repairs	1.10	0.50	–55
All motoring (old definition)	54.60	54.90	1

1. Data for 1996–97 are based on old FES categories which include some items excluded under COICOP.

Trends in expenditure on fares and other travel costs

Expenditure on fares and other travel costs rose by 13 per cent between 1996–97 and 2002–03 (Table 7.4). Expenditure on air fares rose by three-quarters, reflecting increased travel by air (see Chapter 2) and that on rail fares rose by a fifth. However, expenditure on bus fares fell by about a tenth.

Table 7.4 Average weekly household expenditure on fares and other travel: 1996–97 and 2002–03

United Kingdom			£/percentage
Expenditure type	1996–97 (2002–03 prices)	2002–03	Percentage change 1996–97 to 2002–03
Fares and other travel (COICOP categories¹)			
Rail and tube fares:	1.50	1.80	20
Season tickets	0.50	0.60	20
Other tickets	1.00	1.20	20
Bus and coach fares:	1.60	1.40	–13
Season tickets	0.30	0.40	33
Other tickets	1.30	1.10	–15
Combined tickets	0.60	0.80	33
Season tickets	0.50	0.60	20
Other tickets	0.10	0.20	100
Air and other travel and transport:	3.50	4.50	29
Air fares ²	0.90	1.50	67
Other transport and travel	2.60	3.00	15
All fares and other travel (new definition)	7.10	8.50	20
Old FES categories:			
Fares and other travel	8.60	9.70	13

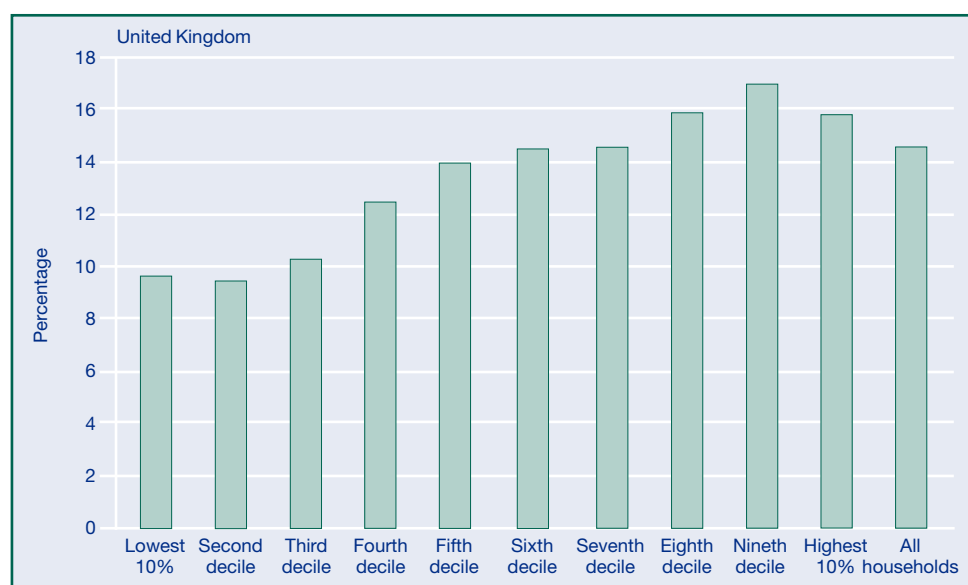
1. Data for 1996/97 are based on old FES categories which include some items excluded under COICOP.

2. Excludes air fare component of package holidays abroad. Some of this increase may be due to more direct booking of flights.

Expenditure by income

The more money households have, the more they spend on travel. For the poorest third of households, transport only accounts for about 10 per cent of their weekly expenditure compared with 15 per cent for households as a whole (Chart 7.7).

Chart 7.7 Travel expenditure as percentage of all expenditure by income decile: 2002–03



The poorest third of households spent under £20 a week on motoring compared with over £75 a week by the wealthiest third (Chart 7.8). The average for all households was £51 a week. Car ownership levels range from 0.3 cars per household for the poorest household to 1.9 cars per household for the wealthiest. When the number of cars in a household is taken into account, there is a smaller spread of expenditure on motoring per car from around £30 per car per week in the poorer households to £50–60 per car per week in the wealthiest, compared with an average of £45 for all households.

Chart 7.8 Average weekly motoring expenditure per household and per car by household income decile: 2002–03

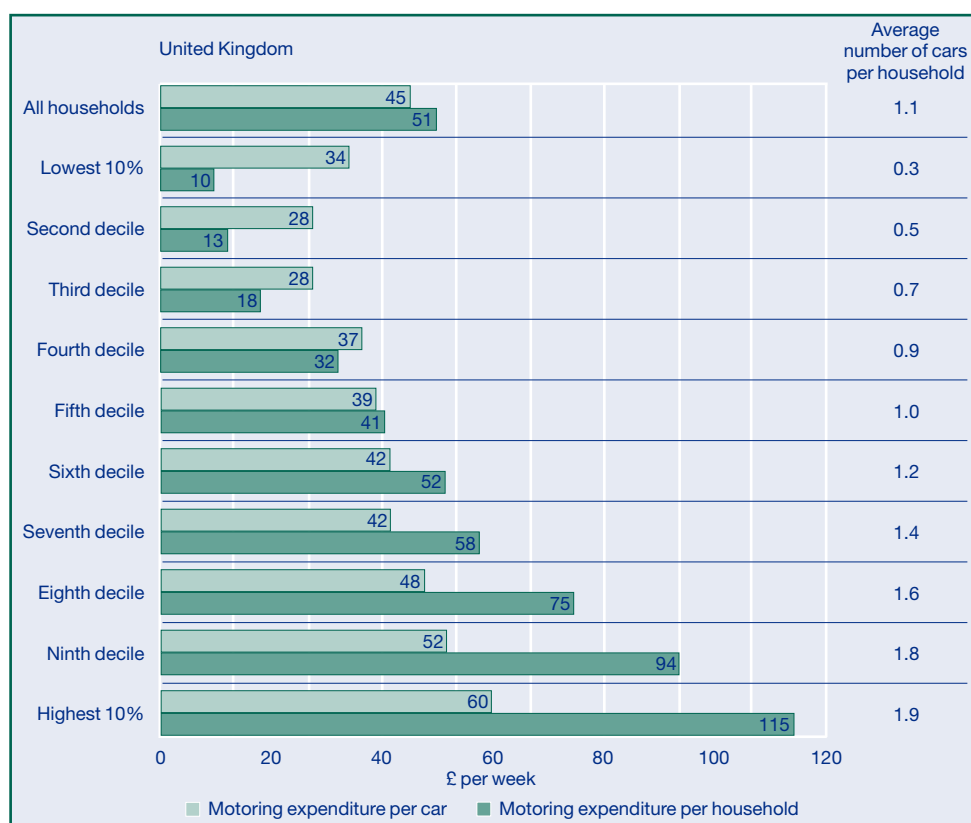
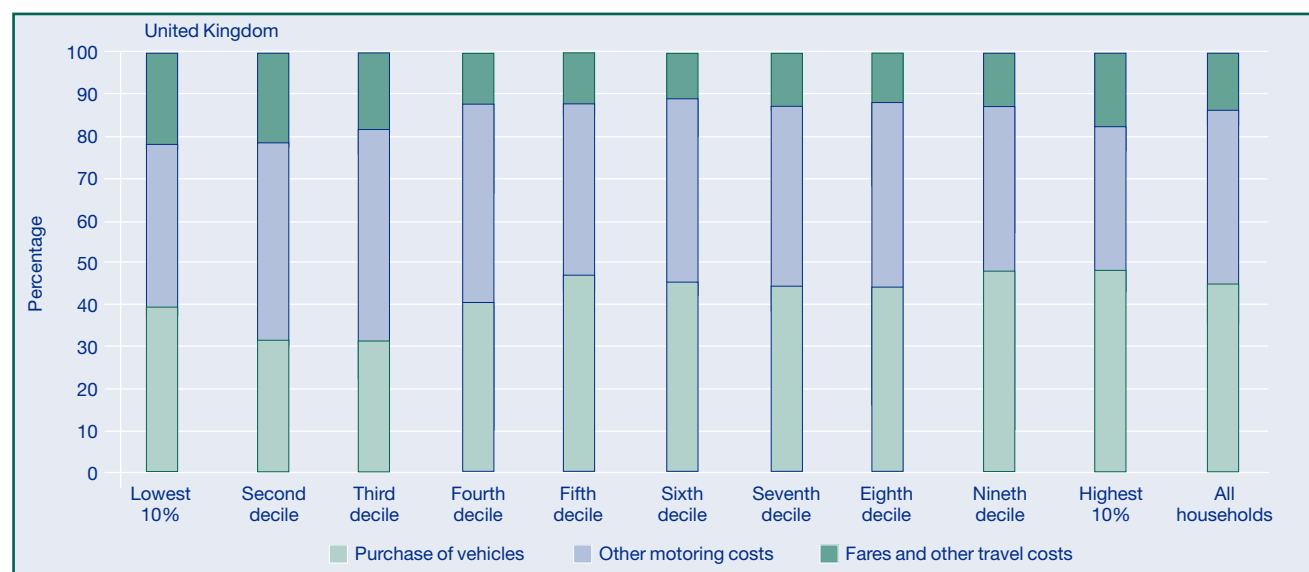


