



Department for Transport

Analyses from the National Travel Survey

About this release

The National Travel Survey is a household survey of personal travel by residents of England travelling within Great Britain, from data collected via interviews and a one week travel diary.

The NTS is part of a continuous survey that began in 1988, following ad-hoc surveys from the 1960s, which enables analysis of patterns and trends.

Some key uses of the data include describing patterns, for example how different groups of people travel, monitoring trends in travel, including sustainable modes; assessing the potential equality impacts of transport policies on different groups; and contributing to evaluation of the impact of policies.

Short walks data

For information on the exercise to reweight the short walks data for 2002 to 2015, please see page 3 of this release.

This publication presents four pieces of analysis using National Travel Survey data, demonstrating the breadth of information available from the NTS

They include analyses of travel trends going back to 1972; differences in travel between different types of locations; an analysis of trips that use more than one mode; and a more detailed look at the satisfaction questions from the 2016 NTS.

Key findings:

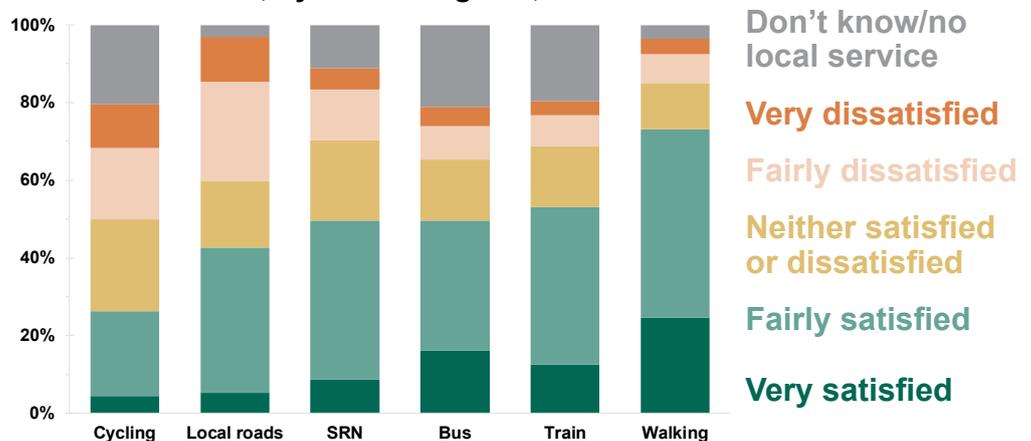
There have been substantial changes in travel behaviour since 1975. The total number of trips per person per year increased from 1975 until 1990 and has been falling since 1995.

In 2011-2014, distance travelled per head was 80% more in the smallest settlements and rural areas than in the Greater London Built-up Area and car driver travel per person three times more.

Although a relatively small proportion of trips use more than one mode, the proportion and type of modes used in multi-mode trips varies for London, urban and rural areas, and by the purpose of the trip.

In general, levels of satisfaction with the Strategic Road Network (SRN), local roads, rail, and buses were quite similar. However, satisfaction is lower for cycling provision (27%) and higher for walking provision (73%).

Satisfaction levels, by mode: England, 2016



Index	Page
Introduction to this publication	3
Accessing NTS data	3
Thank you	3
An analysis of long-term trends in travel patterns	4
Variations in travel between different locations	12
Personal Travel in England - how we use transport and why	19
Satisfaction with transport services	26
Notes and background information	34

Introduction to this publication

The 2016 National Travel Survey (NTS) publication released in July 2017 contained the latest results from the continuing series of household travel surveys designed to provide a consistent source of data on personal travel behaviour across England.

We had planned to follow up the July statistical release with this publication containing reweighted NTS data for short walks from 2002 to 2015 and a consistent time series of walking trips up to and including 2016. **However, we have decided to wait until later in the year to complete this reweighting exercise.** This will enable us to consider the new 2017 data too as part of that work and produce a consistent set of walking data from 2002 to 2017. 2017 is the first year we collected short walks on Day 1 for the whole sample.

This statistics release does contain the articles showcasing different aspects of the NTS that was also planned.

Accessing NTS data

In addition to the published statistics together with accompanying statistical tables, the underlying dataset and guidance in analysing it can be accessed from the [UK Data Service](#) for users who wish to explore the data for themselves.

Thank you

Very special thanks are due to our authors of the articles contained in this document who generously gave their time to produce them. These are Peter Headicar and Kit Mitchell, and Mary McKee, Matthew Herbert and the Social and Behavioural Research Team in the Department for Transport.

The help of the members of the public who give their time to respond to the survey is always gratefully acknowledged.

What travel is included?

The NTS only includes personal travel within Great Britain, by residents of private households in England, along the public highway, by rail or by air. Travel off-road, or for commercial purposes (to deliver goods or to convey a vehicle or passengers) is not included.

What is a trip?

The basic unit of travel in the NTS is a trip, which is defined as a one-way course of travel with a single main purpose.

What is a stage?

Trips consist of one or more stages. A new stage is defined when there is a change in the mode of transport.

Further information about the NTS and its methodology

A range of supporting information is available which provides background to understand the source of the statistics presented in this publication, all available from the [NTS collections page](#) on GOV.UK.

An analysis of long-term trends in travel patterns

by C G B (Kit) Mitchell

The National Travel Survey has collected data on personal travel in a broadly consistent way since the 1970s, meaning it is a key source for monitoring trends in travel behaviour. This analysis shows some of those trends.

Introduction

Since the 1970s there have been significant changes in travel behaviour in Britain. Car ownership has increased, and this has led to greater use of cars and less use of local buses and bicycles. Trips for some purposes, such as shopping and personal business (visits to banks, health centres and hairdressers, for example), and visiting friends, have reduced. Overall, the number of trips per person per year increased by 17% between 1975 and 1990, from 935 to 1,094, and has subsequently fallen by 16% by 2015. Because of the greater use of cars, the total distance travelled per person per year increased 52% between 1975 and 2003, from 4,710 to 7,202 miles per person per year, and has subsequently reduced by 8%.

This article uses National Travel Survey data to describe these and other changes in travel behaviour that have occurred in the 40 years since 1975.

The National Travel Survey provides good data on the numbers, lengths and purposes of trips made by different means of transport (walk, cycle, bus, car, train). Limited data go back to 1972 (and very limited pilot data from 1965), with reasonably comprehensive data since 1995. These were collected initially on a triennial basis and, since 1988, annually. There have been a number of breaks in the series; because of falling response rates, data have been weighted since 1995; since 2013 the survey has only covered England instead of Great Britain. Finally, the 2016 NTS analysed the recording of short walks (50 yards to 1 mile) and has increased the estimated number of short walks; this paper, which is concerned with long-term trends, will not use data for 2016. Despite these changes, the NTS gives unique insight into how travel has changed since 1972.

This article is limited to describing some of the long-term trends in travel behaviour revealed by data from the National Travel Survey, without attempting to find reasons for these changes. Its value to policy makers is as a demonstration of the volatility of some aspects of travel behaviour, and as a picture of what is happening now, to help assess the possibility of success if attempts are made to change current travel behaviour.

Over 50 years of the NTS

The first NTS was carried out in 1965.

The 1965 survey had some notable differences to the current version - in particular, data on short walks were not collected and so results are not presented as part of the standard data tables.

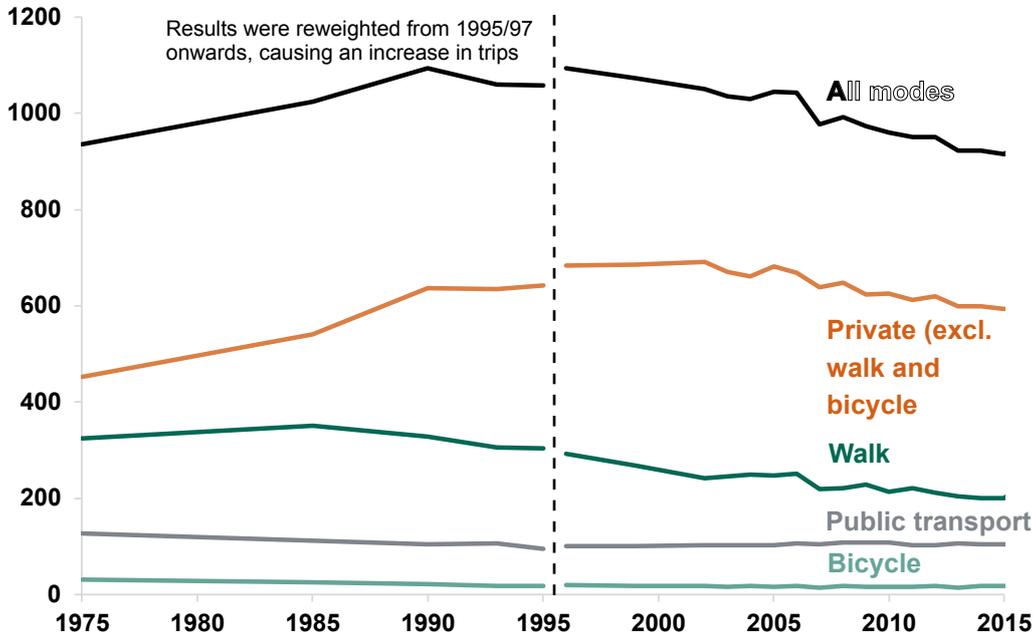
To mark the 50th anniversary of the first NTS data collection, a factsheet including figures estimated from the 1965 survey is available on the [NTS 2014 page](#).

Number of trips by mode of transport

Trends in the numbers of trips per person per year by modes of travel are shown in Charts 1a and 1b. The data up to 1996 (the 1995/97 surveys) are for Great Britain and for England for years after that. The differences between rates for England and Great Britain are very small, however, and do not make a material difference to the trends presented.

Chart 1a: Trips per person per year by mode of transport: 1975-2015

Trips per person per year



What are private modes?

For this article, private modes are car, motorcycle, private hire buses, minibus, motorcaravan and dormobile.

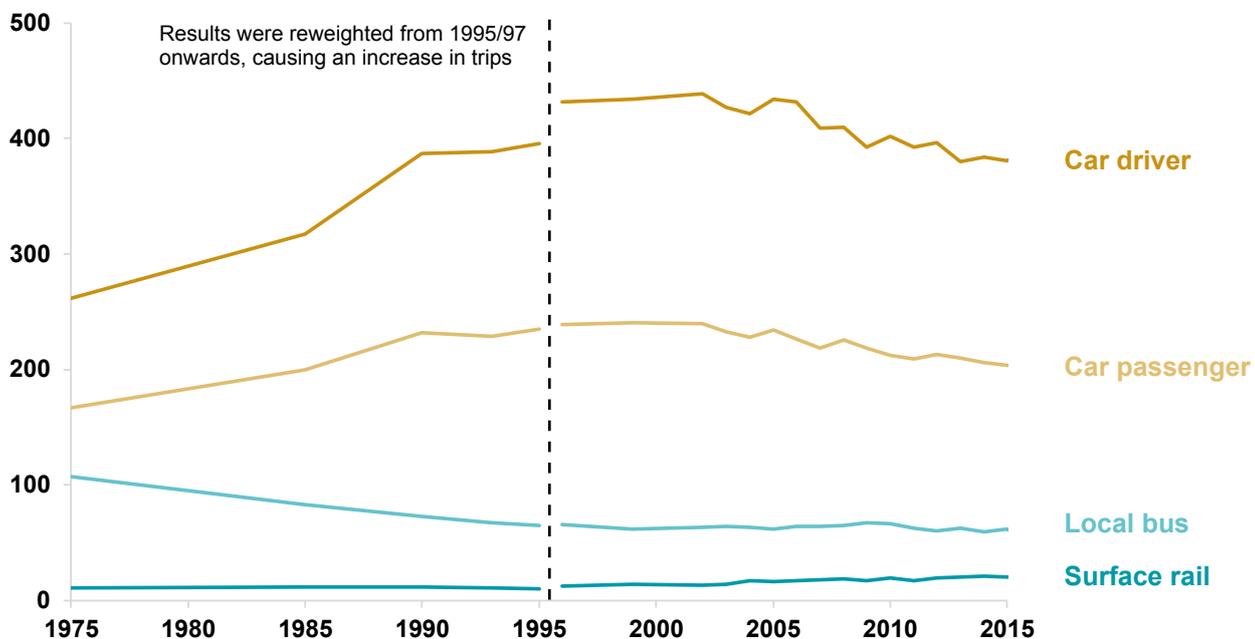
Walking and cycling are shown separately although sometimes included as private transport.

What are public modes?

Public includes local buses (in London and outside), non-local bus, rail (surface rail and London Underground), light rail, tram, taxi, domestic air and ferry.

Chart 1b: Trips per person per year by selected modes of transport: 1975-2015

Trips per person per year



The overall trip rate increased from 935 per person per year in 1975 (and, not shown, 956 in 1972) to 1,094 in 1990 (the 1989-91 surveys), remained at 1,094 in 1996 (the 1995-97 surveys), then fell fairly steadily to 914 in 2015. Travel by motorised private modes (see box above) rose from 453 trips in 1975 to 690 trips in 2002, then fell to 594 trips by 2015.

Within the private modes, trips as car driver rose from 262 in 1975 to 432 in 1996 and 434 in 2005, before falling to 381 in 2015.

Trips by public transport fell from 126 in 1975 to 100 in 1996 and 104 in 2015. Within public transport, local bus trips fell from 107 in 1975 to 61 in 2015, while surface rail grew from 11 in 1975 to 20 in 2015. Walking trips fell from 350 in 1985 to 200 in 2015.

Most modes have seen reductions in the average trips per person per year since 2002, but the increase for surface rail represents an almost doubling of trips.

Distance travelled by mode of transport

Variation in the miles travelled per person per year by mode of travel (Charts 2 and 3) is similar to that for numbers of trips. Results for 2016 are shown, as the distance travelled is much less affected by the re-assessment of short trips than the number of trips.

Miles per person per year

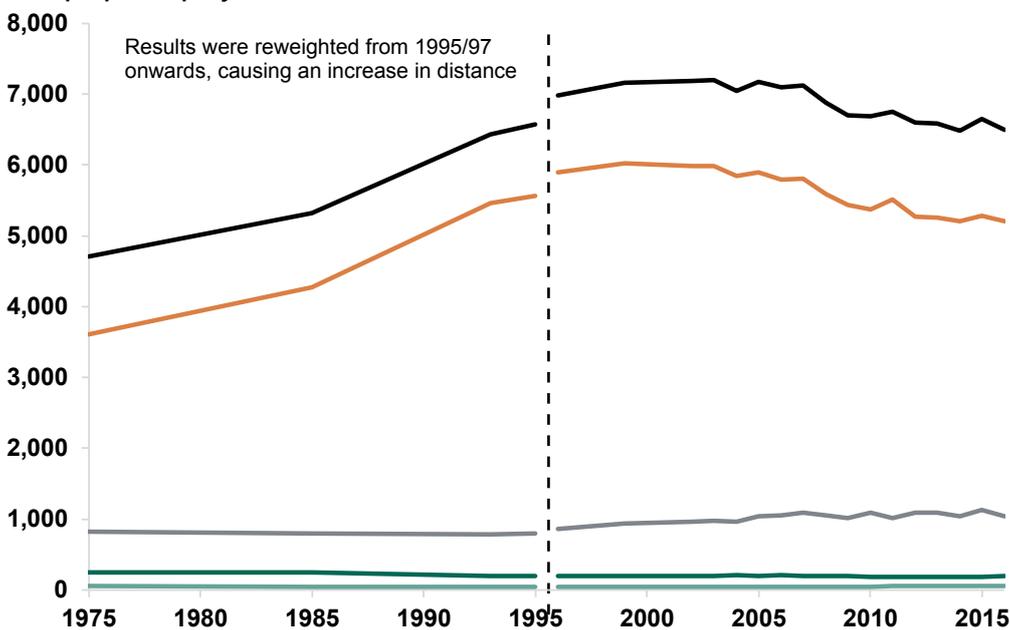


Chart 2: Miles per person per year by modes: 1975-2016

All modes

Private (excl. walk and bicycle)

Public transport

Walk
Bicycle

Miles per person per year

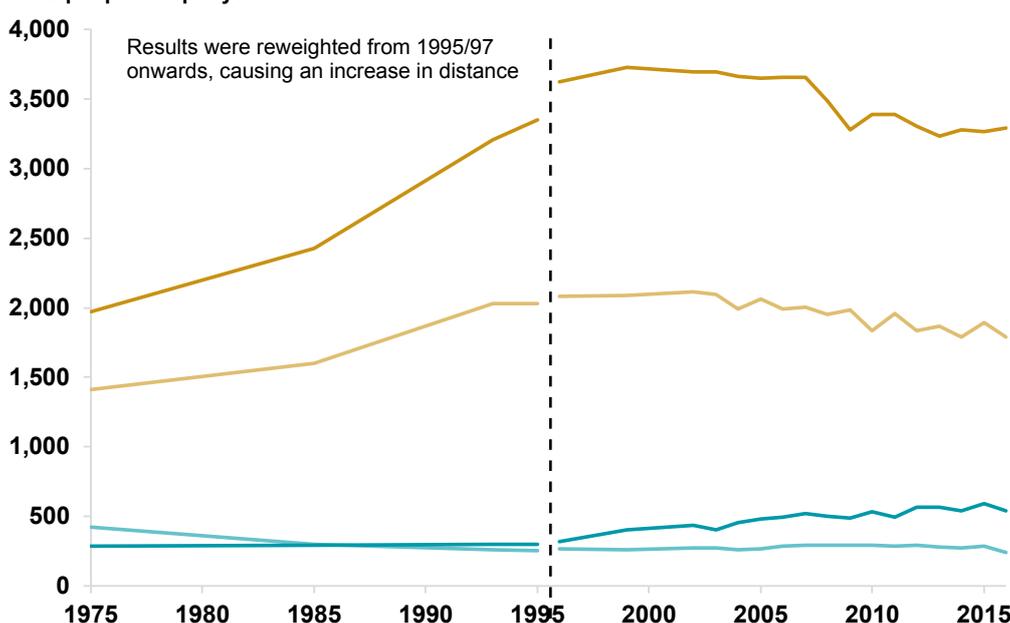


Chart 3: Miles per person per year for selected modes: 1975-2016

Car driver

Car passenger

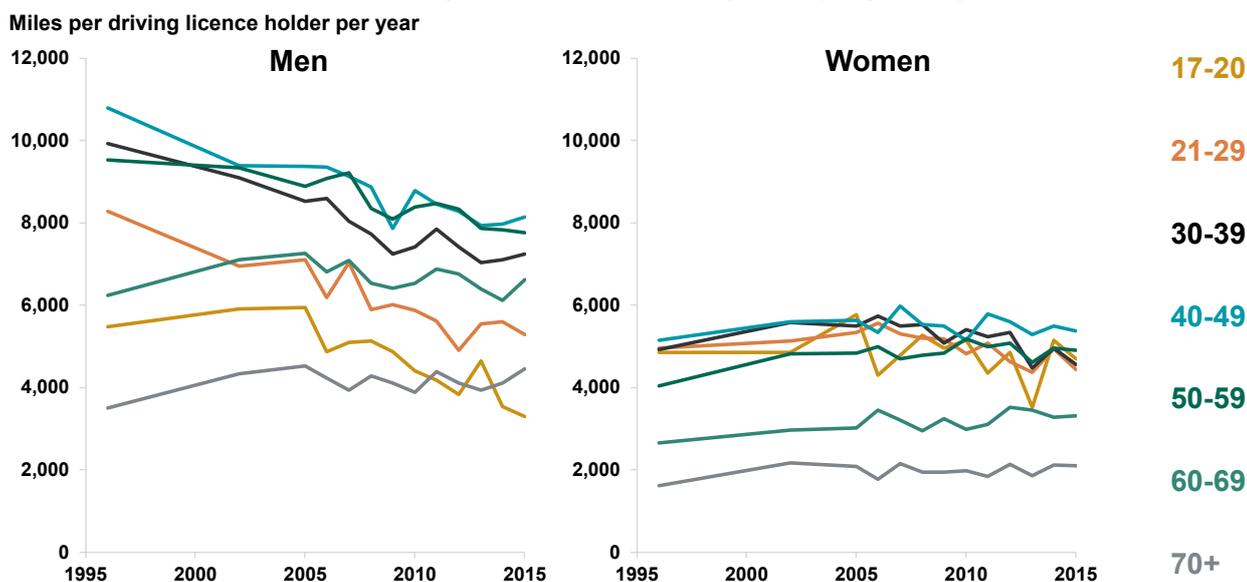
Surface rail
Local bus

The total distance travelled per person per year has fallen by 9% between 2007 and 2016. Distance by all motorised private transport has fallen by about 13% since 2003, and as a car driver by about 10% since 2007. Miles travelled by surface rail have almost doubled since 1985.

