Department for Transport

Vehicle Licensing Statistics: Annual 2019

About this release

This release presents the latest statistics on licensed motor vehicles. It is part of the Vehicle Statistics series. Detailed data tables are available online.

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

Except where otherwise stated, the statistics refer to Great Britain. UK data is available from July 2014.

In this publication

ULEVs: Vehicles that emit less than 75g of carbon dioxide (CO_2) from the tailpipe for every kilometre travelled.

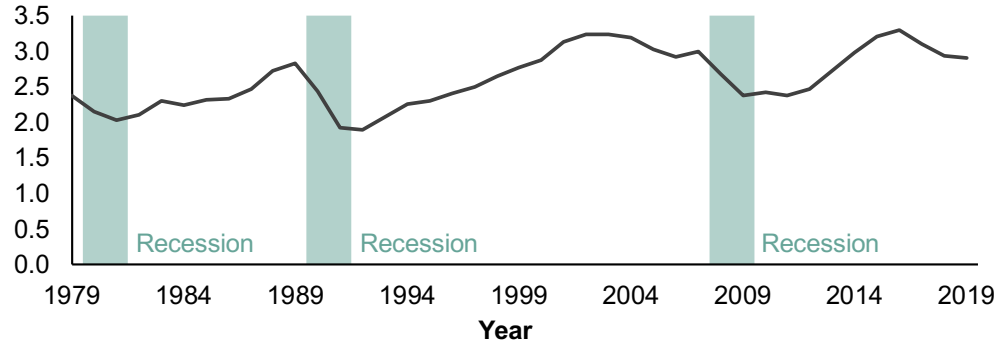
Alternative fuel: Vehicles powered by something other than petrol or diesel.

Next published: June 2020

NEW

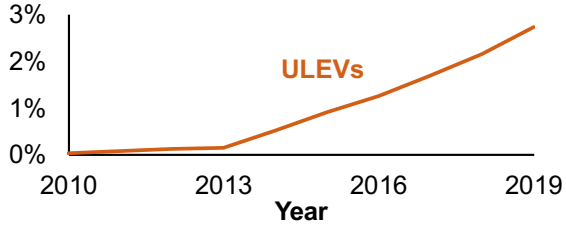
2.9 million vehicles were registered for the first time in Great Britain during 2019, 1.1% fewer than during 2018. [VEH0153]

Millions of vehicles registered for the first time - GB

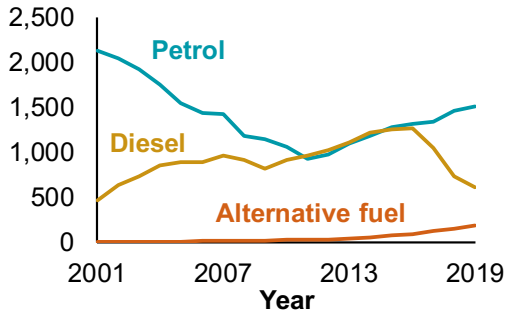


During 2019, 79,747 **ultra low emission vehicles** (**ULEVs**) were registered for the first time in Great Britain, an increase of 26% on 2018. ULEVs made up 2.7% of all new registrations. [VEH0150]

Proportion of vehicles registered for the first time - GB



Thousands of cars registered for the first time - GB



The number of **diesel** cars registered for the first time in Great Britain during 2019 declined by 18% compared to 2018, to the lowest annual number since 2001. There was a 26% increase in the number of **alternative fuel** cars over the same time period. [VEH0253]

NEW

The most **popular** new car models in Great Britain in 2019 were Ford Fiesta (76 thousand), Volkswagen Golf (58 thousand) and Ford Focus (55 thousand). [VEH0161]

At the end of 2019, there were 38.7 million **licensed vehicles** in Great Britain, an increase of 1.3% compared to the end of 2018. [VEH0101]

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New data released

This release includes a number of new and enhanced data tables relating to ultra low emission vehicles (ULEVs) and additional breakdowns by propulsion / fuel type for all main body types.

This initiative has been put in place to meet the growing need from users for regularly updated datasets on the fast developing trends for vehicles using alternative fuels, particularly on a geographical basis.

Ultra low emission vehicles (ULEVs)

- VEH0132: Licensed ULEVs by local authority, including a breakdown for battery electric vehicles (BEVs) and plug-in hybrid electric vehicles (PHEVs), and a breakdown for private and company keepers for the latest quarter (**enhanced**).
- VEH0133: Licensed ULEVs by body type and propulsion / fuel type, including top 20 licensed models at the end of the latest quarter (**new**).
- VEH0134: Licensed ULEVs by postcode district (with BEV and PHEV breakdown) (**new**).
- VEH0171: New ULEV registrations by body type and propulsion / fuel type, including top 20 models for the latest year (**new**).
- VEH0172: New ULEV registrations by region (**new**).

Propulsion / fuel type

A consistent propulsion / fuel type table has been introduced for all body types, with an enhanced layout for cars and vans.

This has resulted in an **enhanced** version of VEH0203, VEH0253, VEH0403, and VEH0453, as well as **new** tables VEH0303, VEH0353, VEH0503, VEH0553, VEH0603, and VEH0653.

Geography

Vehicles are allocated to a local authority according to the postcode of the registered keeper. This is the keeper's address for privately owned vehicles or the company's registered address for company owned vehicles. The address does not necessarily reflect where the vehicle is located. This is especially true for large fleets kept by companies involved with vehicle management, leasing or rentals. Significant changes in the number of vehicles from year to year can often occur when these companies change their registered address.

There are several hotspots of ULEVs registered to company addresses that distort the geographic distribution of these figures. These include the following local authorities: Birmingham, Forest of Dean, Leeds, Leicester, Milton Keynes, Peterborough, Portsmouth, Renfrewshire, Slough, South Gloucestershire and Swindon. Table VEH0132d should help illustrate whether any particular area is affected.