Chart 7.9 Distribution of travel expenditure by income decile: 2002–03

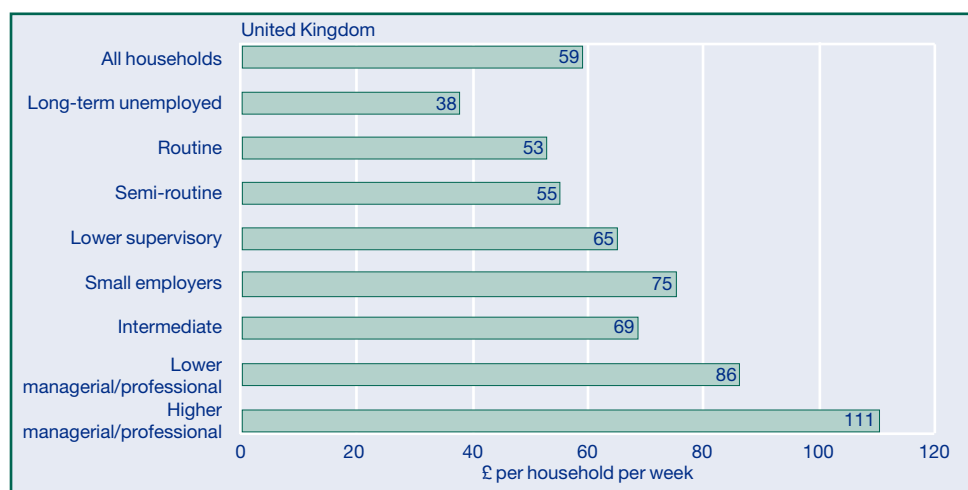


In 2002–03, the poorest and the wealthiest households spent a higher proportion of their travel expenditure on fares and other travel costs (Chart 7.9). This is consistent with information on travel by income from the NTS which shows that those in the lower bands travel more by public transport because of low car ownership and those in the highest income quintile travel relatively more by rail (see Chapter 5).

Expenditure by economic activity status and by socio-economic class

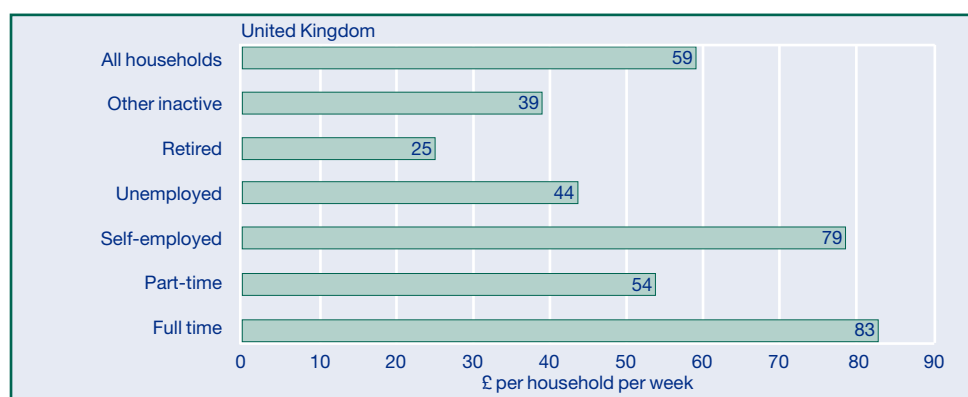
Travel expenditure by the socio-economic class of the household reference person (HRP) reflects that for different income groups shown above, ranging from under £40 a week for the long term unemployed to over £100 per week for people in higher managerial and professional occupations (Chart 7.10). Households where the household reference person was long-term unemployed spent only 11 per cent of their total expenditure on transport compared with around 15 per cent by other households.

Chart 7.10 Travel expenditure by socio-economic class of household reference person: 2002–03



Similarly it varies by the employment status of the HRP. Households where the HRP was working full-time or was self employed spent around £80 a week on travel compared with £54 a week where the HRP worked part-time (Chart 7.11). Retired households only spent £25 per week and other inactive people about £40. The proportion of their expenditure that they spent on travel was also lower than average.

Chart 7.11 Travel expenditure by economic activity status of household reference person: 2002–03



Expenditure by tenure

Total travel expenditure was highest for those buying with a mortgage, but expenditure per car was highest for those in privately rented furnished accommodation as their average number of cars per household (0.8) was about half that of mortgage holders (1.5). Total travel expenditure was lowest for those renting from a registered social landlord or the Council, but their average expenditure per car was similar to the average for all households at around £50 per car (Chart 7.12). Households who rented spent a lower proportion of their expenditure on travel than other households.

