

## Modal Comparisons



This section looks at the use people make of the different modes of transport when travelling to, from and within Great Britain from Transport Statistics Great Britain published on 15 December 2011.

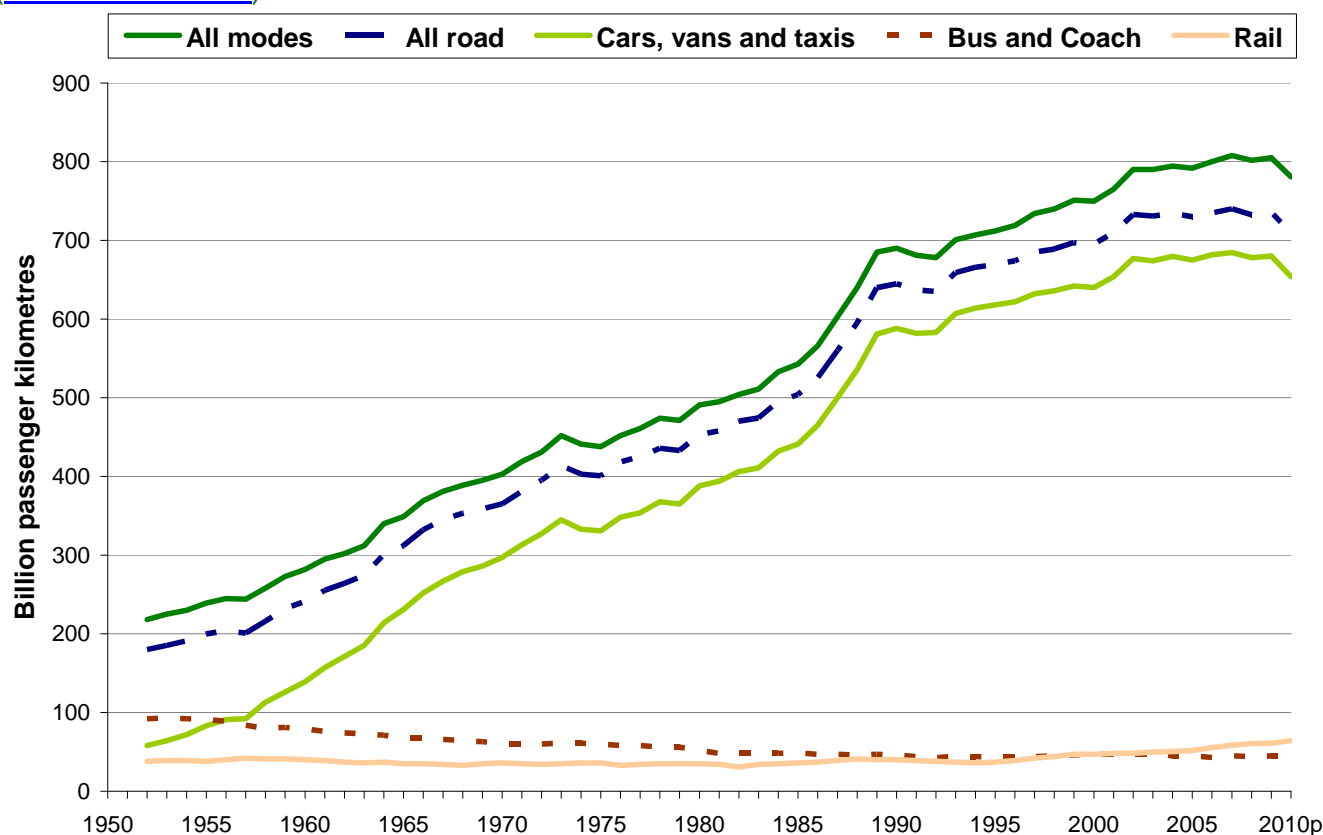
### Modal Comparisons includes:

- Passenger Transport including a range of tables on modes of travel, distance travelled, journeys, casualty rates and overseas travel.
- Employment in transport and transport related industries.
- Household and Government expenditure on transport.
- General information on transport costs based on the Retail and Consumer Prices Indices

## Passenger transport

### Passenger Transport by Mode: 1952 to 2010

([Table TSGB0101](#))

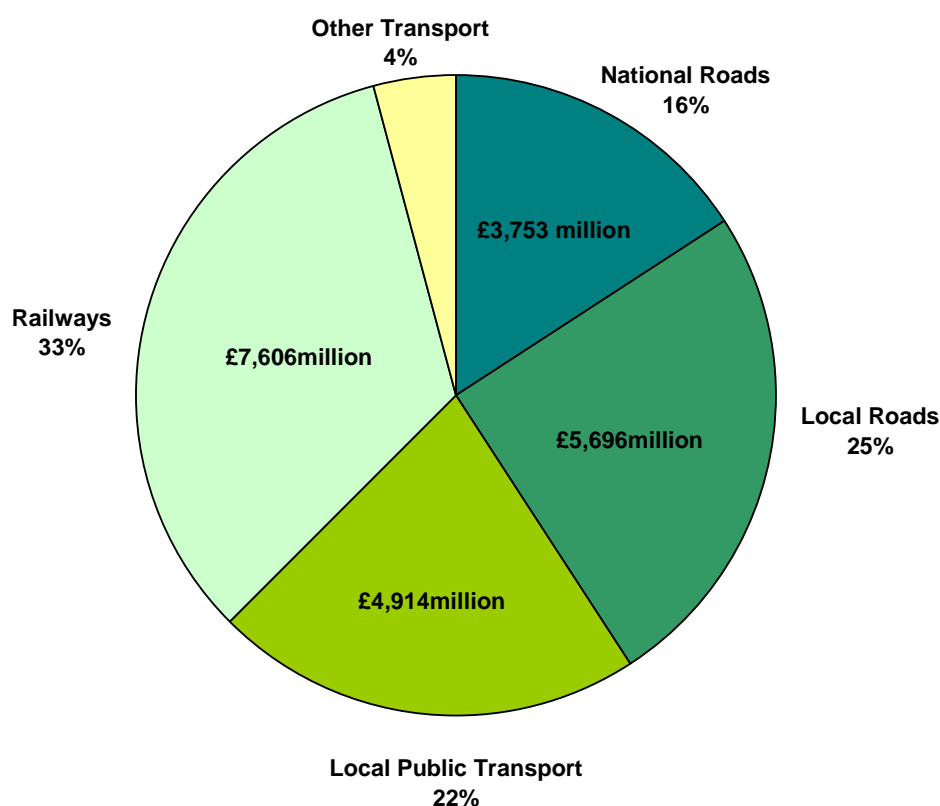


- Over the long term there has been an increase in the distance travelled by all modes driven mainly by an increase in the distance travelled by road, and in particular by cars, vans and taxis although there was a fall in 2010.
- In addition, the proportion of travel by cars, vans and taxis rose from just over a quarter from 1952 to a peak of nearly ninety per cent in the early 1990s and has remained almost at those levels since then.

## Government expenditure on transport

### Breakdown of public sector expenditure on transport in the UK by mode in 2010/11

([Tables TSGB0117 to TSGB0120](#))

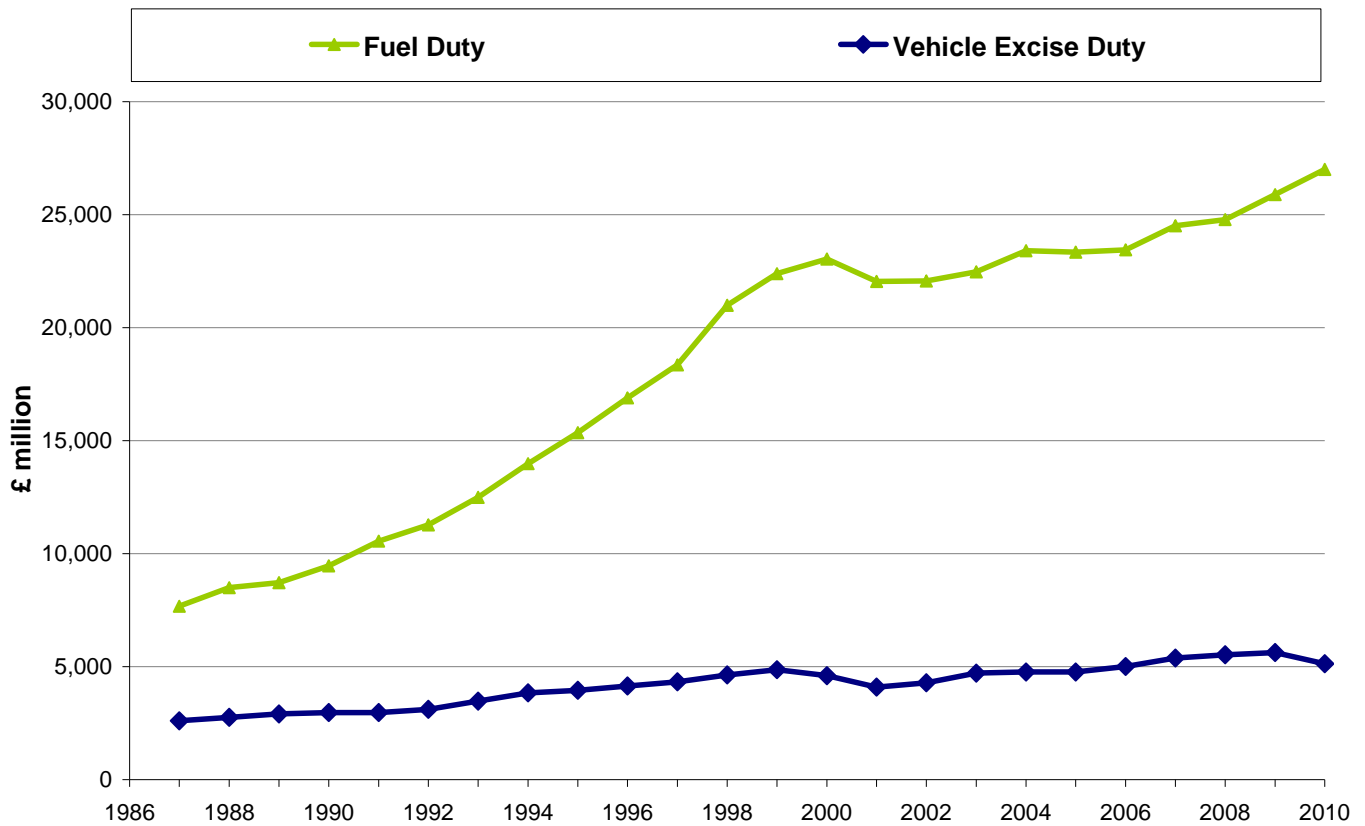


- Total public spending on transport in the United Kingdom, including capital spending by public corporations, in 2010/11 was £22.9 billion.
- Of this about one third was on railways, including tubes, and about a quarter on local roads. This rises to 41 per cent when expenditure on both national and local roads is included.
- Of government expenditure about 45 per cent is spent directly by central government (excluding grants to local government), 48 per cent by local government and 8 per cent by public corporations.

## Government revenue from taxes on motoring

### Government Revenues from Vehicle Excise Duty and Fuel Duty: 1987 to 2010

([Table TSGB0125](#))

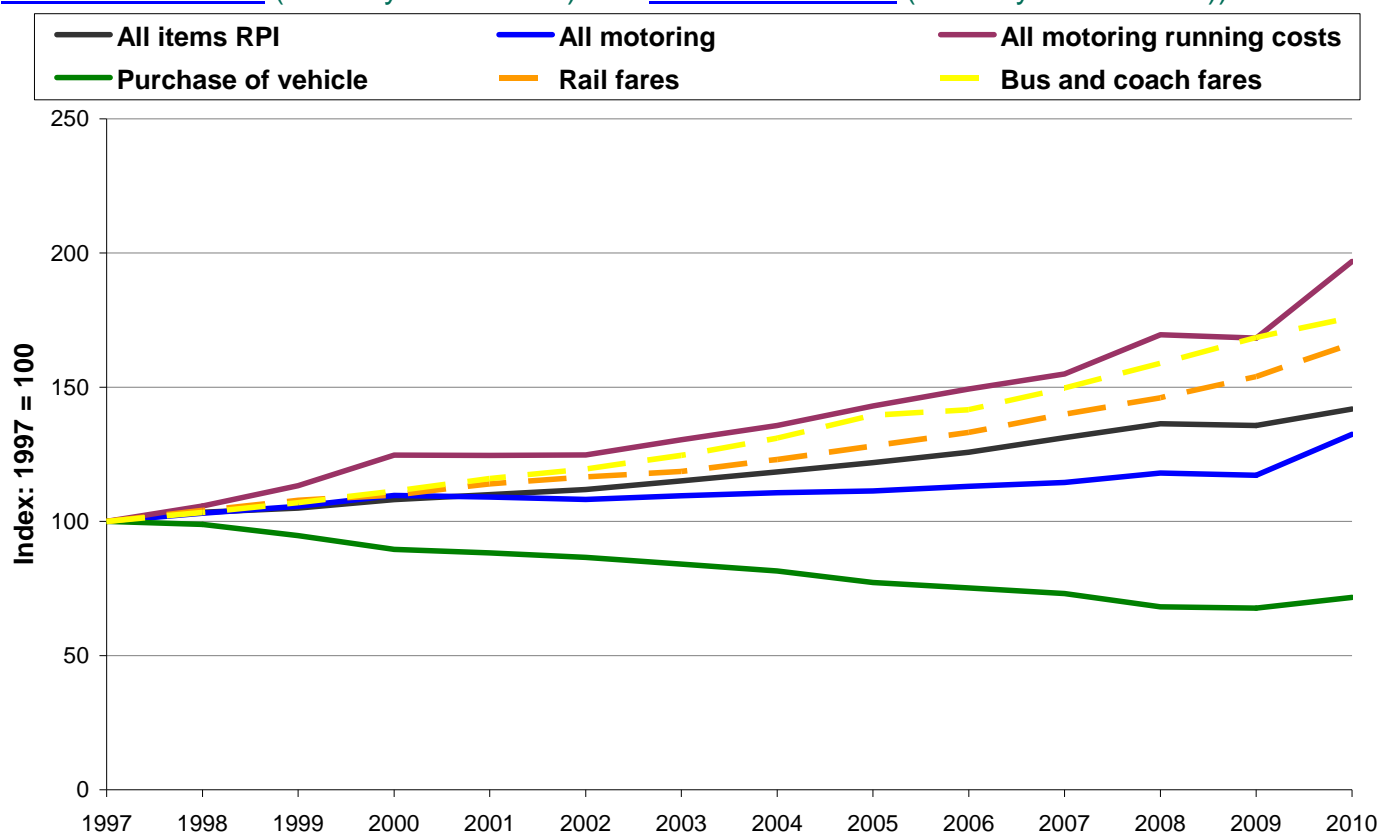


- Vehicle Excise Duty revenues have almost doubled between 1987 and 2010 whereas the increase in the revenue from fuel duty has more than tripled.
- Over the same period the RPI has more than doubled.

## The cost of transport

### Changes in the cost of living and in the cost of transport: 1997 to 2010

([Tables TSGB0122](#) (formerly TSGB0119) and [Table TSGB0123](#) (formerly TSGB 0120))



- The overall cost of motoring (including purchase, petrol & oil and tax & insurance) has only risen slowly, although there was a larger increase in 2010, and more slowly than the increase in the cost of living as measured by the all items Retail Prices Index (RPI). However when the purchase of vehicle is removed, motoring running costs have risen faster than the RPI.
- Public transport fares have risen faster than the RPI.

Detailed statistics (tables and charts) on “modal comparisons” can be found on the [Transport Statistics Great Britain Modal Comparisons web page](#).

### Background notes

Full guidance on the methods used to compile these statistics and their sources can be found in the [Modal Comparisons Notes and Definitions](#).

## Aviation

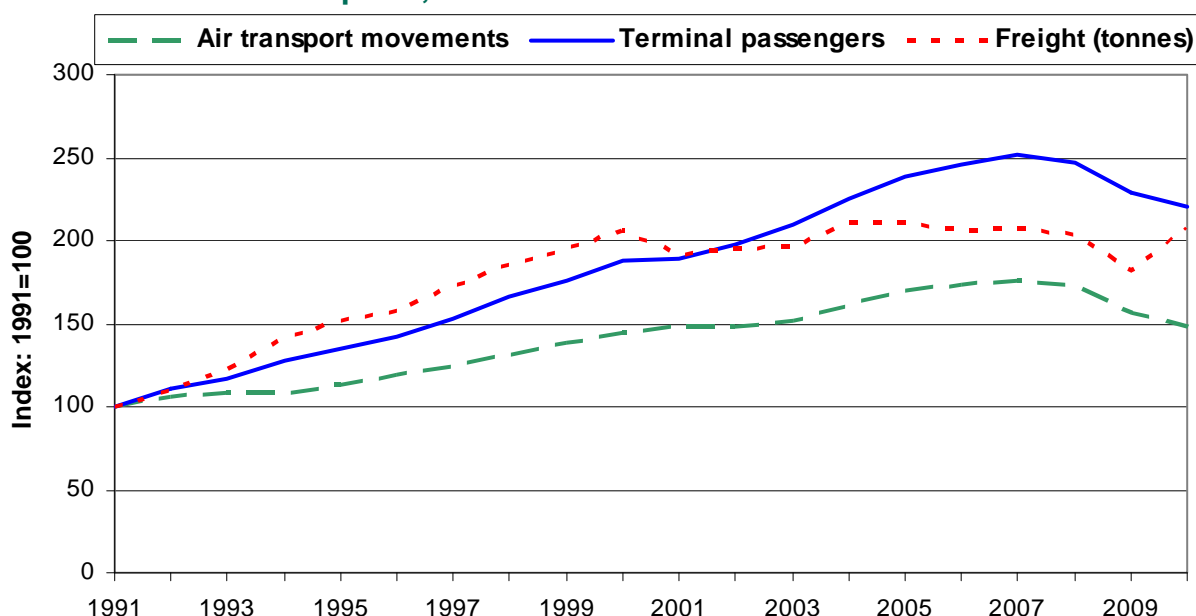
### Key trends

- There were nearly 211 million **terminal passengers** at UK airports in 2010, a fall of 3% since 2009 and 12% since the peak in 2007. This is the first time passenger numbers have fallen in 3 consecutive years, although most of the fall in 2010 is attributable to the volcanic ash, strikes and severe winter weather. In the months unaffected by these events, passenger numbers were similar to 2009, suggesting the underlying demand was broadly flat.
- There were 2 million **air transport movements** (take-offs and landings) in 2010, 6% fewer than in 2009. **Freight** handled at UK airports increased by 14% to 2.3 million tonnes, following a sharp fall in 2009.