Vehicles registered for the first time

During 2019, 2.9 million vehicles were registered for the first time in Great Britain. [VEH0150]

During 2019 

2.9 million vehicles registered for the first time in Great Britain

New vehicle registrations have been declining for the past three years, mainly due to the fall in new car registrations (which typically represent around 80% of new registrations). In 2019, overall new registrations were 1.1% lower than during 2018, 6.5% lower than during 2017, and 12.0% lower than during 2016, which was the highest recorded level ever.

Body Type

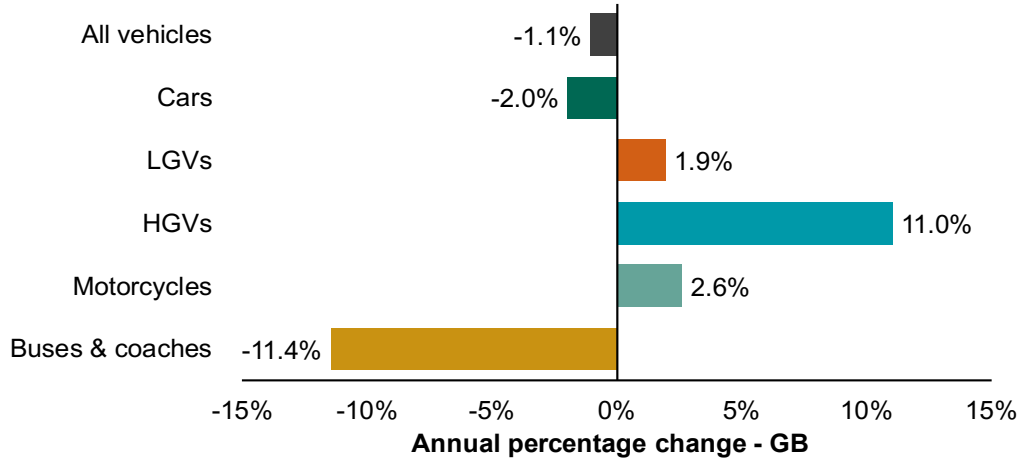
Heavy goods vehicles (HGVs), which includes vehicles such as motor homes, saw a large increase in new registrations during 2019 of 11.0% compared to 2018, as shown in **Figure 1**. This

was impacted by the introduction of mandatory smart tachographs during the year. Bus & coach registrations fell by 11.4% over the same period, largely due to a reduction in minibus registrations during early 2019. [VEH0150]

Europe

According to figures produced by ACEA (see side bar): *"Overall in 2019, new car registrations increased by 1.2% across the European Union, reaching more than 15.3 million units in total... Looking at the five major EU markets, Germany (+5.0%) recorded the largest increase last year, followed by France (+1.9%) and Italy (+0.3%). By contrast, both Spain (-4.8%) and the United Kingdom (-2.4%) saw demand fall in 2019."* [ACEA]

Figure 1: Annual percentage change in vehicles registered for the first time compared to 2018 by body type, Great Britain, 2019 [VEH0150]



Although the number of new registrations in Great Britain can vary considerably each year, the total vehicle stock varies much more slowly as there are many more vehicles that remain licensed over the year.

Table 1: Vehicles registered for the first time by body type, with previous year and total stock comparison, Great Britain, 2019 [VEH0101, VEH0150]

Thousand / *Percentage*

	2019		2018		Total stock at the end of 2019
	New registrations	Proportion of all new registrations	New registrations	Proportion of all new registrations	
Cars	2,295	*79.1*	2,342	*79.9*	31,888
Light goods vehicles (LGVs)	369	*12.7*	362	*12.4*	4,123
Heavy goods vehicles (HGVs)	54	*1.9*	49	*1.7*	501
Motorcycles	119	*4.1*	116	*3.9*	1,250
Buses & coaches	7	*0.2*	8	*0.3*	152
Other	57	*2.0*	56	*1.9*	767

ACEA

The ACEA (European Automobile Manufacturers' Association) produce new registration figures collected from trade bodies across Europe.

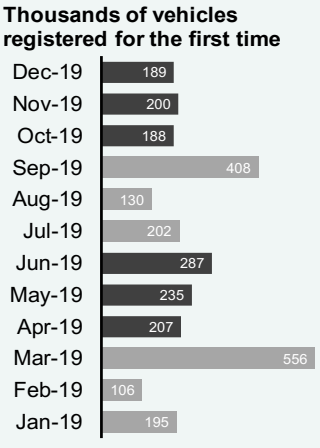
UK data is provided by The Society of Motor Manufacturers and Traders (SMMT), which represents new car sales rather than new registrations with DVLA, so the figures will be broadly comparable but will not match.

Monthly seasonality

Up to 1998, new registration plates were issued once a year in August, causing a peak in new registrations in the third quarter.

Since 1999, new plates have been issued twice a year, in March and September. This changed the distribution of new registrations through the year, with peaks in the first and third quarters.

INSET: Vehicles registered for the first time by month, Great Britain, 2019 [VEH0150]



New diesel car registrations continue to decline sharply in Great Britain, with large increases seen for alternative fuel cars. [VEH0253]

There was a 18% decline in the number of diesel cars being registered for the first time in 2019 compared to 2018, falling to 605 thousand cars, which is below the 2008/09 recession dip and similar to 2002 registrations.