Chart 7.12 Travel expenditure by tenure: 2002-03

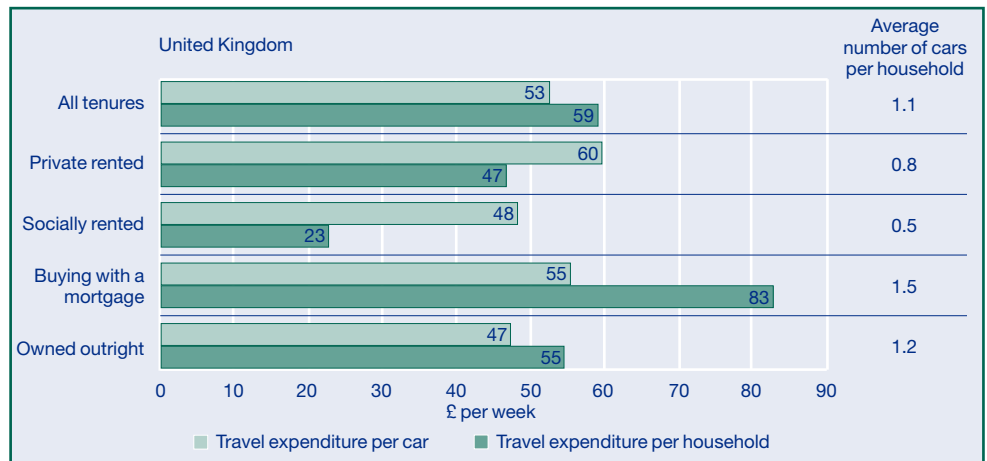


Chart 7.13 Average weekly travel expenditure by region and country: 2001-02 to 2002-03

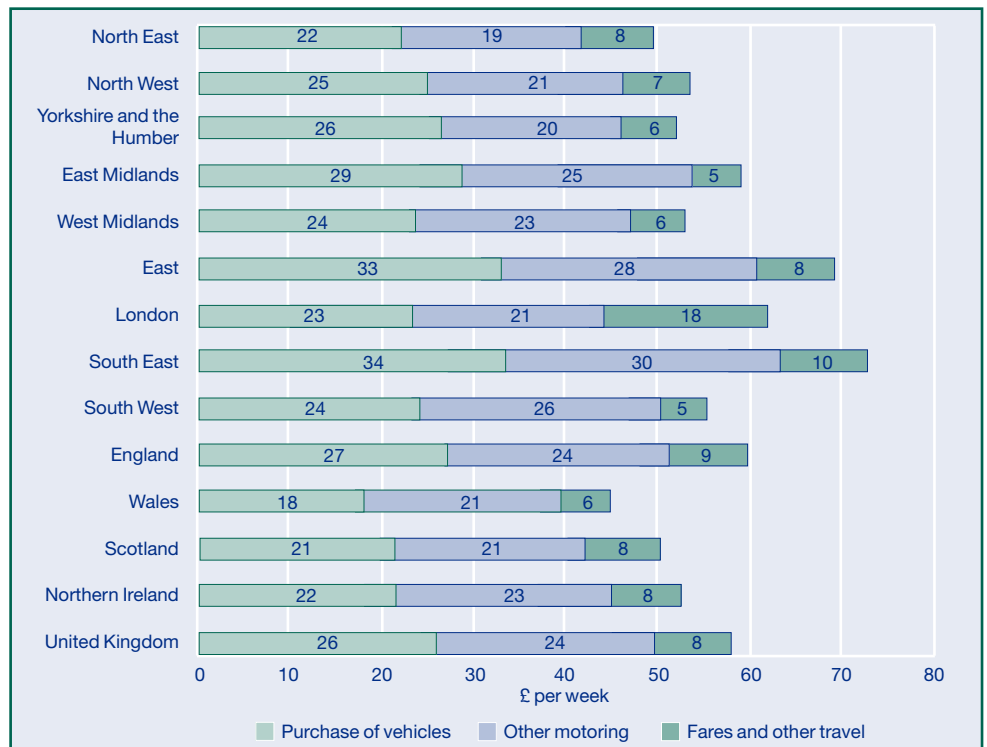
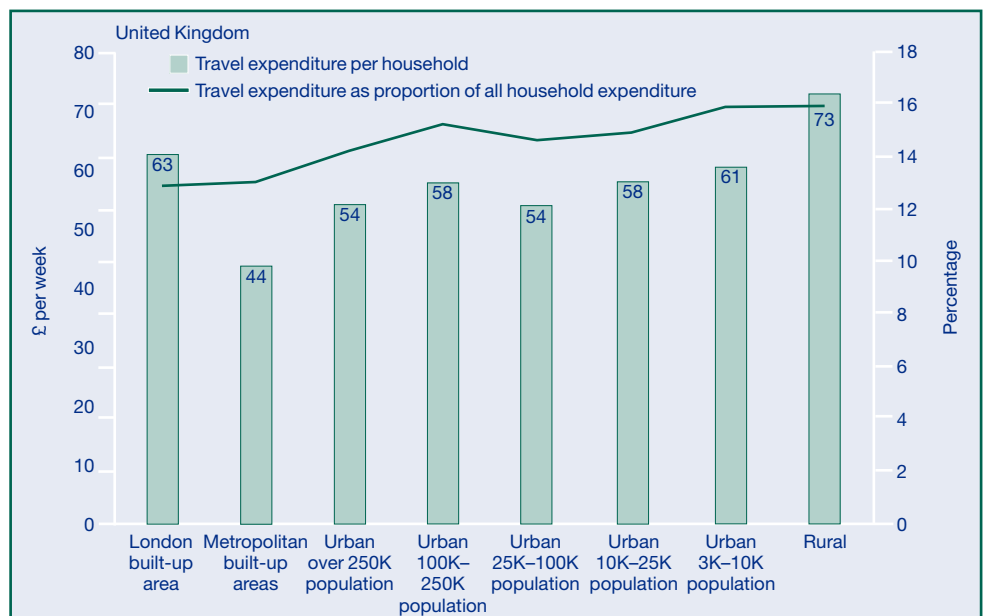


Chart 7.14 Travel expenditure by urban/rural area (GB): 2001-02 to 2002-03



Expenditure by region and size of urban area

Households in the East and South East spent the most on travel, around £70 per week, and those in Wales and the North East spent the least at under £50 a week (Chart 7.13). Households in London spent considerably more on fares and other travel costs (£18 a week).

Households in rural areas spent the most on travel (£73 on average per week), which was two-thirds more than that spent by those in Metropolitan built-up areas (£44 per week). Otherwise, there is not a great variation in travel expenditure (£54–£63 per week) between households in different types of urban area (Chart 7.14). Households in the London built-up area were the second highest spenders on travel, but spent the lowest proportion of their total expenditure on it.

In terms of expenditure per car, households in the London built-up area (which extends beyond the Greater London Authority) spent the most per car and those in less heavily populated areas the least.

