



Department  
for Transport

# Road Use Statistics Great Britain 2016

This publication provides an overview of statistics on roads and how they are used. It brings together information previously released by the Department for Transport on vehicles, travel, and traffic.



## Feedback

This is a new publication and we would welcome any feedback to: [roadtraff.stats@dft.gsi.gov.uk](mailto:roadtraff.stats@dft.gsi.gov.uk)

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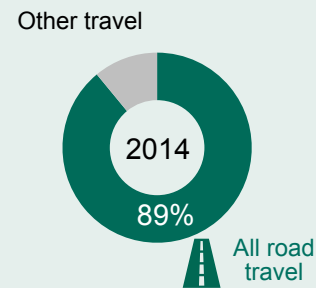
## Summary



### Section 1: Roads are vital for moving people and goods around the UK

page 4

- ▶ Most people's journeys are made by road and the majority of these are by car or van.
- ▶ Roads are vital to the economy, with almost three times more goods moved by roads than by water and rail combined.
- ▶ The Strategic Road Network (SRN) accounts for only 2.4% of the road network length but carries a disproportionately large amount of traffic, with HGVs in particular depending on the SRN.



### Section 2: Over the long term, road use and licensed vehicles have grown dramatically

page 9

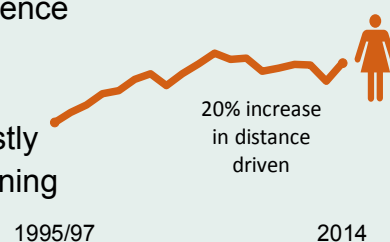
- ▶ Road use has grown dramatically since the 1950s, this has been driven by individuals travelling further on average.
- ▶ Over the last two decades the rate of car traffic growth has slowed. For an average person, car use fell throughout the 2000s, but this was partially offset by an increase in population using the roads.
- ▶ Recent trends show a resumption of traffic growth after the recession. Growth has been strongest on the SRN and for van traffic across all roads.



### Section 3: The most common means of travel is by car for all age, gender, and income groups

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- ▶ Men drive further than women on average, but the distance driven by women is growing, reflecting an increase in licence holding by older women.
- ▶ Car use per person has fallen amongst young men, mostly due to a drop in the number of 17-20 year old males gaining a driving licence.
- ▶ People in the highest household income group travel more than twice as far by car as people in the lowest income group.



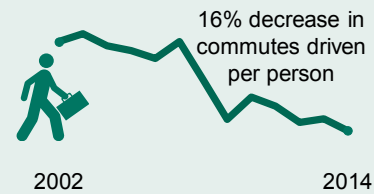
## Summary



### Section 4: Car is the most popular form of transport for all trip purposes

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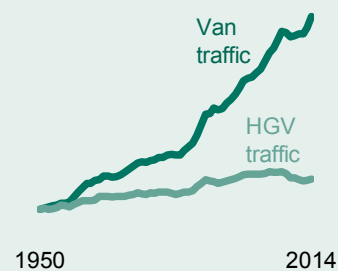
- ▶ Car use per person has fallen across all different trip purposes since 2002.
- ▶ Two thirds of commuting trips are made by car but there was a notable drop in commuting and business trips per person during the 2008/9 economic downturn.
- ▶ The majority of trips under 1 mile are made by walking; for trips of other lengths, car is the main mode of travelling.



### Section 5: Commercial road users account for a small but growing proportion of traffic on roads

page 30

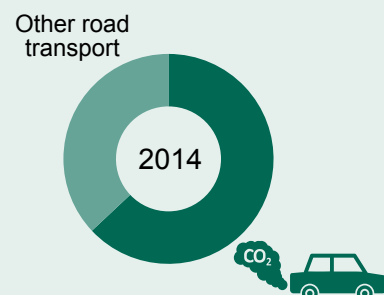
- ▶ Van traffic has grown faster than car traffic on all types of road in recent years.
- ▶ HGV traffic has not yet returned to pre-recession levels.
- ▶ HGV vehicles are travelling less distance, but carrying more goods since the 1990s, owing to a shift away from using smaller HGV vehicles towards larger vehicles or vans.



### Section 6: Performance of the road network

page 35

- ▶ Despite growth in traffic, there have been large decreases in road casualties on all roads.
- ▶ Road user satisfaction has been fairly stable over recent years. Satisfaction with different aspects of the SRN varies, but remains high.
- ▶ Cars account for almost two thirds of road transport greenhouse gas emissions. Total emissions from road transport have fallen since 2007.





## Section 1: An introduction to roads

This chapter looks at roads in the context of other forms of transport and provides an overview of roads and traffic.

**Roads are vital for people's journeys**

Most people's journeys are made by road and the majority of these are by car or van. This was not always the case, in the 1950s a larger proportion of journeys were made by bus or coach compared to car or van.

**Road freight contributes £11bn to the UK economy**

Road is the main method of transporting freight across Great Britain, with almost three times more goods moved by road than by water and rail combined.

**Traffic is not evenly split by road type or vehicle type**

Motorways and 'A' roads, whilst making up a relatively small proportion of the total road length in Great Britain, account for a disproportionately large amount of the overall traffic.

### Sources in this chapter

[Transport Statistics Great Britain](#)

[National Travel Survey](#)

[Road Freight Statistics](#)

[Road Lengths in Great Britain](#)

[Road Traffic Statistics](#)

## Section 1: An introduction to roads

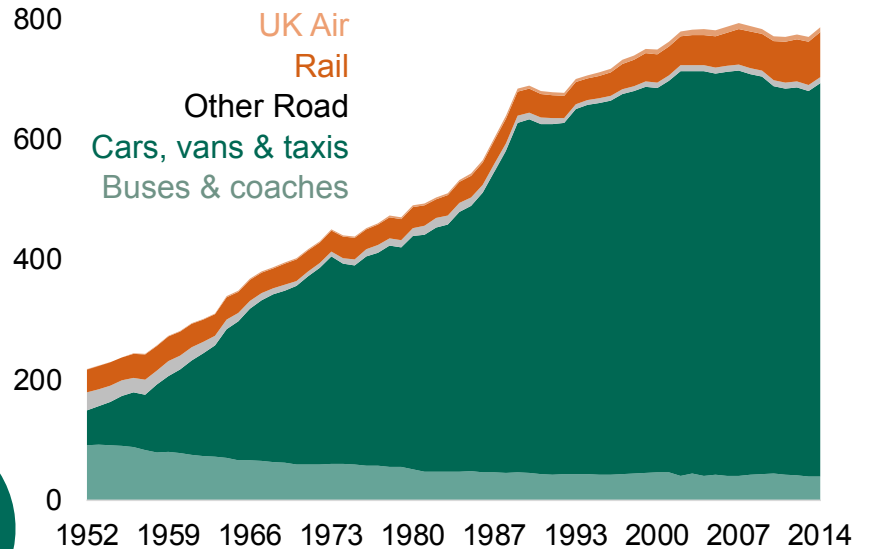
### Roads are vital for moving people and goods around the UK.



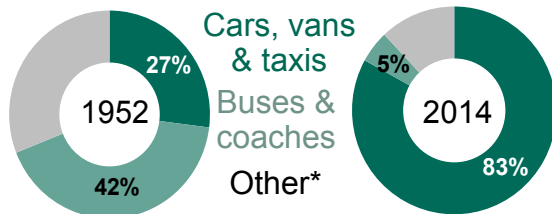
#### Most people's journeys are made by road

In 2014, 90% of passenger journeys were by road. This is a similar proportion to 1952, when records began. However, the distance travelled and the vehicles used have changed considerably over the last 60 years. Distance travelled by car or vans has increased by over 1000%.

Billion passenger kilometres travelled by mode of transport, [TSGB0101](#)



#### Proportion of all passenger distance travelled



\*Other includes motorcycles and pedal cycles (which accounted for 14% of traffic in 1952, and 1% in 2014), rail, and air travel.



#### Car is the main mode of travel for most people

In 2014:



**73%** of people held a driving licence (adults aged 17 and above); 80% of men, and 67% of women.



**76%** of households have access to a car, with 32% having two or more.



**64%** of all personal trips - which include commuting, shopping, education and leisure travel - were made by car, as a driver or passenger.



**78%** of distance travelled per person per year for personal trips was by car.



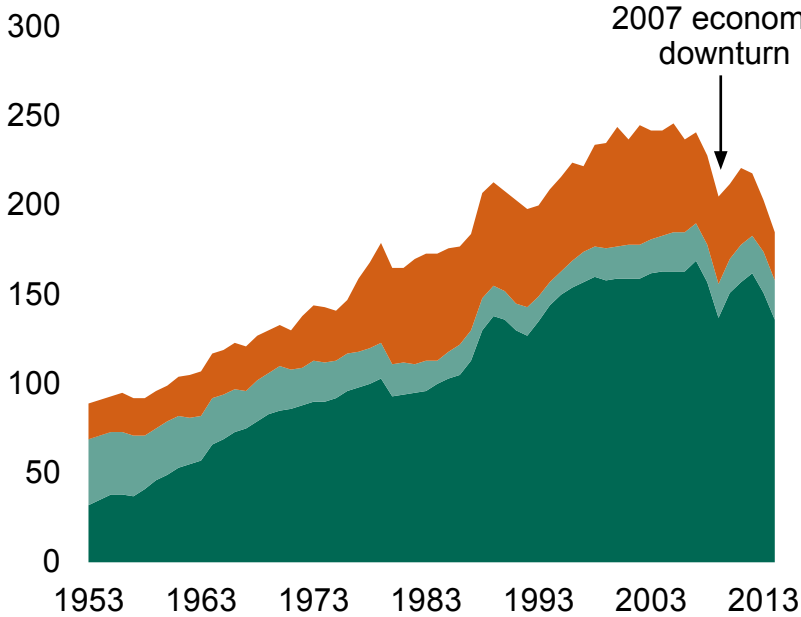
**84%** of people in England travelled by private car (as a driver or passenger) at least once or twice a week.

## Section 1: An introduction to roads



### Roads also account for over two-thirds of domestic freight carried

Billion tonne kilometres, UK



Percentage of all freight carried in 2014

Water 15%



Rail 12%



Road 73%

#### Detailed statistics ...

on freight transport by mode can be found in chapter 4 of [Transport Statistics Great Britain 2015](#).



### Road freight contributes £11bn to the UK economy

In 2014 within the UK road freight sector...

... 151 billion tonne kilometres of freight were transported ...

↓ 2% decrease on previous year



... there were 36,552 road freight enterprises ...

↑ 15% increase on previous year



... with sector level employment of 222,000 individuals ...

↑ 6% increase on previous year



... contributing £11.2 billion to the UK economy.

↑ 16% increase on previous year



## Section 1: An introduction to roads

### The Strategic Road Network

The Strategic Road Network (SRN) is made up of the motorways and major trunk 'A' roads in England that are managed by Highways England (HE). Accounting for only 2.4% of the road network in length, it carries a disproportionately large and consistently increasing amount of traffic.

**4,400 miles**

Of SRN road in 2014, 2.4% of the English network

**33%**

Of traffic in England was on the SRN in 2014 (87 billion vehicle miles)

**9%**

Of reported road casualties were on the SRN in 2014 (see [here](#))

**29 to 60%**

Increase in traffic on the SRN forecast to 2040 (see [here](#))

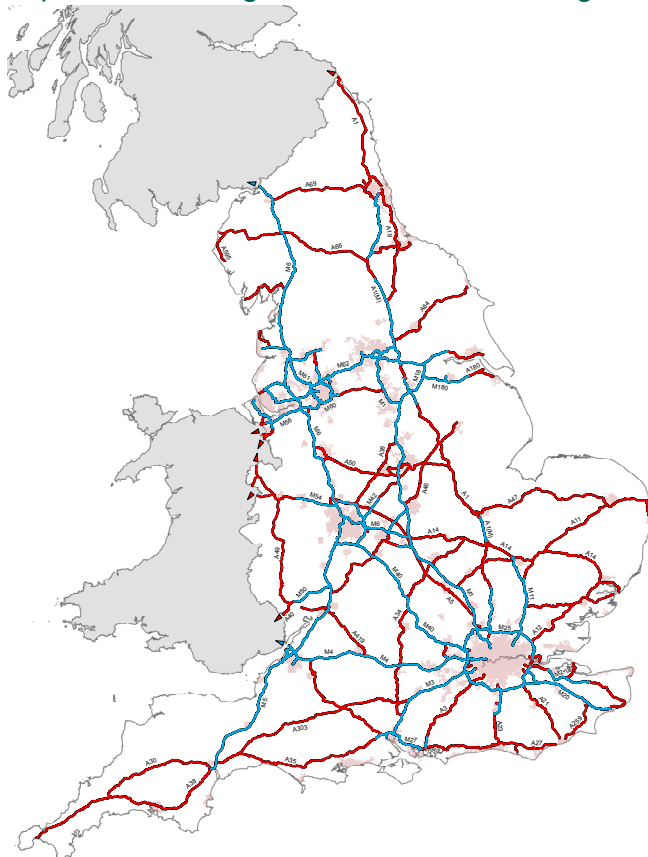
#### Useful Links

[Strategic Road Network Statistics](#)

[DfT report 'Use of the Strategic Road Network'](#)

[Highways England homepage](#)

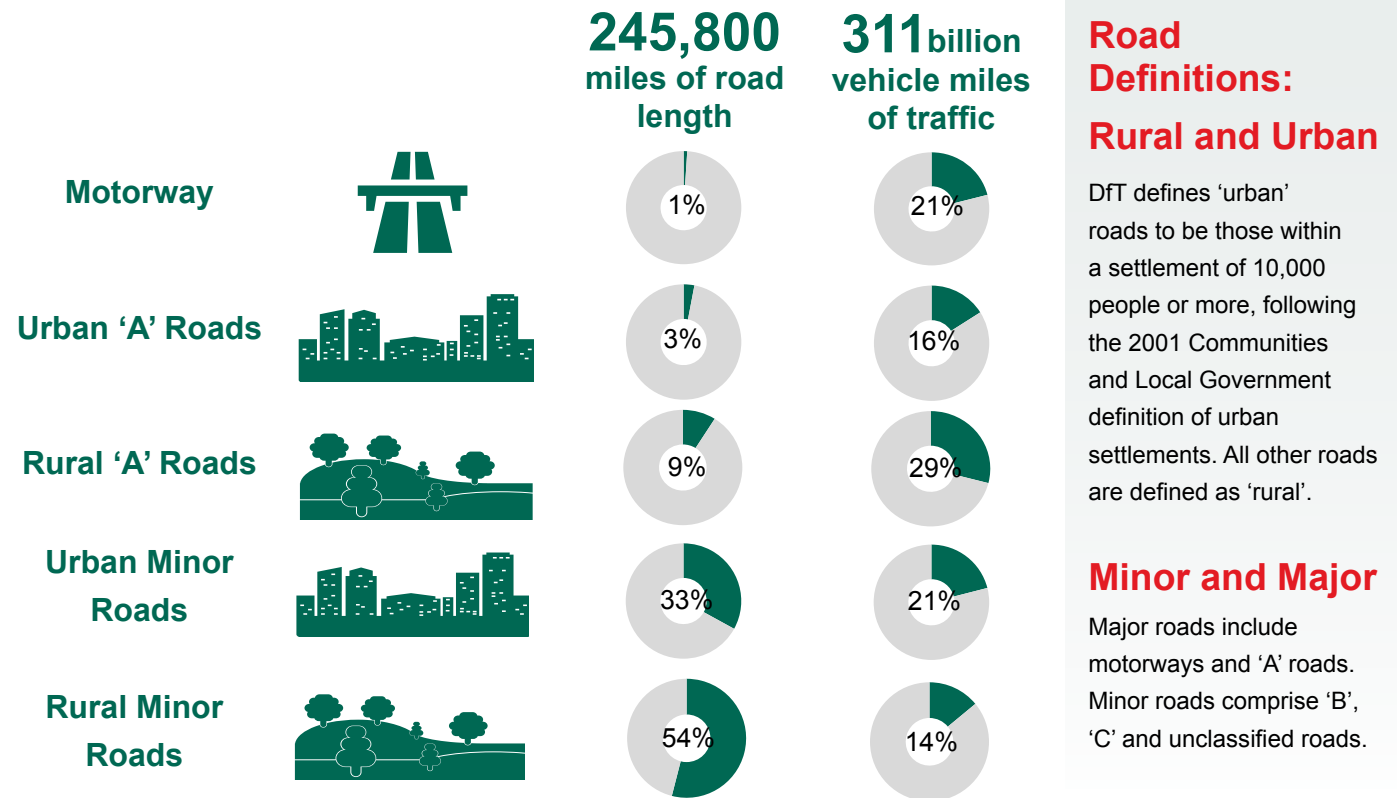
Map of the Strategic Road Network in England



## Section 1: An introduction to roads

Minor roads account for the most road length, but major roads carry disproportionately more traffic

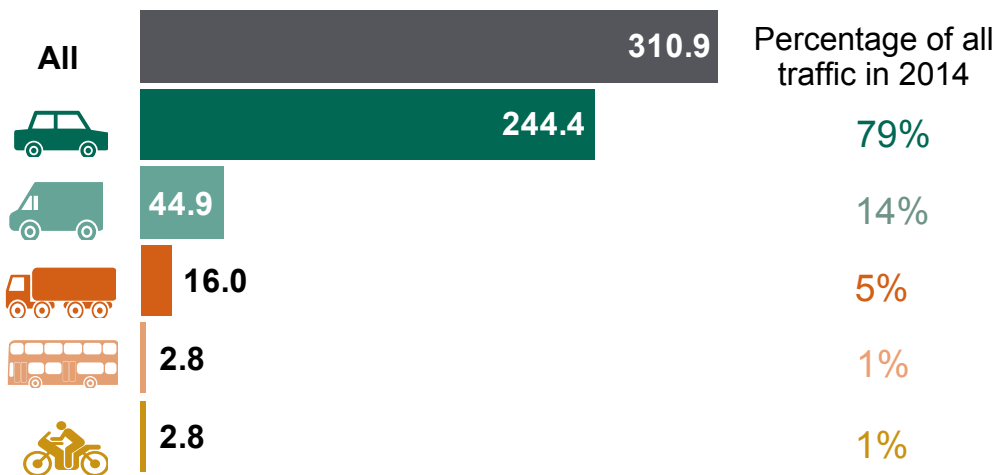
In 2014, major roads combined (the Strategic Road Network and 'A' roads managed by local authorities) accounted for 13% of road length and carried 65% of total road traffic in Great Britain. Minor roads made up 87% of road length but carried 35% of traffic.



Cars account for the majority of traffic on all types of road

In 2014, cars accounted for 79% of all motor vehicle traffic. They were followed by vans and then HGVs, with 14% and 5% of all motor vehicle traffic, respectively.

