Sources of data on vehicle mileages

Last Updated: June 2013

The Department for Transport produces or is developing statistics on vehicle mileages and road traffic from several different sources. These data sources are designed for different purposes and so have a different coverage of vehicle mileage. The choice of data source is highly dependent on how it will be used.

This note gives an overview to help potential users decide which source might be most appropriate for them. For more detail, please refer to the individual sources.

MOT Odometer Readings

(Note: This new data source is currently in development. Some early experimental statistics have been published to inform discussions on further development, but these do not yet constitute a fully developed statistical source).

Odometer readings are recorded for around 95% of MOTs in GB. This effectively provides a near census of mileages for those vehicles required to take an MOT test. MOT (vehicle roadworthiness) tests must be taken annually by all cars, light goods vehicles and motorcycles over 3 years old, and certain vehicles such as taxis and passenger carrying vehicles with 9 or more seats over 1 year old. Some types of vehicle – primarily HGVs and larger buses and coaches, and taxis regulated by local authorities are subject to different inspection regimes, and odometer readings are not available for these.

It is very important to note that even for vehicle types within the scope of the MOT system, in most cases no odometer readings will be available until the vehicle has been on the road for about three years.

All mileage by the vehicle will be included, whether business or private, on GB roads or elsewhere. No breakdown of the total mileage between MOT tests is available. However, it is possible to link together the successive tests of the same vehicle, in order to generate estimates of total annual mileage.

The DfT can combine MOT records with additional vehicle registration records not already held within the VOSA system, such as the postcode of the vehicle keeper, and other characteristics of the vehicle not already held within the VOSA system. The link with keeper postcode can be used to produce mileage estimates associated with geographical areas, subject to the limitation that the use of the vehicle does not necessarily take place in the vicinity of the keeper's address – not even necessarily in the same country.

The experimental MOT mileage statistics are published at https://www.gov.uk/government/organisations/department-for-transport/series/vehicle-licensing-statistics.

National Travel Survey

The NTS is a survey of private households in Great Britain. Estimated annual mileages and/or current odometer readings are collected for vehicles belonging to

respondent households. Only private households are surveyed, so some types of company vehicles may not be included (in particular fleet vehicles). Respondents are asked to split their annual mileage estimates between commuting, business and other purposes. Mileage driven for the purpose of carrying/delivering goods is explicitly excluded.

The NTS also collects data on the make and model of vehicles and on the fuel type used. NTS travel diaries also provide data on the distance travelled by car according to journey purpose, and the start and end point of such trips.

The relatively small sample size (about 8,000 households a year) means that mileage estimates are not robust at geographies below regional level, and for vehicles other than cars.

The results of the NTS are published annually at: https://www.gov.uk/government/organisations/department-for-transport/series/national-travel-survey-statistics.

Road Traffic Estimates

DfT Road Traffic statistics produce annual and quarterly traffic volume estimates for the GB road network. Annual estimates are mainly based on around 8,000 manual counts where trained enumerators count traffic by vehicle type over a 12 hour period. Traffic data are also collected continuously from a national network of around 180 Automatic Traffic Counters (ATCs). These two data sources are combined with road lengths statistics to produce the number of vehicle miles travelled each calendar year.

Traffic estimates include all journeys by all vehicle types for all purposes on GB roads. Vehicle mileage will include mileage undertaken by foreign- and NI-registered vehicles on GB roads but will not include travel by GB-registered vehicles abroad. Estimates can be broken down by vehicle type and road category but no vehicle characteristic information is available.

Annual traffic estimates are published at local authority, regional and GB level whilst quarterly traffic estimates are only published at GB level. These can be found here: https://www.gov.uk/government/organisations/department-for-transport/series/road-traffic-statistics

The major roads network (motorways and 'A' roads) in Great Britain is represented by a series of links, which are unique sections of road which make up the entirety of the major roads network. The traffic counts website allows users to view and download estimated traffic flows for the last 10 years at link level for every major road in Great Britain. An interactive map provides a mapped background to identify traffic flows in specific areas of the country. This can be found here: http://www.dft.gov.uk/traffic-counts/

Which source should I use?

Once full developed, MOT-based estimates should be useful for mileages by:
- Average annual mileages for the vehicle types below
- Small area level estimates (due to large sample)

- Cars and motorcycles
- Light vans
- Motorcycles
- Smaller buses (including minibuses)
- Fuel type
- CO_2 emissions (for cars and light vans)
- Vehicle age
- Company/private vehicle keepers
- Car make and model

The National Travel Survey mileages can be useful for:
- Average annual mileages
- At regional and national level
- Journey purpose
- Commuting
- Cars
- Fuel type
- Vehicle age (including those under 3 years old)

Road Traffic estimates can be useful for:
- Volume and distribution of traffic on GB roads
- At local authority, regional and GB level encompassing major and minor roads
- Flows at link level for every major road in GB
- Foreign and Northern Irish-registered activity on GB roads
- Comparison of traffic volumes on different road types (e.g. motorways, 'A' roads)
- Comparison of traffic volumes by 11 different vehicle types
- HGVs and buses and coaches (excluded from other sources)

Key Facts

	MOT	NTS	Road Traffic
Data source	All odometer readings taken during MOT tests recorded by VOSA	Survey interview and 7-day travel diary	Manual and automatic traffic counters
National Coverage	Vehicles tested at GB MOT test centres	GB households	All vehicles on GB roads, including foreign and Northern Irish-registered
Travel included	All roads, including abroad	All roads within Great Britain, personal travel only	All roads within Great Britain
Geographical disaggregation of data	Small areas	Regional and national level	Local authority, regional and GB level. Link level flows
Type of mileage	Average annual mileage	Average annual mileage	Vehicle miles – One vehicle times one mile travelled results in one vehicle mile. For example,

			one vehicle travelling one mile a day for a year would be 365 vehicle miles.
Vehicle type	Cars, motorcycles, light vans, smaller buses (including minibuses) – usually once 3 or more years old	Cars only (excluding some company vehicles)	All vehicle types
Mileage splits by vehicle characteristics	Fuel, CO2 emissions (only for cars), vehicle age, private/company	Make and model, fuel type, age	Not possible
Types of journey included	All journeys	Personal travel only	All journeys
Mileage splits by journey purpose	Not possible	Yes	Not possible
Publication schedule	tba	Annually	Annually and quarterly
Time series start year	2005	1995	Annually – 1949; Quarterly – 1993