#### Aviation includes information on:

- Activity at UK airports.;
- Activity of UK airlines;
- Major international airports and airlines;
- Casualties and incidents

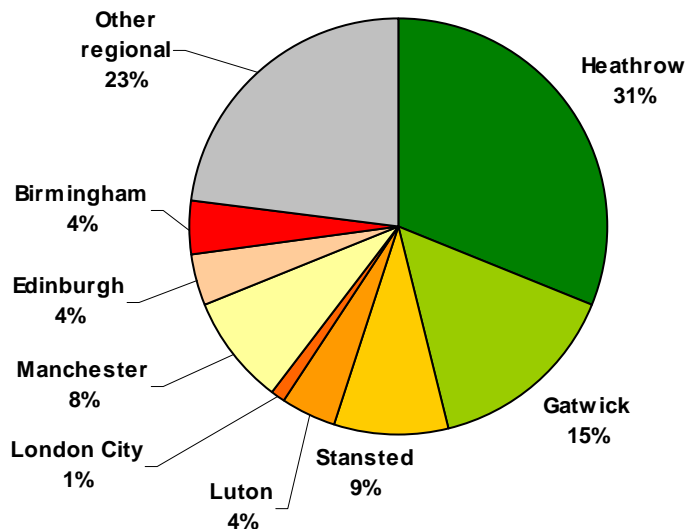
### Trends in air traffic at UK airports, 1991 to 2010



- The number of terminal passengers on **domestic services** peaked in 2005 at 24.7 million and has since fallen by 23% to 19 million in 2010 (excluding double counting at domestic airports). The number of terminal passengers on **international services** peaked two years later, in 2007, and has since fallen by 10% to 172.6 million in 2010.

## UK Airports

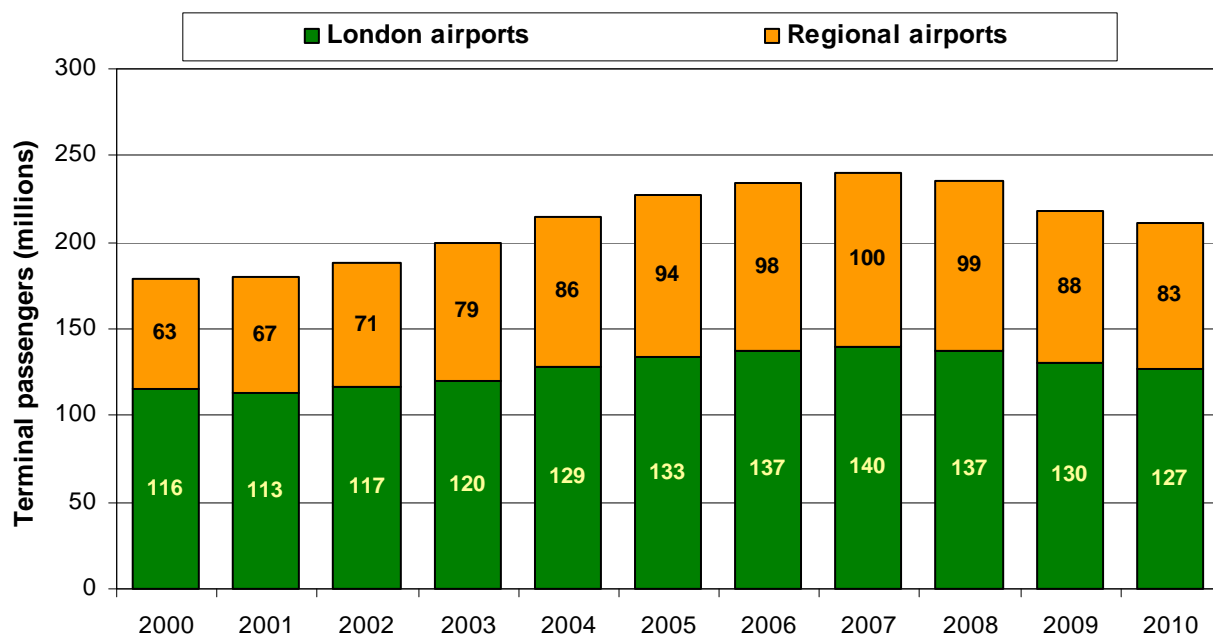
### Terminal passengers by airport, 2010



- In 2010, **Heathrow** was the UK's busiest airport, handling 22% of air transport movements, 31% of terminal passengers and 63% of freight tonnes.
- Worldwide, **Heathrow** had the largest number of terminal passengers on international flights in 2010 at 61 million, followed by Paris Charles de Gaulle (53 million) and Hong Kong International (50 million). In terms of total terminal passengers (domestic and international), Heathrow was the fourth largest airport in 2010 after Atlanta, Beijing and Chicago.

- In 2010, the five **London airports** accounted for 60% of all terminal passengers at UK airports, down from 65% in 2000.
- Between 2000 and 2010 overall terminal passenger numbers increased by 32% at the **regional airports** compared with 10% at the five London airports. However, regional airports experienced a proportionally larger fall since the peak in 2007 at 17% compared with a 9% fall at the London airports.

### Number of terminal passengers at London and regional airports<sup>1</sup>, 2000 to 2010



<sup>1</sup> 'London airports' covers Heathrow, Gatwick, Stansted, Luton and London City; 'regional airports' covers all other UK airports.

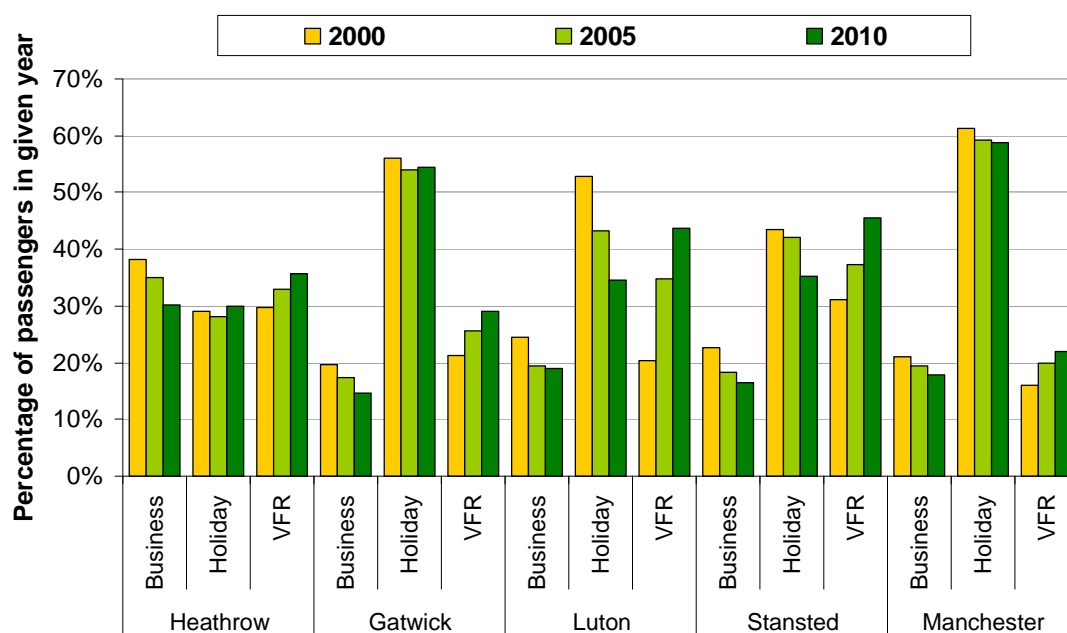
The CAA collects data on **punctuality** from 10 major UK airports<sup>2</sup>.

- In 2010, the average delay per movement was 17.7 minutes. The average delay was higher for charter flights (32 minutes) than for scheduled flights (17 minutes).
- Punctuality worsened in 2010 compared with 2009 at each of the 10 airports for which figures are collected.

## Flight and passenger characteristics

- In 2010, 71% of **international passenger movements** at UK airports were to/from European origins/destinations. The most common country of origin/destination for terminal passengers at UK airports in 2010 was Spain (including the Canary Islands), which accounted for 17% of all international passenger movements. The USA was second, accounting for 9% of international passenger movements in 2010; this share has fallen from 13% in 2000.
- In 2010, visiting friends and relatives (VFR) was the most common **purpose of travel** at Heathrow, Stansted and Luton. The proportion of passengers who are visiting friends/relatives has increased over the last decade at all 5 of the main UK airports.

## Purpose of travel at selected airports, 2000, 2005 and 2010



Information on how passengers **travel to airports** is available from the CAA passenger survey.

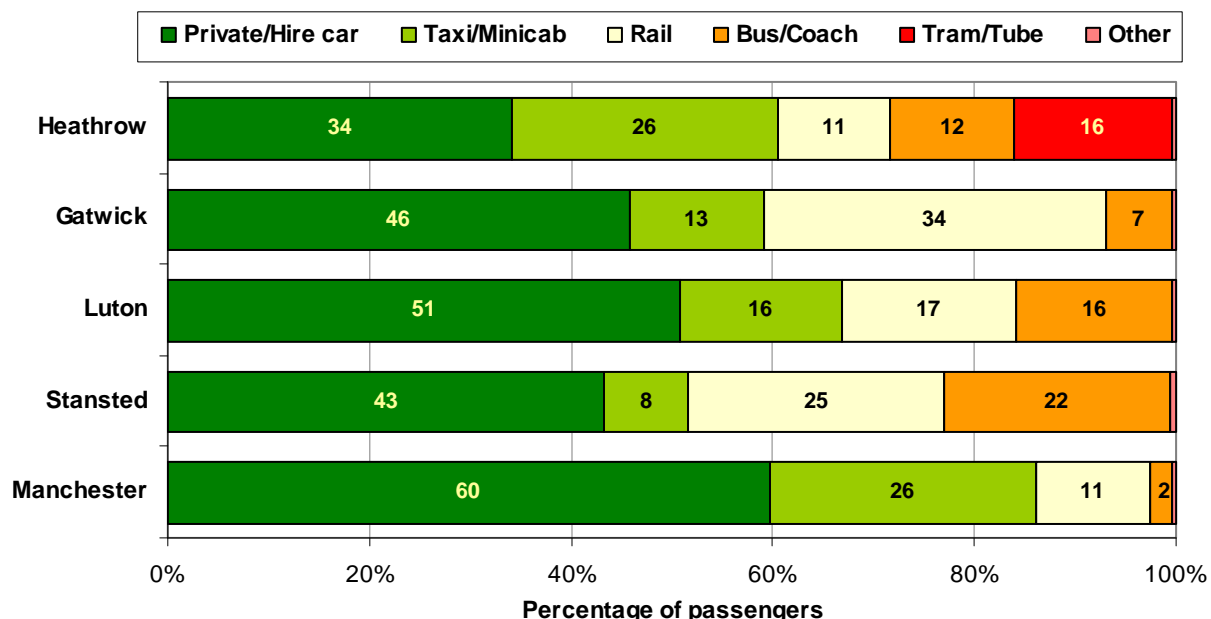
- Among the five airports<sup>3</sup> which are surveyed each year, the proportion of passengers travelling to the airport by private or hire car in 2010 ranged from 34% at Heathrow to 60% at Manchester. Between 2000 and 2010, the proportion travelling by private/hire car fell from 56% to 43% at Stansted and from 68% to 51% at Luton. The proportion also fell at Heathrow and Gatwick but remained about the same at Manchester.

<sup>2</sup> Heathrow, Gatwick, Stansted, Luton, London City, Manchester, Birmingham, Glasgow, Edinburgh, Newcastle

<sup>3</sup> Heathrow, Gatwick, Stansted, Luton, Manchester

- Use of taxi/minicab is relatively high at Heathrow and Manchester (26%) while travel by rail is relatively high at Gatwick (34%) and Stansted (25%).

### Mode of transport to selected airports, 2010



### UK Airlines

- In 2010 **Easyjet** uplifted more passengers than **British Airways** (42 million and 30 million respectively) but British Airways accounted for more than twice as many passenger km as Easyjet (105 billion and 49 billion respectively).
- In 2009, around 74,000 people were employed by UK airlines worldwide. This is a fall of 20% since 2000 and a fall of 6% since 2009.

### Accidents and incidents

- There were 43 **casualties** caused by accidents involving UK aircraft in UK airspace in 2010. This is half the number recorded in 2009, although the time series is volatile due to the small numbers involved. Of these casualties, 8 (19%) were fatal.
- There were 167 **aircraft proximity incidents** in 2010. Around a fifth (21%) of these incidents involved commercial air transport compared with half (50%) in 2000.

Detailed statistics on “Aviation” can be found on the [Transport Statistics Great Britain Aviation web page](#), table numbers AVI0101 to AVI0402.

### Background notes

1. Full guidance on the methods used to compile these statistics and their sources can be found in the Transport Statistics Great Britain 2011 Notes and Definitions.





## Energy and environment

### Transport energy consumption

([Table ENV0102](#))

- In 2010, transport accounted for 39% of all final energy consumption in the UK. Road transport accounted for 27% of final energy consumption with aviation accounting for 8%.
- The direct use of petroleum accounted for 97% of transport energy consumption.
- Energy from renewable sources made up around 2.1% of transport energy consumption in 2010 up from 0.1% in 2005.
- Almost all transport renewable energy consumption is in the form of biofuels blended into petrol and road diesel. Biofuels made up 3.0% of road transport energy consumption in 2010, up from 0.2% in 2005.

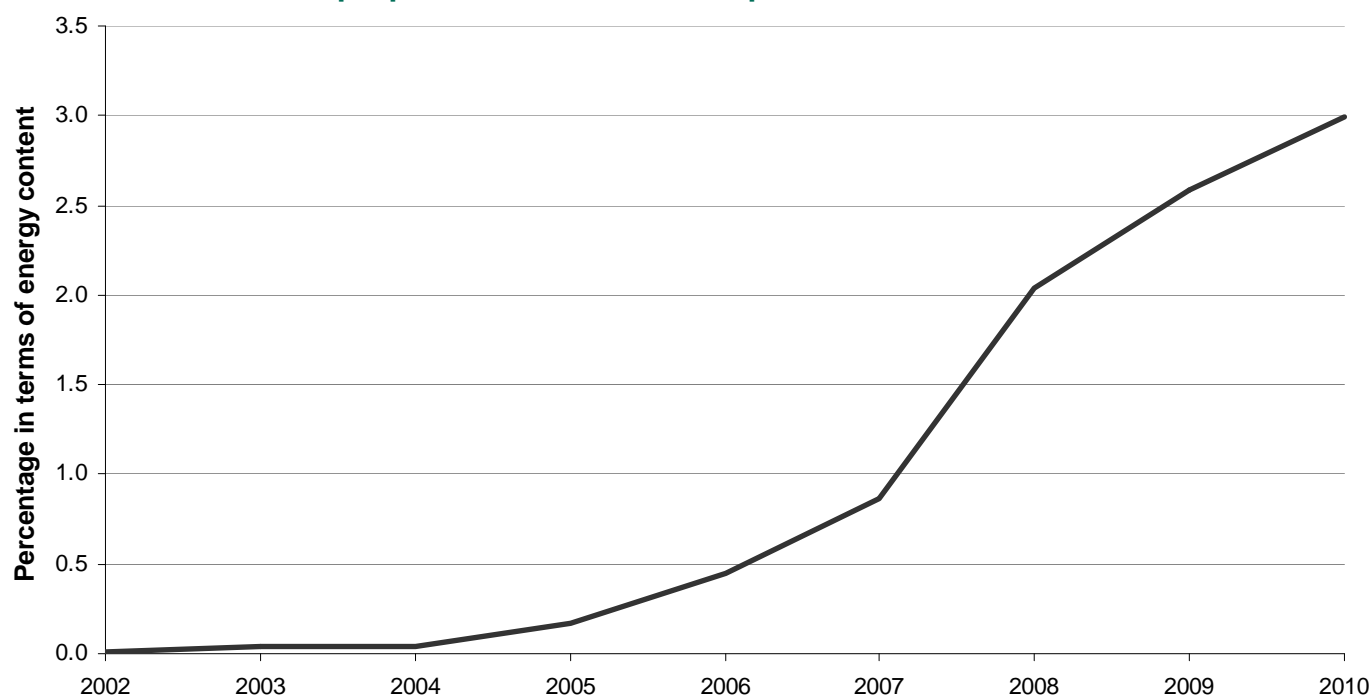
#### This summary contains information on:

- Transport energy consumption;
- Greenhouse gas emissions from transport;
- Air pollutant emissions from transport.

Detailed statistics (tables and charts) can be found in the [Energy and environment web tables](#).

Background on the data sources for each table can be found in the [Energy and environment notes and definitions](#).

### Chart 1 – Biofuels as a proportion of all road transport fuels 2002 – 2010



### Background notes

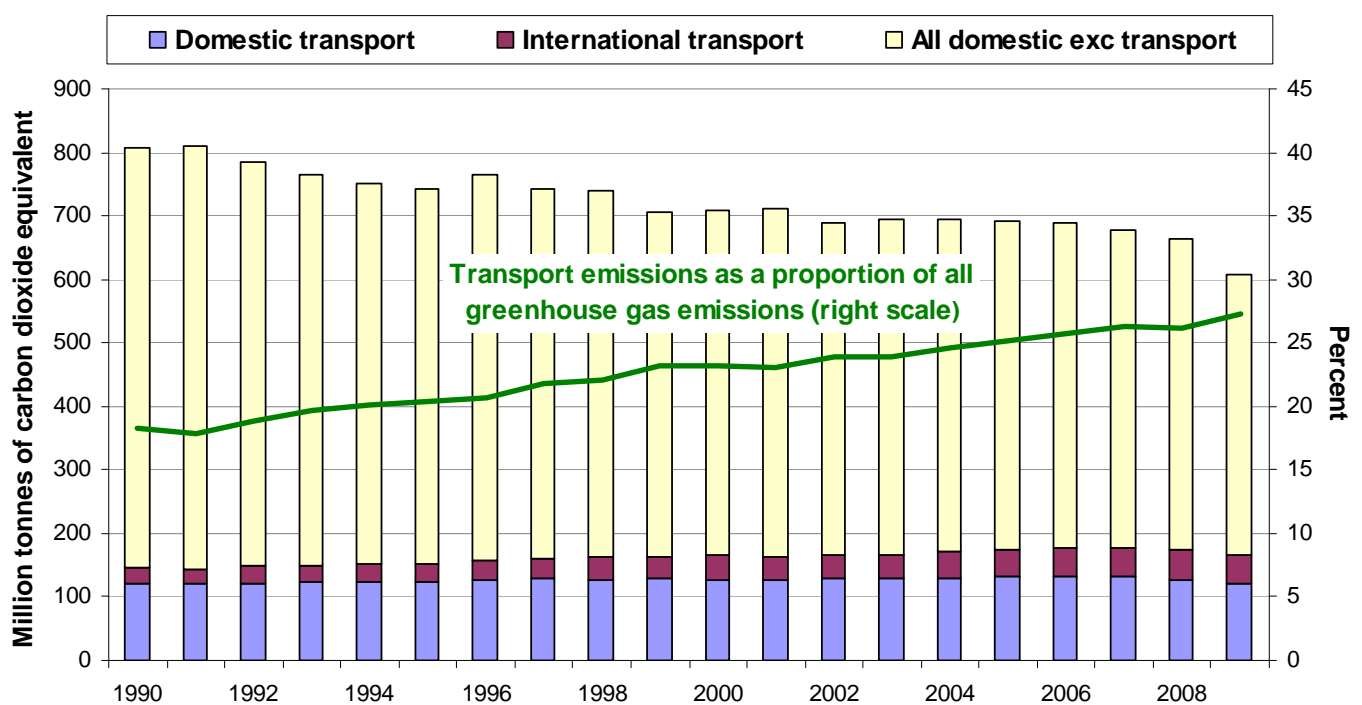
More information on UK energy consumption can be found in the [Digest of UK Energy Statistics \(DUKES\)](#).

