



Department for Transport

# Vehicle Speed Compliance Statistics, Great Britain: January - June 2020

## About this release

This statistical release is a new quarterly release and is in addition to the annual Vehicle Speeds Compliance release.

It presents estimates of compliance with speed limits in free-flowing conditions on roads in Great Britain.

These are based on speed data from a sample of DfT's Automatic Traffic Counters (ATCs), chosen to exclude locations where external factors might restrict driver behaviour (e.g. junctions, hills, sharp bends and speed cameras).

The statistics provide insights into speeds at which drivers choose to travel when free to do so, but are not estimates of average speeds across the whole network, which are available separately (see page 7).

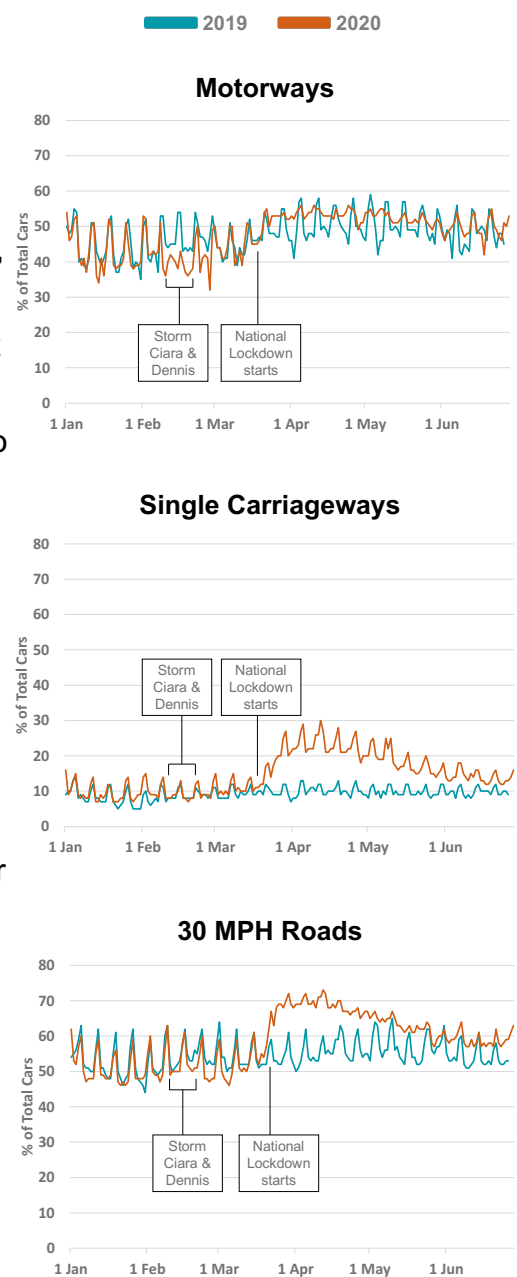
## In this publication

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**The proportion of cars exceeding the speed limit during the UK coronavirus lockdown was higher than for the equivalent period of 2019.**

- ▶ These differences emerged as road traffic levels reduced sharply in late March after the UK lockdown was introduced.
- ▶ As restrictions eased later in quarter 2 2020 (April to June), road traffic began to return to normal levels, and speed limit exceedance also started to return to levels more similar to 2019.
- ▶ In quarter 2 2020, 53% of cars in free flowing conditions **exceeded** the speed limit on motorways, compared with 52% in quarter 2 2019. On National Speed Limit (NSL) single carriageways with a car speed of limit of 60mph, 17% of cars **exceeded** the limit in quarter 2 2020, compared with 10% in quarter 2 2019, while on 30mph roads the figures were 63% and 56% respectively.

**Figure 1** Proportion of cars exceeding the speed limit



## Important information about this release

### Context

- ▶ The annual speed compliance statistics show very little variation in compliance with the speed limit from year to year, so without the coronavirus pandemic, we would expect speed limit compliance to have remained in line with previous years.
- ▶ However during the UK lockdown, which started in March 2020 road traffic decreased significantly, as people were encouraged to stay at home (see Figure 2). Throughout the second quarter of 2020, road traffic levels gradually increased again, as restrictions gradually eased.
- ▶ This unusual trend in road traffic patterns co-incides with changes in the level of compliance with speed limits by car drivers.

**Figure 2:** Car use on roads, since March 2020



For more information on transport use during the coronavirus pandemic, see <https://www.gov.uk/government/statistics/transport-use-during-the-coronavirus-covid-19-pandemic>

### Understanding and Interpreting these statistics



|   |  |  |
|---|--|--|
| <b>What do free flow speeds tell us ?</b> | Free flow speeds reflect the speeds drivers may travel at when free to do so.  | They are not representative of the level of speeding across the whole road network – which we would expect to be lower.  |
| <b>What roads are covered?</b>            | Only sites where the road conditions are free flowing and there are no junctions, hills, sharp bends, speed enforcement cameras or other traffic calming measures.                     | The statistics do not cover roads where the road layout or traffic calming measures are likely to constrain vehicle speeds. This includes smart motorways.   |
| <b>Comparing Data Between Years?</b>      | Only broad-scale comparisons of patterns in compliance and speeds over time periods of 5 or more years can be made confidently, unless the changes are large and the context is clear. | This release covers January to June 2020 and therefore cannot be directly compared to annual publications. 2019 quarterly statistics are provided throughout the release for comparative purposes. |

### Key terms

#### Exceeding the speed limit

Vehicles travelling at a speed higher than their applicable speed limit are defined as “exceeding the speed limit”.