Distance travelled by car drivers

Charts 1 and 2 showed the number of trips and the distance travelled as a car driver averaged across all survey respondents, regardless of whether or not they had a car driving licence. Chart 4 shows the distances driven by men and women who hold car driving licences, by age band. For all ages, men drive greater mileages than women. For men aged 21 to 60, the mileage driven has fallen fairly steadily since 1996; for men aged 17-20 the reduction was from 2005. For women, mileage increased slightly from 1996 to 2002, and has remained steady since then.

Chart 4: Miles driven per driving licence holder per year, by age: England, 1995/97-2015

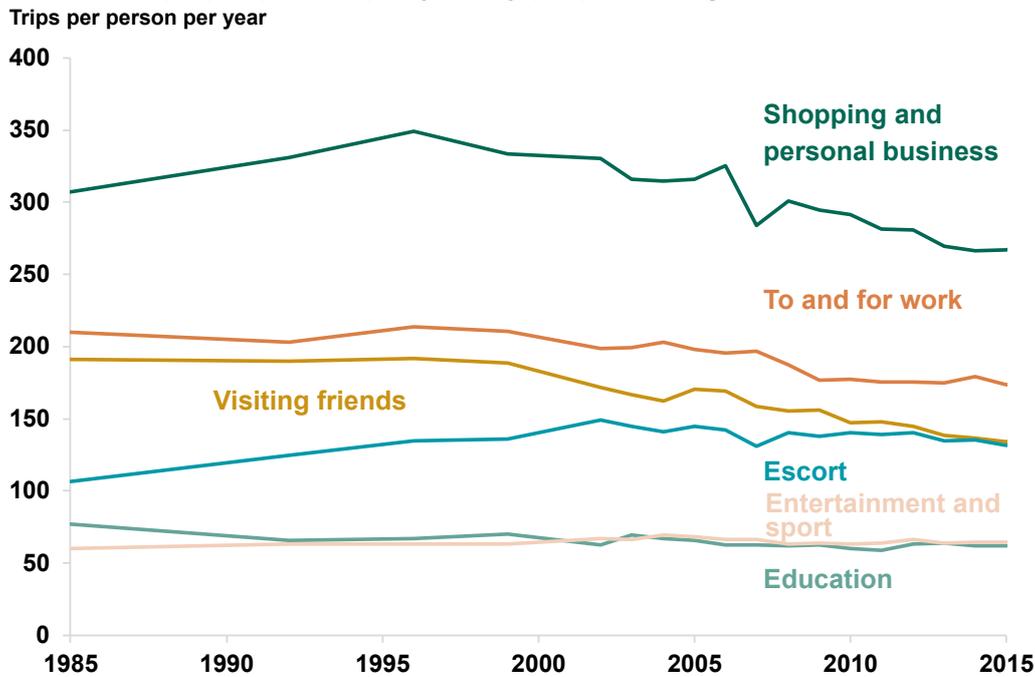


The changes to numbers of car driver trips follow the patterns for distance driven. For men aged less than 60 years, numbers of trips have fallen steadily since 1996. For older men, numbers of trips rose slightly from 1996 to 2004 or 2005, after which they fell for men aged 60 to 69 and remained steady for men aged 70 and over. For women aged 20 to 50, the numbers of trips have been falling since 2005. For women aged more than 50, numbers of trips have been steady, though with considerable year to year variation.

Number of trips by purpose

Chart 5 shows the trends in the numbers of trips by a selection of purposes. Since the total number of trips per person per year peaked in 1996, the number of trips for shopping and personal business has fallen from 349 to 267 per person per year in 2015, a reduction of 24%. The number of trips to visit friends has fallen by 30%, and trips to and for work by 19%. Trips for other purposes such as education, escort and leisure have changed little since 1996.

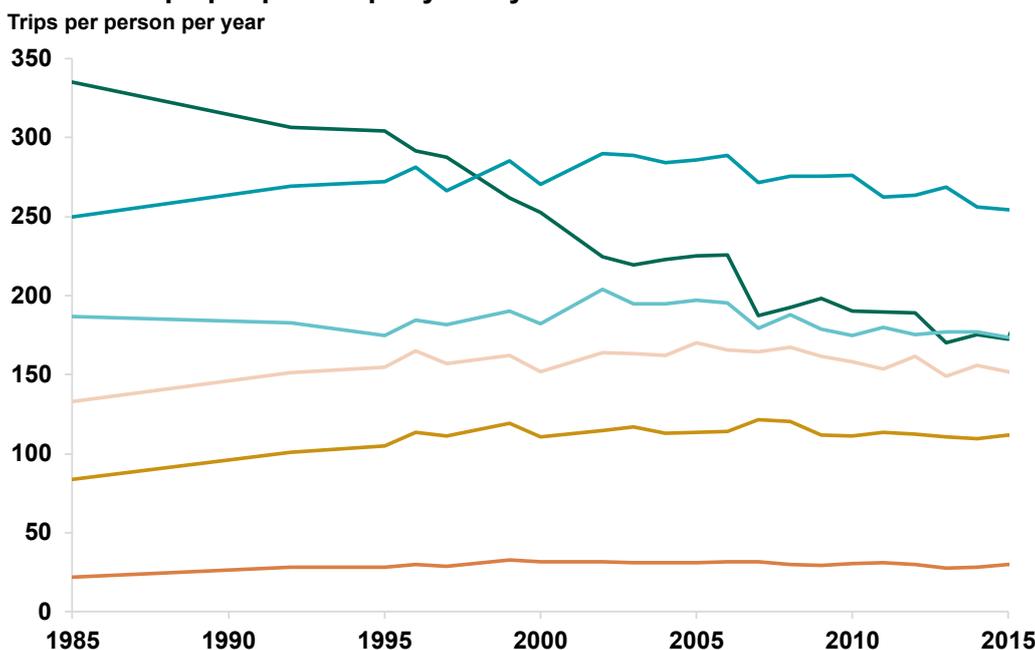
Chart 5: Trips per person per year by purpose: England, 1985-2016



Number of trips by distance band

The change in the total number of trips shown in Chart 1 does not apply equally to trips of different lengths. Chart 6 shows that almost all the change in the total number of trips since 1985 has occurred because of changes in the number of trips shorter than 1 mile. These trips reduced from 335 per person per year in 1985 to 173 in 2015. The numbers of trips of 1 to under 2 miles and 2 to under 5 miles fluctuated but have not changed substantially over the whole period. The number of longer trips increased slightly for about 15 years after 1985, since when they have changed little.

Chart 6: Trips per person per year by distance band: 1985-2016



Purpose of travel in the NTS

The purposes of travel used in this section can be summarised as follows:

- ▶ **Commuting:** trips from home to usual place of work or from usual workplace to home
- ▶ **Business:** personal trips in course of work
- ▶ **Education:** trips to school or college
- ▶ **Shopping:** trips to the shops or from shops to home
- ▶ **Personal business:** visits to services, medical consultations, etc.
- ▶ **Visit friends:** trips to visit friends, either at someone's home or elsewhere
- ▶ **Other leisure:** mostly entertainment, sport, holidays and day trips

Escort trips are those made to accompany someone else e.g. taking a child to school is escort education.

2 miles to less than 5

Less than 1 mile

1 mile to less than 2

5 miles to less than 10

10 miles to less than 25

25 miles to less than 50

To try to understand the kinds of short trips that are no longer being made, the Department for Transport has provided a special table from the National Travel Survey showing the number of trips shorter than one mile for different purposes since 2002.

Charts 7a and 7b shows these journey numbers for a variety of journey purposes. For some purposes, such as education, escort education, other escort and entertainment / public activity, the number of trips per person per year has changed little since 2002. For others, such as shopping, personal business and visiting friends at home, there have been large reductions in the number of trips. For a third group, which includes commuting and visiting friends not at their home, there has been a small reduction in the number of trips.

Chart 7a: Trips per person per year shorter than 1 mile by selected purposes: England, 2002-2015

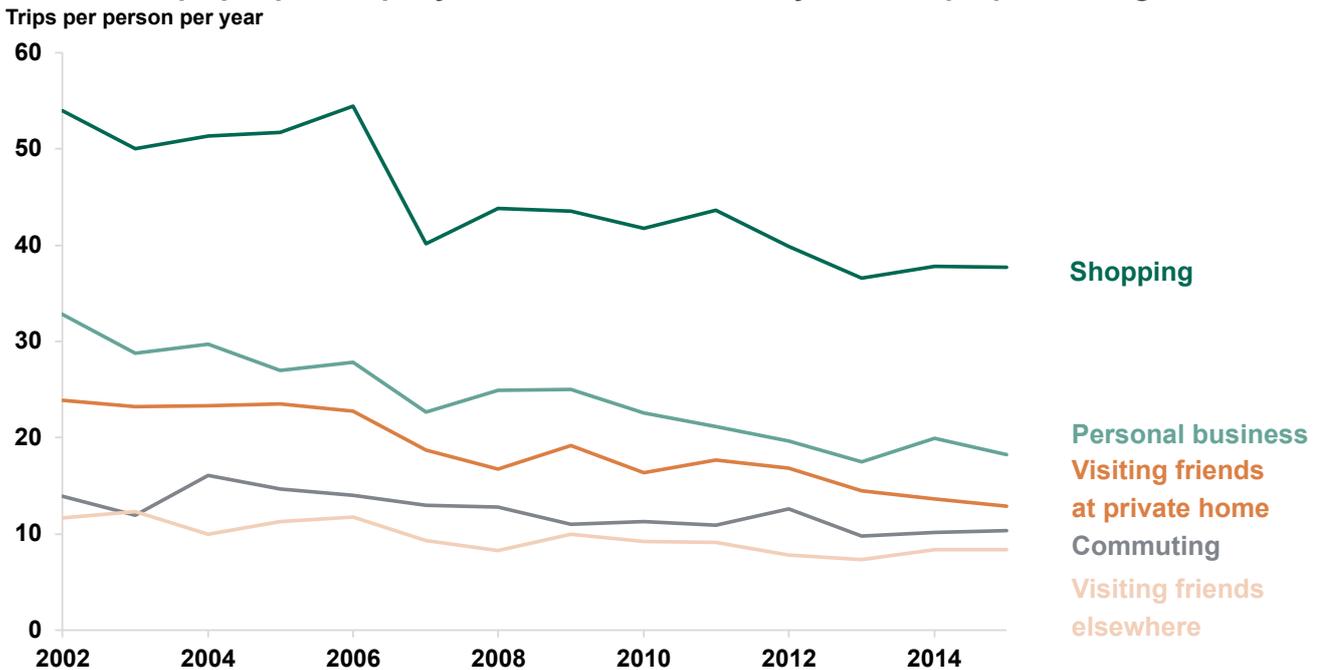
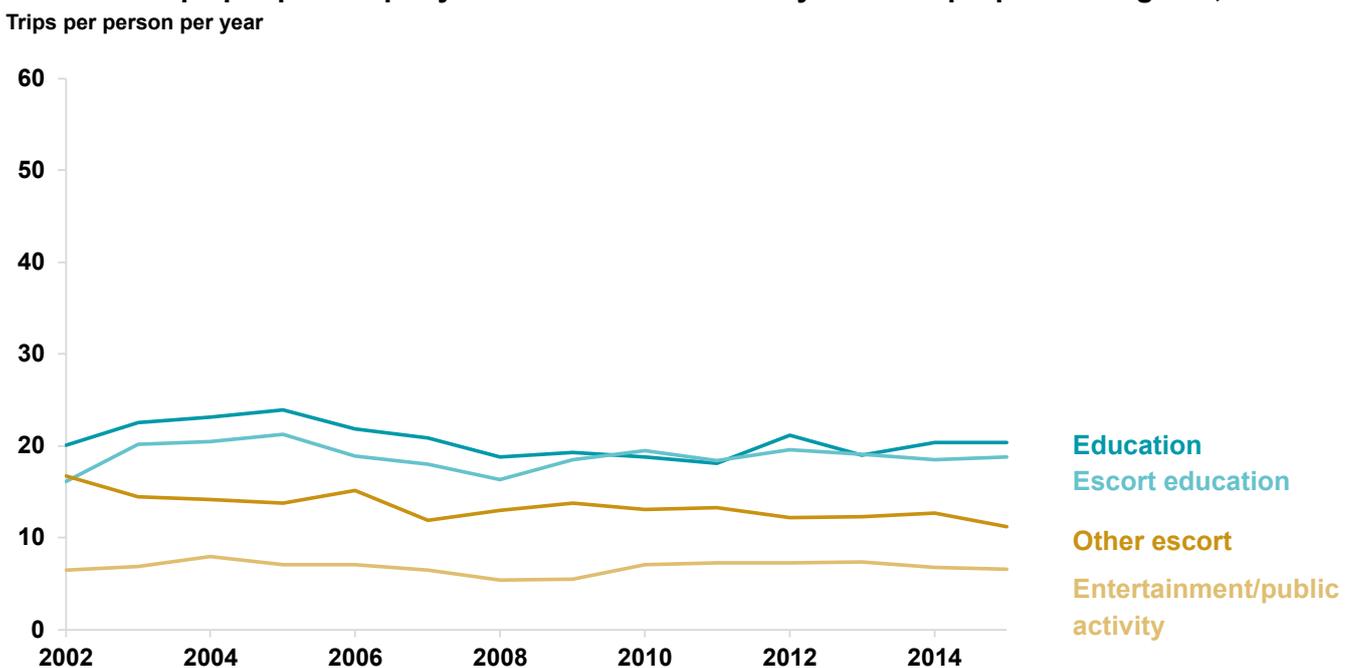


Chart 7b: Trips per person per year shorter than 1 mile by selected purposes: England, 2002-2015



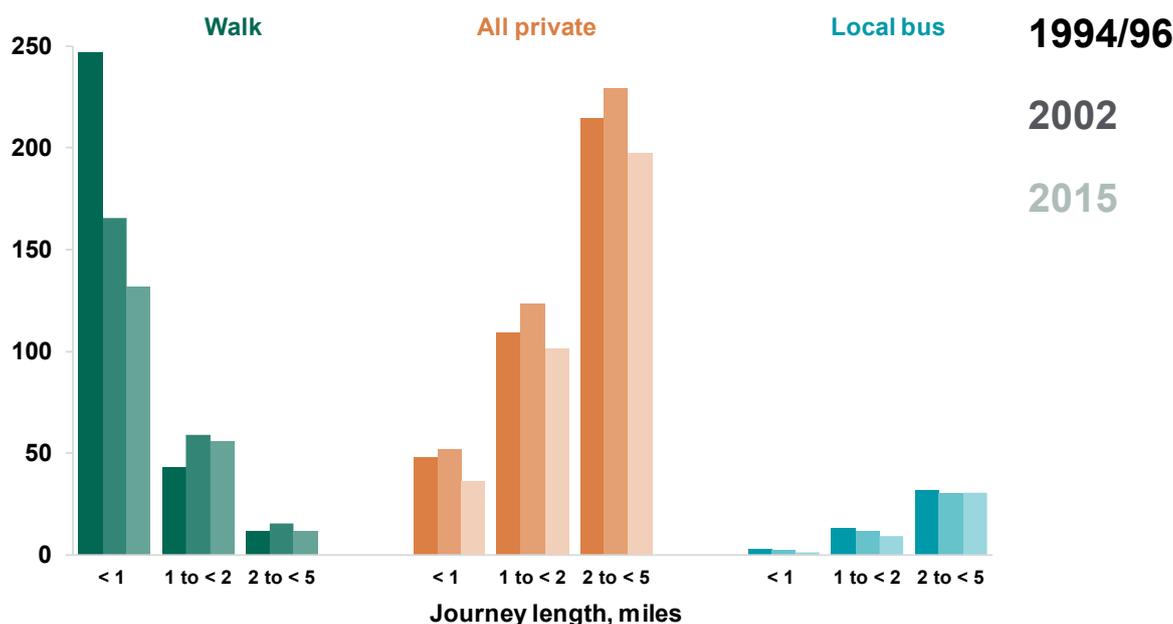
The number of trips shorter than 1 mile reduced from 224 in 2002 to 173 in 2015. Of this reduction of 51 trips, 31 were for shopping or personal business, 11 for visiting friends at home, 3 for visiting friends elsewhere and 4 for commuting. This suggests that the reduction in short trips is mainly a result of reducing use of local shops and services, and of making fewer local social visits. Whether this is because the number of local shops, services and acquaintances has reduced, or that people are choosing to use a car to travel to more distant destinations, is not known. The number of shopping trips may have been reduced by the rise in online shopping, but this is so recent that it would be a continuation of an earlier decline.

