



## Vehicle Excise Duty evasion statistics: 2019

#### **About this release**

This release presents estimates for the rate of Vehicle Excise Duty (VED, or road tax) evasion among vehicles seen on UK roads, and the estimated associated revenue loss.

These statistics are based on observing registration marks of vehicles in traffic via a roadside survey carried out at 256 sites across the UK in June 2019.

Every vehicle registered in the UK must be correctly taxed if used or kept on a public road. This tax is collected and enforced by the Driver and Vehicle Licensing Agency (DVLA).

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The estimated rate of unlicensed vehicles observed on UK roads was lower in 2019 than when previously surveyed in 2017.



**1.6%** of vehicles in UK traffic unlicensed in 2019, down from 1.8% in 2017.



**634 thousand** unlicensed vehicles estimated in UK active stock (1.6% of all

vehicles) in 2019.



**£94 million** of potential revenue loss over one year (about 1.5% of total due), although some of this will have been recovered through DVLA enforcement activity or by vehicle keepers paying arrears of duty at a later date.

#### What we can conclude

The UK estimated rate of vehicles evading VED in traffic is statistically significantly lower than in 2017.

#### What we cannot conclude

The real loss of duty to the Exchequer is not £94 million, as this is an upper estimate and some will be reclaimed / paid later.

In 2019, the estimated rate of unlicensed vehicles in traffic in the UK was 1.6%, compared with 1.8% in 2017 and 1.5% in 2015.

An estimated 1.6% of all vehicles in the active UK stock were unlicensed in 2019. This was the equivalent of around 634 thousand vehicles, down from 755 thousand in 2017.

#### Of the unlicensed vehicles identified in the 2019 survey:



<u>6</u>

**54%** had been unlicensed for 2 months or less



**43%** were 10 or more years old

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information



**36%** had changed hands since the beginning of October 2018



**9%** were less than 2 years old

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#### **VED** evasion in traffic

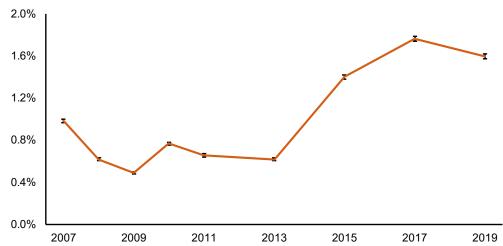


## The latest estimates indicate that 1.6% of traffic on roads in the United Kingdom consisted of vehicles which were unlicensed.

This is a statistically significant decrease compared with 2017, when the rate was 1.8%. The recent trends were likely to be related to the major changes to the vehicle licensing system which took place in October 2014, which are summarised on page 3.

Figure 1: Estimated VED evasion rate in traffic, Great Britain, 2007 to 2019

#### Proportion of vehicles evading



#### Tax class

The majority of vehicles are in the Private and Light Goods (PLG) vehicle tax class, accounting for 89% of all licensed UK vehicles. The UK evasion rate in traffic for PLG vehicles was 1.7% in 2019, slightly above the overall average but not statistically significantly different.

Rates of evasion in UK traffic were relatively low for both the Goods vehicle (0.8%) and Bus (0.5%) tax classes in 2019.

The UK evasion rate for Exempt vehicles was 1.3%. Although Exempt vehicles do not have to pay VED, they still need to be licensed for use on the road.

The evasion rate in traffic is highest for Motorcycles at 3.8%. It is much harder to collect data for motorcycles than other vehicle types, so this figure should be treated with more caution than for other vehicle types. However, it is still considered to be a robust indication that motorcyclists have a higher evasion rate than the average road user.

### What is evasion "in traffic"?

This is the rate of unlicensed vehicles in traffic. In other words, if you stood beside an average road, the percentage of passing vehicles which you would expect to be unlicensed.

This can be thought of as a measure of how much the roads get used by drivers whose vehicles are not compliant with the road tax rules.

#### **Updated tables**

Unlicensed vehicles in traffic: <u>VED0101 to 0104</u>

## Statistical significance

Changes described in this release will often state whether the change was "statistically significant".

These estimates are based on a survey of a sample of all traffic, so they are subject to a range of uncertainty, represented in some of the charts by error bars showing a range between upper and lower estimates.

Those in the evasion in traffic section are based on the 95% confidence intervals of the estimates. The 95% confidence interval is the range of values within which the true rate of evasion would fall 95% of the time if it were possible to repeat this survey many times.