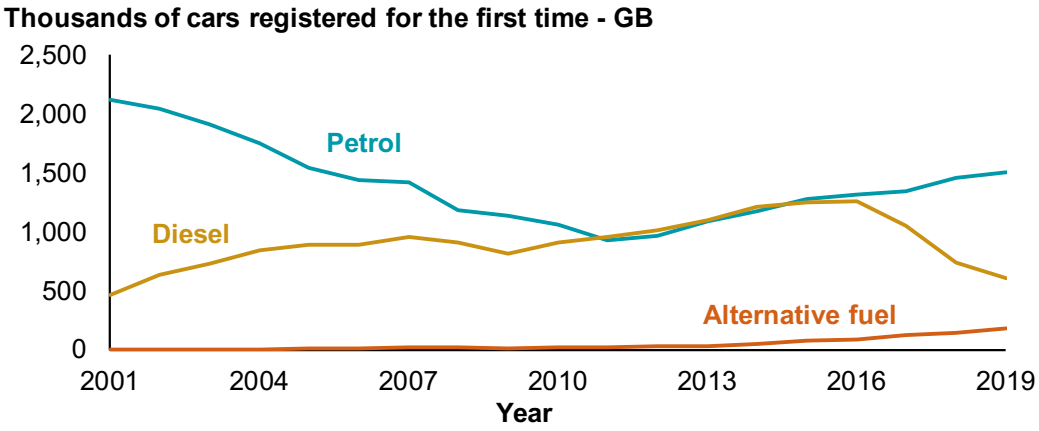
New car registrations

Annual change in 2019 - GB

Diesel	Petrol	Alt. fuel
-18%	+3%	+26%

Compared to 2018 new registrations, petrol cars increased by 3% and alternative fuel cars increased by 26% in 2019.

Figure 2: Cars registered for the first time by fuel type, Great Britain, 2001 to 2019 [VEH0253]



Key events around the decline in new diesel cars

April 2017: changes are introduced for newly registered car tax bands and rates.

July 2017: UK Plan for Tackling Roadside Nitrogen Dioxide Concentrations is announced, ending the sale of all new conventional petrol and diesel cars and vans by 2040.

November 2017: Transport for London announces the "world's first Ultra-Low Emission Zone" - although new diesel cars would not be charged under the current plan.

Electric Vehicle Charging Device Statistics

The Department for Transport publishes statistics on the number of publicly available electric vehicle charging devices in the UK.

Battery electric new car registrations more than doubled in Great Britain, which contrasts with a sharp decline in plug-in hybrid electric cars. [VEH0253]

In 2019, out of all new alternative fuel car registrations, there were 112 thousand hybrid electric (HEVs), 38 thousand battery electric (BEVs), 35 thousand plug-in hybrid electric (PHEVs), and less than one thousand using other fuel types.

The number of battery electric cars registered for the first time in 2019 more than doubled (+141%) compared to 2018, affected by the release of Tesla Model 3 and strong growth for other popular models.

Hybrid electric cars increased by 30% in 2019 compared to 2018, whereas the number of plug-in hybrid electric cars decreased by 17%.

Does the vehicle use electric power?		Does the vehicle use petrol or diesel? Yes	No
	Yes, and is a plug-in	Plug-in hybrid electric (PHEV)[1]	Battery electric (BEV)
	Yes, but is not a plug-in	Hybrid electric (HEV)	Fuel cell electric (FCEV)
	No	Petrol / Diesel	Other*

1. A range-extended electric vehicle is a special case of PHEV, where the conventional fuel does not power the wheels directly, usually only charging the battery for additional range.

* This table excludes rare combinations based on biofuels and other emerging technologies.

Ultra low emission vehicles (ULEVs)

This section relates to the United Kingdom rather than Great Britain.

Large increases in new battery electric ULEVs push total new ULEV numbers up in the UK. [VEH0171]

In 2019, 80,578 ULEVs were registered for the first time in the United Kingdom, an increase of 26% on 2018 and 52% on 2017. ULEVs accounted for 2.7% of all new vehicle registrations, up from 2.1% in 2018. [VEH0150]

In 2019, the most common generic model of ULEV registered for the first time in the UK was the Tesla Model 3 with 10,649 vehicles, followed by the Mitsubishi Outlander with 6,195 vehicles and the Nissan Leaf with 5,280 vehicles. [VEH0171]

Key events surrounding the uptake of new ULEV registrations

2011/2012: plug-in car and van grants are introduced, reducing the cost of new qualifying models. These were expanded to cover more body types in March 2016.

July 2018: Road to Zero Strategy is announced, confirming the government's ambition to see at least half of new cars to be ultra low emission by 2030.

October 2018: The government announced that changes would be made to the plug-in car grant, focusing on battery electric vehicles.

Figure 3: ULEVs registered for the first time by fuel type, United Kingdom, 2010 to 2019 [VEH0171]

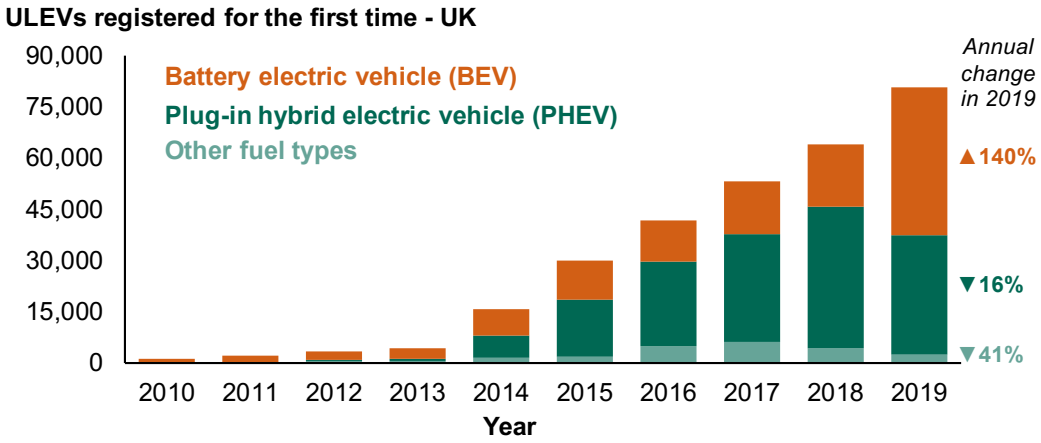


Figure 4: Top 20 generic models for ULEVs registered for the first time by fuel type, United Kingdom, 2019 [VEH0171]