## Greenhouse gas emissions ([Table ENV0201\(a\)](#))

There is no internationally agreed way of allocating emissions from international transport to individual nation states. However emissions from international shipping and international aviation based on estimated fuel consumption from UK fuel bunkers can be added to the domestic emissions to give a UK total.

- Between 1990 and 2009 greenhouse gas (GHG) emissions from transport (shown by the bottom two bars in chart 2) have increased by 13% whilst total GHG emissions have fallen by 25% over the same period. As a result, as a proportion of total GHG emissions, transport emissions have risen from 18% in 1990 to 27% in 2009, as shown by the line in chart 2 below.

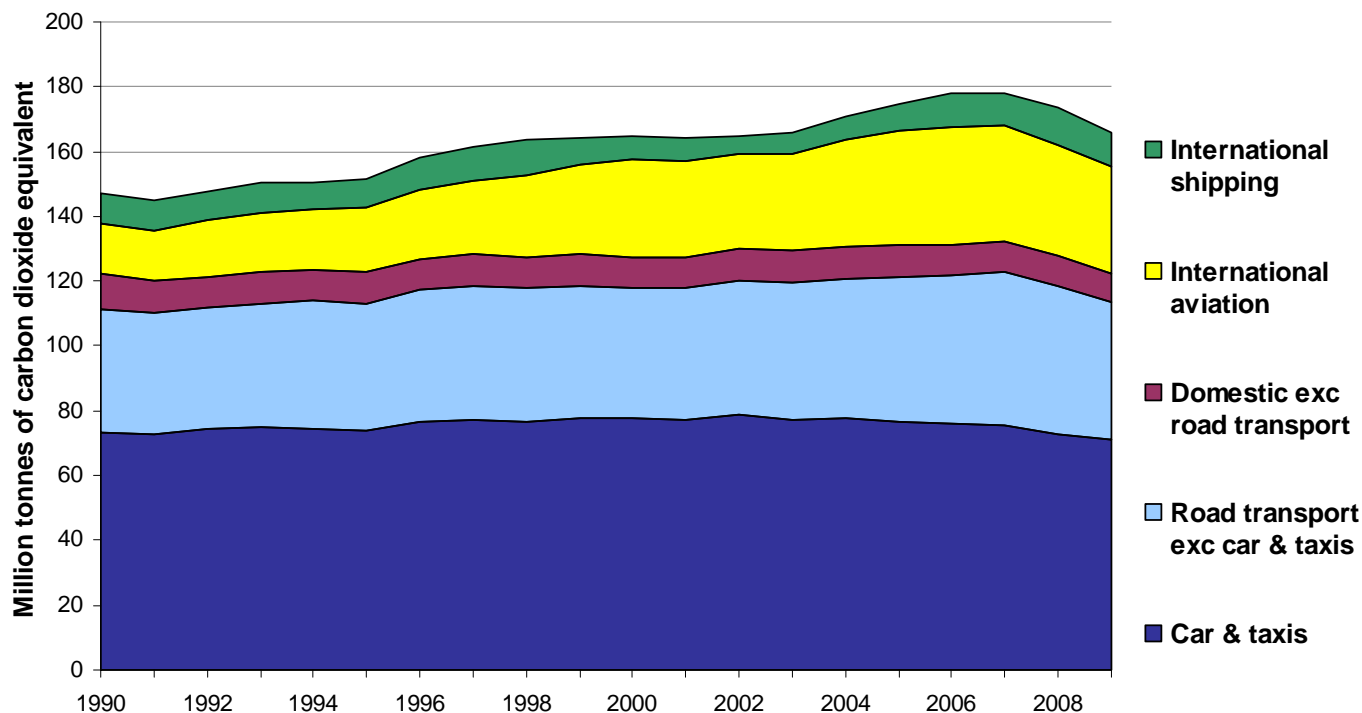
**Chart 2 - UK greenhouse gas emissions, 1990 – 2009**



- Emissions from international transport (shown by the middle bars in chart 2) have grown by 75% between 1990 and 2009. As a proportion of total GHG emissions, international transport emissions have risen from 3% in 1990 to 7% in 2009.

- Road transport made up 68% of total GHG emissions from transport in 2009. However most of the growth in total transport GHG emissions since 1990 is attributable to growth in international air travel. Emissions from international aviation in 2009 were more than double 1990 levels (a 110% increase). Emissions from international aviation made up a fifth (20%) of total transport GHG emissions in 2009.

**Chart 3 - UK transport greenhouse gas emissions by mode, 1990 – 2009**

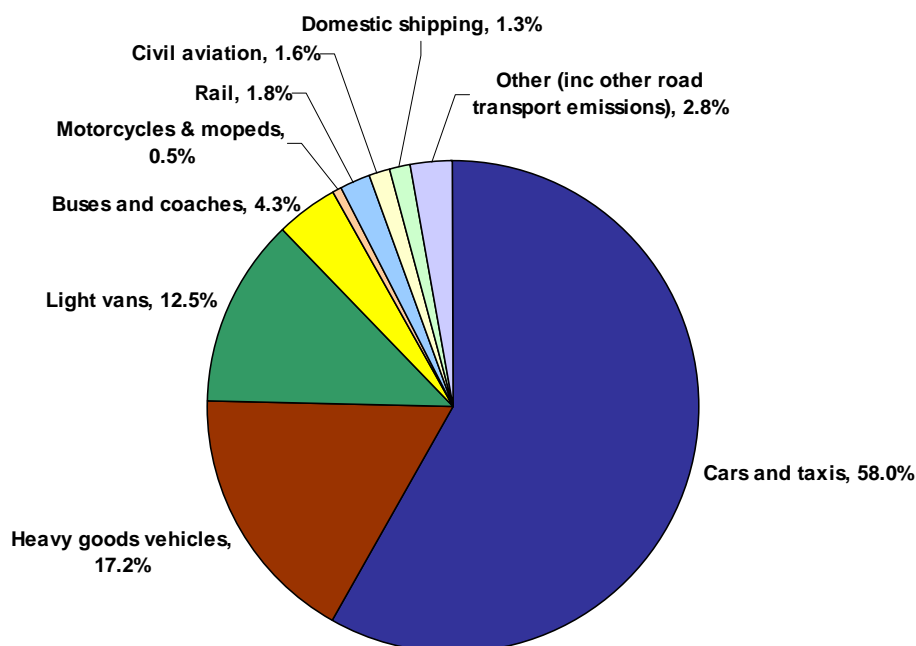


### Domestic greenhouse gas emissions ([Table ENV0201\(a\)](#))

- Domestic greenhouse gas (GHG) emissions from transport (shown by the bottom bars on chart 2) were around the same level in 2009 (122.2MtCO<sub>2</sub>e) as in 1990 (122.1MtCO<sub>2</sub>e). Domestic emissions from all other sources (shown by the top bars on chart 2) fell by 33% over the same period. As a result emissions from domestic transport increased as a proportion of all domestic GHG emissions, from 16% in 1990 to 22% in 2009.
- Domestic transport GHG emissions grew by 8% between 1990 and 2007, with continual improvements in the fuel economy of new cars slightly offset by continuing growth in road traffic volumes. This was followed by a fall of 8% between 2007 and 2009.

- Road transport makes up just over 90% of all domestic transport emissions, with car travel accounting for over a half (58%) and heavy goods vehicle and light van traffic accounting for just under a third (30%) in 2009.

**Chart 4 - UK domestic transport greenhouse gas emissions, 2009**



- The falls in road traffic volumes during the recession are likely to have been the main driver of the 8% fall in domestic transport GHG emissions between 2007 and 2009. The other key factor was improvements in car fuel economy. Continual improvement in new car fuel economy over time has meant that older less efficient cars have been replaced by increasingly more efficient new cars. This is likely to be the key reason for the decreases in car traffic GHG emissions since 2002 despite growth in car traffic volumes.
- Increases in biofuels as a proportion of all transport fuels (see chart 1) have also contributed to the fall in domestic transport GHG emissions between 2007 and 2009. CO<sub>2</sub> emissions from the combustion of biofuels are not included in the GHG emission figures, in line with international guidelines. These CO<sub>2</sub> emissions are offset by the CO<sub>2</sub> absorbed in the growth of the crops which the biofuels are produced from.

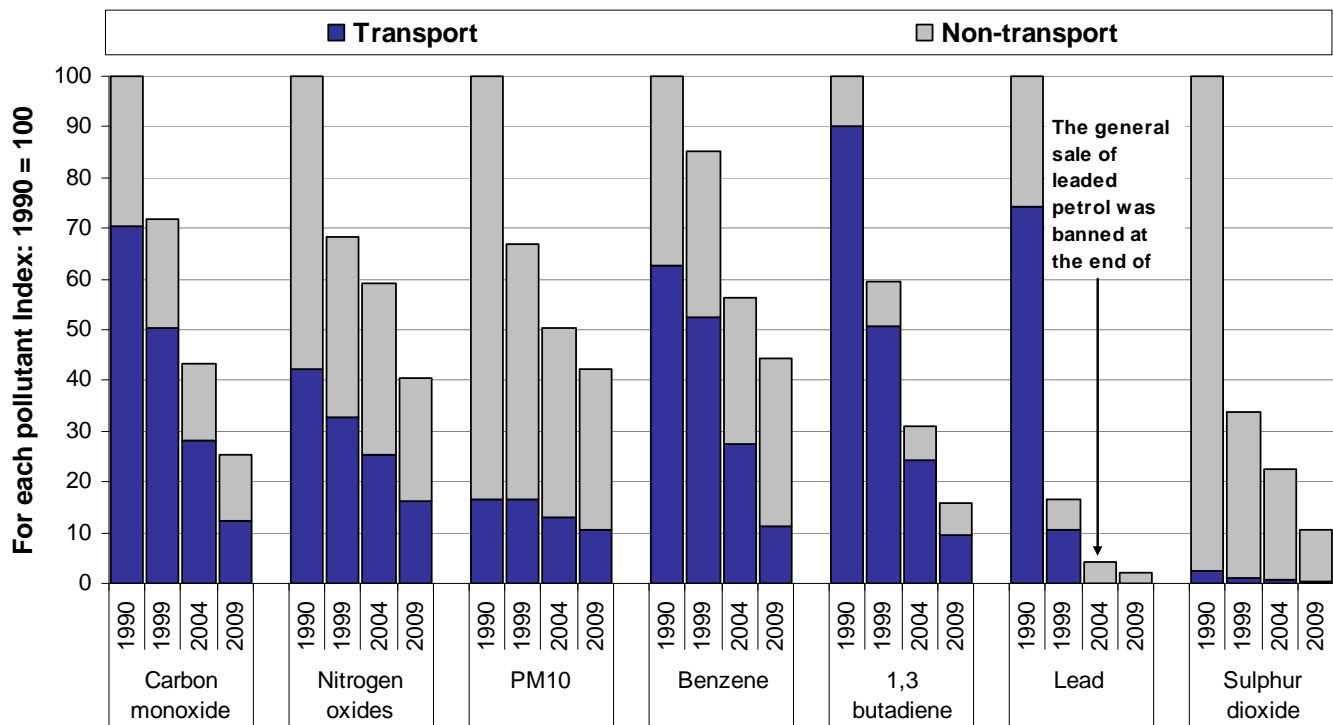
### Background notes

1. More information on greenhouse gases emissions can be found on the [DECC Greenhouse gas emissions webpage](#).
2. More data on UK greenhouse gas emissions can be found on the [DECC 2009 Final 2009 Greenhouse Gas Emissions webpage](#).

## Air pollutant emissions from transport ([Table ENV0301](#))

Local air pollutants need to be controlled to reduce risks to health, the environment and quality of life. As is the case with greenhouse gas emissions, emissions from road transport accounts for the majority of air quality pollution from transport. Air pollutant emissions from transport have fallen considerably since 1990, mainly as a result of cleaner road vehicles and road fuels.

**Chart 5 - UK air pollutant emissions: 1990, 1999, 2004 and 2009**



- Carbon monoxide reduces the oxygen carrying capacity of blood. Emissions from transport have fallen by 82% since 1990.
- Nitrogen oxides are acid gases and can affect human health and vegetation. They also contribute to the formation of ground level ozone which can trigger a range of health problems and damage vegetation. Nitrogen oxide emissions from transport have fallen by 61% since 1990.
- Benzene and 1,3 butadiene are also involved in the formation of ground level ozone and can cause a range of adverse health effects. They are also carcinogenic. Transport emissions of these pollutants have fallen by 82% and 89% respectively.

### Background notes

More data and information about air pollutant emissions can be found on the [Defra Air Quality Statistics web page](#).



## Freight

This section contains data relating to trends in the methods used to transport goods around Great Britain and the type of goods that are being transported. It also considers the efficiency of the road freight industry, which is responsible for the majority of tonnage delivered.

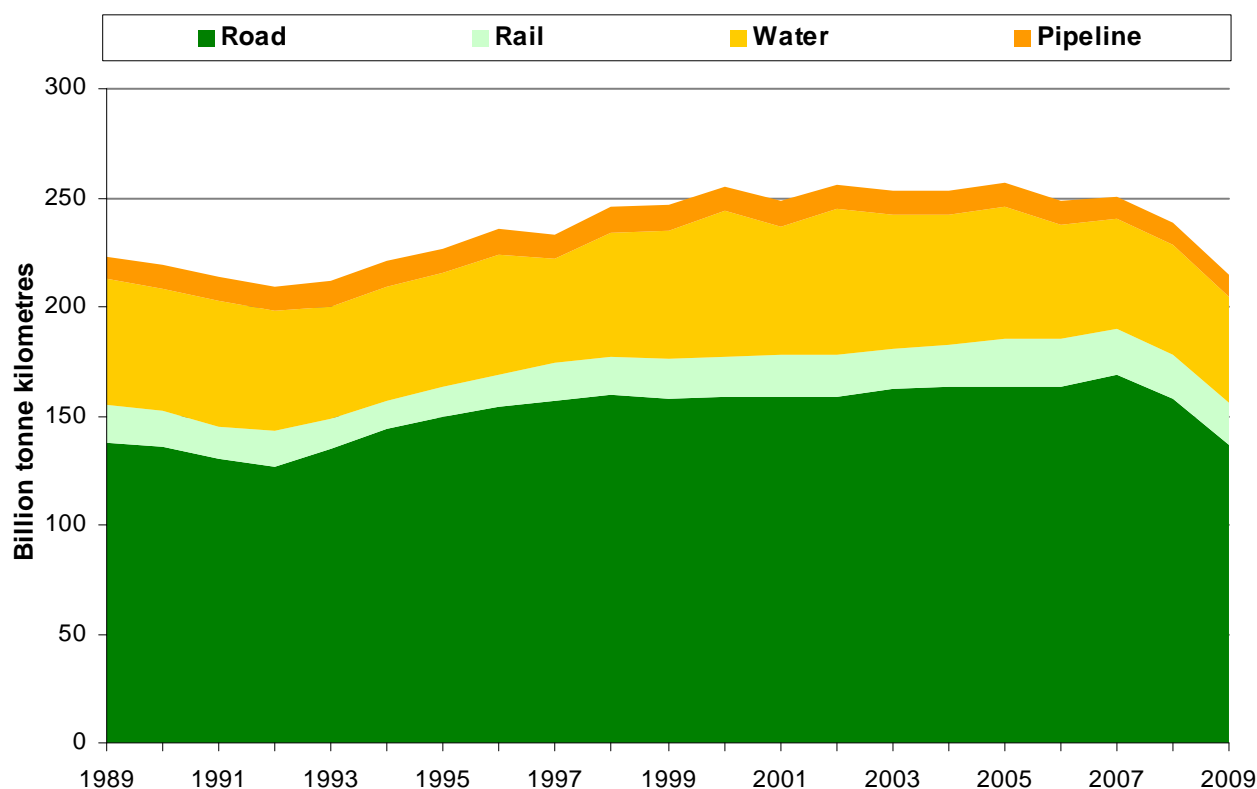
### Freight includes:

- Domestic freight moved by different modes, including road, rail, water and pipelines.
- Goods lifted and moved by foreign-registered and Great Britain-registered HGVs.
- Freight train movements and the impact on road haulage.
- Roll on/Roll off ferry and Channel Tunnel traffic.

## Overall freight levels by mode

**Chart 1: Domestic freight moved by mode: 1989 to 2009, Great Britain**

([Table TSGB0401](#))



Sources: Department for Transport; Office of Rail Regulation; Department of Energy and Climate Change

- In 2009, the level of domestic freight was at broadly the same level as in 1991, at around 215 billion tonnes kilometres (**Chart 1**).

