## Vehicles Factsheet - March 2010

## Introduction

This Factsheet summarises findings on vehicles. It is based on data from the National Travel Survey (1995/1997 to 2008) and Vehicle Licensing Statistics (2001 to 2008). The findings cover Great Britain unless otherwise specified.

## Technical note

The term 'car' is used for all 3 - or 4 -wheeled vehicles with a car body type and also light vans, $4 \times 4$ vehicles, dormobiles, and motor-caravans. Such vehicles are regarded as household cars if they are either owned by a member of the household or available for the private use of household members. Most analyses are based on this definition of car except estimates of annual mileage which are given for 4-wheeled vehicles only.

## Vehicle licensing

Overall, there were 34.2 million licensed vehicles registered in Great Britain at the end of 2008. This is an increase of almost 4.5 million, or $15 \%$, on the number licensed in 2001. The change in vehicle numbers varied between different types of vehicle with licensed cars increasing in number by $13.1 \%$, licensed motorcycles and scooters increasing by $31.6 \%$, and licensed goods vehicles increasing by $3.4 \%$ during that period.

Chart 1: Index of licensed vehicles in Great Britain: 2001-2008


Source: Vehicle license Statistics
There has been a general trend of decline in the number of cars registered for the first time in Great Britain. In 2008 this figure was 2.1 million; a drop of 280 thousand new car registrations, or $11.6 \%$, from the previous year and 21.3\% fewer than peak new registrations in 2002.

Chart 2: New car registrations: 2001-2008


Source: Vehicle license Statistics
Between 2001 and 2008 there was a 27.8 percent increase in licensed motorcycles. There was a more significant increase amongst motorcycles with larger engine sizes; 1000+cc motorcycles up 89.4\% and 801-1000cc motorcycles up 54.9\%.
Chart 3: Motorcycles licensed by engine capacity: 2001-2008


Source: Vehicle license Statistics

## Car availability

Average cars per household increased from 1.0 in 1995/1997 to 1.14 in 2008. This was due to both a decrease in households with no car and an increase in 2-car households.

In 2008, 32\% of households had access to 2 or more cars compared to $25 \%$ in 1995/1997. Households in London boroughs and large metropolitan areas are less likely to have access to a car than households in small urban or rural areas. In London 41\% of households have no car whereas 50\% of households in rural areas have access to at least 2 cars.

Chart 4: Car availability by area type: 2008


Source: National Travel Survey
Between 2001 and 2008 there was a 13\% increase in privately owned vehicles. Female car ownership increased by $21.2 \%$, compared to $7.8 \%$ by males. This is indicative of both the increase in 2-car households (partly due to a fall in real term car purchase price over time) and increase of female driving licence holding, from $61 \%$ to $65 \%$, during this period.

Chart 5: Car ownership: 2001-2008


[^0]Car availability is strongly related to household income. In 2008 over 50\% of households in the lowest income quintile did not have access to a car, compared to $10 \%$ in the highest quintile.

Between 1995/1997 and 2008, there was an increase in car availability in the lowest income quintile and an increase in middle-income households having access to 2 or more cars.
Chart 6: Household car availability by income quintile: 1995/1997 and 2008


Source: National Travel Survey
Average car occupancy remained fairly constant between 1995/1997 and 2008 at 1.6 individuals. The level of occupancy varies dependent on trip purpose. In 2008, there was a higher average car occupancy rate amongst education and holiday/day trips (2 individuals); child occupancy being a key factor for these trips, compared to commuting and business trips (1.2 individuals).
Chart 7: Car occupancy by trip purpose ${ }^{1}$ : 2008


[^1]
## Vehicle Mileage

Average annual mileage is influenced by fuel type and ownership type, with those owning diesel cars tending to drive further.

In 2008, the average annual mileage of company owned cars (19.7 thousand miles) was nearly 2 and half times that of privately owned cars (8.2 thousand miles). The average annual mileage of company diesel cars was 22.3 thousand miles per year compared to 14.7 thousand miles by company petrol cars.