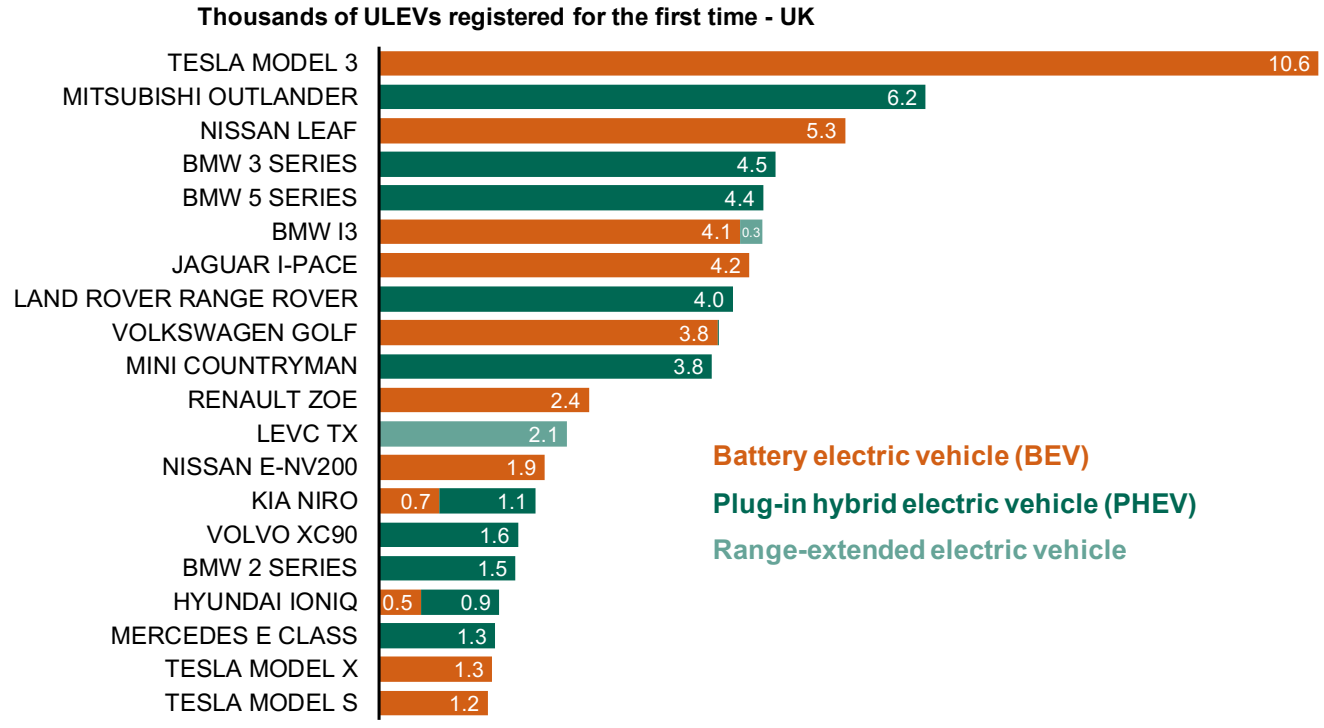


Table 2: ULEVs registered for the first time by body type, with previous year and total new registrations comparison, United Kingdom, 2019 [VEH0170]

New ULEV registrations — Number / *Percentage*

	2019	2018	Annual percentage increase (2019)	Proportion of all new registrations (2019)
Cars	72,853	60,254	*21*	*3.1*
Light goods vehicles (LGVs)	3,625	1,606	*126*	*1.0*
Heavy goods vehicles (HGVs)	19	12	*58*	-
Motorcycles	1,706	668	*155*	*1.4*
Buses & coaches	121	90	*34*	*1.7*
Other	2,254	1,250	*80*	*3.9*

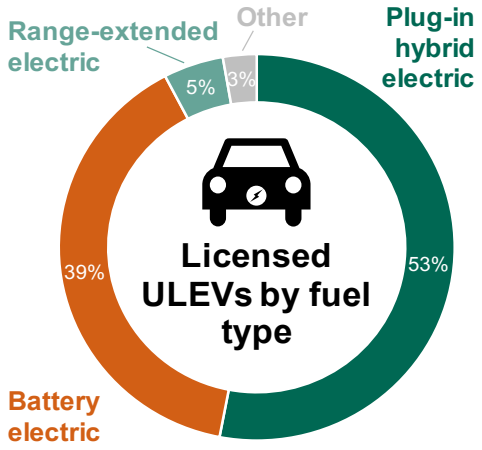
At the end of 2019, there were 269 thousand ultra low emission vehicles in the UK. [VEH0130]

There were 36% more licensed ULEVs at the end of 2019 compared to the previous year, where there were 198 thousand.

The vast majority of ULEVs licensed at the end of 2019 were either PHEVs (53%) or BEVs (39%). A small proportion were range-extended electric vehicles (5%), which is currently only available in a small selection of models. [VEH0133]

In the UK, at the end of 2019, ULEVs accounted for 0.7% of all licensed vehicles. Regionally, the highest rate was seen in London with 1.3% and the lowest was in the North East, Northern Ireland and Wales, each with 0.3%. [VEH0101, VEH0130]

Figure 5: Licensed ULEVs by fuel type, UK, 2019 [VEH0133]



Average CO_2 emissions for cars

Average CO_2 emissions of cars registered for the first time have been affected by regulation and market changes over the past few years.

Average CO_2 emissions of cars registered for the first time in Great Britain steadily fell between 2003 and 2016, but then began to increase, with a shift towards registering larger cars (which have higher reported emissions) and increases in reported emissions for popular petrol car models (**Figure 6**). [VEH0150]

Changes to the official measurement procedure used, from NEDC to WLTP (see side bar), to determine car CO_2 emissions have caused a number of discontinuities to the time series from September 2018 onwards, which have complicated the interpretation of recent trends. These changes are summarised in **Table 3** and the side bars.