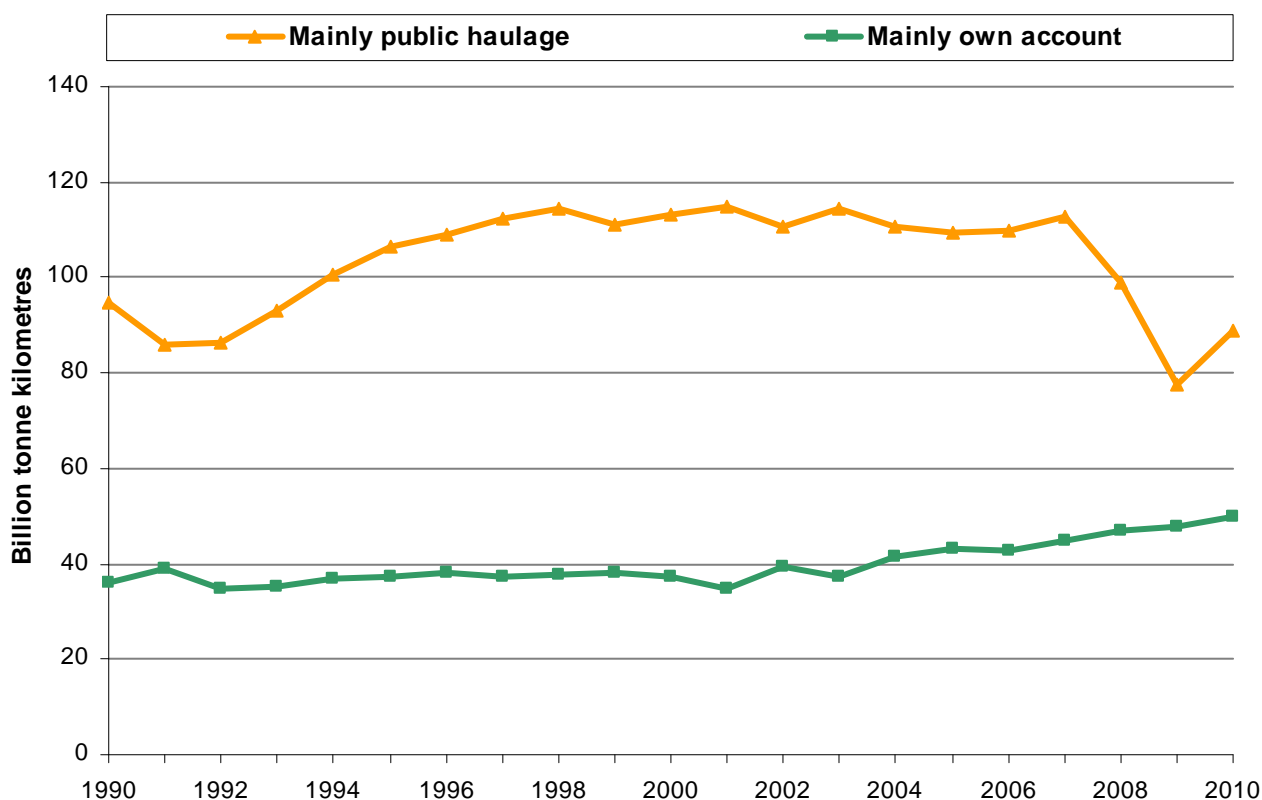
- Since the late-1980s, more than 60 per cent of goods have been moved by road, although the amount of goods moved by road decreased by 13 per cent between 2008 and 2009 to 137 billion tonnes kilometres and rose to 151 billion tonne kilometres in 2010.
- Goods moved by rail account for around 9 per cent of all goods moved. In recent years, rail freight has also accounted for around 5 per cent of goods lifted, compared with 9 per cent in 1980/81.
- Goods moved by pipeline have remained fairly stable over the last 25 years, at around 11 billion tonne kilometres.

## Domestic road freight activity by British and foreign-registered HGVs

- Domestic road freight activity is split between own account and public haulage operators. Between 2009 and 2010 the amount of goods moved by own account and public haulage operators rose (by 5 per cent and 15 per cent respectively)

**Chart 2: Domestic freight moved by GB-registered goods vehicles over 3.5 tonnes, by mode of working: 1990–2010**

([Table TSGB0407](#))



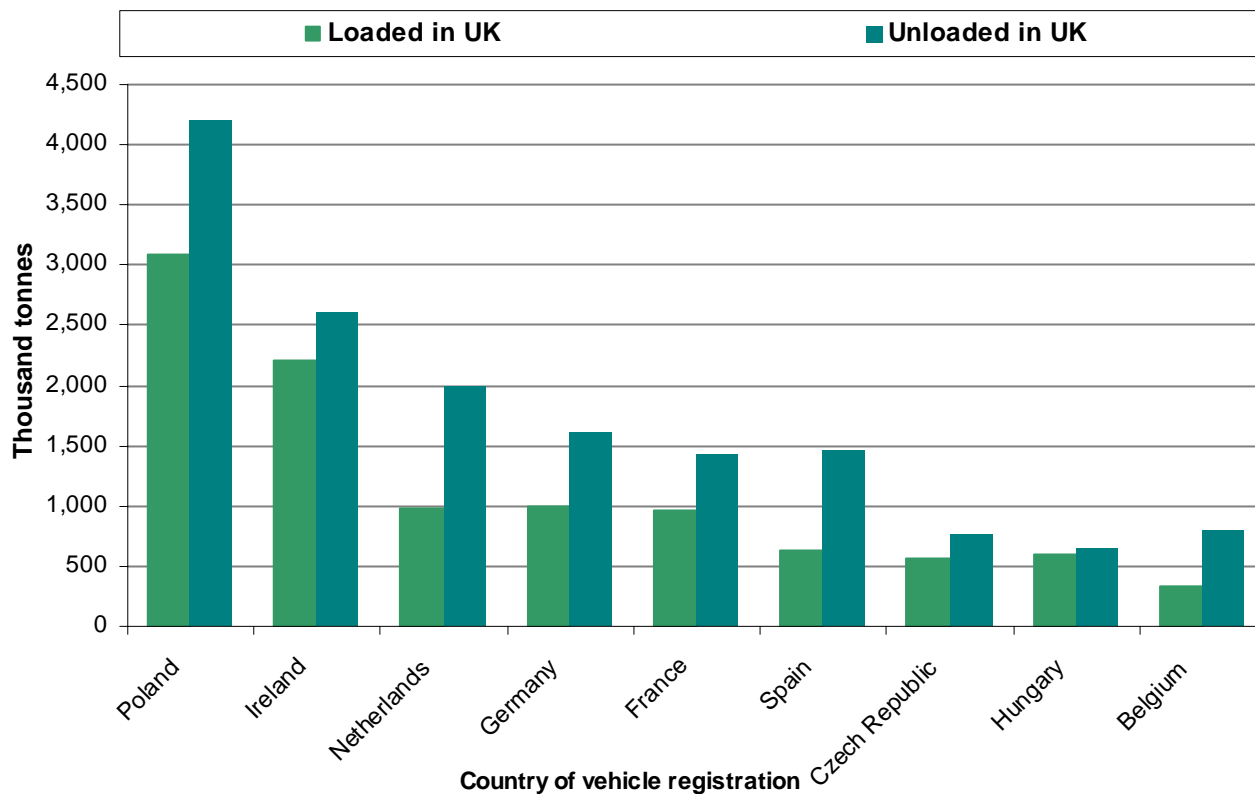
Source: Continuing Survey of Road Goods Transport Great Britain, Department for Transport

- The amount of goods moved by public haulage in 2010 was at a level similar to that in 1992, but the level of goods moved by own account hauliers was at its highest level over the same period (**Chart 2**).

- Information compiled by Eurostat on the amount of international road haulage carried out by foreign HGVs show that, in 2010, foreign-registered HGVs loaded 12.4 million tonnes of goods and unloaded 18.6 million tonnes of goods in UK (**Chart 3**).

### Chart 3: Goods loaded or unloaded in the UK by foreign-registered goods vehicles over 3.5 tonnes: 2010

(Tables [TSGB0413](#) and [TSGB0414](#))



Source: Eurostat

- Significant contributors to these totals include Polish vehicles, that loaded 3.1 million tonnes and unloaded 4.2 million tonnes, and vehicles from the Republic of Ireland that loaded 2.2 million tonnes and unloaded 2.6 million tonnes in the UK.

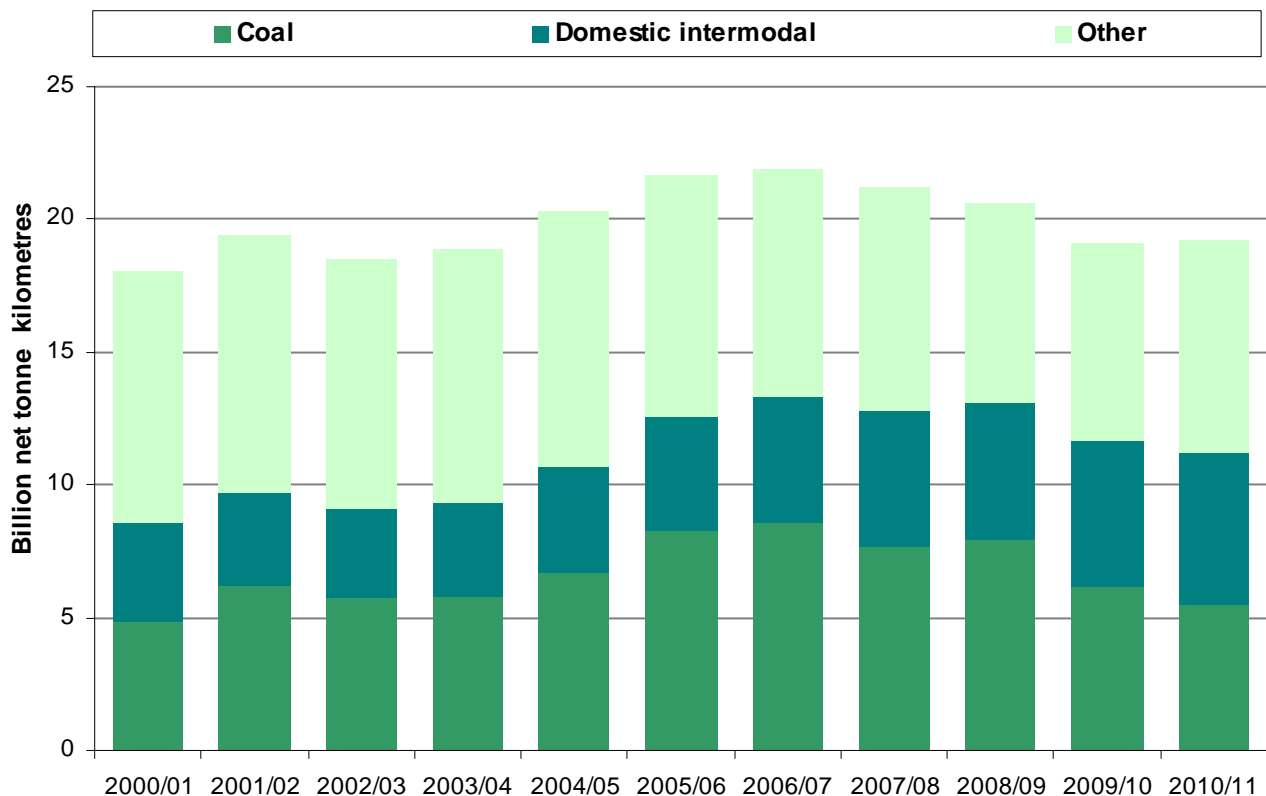
### Rail freight activity

- Goods moved by rail had declined in the three years to 2009/10. The amount of freight moved in 2009/10 was 19.1 billion net tonne kilometres, a 7.6 per cent decrease from 2008/09. However, there was a slight increase to 19.2 billion net tonne kilometres moved by rail in 2010/11.
- In 2010/11, coal and domestic intermodal commodities accounted for nearly 60 per cent of goods moved by rail.



**Chart 4: Goods moved by rail, by commodity: 2000/01 to 2010/11**

([Table TSGB0422](#))



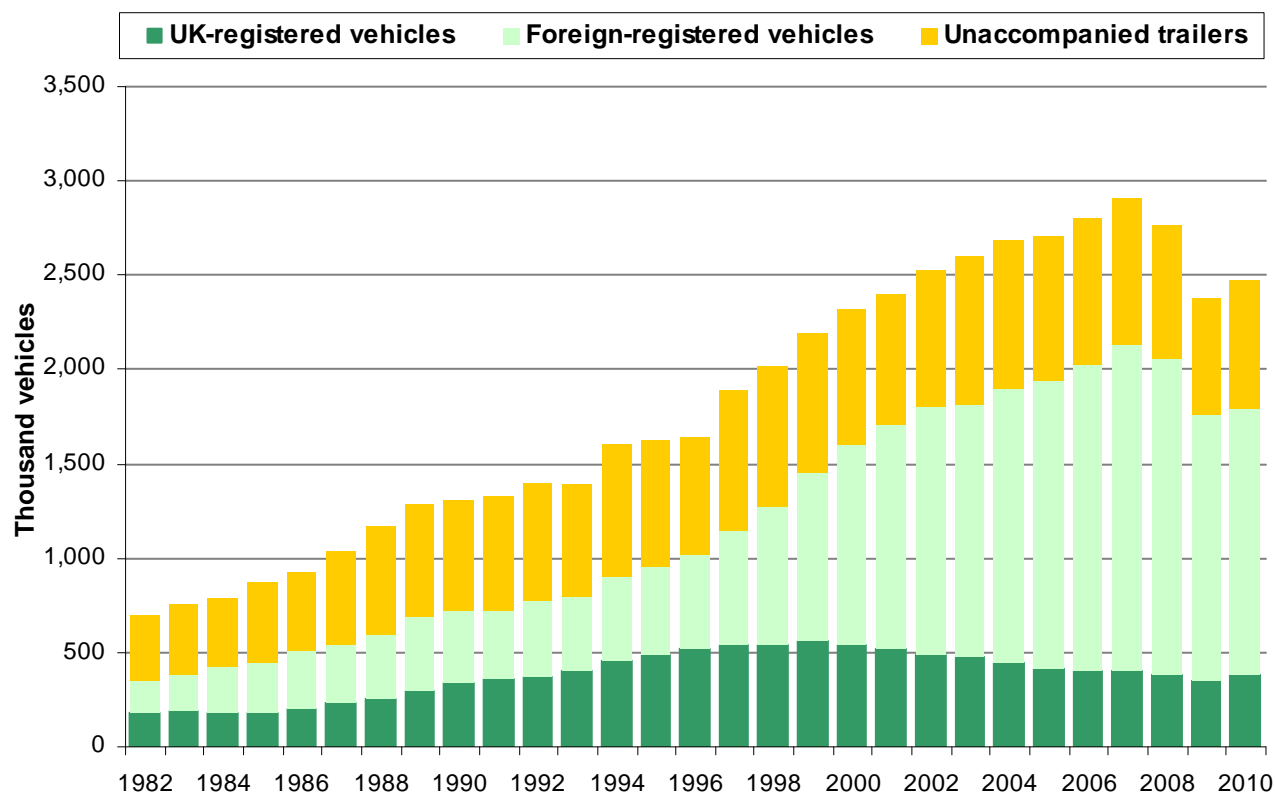
Source: Office of Rail Regulation

- The weight of goods lifted by rail has fallen by 42 per cent since 1980/81, from 154 to 90 million tonnes. However, between 2009/10 to 2010/11 there was a 3 per cent increase in goods lifted by rail.

## Road goods vehicles travelling to mainland Europe

- In 2010, 2.47 million goods vehicles travelled from Great Britain to mainland Europe, 4 per cent higher than the 2009 total and 76 per cent higher than in 1992.
- This figure was made up of 1.79 million powered vehicles, up 2 per cent from 2009 and up 133 per cent from 1992, and 673 thousand unaccompanied trailers, up 10 per cent from 2009 and up 7 per cent from 1992.
- Of the powered goods vehicles 21 per cent (379 thousand) were UK-registered, a small rise on the 2009 share of 20 per cent.
- Since the early 1990s there has been a significant rise in the number of foreign registered goods vehicles, from 394 thousand in 1992 to 1.4 million in 2010.
- Of these foreign registered goods vehicles the majority were from Poland (250 thousand), followed by the Netherlands (194 thousand) and Germany (152 thousand).

**Chart 5: Roll-on/Roll-off ferry and Channel Tunnel traffic: 1982 to 2010, Great Britain**  
(Tables [TSGB0425](#) and [TSGB0426](#))



Source: Road goods vehicles travelling to mainland Europe survey, Department for Transport

## Background notes

Full guidance on the methods used to compile these statistics and their sources can be found in the [Freight Notes and Definitions](#).



## Maritime

This section contains statistics relating to maritime and inland waters transport.

More details are available via the [Ports series page](#) on the DfT statistics web site.

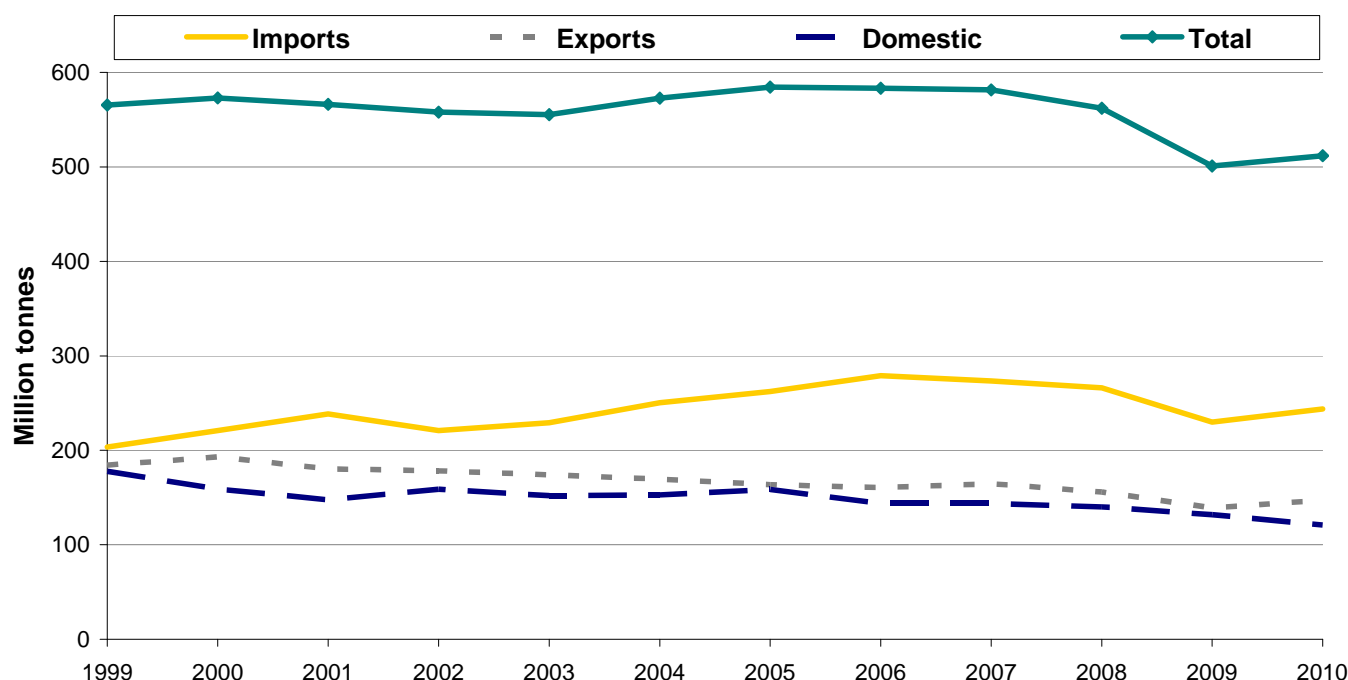
### Maritime Statistics includes:

- Freight handled at UK sea ports
- Passenger traffic at UK sea ports
- Waterborne freight in the UK
- Shipping, including commercial shipping fleets, industry revenue and expenditure and maritime incidents

## Freight traffic handled at UK sea ports

(Tables TSGB0501 to 0503)

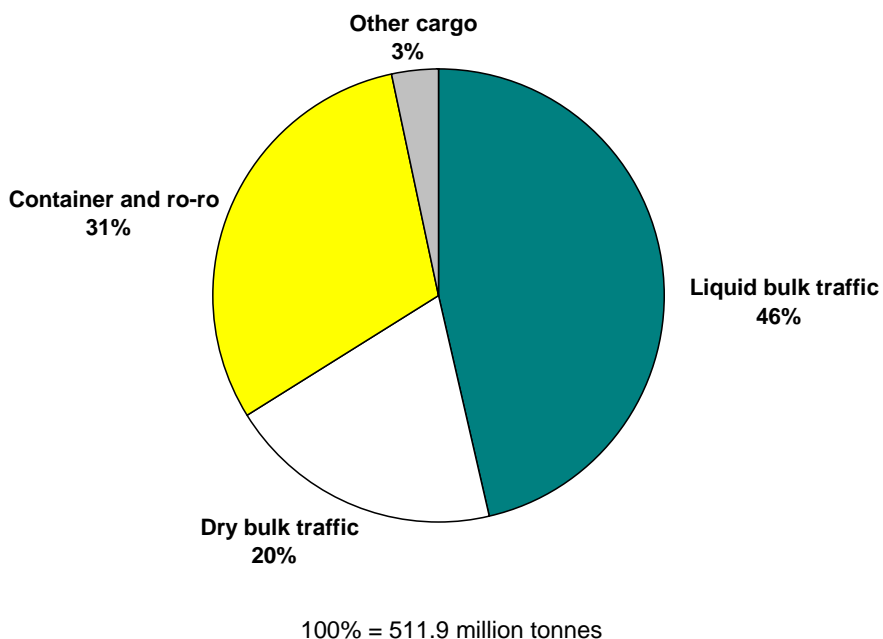
**Chart 1: UK port freight traffic, 2000 to 2010**



- UK sea ports handled 512 million tonnes (Mt) of freight traffic in 2010, an increase of 2 per cent on 2009, but 12 per cent lower than in the peak year of 2005.
- Over the ten years since 2000, imports have increased by 10%, exports have decreased by 24% and domestic traffic has fallen by 24%.