Table 7.5 Household expenditure on transport:
United Kingdom:
1996–1997 – 2002–03

	£ per week/percentage						
	1996– 1997	1997– 1998	1998– 1999	1999– 2000	2000– 2001	2001– 2002	2002– 2003
COICOP categories¹							
(a) Motoring² costs							
Purchase of vehicles	16.20	20.2	23.90	23.00	23.20	25.80	26.60
New cars and vans	4.70	5.80	7.40	7.90	10.60	10.70	11.30
Second-hand cars and vans	10.90	13.4	15.90	14.30	11.80	14.40	14.50
Motorcycles and scooters	0.30	0.60	0.40	0.50	0.60	0.50	0.90
Other vehicles (mainly bicycles)	..	..	..	..	..	0.20	0.20
Bicycle purchase	0.30	0.40	0.20	0.30	0.20	..	..
Spares, accessories, repairs and servicing	5.90	6.30	6.40	6.40	6.40	7.00	7.30
Car or van	5.60	5.90	6.10	6.20	6.00	6.80	6.90
Motorcycle	0.20	0.20	0.10	0.10	0.20	0.10	0.20
Bicycle	0.10	0.20	0.20	0.20	0.10	0.10	0.20
Petrol, diesel and other motor oils:	11.80	12.6	13.00	14.40	15.80	14.80	14.80
Petrol	10.60	11.3	11.50	12.80	14.00	12.70	12.70
Diesel	1.00	1.20	1.30	1.40	1.80	2.00	2.10
Other motor oils	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Other motoring costs	1.70	1.80	1.90	1.90	1.80	1.80	1.90
All motoring costs	35.70	40.9	45.20	45.70	47.20	49.40	50.70
(b) Fares and other travel costs³							
Rail and tube fares:	1.30	1.40	1.90	1.80	2.00	1.90	1.80
Season tickets	0.40	0.40	0.70	0.60	0.60	0.60	0.60
Other tickets	0.90	1.00	1.20	1.20	1.40	1.30	1.20
Bus and coach fares:	1.40	1.30	1.30	1.40	1.40	1.50	1.40
Season tickets	0.30	0.30	0.30	0.30	0.30	0.30	0.40
Other tickets	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Combined tickets	0.50	0.60	0.70	0.90	0.90	1.00	0.80
Season tickets	0.40	0.40	0.60	0.70	0.70	0.80	0.60
Other tickets	0.10	0.10	0.10	0.20	0.20	0.20	0.20
Air and other travel and transport:	3.00	3.80	3.70	4.00	4.30	4.10	4.50
Air fares ³	0.70	1.30	1.00	1.00	1.30	1.20	1.50
Other transport and travel ⁴	2.30	2.60	2.70	3.00	3.00	2.90	3.00
All fares and other travel costs ⁴	6.20	7.10	7.60	8.10	8.60	8.40	8.50
All transport (excluding motor vehicle insurance and taxation and boat purchase and repairs – see below)	41.80	48.00	52.70	53.80	55.90	57.80	59.20
All household expenditure	309.10	328.80	352.20	359.40	385.70	398.30	406.20
Percentage of household expenditure on transport	13.5	14.6	15.0	15.0	14.5	14.5	14.6
Old FES categories							
Included under transport and travel but excluded above:							
Motor vehicle insurance and taxation	6.00	6.30	7.00	7.30	8.20	9.20	11.00
Vehicle taxation	2.10	2.20	2.40	2.40	2.50	2.40	2.40
Vehicle insurance	3.90	4.10	4.50	4.90	5.70	6.80	8.60
Boat purchase and repairs	0.80	0.50	0.30	0.60	0.50	0.40	0.60
Key transport expenditure totals:							
Motoring costs	41.20	46.60	51.80	52.60	55.10	58.50	61.70
Fares and other travel costs	7.50	8.10	8.30	9.20	9.50	9.50	8.00
All transport and travel	48.70	54.80	60.00	61.70	64.50	68.00	69.70

1. Data for 1996/97–2000/01 are based on old FES categories which include some items excluded under COICOP, eg, motor caravans, audio equipment, helmets.

2. Includes expenditure on motorcycles and bicycles

3. Excludes air fare component of package holidays abroad.

4. Includes expenditure on taxis, car hire and leasing.

Appendix A The National Travel Survey

The 2003 National Travel Survey (NTS) is the latest in a series of household surveys designed to provide a databank of personal travel information for Great Britain. It is part of a continuous survey that began in July 1988, following ad hoc surveys since the mid-1960s. The survey is designed to pick up long-term trends and is not suitable for monitoring short-term trends.

Travel details provided by respondents include trip purpose, method of travel, time of day and trip length. The households also provided personal information, such as their age, gender, working status, and driving licence holding, and details of the cars available for their use. In order to minimise the burden of completing the diaries respondents only included walks of under a mile on the seventh day, but all tables in this publication include data on short walks (over 50 yards) grossed up for the full seven day period.

The 2002/2003 surveys

During the two years 2002 and 2003, nearly 15,700 households provided details of their personal travel by filling in travel diaries over a period of a week, compared with over 9,900 households in 1999/2001. Previously data from the continuous survey has been shown for a three year time period because of the small sample size. The increased sample size from 2002 enables results to be presented for single years for many purposes, but data for 2002 and 2003 have been combined together for this publication. Details of sample sizes are given in Table A.

Changes to the methodology in 2002 mean that there are some inconsistencies with data for earlier years. Details of possible discontinuities are given below.

Uses of the NTS

The NTS is carried out in order to provide a better understanding of the use of transport facilities made by different sectors of the population, and trends in these patterns of demand. Extensive use was made of NTS data in the formulation of in the 10 Year Plan *Transport 2010*, published in July 2000, and in the report *Making the connections: Final report on transport and social exclusion*, published in February 2003. Data were also used in the *Road Pricing Feasibility Study* published in July 2004. Other important uses include the forecasting of future traffic levels and monitoring accident rates amongst different types of road user.

The 2002/2003 surveys: Methodological changes

Particular reasons for discontinuities which readers should note when using the data include:

- **Coding the diary data centrally** rather than by interviewers and considerable efforts by the new contractor to clarify definitions should ensure greater consistency, but may cause some discontinuities with previous years. This may be the cause of discontinuities for some mode and purpose categories.
- **Day 7 trips** appear to have been under-recorded. This particularly affects the recording of short walks under 1 mile which are only recorded on that day, but also affects other trips as

well. This has implications for the average time and length of trips, especially walking trips, and secondary school trip length.

- **London** households are under-recorded, particularly for outer London in 2002, and there are changes in the age distribution. This affects trips by London bus and the underground, and car ownership in London, and may affect total distance travelled and time taken.
- The proportion of deeply rural households in the **rural sample** fluctuates from year to year. This proportion was relatively high in 2002 compared with earlier years. This will affect comparison of car ownership figures for rural areas and may affect trip lengths and times for the country as a whole.
- The 2002 and 2003 survey years relate to mid-January to mid-January, whereas data for previous years related to the calendar year 1 January – 31 December.