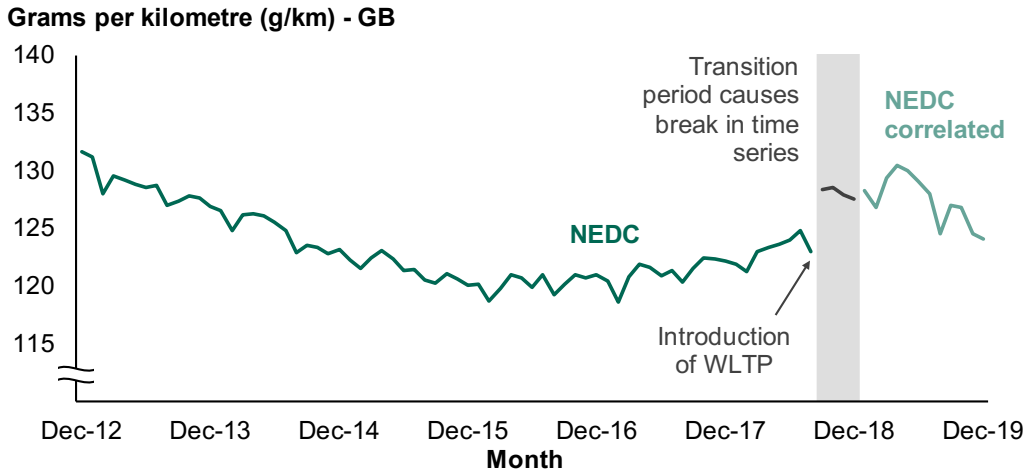
Methods used to measure CO_2 emissions

New European Driving Cycle (NEDC): Original laboratory test based on theoretical behaviour.

Worldwide Harmonised Light Vehicle Test Procedure (WLTP): More advanced lab test to replace NEDC, based on real driving data.

NEDC correlated value: This value has been calculated using the results of a WLTP test via the COM2PAS tool developed by the European Commission, for tax and emissions monitoring purposes.

Figure 6: Average CO_2 emissions for cars registered for the first time, monthly, Great Britain, Dec 2012 to Dec 2019 [VEH0150]



Break in series for average reported CO_2 emissions of cars

The "NEDC correlated" figure is not directly comparable with the NEDC figure as their underlying methodologies are different.

Table 3 illustrates which time periods are not directly comparable as a result:

- Up to August 2018
- September 2018 to December 2018
- January 2019 onwards

Table 3: The use of different testing systems for average reported CO_2 emissions of new cars, United Kingdom

Name	Period	Testing system used	Figure used when registered	Notes
NEDC / Pre-WLTP	Up to August 2018	NEDC	NEDC	
Transition period	September 2018 to December 2018	WLTP	NEDC and NEDC correlated	Some NEDC tested vehicles allowed to be registered
WLTP	January 2019 onwards	WLTP	NEDC correlated	WLTP figure will be used from April 2020 onwards

VED bands [VEH0256]

Prior to 2011, over 90% of cars registered for the first time each year had emissions above 110 g/km. This percentage had dropped to 59% by 2015, following increases in new ULEV and HEV registrations. However, a market shift to registering larger cars (e.g. SUVs) began to reverse this trend between 2015 and 2019, as illustrated in **Figure 7**. There was a marked shift back towards lower emission vehicles in the last two quarters of 2019. [VEH0256]

VED bands

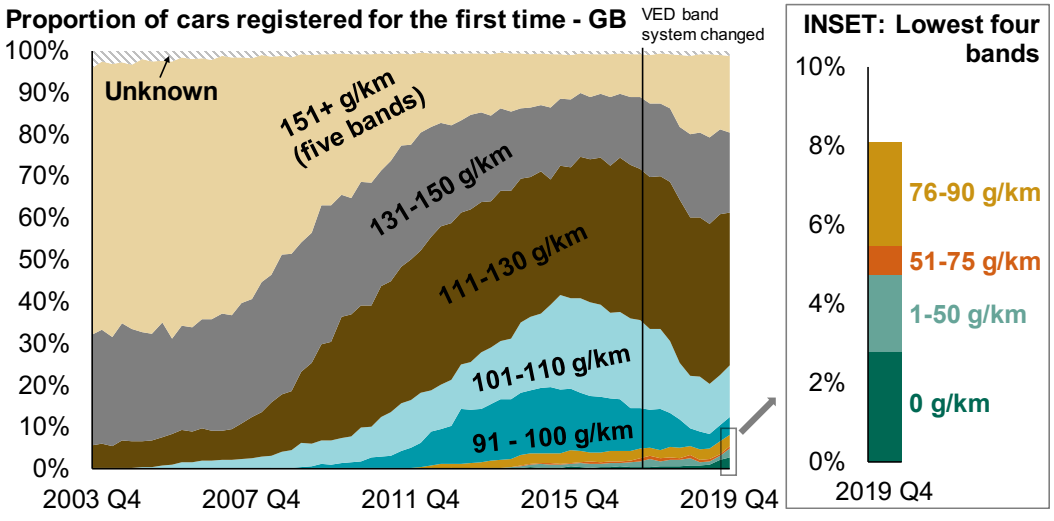
Vehicle Excise Duty (VED) is charged on vehicles registered in the UK.

Since March 2001, car VED has charged in bands on the basis of their CO_2 emissions (NEDC).

From April 2017, the CO_2 emission bands for VED were revised.

From April 2020, whilst the VED bands did not change, the emissions used to allocate a band changed to use WLTP figures. This change will not be reflected in these statistics until 2020 Q2.

Figure 7: Cars registered for the first time by CO_2 emission / VED band, quarterly, with insert for lowest four bands, Great Britain, 2003 Q4 to 2019 Q4 [VEH0256]



Total licensed vehicles

At the end of 2019, there were 38.7 million licensed vehicles in Great Britain, a 1.3% increase compared to the end of 2018. [VEH0103]

The number of licensed vehicles at the end of the year has increased in all but one year (1991) since the end of the Second World War.