**Table 1: Top 10 UK ports by tonnage 2010**

Port	Million tonnes	% of total
1. Grimsby & Immingham	54.0	10.6
2. London	48.1	9.4
3. Milford Haven	42.8	8.4
4. Southampton	39.4	7.7
5. Tees and Hartlepool	35.7	7.0
6. Forth	34.3	6.7
7. Liverpool	30.0	5.9
8. Felixstowe	25.8	5.0
9. Dover	24.1	4.7
10. Medway	14.0	2.7
Other major UK ports	150.4	29.4
Minor UK ports	13.4	2.6
<b>All ports of the UK</b>	<b>511.9</b>	<b>100</b>

**Chart 2: UK port traffic by cargo type, 2010**

- Grimsby and Immingham was the UK's largest port by tonnage in 2010. The top three ports remained the same as in 2009.
- Liquid bulk traffic accounted for 46 per cent of the total, dry bulks 20 per cent, container and roll-on/roll-off (ro-ro) traffic 31 per cent and other cargo 3 per cent.

## Unitised freight traffic

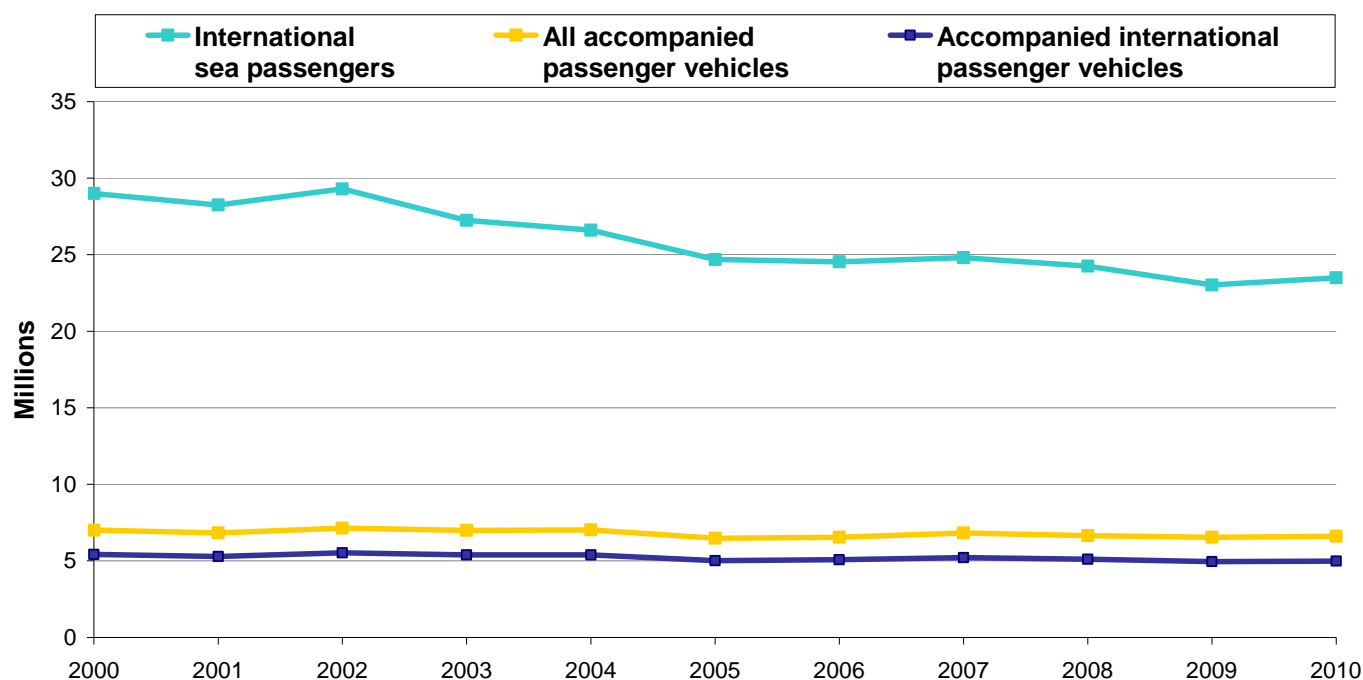
(Tables TSGB0504 to 0507)

- Unitised traffic forms part of the freight traffic described above and in 2010 UK major ports handled 12.0 million main freight units (containers, road goods vehicles, unaccompanied trailers and shipborne port-to-port trailers/barges), 4 per cent more than in 2009. These units carried 147 million tonnes of goods, up 4 per cent on the previous year.
- The number of lo-lo containers through UK major ports totalled 4.9 million units (57 million tonnes) in 2010. This represents an 11 per cent rise in units between 2009 and 2010.
- Road goods vehicles and unaccompanied trailers decreased by 1.5 per cent to 6.3 million units (79 million tonnes). The latest figure represents a 10 per cent increase in units since 2000.

## Sea passengers and passenger vehicles handled at UK sea ports

(Tables TSGB0506, 0507, 0511 and 0512)

**Chart 3: Accompanied passenger vehicles and International sea passengers, 2000 to 2010**



- International sea passenger journeys to and from the UK rose by just under half a million in 2010 to 23.5 million. Of these, 21.8 million were short-sea ferry passengers and 1.6 million were cruise and other long sea journey passengers.
- Accompanied passenger vehicles rose by very slightly to 6.6 million in 2009, with France accounting for 3.7 million vehicles (55 per cent), followed by Northern Ireland with 1.1 million (16 per cent).
- Dover was the busiest passenger seaport handling 60 percent of international sea passengers and 56 per cent of international passenger vehicles.

## Waterborne freight in the UK

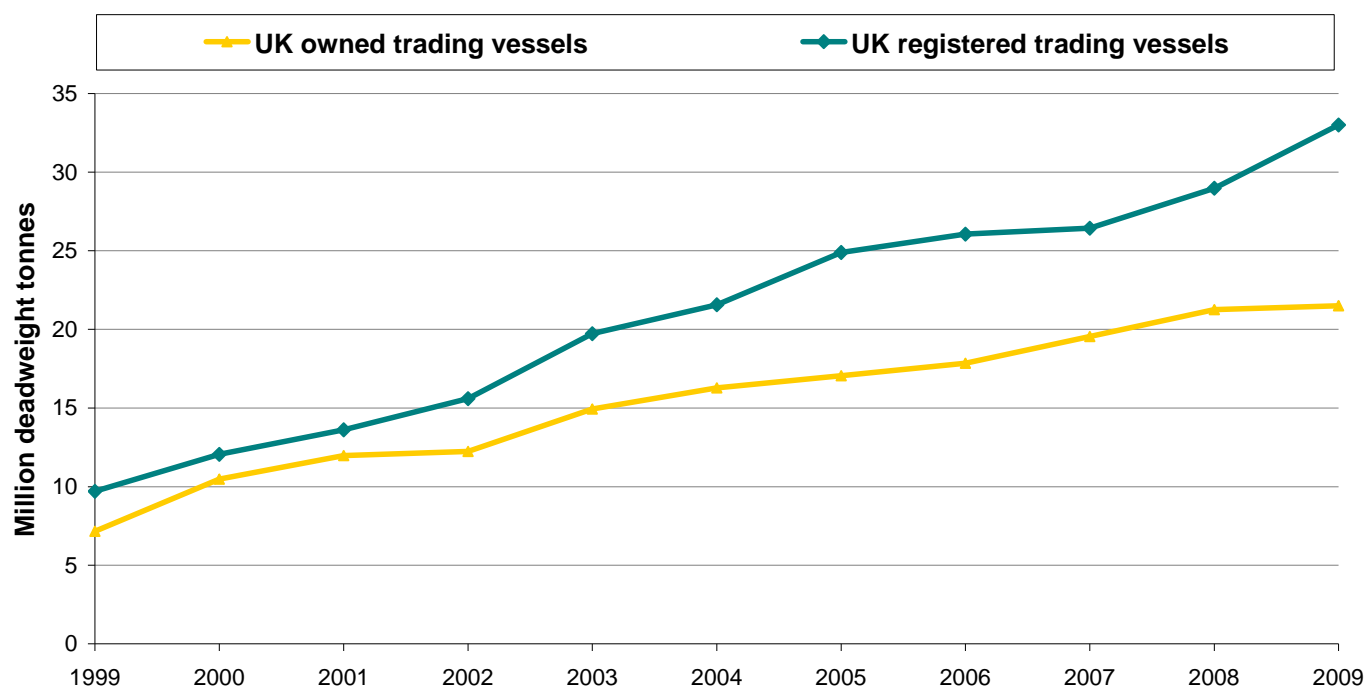
(Tables TSGB0508 to 0510)

- Traffic on UK domestic waters accounted for 6 per cent (110 million tonnes) of all goods lifted in the UK, and 22 per cent (49 billion tonne-km) of all goods moved in 2009.
- Of the total goods moved on UK domestic waters in 2009, 72 per cent was traffic around the coast; 26 per cent was one-port traffic (to or from offshore installations, or dredged materials); 3 per cent was inland waters traffic (including both non-seagoing traffic and seagoing traffic crossing into inland waters).
- The River Thames was the busiest of the major inland waterways, with 0.59 billion tonne-km of goods moved (46 per cent of inland waters total, and 1.2 per cent of all waterborne traffic). Traffic on the River Forth totalled 0.18 billion tonne-km and the River Humber 0.14 billion tonne-km.

## Shipping Statistics

(Tables TSGB0513 to 0518)

**Chart 4: UK and Crown Dependency registered trading vessels over 500 gt<sup>2</sup>, 1999 – 2009**



- The deadweight tonnage<sup>3</sup> (dwt) of UK and Crown Dependency registered vessels has increased by 240 per cent since 1999, from 9.7 million dwt to 33 million dwt in 2009.
- Ships on the UK register need not be owned by UK interests, and vice versa. UK owned trading vessel deadweight tonnage has trebled over the previous ten years, from 7.2 million in 1999 to 21.5 million in 2009.

This summary refers to tables that can be found on the [Transport Statistics Great Britain Maritime web page](#). More detailed statistics on maritime transport, including additional topics such as seafarer employment and port employment, can be accessed via the [Ports series page](#) of the DfT Statistics web site.

### Background notes

1. Full guidance on the methods used to compile these statistics and their sources can be found in the [Maritime Notes and Definitions](#).
2. Gross tonnage. A measure of vessel size representing the total of all the enclosed spaces of the vessel obtained by means of a formula, which has as its basis the volume in cubic metres.
3. The deadweight tonnage is the total weight of cargo, fuel, fresh water, stores and crew which the ship can carry when immersed to her (usually summer) load line.



## Public Transport

This section looks at the use of public transport in Great Britain and related data about public transport from Transport Statistics Great Britain published in December 2011.

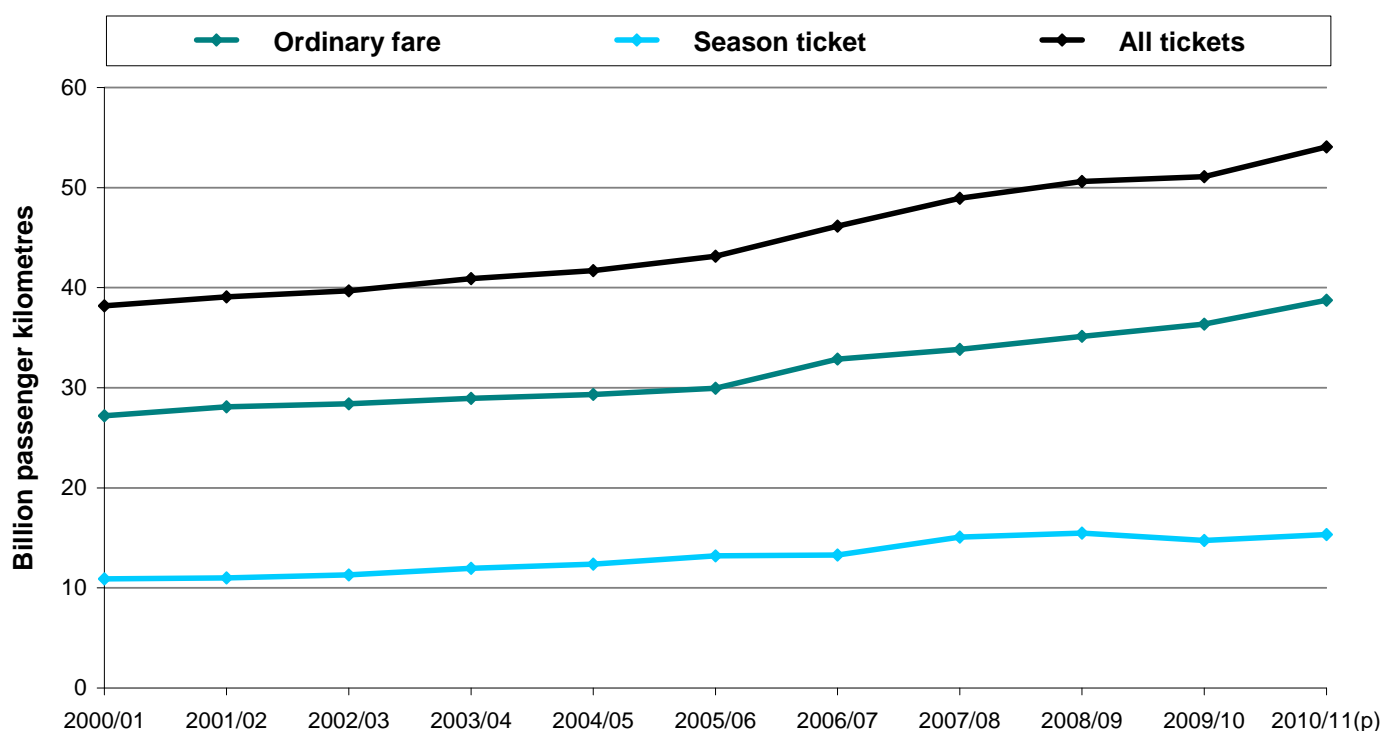
Important Note: Figures on bus support and revenue were updated in January 2012 to use final out-turn data for 2010/11.

### Public Transport includes:

- National Rail
- The Channel Tunnel
- Underground systems
- Buses
- Light Rail and Tram systems

## National Rail

### Passenger kilometres on national railways, by ticket type: Great Britain, annual from 2000/01 ([Table RAI0103](#))



- Since privatisation (1994/95), the number of franchised journeys made by national rail has increased by 84 per cent, from 0.7 billion to 1.4 billion in 2010/11 (42 per cent since 2000/01). During this period the number of journeys has risen every year apart from a slight drop of 0.7 per cent between 2008/09 and 2009/10, which was likely a result of the recession. Between 2009/10 and 2010/11 the number of journeys rose again, by 7.6 per cent.

- 
- Passenger kilometres travelled by national rail follow a similar trend to passenger journeys, and have increased by 88 per cent since 1994/95, from 29 billion to 54 billion passenger kilometres in 2010/11. The effects of the Hatfield crash in October 2000 briefly caused an interruption in the steady upward trend, but usage has increased again since then.
  - Punctuality and reliability are measured through the Public Performance Measure (PPM), which combines figures for punctuality and reliability into a single performance measure, measuring the proportion of trains that arrive at their destinations on time. In 2010/11, 90.8 per cent of all services arrived on time, which is a fall from the record high of 91.5 in 2009/10 but is higher than all previous years since records began in 1997/98. PPM was 79.1 per cent in 2000/01, a significant drop on the previous year. This was as a result of the Hatfield crash in October 2000, where long distance services were particularly affected. Since the Hatfield crash, PPM for all the sectors has been improving gradually.
  - National railways revenue for all franchised operators has increased by 94 per cent between 2000/01 and 2010/11, from £3.4 billion to £6.6 billion. To take into account inflation, the figures have also been adjusted to 2010/11 prices and these figures show that over the same period revenue has increased by 49 per cent.

Detailed statistics on national rail and the channel tunnel can be found on the [Rail Statistics web tables](#).

## Underground Systems

- There were 1.1 billion passenger journeys on the London Underground and 13 million journeys on the Glasgow Subway in 2010/11.

Detailed statistics (tables and charts) on Underground Systems can be found in tables [LRT9901](#) and [LRT9902](#).