Effect of journey length on the amount of walking

Chart 1 showed that the number of walking trips per person per year has been reducing since 1985. Chart 8 shows the number of walking trips, trips by private transport (as driver or passenger) and trips by local bus, in the length bands under 1 mile, 1 to under 2 miles and 2 to under 5 miles. This shows the expected reduction in the number of trips on foot, but only for those trips shorter than one mile. The number of longer walk trips has increased. It also shows that in general short walk trips have not become short car trips, as the number of private trips shorter than one mile has also reduced, though not as much as walk trips.

Chart 8: Trips per person per year by trip length and selected modes: 1994/96, 2002 and 2015

Trips per person per year



While there have been changes in the absolute numbers of walking trips, the percentage share of trips between modes has not changed greatly between 1994/96 and 2015. For trips shorter than 1 mile, around 75% to 80% are made on foot, but over that period there has been a reduction of 5 percentage points in the share of trips on foot and a similar increase in the share of trips by motorised private transport. The effect of this on the number of walking trips is negligible compared to the reduction in the number of short trips.

Over the same period, the modal share of walk trips between 1 and 2 miles long has increased from 25% to 32%, and the modal share of private transport trips has reduced, from 62% to 58%.

These charts present a number of patterns. At least 75% of trips shorter than 1 mile are made on foot; the reduction in walking is limited to trips shorter than 1 mile; the reduction is because of an overall reduction in trips under 1 mile, and would not seem to be due to short trips switching from walk to car; and that 82% of the reduction in trips shorter than 1 mile is due to reductions in the numbers of short trips for shopping, personal business and visiting friends at home.

Conclusion

The analyses described in this paper show that there have been substantial changes in travel behaviour since 1975. The total number of trips increased from 1975 until 1990 and has been falling since 1995. Almost all the change since 1985 is due to a reduction in the number of trips shorter than 1 mile. Of this reduction in short trips, 59% were for shopping and personal business, and 21% for visiting friends at home. For car travel, the number of trips increased until 2002 and has subsequently fallen.

The numbers of trips regardless of length for shopping and personal business, and to visit friends, have reduced since 1996.

When car driving is analysed by driver age and gender it is found that for men aged 21 to 60, the distance driven per driver per year has been falling since 1996, while for drivers aged over 60, the distance driven increased until 2005; subsequently it has reduced slightly for drivers aged 60 to 69 and remained steady for drivers aged 70 and over. Women drive smaller distances, and for all age groups the pattern has been a slight increase in mileage driven until 2005 and little change thereafter.

The results could only be obtained because of the long-term stability of the National Travel Survey questionnaire and procedures, and the wealth of data the survey contains in addition to simple travel diaries.

Variations in travel between different locations

by Peter Headicar

One dimension of the National Travel Survey is the ability to report on variations in travel behaviour between different parts of the country.

Introduction

The 2015 Survey Report distinguishes between London, urban and rural areas using the 'Urban-Rural Classification'. Statistical tables NTS9901-9915 provide further information using this classification and also by administrative region.

Both of these sub-national classifications are too coarse to reveal differences between types of places more locally. Understanding these differences can help inform spatial planning and contribute to improved travel forecasting.

This note therefore uses additional information from the NTS to explore spatial variations in more detail. This article focusses on the overall amount of travel (miles per person per year), the amount of car driver travel and the car driver mode share. Because of the limited sample numbers involved in geographical disaggregation two or three years of NTS data have been grouped together.

Extending the urban and rural definitions

The urban/rural distinction (defined as settlements larger or smaller than 10,000 population) can be extended to identify differences across the full range of settlement sizes.

'Settlement' is measured in terms of continuous built-up areas (BUAs), in recognition of the fact that formerly separate settlements have often joined to form a single urban area (see the Background note). Greater London and the six metropolitan areas – Greater Manchester, West Midlands, West Yorkshire, Merseyside, Tyne and Wear and South Yorkshire – each have very large BUAs, in London's case extending beyond the administrative boundary.

Size of built-up area is strongly associated with population density (Chart 9) and both these factors impact on travel behaviour, although not perhaps as much as their very large physical differences might suggest. Higher densities imply shorter trips for local journeys and greater opportunities for walking, cycling and using public transport but size itself can have contrary effects as far as overall travel volume is concerned. Larger settlements are likely to be more self-contained in their functions (and thus longer trips to external destinations might be avoided) but the average distance of 'in town' journeys - especially to jobs and services in central areas - might be greater.

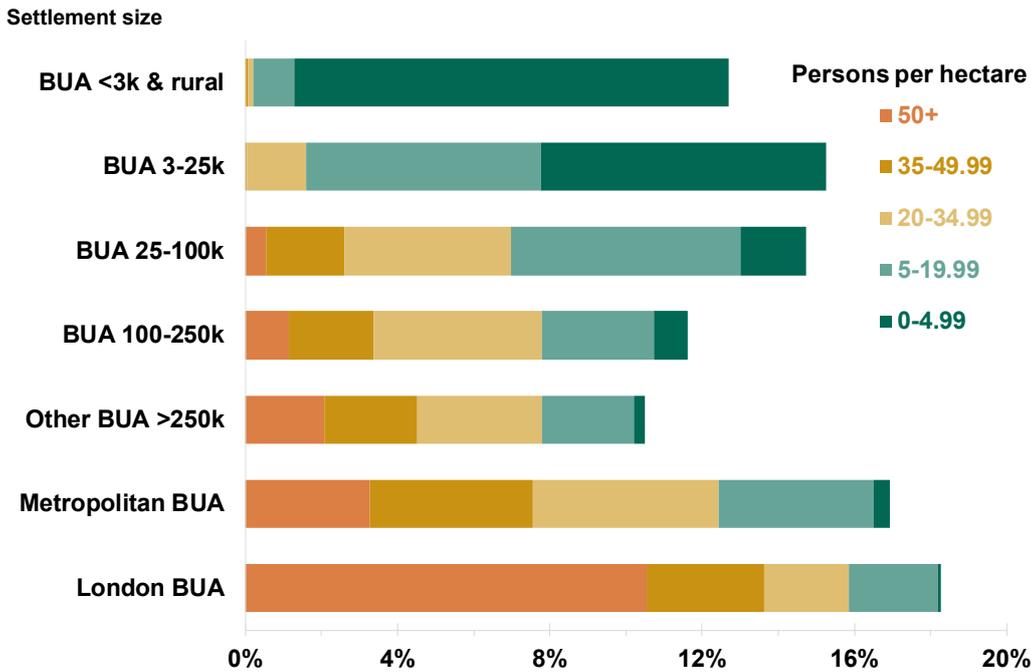
NTS standard errors

As these statistics are derived from a sample survey resulting estimates can fluctuate as a result of sample variability. Therefore users should be careful when drawing conclusions, particularly from short-term changes or when comparing different groups of small sample sizes.

One way of increasing the sample size is to aggregate across a number of years as is the case in the analysis in this article, or in the NTS99 tables that are published each year.

A detailed [report on standard errors](#) for selected NTS variables (based on 2009 data) is available. This will be updated in 2018.

Chart 9: Share of national population by size of built-up area and postcode sector density: England 2012-14



Rural areas

Note that 'rural' in this context refers to settlements of less than 1,500 population or to residences outside settlements altogether and should be distinguished from the 10,000 population threshold used in the Urban/Rural Classification.

The distance travelled per head and car driving increases with decreases in settlement size (Chart 10). The distance travelled per head is 80% more in the smallest settlements and rural areas than in the Greater London BUA and car driver travel per person three times more.

Miles per person per year

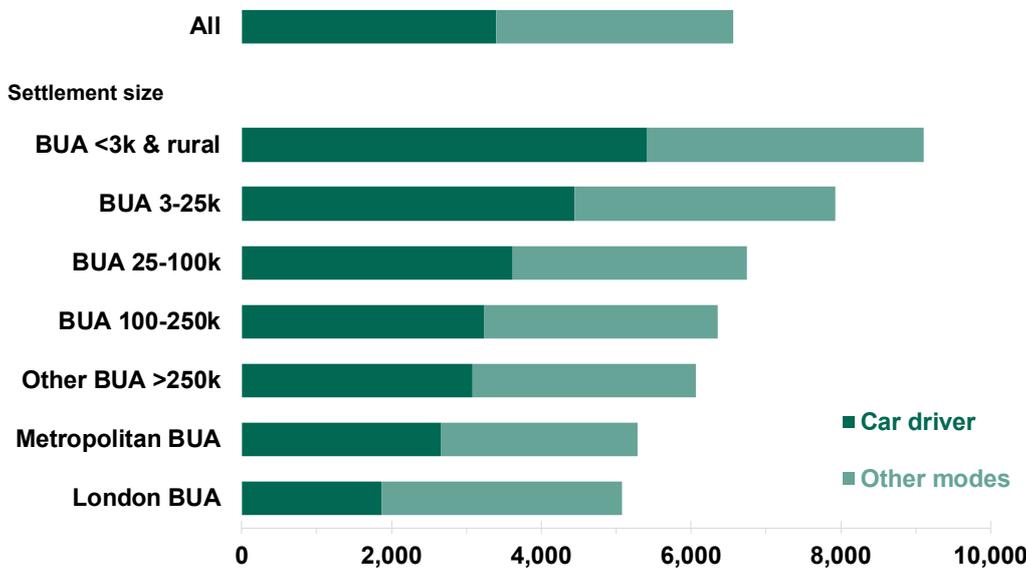


Chart 10: Miles per person per year by settlement size: England, 2012-14

The differences between the settlement size categories arise from a combination of differences in the volume of trip-making (which itself is not obviously related to settlement size), in average trip distances and in the car driver mode share (Table 1).

Whilst there are pronounced differences in travel behaviour towards either end of the settlement size spectrum there is relatively little difference outside London and the conurbations between all urban areas with populations greater than 25,000. In part this arises because settlement size alone has been used to represent spatial variation whereas in practice many other geographical and socio-economic attributes exert an influence.

Table 1: NTS data by settlement size: England, 2012-14

	Per person per year		Average trip distance (miles)	Car driver share
	Trips	Miles		
London BUA	707	5,076	7.2	37%
Met BUAs	792	5,287	6.7	50%
Other BUA >250k	840	6,067	7.2	51%
BUA 100-250k	815	6,358	7.8	51%
BUA 25-100k	857	6,745	7.9	54%
BUA 3-25k	844	7,926	9.4	56%
BUA <3k and rural	891	9,109	10.2	59%
All	814	6,557	8.1	52%

Utilising the ONS classification of local authorities

Some representation of the effect of these other attributes can be achieved by making use of the ONS classification of local authorities (see Background Note). Outside London and the metropolitan areas this classification provides a context within which the individual settlements are situated.

Five area types based on the ONS classification are used to represent this context:

Regional and Industry centres – distributed around the country, usually the main settlement of a sub-region

Industrial areas – former mining and industrial areas found almost exclusively in the Midlands and North of England

Prospering South East – a mix of town and country areas, including New Towns, within a ring of about 50 miles outside the Greater London BUA

Prospering Smaller Towns – a similar mix of town and country areas occupying much of the spine of England in between the more urbanised areas beyond the South East

Coastal and Remoter Rural – the more peripheral parts of the country consisting mainly of low density rural areas beyond the commuter belts of cities but with some sizeable coastal towns often with tourist and/or retirement traditions

These area types vary in the size mix of their settlements (Chart 11) and this alone would contribute to their differences in travel (Chart 12). However there are marked differences between the area-types in respect of individual settlement size categories (Chart 13). For example in respect of BUAs between 25,000 and 100,000 population the distance travelled per head varies between 5,873 miles a year amongst residents of the Coastal and Remoter Rural category to 7,748 among residents of the Prospering South East and similar differences arise in respect of car driver travel. Compared to previous results, this is counterintuitive in that the more rural area type is characterised by a lower volume of travel per head.

Chart 11: Settlement size mix of LA area-types (outside London BUA and metropolitan areas): 2012-14

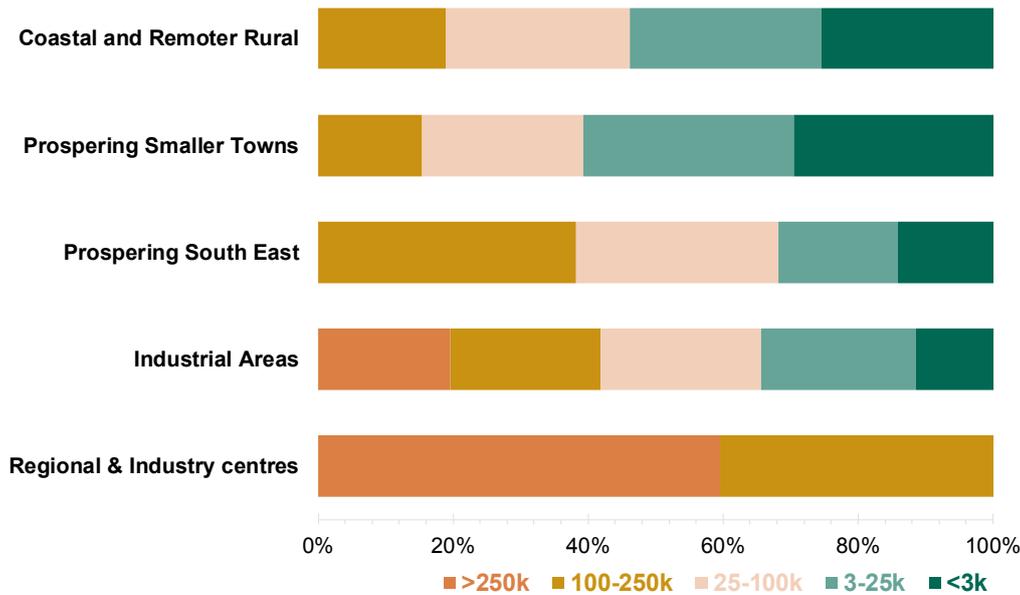
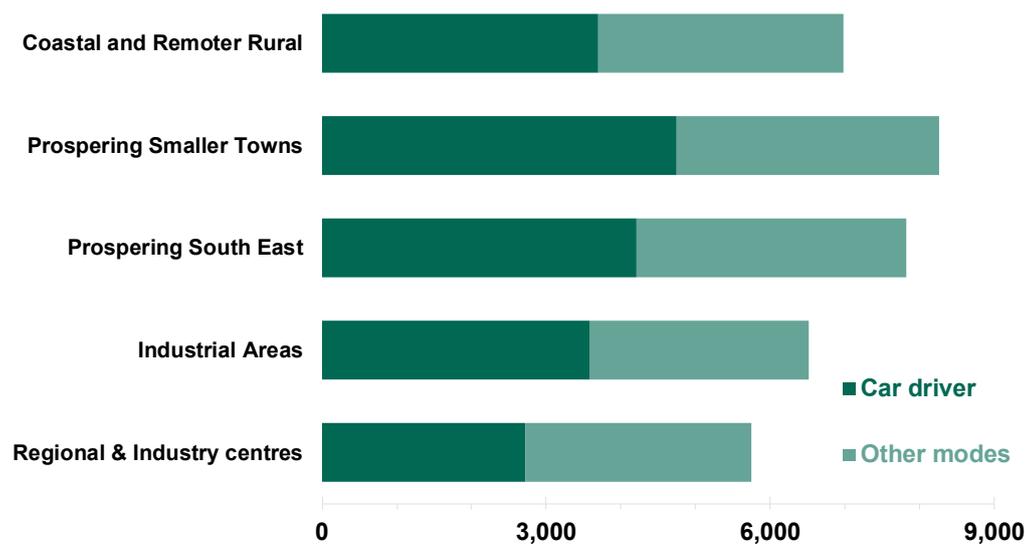


Chart 12: Miles travelled per person by car driver and other modes by area type (outside London BUA and metropolitan areas): England, 2011-14

Miles per person per year

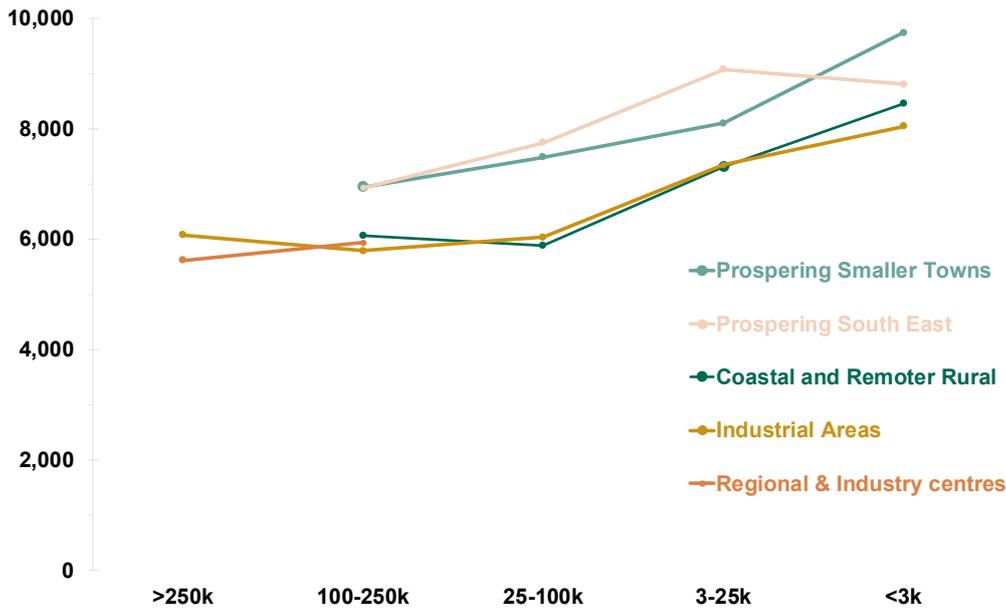


Within London and the metropolitan areas disaggregation by settlement size is not appropriate since the majority of their populations are contained within a single BUA. However, substantial spatial variations in travel arise and these can be linked to the area type classifications of the individual local authorities and their population densities.