At the end of 2019 **38.7 million** vehicles licensed for use on roads in Great Britain

Figure 8: Licensed vehicles at the end of the year, Great Britain, 1950 to 2019 [VEH0103]

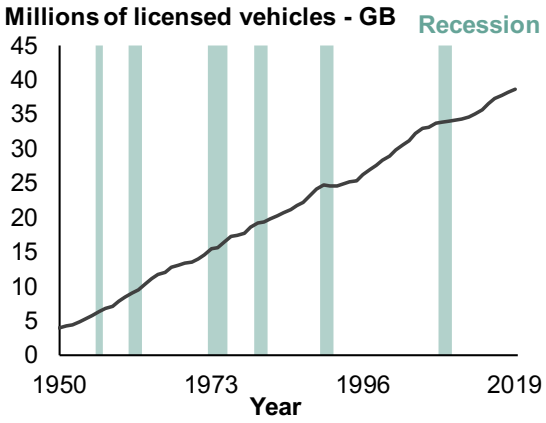
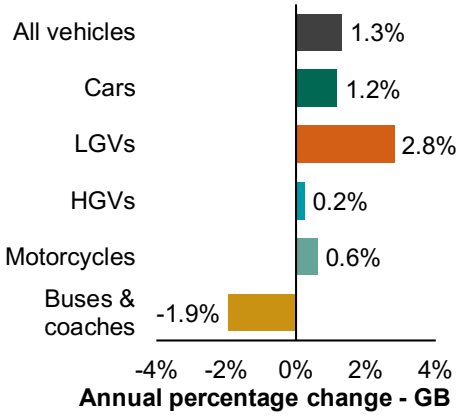


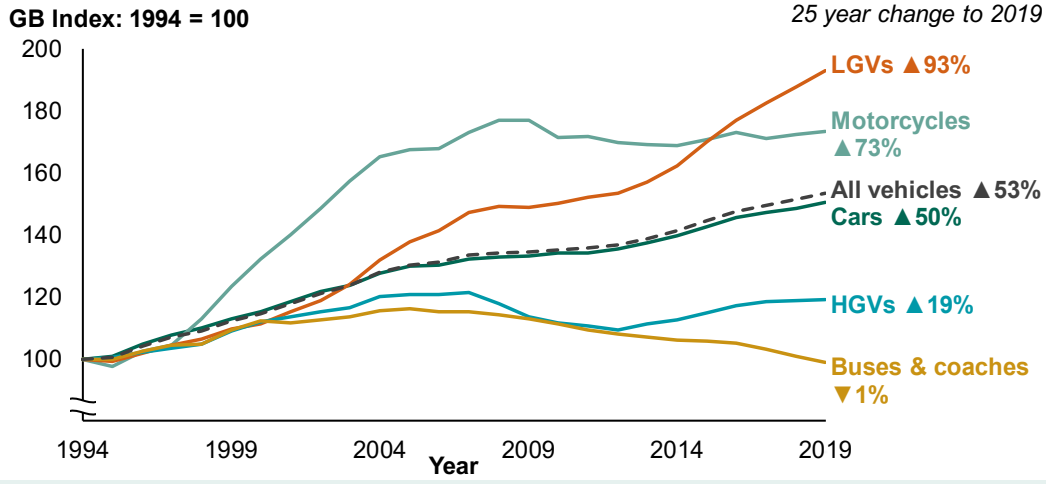
Figure 9: Annual percentage change in licensed vehicles by body type, Great Britain, end of 2019 [VEH0101]



Cars make up the majority of licensed vehicles. There were 31.9 million cars (82.4%), 4.1 million LGVs (10.7%), 0.50 million HGVs (1.3%), 1.3 million motorcycles (3.2%), 0.15 million buses & coaches (0.4%), and 0.77 million other vehicles (2.0%) licensed at the end of 2019. [VEH0101]

All body types apart from buses & coaches saw an increase in overall licensed vehicles since the end of 2018. The largest percentage increase was for LGVs at 2.8%, which has been sustained for a number of years. There was a 1.9% fall in the buses & coaches fleet in 2019, which reflects the 11.4% decline in the number of new registrations during 2019. [VEH0101]

Figure 10: Index of licensed vehicles at the end of the year by body type, Great Britain, 1994 to 2019 [VEH0101]



How are these different from new registrations?

Figures on total licensed vehicles have slower variations compared to vehicles registered for the first time as there are many more vehicles that remain licensed over the year.

Motorcycles

The number of licensed motorcycles fluctuates considerably by quarter, with higher numbers licensed at the end of June and September compared to the end of March and December.

This is consistent with riders typically licensing their motorcycle for 6 months during the summer months but not during winter.

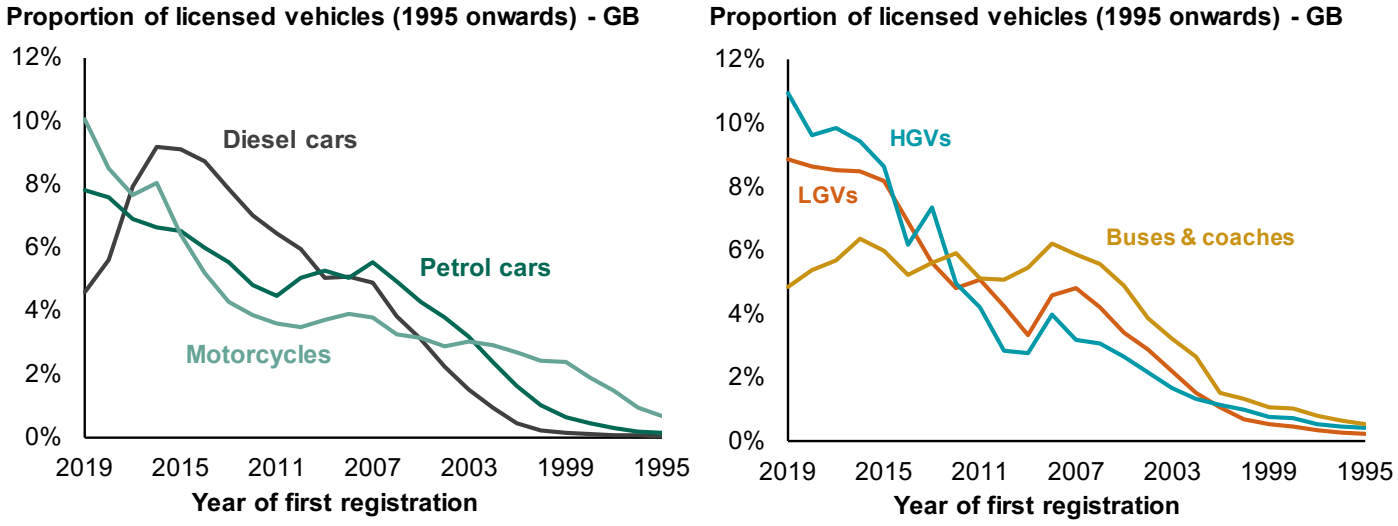
The National Travel Survey provides more information on motorcycle use.

