## National Travel Survey Department for Transport Motorcycle use in England

#### About this factsheet

This factsheet presents an analysis of motorcyclists in the National Travel Survey (NTS) including information on trends in motorcycling trips and distance, and analysis of area types, age and sex of motorcyclists, and engine sizes. In this factsheet, the definition of 'motorcycle' also includes mopeds and scooters, as well as larger motorcycles. Trips and distance for the driver and passenger are counted separately. If a motorcycle has a driver and a passenger, that is counted as two trips.

## Results from the National Travel Survey show that in England in 2016, motorcyclists made around 440 motorcycle trips per year and travelled around 4,800 miles per year on average.

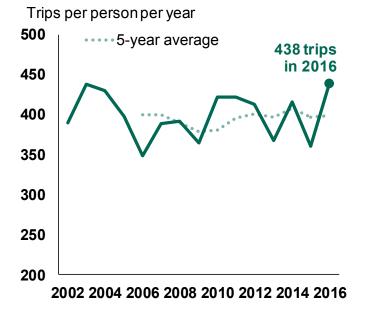
A motorcyclist is defined here as a person making at least one trip by motorcycle (including mopeds and scooters) in their NTS travel diary either as the driver or a passenger.

While figures can fluctuate year-on-year, overall trends in the average number of trips made and the average distance travelled by motorcyclists per year have remained broadly unchanged in recent years (see 5 year averages in charts below).

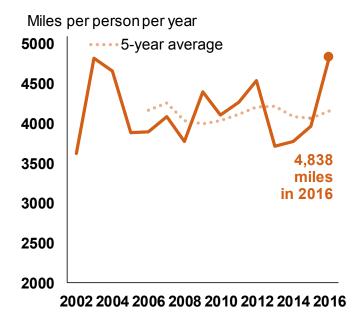
Around 90% of motorcycle trips made and distance travelled were by men.

Around 2% of households had access to a motorcycle in 2016. While this figure has been between 2% and 3% since the late 1990s, there is some evidence that this percentage has been decreasing in recent years.

## Motorcycle trips per motorcyclist per year: England, 2002-2016



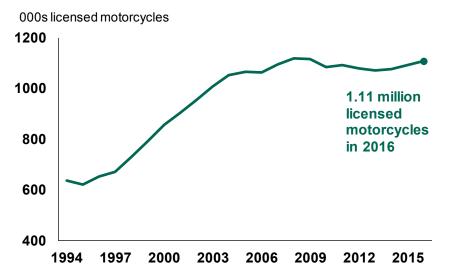
#### Motorcycle miles per motorcyclist per year: England, 2002-2016



## Motorcycle ownership

# There were 1.11 million licensed motorcycles in England at the end of 2016, according to Vehicle Licensing Statistics (Chart 1).

There was a steady increase in the number of licensed motorcycles to a peak of 1.12 million in 2008. Since then, the trend has been more stable. The number of motorcycles in 2016 was a 74% increase on the 1994 figure.



# Vehicle Licensing Statistics

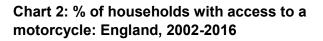
The paragraph opposite has information from the Vehicle Licensing Statistics. Further information and detailed tables are available from the website.

Data are based on administrative data held by the Driver and Vehicle Licensing Agency (DVLA).

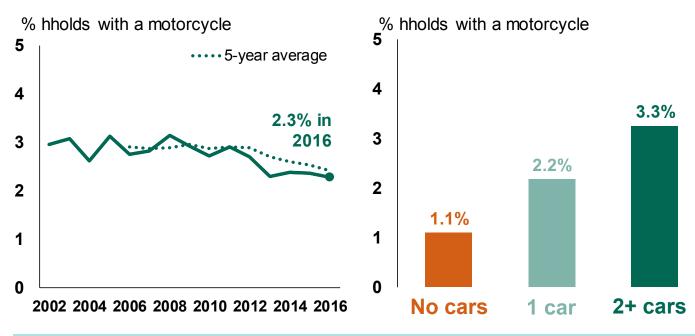
Chart 1: Number of licensed motorcycles: England, 1994-2016

The NTS shows that in 2016, around 2% of households had access to a motorcycle. While this figure has been between 2% and 3% since the 1990s, there is some evidence that the trend is decreasing in recent years (Chart 2).