Incentives offered to a subset of the sample in the second half of 2002 demonstrated their effectiveness in increasing response rates particularly for some under-represented groups, for example large families. Full use of incentives during 2003 led to an improved sample size. However, since the incentives have been more successful in getting response from certain types of household, some discontinuities may be apparent. This may affect estimates of those holding driving licences, car ownership, and some transport modes and travel purposes.

Work is being carried out for DfT to weight the data for 2003 and earlier years to address non-response, sampling variations and other factors. This should ameliorate some of these problems in future. Some weighted data will be published in 2005.

Sampling errors

Because estimates made from a sample survey depend upon the particular sample chosen, they generally differ from the true values of the population. This is not usually a problem when considering large samples (such as all car trips in Great Britain), but may give misleading information when considering data from small samples, for example cyclists in a particular age band, or travel by ethnic group.

In general, it should be remembered that for estimates of households, individuals and vehicles, samples of under 100 should not be used, while samples of under 300 should be used cautiously. For trip and stage estimates, even more caution should be exercised: samples of under 300 should not be used, whilst samples of under 1,000 should be used cautiously. Tables of sampling errors for a wide variety of the main statistics derived from the NTS are published in the 2000 Technical Report. Sampling errors for 2003 will be published in the 2003 Technical Report in 2005.

Technical reports

Technical reports for the NTS are published annually. The 2002 Technical Report, available on www.dft.gov.uk/transtat/personaltravel includes details of sampling, fieldwork and data processing and a full set of the questionnaires. The 2003 Technical Report, to be published in 2005, will additionally include details of the variables, sampling errors, a summary of definitional differences between the 2003 NTS and earlier surveys, a comparison of NTS data with other sources and a note on progress made since the National Statistics Review of the NTS in 2000.

Publications and unpublished data

The most recent editions of all NTS publications are available on the DfT website at www.dft.gov.uk/transtat/personaltravel. Bulletins of key results are normally published annually. Appendix D lists reports on earlier National Travel Surveys and Appendix E lists topics covered in NTS and other reports.

Personal Travel Factsheets on specific issues (including travel by car, bus, rail, walking, cycling, motorcycling, taxi, and travel to school, work and shops) were published for 1999/2001 data in January 2003. These will be updated to 2002/2003 later in 2005.

Customised tables using unpublished NTS data can be obtained from the NTS enquiry point (telephone 020 7944 3097 or e-mail national.travelsurvey@dft.gov.uk). Charges may be made to cover the costs of data extraction.

Table A.1 Unweighted sample numbers on which analyses are based

	Number/thousands											
	1992/1994			1995/1997			1998/2000			2002/2003		
Households	10,296			9,688			9,390			15,695		
Individuals	24,671			23,167			21,868			36,353		
Children (<16)	5,356			5,126			4,630			7,591		
Adults (16+)	19,315			18,041			17,238			28,762		
Motor vehicles	10,179			9,948			10,110			17,459		
Cars	9,705			9,558			9,767			16,899		
4-wheeled cars	9,048			8,958			9,146			15,715		
Trips	98,460			77,560			357,547			593,761		
Stages	16,703			92,960			372,665			616,278		
Great Britain demographic data for survey periods:												
Population ('000s)	56,043			56,385			56,797			57,738		
Grossing up factors	2,272			2,434			2,597			1,588		
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Households	3,453	3,418	3,425	3,339	3,210	3,139	2,935	3,020	3,435	3,469	7,437	8,258
Individuals	8,320	8,161	8,190	8,029	7,665	7,473	6,842	6,970	8,056	7,978	16,886	19,467
Children (<16)	1,752	1,796	1,808	1,810	1,666	1,650	1,433	1,466	1,731	1,659	3,413	4,178
Adults (16+)	6,568	6,365	6,382	6,219	5,999	5,823	5,409	5,504	6,325	6,319	13,473	15,289
Motor vehicles	3,467	3,346	3,366	3,422	3,288	3,238	3,121	3,217	3,772	3,707	8,195	9,264
Cars	3,283	3,206	3,216	3,267	3,167	3,124	3,030	3,119	3,618	3,580	7,907	8,992
4-wheeled cars	3,068	2,997	2,983	3,078	2,955	2,925	2,829	2,927	3,390	3,349	7,407	8,308
Trips	136,410	128,946	133,104	130,415	124,748	122,397	112,867	114,501	130,179	129,998	278,916	314,845
Stages	142,785	134,690	139,228	135,997	129,690	127,273	117,269	119,072	136,324	134,036	289,048	327,230
Great Britain demographic data for survey periods:												
Population ('000s)	55,940	56,037	56,154	56,279	56,381	56,496	56,627	56,802	56,960	57,149	57,625	57,851
Grossing up factors	6,724	6,866	6,856	7,009	7,356	7,560	8,276	8,150	7,071	7,163	3,413	2,972

Response rates

The response rate shown in Table A.2 for 2002/2003 was 57 per cent of all eligible households, significantly lower than nearly all other NTS surveys, but continues the falling trend since the record 79.8 per cent achieved during 1989/91. The falling response rate reflects the general fall in response rates throughout Great Britain, especially for diary surveys. It is increasingly difficult to contact some households, and the rate of refusal is

increasing, possibly because there are so many commercial surveys currently conducted both in person and by telephone. Many other households state that they are too busy to take part.

Table A.2 Details of the 2002/2003 and earlier National Travel Surveys

									Number/thousands	
		Fieldwork period	Sampling frame	Addresses selected	Extra households found	Ineligible addresses	Eligible households	Fully cooperating households	Response rate (%)	Achieved sample rate (%) ¹
Ad-hoc surveys										
1965 ²	Research Services Limited	Feb 1965–Feb 1966	Electoral Register	15,792	..	..	15,275	7,545	71.0	..
1972/1973	OPCS	April 1972–March 1973	Electoral Register	8,736	140	485	8,391	5,786	69.0	..
1975/1976	Social and Community Planning Research	July 1975–June 1976	Electoral Register	15,120	223	673	14,670	9,589	65.4	..
1978/1979	MAS Survey Research Ltd.	May 1978–May 1979	Electoral Register	15,120	166	815	14,471	8,429	58.2	..
1985/1986	OPCS	July 1985–June 1986	PAF ³	15,120	290	1,827	13,583	10,266	75.6	66.6
1988 to 2001 – continuous survey OPCS/ONS										
1988		July 1988–Dec 1988	PAF ³	2,520	28	293	2,255	1,754	77.8	68.8
1989/1991		Jan 1989–Dec 1991	PAF ³	15,120	323	1,974	13,469	10,752	79.8	69.6
1992/1994 ⁴		1 Jan 1992–16 Jan 1994	PAF ³	15,340	258	1,951	13,647	10,424	76.4	66.8
1995/1997		17 Jan 1995–16 Jan 1998	PAF ³	15,120	243	1,859	13,504	9,685	71.7	63.0
1998/2000 ⁵		17 Jan 1998–11 Jan 2000	PAF ³	15,875	208	1,686	14,397	9,321	64.7	58.0
2002–2003 – continuous survey NatCen										
2002/2003 ⁶		12 Jan 2002–11 Jan 2004	PAF ³	30,096	329	2,781	27,644	15,695	56.8	51.6