Within the conurbations a distinction is made between those authorities classified as Regional and Industry Centres which form their core cities (for example Leeds and Birmingham) and other centres with the same classification which are located in the outer parts of their respective conurbations.

Chart 13: Distance travelled by all modes by LA area-type (excluding London BUA and metropolitan areas) and by settlement size: England, 2011-14

Miles per person per year



Authorities classified as Industrial Areas and as Prospering Smaller Towns are also present in the outer areas of conurbations. The average population density of the local authorities in the nine types is shown in Chart 14 and miles travelled per head in each type by car driver and other modes is shown in Chart 15.

Chart 14: Average local authority density of NTS respondents in Greater London BUA and Core Cities and Conurbations by area-type: England, 2011-14

Persons per hectare



Miles per person per year

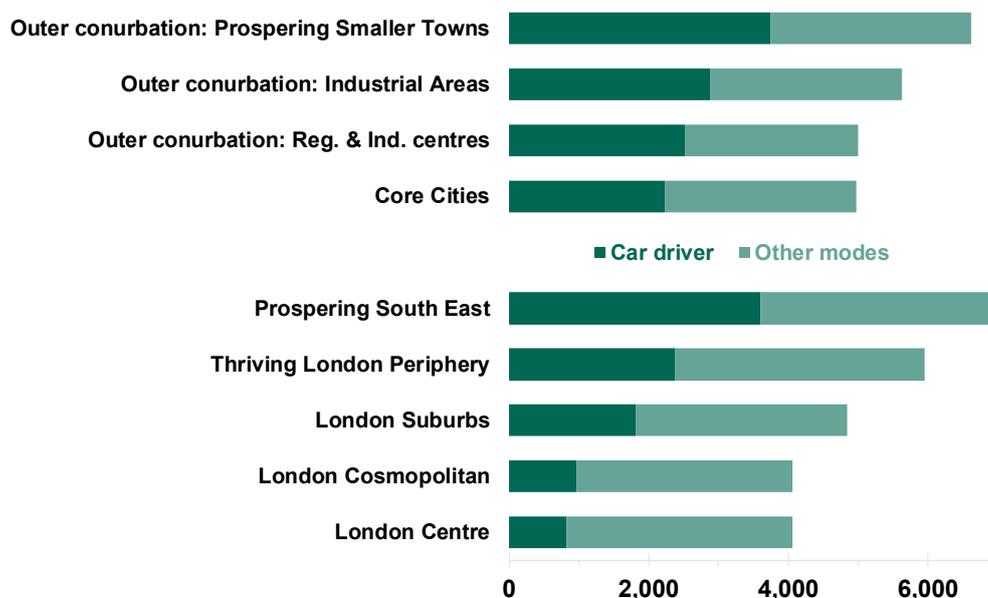


Chart 15: Distance travelled per person by car driver and other modes by LA area-type within Greater London BUA and Core Cities and Conurbations: England, 2011-14

Core Cities and Conurbations

This term is used because in addition to all the metropolitan authorities this group contains the large non-metropolitan cities of Bristol and Nottingham. These and the six metropolitan centres (but not London) are also known as England's 'core cities'.

The higher densities in all but the outermost parts of the Greater London BUA than in the Core Cities and Conurbations group (see box opposite) are reflected in the lower travel per head and in lower car driver miles. The car driver mode shares of residents of the four London area types (between 20% and 40%) are all lower than the 45% of the Core Cities. This feature arises partly as a consequence of using local authorities as the unit of analysis, since those in the metropolitan areas typically occupy a much larger geographical area than those in London and have a wider spread of characteristics. If one were able to disaggregate the Core City authorities geographically in the manner of the constituent authorities of the Greater London BUA then a degree of variation, albeit on a smaller scale, would be revealed.

Changes over time in different areas

So far differences between areas have been described in terms of travel behaviour at a particular point in time. However there is also variation in the changes taking place over a period of time. This can be explored comparing NTS data for 2011-2014 with 2002-2005.

Over this period travel per person fell nationally by 7.7% and car driver travel by 9.8%. The general pattern is for the reduction to lessen from larger to smaller settlements (Chart 16). In all BUAs above 25,000 population the decline in car driver travel is at least twice that of other modes and as a result the driver mode shares in these places have fallen from a range of 41-55% to 37%-53%. By contrast in smaller towns and rural areas the decline has been very similar for car drivers and other modes and the driver mode share is essentially unchanged.

These figures of change in travel per head are a mix of differing behaviours among groups within the population. There have also been changes in driving between age groups – due more to changes in licence holding and car availability than to changes in the behaviour of those individuals who do drive. It is interesting to explore the significance of these changes in terms of their contribution to the spatial variations described previously.

Chart 16: Percentage change in miles per head per year by car driver and other modes by area type and BUA size: England, 2002-5 to 2011-14

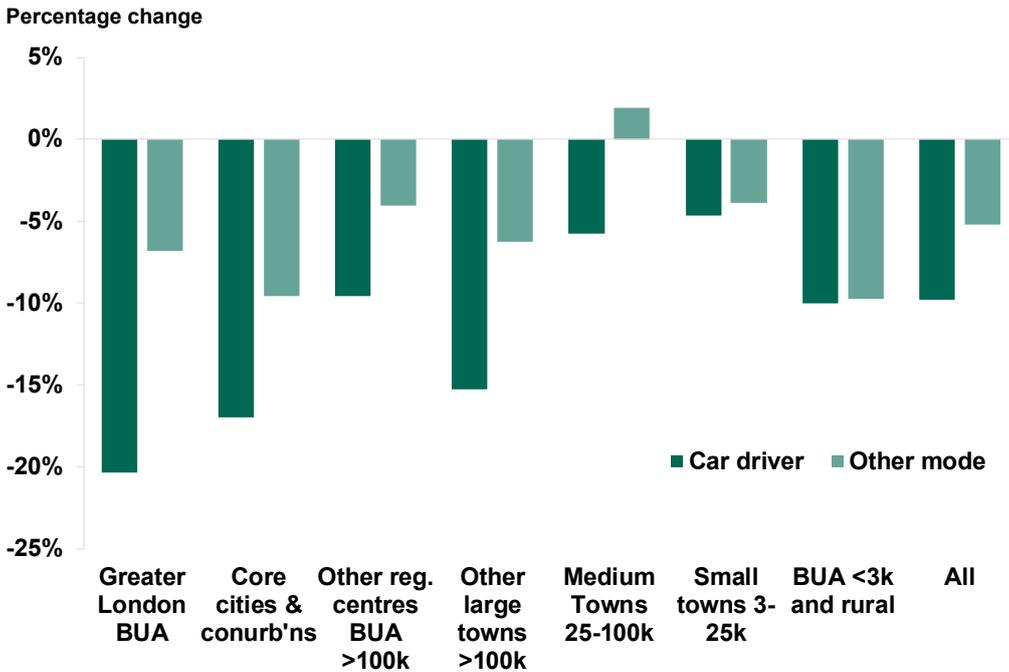
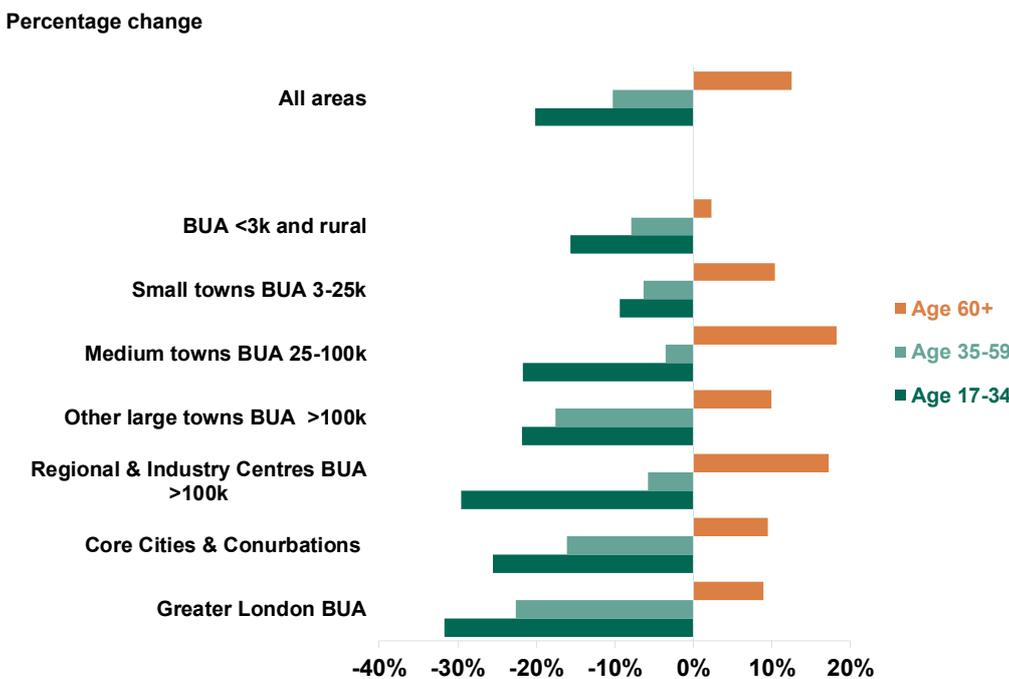


Chart 17 shows the change in car driver miles per head in each of seven main spatial categories for three adult age groups: 17-34, 35-59 and 60+.

Nationally these groups exhibited very different trends with reductions of 20% and 10% respectively among the 17-34 and 35-59 age groups and an increase of 12% among the older group. There are broad geographical variations around these figures as shown in the chart but wider differences can be identified at the more detailed level of individual area-type and settlement size categories.

Chart 17: Percentage change in car driver miles per head per year by age group and area type and BUA size: England 2002-5 to 2011-14



In the case of the 17-34 age group there has generally been a larger than average decrease in London, the conurbations and Other Regional and Industry Centres but a smaller reduction among smaller towns (3-25k) except in the Coastal and Remoter Rural area type where car miles per head in such places have fallen by 31%.

In the case of the 35-59 age group there was again a larger than average decrease in London and most of the conurbations. However industrial towns within the conurbations and industrial areas generally showed smaller reductions.

In the case of the 60+ age group the largest increases in car driving occurred in Other Regional and Industry Centres outside the conurbations and in large and medium towns (greater than 25k) in the Coastal and Remoter Rural area type. By contrast, except in Industrial Areas, car driving has barely increased among this group in smaller towns and rural areas although these places continue to show the highest amount of driving per head.

Changes in the spatial distribution of the population

The ability to utilise spatially disaggregated data of the kind described in this note can help improve estimates of national travel and of changes in travel behaviour. This is by drawing on data from the decennial Census of Population which, being a 100% survey, provides more accurate information on the spatial distribution of the population by age and other socio-economic variables.

The changes seen in travel and car driver travel per head nationally between 2002-2005 and 2011-2014 arise from two sources. Firstly, there are changes in the actual travel behaviour of individuals within particular socio-economic categories (here defined in terms of area-type and/or settlement size and age group) and secondly there are changes in the proportions of the population within each of these categories.

Nationally, over the decade between 2001 and 2011, the proportion of the population over 60 increased by 1.9 percentage points and the proportion of people living within larger settlements (over 100k) increased by 2.8 percentage points. Because both these categories are associated with lower rates of travel than the average this implies that travel per head nationally would have reduced even if behaviour at the individual level had remained unchanged.

In practice changes in both the composition and distribution of the population and in individual travel behaviour have contributed to the 'observed' changes in overall travel reported in NTS. The impact of population-related change is estimated to have reduced travel per head by 12% more than it would have otherwise and 16% in the case of car driver travel. Put another way population-related change accounts for roughly 11% of the observed reduction in travel per head identified between 2002-5 and 2011-14 and 14% of the change in car driver travel.

Conclusion

While the sample size of the National Travel Survey prevents detailed analysis of smaller geographical areas such as individual local authorities, using classifications like Built-Up Areas and the ONS classification of Local Authorities can provide greater insight into how travel behaviours differ across different types of area or between different parts of the country than simply using the standard Government Office Region analysis.

Personal Travel in England – how we use transport and why

by Mary McKee and Matthew Herbert, IHAC, DfT.

This article illustrates the relative frequency of trips using one or more modes, and shows how mode use can be affected by both the reason for travel, and the journey location.

Introduction

This analysis was produced by DfT’s In-house Analytical Consultancy (IHAC) using National Travel Survey data from 2012-2016 and gives an overview of how people in England travel for a range of purposes. The analysis was conducted using data on individual stages within trips – this made it possible to look at every mode used during the course of a trip.

Most personal travel is by a single mode - often the car.

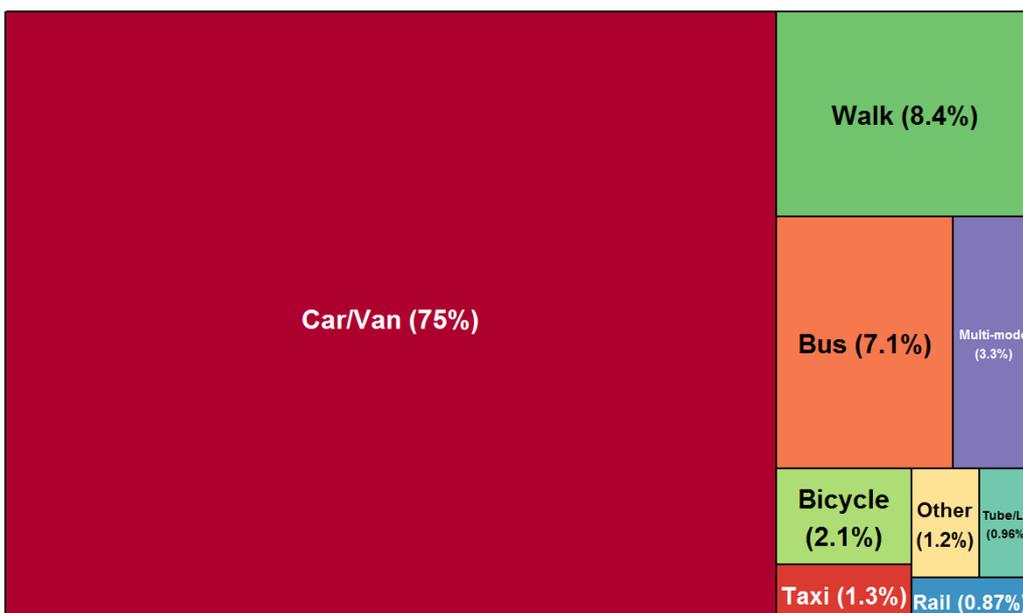
The majority of trips made by England residents used a single mode (97%), and most of these trips were by car or van (75% of all trips).

Walks of over a mile, and trips by bus were the most frequent modes of travel after car or van (Chart 18).

Short walks under a mile have been excluded entirely from this analysis (see box opposite). Personal travel modes e.g. car, bike, and also taxi, will generally not be combined with a short walk, but public transport modes are often combined with a short walk.

Given so, relatively few trips used more than one mode of transport.

Chart 18: All trips by mode or multi-mode (short walk stages excluded): England, 2012-2016



Short walks

Short walks of under a mile are recorded in a different way from other trip stages in the NTS and are also subject to some underreporting. So for this analysis, short walk stages have been omitted altogether because of the difficulties of combining up to trip level in a consistent way.

When looking at the results, it should be noted that trips identified as using only a public transport mode were often, in reality, combined with a short walk.

Mode definitions

Where a mode is indicated, it means the whole trip was done using that mode. Trips using more than one mode e.g. train then car are “multi-mode”.

“Walk” means walks of a mile or more.

Car/van is primarily car: 98% of car/van trips were car trips.

Trips in urban areas, London, and rural areas

Nearly three quarters of trips had their start point in an urban area (72%). The remaining trips originated in London (16%) and rural areas (12%).

Travel patterns vary by area type

As described in the previous article, the NTS allows an analysis by urban and rural areas. While urban areas mirror England very closely (most trips were in urban areas), London and Rural travel patterns diverge.

London had the highest proportion of multi-mode trips with 10% of all journeys, but was still heavily reliant on the car. Over half of trips were entirely by car/van.

Rural areas were much more reliant on the car than London and other urban areas, with multi-mode trips accounting for only 2% of all trips (not including any short walk stages).

Bus travel was more common than multi-mode travel in London. 15% of trips were by bus alone (or in combination with a short walk not shown). Buses were also frequently used in urban areas (7% of trips). In rural areas, 2% of trips were by bus.

Urban mode use

Car/van, walking (over a mile) and bus trips together accounted for 93% of urban trips. About 2% of urban trips were made using more than one mode (chart 19).