Billion vehicle miles travelled, Great Britain, 2014, [TRA0101](#)



### Vehicle Definitions

**Light Goods Vehicle (LGV; a.k.a. van)**  
Goods vehicles not exceeding 3.5 tonnes gross vehicle weight



**Heavy Goods Vehicle (HGV; a.k.a. lorry)**  
Includes all goods vehicles over 3.5 tonnes gross vehicle weight







## Section 2: Trends in Road Use

This chapter gives overall trends on roads, including traffic patterns over the long term and in recent years.

**These trends are driven by changes in both personal and commercial travel, which are covered in more detail in sections 3 to 5.**

### Since the 1950s

Over the long term, road use has grown dramatically, dominated by growth in car traffic. This growth reflects increasing household car availability, enabling people to make longer trips, leading to an increase in the distance travelled by individuals on average.

### Since the 2000s

The rate of traffic growth slowed over the last two decades, and levels fell for three consecutive years after the 2008/09 economic downturn. At the individual level, car use fell in the 2000s, although this was partially offset by increases in population and households.

### Recent years

Recent trends show a resumption of traffic growth as GDP recovers, and provisional statistics suggest that car traffic has returned to pre-recession levels. Traffic on the Strategic Road Network has had the largest growth, and van traffic on all roads has also grown strongly.

### Sources in this chapter

[Road Traffic Statistics](#)

[Vehicle Licensing Statistics](#)

[Road network size and condition statistics](#)

[National Travel Survey](#)

## Section 2: Trends in Road Use

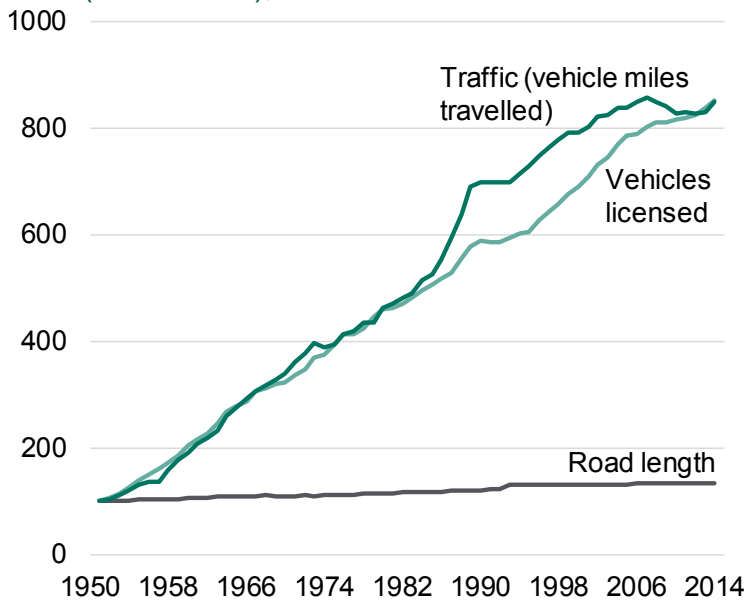
Over the long term, road use and licensed vehicles have grown dramatically, but over the past decade growth has slowed.



### Traffic and licensed vehicles have seen long term growth

The number of vehicles licensed and the amount of traffic has grown to seven times the amount in 1950, while road length has increased by just under a third.

Index (1951 = 100), Great Britain



In 1951

37 billion



vehicle miles travelled

In 2014

311 billion

4.2 million



vehicles licensed

35.6 million

184,800 miles



of road

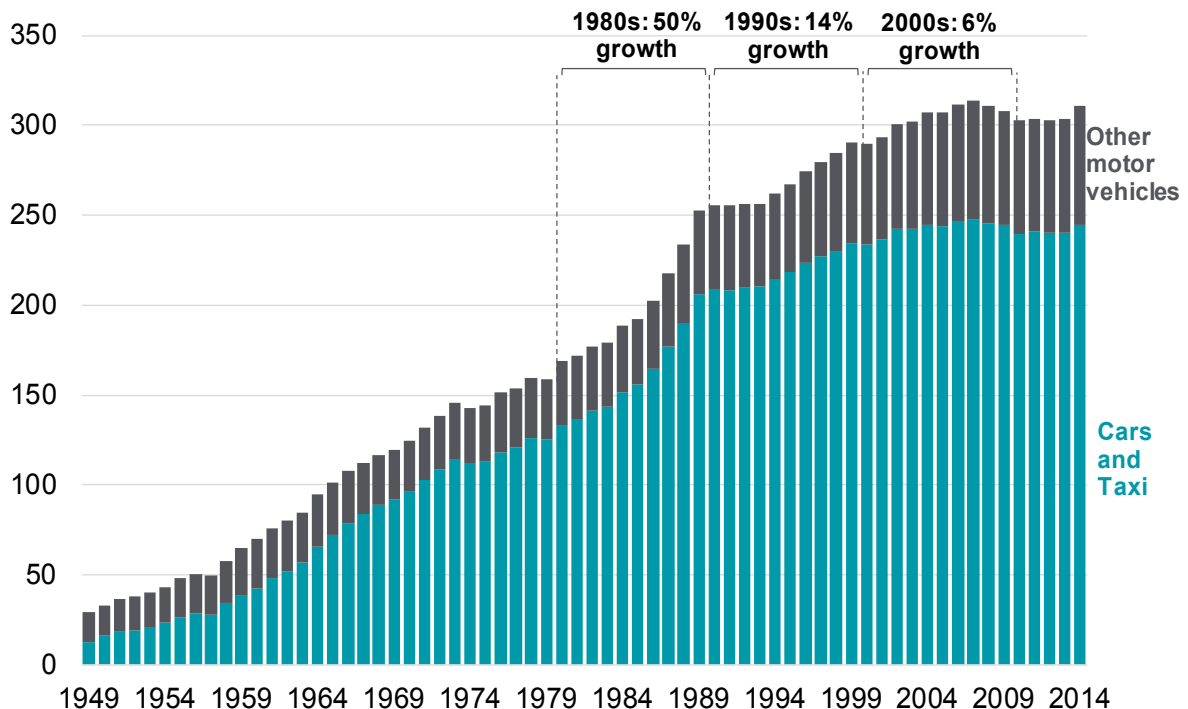
245,800 miles



### Growth in car traffic dominated traffic trends in the long term

Cars accounted for 79% of all vehicle miles travelled in 2014, compared to 44% in 1949.

Billion vehicle miles, Great Britain, [TRA0101](#)

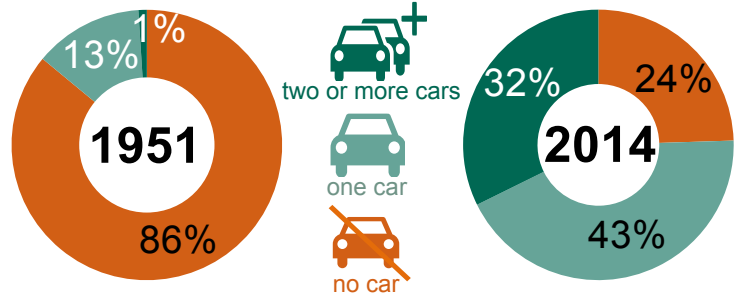


## Section 2: Trends in Road Use

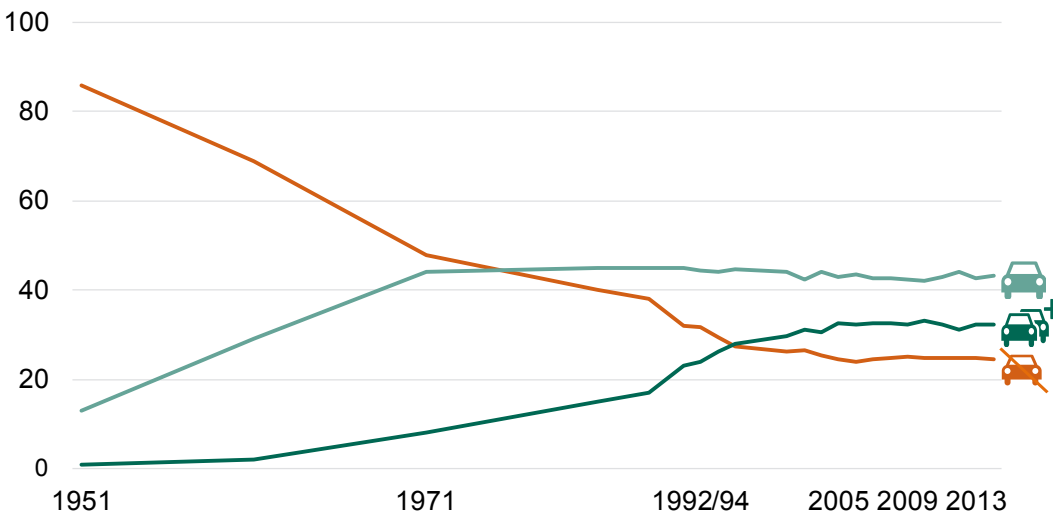


### Car ownership increases are a key factor in long term traffic trends

The long term trend of growth in traffic has mainly been a result of growth in car ownership. Strong growth in household access to a car between the 1950s and 1970s was followed by growth in households with two or more cars in recent decades.



#### Household car availability, England, [NTS0205](#)



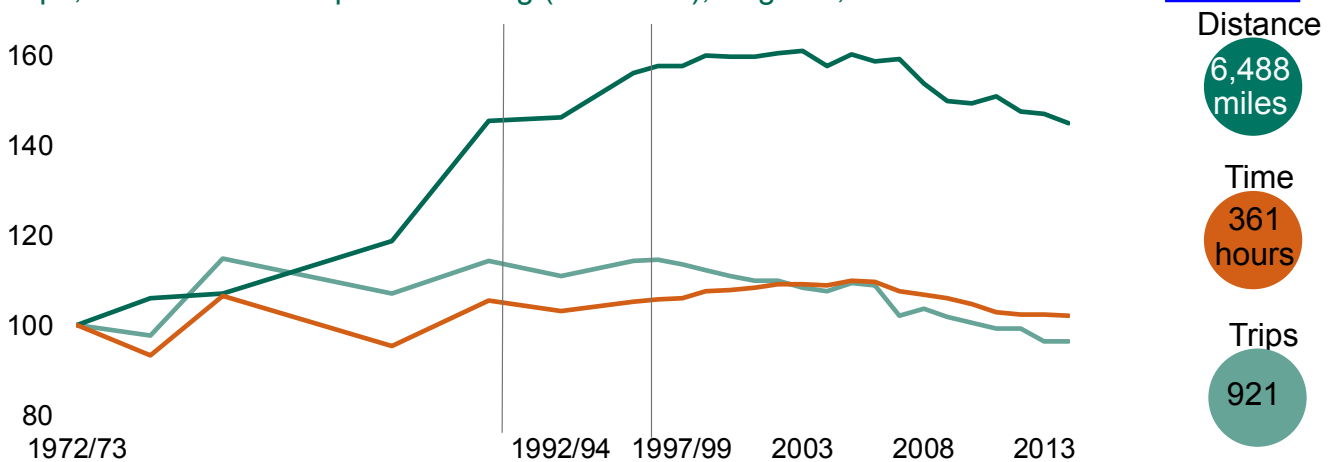
There still appears to be some scope for further growth in ownership; according to the National Travel Survey 2014, 48% of those in the lowest income quintile households are without access to a car.



### Compared to the 1970s we are travelling much further on average

Increases in the average distance travelled per person per year occurred in the three decades 1970 to 2000, for personal travel. This was largely due to increases in average trip lengths since the 1970s, which rose over 50% to 7 miles in 2014. However, since the early 2000s average distance and trip length have levelled off.

#### Trips, distance & time spent travelling (all modes), England, Index: 1972/73 = 100 [NTS0101](#)



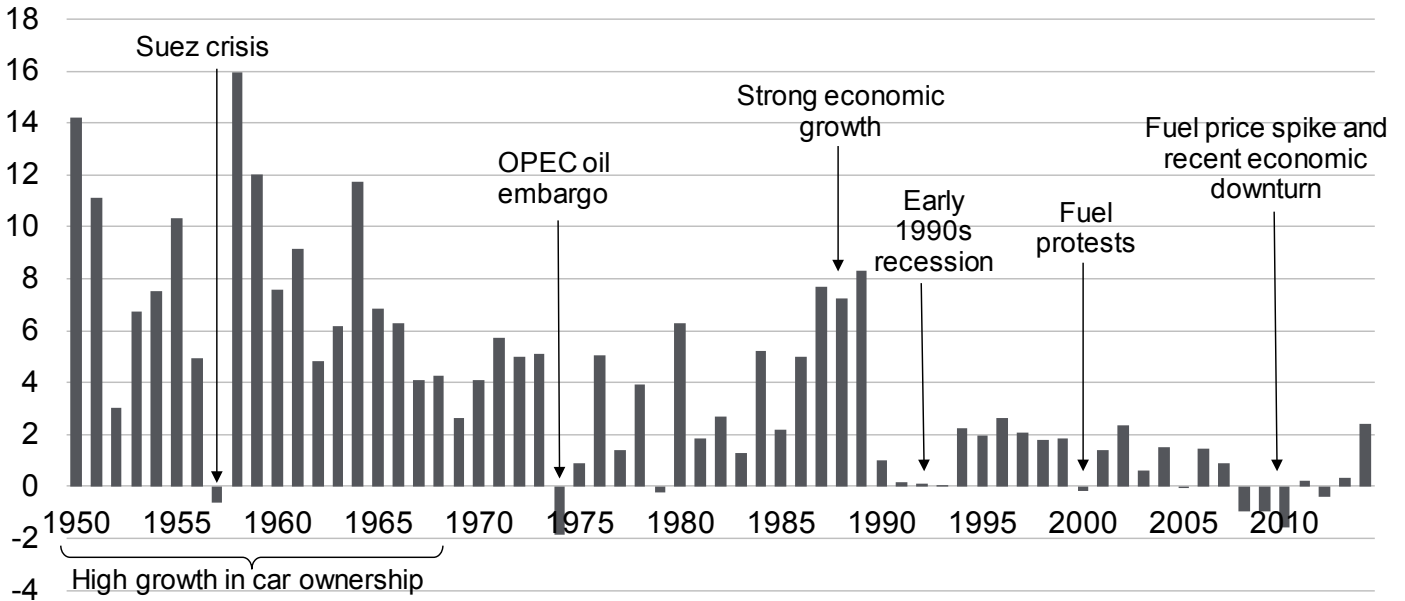
## Section 2: Trends in Road Use



### The rate of traffic growth has slowed over the last two decades

Fluctuations in road traffic levels tend to coincide with events such as changes in the economy (including GDP) and peoples' disposable incomes, which influence car ownership and the trip behaviour of car owners. In the 2000s, motor vehicle traffic grew by 6%, compared to a 50% increase over the 1980s. Motor vehicle traffic had a pre-recession peak of 314.1 billion vehicle miles in 2007 after which it fell for three consecutive years; the first consecutive falls since traffic records began. Recent trends show a resumption of traffic growth after the recession.

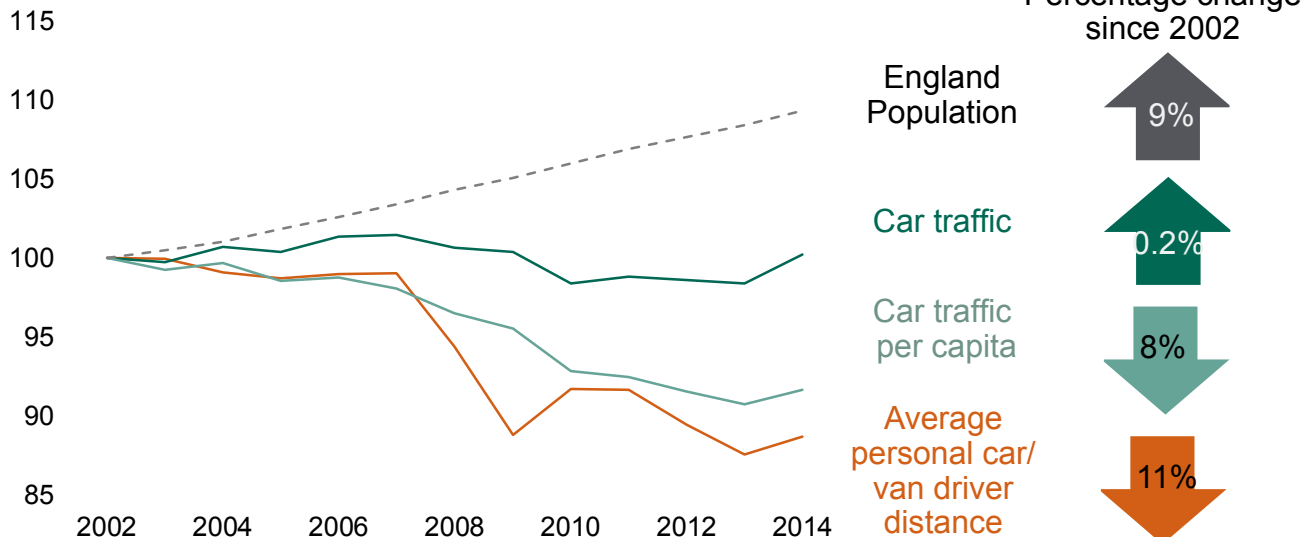
Year-on-year growth in motor vehicle traffic in Great Britain, [TRA0101](#)



### For an average person, car use fell in the 2000s...

At the individual level, the average distance driven per person has fallen over the last decade or so (though there are different trends for different groups, as shown in section 3). Despite this, overall car traffic levels were broadly stable over the same period, in part due to increasing population.

Index 2002 = 100



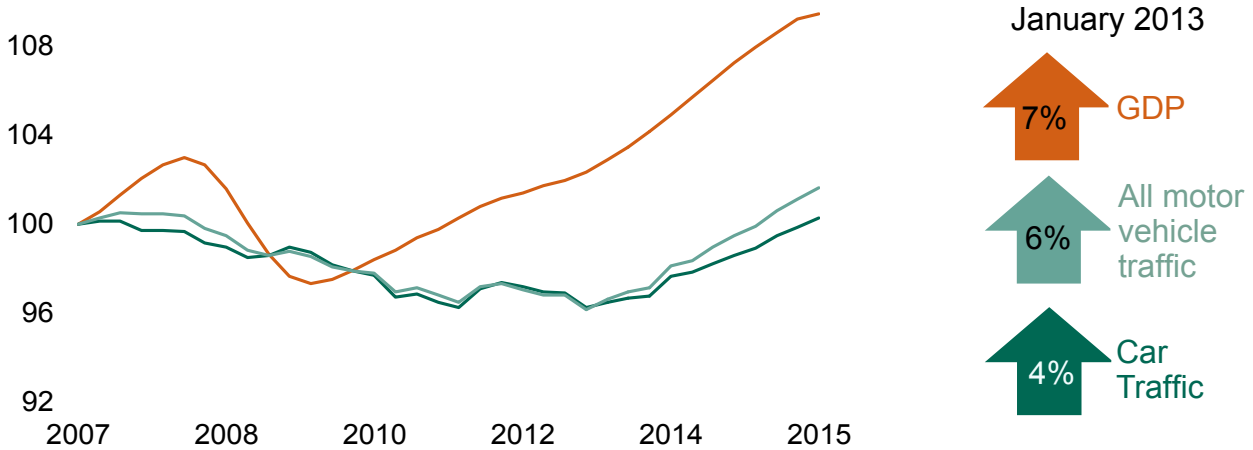
## Section 2: Trends in Road Use



### Recent trends show resumption of traffic growth after recession

In 2014, car traffic had the largest annual increase since the early 2000s. Provisional 2015 estimates suggest that this trend is continuing. The upward trend in traffic levels is likely to reflect growth in the UK economy (although GDP has been growing from around 2010, the rate of growth was faster from 2013 to 2015). Lower fuel prices, and hence cheaper travel, may also have contributed to increased traffic.