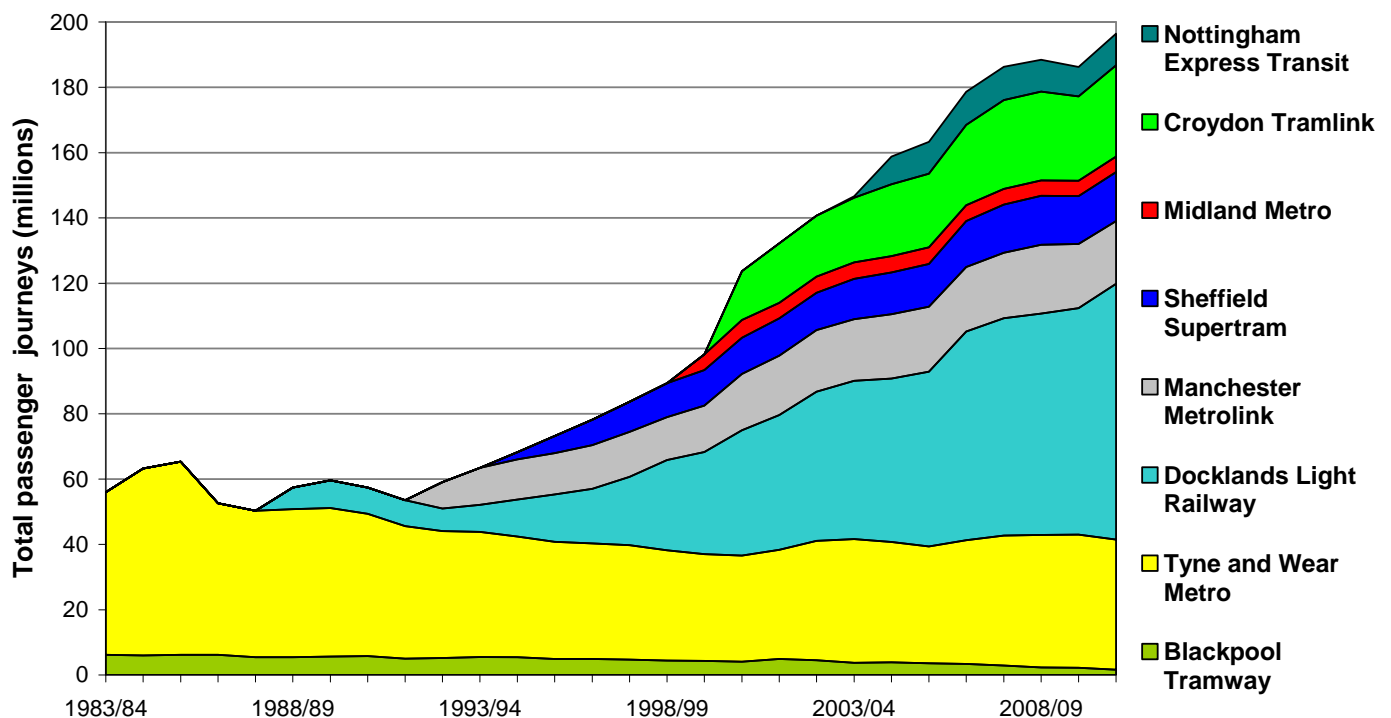


## Light Rail and Tram Systems

- Light rail and tram passenger journeys in England increased by 5.5 per cent between 2009/10 and 2010/11. In 2010/11, there were 196.5 million passenger journeys. This represents the highest number of passenger journeys to date.
- Light rail and tram vehicle miles in England increased by 1.8 per cent between 2009/10 and 2010/11. In 2010/11 there were 13.9 million vehicle miles.

### Annual Share of Passenger Journeys: England, 1983/84 to 2010/11

([Table LRT0101](#))



- Light rail and tram passenger revenue in England increased by 9.0 per cent in real terms between 2009/10 and 2010/11.
- The number of light rail and tram passenger cars in England decreased by 8.9 per cent between 2009/10 and 2010/11. This was mainly due to a 57.5 per cent decrease in passenger cars on the Blackpool Tramway, associated with its ongoing redevelopment work.

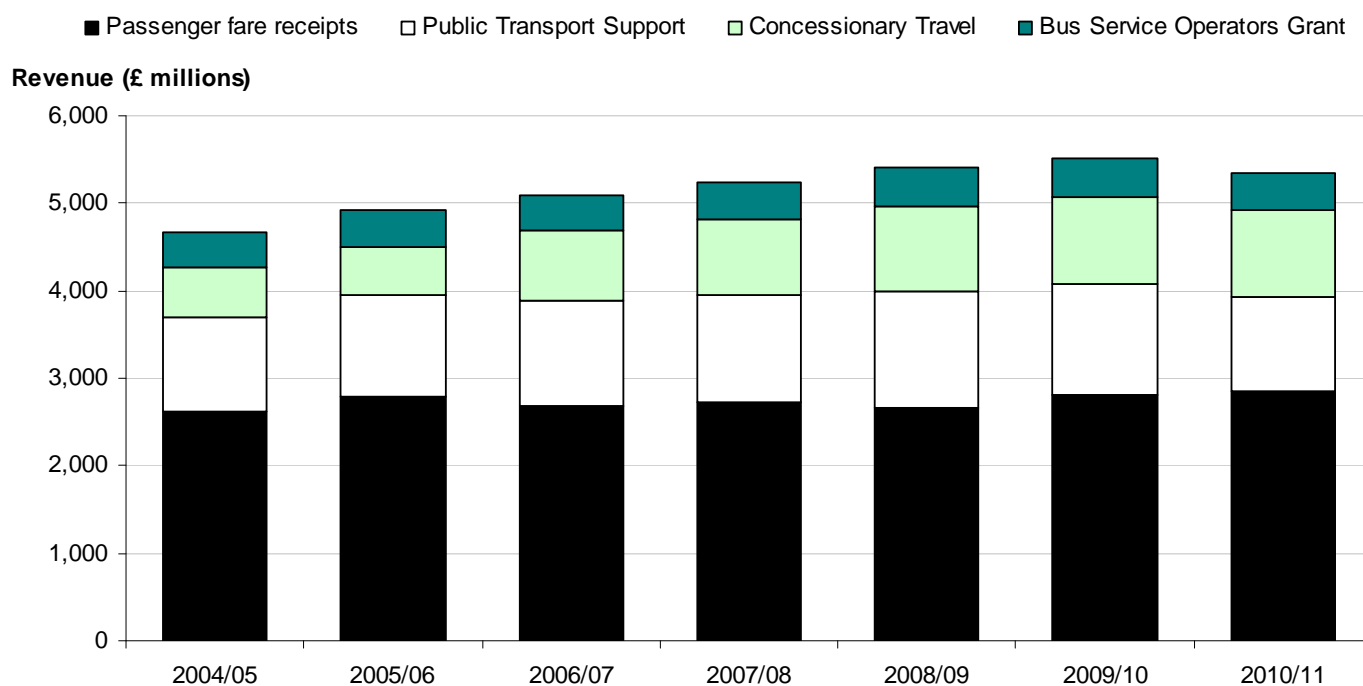
Detailed statistics (tables and charts) on Light Rail and Tram Systems can be found on the Light Rail Statistics web tables, table numbers [LRT0101](#) to [LRT0302](#).

## Buses

- There were 4.6 billion bus passenger journeys in England in 2010/11. This is a 0.1 per cent increase from the 2009/10 level. Journeys in London increased by 1.4 per cent over this period and now account for nearly half (49 per cent) of all bus passenger journeys in England.
- Bus vehicle miles in England increased by 0.1 per cent between 2009/10 and 2010/11, with 23 per cent of mileage outside London on local authority supported services in 2010/11.
- Bus fares in England were at the same level in real terms in March 2011 as in March 2010.
- 53.5 per cent of operating revenue for local bus services came from passenger fare receipts in 2010/11 (50.9 per cent in 2009/10).
- Net public funding support for local bus services in England decreased by 7.3 per cent in real terms between 2009/10 and 2010/11.

### Estimated operating revenue for local bus services by revenue type, England (at 2010/11 prices) 2004/05 to 2010/11 (in £ millions)

([Table BUS0501](#))



- In 2010/11, there were 84.5 thousand Public Service Vehicles (PSVs) in use by PSV operators in Great Britain, of which 46.3 thousand (55 per cent) were buses and the remainder minibuses and coaches. This represents a decrease of around 1,300 PSVs and 600 buses compared with the equivalent figures for 2009/10.

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Detailed statistics (tables and charts) on buses can be found on the Bus Statistics web tables, table numbers [BUS0101 to BUS1003](#).

### **Background notes**

Full guidance on the methods used to compile these statistics and their sources can be found in the [Public Transport Notes and Definitions](#).



## Roads and Traffic

This section presents statistics on Roads and Traffic in Great Britain from Transport Statistics Great Britain for 2011.

For further information on road traffic, speeds and lengths please email [roadtraff.stats@dft.gsi.gov.uk](mailto:roadtraff.stats@dft.gsi.gov.uk).

For further information on road expenditure and construction, and taxation revenue, please email [road.maintenance@dft.gsi.gov.uk](mailto:road.maintenance@dft.gsi.gov.uk).

### Roads and Traffic includes:

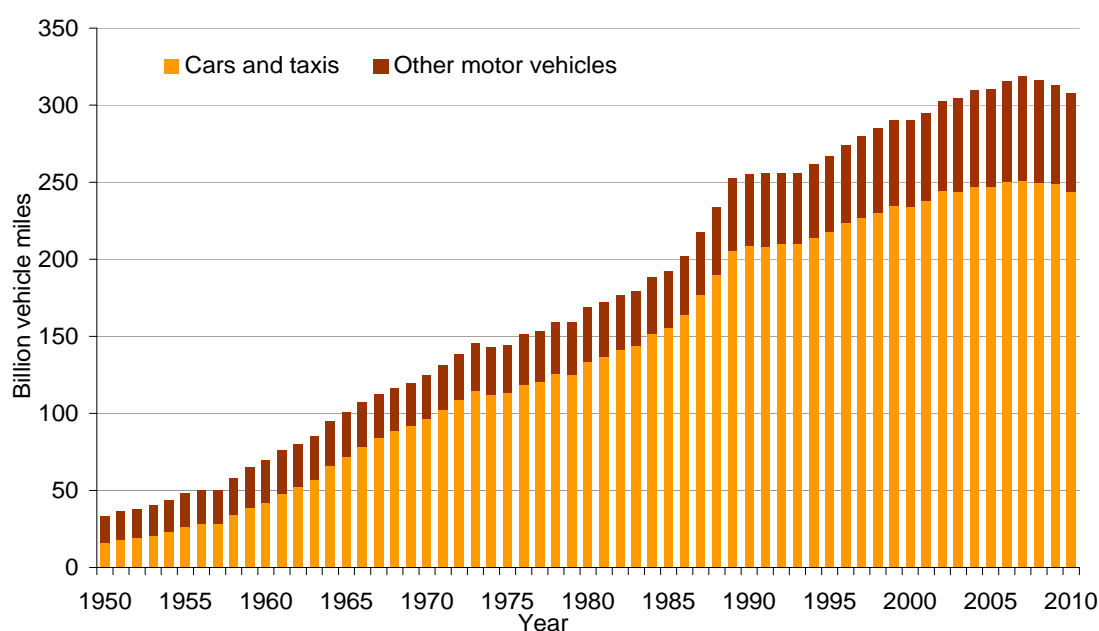
- Road traffic
- Traffic forecasts
- Road lengths
- Vehicle speeds
- Congestion
- Road taxation revenue

### 1. Road traffic

- In 2010, the overall motor vehicle traffic volume in Great Britain was 1.6 per cent lower than in 2009, at 308.1 billion vehicle miles.
- This follows a 1.0 per cent year on year fall between 2008 and 2009, and a 0.8 per cent fall between 2007 and 2008. Motor vehicle traffic has fallen for three consecutive years for the first time since records began in 1949. However, traffic levels in 2010 were 6.2 per cent higher than in 2000.

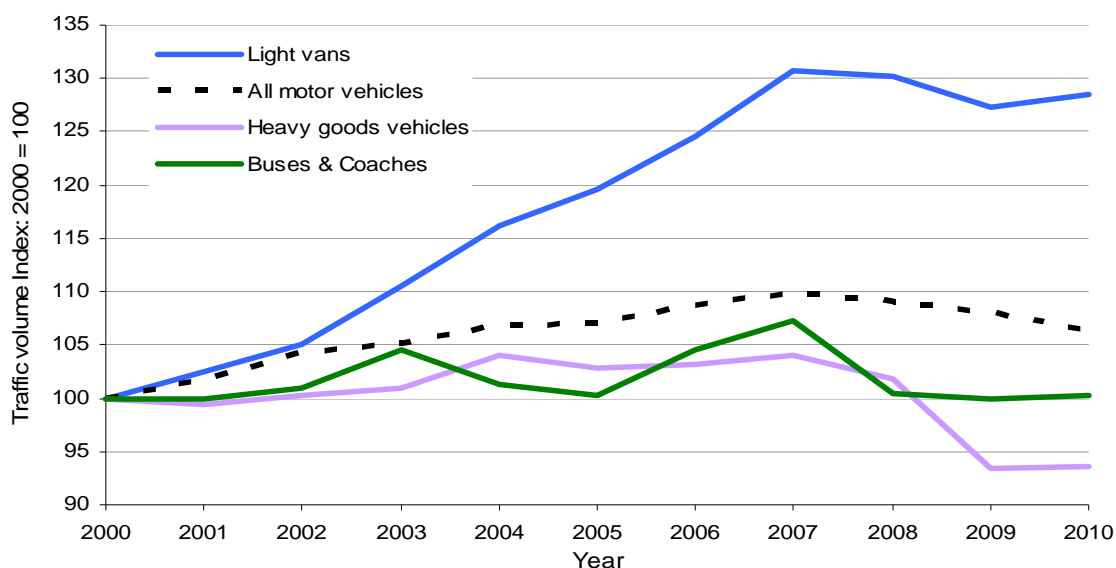
### Chart 1: Road traffic by vehicle type: 1950-2010 (cars and all motor vehicles)

Source: National Road Traffic Survey, DfT



- Car traffic fell by 2.1 per cent from 2009 to 243.8 billion vehicle miles in 2010. The decline in car traffic accounts for the majority of the fall in overall traffic in 2010.

**Chart 2: Road traffic by vehicle type (Commercial and public service vehicles) in Great Britain, 2000-2010**



Detailed statistics (tables and charts) on “Annual road traffic by vehicle type” can be found in the Annual Road Traffic Statistics web tables, [TRA0101](#), [TRA0104](#), [TRA0201](#), and [TRA0204](#)

- In 2010, light van traffic was 41.8 billion vehicle miles, a 0.9 per cent increase from 2009. Light van traffic increased by 28.6 per cent between 2000 and 2010.
- Heavy goods vehicle (HGV) traffic had a small increase between 2009 and 2010 of 0.3 per cent, to 16.4 billion vehicle miles.
- In 2010 19.8 per cent of traffic was on motorways, 28.2 per cent on rural ‘A’ roads, 16.1 per cent on urban ‘A’ roads, 14.1 per cent on rural minor roads and 21.8 per cent on urban minor roads, these proportions are similar to 2009.
- Overall, major roads showed a 1.3 per cent decrease in traffic, and minor roads saw a 2.2 per cent decrease in traffic between 2009 and 2010.
- Traffic on motorways decreased by 1.3 per cent between 2009 and 2010; traffic on urban ‘A’ roads decreased by 1.0 per cent and traffic on rural ‘A’ roads decreased by 1.5 per cent.

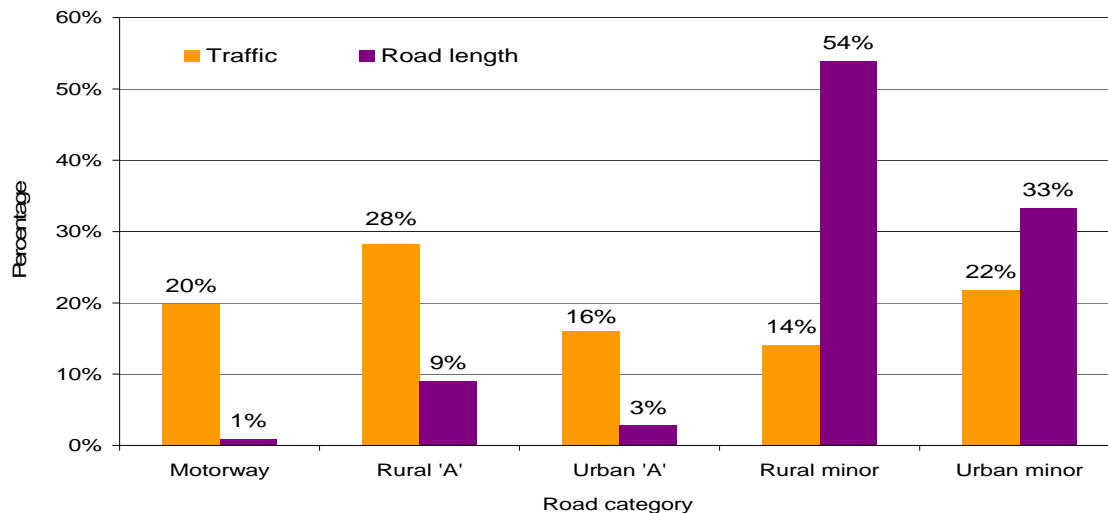
## 2. Traffic forecasts (web table TRA9905)

- Despite the traffic estimates for 2008 to 2010 showing declines in overall traffic levels, the Department’s forecasts suggest the longer term trend of continual traffic growth will resume.
- Forecasts from the National Transport Model suggest that motor vehicle traffic in 2035 will be 43 per cent higher than in 2003. The greatest growth forecast is in light van traffic, which is predicted to be 103 per cent higher than in 2003.

### 3. Road Lengths

- The total road length in Great Britain in 2010 was estimated to be 245.0 thousand miles. Estimated road length in Great Britain has increased by around 2.5 thousand miles (1.0 per cent) in the decade since 2000.

**Chart 3: Percentage of road length and traffic by road class in Great Britain, 2010**



- In 2010, motorways and 'A' roads accounted for 0.9 per cent and 11.8 per cent respectively of total road length in Great Britain. In contrast, 19.8 per cent of all motor vehicle traffic was on motorways and 44.3 per cent on 'A' roads.
- Minor road length in Great Britain was estimated to be 213.7 thousand miles in 2010, amounting to 87.3 per cent of the total, however these roads carried 35.9 per cent of all traffic.

Detailed statistics (tables and charts) on Road lengths by road type or by region can be found in the Road Lengths web tables, [RDL0101](#), [RDL0201](#), [RDL0103](#) and [RDL0203](#).