The average age of a licensed car in Great Britain was 8.3 years at the end of 2019. [VEH0211]

Petrol cars were older, with an average age of 9.1 years compared with 7.3 years for diesel cars. The average age of licensed LGVs was 8.3 years, HGVs was 7.4 years, buses & coaches was 10.9 years, and for motorcycles was 15.0 years. [VEH0211, VEH0311, VEH0411, VEH0511, VEH0611]

Figure 11: Licensed vehicles at the end of the year by body type and year of first registration (1995 onwards), Great Britain, 2019 [VEH0211, VEH0311, VEH0411, VEH0511, VEH0611]

Vehicles registered before 1995 have been omitted for simplicity. They account for a small proportion of all licensed vehicles.



Cars and their keepers

Company kept cars are a primary driver of new registrations for cars. [VEH0202, VEH0252]

During 2019, 59% of cars registered for the first time had a company keeper. However, the proportion of licensed cars at the end of 2019 kept by companies was much lower at only 9%.

This illustrates that company-kept cars registered for the first time become privately-kept within a few years. The proportion of company-kept cars in the fleet has remained relatively stable between 8-10% since 1994.

Over the last 10 years, the number of female registered keepers of licensed cars had increased by 17%, compared with an increase of only 9% in male keepers. Women now account for 35% of registered car keepers with men accounting for 50%.

For privately-kept vehicles where the keeper's gender is recorded, 59% are male and 41% are female at the end of 2019. Overall, privately-kept cars, including those where the gender is unknown, accounted for 89% of all cars at the end of 2019, with those between keepers accounting for 2%.

Who is a registered keeper?

Every registered vehicle, unless it is in the process of changing hands, has a registered keeper, whose details are held by DVLA.

Note that the registered keeper of a vehicle is not necessarily the person who uses it, and the vehicle is not always based at the keeper's contact address. This is particularly true for company or fleet vehicles.

Ford remained the most common make for new car registrations in Great Britain during 2019. [VEH0260]

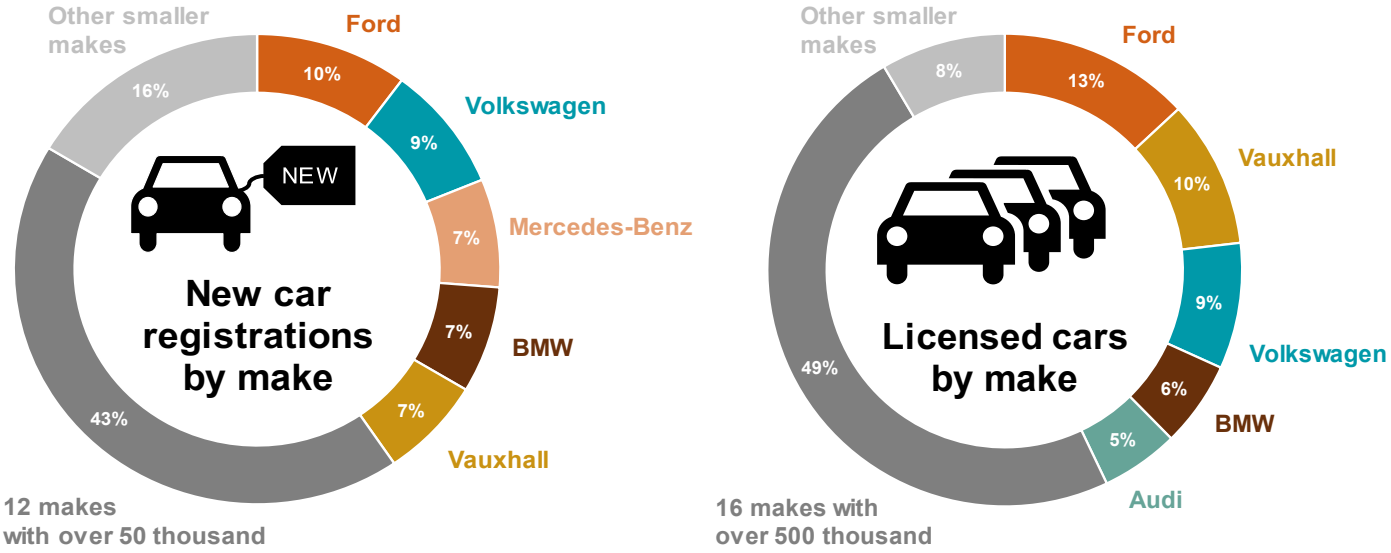
During 2019, the top five makes were Ford (10%), Volkswagen (9%), Mercedes-Benz (7%), BMW (7%), and Vauxhall (7%). The equivalent top five for 2018 were Ford (11%), Volkswagen (8%), Vauxhall (7%), Mercedes-Benz (7%) and BMW (7%). [VEH0260]

There were 17 makes with over 50 thousand cars registered for the first time each in 2019, accounting for 84% of all new car registrations. [VEH0260]

For total licensed stock at the end of 2019, the top five makes were different to new registrations, namely Ford (13%), Vauxhall (10%), Volkswagen (9%), BMW (6%), and Audi (5%). [VEH0210]

There were 21 makes with over 500 thousand licensed cars each, accounting for 92% of all licensed cars. [VEH0210]