1. The achieved sample rate is the number of fully-cooperating households as a percentage of the combined total of the set sample and the extra households found.
2. Many areas were over-sampled in the 1965 survey in order to provide sufficient data for regional analyses. The figures for fully cooperating households, and the response rate shown in the table are after reweighting.
3. The Postcode Address File (PAF) is a computerised list of all addresses, which is maintained by the Post Office. It includes more empty and other such ineligible addresses than the Electoral Register used before 1985/1986.
4. The 1992/1994 figures reflect the change to mid-month quotas from the start of 1992. The extra 220 addresses included represent the 20 quotas, each of 11 addresses, carried out in the transitional period 1–16 January 1992. Also in 1993, five quotas a year were switched to London from the rest of Great Britain in order to provide a better representation of London residents.
5. In 2000, the sample size was increased to 5,796 addresses (252 quotas, each of 23 addresses).
6. In 2002 the sample size was increased to 15,048 addresses (684 quotas, each of 22 addresses).

Appendix B National Travel Survey – notes and definitions

Personal travel

The subject of the National Travel Survey is personal travel. This is travel for private purposes or for work or education, provided the main reason for the trip is for the traveller himself or herself to reach the destination.

Trips in course of work

Trips made in the course of work are included provided that the purpose of the trip is for the traveller to reach a destination. Travel to deliver goods, or to convey a vehicle or passengers (e.g. as a bus driver or taxi driver), is not covered. Nor is travel as a conductor, guard or other member of a crew of public transport vehicles. Also excluded is travel as a driver or a member of a crew of public vehicles such as fire engines or ambulances; travel in industrial or agricultural equipment (cranes, bulldozers, tractors, etc.); travel in specially equipped vehicles used in the course of a person's work (police patrol cars, AA/RAC repair vehicles, Royal Mail vans, etc.); and trips in course of work by people paid to walk or cycle, such as policemen on the beat, traffic wardens, leaflet distributors, messengers, postmen, or roundsmen.

Leisure travel

Travel for a leisure purpose is normally included. However, trips which are themselves a form of recreation are not. Examples are yachting or gliding, which are done for the pleasure of going in a boat or plane rather than to get somewhere. Travel by foot away from the public highway is excluded unless both the surface is paved or tarred and there is unrestricted access. Thus, walks across open countryside on unsurfaced paths are excluded; and so are walks in pedestrian precincts or parks that are closed at night. Children's play on the street is not included as travel, but information about this is collected separately on Day 7.

Geographical coverage

Only travel within Great Britain is included. Trips to other places are included only up to the ticket control point at which the boat, plane or train using the Channel Tunnel, is boarded. Travel by road vehicle away from the public highway is excluded, but travel on public roads in parks and on cycleways is included.

Trips

The basic unit of travel, a trip, is defined as a one-way course of travel having a single main purpose. Outward and return halves of a return trip are treated as two separate trips. A trip cannot have two separate purposes, and if a single course of travel involves a mid-way

change of purpose then it, too, is split into two trips. However, trivial subsidiary purposes (e.g. a stop to buy a newspaper) are disregarded.

Note that in earlier publications the word 'journey' has been used. 'Trip' is now used for clarity, as the word 'journey' is often used in travel literature to mean a sequence of trips starting and finishing at the same place.

Trips under 1 mile

In the past trips under 1 mile have sometimes been excluded from analyses in reports (see Appendix G of the 1991/93 report). This report includes trips of all lengths in every table.

Stages

A trip consists of one or more stages. A new stage is defined when there is a change in the form of transport or when there is a change of vehicle requiring a separate ticket.

Distance travelled

The length of any trip stage is the distance actually covered, as reported by the traveller, and not the distance 'as the crow flies'.

Series of calls trips

In order to reduce the burden on respondents, travel involving a number of stops for the same main purpose and using the same form of transport are treated as one continuous series of calls trip from the first such call to the last one. Only shopping and 'in course of work' travel can be treated in this way. A doctor's round would therefore consist of one trip to the first patient, one series of calls trip to the other patients and one trip from the last call back to the surgery or home. In general, series of calls trips are excluded from tables in this report.

Modes of travel

Walks of less than 50 yards are excluded.

Car includes light vans, Land Rovers and privately owned lorries.

Rail includes both surface rail (former British Rail) and London Underground services, but not any other rail service.

Light Rail includes the Tyne & Wear Metro, Docklands Light Railway, Manchester Metrolink, Glasgow Underground System, South Yorkshire Supertram, Blackpool Trams, Croydon Tramlink, Leeds Supertram, Greater Nottingham Light Rapid Transit and Midlands Metro. It has been possible to distinguish these modes since 1998, but the number of cases is very small and they are included in tables under 'other public' transport.

Local bus includes all 'local' services, but excludes express services, excursions and tours.

A *bicycle* is any pedal cycle capable of use on the public road, but not children's bicycles or tricycles that are intended as toys.

'Other' modes depend on the context, but may include other types of bus (works or school bus, private hire, express bus and tours and excursions), two-wheeled motor vehicles, motorcaravans, dormobiles, taxis/minicabs, domestic air travel and other private and public transport.

Main mode of travel

The main mode of a trip is that used for the longest stage of the trip. With stages of equal length the mode of the latest stage is used.

Trip purpose

The purpose of a trip is normally taken to be the activity at the destination, unless that destination is 'home' in which case the purpose is defined by the origin of the trip. The classification of trips to 'work' is also dependent on the origin of the trip. Purposes include:

Commuting

Trips to a usual place of work from home, or from work to home.

Business

Personal trips in course of work, including a trip in course of work back to work. This includes all work trips by people with no usual place of work (e.g. site workers) and those who work at or from home.

Other work

Trips to work from a place other than home or in course of work, e.g. coming back to work from going to the shops during a lunch break.

Education

Trips to school or college, etc. by full time students, students on day-release and part time students following vocational courses.

Shopping

All trips to shops or from shops to home, even if there was no intention to buy.

Personal business

Visits to services, e.g. hairdressers, launderettes, dry-cleaners, betting shops, solicitors, banks, estate agents, libraries, churches; or for medical consultations or treatment; or for eating and drinking, unless the main purpose was entertainment or social.

Social or entertainment

Visits to meet friends, relatives, or acquaintances, both at someone's home or at a pub, restaurant, etc.; all types of entertainment or sport, clubs, and voluntary work, non-vocational evening classes, political meetings, etc.

Holidays or day trips

Trips (within GB) to or from any holiday (including stays of 4 or more nights with friends or relatives), or trips for pleasure (not otherwise classified as social or entertainment) within a single day.

Just walk

Walking trips for pleasure or exercise along public highways, including taking the dog for a walk and jogging.

Escorting

Used when the traveller has no purpose of his or her own, other than to escort or accompany another person; for example, taking a child to school. Escort commuting is escorting or accompanying someone from home to work or from work to home. Similarly, other escort purposes are related to the purpose of the person being escorted.