### 4. Vehicle speeds

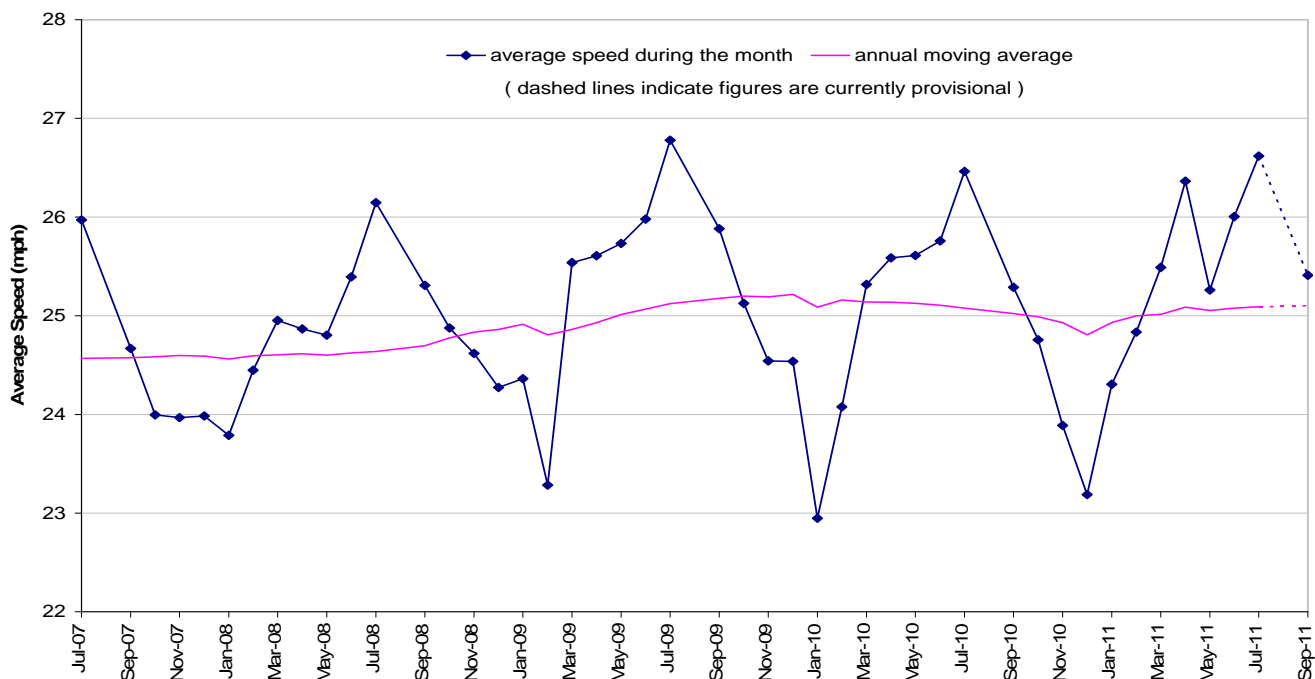
- In 2010, the average free flow speed of cars travelling on non-built-up roads was 69 mph on motorways, 68 mph on dual carriageways and 47 mph on single carriageways.
- The average free flow speed of cars in 2010 on roads with a 40 mph speed limit was 35 mph and on roads with a 30 mph limit it was 30 mph.
- Forty nine per cent of cars on motorways were travelling at a speed that exceeded the 70 mph limit. In addition, 14 per cent of cars were travelling 10 mph or more above the speed limit.
- Very few rigid and articulated HGVs exceeded their speed limit of 60 mph on motorways, as they are fitted with speed limiters. However, 83 per cent of them exceeded the 50 mph speed limit on dual carriageway non-built-up roads and 69 per cent exceeded the 40 mph limit on single carriageway non-built-up roads. Eighteen per cent exceeded the speed limit by 10 mph or more on single carriageway roads.

Detailed statistics (tables and charts) on Free Flow Vehicle Speeds on non-built up and built-up roads can be found in the Free Flow Vehicle Speeds Statistics web tables [SPE0101](#), [SPE0102](#)

## 5. Road congestion

- The average speed achieved on local authority managed 'A' roads during the morning peak in 2010/11 was 25.1 mph.
- This is broadly similar to the average speeds observed during 2009/10 (25 mph) and 2008/9 (25.1 mph) but 1.8 per cent faster than those observed during 2006/7 (24.6 mph).

**Chart 4: Average vehicle speeds (flow-weighted) during the weekday morning peak<sup>1</sup> on locally managed 'A' roads: England, September 2006 to September 2011<sup>P</sup>**



1. Morning peak defined as 7am to 10am. Weekdays falling within school holiday periods excluded.  
P = provisional

Detailed statistics on "Congestion on local authority managed 'A' roads" can be found in the Congestion Statistics web table numbers [CGN0201 to CGN0206 and CGN0901 to CGN0903](#).

## 6. Road taxation revenue

- Nearly £5.8 billion was raised through vehicle excise duty (VED) in 2010/11. This was based on nearly 43 million unique vehicles being licensed during the year and includes refunds for surrendered tax discs.
- About £27.3 billion was raised through fuel tax in 2010/11.

Detailed statistics can be found at in web table number [RDE0103](#).



## Transport Accidents and Casualties

This section looks at road and rail accidents and casualties, and motoring offences.

### Reported Road Casualties

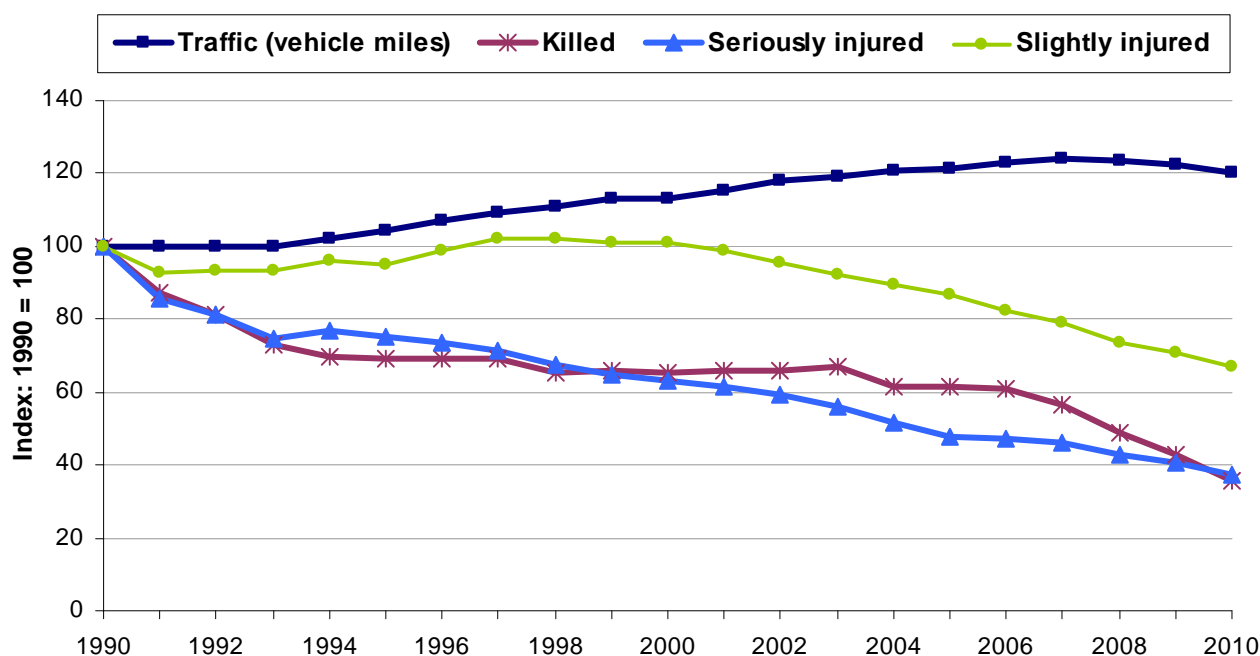
(Tables TSGB0801 – 0804, 0809)

- In 2010 there were a total of 208,648 reported road casualties of all severities, 39 per cent lower than in 1990. A total of 1,850 people were killed, 65 per cent lower than in 1990, 22,660 were seriously injured (down 63 per cent) and 184,138 were slightly injured (down 33 per cent). Between 1990 and 2010 traffic grew by 20 per cent.

#### Transport Accidents and Casualties includes:

- Traffic and reported road accident casualties, by casualty severity, roads user type, road class.
- Reported road accident casualties, by road class, hour of day.
- Breath tests performed on car drivers and motorcycle riders.
- Motoring offences.
- Rail accident casualties by casualty severity and casualty mode.
- Rail signals passed at danger (SPADS) on Network rail controlled infrastructure.

#### Traffic and reported road casualties by severity: GB 1990 – 2010: Index 1990=100

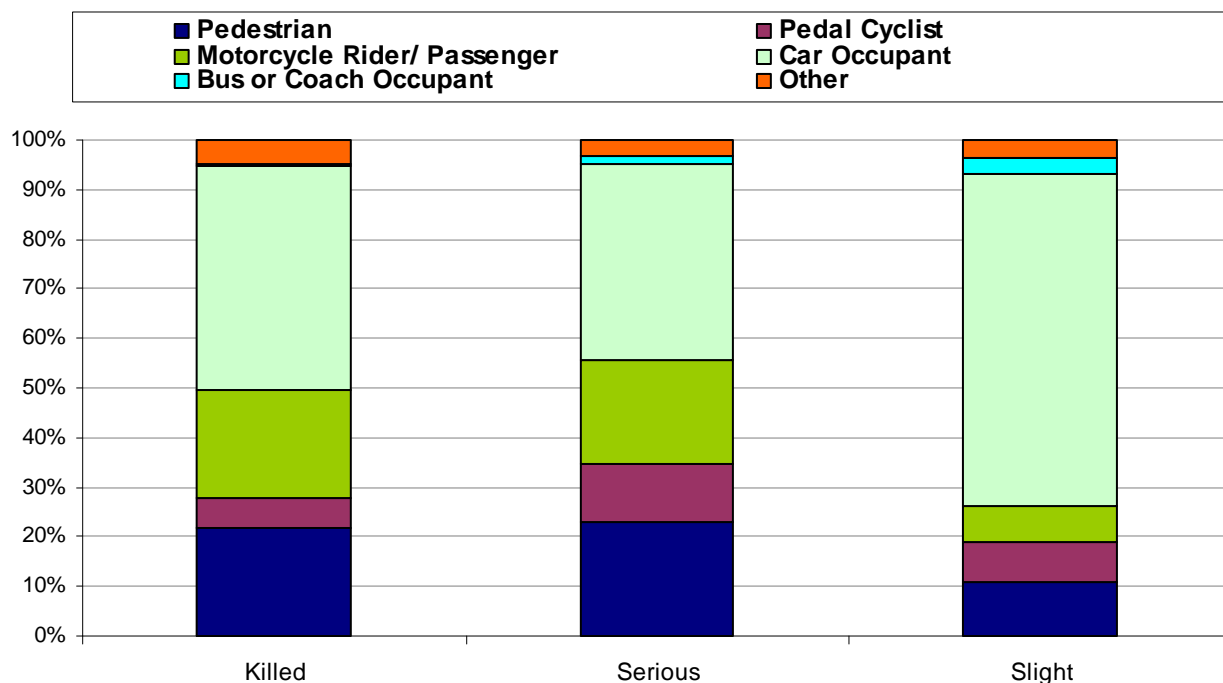


- The chart above shows the trends in killed, seriously and slightly injured casualties between 1990 and 2010. Trends in fatal and seriously injured casualties were similar between 1990 and 1998 with a divergence between 1998 and 2005.



- Fatal casualties fell by 6 per cent and serious injuries by 29 per cent between 1998 and 2005, however between 2005 and 2010 fatalities decreased by 42 per cent, compared to a 22 per cent fall in serious injuries.

### Proportion of reported road casualties by road user type and severity: GB 2010



- The chart above shows that car occupants were the largest group of casualties for all severities, accounting for about two thirds of reported slight casualties and nearly half of all fatalities.
- Pedestrians accounted for 23 per cent of reported deaths and serious injuries but only 11 per cent of slight injuries. Similarly, 22 per cent of all fatalities were motorcycle users, but only 7 per cent of those slightly injured.
- Together, car occupants, pedestrians and motorcyclists account for 89 per cent of deaths, and 85 per cent of all reported casualties. Of the remainder, pedal cyclists made up 8 per cent and bus users 3 per cent of all casualties.
- Most fatalities occur on rural roads, 40 per cent occurred on rural A roads with a further 22 per cent on other rural roads. Thirty two per cent of fatalities occurred on urban roads, compared to 60 per cent of all casualties. Only 6 per cent of fatalities occurred on motorways, although they account for 20 per cent of traffic.

### Motoring offences ([Tables TSGB0804, TSGB0810 - 0811](#))

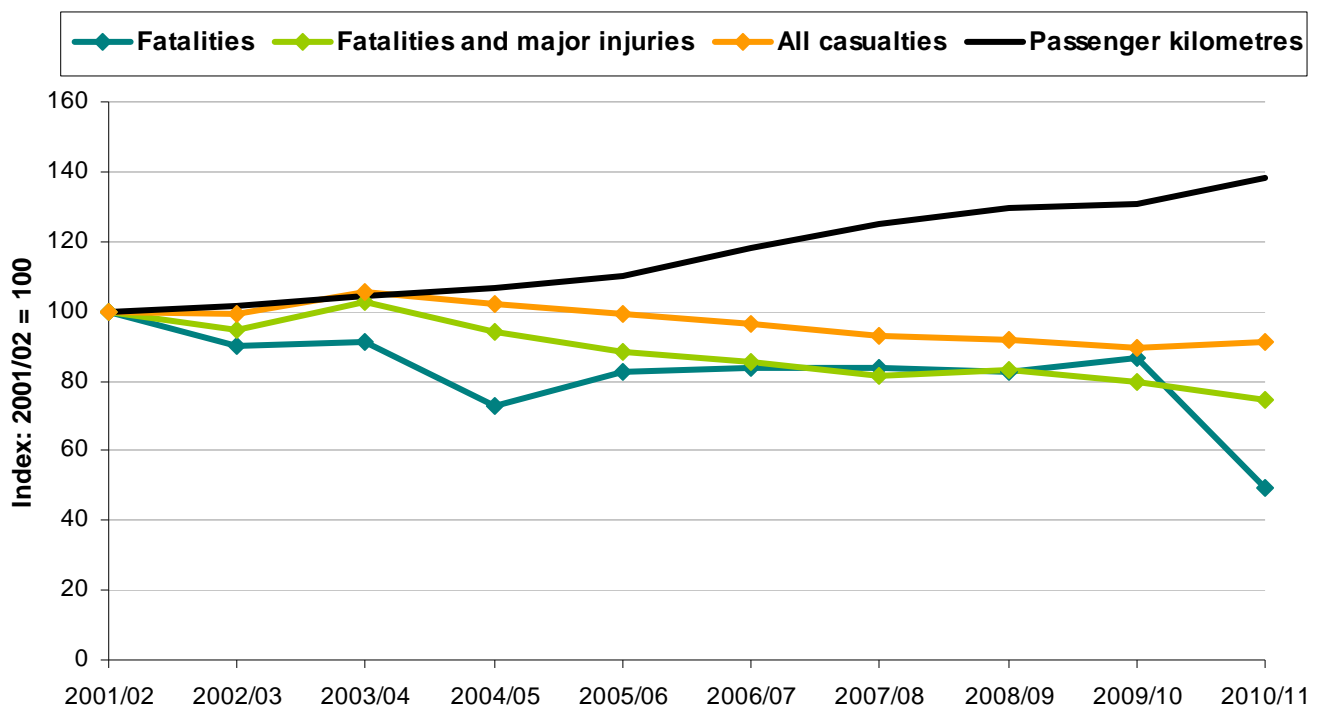
- In 2009 speed limit offences accounted for just under half of all motoring offences (excluding obstruction, waiting and parking offences) with licence, insurance and record keeping offences accounting for around a further fifth.

## Rail accidents and casualties ([Tables TSGB0805 – TSGB0808](#))

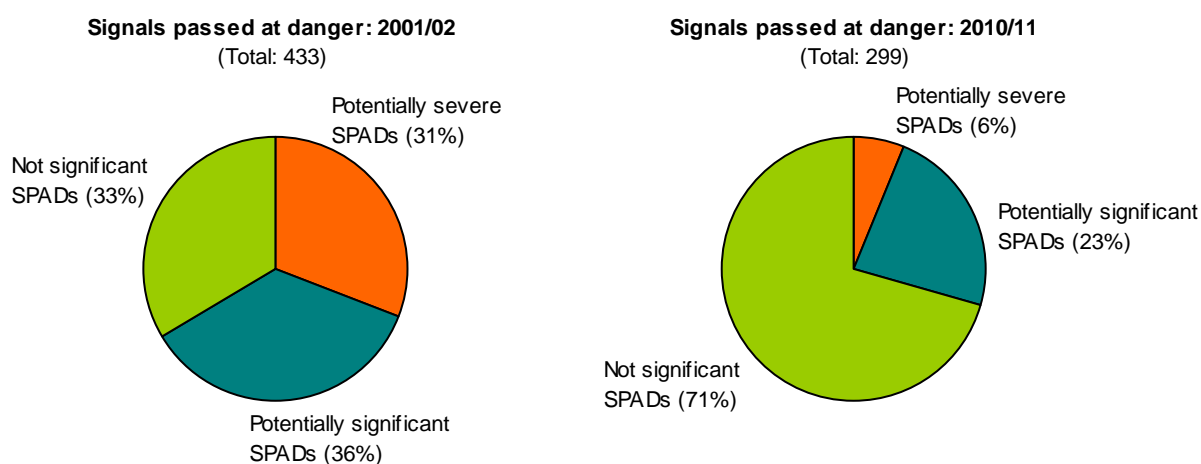
In a change to previous publications the rail safety figures have been sourced from the Rail Safety and Standards Board (RSSB) rather than from the Office of Rail Regulation's (ORR's) SIGNAL database. This follows ORR's decision to source the figures in their publications from RSSB rather than SIGNAL. Therefore there are a number of differences between these figures and those published in previous years. In particular these figures now only cover National Rail, while in previous years they included accidents and casualties occurring on all other forms of rail as well, such as light rail and tram systems and London Underground.

- Excluding suicides, in 2010/11 there were 40 fatalities on the National Rail network, a 43 per cent fall from 2009/10 when there were 70. This reduction is mainly due to a large fall in the number of trespassers killed, 27 of whom were killed in 2010/11 compared to 50 the year before. There were also 8 passenger fatalities, 1 member of the workforce and 4 members of the public (excluding trespassers).
- Excluding attempted suicides, there were 395 major injuries in 2010/11 compared to 396 the previous year. This number has fallen by 21 per cent since 2001/02. Overall casualties rose by 2 per cent from 12,585 in 2009/10 to 12,841 in 2010/11, although this follows six consecutive years of falls. Passenger kilometres rose by 6 per cent from 2009/10 to 2010/11, and have risen by 38 per cent since 2001/02.