#### Administrative changes introduced from 1 October 2014

#### Paper tax disc abolished

The requirement to display a valid tax disc in the windscreen of all vehicles used on the road was abolished, and no new paper tax discs were issued. This removed a visual in-vehicle reminder of the tax disc expiry date, but the DVLA still send reminders before renewal is due, and it is also possible to check license status of a vehicle online.

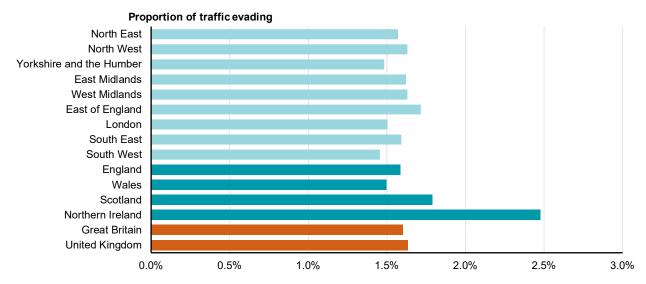
#### Non transferability of road tax when vehicles change hands, and automatic refunds

Any existing vehicle tax now automatically ends when a vehicle changes hands. The previous keeper is automatically refunded any full months of remaining tax, and the new keeper must tax the vehicle immediately. Previously, any remaining tax could be transferred with the vehicle, and the previous keeper would need to claim a refund if they wanted one. There is therefore potential for evasion rates to increase if the new keeper fails to understand or comply with the new arrangements. However, this situation can only arise where a vehicle changes hands, and the DVLA have been issuing reminders to all new keepers who have not taxed their vehicle.

#### **Region / Country**

The estimated VED evasion rates in traffic only varied slightly between English regions and Wales, between 1.5% and 1.7%. The highest rate of evasion in traffic was seen in Northern Ireland with 2.5%, statistically significantly higher than any other region, followed by Scotland with 1.8%. It should be noted that these results are based on where vehicles were seen in traffic, not where they are registered.

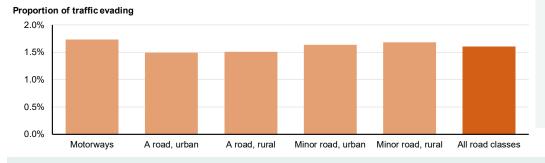
Figure 2: Estimated VED evasion rate in traffic by region, United Kingdom, 2019



#### Road type

Estimated evasion rates in Great Britain varied slightly between different road types, with lower rates on A roads than all other road classes.

Figure 3: Estimated VED evasion rate in traffic by road type, Great Britain, 2019



#### Geography

This survey covers the whole of the United Kingdom, which is Great Britain (England, Scotland and Wales) and Northern Ireland.

However, some detailed results are only available for Great Britain or for Great Britain and Northern Ireland separately.

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#### **VED** evasion in active stock

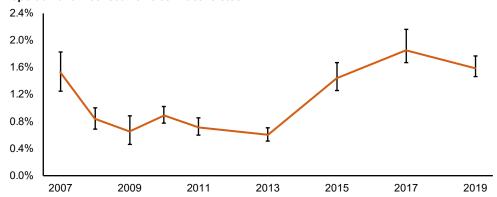


## The latest estimates indicate that 1.6% of vehicles in the active vehicle stock were unlicensed in the United Kingdom.

This corresponds to 634 thousand vehicles. Whilst lower than the estimate for 2017, the sampling error associated with these estimates means that the change is not statistically significant. The 2017 rate of evasion was 1.9%, corresponding to 755 thousand vehicles.

### Figure 4: Estimated VED evasion rate in active stock, Great Britain, 2007 to 2019

Proportion of unlicensed vehicles in active stock



### What is evasion "in stock"?

This is the number of distinct vehicles which are unlicensed as a proportion of all the distinct vehicles seen on the road.

This rate can be lower than the evasion in traffic figure if unlicensed vehicles are used more than licensed ones, or higher if they are used less.

Evasion in stock is relevant when calculating VED revenue lost to evasion.

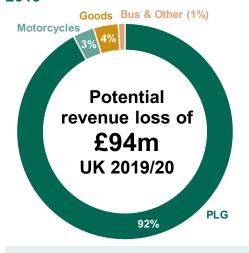
#### Potential revenue lost to evasion



# The estimated rate of VED evasion in the UK would correspond to around £94 million in lost tax revenue over a full year.