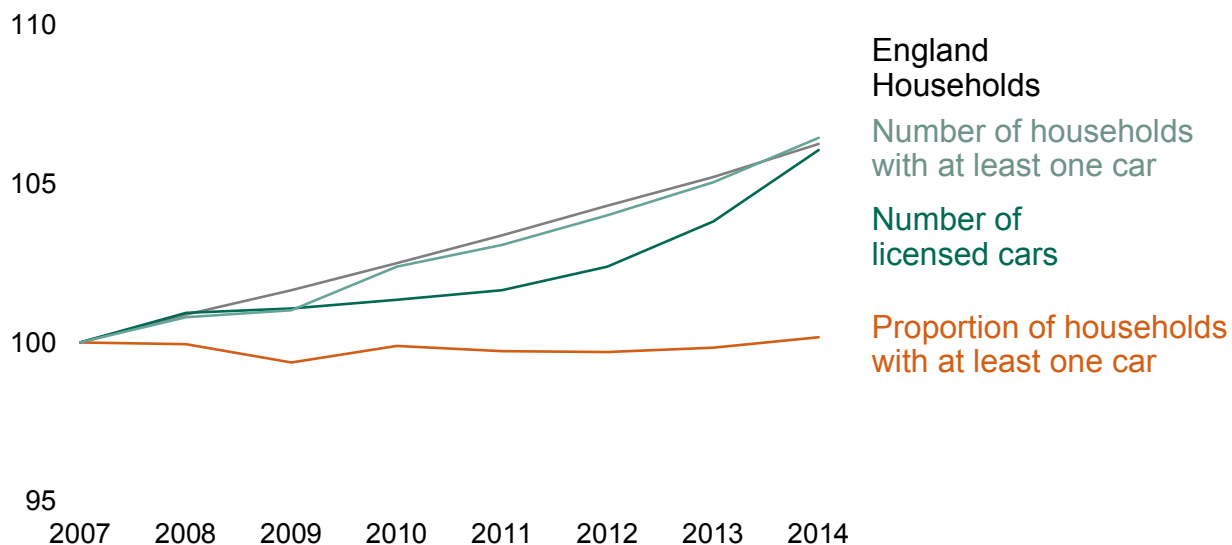
Rolling annual totals, GB, Index: 2007Q1= 100) [TRA2501](#)



### The number of cars on the road has also increased

Although the proportion of households with at least one car has remained stable in recent years, the increases in population and number of households are likely to have contributed to the recent growth in licensed cars on the road and to car traffic. However, it is too early to say whether people are driving further on average at the individual level.

Index 2007 = 100



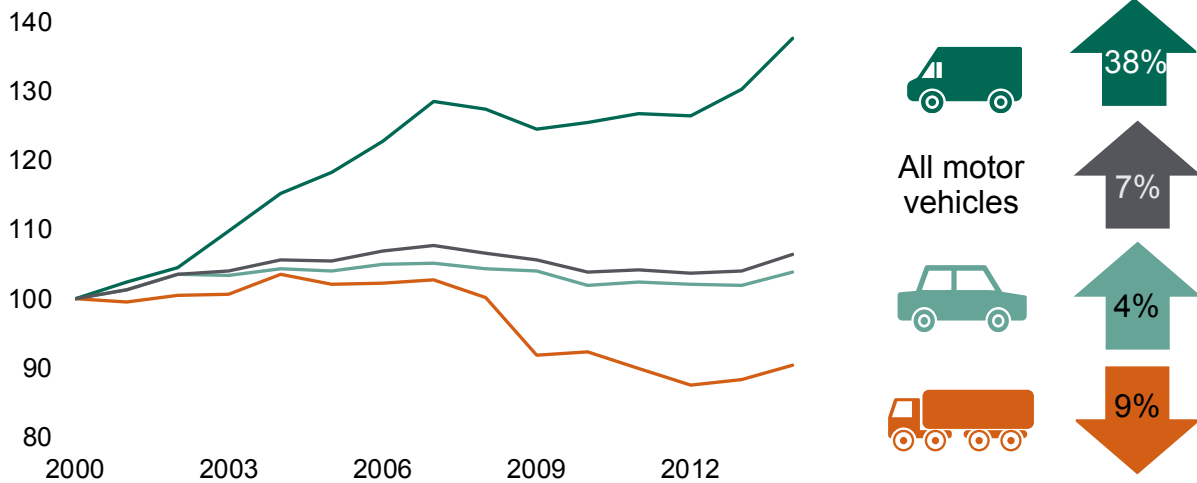
## Section 2: Trends in Road Use



### Van traffic has grown strongly in recent years

The recent growth in motor vehicle traffic is also linked to the large increases observed in van traffic. The number of licensed vans have increased strongly, with likely factors affecting this including the changes to taxation rules which may have made them a more attractive option for some people, and the increase in internet shopping and home deliveries.

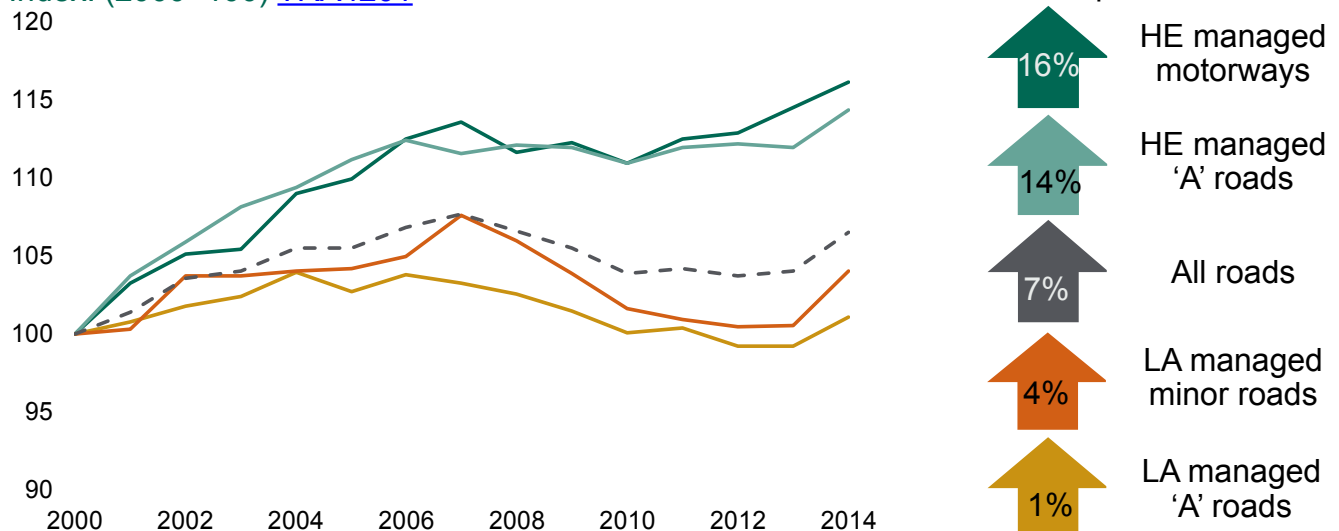
Annual road traffic on all roads, GB, Index: (2000=100), [TRA0106](#) Compared to 2000



### The Strategic Road Network shows the largest traffic growth

Traffic on Highways England managed roads recovered more quickly after the recession, increasing 1.7% between 2013 and 2014. Traffic fell more on local authority (LA) managed roads during the recession and has not yet returned to pre-recession levels.

Trend in all vehicles traffic by road management, England, Index: (2000=100) [TRA4201](#)



## Section 2: Trends in Road Use



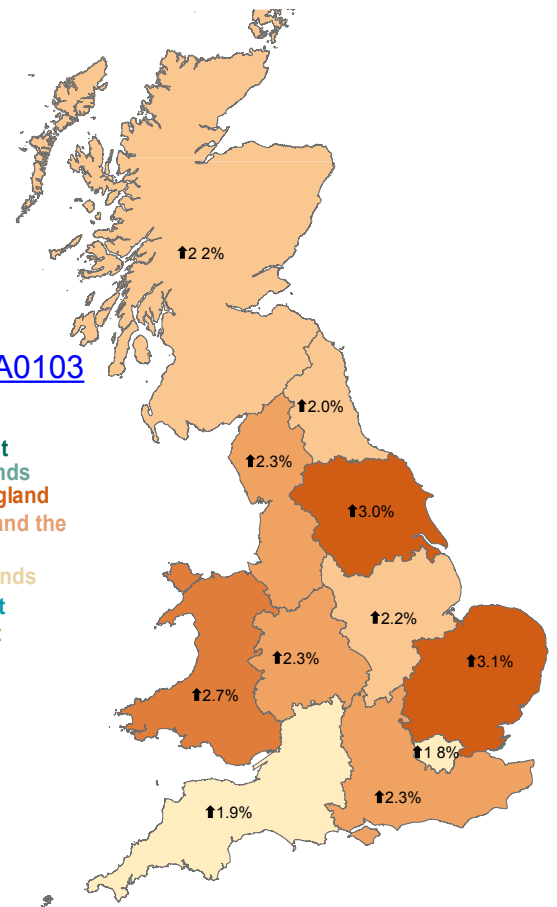
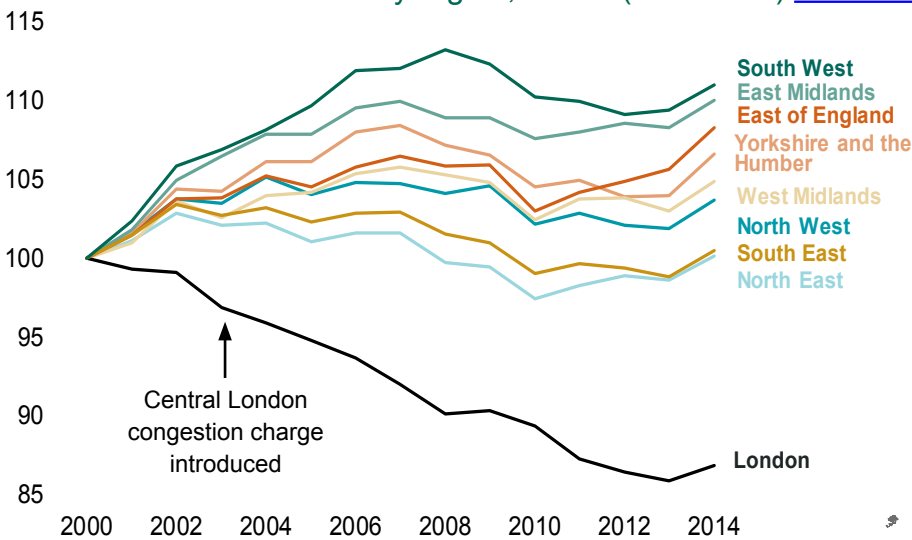
### London shows a different trend to other regions in Great Britain

In 2014 traffic increased in all regions of Great Britain compared to 2013. However, levels and trends have varied between the regions.

While traffic in London has increased slightly in the last year, the general trend since the early 2000s has been downwards. This decline in traffic in London reflects growth in surface rail and bus use.

% change in traffic between 2013 and 2014, by region

Trend in all vehicles traffic by region, Index: (2000=100) [TRA0103](#)



### Trends in bus use also differ in London

Average number of trips per person per year by public transport modes, England, Index 1995/7 = 100 [NTS0303](#)



Percentage change since 1995/97

↑71% Surface rail

↑29% Bus in London

↓20% Other local bus

## Section 2: Trends in Road Use



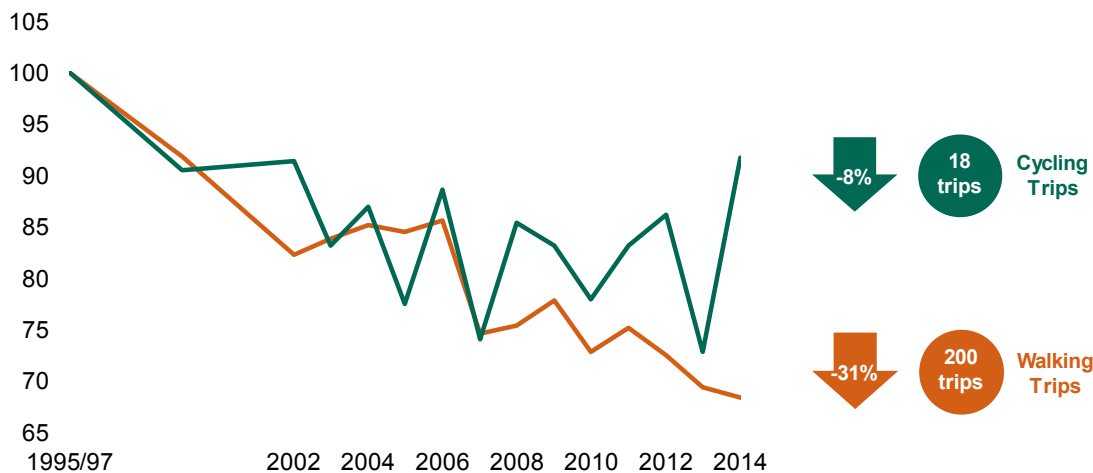
Walking trips are falling, whereas cycling trips have remained fairly constant...

Walking and cycling are sustainable modes of travel that take place on or alongside roads - overall 22% of personal trips are walked (compared to 64% made by car) and 2% are cycled.

Walking trends show that average distance walked per person per year has fallen over the last two decades (-9% since 1995/97), despite people travelling further on average each trip (+28%) - as the number of walk trips per person has fallen by almost one third.

Although the number of cycling trips has remained broadly constant in recent years, the average distance cycled per person has increased (+26% since 1995/97), as has average cycle trip length (+36%).

Cycling and walking trips per person per year: England, Index 1995/7 = 100 [NTS0303](#)



### Further information on road use at local level

#### Walking and cycling

[Local area walking and cycling in England 2013 to 2014](#)

[Cycling to work: 2011 census data analysis from the Office of National Statistics](#)

#### Personal travel (regional level)

[National Travel Survey](#) (tables NTS99)

#### Buses

[DfT annual bus statistics](#)

#### Traffic at local authority and road level

[DfT traffic counts website](#)





## Section 3: Who is using the roads?

This chapter looks at how road use varies by factors such as age and gender, including trends in car driving over the last decade.

### Road use by age and gender

Car travel is the most common means of transport for both men and women from all age groups, including children. However, children make more walking trips than adults.

For all age groups, men drive further than women on average.

### Recent trends by age and gender

On average over the whole population, individual car mileage has fallen over the last decade. However, as outlined in section 2, this has been offset by increases in population using the roads and so total car traffic levels have shown a different trend over this period.

There are also different trends for different age and gender groups. The distance that women drive is increasing, which in part reflects the increase in the proportion of older women holding driving licences, while the overall reduction in car use is greatest for young men (aged 17-29). There has been a reduction in number of 17 to 20 year olds gaining a driving licence in recent years.

### Income

Almost half of households in the lowest income quintile have no access to a car, whereas those in the wealthiest households (highest income quintile) travel more than twice as far by car.

### Sources in this chapter

[National Travel Survey](#)

[Driver and Vehicle Standards Agency](#)

[Vehicle Licensing Statistics](#)

## Section 3: Who is using the roads?

# The most common means of travel is by car for all age, gender and income groups



### Most personal trips are made by road

A great majority of personal trips - including to get to work, shops, education or to visit friends - are made by road. In 2014:



Overall 64% of all personal trips are made by car. Car trips account for more than half of all trips for all age groups except 17 to 20 year olds.



On average, men make a higher share of trips as car drivers than women, particularly at older age groups. Women and children (aged 0-16) are more likely to travel as car passengers.



17-20 year old women make more trips by bus than any other age group.



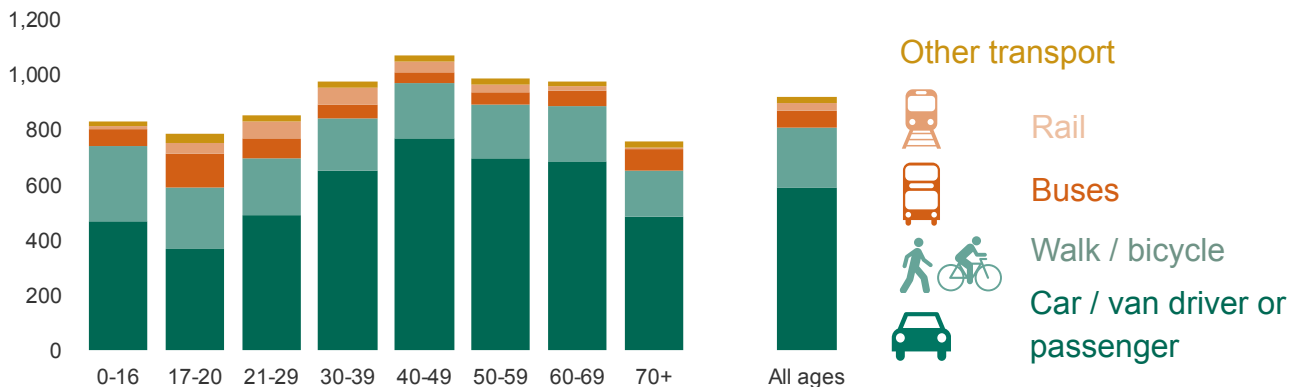
Walking accounts for around a third of trips for children and a lower share for adults; overall 22% of trips are made by walking.