The percentage of households that had access to a motorcycle varied according to the number of cars in the household (Chart 3). In households without a car, 1% had access to a motorcycle. In households with one car, it was 2%. In households with two or more cars, it was 3%.



## Chart 3: Motorcycle access, by household cars: England, 2016



## Overall trends in motorcycle use

On average, people living in England made around 3 motorcycle trips per person per year in 2016. In 2002, the average was around 4 trips per person per year (Chart 4). The average distance travelled per person per year was 34 miles (Chart 5), broadly similar to the figure in 2002 (36 miles). Figures for individual years can vary a lot due to the small sample of motorcycle trips so 5-year averages are also shown in the chart. These demonstrate some evidence that both the average of number of trips and the average distance per person in the population have been decreasing in recent years.

#### Chart 4: Motorcycle trips per <u>person</u> per year: England, 2002-2016

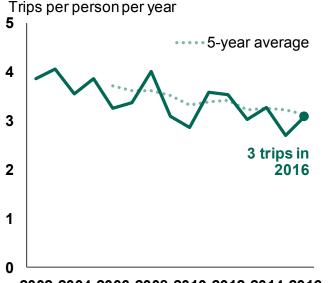
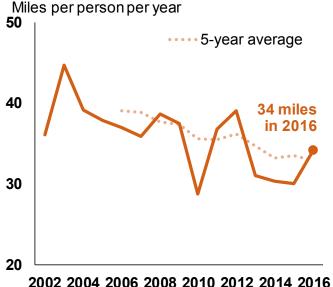


Chart 5: Motorcycle miles per <u>person</u> per year: England, 2002-2016



#### 2002 2004 2006 2008 2010 2012 2014 2016

The charts above are based on the average number of trips and the average miles travelled per year that include people who cannot or do not ride motorcycles. If we look at the same measures but for "motorcyclists" (see box opposite), that is people who rode a motorcycle (either as driver or passenger) during the week they filled out their NTS travel diary, we get a different picture. Charts 6 and 7 over the page show that on average, motorcyclists made around 400 trips per year (around 8 trips per week) and travelled around 4,100 miles per year in the last 10 years. Motorcyclists used motorcycles for around 40% of the total distance they travelled.

While there was some evidence of a declining trend in trips made and miles travelled in the general population, among motorcyclists the trends in average trips and distance have been broadly stable since 2002. This means there have been fewer motorcyclists recorded in the NTS in recent years, but motorcyclists are continuing to do broadly the same amount of travel.

## Definition of a 'motorcyclist'

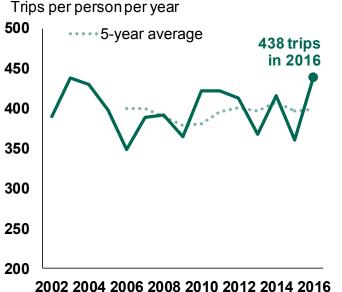
In this factsheet, a 'motorcyclist' is an individual who recorded the use of a motorcycle (including a moped or scooter) in their travel diary at least once either as a driver or passenger.

The travel diary lends us a window into what these mode users are actually using motorcycles for and from their interviews we can examine their characteristics.

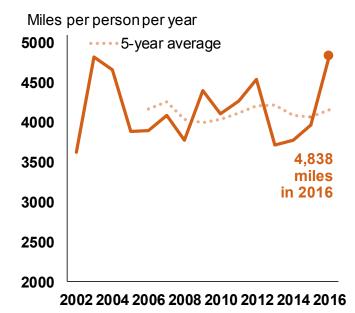


## Overall trends in motorcycle use

#### Chart 6: Motorcycle trips per motorcyclist per year: England, 2002-2016



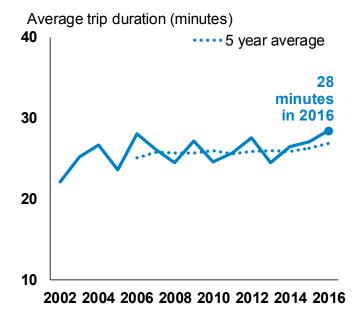
#### Chart 7: Motorcycle miles per motorcyclist per year: England, 2002-2016