Chart 8: Annual average mileage of 4 -wheeled vehicles by type of car and fuel type: 2006/2008


Source: National Travel Survey
Average annual mileage is inversely related to vehicle age. Vehicles less than 1 year old travel on average 11.7 thousand miles, compared to 9.1 thousand miles by vehicles aged $4-5$ years, and 6.6 thousand miles by vehicles over 10 years old.

Chart 9: Average annual mileage of 4-wheeled vehicles by age and fuel type: 2006/2008


[^2]There is a correlation between the size of car and annual mileage. On average large cars travel 11.3 thousand miles per year compared to only 6.8 thousand miles in small cars.

Chart 10: Average annual mileage of 4 -wheeled vehicles by size category: 2006/2008


Source: National Travel Survey
Vehicles in a 1-car household have an average annual mileage of 8 thousand miles. In multi-car households, cars are ranked dependent on distance travelled; the highest mileage being the first-ranked vehicle. On average the annual mileage of the first ranked vehicle (13.2 thousand miles) is almost double that of the second vehicle ( 6.7 thousand miles).
Chart 11: Average annual mileage of 4-wheeled vehicles by vehicle rank and fuel type: 2006/2008


Source: National Travel Survey

## Fuel consumption

Between 1995/1997 and 2008 cars became marginally more fuel efficient in all categories of engine size except those cars in the 1401-1800 group.

Fuel efficiency is generally inversely related to engine size. In 2008 average fuel consumption of cars with an engine size less than 1 litre was 37 miles per gallon, compared to 26 miles per gallon by cars with an engine size greater than 2 litres.
Chart 12: Fuel consumption by engine size: 1995/1997 to 2008


Source: Vehicle license Statistics

## CO2 emissions

Average carbon dioxide emissions from cars continued to fall in 2008, with average emissions from licensed cars - registered in Great Britain on or after 1 March 2001 - down 1\% in the year to a mean of $169.5 \mathrm{~g} / \mathrm{km}$. Further, the average $\mathrm{CO}_{2}$ emissions from cars newly registered in the year fell by nearly $4 \%$ between 2007 and 2008 to an average figure of $158.2 \mathrm{~g} / \mathrm{km}$.

Between 2001 and 2008 there was an increase, from $24 \%$ to $34 \%$, in the number of cars in the low $\mathrm{CO}_{2}$ emission band ( $101-120 \mathrm{~g} / \mathrm{km}$ ). During that period, cars in the highest $\mathrm{CO}_{2}$ emission band $(226 \mathrm{~g} / \mathrm{km}+$ ) declined from $12 \%$ to $8 \%$ of the vehicle fleet.
Chart 13: Cars licensed by $\mathrm{CO}_{2}$ emission band: 2001$2008^{1}$

${ }^{1}$ Percentages exclude vehicles with unknown CO2 emissions
Source: Vehicle license Statistics

Further information
Since 2002, NTS fieldwork has been conducted by the National Centre for Social Research (NatCen)
The main results from the National Travel Survey along with details of the NTS methodology are published at:
http://www.dft.gov.uk/pgr/statistics/datatablespublications/personal/mainresults/
Other National Travel Survey factsheets are published here:
http://www.dft.gov.uk/pgr/statistics/datatablespublications/personal/factsheets/
The main results from Vehicle License Statistics are published at:
http://wwww.dft.gov.uk/pgr/statistics/datatablespublications/vehicles/licensing/vehiclelicensingstatistics2008
For further information and any queries please contact:
national.travelsurvey@dft.gov.uk or telephone 02079443097


[^0]:    Source: Vehicle license Statistics

[^1]:    ${ }^{1}$ Each purpose includes the appropriate escort purpose. For example, education includes escort education

    Source: National Travel Survey

[^2]:    Source: National Travel Survey