Figure 12: Top five makes for cars registered for the first time during 2019 and for those licensed at the end of 2019, Great Britain [VEH0210, VEH0260]

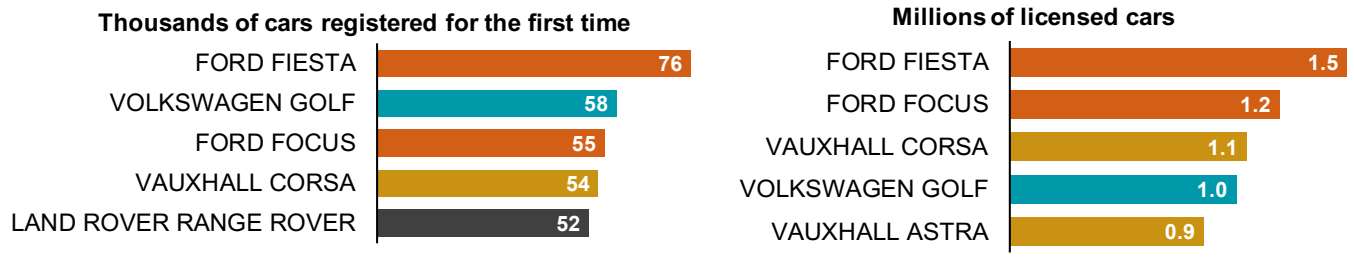


Ford Fiesta was the most common new car registration in 2019, with 76 thousand registered for the first time. This was followed by Volkswagen Golf with 58 thousand and Ford Focus with 55 thousand. [VEH0161]

Land Rover Range Rover and Nissan Qashqai were fifth and sixth respectively (52 and 51 thousand) despite their makes only accounting for 3% and 4% of all new car registrations. [VEH0161]

At the end of 2019, the most common licensed car was Ford Fiesta, with 1.5 million cars licenced, followed by Ford Focus with 1.2 million, and Vauxhall Corsa with 1.1 million. [VEH0128]

Figure 13: Top five generic models for cars registered for the first time during 2019 and for those licensed at the end of 2019, Great Britain [VEH0128, VEH0161]



Background notes

About these statistics

Almost all the statistics in the vehicle licensing statistics series are derived by Department for Transport statisticians from extracts of the Driver and Vehicle Licensing Agency (DVLA) vehicle database. The main purpose of the database is to administer vehicle registration and licensing records in the United Kingdom.

For further information about the data used in this release, please see the detailed notes and definitions. There is also a Statement of Administrative Sources for the DVLA vehicles database.

A separate note on users and uses of these statistics is available from the vehicles statistics information web page.

Strengths and weaknesses of the data

The DVLA database can be regarded as being virtually complete in terms of the number of vehicles registered for the first time, licensed vehicles and vehicles with a SORN (Statutory Off-Road Notification). However, there may be some errors in some of the specific details of individual vehicles.

The Department for Transport estimates that under 2% of the vehicles records have an inaccuracy in one of the variables used for the statistics published. Other factors to consider in interpreting these statistics include:

- Changes in legislation;
- Revisions to the series;
- Seasonal variation which affects some vehicle types;
- Foreign registered vehicles may also use UK roads without being registered with DVLA;
- Vehicle Excise Duty (VED) evasion.

Most of these factors will only have a marginal effect for most uses of the data.

Geography

In July 2014, vehicle and registration services for Northern Ireland were centralised at DVLA, where these services for Great Britain were already administered. This created a single vehicle register for the United Kingdom, in place of separate registers for Great Britain and Northern Ireland.

As a result of these changes, the coverage of the vehicle licensing statistics tables was expanded to cover UK as well as GB where practical. Because of the greater availability of GB time series data, this statistical release will continue to focus mainly on GB rather than UK results for now. For further information, please see the detailed notes and definitions.

National Statistics

These statistics were designated as National Statistics in April 2012. There are a few exceptions listed on the collection page.

National Statistics are produced to the high professional standards set out in the Code of Practice for Statistics. They undergo regular quality assurance reviews to ensure that they meet customer needs. They are produced free from any political interference.

Details of ministers and officials who receive pre-release access to these statistics up to 24 hours before release can be found in the pre-release access list.

Measuring CO_2 emissions in new vehicles since 2018

Cars registered for the first time from September 2018 onwards were mandated to be tested under WLTP, resulting in a WLTP-CO_2 emissions figure. In 2019, this additional figure was collected (for the vast majority of cars) at point of first registration using DVLA's new Register a Vehicle (RaV) service.

Using this 2019 RaV data, the average WLTP-CO_2 emissions for cars registered for the first time in the UK was provisionally around 153 g/km, which is around 20% higher than the "NEDC correlated"-CO_2 figure of 128 g/km.

From April 2020 onwards, the WLTP-CO_2 figure will be used to determine the VED band for a car, so it is expected that a noticeable change in these figures from 2020 Q2 onwards will be observed due to the new methodology alone.

In addition, the majority of light goods vehicles registered for the first time from September 2019 onwards are also mandated to be tested under WLTP rather than NEDC.

Recent trends

There are more recent data than published here available from SMMT on the majority of vehicle sales.

SMMT data are published monthly for cars and vans shortly after the month-end, in advance of the publication of DfT's detailed official statistics. This can be useful to look at the most recent trends in vehicle registrations.

Although there are slight differences in coverage of the SMMT data, the volumes and trends published by SMMT are generally consistent with DfT published data.

More information about the data published by SMMT can be found on their website.

Request for feedback

We welcome any feedback on these statistics, to ensure future releases best meet user needs. Feedback can be provided by email to vehicles.stats@dft.gov.uk.

Next release

Vehicle Licensing Statistics are published quarterly. The next release is due in June 2020, which will cover the period up to the end of March 2020. The quarterly releases (published June, September, December) have a reduced number of tables and commentary compared to the annual publication (April).

Any updates to these plans, including the exact publication date when known, will be advertised via the DfT statistical publications schedule.

Release of DfT Statistics publications

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