The estimates in this section relate to potential lost tax revenue over a full year. However, some of this will have been recovered through DVLA enforcement activity or through vehicle keepers paying arrears of duty to cover the untaxed period.

Figure 5: Estimated VED revenue loss by tax class, UK, 2019



The total figure equates to about 1.5% of the total VED due on all vehicles.

The amount of VED due varies between tax classes, so the potential revenue loss from unlicensed vehicles has a different distribution to the number of those unlicensed vehicles.

The vast majority of the estimated UK revenue lost, £86m, was

attributable to PLG vehicles, with £3m each to Motorcycles and Goods vehicles, and £1m to Buses and Other tax classes. Exempt vehicles do not account for any lost revenue.

#### **Updated tables**

Unlicensed vehicles in active stock: <u>VED0201 to 0202</u>

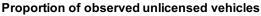
Lost revenue from unlicensed vehicles: VED0301

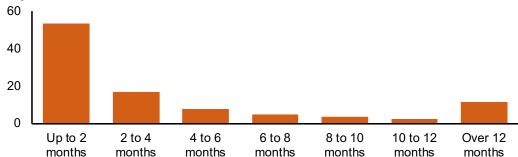
#### Further characteristics of unlicensed vehicles

#### Time since last licensed (based on 73% of observations)

Most vehicles, 54%, had been unlicensed for less than 2 months prior to the beginning of June. 11% had been unlicensed for more than a year, but this proportion was 27% for motorcycles.

Figure 6: Time since last licensed: unlicensed vehicles in June 2019





### Limitations to data in this section

The results in this section come from matching vehicles to their corresponding records in the Department's vehicle statistics data sets.

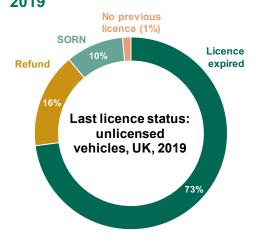
The proportion of observations with a successful match is noted in each subheading.

#### Last licence status (based on 76% of observations)

The majority of unlicensed vehicles were on the road after the licence had expired (73%);

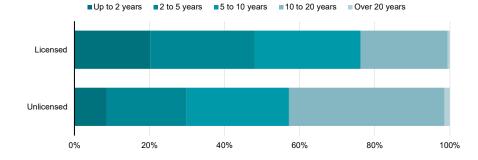
- ► 16% were seen after a licence refund had been issued and a subsequent licence has not been taken out:
- ► 10% were driving while the vehicle previously had a Statutory Off Road Notification (SORN); 6% had a current SORN and 4% had an expired SORN;
- ▶ 1% had no record of a previous licence.

## Figure 7: Last licensing status: unlicensed vehicles in June 2019



#### Age of vehicle (based on 93% of observations)

Figure 8: Age of vehicle: unlicensed and licensed vehicles in June 2019



Unlicensed vehicles observed in the survey included a higher proportion of older vehicles, with 43% being 10 or more years old, compared with only 24% of licensed vehicles. Conversely, only 9% of unlicensed vehicles were under 2 years old, compared with 20% of licensed vehicles.

#### Changed hands recently (based on 93% of observations)

36% of unlicensed vehicles had changed hands since the beginning of October 2018, which is higher than the proportion of licensed vehicles (22%).

#### **Updated tables**

Observed unlicensed vehicles: <u>VED0401 to 0405</u>

#### **Background information**

#### **About these figures**

Every vehicle registered in the United Kingdom must be taxed if used or kept on a public road. If the vehicle is kept off-road it must either be taxed or have a SORN (Statutory Off Road Notification) in force. Some vehicle types are zero-rated for VED, for example vehicles used by disabled people, mobility scooters, historic vehicles, electric vehicles, mowing machines, steam vehicles and agricultural vehicles – these are shown in the 'exempt' tax class in this report.

VED is collected and enforced by the Driver and Vehicle Licensing Agency (DVLA). The agency carries out computerised and roadside checks to identify evading vehicles. These enforcement activities are independent from this statistical survey of evasion.

#### Survey design and methodology

These statistics are based on the direct collection of registration marks of vehicles in traffic via a roadside survey using automatic number-plate recognition cameras at 256 sites in June 2019. For further details of how the survey was carried out, how the evasion estimates were derived and treatment of misread registration marks see the <u>Notes and Definitions</u>.