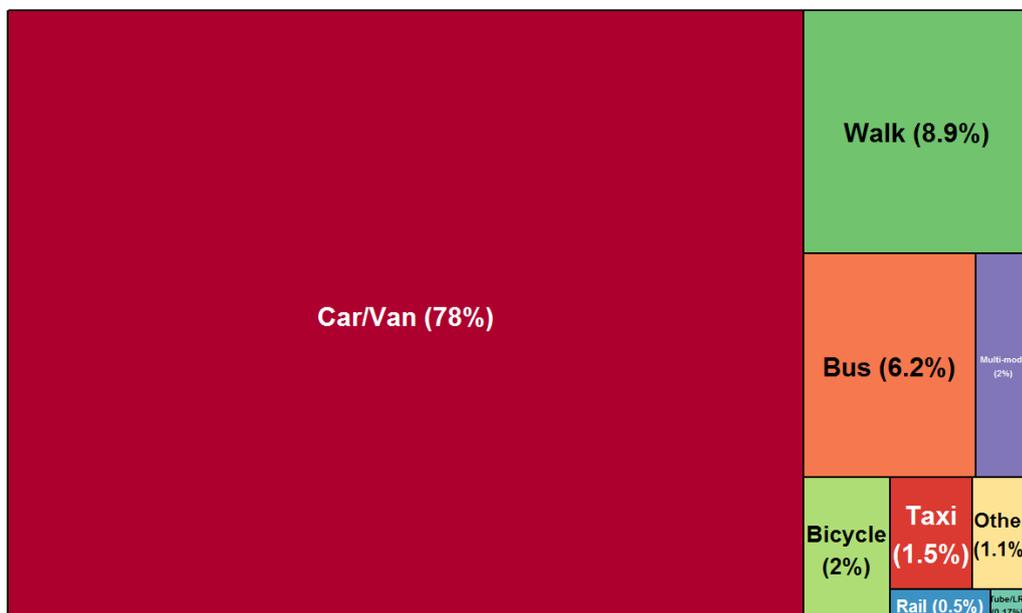


Chart 19: Urban personal travel by mode/multimode (short walks excluded): England, 2012-2016

Within those urban multi-mode trips, 85% had two stages, and most of the remainder were three-stage trips. The car was used in over half of urban multi-mode trips. Rail was also a feature of over half of urban multi-mode trips. Also, nearly 40% of urban multi-mode trips involved a walking (more than a mile) or bus stage (Chart 20 and box over the page).

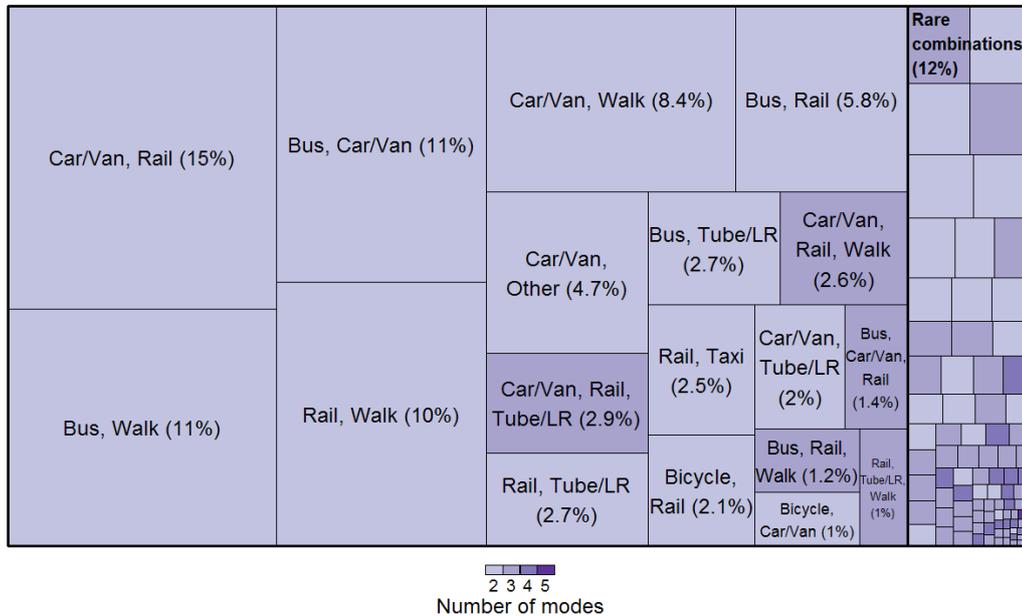


Chart 20: All multi-modal trips in urban areas by the combination of modes used (short walks excluded): England, 2012-2016

Multi-mode

The tree maps in purple show the different modes of transport used in a multi-mode trip. For example, “Bus, Tube/LR” means that there was at least one bus stage and one Tube/Light Rail stage in the trip, in any order.

Trips using two modes might involve more than two trip stages – e.g. bus then rail then another bus. The tree maps do not distinguish.

London mode use

There was a wide variety of mode combinations in use in London (Charts 21 and 22). Some 80% of London multi-mode trips involved two modes, and most of the rest were three mode trips. Trips that included 4 or 5 modes were rare (1%). Rail was the most common mode in multi-mode journeys, as nearly two thirds of London multi-mode journeys involved a rail stage. Nearly 60% of multi-mode London trips involved the underground or light rail and 45% involved a bus stage. Almost a quarter of the multi-mode trips involved a car or van.

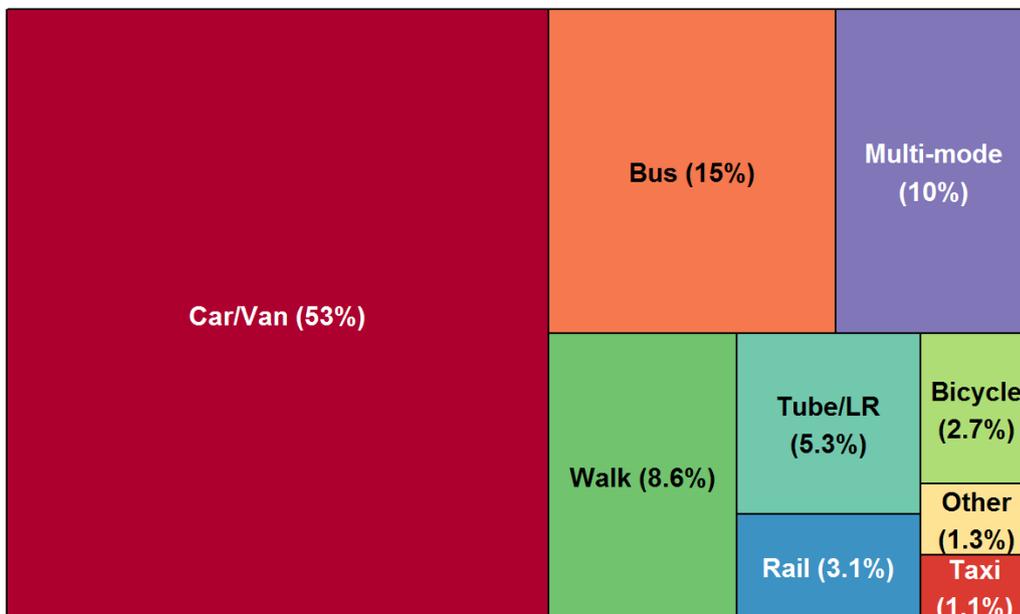
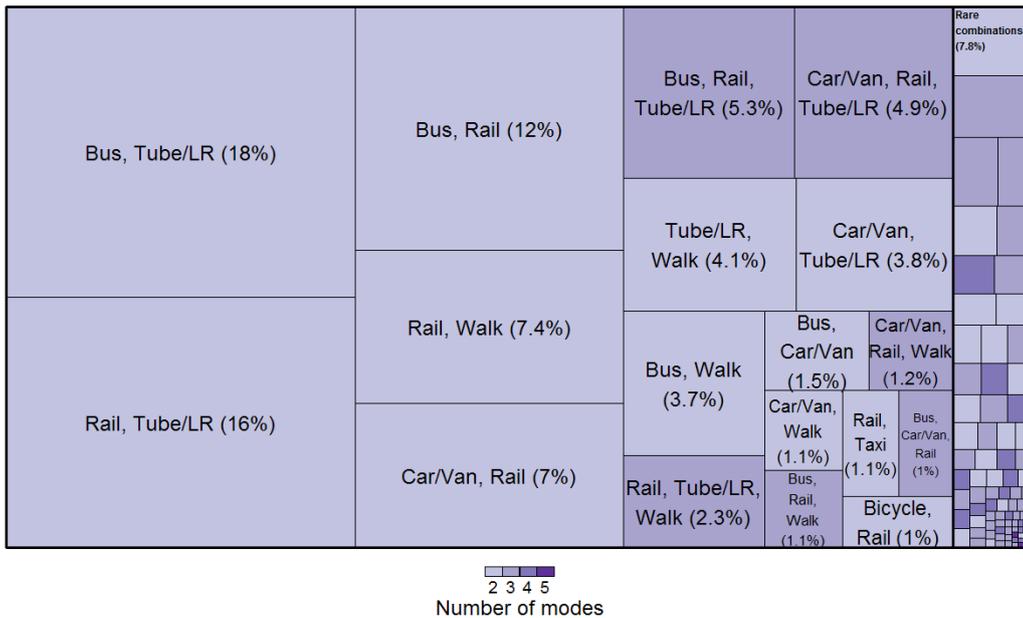


Chart 21: London personal travel by mode/multimode (short walks excluded): 2012-2016

Chart 22: All multi-modal trips in London by the combination of modes used (short walks excluded): 2012-2016

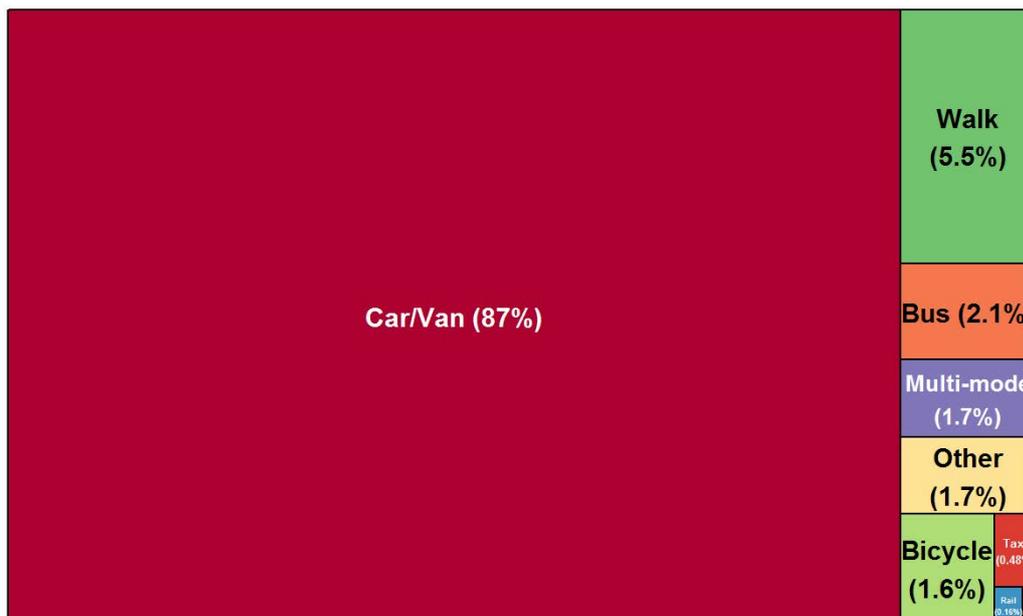


Rural mode use

For trips that started in a rural area, around 87% were made by car/van (Chart 23). This figure was higher than the corresponding proportion in urban areas, and much higher than in London. Together, car/van, walking (more than a mile) and bus trips accounted for 94% of all rural personal travel. Fewer than 2% of trips were made using more than one mode.

Over 80% of rural multi-mode trips have two stages (Chart 24) and around 75% of multi-mode trips involved a car/van. Just over 40% involved a rail stage and around a third each included a bus or walk stage (walks over a mile).

Chart 23: Rural personal travel by mode/multi-mode (short walks excluded): 2012-2016



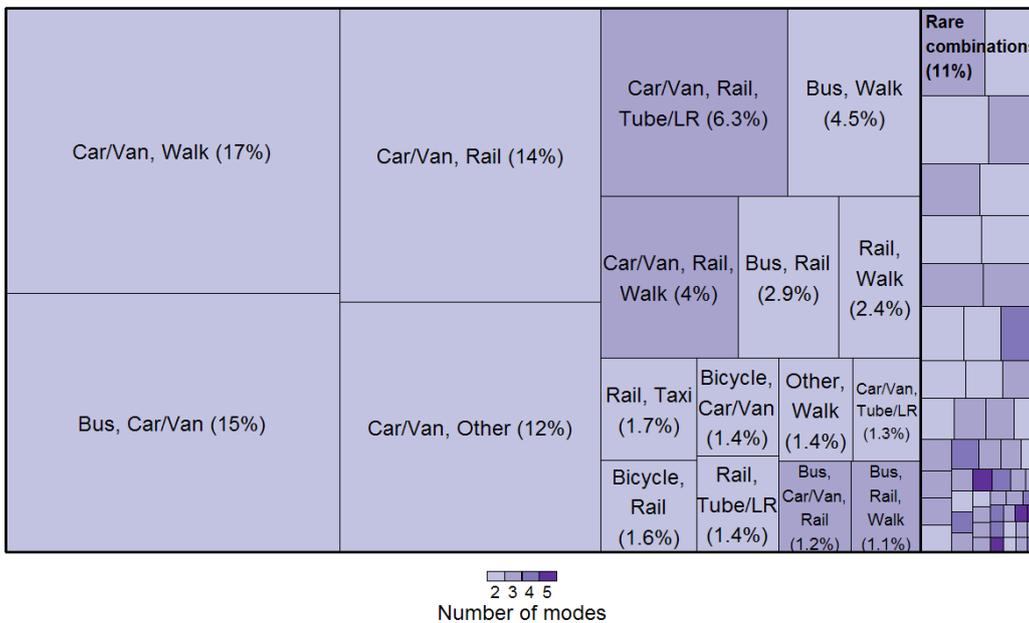
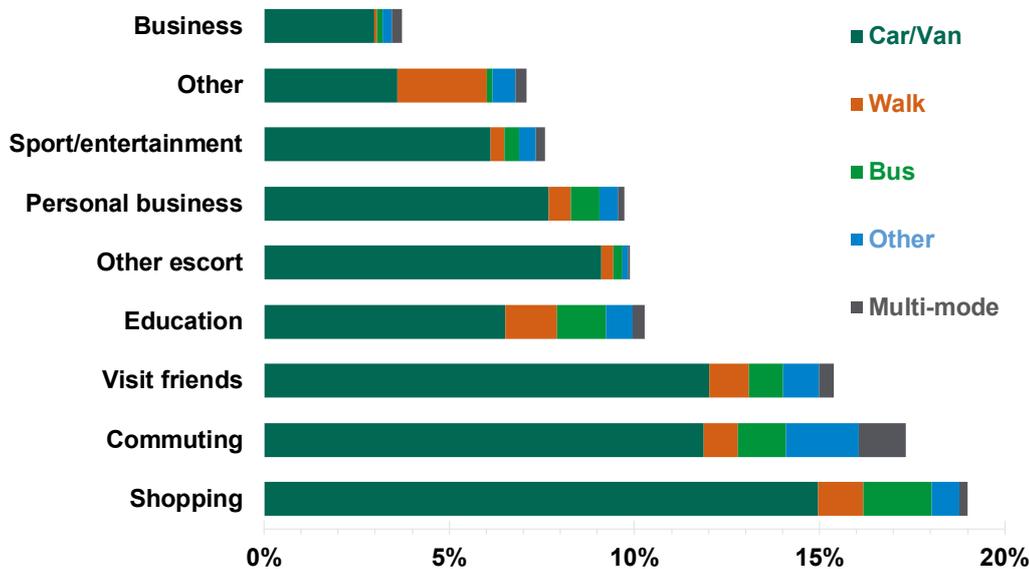


Chart 24: All multi-modal trips in rural areas by the combination of modes used (short walks excluded): 2012-2016

The impact of purpose on mode use

The mode used varied by the purpose of the trip (Chart 25). Shopping, commuting and visiting friends accounted for just over half of the trips made by people in England. Car was the most common mode of transport used for every purpose, accounting for more than half of “other” trips, through to over 90% of “other escort” trips.

Chart 25: Trips by mode and purpose (short walks excluded): England, 2012-2016



Walking (walks of over a mile, with short walks excluded) accounted for 8% of trips overall, but was also a particular feature of “other” trips – over a third of these trips were walks. This category includes walking for exercise or pleasure. It was common also in education, many of which would be walks from home to school either as a pupil or someone walking with them.

A bus was used for 7% of trips – and the most common trip purposes were education and shopping.

Focus on commuting

Commuting accounted for the majority of multi-mode trips in 2012-2016. Nearly 40% of multi-mode trips were for commuting and around 7% of all commuting trips were multi-mode. Similar to the prevalence of multi-mode trips overall, multi-mode commuting trips varied by the location of trip (Chart 26). In particular, London commuting trips were different from other types of trips, and other areas. For example, car/van use was lower than in other urban areas and rural areas, and multi-mode trips more common. Car/van trips accounted for 36% of London commutes, and multi-mode trips accounted for over 20% of London commuting trips.

For urban and rural areas, commuting trips were more similar to other trip purposes. Some 90% of rural commutes were by car/van alone. For England overall, nearly 70% of commutes were by car alone, similar to the percentage (75%) in urban areas.

Chart 26: Commuting trips in different areas by mode or multi- mode (short walks excluded): England, 2012 to 2016



Conclusion

This analysis demonstrates the wealth of detail on trip modes and purposes that is available from the National Travel Survey and how travel patterns vary between areas, in particular looking at trips that use more than one mode of transport. Although a relatively small proportion of the trips presented here are multi-mode, the analysis shows how these proportion and type of modes used in multi-mode trips varies for London, urban and rural areas and for the purpose of the trip.

Satisfaction with transport services

by the Social and Behavioural Research Team, DfT

This article describes some analysis of National Travel Survey questions on satisfaction with different aspects of transport. The satisfaction question and methodology were described in the NTS Factsheet published in December, and this article shows some more in-depth analysis for a range of demographic factors.

Introduction

This analysis was produced by the Social and Behavioural Research team in DfT. It analyses the self-completion satisfaction questions in the National Travel Survey (see box opposite).