### National Travel Survey data

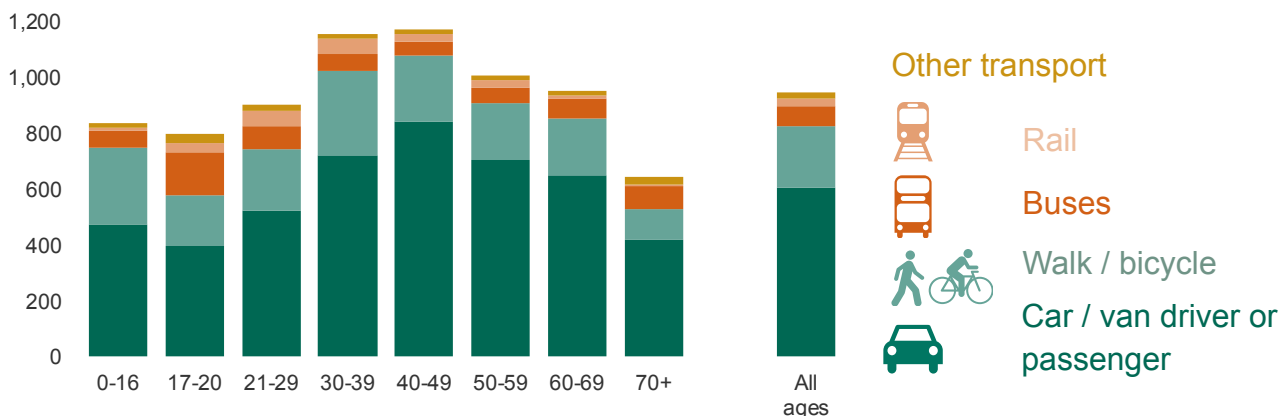
The data for this section comes from the National Travel Survey, which measures personal travel - where the purpose is to reach a destination, rather than to carry goods or passengers. A trip is defined as a one way course of travel having a single main purpose.

Average number of trips by gender and age and main mode: England, 2014 , [NTS0601](#)

#### Males



#### Females



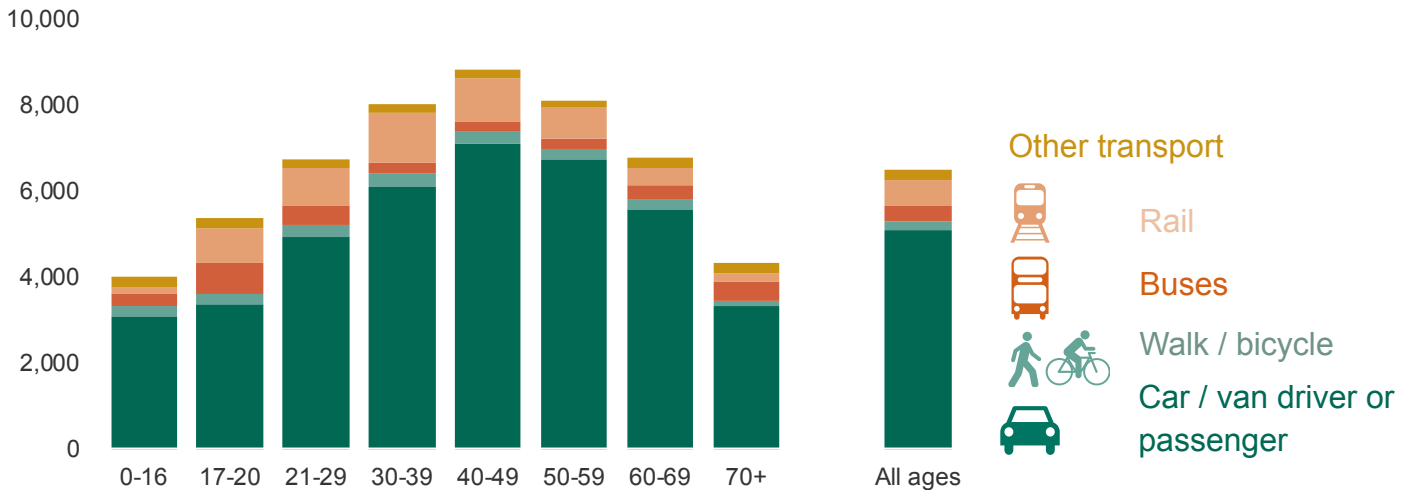
## Section 3: Who is using the roads?



Distance travelled follows a similar pattern but car travel is even more dominant...

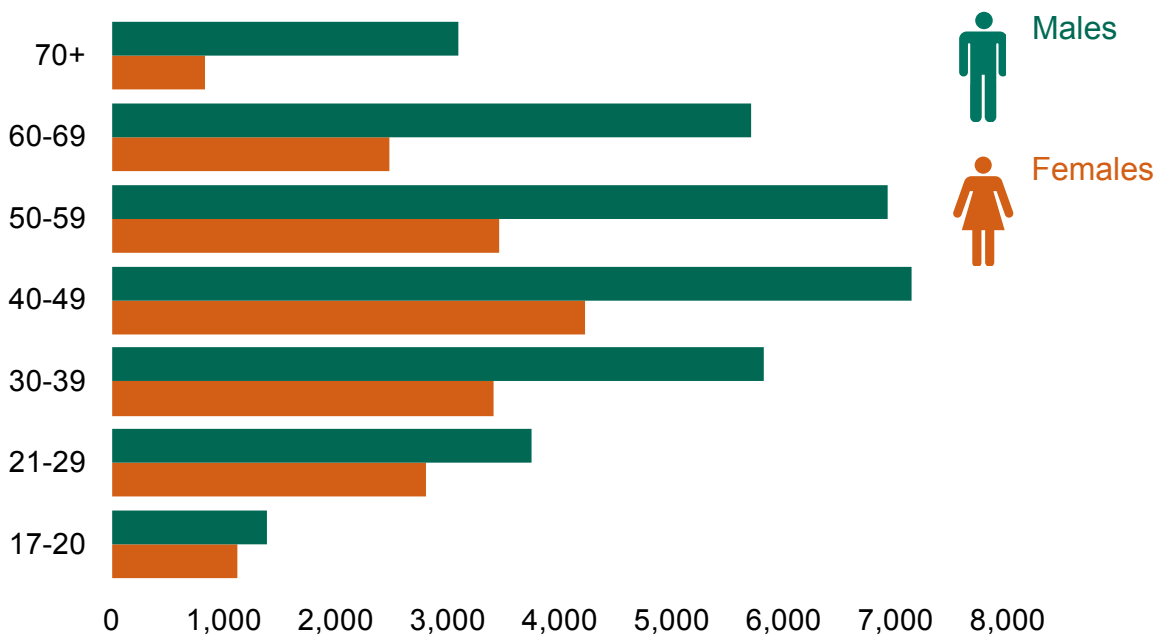
Overall, 78% of distance travelled for personal trips by the average person is by car; on average, most distance is travelled by car for all age groups.

Average distance travelled (miles per person) by age and mode: England 2014, [NTS0605](#)



Men drive much further than women on average...

Average car driver distance travelled miles per person per year by age and gender: England, 2014, [NTS0605](#)



## Section 3: Who is using the roads?



... but overall distance driven is growing for women...



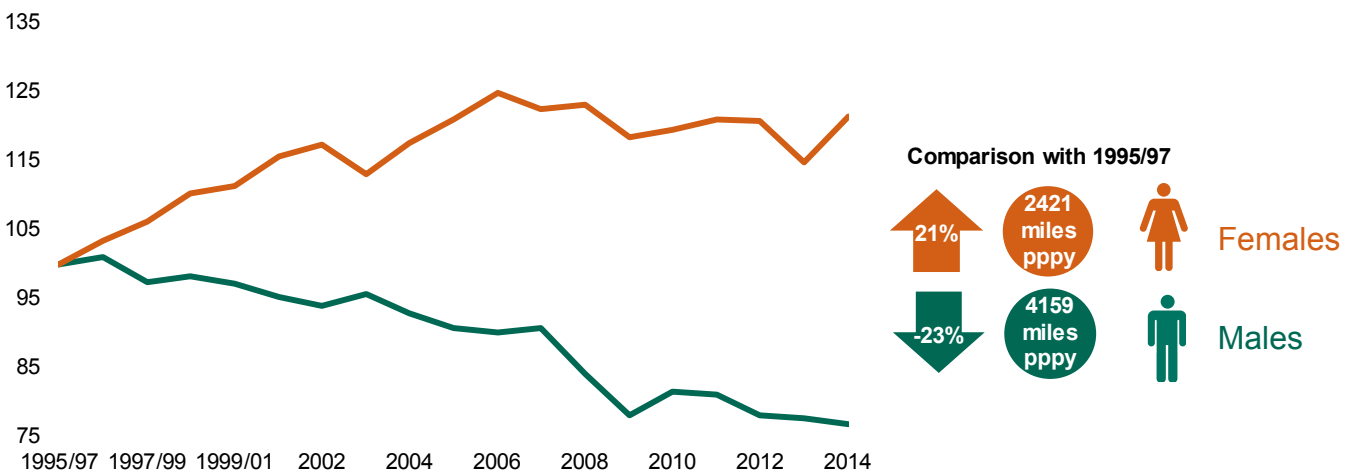
Men drive more than two thirds as many miles per year, on average, as women (4,159 miles v 2,421 miles in 2014). However, the average distance travelled by men has been decreasing over time while that by women has increased.

The pattern is similar in terms of number of trips made as a car driver.

Men made 411 car driver trips on average in 2014 (a fall of 23% since 1995/97)

Women made 357 car drivers trips in 2014 (an increase of 8% since 1995/97).

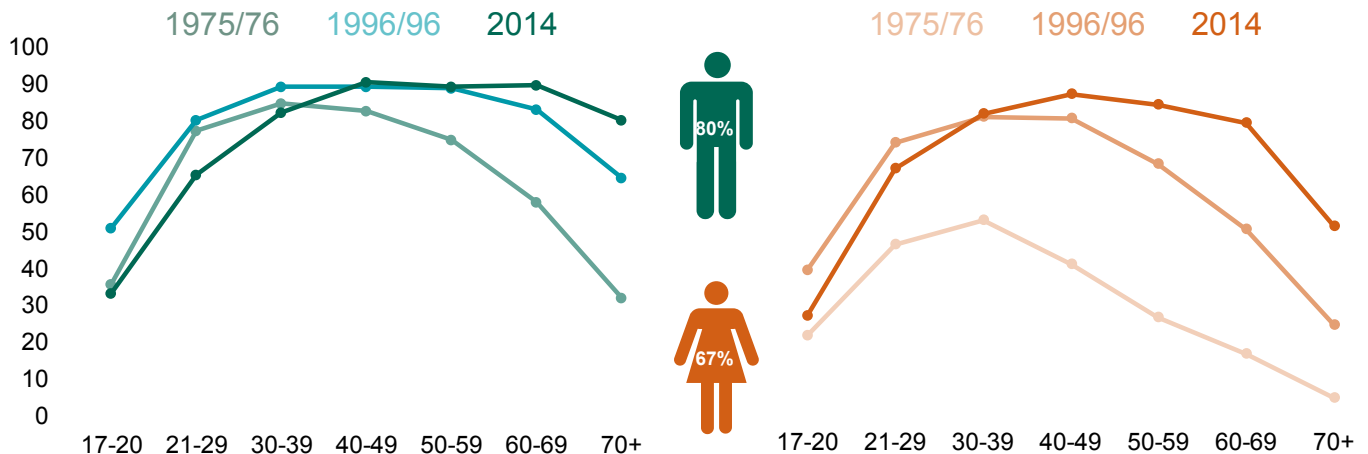
Average car driver distance travelled per person per year by gender: England, 1995/97 to 2014; Index 2002 = 100, [NTS06 series](#)



... which in part reflects continued growth in the proportion of older women holding driving licences...

In 2014, 80% of men and 67% of women (aged 17 or over) held a driving licence. This compares with 69% of men and 29% of women in 1975/76.

Proportion of full car driving licence holders, 2014, [NTS0201](#)



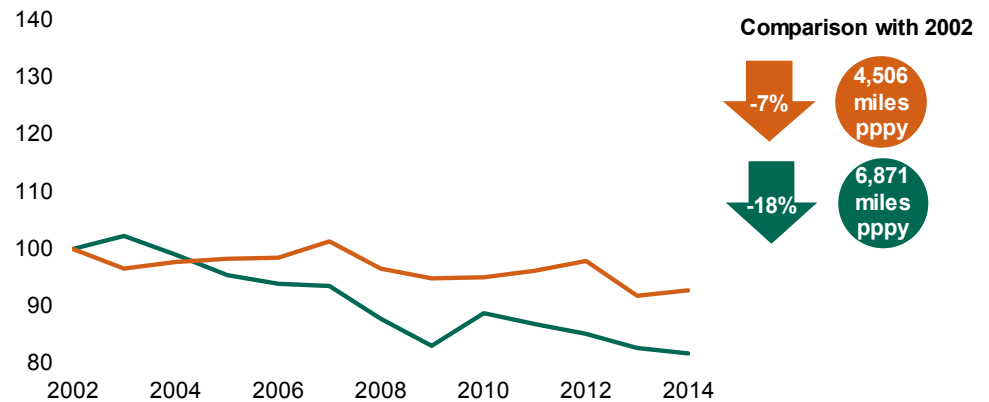
## Section 3: Who is using the roads?



Average distance travelled by car has grown by more than a third for retired women since 2002...

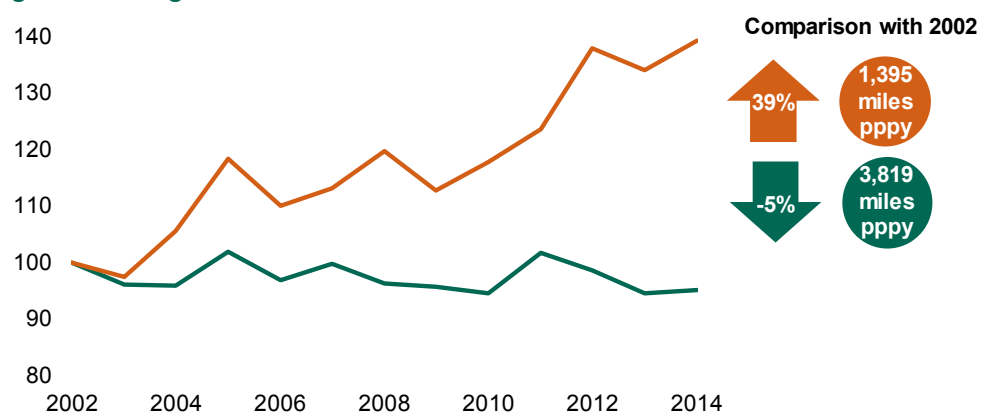
For both male and female full-time workers, average car driver distance travelled per person per year has fallen since 2002. Male full-time workers have seen a larger decline than females.

Average car driver distance travelled for **full time workers** by gender: England, 2002 to 2014; Index 2002 = 100



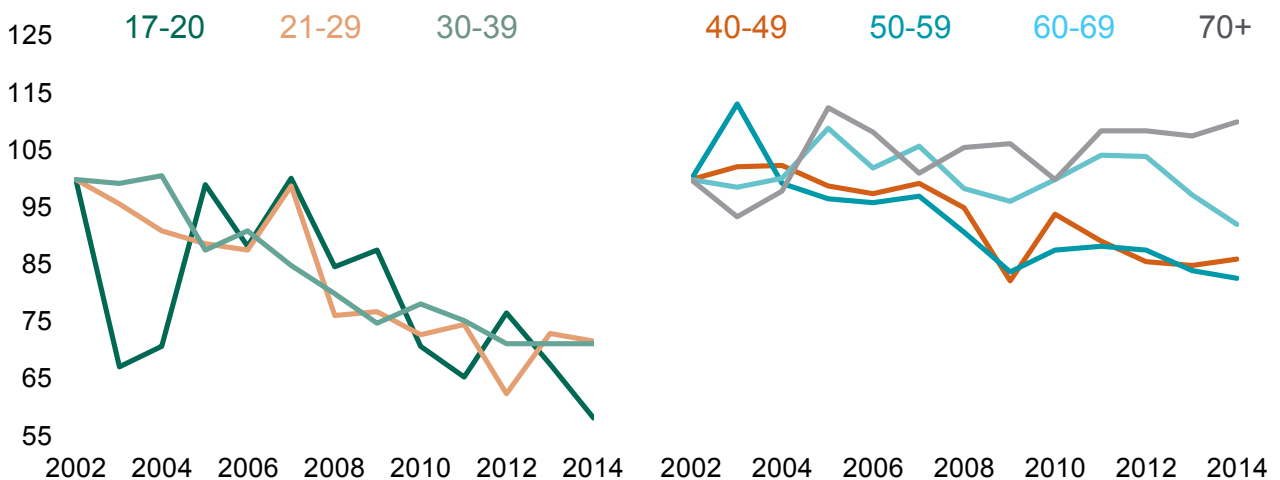
Male retired workers, on average, drive almost three times further than female retired workers, though distance travelled by female retired workers has grown 39% since 2002.

Average car driver distance travelled for **retired workers** by gender: England, 2002 to 2014; Index 2002 = 100



The reduction in car use has been greatest for young males...

Average **male** car driver distance travelled by age: England, 2002-2014; Index 2002 = 100 [NTS0605](#)



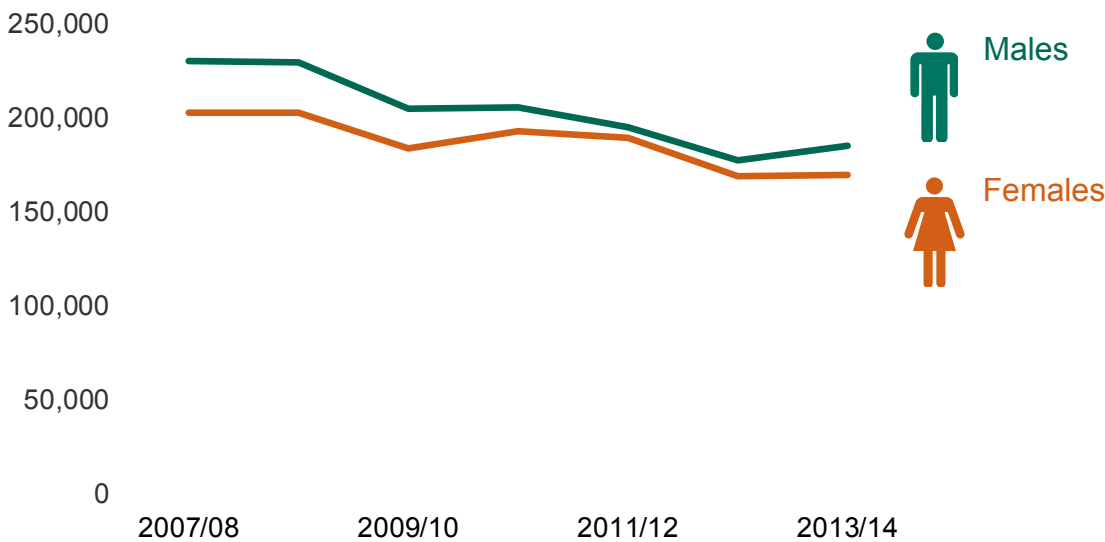
## Section 3: Who is using the roads?