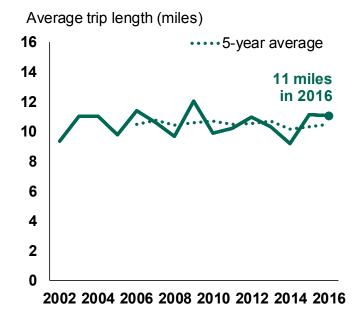
Charts 8 and 9 below show that trends in the average trip distance and the average trip time have been broadly stable in recent years. In 2016, they were 28 minutes and 11 miles per trip.

Since the mid 1990s, the average length of motorcycle trip has been longer than the average length of a trip by a car driver. In 2016, the average car trip was 8.4 miles, compared to 11.1 miles for motorcycle trips.

#### Chart 8: Average motorcycle trip time: England, 2002-2016



#### Chart 9: Average motorcycle trip length: England, 2002-2016



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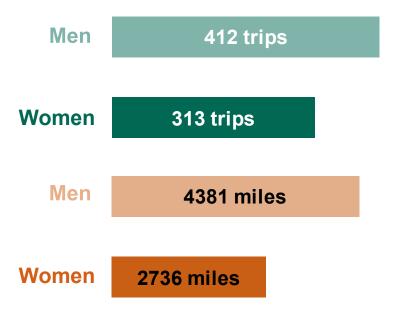
## **Trip length and time**

A time series of the average trip length, by mode of transport is available in Table NTS0306.

A time series of the average trip time is available in Table NTS0311.

For the average over the period 2002 to 2016, men used motorcycles more often than women. Male motorcyclists made an average of 412 trips per person per year over 2002-2016, compared to 313 for female motorcyclists. Nearly 90% of motorcycle trips were done by men. Similarly, men travelled a higher average mileage per motorcyclist over the same period. Men averaged around 4,380 miles, compared to 2,740 miles for women. 91% of total motorcycle distance was travelled by men.

# Chart 10: Average motorcyclist trips and distance travelled for men and women: England, 2002-2016



## Motorcyclists

A relatively small number of people in the NTS sample used a motorcycle in each year from 2002 to 2016—around 100 to 140 people.

In order to produce the more detailed analyses presented here for men and women, and over the page on purpose and trips by different area types it has been necessary to group all the years together from 2002 to 2016.

Male motorcyclists aged 17-20 and 21-29 were the most frequent users of motorcycles, making around 530 trips and 499 trips per motorcyclist per year respectively. Male motorcyclists aged 30-39 and 40-49 rode the highest average distance, around 4,900 miles per motorcyclist per year. In terms of total trips and distance, around 60% of total motorcycle trips and 70% of total motorcycle distance were done by men aged 30 and over (Charts 11 and 12).

All wom- en 11%	Men 20-29 13% len	Men up to 20 years 14%	Chart 11 (I): % of total motorcycle trips by age and sex England, 2002- 2016	Men up to 20 years 7%	en	Men 20-29 12%	Men 30-39 21%	
30-39 19%		40-49 of tot 22% moto miles and s	Chart 12 (r): % of total	Men			Men 40-49 28%	
Men 50+ 21%			motorcycle miles by age and sex England, 2002- 2016	50+ 23%				

## When are motorcycles used?

A higher proportion of motorcycling trips tend to be made during May and June. Chart 13 shows that 11% of motorcycling trips were made in June and 10% in May, compared to 6% in December over the 2002-2016 period. The low figure for August is because people are away on holiday abroad and fewer trips are recorded in the NTS across nearly all modes of transport.

The figures for surface rail are shown in Chart 14 as a comparison—this mode of transport has a much more even distribution of total trips across the months.