Satisfaction across modes

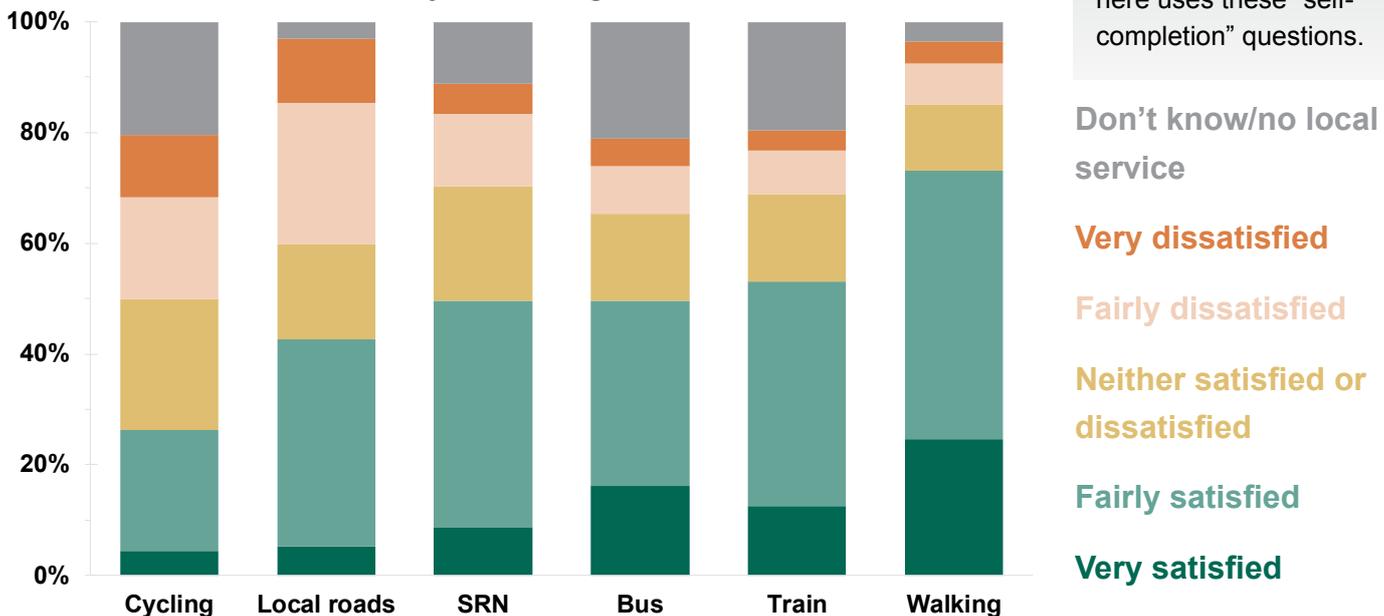
In general, levels of satisfaction with the Strategic Road Network (SRN), local roads, rail, and buses are quite similar (43% are satisfied with local roads, and 53% are satisfied with trains). However, satisfaction is lower for cycling (27%) and higher for walking (73%) (Chart 27).

Differences in satisfaction are more apparent if we focus on users (see box overleaf).

Among users, satisfaction with trains is 67%, and with buses is 63%. For roads, satisfaction is lower at 50% for the SRN and 42% for local roads. Dissatisfaction with local roads is relatively high compared to other modes (38%).

People are more satisfied with provision for walking than any other transport infrastructure or service (76% satisfaction amongst people who walk for more than 20 minutes).

Chart 27: Satisfaction levels, by mode: England, 2016



NTS attitudes and satisfaction questions

Most questions within the NTS concern factual travel behaviours. However, there is a short section which asks about attitudes to and satisfaction with local transport provision. In 2016, for half of households interviewed in the NTS, a random adult was selected from those present during the interview. The selected adult then completed the questions themselves, using a computer, rather than being asked by the interviewer. The analysis presented here uses these “self-completion” questions.

Don't know/no local service

Very dissatisfied

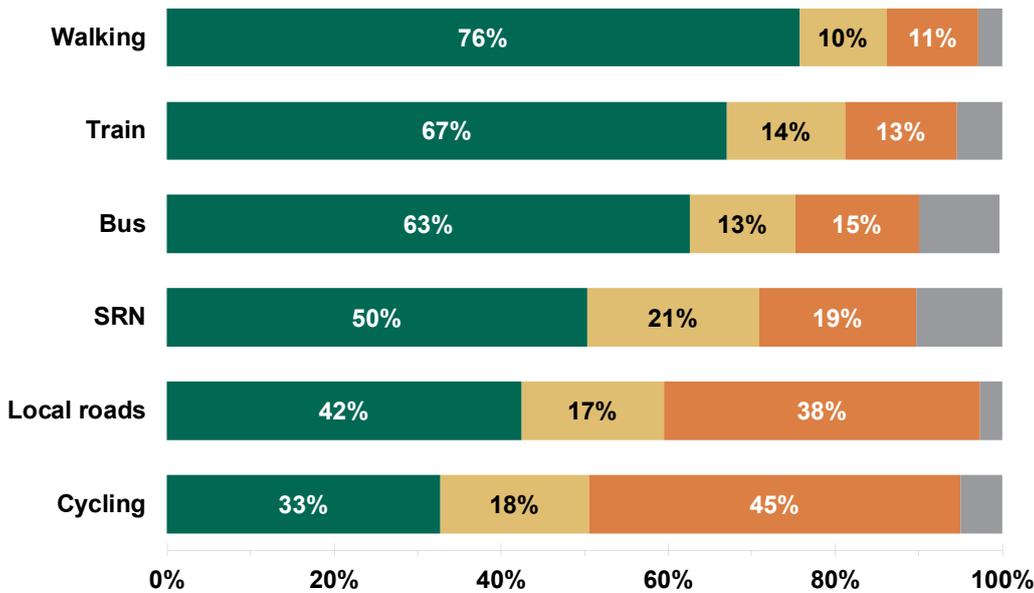
Fairly dissatisfied

Neither satisfied or dissatisfied

Fairly satisfied

Very satisfied

Chart 28: Satisfaction levels of users, by mode: England, 2016



Satisfied

Neither satisfied or dissatisfied

Dissatisfied

Don't know

Users and non-users

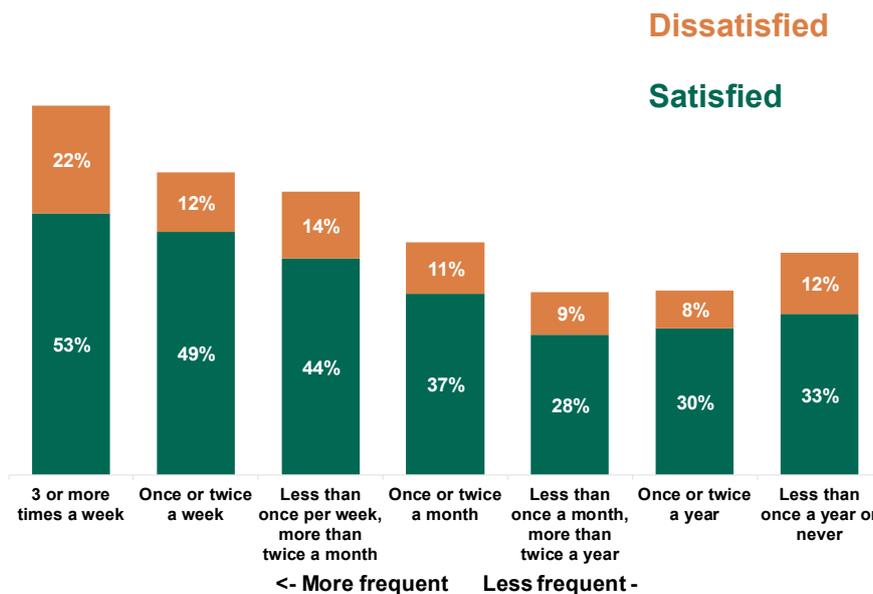
Here, people are counted as a user of a mode if they have said that they use that mode more than once a year.

People are counted as someone who uses walking as a mode of transport if they walk for 20 minutes or more without stopping.

Cycling provision is the only mode where more people are dissatisfied than are satisfied with it. Some 45% of people who cycle are dissatisfied, and only 33% satisfied.

Satisfaction and frequency of use

The NTS records 7 levels of frequency of use for the main transport modes. For most modes, people who use a mode more frequently are likely to be more satisfied than people who use that mode less often. For example, those who travel in a car most frequently are the most satisfied with the Strategic Road Network, though they do also have comparatively high levels of dissatisfaction (Chart 29).



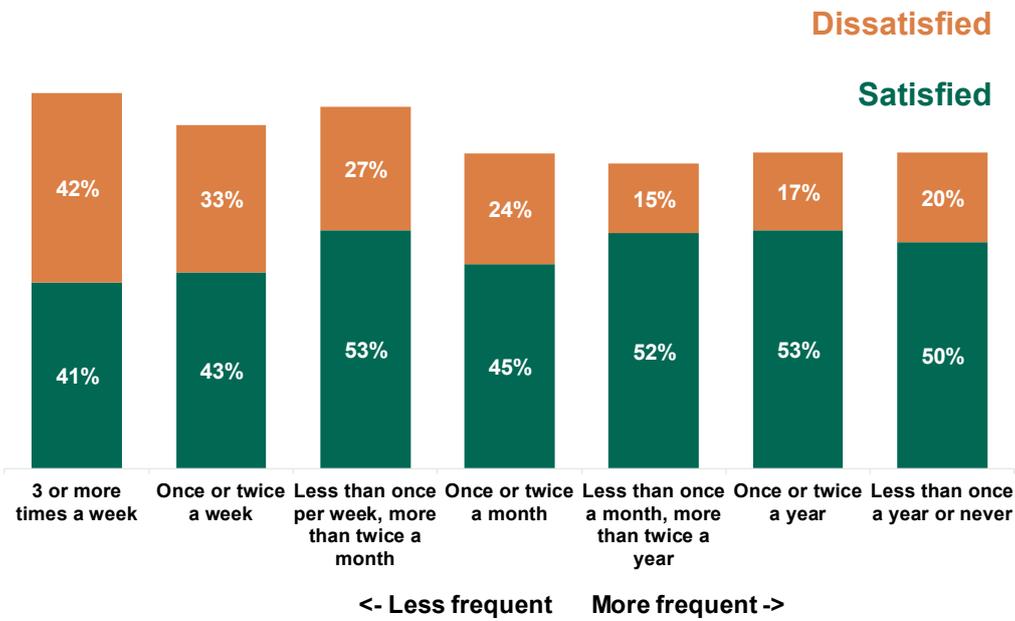
Dissatisfied

Satisfied

Chart 29: Car user satisfaction with the Strategic Road Network: England, 2016

However, the reverse is true for local roads. More frequent car users are the least satisfied with local roads, as well as being the most dissatisfied (Chart 30).

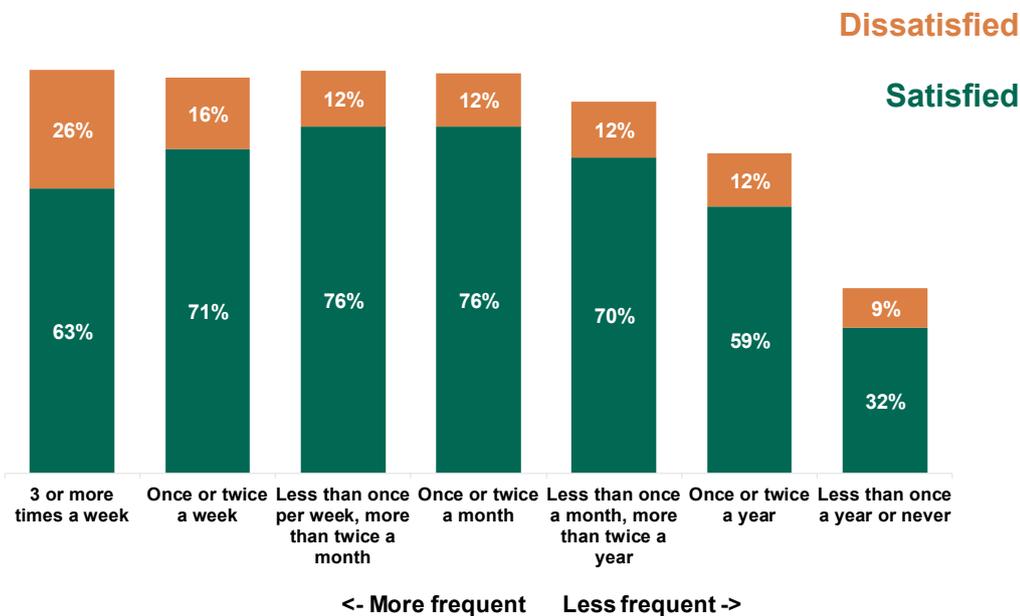
Chart 30: Car user satisfaction with the local road network: England, 2016



There is a more complex relationship between frequency of use and satisfaction for trains (Chart 31). The highest levels of satisfaction (76%) are reported by those who use trains often but not regularly. The lowest levels of satisfaction (59% and 32%) are reported by those who rarely or never use trains.

However, people who use trains very regularly (3 or more times a week) report relatively low satisfaction (63%) and relatively high dissatisfaction (26%). It is likely that this group includes regular train commuters.

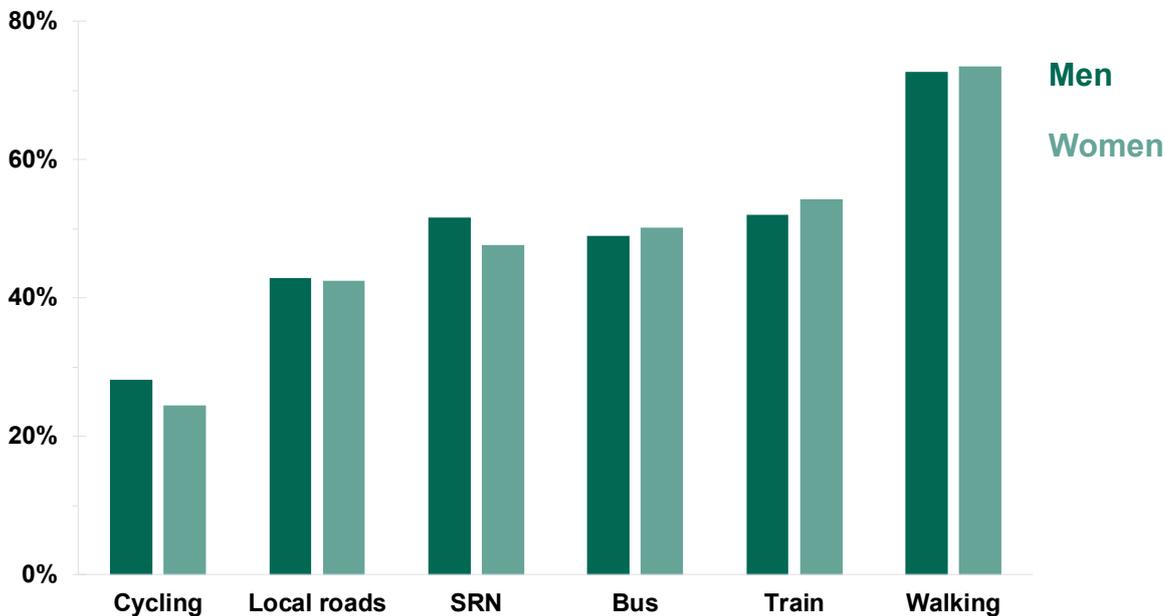
Chart 31: Train user satisfaction: England, 2016



Satisfaction and gender

Men and women have similar levels of satisfaction for most travel modes (Chart 32). There are small gender differences in satisfaction with the SRN and cycling, where men are 4 percentage points more satisfied than women. For both these modes women are also more likely to answer 'don't know'.

Chart 32: % satisfied by mode and gender: England, 2016



Satisfaction and age

There are relatively small differences in satisfaction between age groups. Across all modes, except buses, 25-34 year olds are the most satisfied group (or joint most satisfied group). For buses the most satisfied age group is 65+.

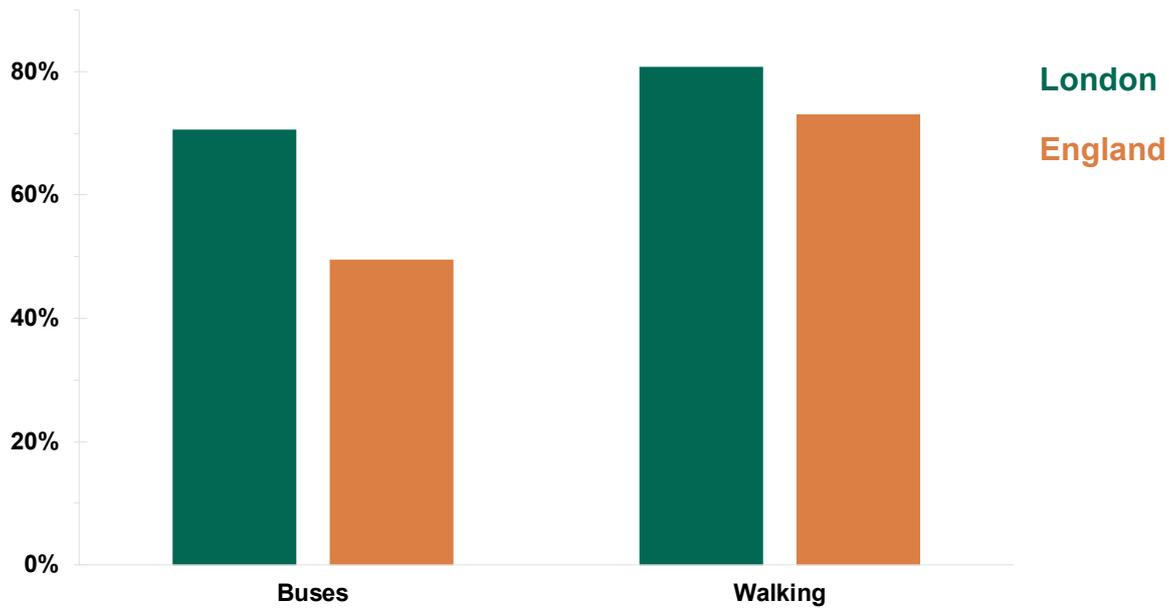
The least satisfied group tend to be the over 65's (except for buses), although the youngest age group (16-24) also tend to report relatively lower levels of satisfaction.

For some modes the pattern is complex. For example 50% of 16-24 year olds are satisfied with buses (the second highest proportion), but 17% say they are dissatisfied (the highest proportion).