There has been a reduction in numbers gaining a driving licence...

The number of young people passing the driving test has fallen in recent years. This is mainly due to a fall in numbers of practical driving tests taken by 17 to 20 year olds. The number of tests taken by both men and women for this age group has fallen by around 25%.

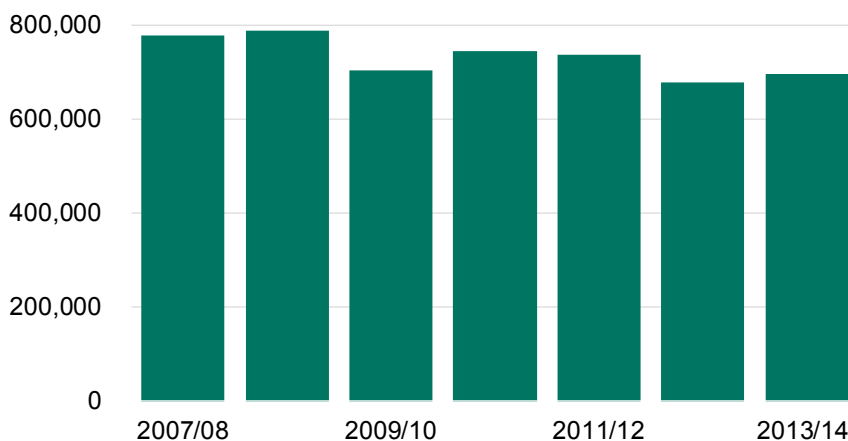
Annual practical car test passes by age (17-20) and gender: Great Britain, 2007/08 to 2013/14 (financial years) [DRT0203](#)



Across all ages, driving test pass rates have remained fairly stable since 2007/8 with just under half of those taking a practical test gaining a driving licence.

However, the number of tests taken by men has fallen by 19%, and the number of tests taken by women has fallen by 14%.

Annual practical car test passes (all ages): Great Britain, 2007/08 to 2013/14 (financial years) [DRT0203](#)



### Driver and rider test statistics

Further statistics on driver and rider testing, including pass rates by age and gender, is available via the links below

[Driving tests and instructors statistics](#)

[Practical car test pass rates](#)

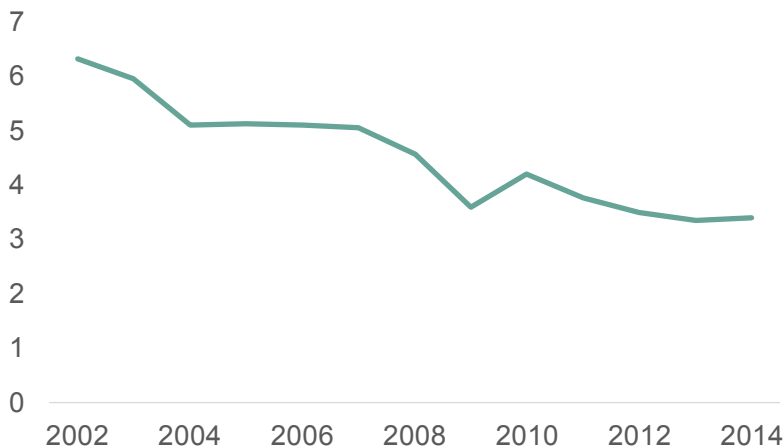
## Section 3: Who is using the roads?



Reduced use of company cars has contributed to the decrease in average car mileage per person...

In the late 1990s, 10% of cars on the road were company registered cars; this fell to around 8% by the mid-2000s (with changes in taxation likely to have been an explanatory factor) and has remained at broadly this level since then. A similar trend is seen for the proportion of household cars which are company owned, from 6% in 2002 to 3% in 2014.

Percentage of household cars that are company cars:  
England [NTS0901](#)



Average mileage of company cars is much higher than for other household cars - with annual mileage of 19,500 compared to 7,500 for privately owned cars.

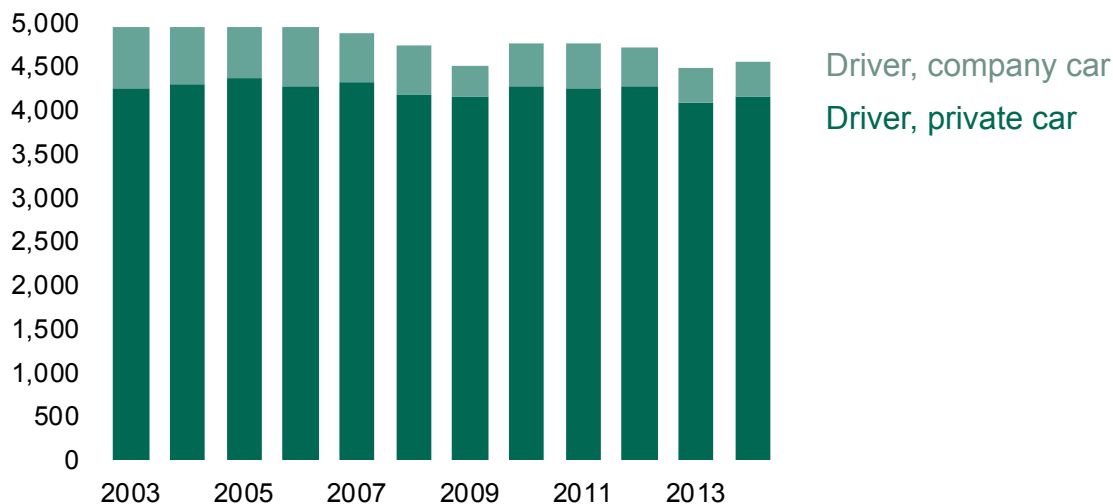
As a result, reduction in the number of company cars is likely to have a disproportionate effect on average household car mileage trends.



...particularly for those aged 30+ outside London...

30+ year olds living outside London travel furthest as a car driver per person per year on average (compared to those under 30, or living in London), and have the highest average company car mileage. Reduction in company car usage has been a key factor in explaining the overall reduction in distance travelled by car for individuals in this group.

Average car distance travelled by non-London residents in England aged 30+, miles per person per year, 2002 to 2014



## Section 3: Who is using the roads?



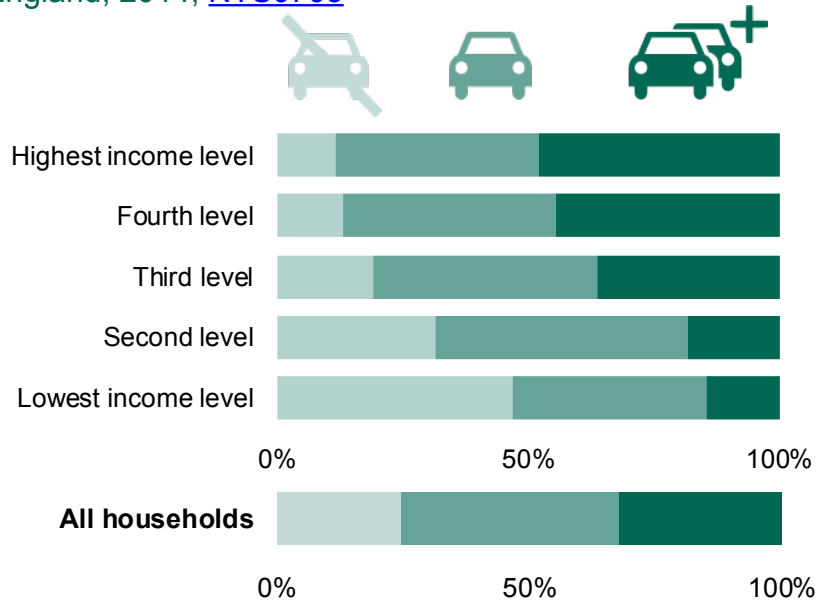
Half of households in the lowest income quintile have access to a car, compared with nearly 90% of those in the highest income quintile...

High income groups are also much more likely to have more than one household car compared with those with lower income levels.

Car driving is the most frequent mode of travel for people with a car in their households.

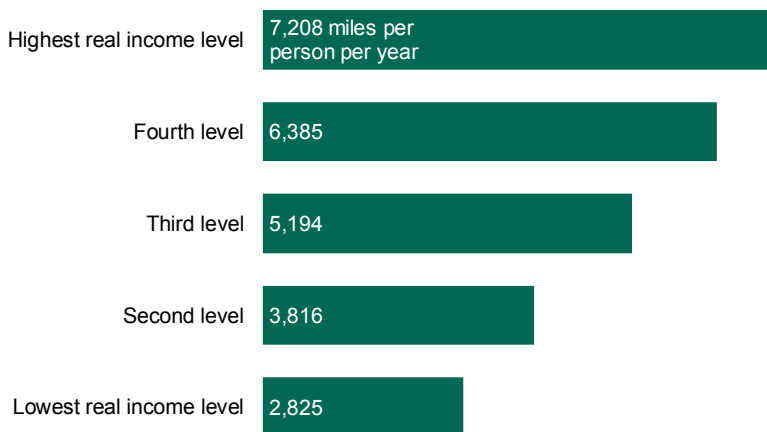
People who do not have access to a car in their households travel more often walking and by bus, and travel much less further per person per year on average.

Household car availability by household income quintile: England, 2014, [NTS0703](#)



Income influences travel behaviour, with those in the wealthiest households travelling more by car...

Distance travelled by car by level of household income, England 2014, [NTS0705](#)



People in the highest quintile household income group travel more than twice as far as people in the lowest. Most of the difference is due to car use, which is related to patterns of household car availability, as illustrated above.

### Further information

Further information on the topics covered in this section and other factors associated with patterns of car use can be found in the [National Travel Survey 2014](#) and [Understanding the Drivers of Road Travel 2015](#) report.

The Department's [segmentation study](#) provides further information on the attitudes and behaviours of different groups of the population, including in relation to car use.





## Section 4: How and why people use roads

This chapter presents information on why people travel by road, in particular by car, and on the pattern of road use in terms of the lengths of car trips.

### Why people travel

For all the main reasons for travelling - including commuting, shopping and visiting friends - most journeys are made by road, in particular by car. For example, two-thirds of commuting/business journeys are made by car.

### Trends in car use for different purposes

On average at the individual level, car use has fallen over the last decade or so, with reductions in the number of trips made by car for commuting, shopping and visiting friends. The total number of trips per person made for these purposes has fallen, which could be associated with increases in online shopping or use of social media.

### Trip lengths

The majority of personal trips under 1 mile are made by walking; for trips of other lengths, car is the main mode of travelling, with more than half of car driver trips being under 5 miles. Trips which involve travelling on motorways tend to be longer.

### Sources in this chapter

[National Travel Survey](#)

[Use of the SRN](#)

### Related data sources

The Labour Force Survey and the Census both have information on commuting:

LFS: <https://www.gov.uk/government/statistical-data-sets/tsgb01-modal-comparisons>

Census: <http://www.ons.gov.uk/ons/guide-method/census/2011/censusdata/index.html>

## Section 4: How and why people use roads

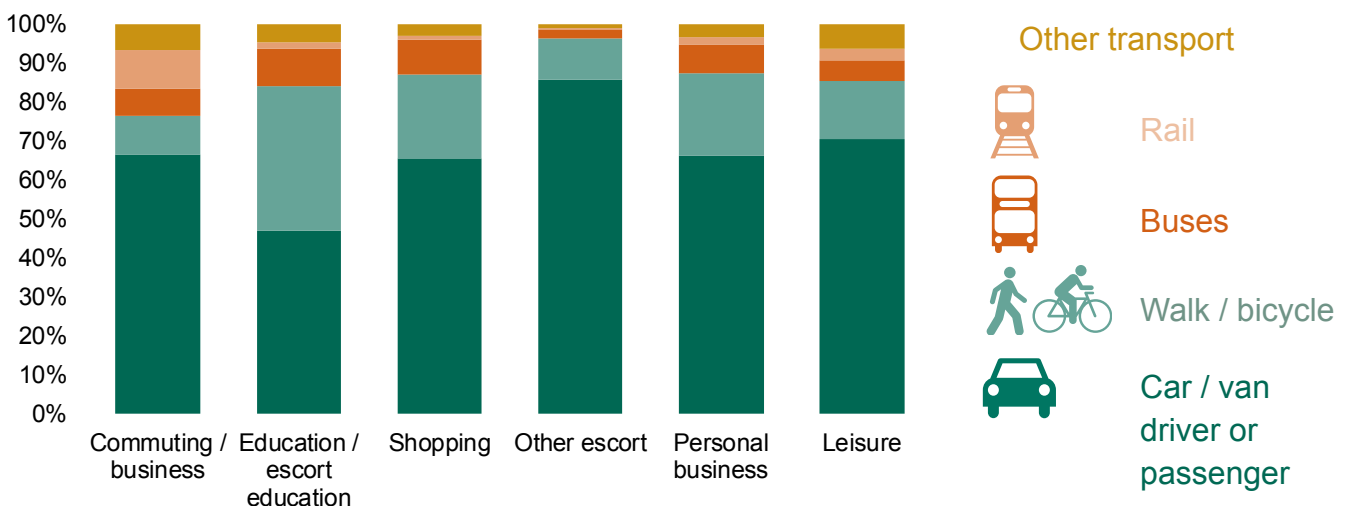
### Car is the most popular form of transport for most types of trip



For all main trip purposes, travel by road accounts for the largest proportion of trips

A large majority of personal trips for all main purposes are made by road (including walking). In particular, for purposes other than education, over half of trips are made by car. For education trips, including parents taking children to school, nearly half are made by car and over a third are made by walking.

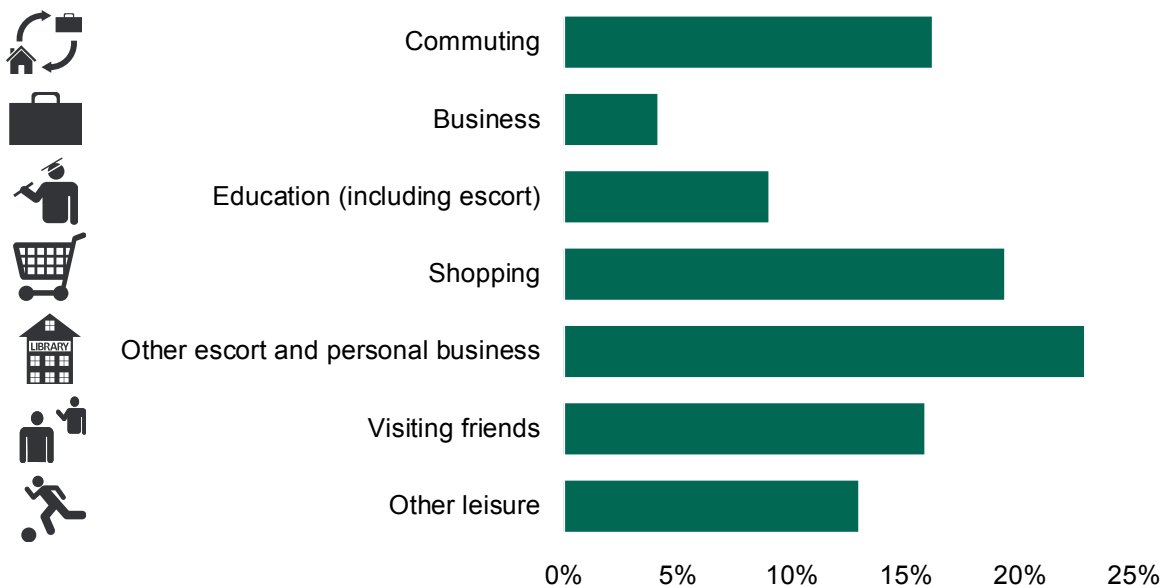
Trips by purpose and main mode: England, 2014 , [NTS0409](#)



### Commuting accounts for 1 in 6 personal car trips ...

Across the whole population, commuting accounts for around 16% of personal car trips (as a driver or passenger), with nearly 30% of car trips being for leisure purposes or to visit friends. However, commuting accounts for a greater share of distance travelled by car - around 25% - as commuting trips tend to be longer on average than those for other purposes.

Proportion of car trips by trip purpose: England, 2014, [NTS0409](#)



## Section 4: How and why people use roads

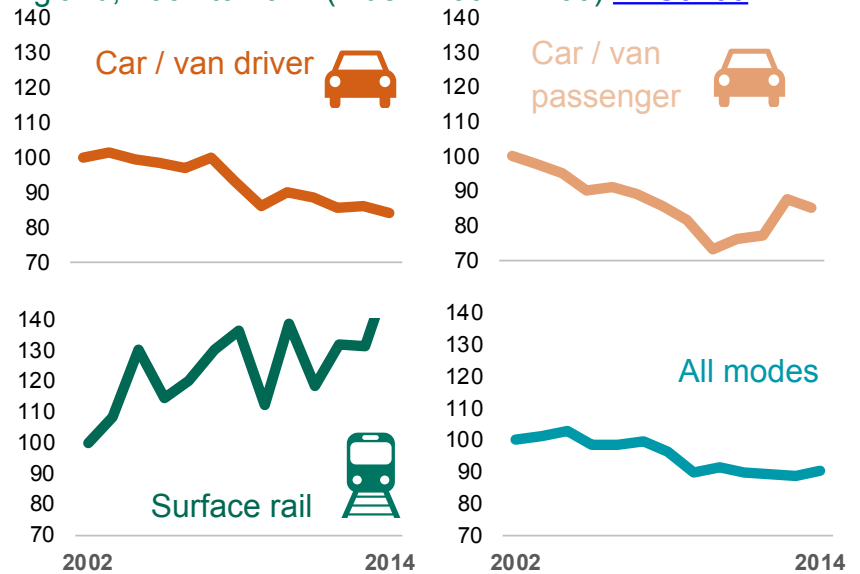


There is a declining trend in commuting trips per person...

Overall, the average number of commuting trips per person<sup>1</sup> per year declined by 10% between 2002 and 2014.

The average number of car / van driver commuting trips fell 16% over this period, whereas commuting by surface rail increased by 56%. However, rail still represents a small share - in 2014 only 7% of all commuting trips were made by surface rail.