Households

A household consists of one or more people who have the sampled address as their only or main residence and who either share at least one main meal a day or share the living accommodation. The survey excludes people who are not living in households, such as students in halls of residence.

Work status

A person is described as working if in paid employment, or self-employed, during the previous week. Persons absent on holiday, on strike, temporarily sick, on study leave, maternity leave, or absent for similar reasons, are included. Sandwich students and students working during vacation are excluded. The distinction between full-time and part-time work is determined by the respondent.

Household income

Household income is the total gross income of all members of the household, from whatever source, before deduction of income tax, National Insurance or pensions contributions.

Real household income equivalent

Because of price inflation, and because household size and composition is not taken into account in the simple measure of household income, a measure of household affluence, known as real household income equivalent, is used. Household income equivalent scales are used to assign values to adults and children within a household – a technique used by the Department for Work and Pensions when assessing Housing Benefit Scales. Total household income is then divided by the sum of these values so that the household income relative to a household consisting of just one married couple can be obtained. These are then deflated to 1990 values using the Retail Price Index (RPI). Households are then assigned to one of twenty groups in ascending order of affluence. These are usually grouped into five 'quintile' groups for analysis purposes.

The values assigned to individuals within a household were as follows:

Head of household single parent	0.71
Other head of household	0.61
Wife of other head of household	0.39
Adult dependant	0.36
Unrelated adult	0.38–0.43 (depending on no. of adults in household)
Child aged under 2	0.09
Child aged 2-4 years	0.18
Child aged 5-7 years	0.21
Child aged 8-10 years	0.23
Child aged 11-12 years	0.25
Child aged 13-15 years	0.27

Household vehicles

The term 'car' is used for all three or four wheeled vehicles with a car body type, and also light vans, Land Rovers, dormobiles and motorcaravans. Such vehicles are regarded as household cars if they are either owned by a member of the household, or available for the private use of household members. Vehicles used only for the carriage of goods, as public service passenger vehicles, or solely for hire by other people are excluded. Hired or borrowed vehicles are included only if they were available to the household over the whole of the sample travel week. Company cars provided by an employer for the use of a particular employee (or director) are included, but cars borrowed temporarily from a company pool are not.

Access to cars

The 'main driver' of a household car is the household member that drives the furthest in that car in the course of a year. Households with two or more cars are likely to have two or more main drivers, one for each car.

'Other drivers' are people in car-owning households, who have a full driving licence to drive a car, but are not main drivers of a household car. No account is taken of whether or not they actually drive a household car.

Non-drivers are all other people in car-owning households. They include children below driving age and adults with provisional driving licences.

Type of area

Households are classified according whether they are within an urban area of at least 3,000 population or in a rural area. Urban areas are subdivided for the purpose of this publication as follows:

- London boroughs – the whole of the Greater London Authority
- Metropolitan built-up areas – the built-up areas of former metropolitan counties of Greater Manchester, Merseyside, West Midlands, West Yorkshire, Tyne and Wear and Strathclyde (excludes South Yorkshire)
- Large urban – self-contained urban areas over 250,000 population
- Medium urban – self-contained urban areas over 25,000 but not over 250,000 population

- Small/medium urban – self-contained urban areas over 10,000 but not over 25,000 population
- Small urban – self-contained urban areas over 3,000 but not over 10,000 population
- Rural – all other areas including urban areas under 3,000 population

England and Wales

The classification specifies urban areas based on the extent of urban development indicated on Ordnance Survey maps. An urban area is a tract of continuously built-up urban land extending 20 hectares or more. Urban areas thus defined but less than 200 metres apart are combined into a single urban area.

Scotland

In Scotland postcodes were classified as urban or rural using population density. Urban postcodes were then aggregated together to form localities using a minimum population of 500 together with other rules.

The areas are based on 1991 population up to 2001, and on 2001 population from 2002

ONS area classification

The 2001 Area Classification is used to group together geographic areas according to key characteristics common to the population in that grouping. These groupings are called clusters, and are derived using census data. The classification is used by government departments and academics for analysis and comparison, and by members of the public for finding out about where they live and how it compares with the rest of the country. The classification has been produced for Great Britain after each census since 1971. It has been produced for the whole of the UK for the first time after the 2001 census. The classification is available at local authority, ward and health area level, and is based on 2003 boundaries. The area classification comprises 9 super-groups, 17 groups and 26 sub-groups. For this publication the ward level based classification at super group level is used.

Index of Multiple Deprivation 2004

The Index of Deprivation 2004 (IMD 2004) is a measure of deprivation at the Super Output Area (SOA) in England. The model of multiple deprivation which underpins the IMD 2004 is based on the idea of distinct dimensions of deprivation which can be recognised and measured separately. The IMD 2004 contains seven domains of deprivation: Income deprivation; Employment deprivation; Health deprivation and disability; Education, skills and training deprivation; Barriers to Housing and Services; Living environment deprivation and Crime. IMD 2004 combines indicators in each of the domains into a single deprivation score for each SOA. Each SOA is ranked according to an overall deprivation score, and the ranking list divided into 10 equal groups, or deciles. Further details may be found at: <http://www.odpm.gov.uk/indices>

Appendix C Notes and definitions for other sources

Chapter 1

Chart 1.1

Vehicle kilometres

Average vehicle flows are derived from manual and automatic roadside traffic counts. Traffic estimates, expressed as vehicle kilometres, are calculated by combining the average vehicle flow data with information on road lengths. A vehicle kilometre is equivalent to one vehicle times one kilometre travelled. Total vehicle kilometres are calculated by multiplying the Annual Average Daily Flow by the corresponding length of road. For example, 1 vehicle travelling 1 kilometre a day for a year would be 365 vehicle kilometres. This is sometimes known as the volume of traffic.

Passenger kilometres

This is the total distance travelled annually by passengers by all modes of transport. 1 passenger kilometre = 1 person travelling 1 kilometre. For vehicles with multiple occupancy the distance travelled is multiplied by the number of vehicle occupants.

Gross Domestic Product

This series is produced by the Office for National Statistics. It is a measure of the value of total economic activity taking place in the UK.

Chart 1.6

The price indices are taken from the Retail Prices Index (RPI), re-based to 1990=100 for convenience. Both the RPI and the series on disposable income are produced by the Office for National Statistics

Chart 1.7

The series of mid-year estimates of the percentage of households with regular use of a car or van is based on data from the National Travel Survey, the Expenditure and Food Survey and the General Household Survey. Estimates of car ownership in 1991 and 2001 are also available from the Census. These differ only a little from the composite estimates for these years upon which Chart 1.7 is based. Elsewhere in this publication car ownership data is from the NTS for comparison with other NTS data for the same period.

Chart 1.9

Driving tests data are supplied by the Driving Standards Agency.

Chapter 3

Table 3.8

The 2001 Census for England and Wales collected information on car ownership and usual method of travel to work, which are combined in this table.