Regional differences in satisfaction

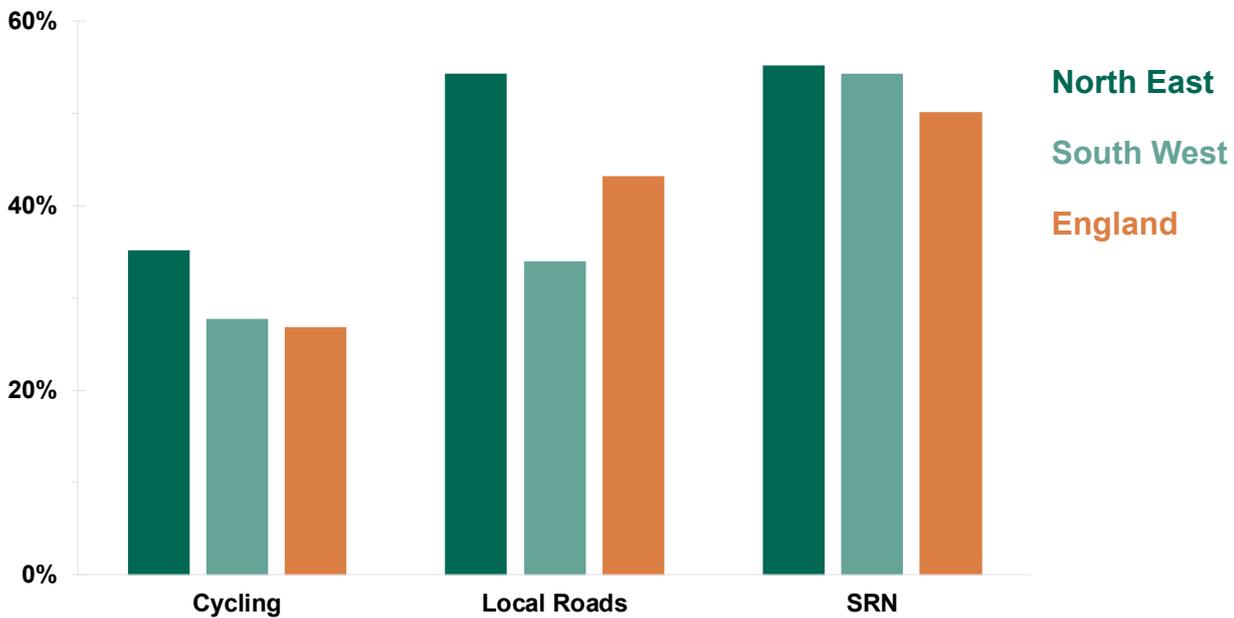
Differences in satisfaction between the regions are not generally very large, with one or two exceptions. The first exception being London, where respondents report notably higher levels of satisfaction with buses (71% net satisfaction compared to an average of 50%) and walking provision (81%, compared to 73%) (Chart 33).

Chart 33: % satisfied by mode: London and England, 2016



The second exception is the North East, where 35% of respondents are satisfied with cycling provision, with the next highest being the South West with 28%, and an average across all regions of 27%. The North East also has the highest proportion of respondents satisfied with major roads and local roads (Chart 34).

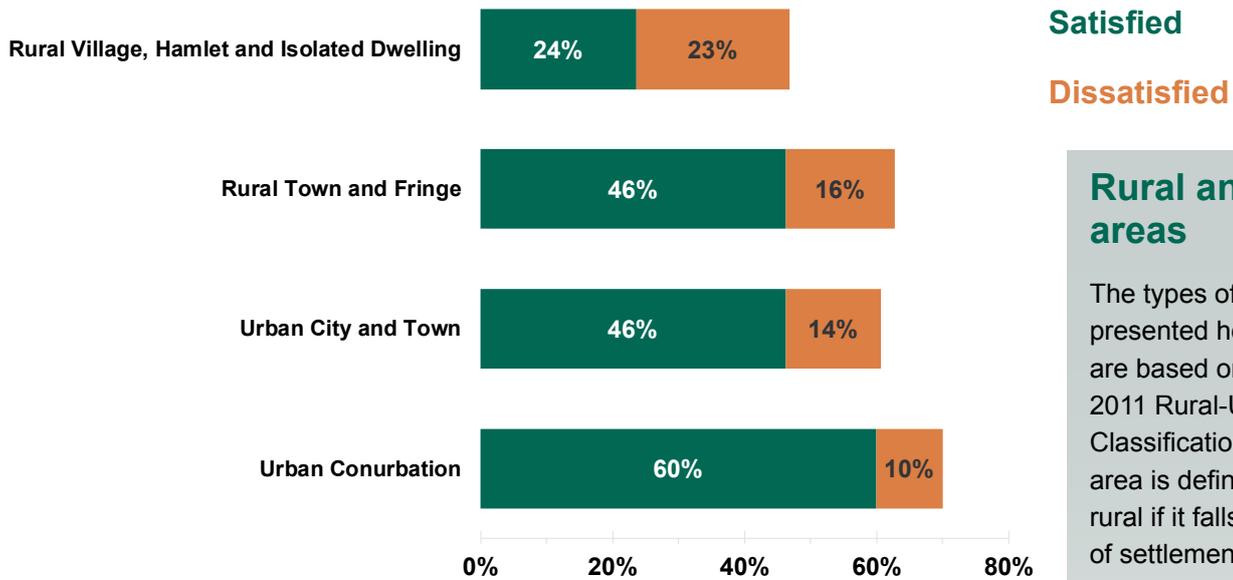
Chart 34: % satisfied by mode: North East, South West and England, 2016



Satisfaction in urban and rural areas

There are differences in satisfaction between people who live in urban and in rural settings. The biggest differences are for satisfaction with bus services where 60% of people in the most urban setting are satisfied, compared to 24% in the most rural (Chart 35).

Chart 35: Bus satisfaction in urban and rural areas: England, 2016



Satisfied

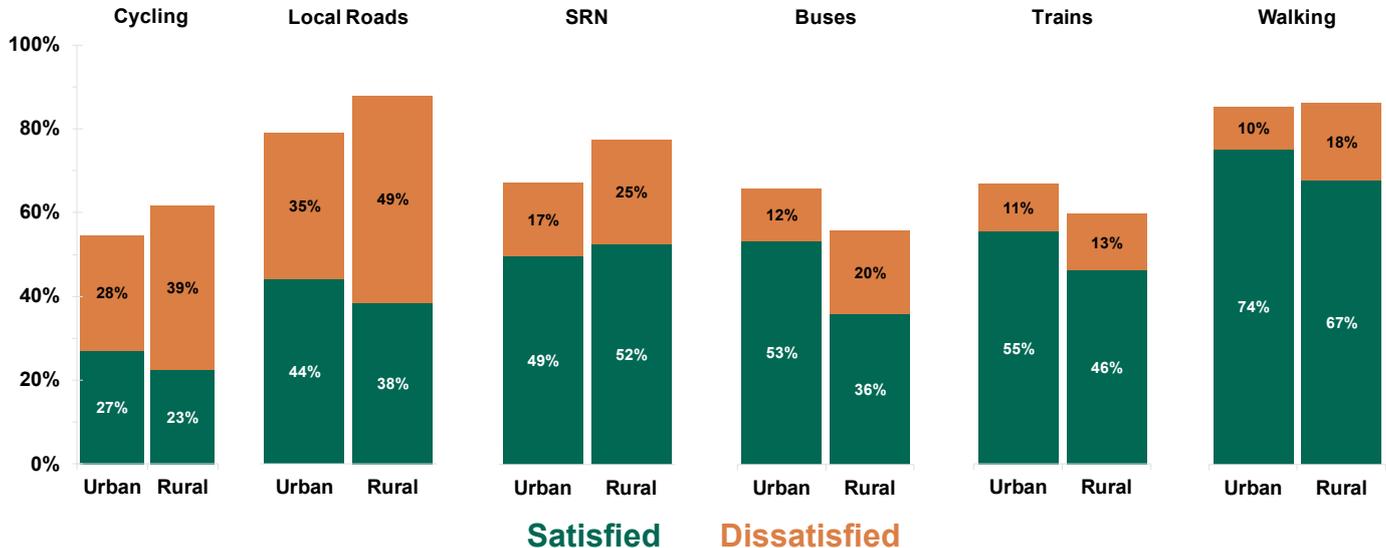
Dissatisfied

Rural and urban areas

The types of residence presented here are based on the 2011 Rural-Urban Classification. An area is defined as rural if it falls outside of settlements with a resident population of more than 10,000. For more information on the classification, please see: <https://www.gov.uk/government/collections/rural-urban-definition>.

This relationship is apparent, though less pronounced, across the other modes. Generally, people living in more urban areas are more likely to be satisfied with local transport provision. The exception being the Strategic Roads Network, where 52% of rural respondents are satisfied, compared to 49% of those who live in urban areas (Chart 36).

Chart 36: Satisfaction in urban and rural areas, by mode: England, 2016



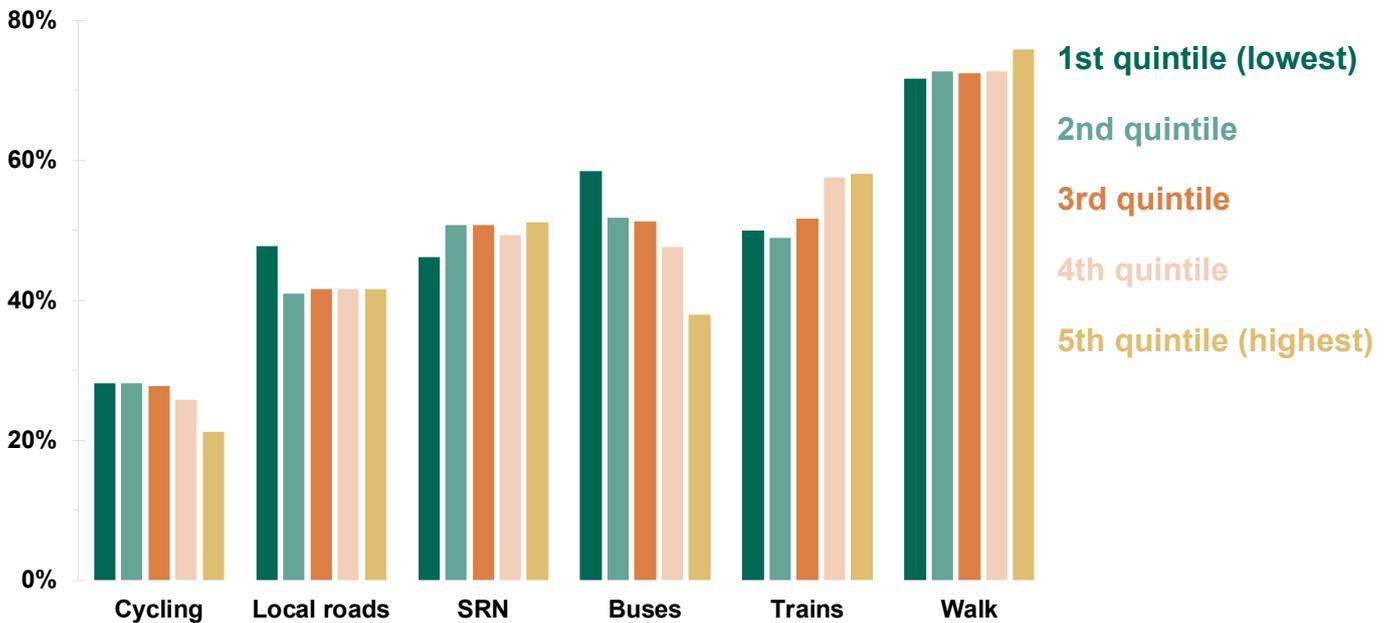
Household income

The relationship between satisfaction and household income differs across modes.

For buses and cycling the highest income quintile has the lowest level of satisfaction. For walking, those in the highest quintile are more likely to be satisfied than those in the other quintiles (76% compared to 72-73%). For trains, those in the highest two income quintiles are the most likely to be satisfied (58%, compared to around 50% for the other quintiles).

For the SRN, those in the lowest income quintile are the least likely to be satisfied (46% compared to around 50% in the other quintiles). Conversely, for local roads, those in the lowest quintile are most likely to be satisfied (48%, compared to around 41%).

Chart 37: % satisfied by household income quintile and mode: England, 2016

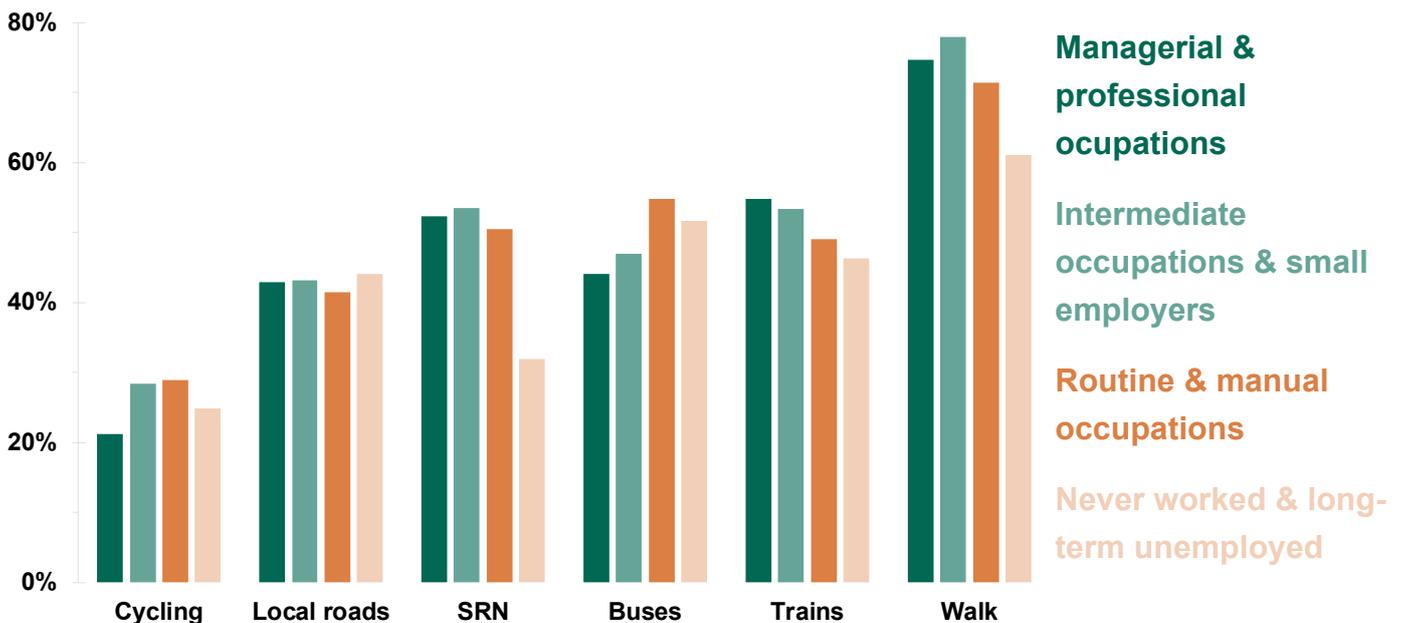


Socio-economic background

Satisfaction levels also vary according to people’s socio-economic background.

The range is greatest for the Strategic Road Network. The highest level of satisfaction is in the intermediate occupations and small employers group, 53%, whereas satisfaction in the never worked and unemployed group is 33%, a difference of 20%.

Chart 38: % satisfied by socio-economic category and mode: England, 2016



For rail, the highest social classification (Managerial and professional occupations) are both the most satisfied group (55%), and the most dissatisfied group (17%), with the lowest proportion of 'don't knows'. For other modes the differences between socio economic classifications are less pronounced, but do exist. For buses and for cycling those in the managerial group are the least likely to be satisfied with the provision for those modes.

Conclusions

The NTS questions on satisfaction are one of a number of datasets that look at attitudes to, and satisfaction with, transport. Some others include the transport module of the British Social Attitudes Survey and the Transport Focus series of rail, tram and bus satisfaction questionnaires. However, the NTS results demonstrate how levels of satisfaction with different modes of transport vary (and sometimes are similar) across a range of demographic factors such as household income, age, gender and location.

A further benefit of the NTS is the ability to link people's responses to the satisfaction questions with their travel behaviour. This is briefly investigated here by using the 'frequency of use' question, but could be extended by analysing the satisfaction questions along with travel behaviours from the 7-day travel diaries.

What is the NS-SEC classification?

The National Statistics Socio-economic classification is a standard measure of socio-economic position across official statistics in the UK since 2001, used to explain variation in social behaviours. Here, it is used for individuals aged 16 and over. For more information, please see the [NS-SEC methodology and guidance of the Office for National Statistics](#)

Notes and background information

This publication presents articles based on the National Travel Survey data. This section provides brief relevant background information and links to sources of further information.

Variations in travel between different locations

The spatial categorisation in the article uses a combination of two metrics

- 1 'Settlement size'
- 2 Local authority classification ('area-type')

In detailed analyses 28 categories are used. These have been designed to show maximum spatial differentiation whilst ensuring that each category contains an adequate number of NTS responses for analysis purposes.

In presenting summaries the 28 categories are reduced to seven groups. There are two versions of this grouped format. The three most urbanised groups are common to both versions: Greater London BUA, Core Cities and Conurbations, and Other Regional and Industry Centres. The remaining four groups are defined either by settlement size or by area-type.

A listing of the categories and groups, the travel characteristics of each in 2011-14 and the change since 2002-5 can be seen in the accompanying table.

Settlement size

This is a convenient term for the more strictly specified concept of a 'built-up area' or BUA. BUAs are defined as comprising land which is 'irreversibly urban in character' and which have a minimum size of 20ha. BUAs which are within 200 metres of each other are linked to form a single BUA. The identification of BUAs is undertaken by the Ordnance Survey and subsequent to each Census the Office for National Statistics converts data produced for the smallest spatial units (output areas) into figures for each BUA. In NTS the resident population of the BUA in which households are located is coded in a series of size bands.

The present exercise groups these into five bands: >250k, 100-250k, 25-100k, 3-25k and <3k or 'rural' (ie residences located outside a BUA). However not all area-types are split into these five bands. For example within local authorities classified as 'Regional and Industry Centres' BUAs are only found in the top two bands. Amongst other area-types only 'Industrial areas' have sufficient population within the >250k band to warrant this being included as a separate category.