Average number of commuting trips per person per year: England, 2002 to 2014 (Index: 2002 = 100) [NTS0409](#)



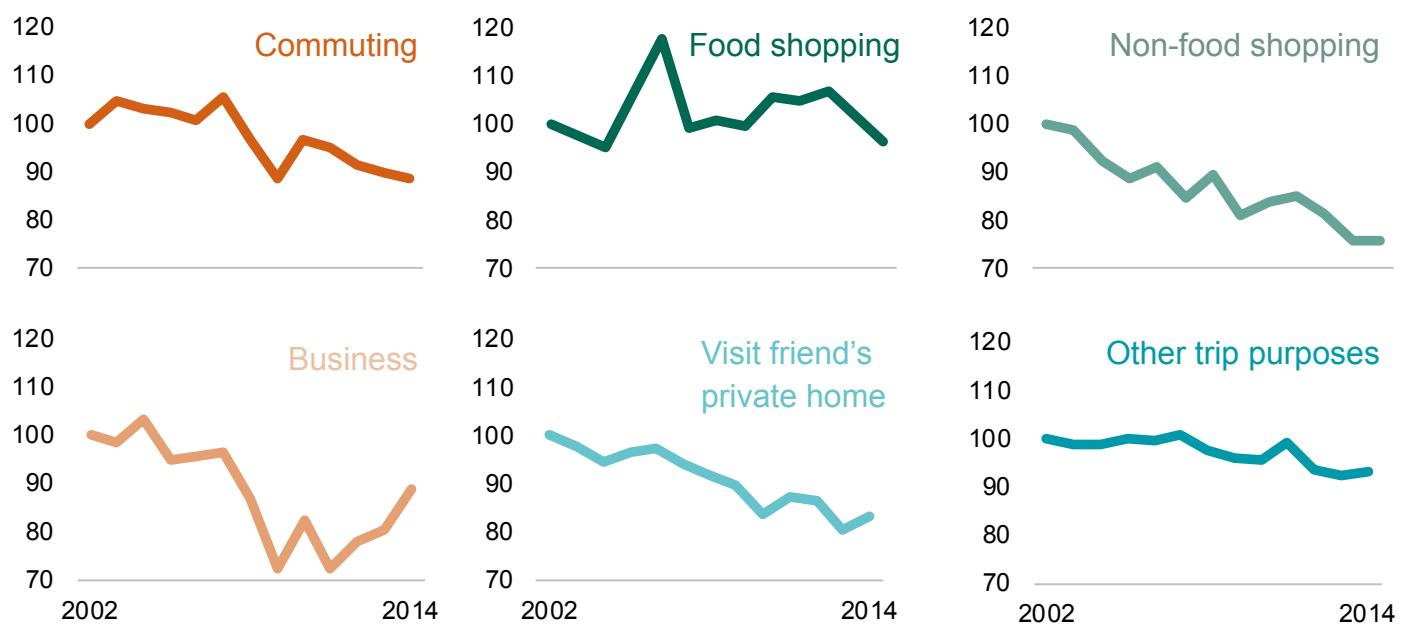
<sup>1</sup>Note that this figure is an average over the whole population, which includes some people that don't make any commuting trips



Shopping and visiting friends are other purposes for which car use has fallen at the individual level...

In terms of distance travelled by car (as a driver or passenger), the purposes for which car use declined most between 2002 and 2014 in terms of average mileage per person were non-food shopping (down 24%), visiting friends at their home (down 17%) followed by commuting (down 12%).

Average car distance travelled per person per year by purpose 2002 to 2014; Index 2002 = 100

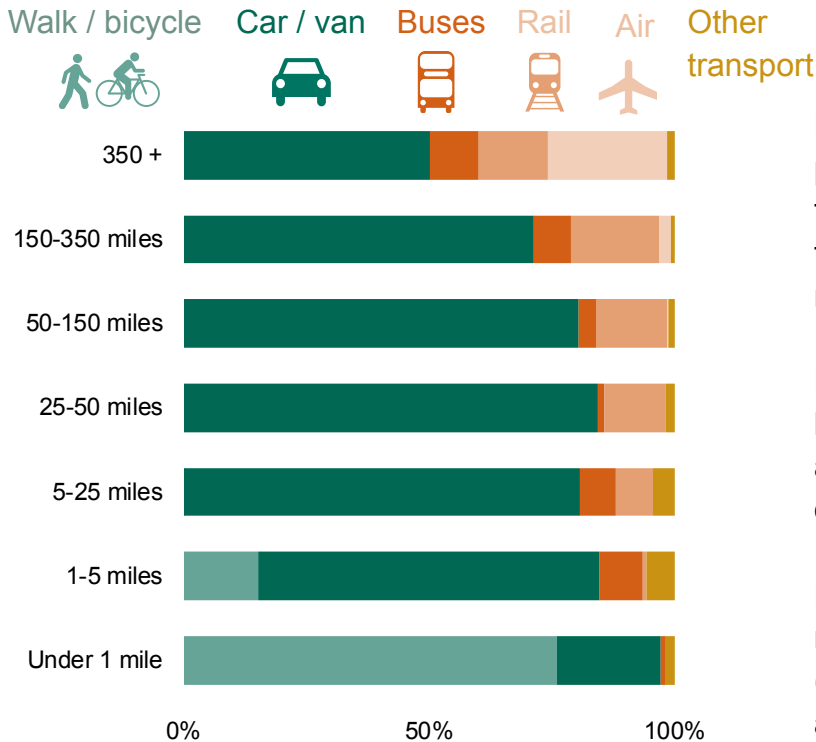


## Section 4: How and why people use roads



The car is used for the majority of trips of all lengths, except the very shortest...

Mode share – average proportion of trips by main mode and distance: England, 2014, [NTS0308](#)



Most trips people make are short - of all personal trips in 2014, 19% were less than one mile in length, 66% were less than 5 miles and 95% were less than 25 miles.

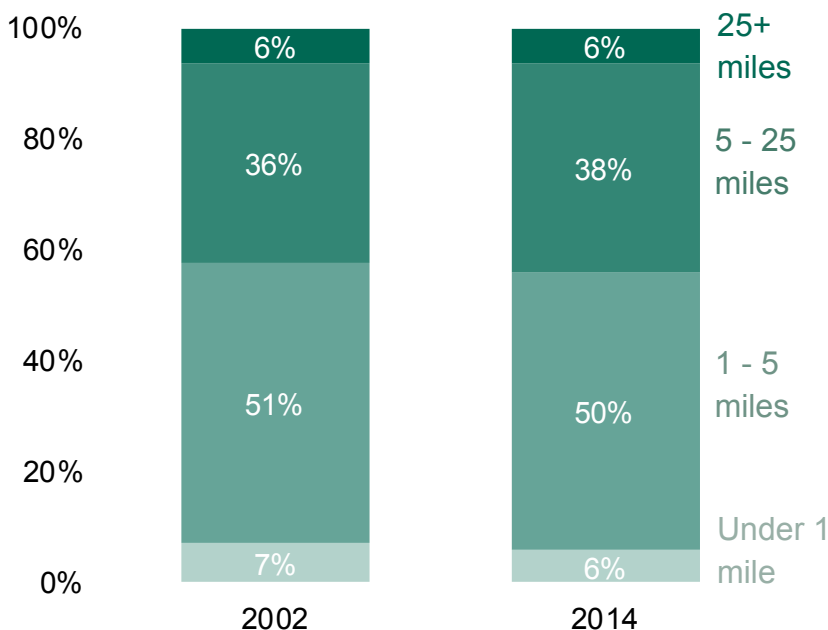
Mode of transport varies by length of trip, but except for trips under 1 mile (which are mostly made by walking), the majority of trips of all lengths are made by car.

Long distance trips (those over 50 miles) represent 2% of all trips. The majority (77%) are by car, 16% by rail, and 2% are by bus (which includes coaches).



Most car trips are relatively short...

Average proportion of trips made by car driver only by trip distance: England, 2014, [NTS0308](#)



In 2014, 6% of car driver trips were under one mile. The proportion under 5 miles was 56%.

Although the number of car driver trips per person per year fell 12% between 2002 and 2014 (from 438 trips to 384), the distribution by trip length did not change notably.

## Section 4: How and why people use roads



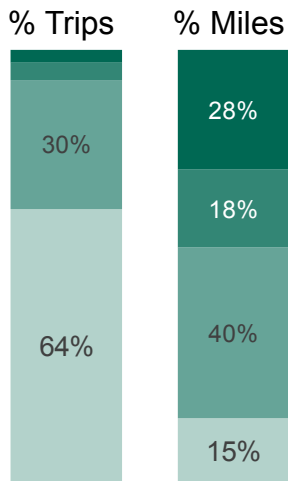
...although trips involving motorways tend to be longer...

Overall, although car trips over 25 miles only account for a small proportion of trips, they also account for almost half the distance travelled.

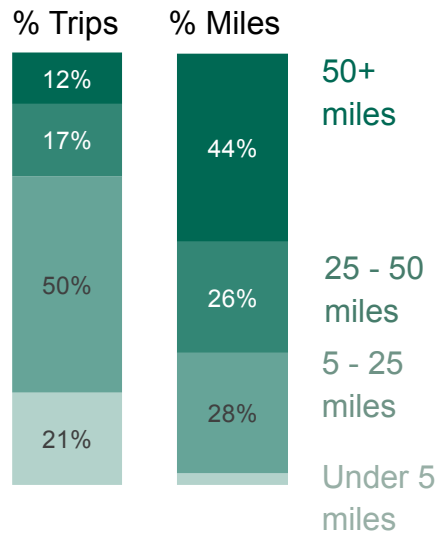
Trips which involve some travel on strategic road network motorways tend to be longer on average, with a higher proportion of longer trips.

Share of car trips and vehicle miles by trip length, Sep 2011 to Aug 2012 in Great Britain

### On all roads



### On SRN motorways



### GPS data source

The data for this section comes from DfT in-vehicle GPS data, for trips between Sep 2011 and Aug 2012. Figures relate to GB vehicles (cars only) on roads in England.

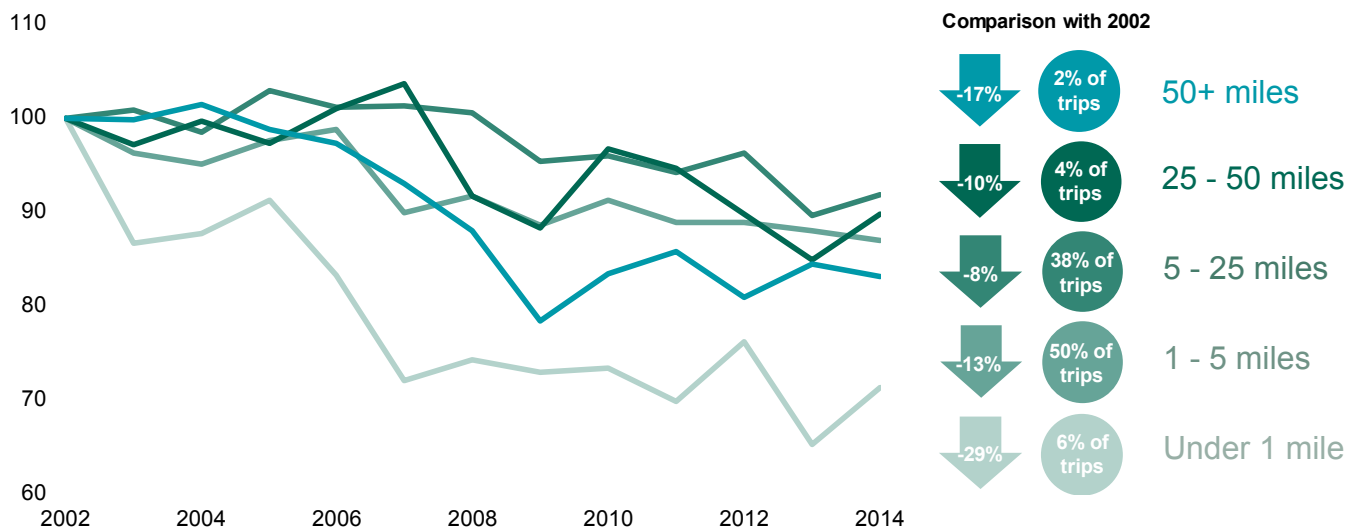
These figures differ from those in the previous section which come from the Department's National Travel Survey which explains why the figures for all roads are slightly different to those shown previously.



The reduction in car driver trips is spread across trips of all lengths...

Car driver trips of all lengths have fallen. Those under one mile have fallen the most, however these only make up 6% of all car driver trips. The proportion of trips made in each distance band has remained broadly constant since 2002.

Car driver trip rates by trip length: England, 2002 to 2014; Index: 2002 = 100 [NTS0308](#)





## Section 5: Commercial road users

This chapter outlines the contribution of vans and HGVs to traffic trends.

**£11bn  
contribution  
to the UK  
economy**

Road is the main method of transporting freight across Great Britain, with almost three times more goods moved by road than by water and rail combined.



Van traffic has grown faster than car traffic in recent years. In 2014 van traffic reached the highest ever level at 45 billion vehicle miles.

The proportion of traffic accounted for by vans has increased over the past 30 years, from 9% in 1984 to 14% in 2014.



HGV traffic increased between 2013 and 2014 to 16 billion vehicle miles. However, this was still 12% below the pre-recession peak level in 2004.

HGV vehicles are the most intensively used vehicles, travelling further on average than cars or vans. HGV vehicles are travelling less distance but carrying more goods since the 1990s, owing to a shift away from using smaller HGV vehicles towards larger vehicle or vans.

### Sources in this chapter

[Road traffic statistics](#)

[Vehicle licensing statistics](#)

[Road Freight statistics](#)

[2008 DfT Van survey](#)

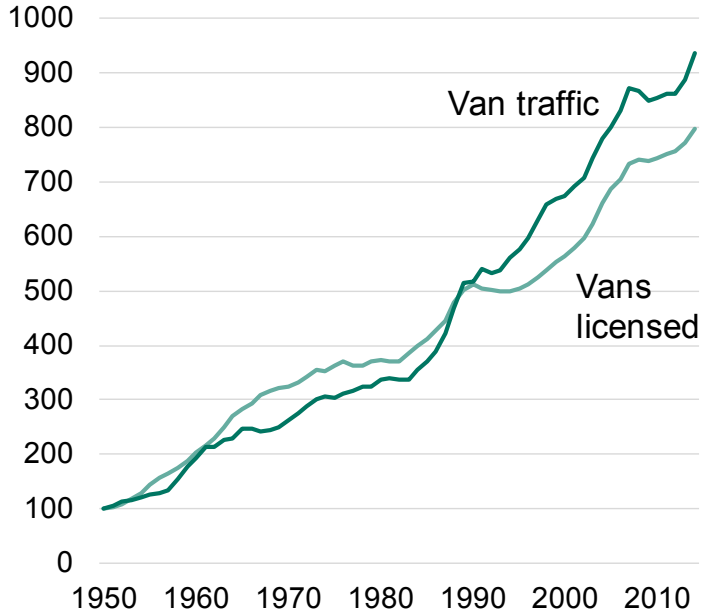
## Section 5: Commercial road users

### Commercial road users account for a growing proportion of traffic.



#### Long term trend in commercial vehicles

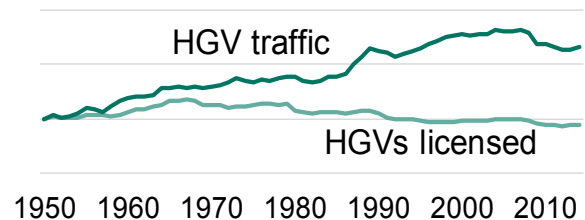
Trends in commercial vehicles and miles travelled, GB, Index: (1950=100)



Commercial vehicles made up 20% of traffic in 2014. Three-quarters of this traffic was by vans and the remainder was by Heavy Goods Vehicles (HGVs).

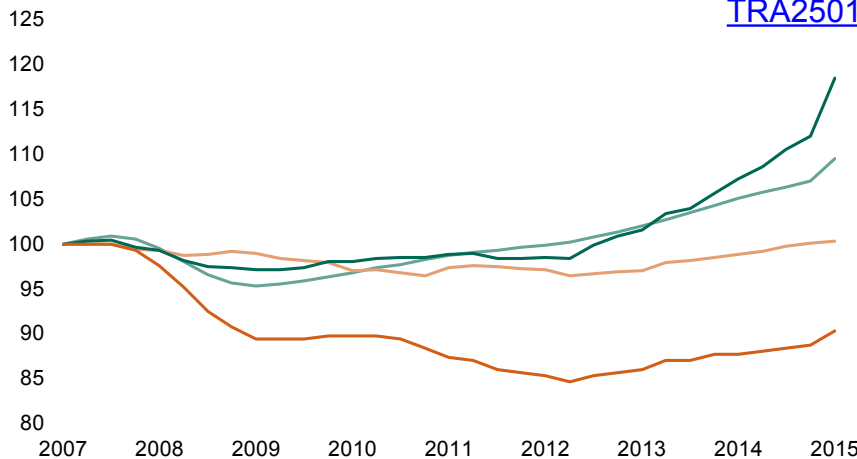
Vans accounted for 10% of all licensed vehicles in 2014.

There were fewer HGVs licensed in 2014 than in 1950, although HGV vehicle miles more than doubled over the same period.

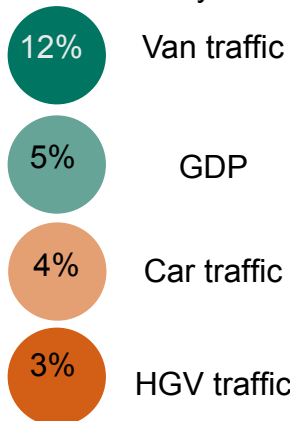


#### Van traffic is growing faster than car traffic

Rolling annual totals, GDP and traffic, Index: (2007Q4=100) [TRA2501](#)



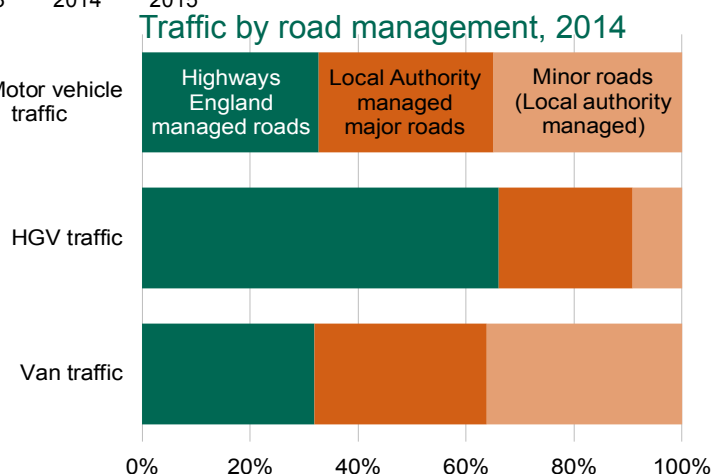
Percentage increase since January 2013



The rise in van traffic has been seen across the country.

HGV traffic began to rise in early 2013, after steady falls since the mid 2000s. HGV traffic relies more heavily on the Strategic Road Network than other traffic, with two thirds of all HGV traffic on the SRN.