Chapter 5

Chart 5.13/Table 5.8

These data are from the Survey of English Housing, a continuous survey carried out for the Office of the Deputy Prime Minister (ODPM). It collects a wide range of information on households, their housing and their attitudes to housing and related issues through face-to-face interviews with about 20,000 householders each year.

Table 5.15

Data on car ownership and ethnic group from the 2001 Census for England and Wales are combined in this table.

Table 5.16

This table uses data from the Autumn (September–November) 2003 Labour Force Survey (LFS), a survey of households living at private addresses in Great Britain. The table is based on those people who are employed, and excludes those on Government New Deal schemes, those working from home or using their home as a working base, and those whose workplace or mode of travel to work are not known.

Table 5.17

This table uses data from the 2002–2003 British Crime Survey, covering crimes in the financial year 2002–2003 in England and Wales. The survey consists of 40,000 interviews of people aged 16 or over each year. It measures the amount of crime by asking people about crimes they have experienced in the last year and includes crimes which are not reported to the police.

Chapter 7 Expenditure

Chart 7.1

The price indices are taken from the Retail Prices Index (RPI), re-based to 1990=100 for convenience. Both the RPI and the series on disposable income are produced by the Office for National Statistics.

Chart 7.2

The outturn fuel prices are supplied by DTI and deflated by the GDP (market prices) deflator.

Table 7.1

Figures for bus and rail travel have been estimated by dividing total revenue from passenger fares from operators (including revenue from payments for concessionary fares) by the total number of passenger miles travelled. They therefore represent an average over all journeys made, and do not necessarily reflect the cost for any individual journey.

Figures for car travel have been estimated by dividing household expenditure on motoring and fuel from the Expenditure and Food Survey by the estimated total number of passenger miles travelled by car, by those living in households.

The Expenditure and Food Survey**Charts 7.3–7.14 and Tables 7.2–7.5**

The EFS is a result of the amalgamation of the Family Expenditure Survey (FES) and the National Food Survey (NFS) and is carried out by the Office for National Statistics. The survey is primarily used to provide information for the Retail Price Index, National Accounts, the effect of taxes and benefits, and trends in nutrition.

The basic unit of the survey is the household, and 6,342 households in Great Britain took part in 2002–03, a response rate of 58 per cent. Each individual in the household is asked to keep a diary for two weeks, recording their daily expenditure. A household interview is conducted to find out information about regular expenditure, such as rent and mortgage payments, along with infrequent but large expenditures such as those on vehicles. Note that business expenses (including car mileage allowances) refunded by an employer and the cost of company cars are not included as household expenditure. ONS publish the results of the UK survey annually in ‘Family Spending’.

The main items of transport expenditure are shown in Table 7.5. Additional information is available as follows:

- Whether vehicles are purchased outright or on loan/hire
- A breakdown of ‘other motoring costs’ by motoring organisation subscriptions; garage rent, other costs, car washing etc; parking fees, tolls, and permits; driving lessons; anti-freeze, battery water, cleaning materials
- A breakdown of ‘other travel and transport’ by school travel; taxis and hired cars with drivers; other personal travel and transport services; hire of self-drive cars, vans, bicycles; car leasing; water travel, ferries and season tickets.

Appendix D Reports on earlier National Travel Surveys

National Travel Survey 1972/73: Cross-sectional analysis of passenger travel in Great Britain, HMSO 1975

National Travel Survey 1972/73: Number of journeys per week by different types of households, individuals and vehicles, HMSO 1976

National Travel Survey 1972/73: A comparison of 1965 and 1972/73 surveys, HMSO 1976

National Travel Survey 1975/76 Report, HMSO 1979

National Travel Survey 1978/79 Report, HMSO 1983

National Travel Survey 1985/86 Report – Part 1 An analysis of personal travel, HMSO 1988

National Travel Survey 1985/86 Report – Part 2 A technical guide, HMSO 1988

National Travel Survey 1989/91, HMSO 1993

National Travel Survey 1991/93, HMSO 1994

National Travel Survey 1992/94, HMSO 1995

National Travel Survey 1993/95, HMSO 1996

National Travel Survey 1994/96, HMSO 1997

Focus on Personal Travel (including the report of the National Travel Survey 1995/97), TSO 1998

National Travel Survey 1996/98 Update, DETR 1999

National Travel Survey 1997/99 Update, DETR 2000

National Travel Survey 1998/2000 Update, DTLR 2001

Focus on Personal Travel (including the report of the National Travel Survey 1998/2000), TSO 2001

National Travel Survey 1999/2001 Update, DfT 2002

National Travel Survey: 2002, DfT 2004

National Travel Survey: 2003 Final Results, DfT 2004

A series of 13 factsheets covering various topics are also published by DfT, and are available free from 020 7944 3097.

Availability of data on the Internet

The current bulletin, factsheets, Technical Reports are also available on:
www.dft.gov.uk/transtat/personaltravel

Appendix E Topics covered in previous reports on the continuous National Travel Survey

National Travel Survey Reports

<i>Section</i>	<i>Topic</i>
1989/91	3 Car users and their cars
	4 Bus and rail travel
	5 Taxis
	6 Walking
	7 Cycling
	8 Travel by journey purpose
	9 Travel by journey length
	10 Comparison of urban and rural travel patterns
	11 Journey start times and travel speeds
	12 Company cars
1991/93	3 Personal travel and the business cycle
	4 Mobility of disabled adults
	5 Shopping journeys
	6 Motorcycles and their users
1992/94	3 Cars and their users
	4 Bus and rail travel
	5 Walking
	6 Cycling
	7 Children's travel
	8 Long distance journey origins and destinations and other new topics
	9 Vehicle occupancy
1993/95	3 Travel by Londoners
	4 Commuting journeys
	5 Travel of the elderly
1994/96	3 Travel by young adults
	4 Patterns of travel
	5 Company cars

Focus on Personal Travel: 1998 Edition

<i>Data relating to</i>	<i>Topic</i>
1995/97	3 How and why do men and women travel?
	4 Travel by children
	5 Aspects of car ownership and use
	6 Trends in public transport use
	7 Travel to work

Focus on Personal Travel: 2001 Edition

<i>Data relating to</i>	<i>Topic</i>
1998/2000	3 How people travel
	4 Why do people travel?
	5 The social background to variations in travel
	6 Travel variations by area type and region
	7 When people travel
	8 Family expenditure on motoring and other travel
	9 Attitudes to transport issues

NTS Articles in Transport Trends

<i>Data relating to</i>	<i>Edition</i>	<i>Topic</i>
1994/96	1998	Travel patterns and journey purpose
1995/97	1999	Walking and Cycling in Great Britain
1996/98	2000	Travel Characteristics of older people Characteristics of the escort education journey
1997/99	2001	Travel by taxi and minicab Motorcycling in Great Britain Partially responding households in the National Travel Survey
All the above reports were published by HMSO/TSO.		

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Focus on Personal Travel aims to provide readers with an introduction to the major trends in personal transport and a greater depth of understanding of some of the current areas of interest, debate and development.

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