#### Changes in handling of low observation numbers for particular tax classes at survey sites

For the production of the 2019 estimates, a correction to the methodology has been made relating to sites at which motorcycle evasion was not measured specifically and also an adjustment for all vehicle types as to how data from sites with low numbers of observations for particular tax classes was used.

For motorcycles prior to 2017, even at sites for which motorcycles were not monitored, the overall motorcycle traffic expected at the site was still used in the calculation of overall evasion rates. This had the effect of decreasing motorcycle evasion rates for those years by roughly one percentage point. The method has now been changed to only consider sites for which motorcycles were actively monitored.

In addition, further analysis has shown that for sites with low numbers of vehicle observations in particular tax classes, there can be a significant impact of relatively few observations causing the calculated overall evasion rates to be quite volatile. As a consequence, for 2019 results, it has been decided that each survey day at each site would only be included in the analysis if there were at least 10 observations of that tax class. Table 1 summarises the impact on the number of observations used for analysis for each tax class.

Table 1: Number of surveys used for 2019 estimates with the proportion of observations used, United Kingdom

Tax Class	Surveys used <sup>1</sup>	Observations used (%)
Private and Light Goods	511	100.0%
Goods	272	98.9%
Motorcycles	103	96.7%
Bus	259	94.4%
Exempt	414	99.2%
Other	48	59.7%
Total	511	100.0%

<sup>1.</sup> There were 512 surveys conducted, one weekday and one weekend count at each site, but one survey was not used at all due to only having 8 observations.

For this reason, it is considered that there is now a discontinuity in the calculated evasion rates estimated for motorcycles between the 2017 and 2019 surveys.

These methodology changes had a negligible impact on overall evasion rate estimates, and there is no discontinuity between years for these estimates or other tax classes.

#### **Revision of previous figures**

Data for 2015 and 2017 have been revised slightly reflecting corrections to the weighting factors used in regional estimates – this mainly affects Northern Ireland data, and therefore the UK estimates – but does not make significant change to the trends displayed. Revised figures are clearly marked in published tables and no other figures were affected.

#### Users and uses of these statistics

These statistics are produced primarily to provide the Department for Transport, the Motoring Agencies and others with evidence to take an informed view on road tax evasion and related policies. The data also provide a source of evidence for auditing the VED account which is independent of the processes of collecting or enforcing payment.

#### Strengths and weaknesses of the data

Overall, these statistics is considered to provide good quality estimates because:

- they are based on a purpose designed statistical survey, using methods which have been carefully developed and peer-reviewed;
- they are based on a very large sample of more than 1 million observed vehicles per survey;
- ▶ the effects of number plate misreads have been considered and additional quality assurance procedures introduced to deal with them;
- they therefore avoid many of the statistical biases that would be likely to arise from using data derived from administrative or enforcement systems;
- ▶ the results are discussed with the DVLA and are thought to be consistent with their operational experience.

#### The limitations include:

- ▶ the high cost and practical constraints of data collection mean that only relatively infrequent 'snapshots' can be taken, and surveying is concentrated in June to maximise the hours of daylight available, but this means no analysis of seasonal variation can be undertaken;
- ► the number of sites is limited by cost and equipment constraints, which reduces the efficiency of the very large overall sample;
- motorcycles are much more difficult to survey given their relatively small numbers, different behaviour in traffic and smaller rear-facing number plates. So the results for motorcycles are likely to be less reliable than for other vehicle types;
- the survey does not identify vehicles which are using 'cloned' number plates, i.e. plate which are valid but belong to another vehicle;
- ▶ the survey does not pick up any vehicles which are only parked on the public highway without ever being used as it only surveys those in traffic. This which would also be a breach of licensing rules.

#### Related sources of information

Statistics on the <u>licensed vehicle stock</u> are regularly published by the Department for Transport. The roadside survey data used to produce the VED estimates are also used to produce estimates of foreign vehicles in traffic, which are published as part of the DfT <u>Road traffic statistics</u> series.

#### **National Statistics**

National Statistics are produced to high professional standards set out in the Code of Practice for Official 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 <u>pre-release access list</u>.

#### **Next release**

This survey is currently carried out in alternate years. Under this schedule, the next survey would be due in June 2021 with the report in late 2021. Any updates to these plans will be advertised via the <u>DfT statistical publications schedule</u>.

#### 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 <a href="mailto:vehicles.stats@dft.gov.uk">vehicles.stats@dft.gov.uk</a>.