All Motor vehicle traffic



## Section 5: Commercial road users

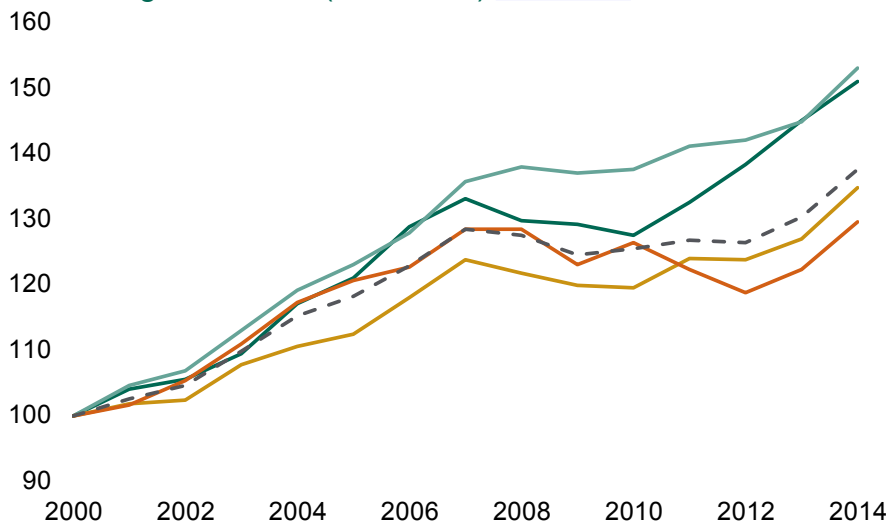


### Van traffic grew on all types of road, with strongest growth on the SRN

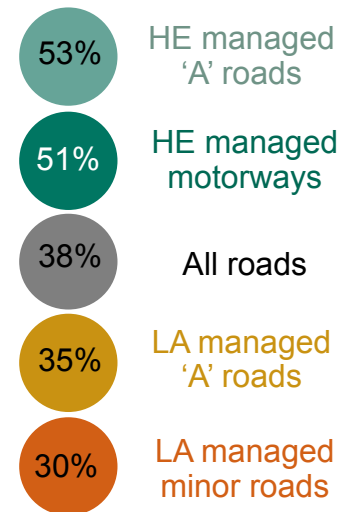
Compared to other vehicle types, van traffic saw the largest percentage increase (5.6%) in 2014 to reach the highest ever figure of 45 billion vehicle miles.

Factors that may have affected the increases in van traffic over the last decade include: the growth in internet shopping and home deliveries; changes to taxation rules for vans and cars may have made vans a more attractive option for some people; costs and regulation for vans tend to be less than for HGVs, which may encourage businesses to substitute vans for HGVs.

Annual van traffic on all roads, by management status, England Index: (2000=100) [TRA4201](#)



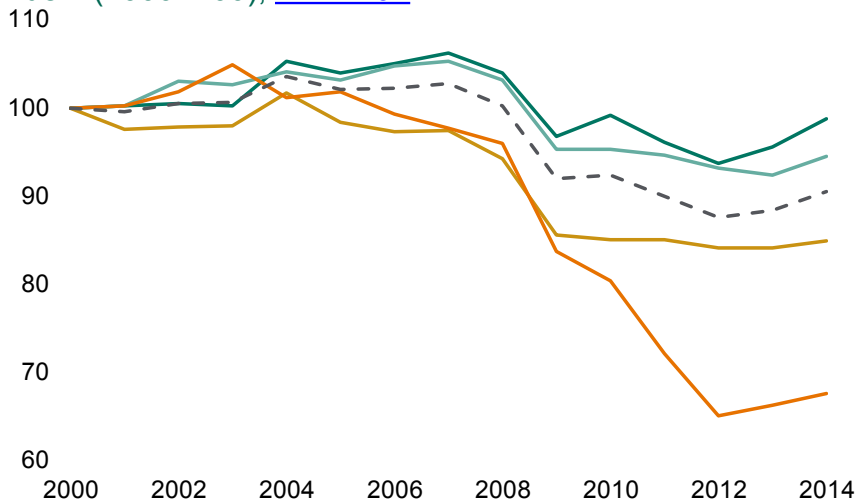
Percentage increase since 2000



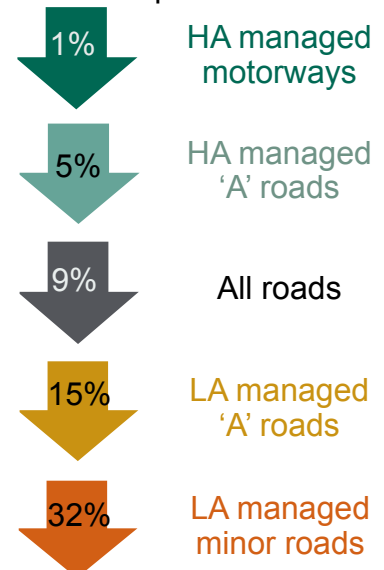
### HGV traffic peaked prior to the economic downturn

HGV traffic was more affected by the recession than any other vehicle type, with particularly large decreases on minor roads. Although HGV traffic is beginning to recover on the Strategic Road Network (managed by Highways England), it is yet to return to the pre-recession peak in 2004.

Annual HGV traffic on all roads in England by road management, Index: (2000=100), [TRA4201](#)



Compared to 2000





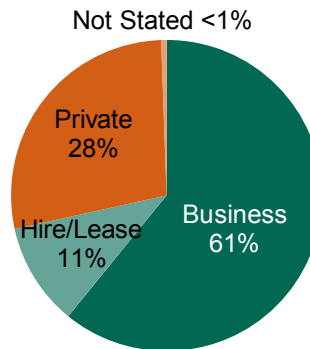
## Section 5: Commercial road users



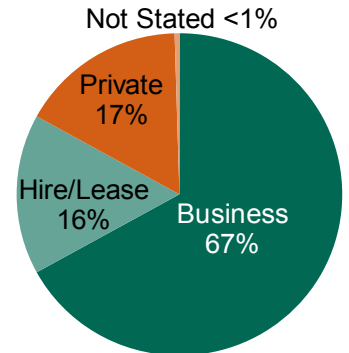
### Most vans are commercially owned

In 2008, almost three-quarters of vans were commercially owned. Commercially owned vehicles had around twice the annual mileage of privately owned vans, and so accounted for over 80% of the distance travelled by vans.

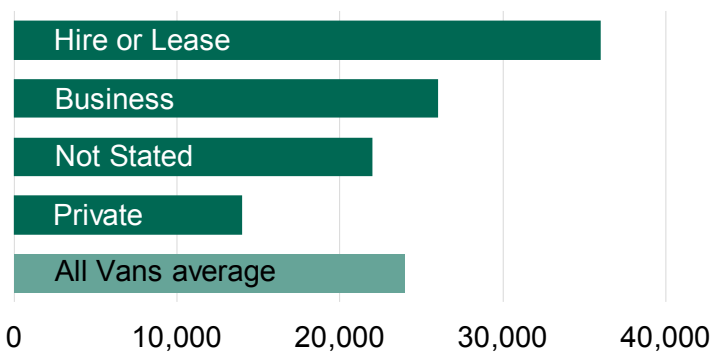
% of registered vans by ownership type



% distance travelled by ownership type



Average yearly mileage travelled per van by ownership, 2008



#### Van Survey 2008

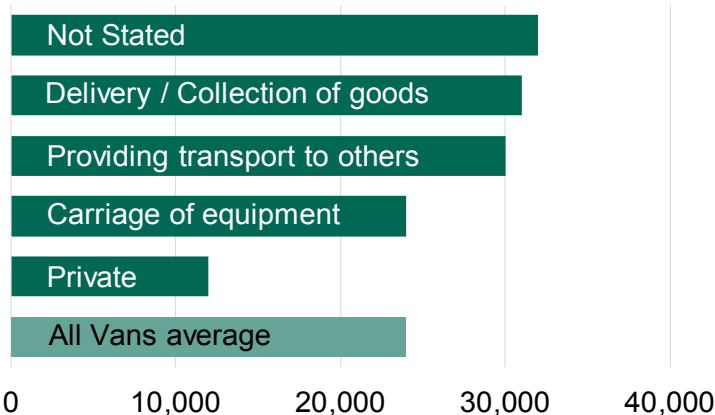
All of the figures on this page come from the DfT Van Activity Baseline Survey in 2008. This was a postal survey of vans, defined as those vehicles that can carry goods and have gross vehicle weights of 3.5 tonnes or less. Only vans registered to the UK, as recorded by the DVLA, were included.



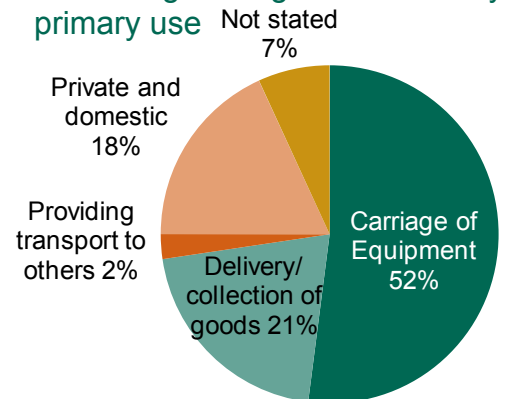
### Around half of vans are used to carry equipment

The 2008 survey also recorded wide variations in the main purpose that the van was used for. The largest single category was business owned vans used for the carriage of equipment, accounting for 52% of vehicles and 53% of distance travelled. Vans used primarily for private and domestic purposes represented 18% of vehicles but only 9% of distance travelled.

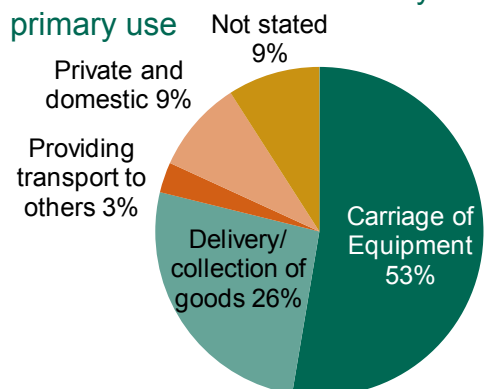
Average yearly mileage travelled per vehicle by primary use, 2008



Percentage of registered vans by primary use



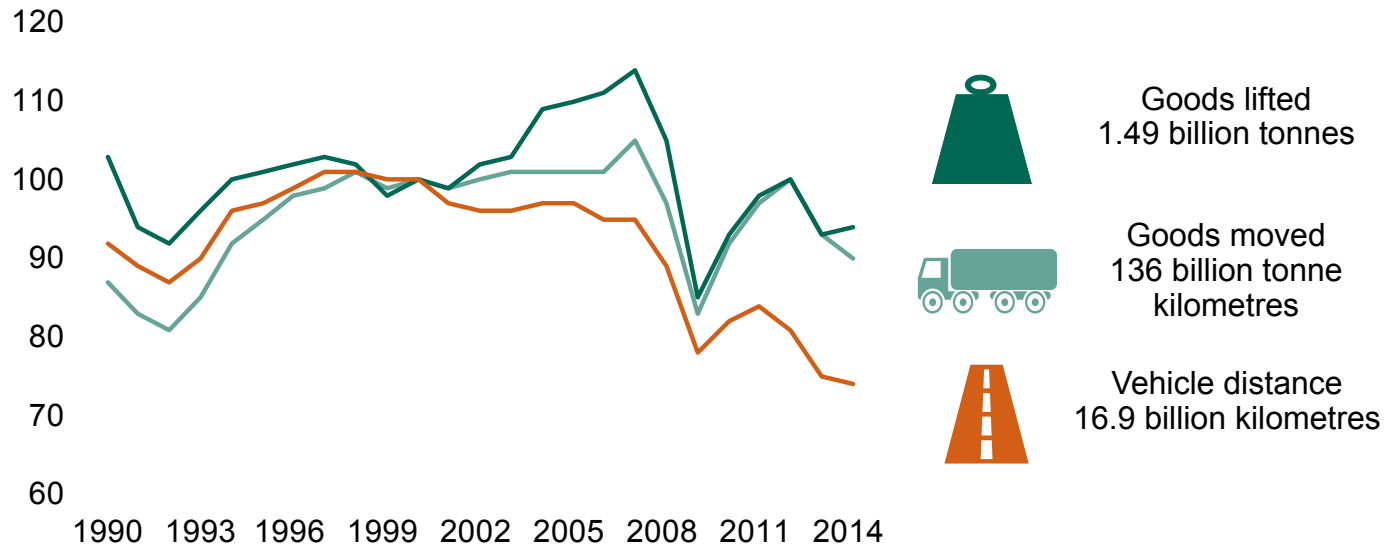
Share of distance travelled by primary use



## Section 5: Commercial road users

Since the 1990s annual growth in the amount of goods moved has generally been slower than growth in GDP

Good moved, goods lifted and vehicle kilometres by GB-registered HGVs, index 2000 = 100



### Definitions

**Good lifted:** the weight of goods carried measured in tonnes.

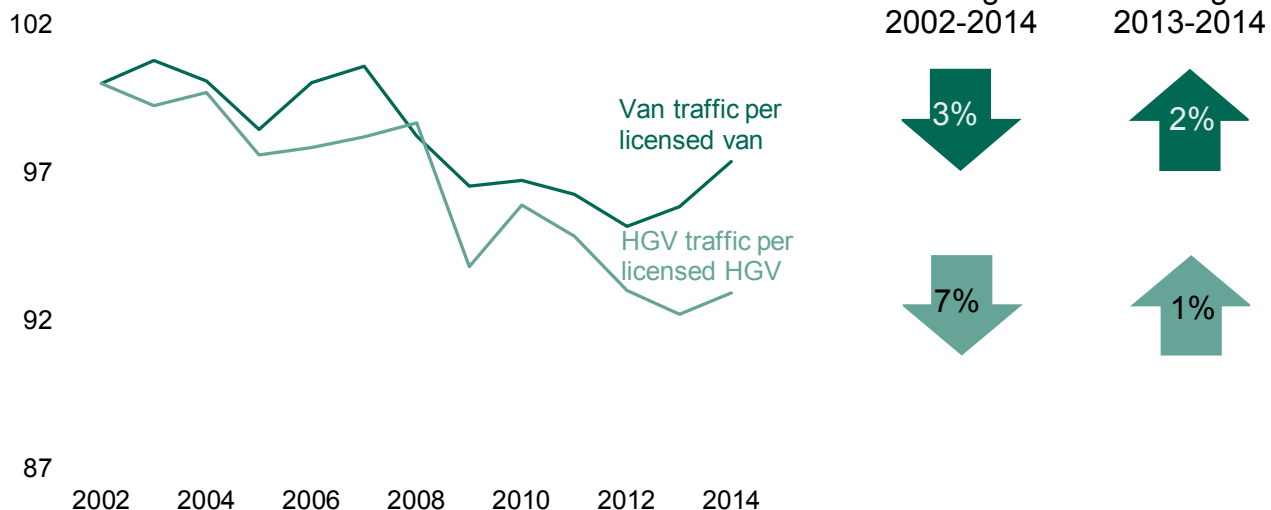
**Goods moved:** a measure of activity taking into account the weight of the load and the distance hauled.

Recent trends suggest a decline in how intensively HGVs are used

HGVs are the most intensively used vehicles, travelling further on average than cars or vans. There are currently fewer HGVs than in the 1950s but vehicle mileage has more than doubled. Over the past decade, however, all vehicle types have seen a decline in mileage per vehicle.

HGV vehicles are travelling less distance but carrying more goods since the 1990s, owing to a shift away from using smaller HGV vehicles towards larger vehicle or vans.

Index 2002=100





## Section 6: Performance of the road network

This chapter outlines factors relating to the performance of roads including congestion, road surface conditions, user satisfaction and accidents.

89%

89% of strategic road users were satisfied with their latest journey in 2014/15. Road user satisfaction has been fairly stable over recent years. Satisfaction with different aspects of the SRN varies, but remains high.



87% of users were satisfied with journey time on the SRN. Congestion measured by average delay on the SRN in England was 9.4 seconds in October 2015.



Road conditions have been fairly stable in recent years. In 2014/15, 4% of the principal 'A' road network should have been considered for maintenance, the same as the previous year.



Despite growth in traffic, road casualties have decreased drastically on all roads.



Total domestic greenhouse gas emissions from road transport has decreased every year since 2007, from 121 million tonnes to 108 million tonnes in 2014, following the recession and developments in fuel efficiencies.

### Sources in this chapter

[Highways England Road User Satisfaction Survey](#)

[Road congestion and reliability statistics](#)

[Road accident and safety statistics](#)

[Connectivity travel time indicators](#)

[Transport energy and environment statistics](#)

[Transport Statistics Great Britain](#)

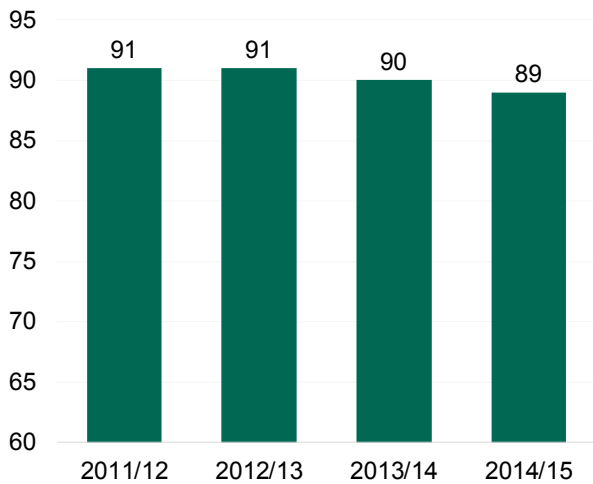
## Section 6: Performance of the road network

Network performance can be measured by infrastructure improvements, user satisfaction and environmental impact.