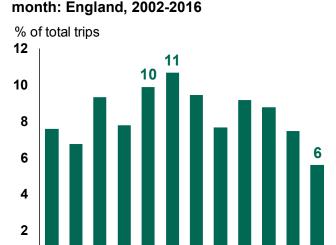
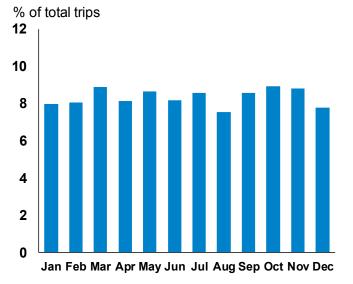


Chart 13: % of total motorcycle trips by

Chart 14: % of total surface rail trips by month: England, 2002-2016



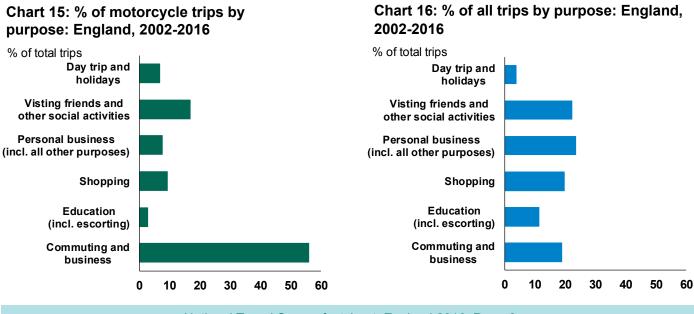
## What are motorcycles used for?

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

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## For the period 2002-2016, over half of motorcycle trips were for commuting or business

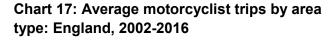
**purposes.** This is a significantly higher proportion than the 19% of trips for all modes combined. A lower proportion of motorcycle trips were for shopping, personal business or education (including escorting people to education) than overall (Chart 15 and Chart 16)

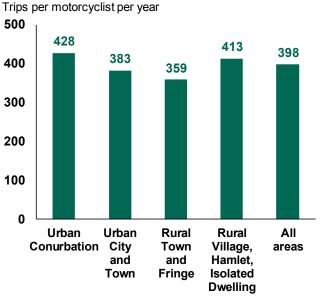


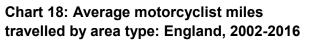
## Motorcycling in rural and urban areas

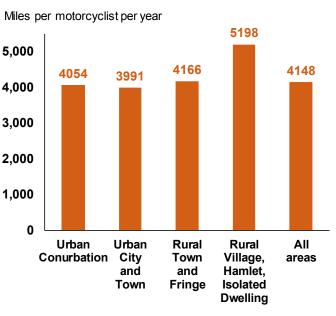
While motorcyclists in urban conurbations (including London) made more trips per year on average over 2002-2016, motorcyclists in the most rural areas travelled a greater

**distance.** Motorcyclists in the most rural areas travelled around 5,200 miles a year on average, compared to around 4,000 miles in other areas.









## What motorcycles are used?

**Larger motorcycles tended to travel greater distances than smaller motorcycles.** The NTS asks owners of motorcycles to give the engine capacity and estimate their total annual mileage (see box). Over 2002-2016, an average of 58% of motorcycles in the NTS were more than 500cc and 10% were 50cc or less. Motorcycles with an engine capacity of more than 500cc averaged 3,800 miles per year, compared to 2,700 miles for the smallest motorcycles.



3.800 4,000 3.400 3,300 3,000 2.700 2.600 2,000 1,000 0 126cc -All 50cc or 51cc -501cc less 125cc 500cc and over

## **Annual mileage**

The NTS interview asks motorcycle owners to estimate their total annual mileage for the vehicle.

These estimates will differ from those derived from respondent travel diaries as it will include mileage not captured in diaries, for example trips done abroad. It is also an estimate of vehicle mileage and doesn't take account of trips and mileage by passengers on the motorcycle.

Average annual mileage per year

## **Background and references**

Information on reported motorcycle casualties is available in the road accident and safety statistics here: https://www.gov.uk/government/collections/road-accidents-and-safety-statistics

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 <u>National Travel Survey Technical Report</u>: <u>2016</u> 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.

For any questions or queries in relation to this factsheet, please contact the National Travel Survey team:

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