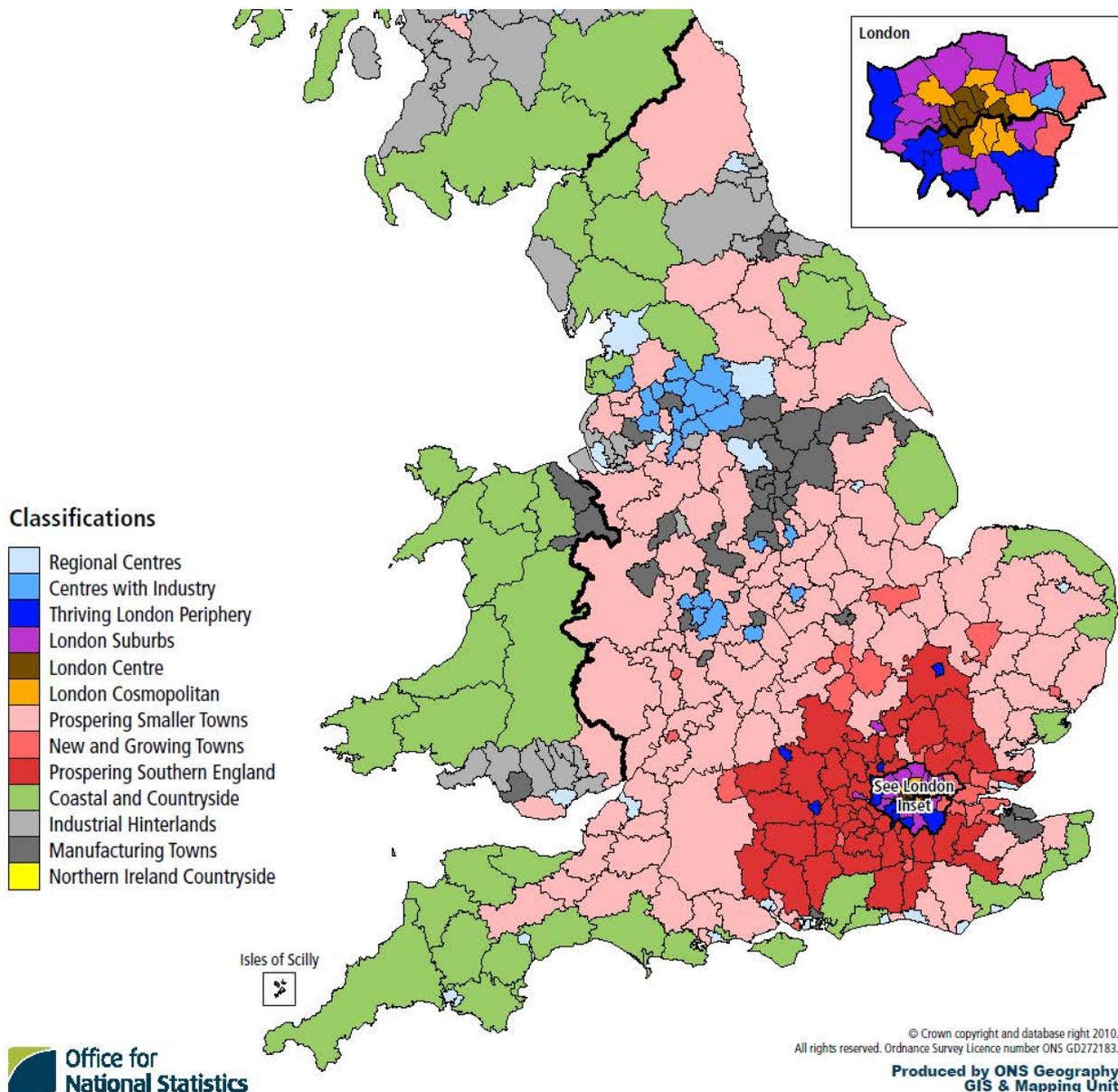
The categorisation by size of BUA is not applied to places within the Greater London BUA or within the Core Cities and Conurbations group. Here categorisation is solely by local authority area-type.

Local authority area type

The area-types used in this exercise are based on the ONS 2001 classification of lower-tier local authorities* (ie London Borough, Unitary and District Councils). This applies cluster analysis to Census data on about 40 demographic and socio-economic variables to generate groups of authorities with similar characteristics.

Twelve groups are identified, with each being given a descriptive label (eg London Suburbs). The geographical distribution of these groups is shown in the map below. A feature of the distribution is that most groups are characterised by location within a particular part or parts of the country. ('Regional centres' are a notable exception).

ONS 2001 Classification of local authorities (group level) updated to authorities extant in 2009



*<http://webarchive.nationalarchives.gov.uk/20160113082420/http://www.ons.gov.uk/ons/guide-method/geography/products/area-classifications/national-statistics-area-classifications/national-statistics-2001-area-classifications/index.html>

For the purposes of the present exercise some of these groups have been amalgamated (generally members of the same 'super-group' in ONS terminology), thus:

ONS super-group	ONS group	'Area-type'
Cities and Services	Regional Centres	Regional and Industry Centres*
	Centres with Industry	
	Thriving London Periphery	Thriving London Periphery**
London suburbs		London suburbs**
London centre		London centre
London cosmopolitan		London cosmopolitan
Prospering UK	Prospering Smaller Towns	Prospering Smaller Towns
	New and Expanding Towns	Prospering South East
	Prospering Southern England	
Coastal and Countryside		Coastal/remoter rural
Mining and Manufacturing	Industrial Hinterlands	Industrial areas
	Mining and Manufacturing	

*These centres are subdivided geographically into 'Core Cities', 'Outer Conurbation Centres' and 'Other Regional and Industry Centres'

** Individual authorities in these ONS groups located outside the Greater London BUA are included in the 'Prospering South-East' area-type

MILES PER PERSON PER YEAR 2011-14 BY ALL MODES, CAR DRIVER AND DRIVER MODE SHARE								
BY AREA/SETTLEMENT SIZE CATEGORY AND CHANGE FROM 2002-5								
Area/size category		% pop'n (NTS)	ALL MODES		CAR DRIVER		DRIVER SHARE	
			miles	% chg	miles	% chg	%	% pt chg
1	London centre	3.0	4061	-20.3	817	-43.7	20.1	-8.3
2	London cosmopolitan	4.3	4054	-5.6	968	-21.0	23.9	-4.6
3	London suburbs (London BUA)	5.0	4845	-15.6	1807	-22.0	37.3	-3.1
4	Thriving London Periphery (London BUA)	2.2	5948	-11.6	2375	-24.7	39.9	-6.9
5	Prospering SE (London BUA)	3.8	6903	-9.0	3601	-9.8	52.2	-0.5
6	Core Cities (Regional and Industry Centres)	8.3	4973	-13.4	2234	-20.5	44.9	-4.0
7	Outer conurb'n: Regional and Industry Centres	4.7	4994	-15.7	2513	-17.8	50.3	-1.3
8	Outer conurb'n: Industrial areas	3.1	5628	-7.4	2880	-12.2	51.2	-2.8
9	Outer conurb'n: Prospering Smaller Towns	1.9	6611	-19.2	3741	-14.1	56.6	3.3
10	Other Regional and Industry Centres BUA >250k	3.7	5615	-7.6	2642	-9.4	47.1	-0.9
11	Other Regional and Industry Centres BUA 100-250k	2.5	5939	-4.9	2839	-8.3	47.8	-1.8
12	Industrial areas: very large towns BUA >250k	2.5	6073	-5.3	3155	-9.5	52.0	-2.4
13	Industrial areas: large towns BUA 100-250k	2.9	5787	-10.1	3106	-14.2	53.7	-2.6
14	Industrial areas: medium towns BUA 25-100k	3.0	6034	-3.8	3253	-9.7	53.9	-3.5
15	Industrial areas: small towns BUA 3-25k	2.9	7342	0.4	4219	4.7	57.5	2.4
16	Industrial areas: BUA <3k & rural	1.5	8041	-9.5	4633	-12.1	57.6	-1.7
17	Prospering SE: large towns BUA >100k	4.4	6926	-14.9	3633	-18.5	52.5	-2.3
18	Prospering SE: medium towns BUA 25-100k	3.5	7748	-2.3	3995	-0.5	51.6	0.9
19	Prospering SE: small towns BUA 3-25k	2.1	9068	-6.9	4867	-12.9	53.7	-3.7
20	Prospering SE: BUA <3k & rural	1.6	8804	-19.8	5373	-18.2	61.0	1.2
21	Prosp. Smaller Towns: large towns BUA >100k	3.7	6943	-9.7	3765	-14.0	54.2	-2.7
22	Prosp. Smaller Towns: medium towns BUA 25-100k	5.8	7478	-0.6	4054	-3.1	54.2	-1.4
23	Prosp. Smaller Towns: small towns BUA 3-25k	7.6	8100	-6.8	4720	-5.2	58.3	1.0
24	Prosp. Smaller Towns: BUA <3k & rural	7.1	9733	-5.5	5830	-5.6	59.9	0.0
25	Coastal/remoter rural: large towns BUA >100k	1.7	6065	-5.5	3232	-13.1	53.3	-4.7
26	Coastal/remoter rural: medium towns BUA 25-100k	2.4	5873	-4.3	2970	-10.1	50.6	-3.2
27	Coastal/remoter rural: small towns BUA 3-25k	2.5	7308	-4.4	3706	-11.2	50.7	-3.9
28	Coastal/remoter rural: BUA <3k & rural	2.3	8455	-12.3	4800	-12.6	56.8	-0.2
	ALL	100.0	6605	-7.7	3426	-9.8	51.9	-1.2
BY GROUPED AREA/SETTLEMENT SIZE CATEGORIES								
Group		% pop'n (NTS)	ALL MODES		CAR DRIVER		DRIVER SHARE	
			miles	% chg	miles	% chg	%	% pt chg
1	Greater London BUA	18.2	5088	-12.4	1904	-20.4	37.4	-3.8
2	Core cities & conurbations	18.1	5268	-13.4	2584	-17.0	49.1	-2.1
3	Other Regional and Industry Centres BUA >100k	6.3	5747	-6.8	2722	-9.6	47.4	-1.5
4	Industrial areas	12.8	6515	-3.6	3580	-5.2	55.0	-1.0
5	Prospering SE	11.6	7817	-11.2	4205	-14.0	53.8	-1.7
6	Prospering Smaller Towns	24.2	8255	-3.4	4743	-3.5	57.5	-0.1
7	Coastal/Remoter rural	8.9	6974	-9.0	3697	-13.1	53.0	-2.5
	ALL		6605	-7.7	3426	-9.8	51.9	-1.2
Of groups 4-7 (excl those within GL BUA and conurb'n's):								
	Large towns BUA >100k	15.2	6479	-11.3	3443	-15.3	53.1	-2.5
	Medium towns BUA 25-100k	14.7	6979	-2.3	3698	-5.8	53.0	-2.0
	Small towns BUA 3-25k	15.1	7952	-4.3	4473	-4.6	56.3	-0.2
	BUA <3k & rural	12.5	9182	-9.9	5445	-10.0	59.3	-0.1

Personal Travel in England - How we use transport and why

This article is based on trips in Great Britain made by people resident in England using 5 years of National Travel Survey (NTS) data from 2012 – 2016

Information for this analysis uses a trip as the primary unit of interest – a trip has one or more modes, one or more stages, a single purpose, and we have also allocated it to a broad area type.

Area types used are London (Inner and Outer London), Urban (connected built up areas that have resident populations above 3,000 people) and Rural (areas that consist of settlements below 3,000 people or are open countryside). For this analysis, trips have been allocated to the area in which they start – not the home area of the person making the trip.

The following describes how modes have been classified and groups for this analysis. (Note that for other published statistics, different classifications may have been used.)

Mode classifications for this analysis

- Walk: Walks of over a mile. Shorter walks have been excluded
- Bicycle: 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.
- Car/van: both include 4-wheeled and 3-wheeled cars, 4x4 vehicles, light vans and lorries.
- Bus: includes all 'local' bus services, but excludes express services, excursions and tours (non-local bus).
- Coach: non-local bus/coach, including express services, excursions and tours.
- Rail: National Rail and London Overground (In other analyses "Rail" may also include the London Underground)
- Tube/LR: London Underground, light rail, trams. (In other analyses, light rail and trams are sometimes classified as "Other")
- Taxi: taxis/minicabs (In other analyses, taxis and minicabs are sometimes classified as "Other")
- Other transport: all other modes – private/hire bus, two-wheeled motor vehicles, domestic air travel, minibuses etc.
- Multi-mode: a trip that consists of at least two stages using a mixture of modes.
- Main mode: Used in other NTS analysis, but not here, where we have included all modes in each trip. The main mode of a trip is that used for the longest stage of the trip by distance. With stages of equal length the mode of the latest stage is used

Satisfaction with local transport services

This article uses information from the self-completion questions in the National Travel Survey. For full details of these questions and the methodology behind them, please refer to the December NTS factsheet here: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/668728/nts-household-self-completion-attitudes-compared.pdf.

Further reading and references

More details about travel behaviours of English residents can be found in the 2016 National Travel Survey publication: <https://www.gov.uk/government/statistics/national-travel-survey-2016>.

Full guidance on the methods used to conduct the survey, response rates, weighting methodology and survey materials can be found in the National Travel Survey Technical Report: 2016 on the above page.

More factsheets on further specific topics from the National Travel Survey can be found at:

<https://www.gov.uk/government/publications/nts-factsheets>.

The attitude questions in the NTS differ from those in the travel module of the British Social Attitudes survey, which can be found at: British Social Attitudes Survey, 2016 Report

The NTS also differs from attitude questions on the National Train, Bus and Tram Passenger Surveys, which sample only users of those services, not the general population. Results from those surveys may be found at:

[National Rail Passenger Survey](#)

[National Bus Passenger Survey](#)

[National Tram Passenger Survey](#)

Other topics covered by the NTS

In addition to the material covered in this publication, the National Travel Survey covers a range of topics, including the following, which are covered by the published NTS data tables:

Daily and monthly trip patterns (tables NTS0504 - NTS0506)

Motorcyclists and household motorcycle ownership (tables NTS0610 and NTS0207)

Concessionary bus travel (NTS0619 - NTS0621)

Road safety - proportion of people involved in road accidents (NTS0623 - NTS0625)

Accessibility of local services (NTS0801 - NTS0803)

Working from home and deliveries of good and services (NTS0804 - NTS0806)

Annual vehicle mileage, by type and age of vehicle (NTS0901 - NTS0904)

Detailed statistical tables

The National Travel Survey web page at: <https://www.gov.uk/government/collections/national-travel-survey-statistics> provides a set of results tables covering the topics presented in this release and the additional topics above. The full list of table sections is:

Trends in personal travel (Tables [NTS0101 to NTS0108](#))

Driving licence holding and vehicle availability (Tables [NTS0201 to NTS0208](#))

How people travel (Tables [NTS0301 to NTS0317](#))

Why people travel (Tables [NTS0401 to NTS0412](#))

When people travel (Tables [NTS0501 to NTS0506](#))

Travel by age and gender (Tables [NTS0601 to NTS0625](#))

Travel by car availability, income, ethnic group, household type and NS-SEC (Tables [NTS0701 to NTS0710](#))

Accessibility (Tables [NTS0801 to NTS0806](#))

Related information

Other travel surveys in Great Britain. From January 2013, the coverage of the NTS changed to sample residents of England only. This change was agreed following a public consultation in 2011. Details of the consultation outcome can be found at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/230560/NTSconsultationSummaryofresponses.pdf

Related surveys carried out in other areas of Great Britain which cover similar topics (though do not use the same collection methods as NTS) include:

Transport Scotland collect personal travel data for residents of **Scotland** using a one day travel diary in their Scottish Household Survey:

<http://www.transportscotland.gov.uk/statistics/scottish-household-survey-travel-diary-results-all-editions>

In **Northern Ireland** data are collected via the Travel Survey for Northern Ireland, based on a similar methodology to the NTS (interview and 7-day travel diary):

<https://www.infrastructure-ni.gov.uk/articles/travel-survey-northern-ireland>

The Welsh Government collect information on active travel as part of the National Survey for **Wales**, although this does not include a travel diary:

<http://gov.wales/statistics-and-research/national-survey/>

Within England, Transport for London conduct the London Travel Demand Survey for **London** residents which is much bigger than the London sample of the NTS (and uses a different data collection method)

Other transport statistics. In addition to National Travel Survey statistics presented here, DfT and others publish a range of statistics related to modes of transport - as signposted throughout this document. Detailed comparisons between the NTS and other sources are not always possible because of differences in collection, coverage and measurement. However, where the NTS and other statistics refer to the same phenomenon, a degree of coherence between different sources can be observed over time, although year-on-year changes can vary.

The full range of statistics published by DfT can be found at <https://www.gov.uk/government/organisations/department-for-transport/about/statistics>

Methodology notes

Strengths and limitations of the NTS: The NTS is a long-running survey which uses a high-quality methodology to collect a broad range of information on travel behaviours at the England level. The methodology has been broadly unchanged over several decades meaning that trends can be monitored. Figures are weighted to be representative of the population. However, like any statistical source, the NTS has its limitations. For example, as a sample survey resulting figures are estimates with associated sampling error. In addition, figures below national level require several years data to be combined, and figures for geographies below regional level cannot be published.

Survey methodology: Since 2002, the Department for Transport has commissioned the National Centre for Social Research (NatCen) as the contractor for the NTS. Full guidance on the methods used to conduct the survey, response rates, weighting methodology and survey materials can be found in the National Travel Survey Technical Report at:

<https://www.gov.uk/government/publications/national-travel-survey-2015>

A 'Notes and definitions' document which includes background to the NTS, response rates, sample size and standard error information and a full list of definitions can be found at:

<https://www.gov.uk/government/publications/national-travel-survey-2015>

Sample sizes are included in all the individual web tables. As estimates made from a sample survey depend upon the particular sample chosen, they generally differ from the true values for the population. This is not usually a problem when considering large samples but may give misleading information when considering data from small samples, such as cyclists in a particular age group.

A note explaining the methodology used to calculate the 2009 NTS standard errors and tables of standard errors for selected key statistics are published at:

<https://www.gov.uk/government/publications/nts-standard-error-guide>

National Statistics are produced to high professional standards set out in the Code of Practice for Official Statistics. The National Travel Survey was assessed by the UK Statistics Authority against the Code of Practice and was confirmed as National Statistics in July 2011. Details of ministers and officials who receive pre-release access to these statistics up to 24 hours before release can be found in the pre-release access list at:

<https://www.gov.uk/government/publications/national-travel-survey-2015>