Road user satisfaction is high and fairly stable over recent years

Strategic Road User Satisfaction Survey- Journey satisfaction score\*



% very or fairly satisfied with the following on their latest journey

- 92% Safety
- 90% Upkeep
- 89% Info Provision
- 87% Journey Time
- 67% Roadworks management

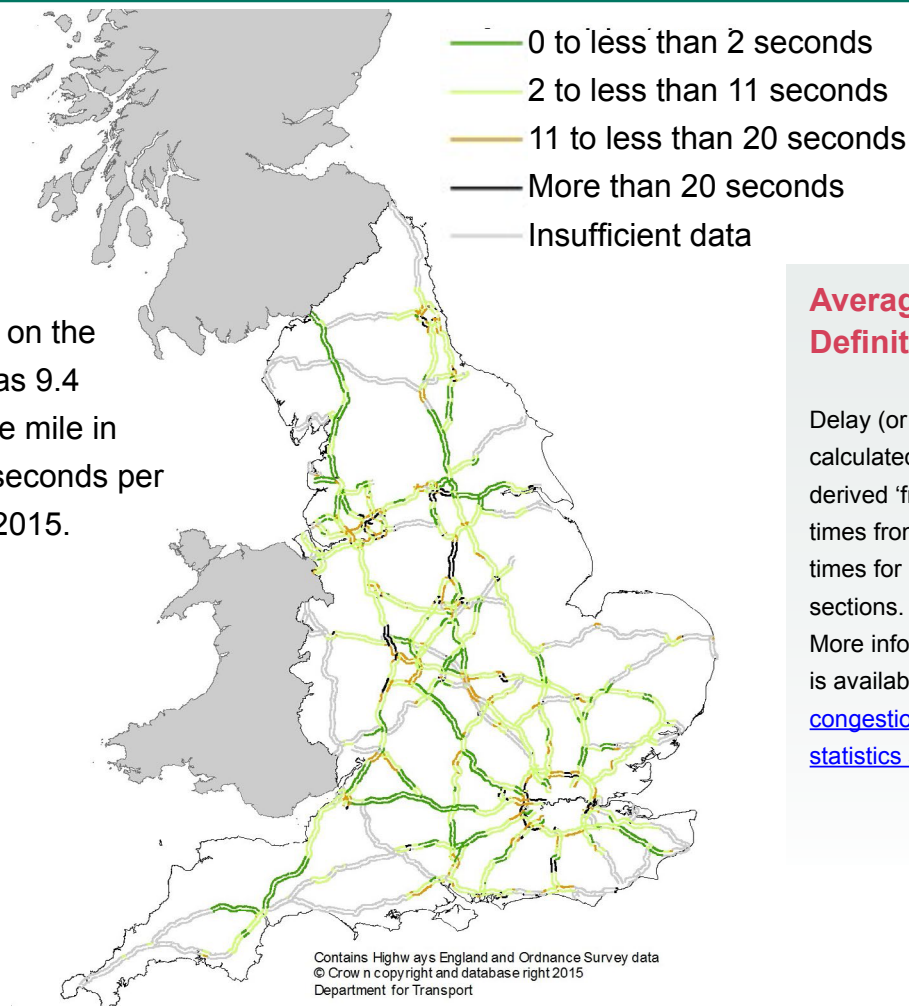
### Further information

These figures relate to the SRN. Satisfaction with local authority managed roads is collected by the [National Highways & Transport Network](#)

\*Satisfaction score is a composite measure of satisfaction with journey time, roadworks management, upkeep, information provision and safety on motorways and trunk roads in England.



Average delay on the SRN varies greatly by link and region



The average delay on the SRN in England was 9.4 seconds per vehicle mile in October and 10.2 seconds per mile in November 2015.

### Average delay Definition

Delay (or 'time lost') is calculated by subtracting derived 'free flow' travel times from observed travel times for individual road sections.

More information is available via the [congestion and reliability statistics series](#).

Contains Highways England and Ordnance Survey data  
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Department for Transport

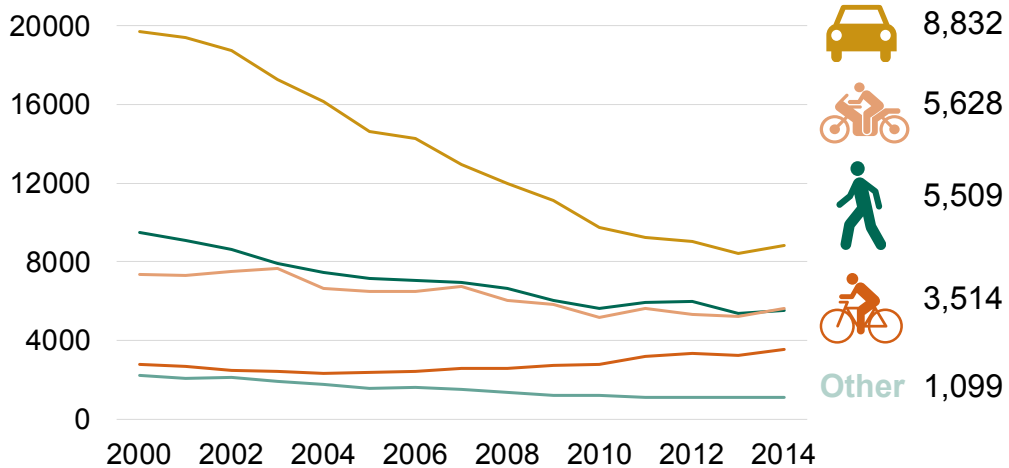
## Section 6: Performance of the road network



### Despite growth in traffic, road casualties have decreased

Increases in traffic lead to greater numbers of vehicles on the road network, greater numbers of interactions of vehicles and pedestrians and therefore increases the likelihood of accidents occurring. However, the fatality rate per billion vehicle miles (bvm) has fallen almost every year from a peak of 165 deaths per bvm in 1949 to the lowest level of 5.6 deaths per bvm in 2013 and 5.7 deaths per bvm in 2014.

Number killed or seriously injured, by transport type, 2014, [RAS30001](#)

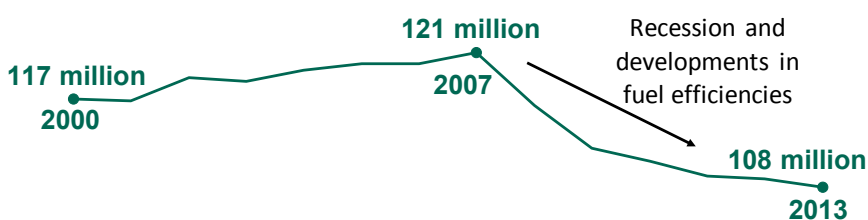


There are a range of reasons for the fall in fatality rates, including: improvements in education and training; improvements in vehicle technology and highway engineering; the introduction of road safety policies, such as speed limits; enforcement of legislation; and behavioural change.



### Greenhouse gas emissions from road transport have fallen since 2007

Total domestic greenhouse gas emissions from road transport (tonnes), UK

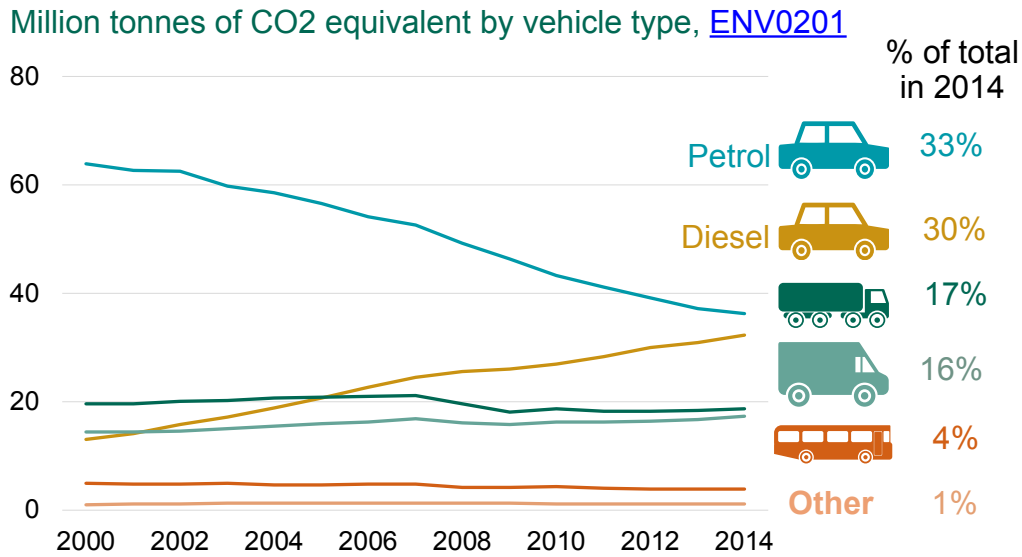


The number of ultra low emissions vehicles registered for the first time increased 264% in 2014.

Lead and Sulphur Dioxide were removed from fuel in 2007 and have since fallen dramatically (26% and 72% respectively), accounting for 5% of domestic transport emissions in 2013.

## Section 6: Performance of the road network

Cars account for almost two thirds of road transport greenhouse gas emissions



Very little of the country is very remote from employment opportunities by car...

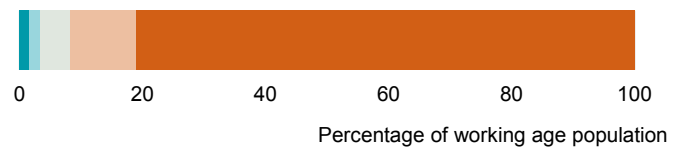
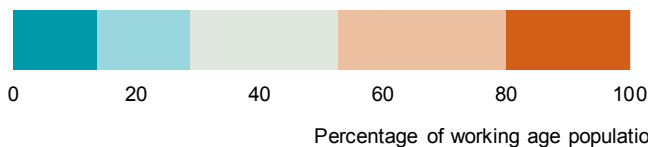
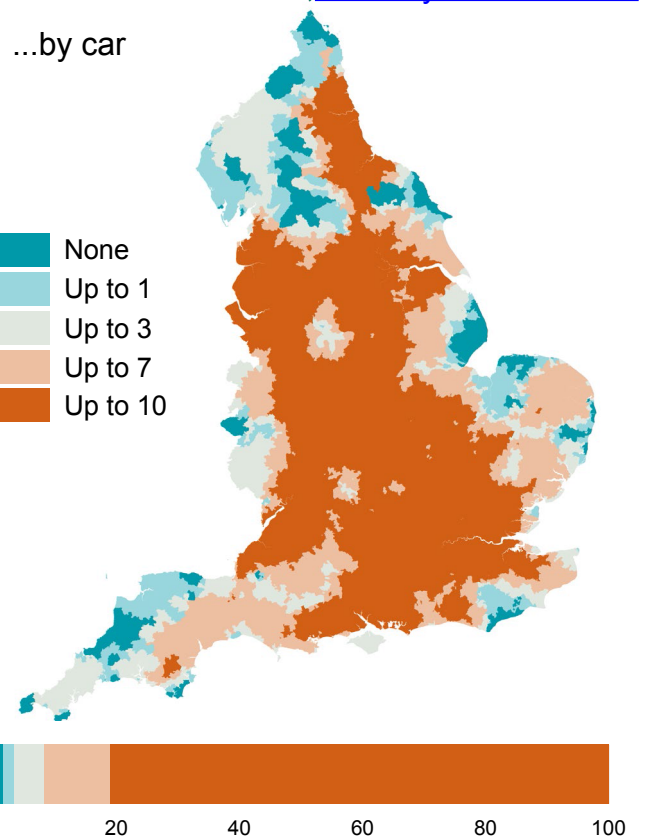
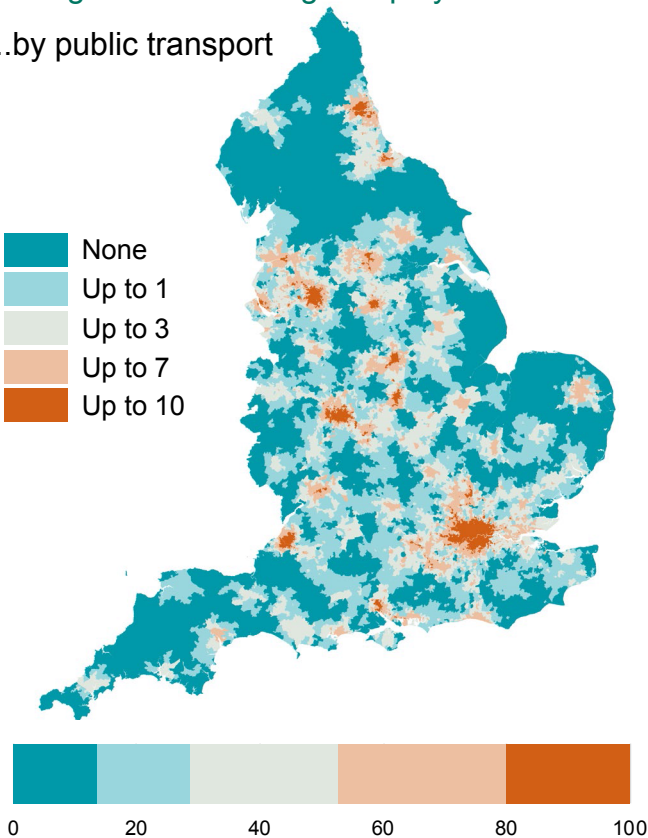


The bars below show that while 80% of the working age population can reach 7 or more large employment centres by car, this is true of only 20% by public transport.

Average number of large employment centres accessible within 45 minutes, [Journey time statistics](#)

...by public transport

...by car



## Section 6: Performance of the road network

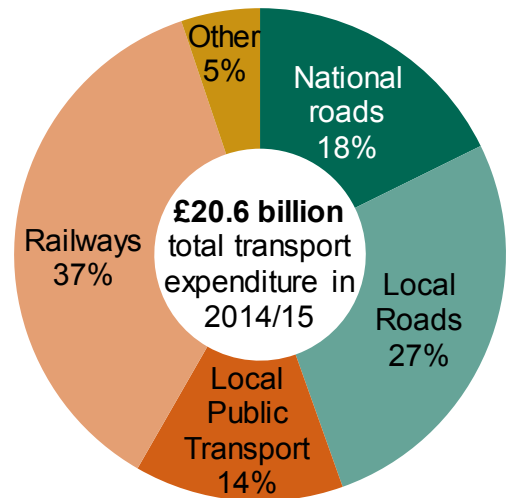
### £ Capital spend makes up the majority of spending on roads

Expenditure on roads in GB, £ billion outturn, [TSGB1301](#)



Of the £9.2 billion spent on roads in Great Britain, 70% was capital spend and the remaining 30% was on current repair and maintenance work. The proportion of the total spent on roads that is accounted for by capital spending has increased steadily over time.

Roads spending made up 45% of expenditure on transport in 2014/15.



### A In recent years, road conditions have been fairly stable

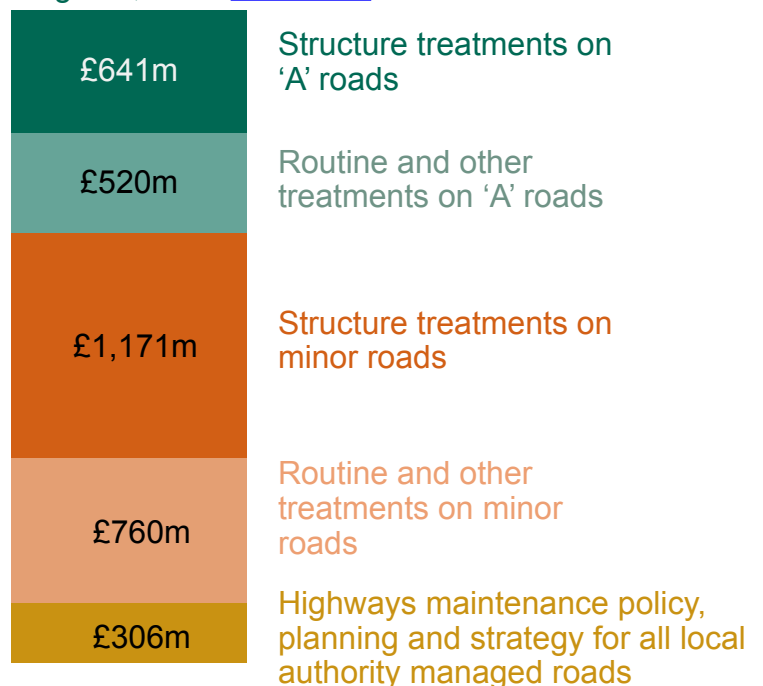
**4%**

of the principal 'A' road network in England should have been considered for maintenance in 2014/15, the same as in the previous year.

#### London

region had the highest proportion of its principle network that should be considered for maintenance at 12%.

Maintenance expenditure on Roads in England, 2014 [RDC0310](#)





## Further information

Links to data sources used throughout this publication and related information.

### About this publication and request for feedback

This is a new publication, which brings together information on roads from a range of statistical publications produced by DfT and other sources. It aims to provide a high-level narrative on roads and how they are used.

Feedback on the publication and any suggestions for improvements to any future updates are welcome, by email to [roadtraff.stats@dft.gsi.gov.uk](mailto:roadtraff.stats@dft.gsi.gov.uk).

### Data sources used in this publication

The following are the key sources of statistics on roads which are used in this publication. Full details of the way the statistics are produced, details of definitions and coverage, and strengths and limitations, can be found by following the links below.

- ▶ **Road traffic statistics** monitor trends in traffic by road and vehicle type in Great Britain based on a network of automatic and manual traffic counts <https://www.gov.uk/government/collections/road-traffic-statistics>
- ▶ The **National Travel Survey** is a large household survey of residents of England which provides a key source of information on how and why people travel. It covers personal travel by all modes, but not commercial traffic (which includes most van use and HGVs) <https://www.gov.uk/government/statistics/national-travel-survey-2014>
- ▶ **Transport Statistics Great Britain** is the main compendium of transport statistics updated annually, covering all forms of transport including roads <https://www.gov.uk/government/collections/transport-statistics-great-britain>
- ▶ **Road freight statistics** cover the activity of Heavy Goods Vehicles within Great Britain including details of goods transported, based on returns from a sample of freight operators <https://www.gov.uk/government/collections/road-freight-domestic-and-international-statistics>
- ▶ **Road accident statistics** contain detailed data on road accidents and casualties, collated from police accident recording <https://www.gov.uk/government/collections/road-accidents-and-safety-statistics>
- ▶ **Journey time statistics** provide estimates of travel times to key services by car and by public transport based on journey planning tools <https://www.gov.uk/government/collections/journey-time-statistics>
- ▶ **Vehicle licensing statistics** provide regular information on the vehicle stock and newly registered vehicles <https://www.gov.uk/government/collections/vehicles-statistics>



- ▶ **Transport energy and environment statistics** provide statistics on the impact of transport on energy consumption, greenhouse gas emissions from transport and pollution from transport <https://www.gov.uk/government/collections/energy-and-environment-statistics>
- ▶ **Road network size and condition** provides estimates of the length of road maintained at public expense and the condition of those roads by road category <https://www.gov.uk/government/collections/road-network-size-and-condition>
- ▶ **Road congestion and reliability statistics** provide an estimate of average speed, average delay and the reliability of travel times on the SRN and local A roads <https://www.gov.uk/government/collections/road-congestion-and-reliability-statistics>

## Related data sources

In addition to the sources listed above, information on roads and their use is available from other statistical sources, produced by DfT and others. These include:

- ▶ **Labour Force Survey** <https://www.gov.uk/government/statistical-data-sets/tsgb01-modal-comparisons>
- ▶ **Census** <http://www.ons.gov.uk/ons/guide-method/census/2011/censusdata/index.html>
- ▶ Summary of **statistics on the Strategic Road Network** <https://www.gov.uk/government/statistics/use-of-the-strategic-road-network>
- ▶ Local area **walking and cycling statistics** for England <https://www.gov.uk/government/statistics/local-area-walking-and-cycling-in-england-2013-to-2014>
- ▶ **Highways England** satisfaction survey <https://www.gov.uk/government/publications/national-road-users-satisfaction-survey-nruss>