### Casualties on the rail network by severity, excluding suicides: GB 2001/02 – 2010/11



- The majority of fatalities on the rail network are suicides. In 2010/11 there were 208, 84 per cent of the total 248 fatalities. There were also 36 major injuries and 15 minor injuries following suicide attempts.
- In most years the number of passengers killed in railway accidents is very small. In years when fatalities are high it tends to be as a result of a major accident. For example, in 1999 the majority of fatalities occurred in the accident at Ladbroke Grove. Since 2005/06, only one passenger has been killed in a train accident.
- The passenger casualty rate in train accidents and movement accidents has fallen from 36.7 casualties per billion passenger kilometres in 2001/02 to 26.4 in 2010/11. The fatality and major injury rate has fallen from 1.2 to 0.9 over the same period.



- The number of signals passed at danger (SPADs) has fallen gradually during the last decade, from 433 reported incidents in 2001/02 to 299 in 2010/11.
- The number of cases where a SPAD could have led to potentially severe accident has fallen by 87 per cent between 2001/02 and 2010/11, while the not significant cases have increased by 46 per cent over the same period. The number of potentially severe or significant cases has dropped from 67 per cent of all reported cases in 2001/02 to 29 per cent in 2010/11.

Detailed statistics (tables and charts) can be found on the [Transport Statistics Great Britain Accidents and Casualties web page](#)

## Background notes

1. Full guidance on the methods used to compile these statistics and their sources can be found in the [Accidents and Casualties Notes and Definitions](#).
2. Fuller analysis and statistics on reported road casualties and accidents can be found on the [Road accidents and safety statistics page of the DfT web site](#). The statistics are based on personal injury road accidents reported to the police, however, it is known that a significant proportion of non-fatal accidents are not reported and this should be borne in mind when using and analysing the data. Further information on sources of data can be found in the annual report [Reported Road Casualties Great Britain](#).

## Vehicles



This section looks at the number of licensed vehicles in Great Britain and related data about vehicles from Transport Statistics Great Britain published on 15 December 2011.

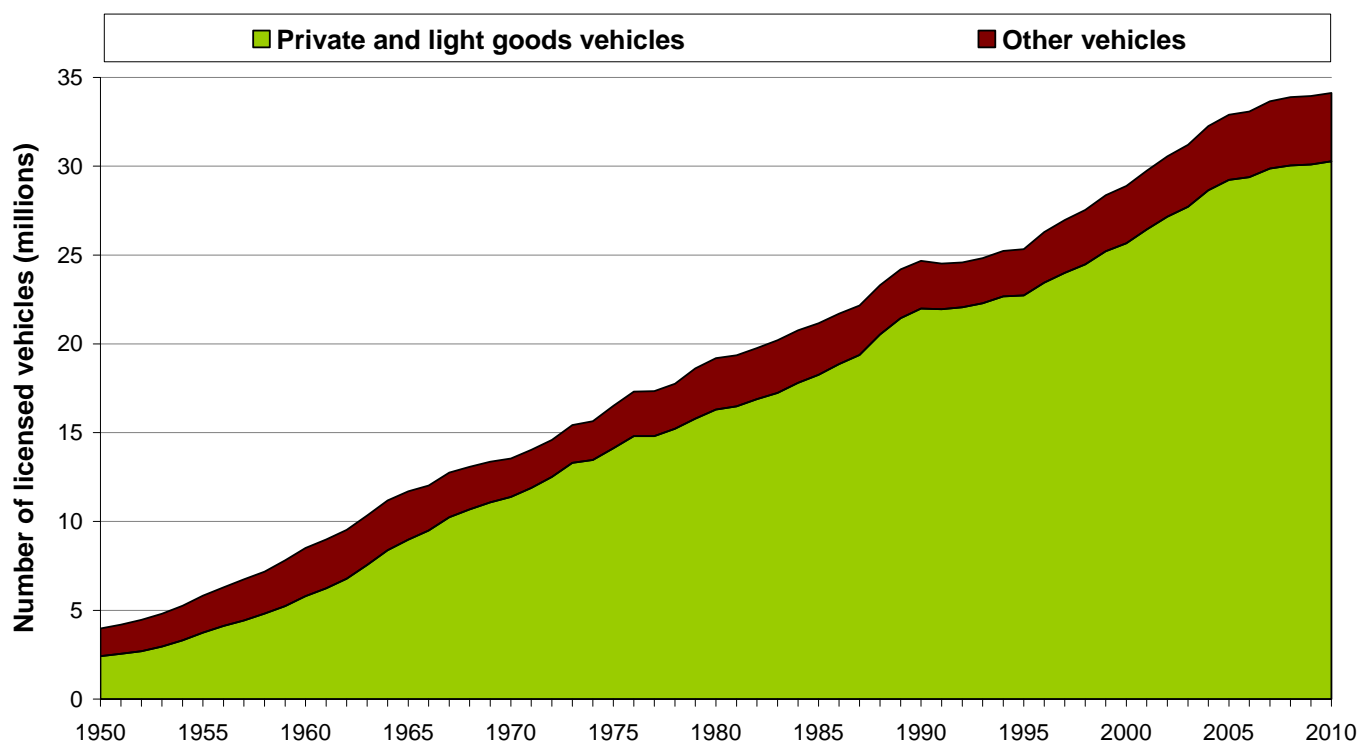
### The Vehicles chapter includes:

- The number of licensed vehicles broken down by taxation class.
- The number of newly registered vehicles broken down by taxation class.
- The number of driving tests undertaken with pass/fail rates.
- The number of MOT tests undertaken with pass/fail rates.

## Licensed Vehicles

### Number of licensed vehicles by tax class, 1950 to 2010

([Table TSGB0901](#), and by body type in [Table TSGB0903](#))



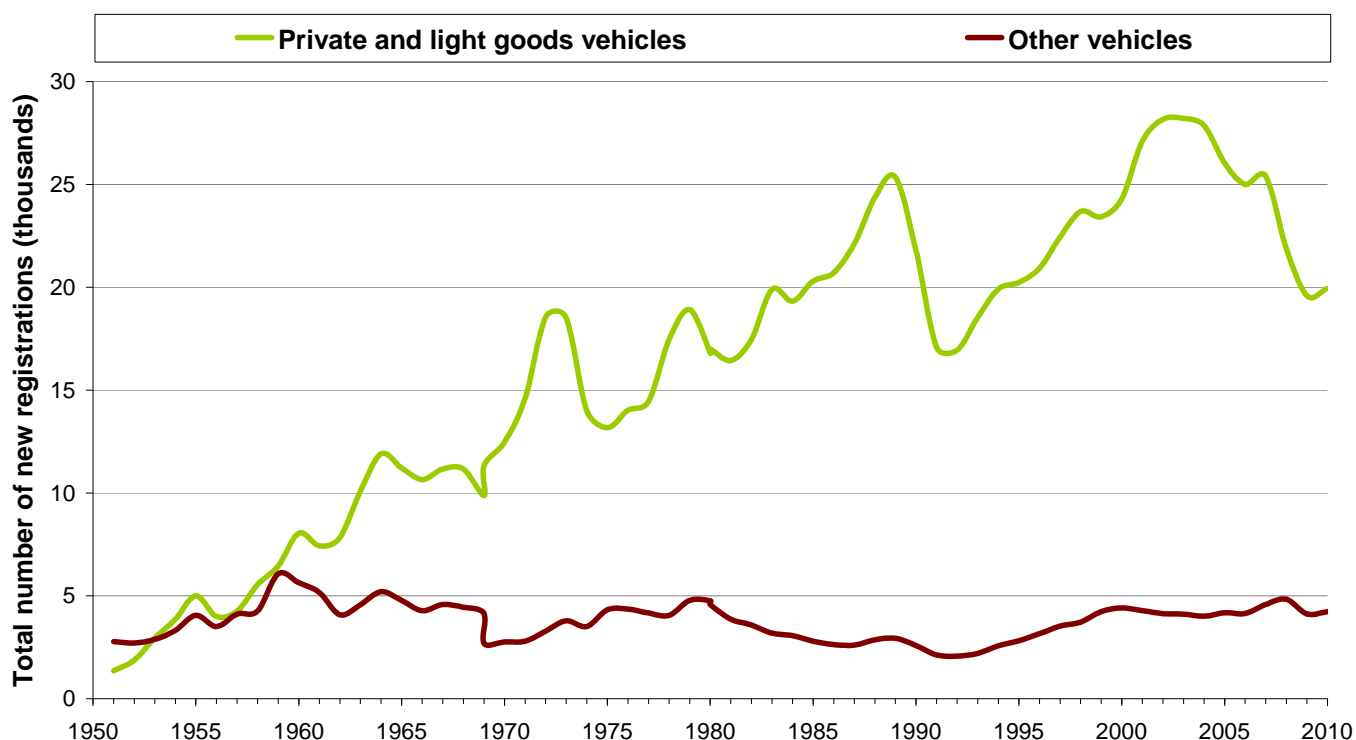
- The chart above shows that the number of licensed vehicles in Great Britain has increased from about 4 million in 1950 to over 34 million in 2010.

- The number of licensed vehicles has grown by about 3.7 per cent a year on average from 1950 to 2010. However, it grew by 0.7 per cent in 2008, 0.1 per cent in 2009 and 0.5 per cent in 2010. Aside from 1990 to 1991, the growth since 2008 has been the lowest growth period on record.
- Vehicles in the private and light goods taxation class (which is mainly made up of private cars and light vans) accounted for about 89 per cent of all the licensed vehicles.

## New Vehicle Registrations

### Motor vehicles registered for the first time by tax class: 1951 to 2010

([Table TSGB0902](#))



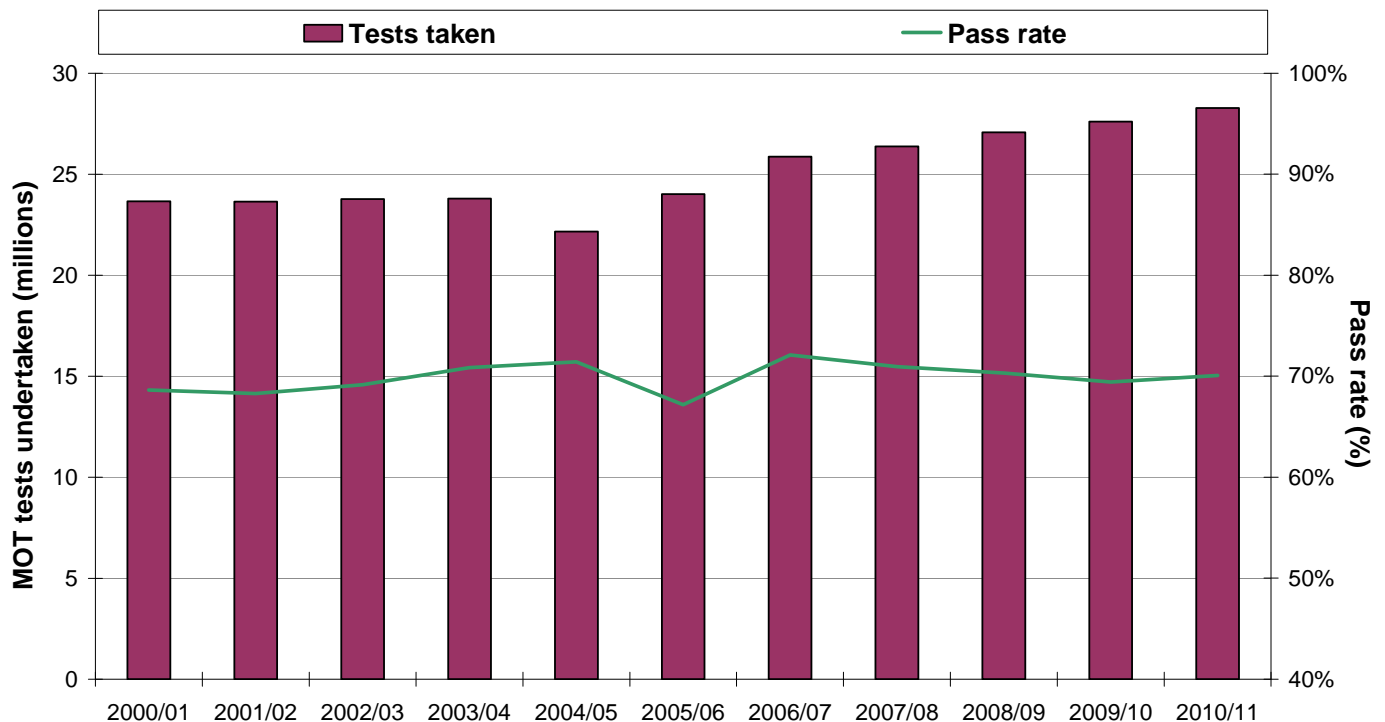
- The total number of vehicles being registered for the first time has increased from about 414 thousand a year in 1951 to peak of over 3.2 million vehicles a year in the early 2000s. The number dipped to 2.4 million in 2010. This is a 2 per cent increase on the previous year but, other than 2009, the lowest year since 1996.
- Most of the increase in new registrations has been in the private and light good vehicles tax class. New registrations in the other tax classes have remained fairly steady with most years between 290 thousand and 430 thousand new vehicle registrations.
- It is likely that the significant decrease in new registrations since 2008 was caused by the recession on the ongoing economic climate. New car and light van registrations have been helped by Vehicle Scrappage Scheme which ran between May 2009 and March 2010.

## MOT Tests

(Tables TSGB0908 to TSGB0912)

### Road vehicle testing scheme (MOT) test results: 2000/01 to 2010/11

(Table TSGB0908)



- As the number of licensed vehicles has increased, so too has the number of MOT tests undertaken. More than one test per valid vehicle is carried out a year as some vehicles fail their initial test, undergo rectification work, and are retested.
- During the period 2000/01 to 2010/11 the overall pass rate stayed steady at around 70 per cent.
- Over 28.2 million MOT tests were carried out in 2010/11. The vast majority of these (26.6 million) were of cars and other small passenger vehicles (up to 12 seats).
- The most common reason for rejection (RfR) for cars was with the lighting and signalling system. In 2010/11 19 per cent of all car tests failed for this reason. Other common defects on cars include brakes, suspension and tyres. These defects are the most common across the other vehicle types as well.

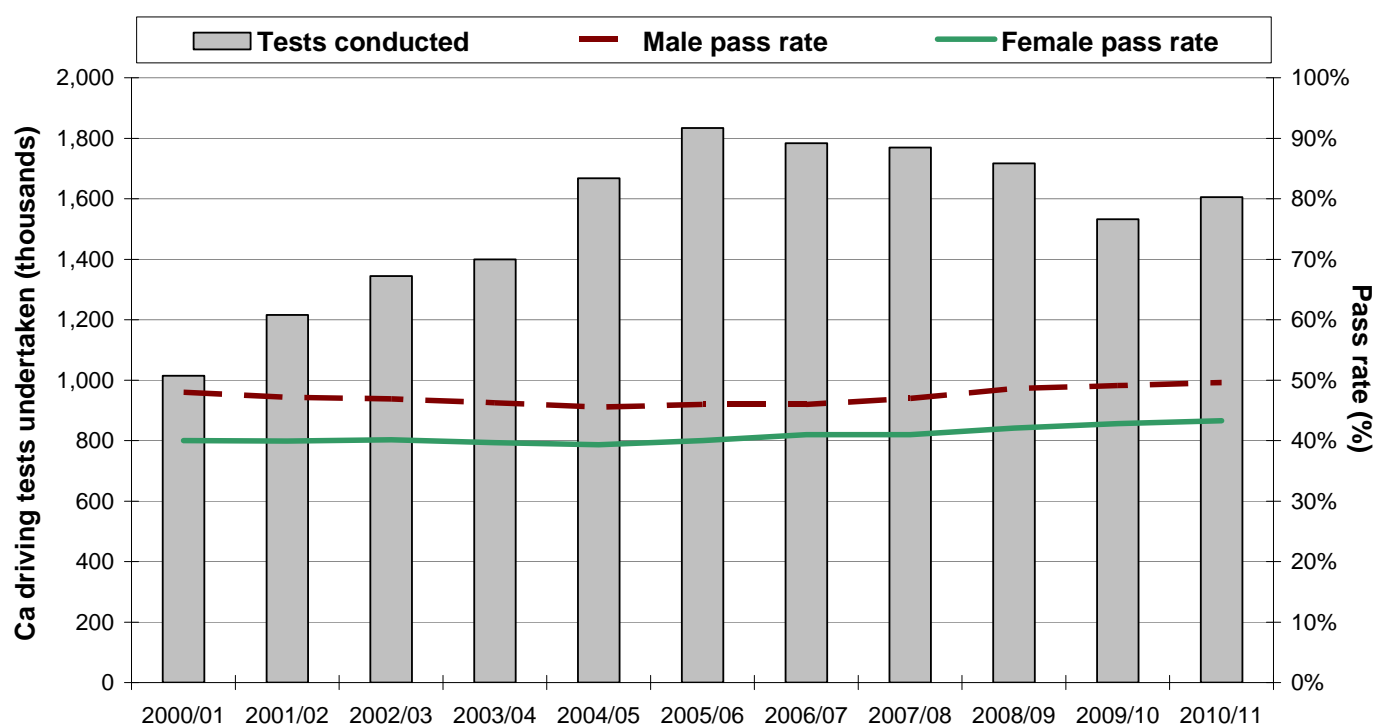
## Private Motoring

(Tables TSGB0913 to TSGB0917)

- The proportion of households with access to car or van has risen from 14 per cent in 1951 to 75 per cent in 2010. Since 2002 there have been more households with access to two or more cars/vans than without any access at all.
- The proportion of the eligible population holding full driving licences rose from 48 per cent in 1975/76 to 71 per cent in 1998/00. Since then it has only risen slightly to 73 per cent in 2010. However, as the population has grown in that time there were 3.9 million more licence holders in 2010 as there were in 1998/00.
- The average annual mileage of four-wheeled cars has decreased from 9,700 miles in 1995/97 to 8,430 in 2010. Most of this decrease has been in the distance driven as part of work as well as commuting, though the average commuting distance driven increased between 2009 and 2010. The average distance driven for other private mileage fell to its lowest level since 1995/1997 in 2010.

### Car driving tests: 2000/01 to 2010/11

(Table TSGB0917)



- The number of car practical driving tests taken rose to by 3.6 per cent from 1.59 million in 2009/10 to 1.65 million in 2010/11. Roughly 51 to 54 per cent of the tests each year were taken by males.
- The overall pass rate has remained reasonably static at about 42 to 46 per cent overall, though in most years males had about a 7 percentage point higher success rate than females.

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Detailed statistics (tables and charts) on “vehicle statistics” can be found on the [Transport Statistics Great Britain Vehicle Statistics web page](#).

### Background notes

1. Full guidance on the methods used to compile these statistics and their sources can be found in the [Transport Statistics Great Britain Vehicle Statistics notes and definitions](#).
2. Further information about the data used to compile the vehicle licensing tables can be found in [Vehicle licensing statistics notes and definitions](#).
3. Further information about the data used to compile the tables from the National Travel Survey can be found in [NTS notes and definitions](#).