#### Free flow speed

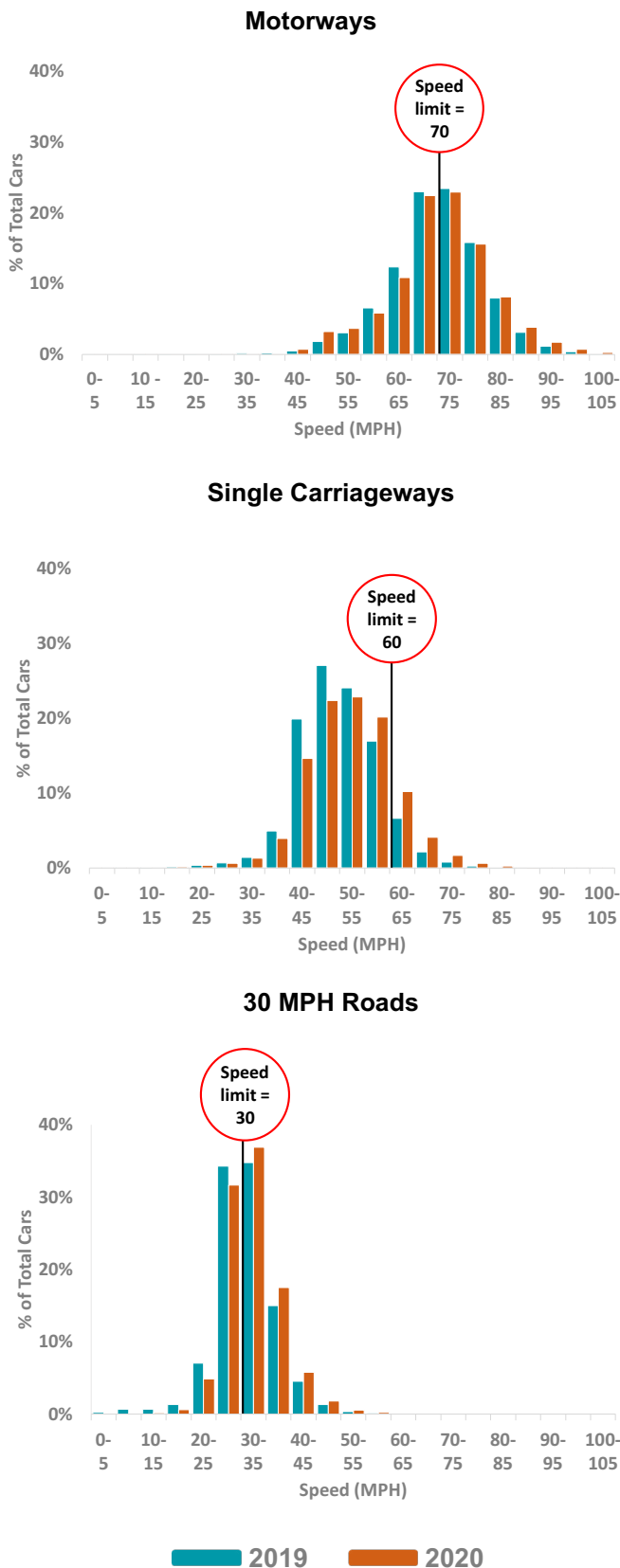
Free flow speeds are observed in locations where external factors which might restrict driver behaviour (e.g. junctions, hills, sharp bends and speed enforcement cameras) are not present.

#### Speed Limits

As of 2015, speed limits for cars are 70mph on Motorways and 60mph on National Speed Limit Single Carriageways. A complete breakdown of national speed limits can be found online at <https://www.gov.uk/speed-limits>.



**Figure 3:** Distribution of car speeds by road type in Great Britain, April to June 2020



## Summary

- ▶ In the second quarter of 2020, the proportion of cars travelling at speeds of 80mph or faster was slightly higher than the same period in quarter 2 2019.
- ▶ For NSL single carriageway roads (60mph speed limit for cars), the proportion of cars travelling at speeds of 55mph or faster was higher than the same period in quarter 2 2019.
- ▶ On 30mph roads, the proportion of cars travelling at speeds of 30mph or faster was higher than the same period in quarter 2 2019.
- ▶ Charts for quarter 1 2020 are not shown, as the speed distributions in this quarter were very similar to those of previous years. Data for quarter 1 are included in the data tables supporting this release. <https://www.gov.uk/government/collections/speeds-statistics>

**Figure 4:** Percentage of Cars exceeding the speed limit by road type

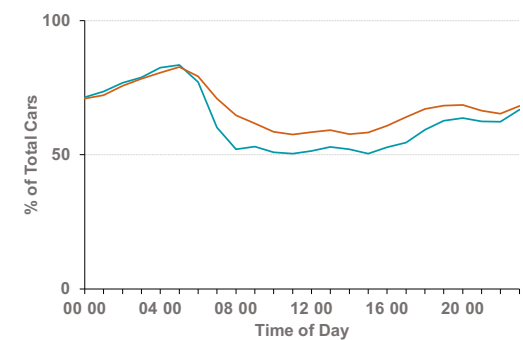
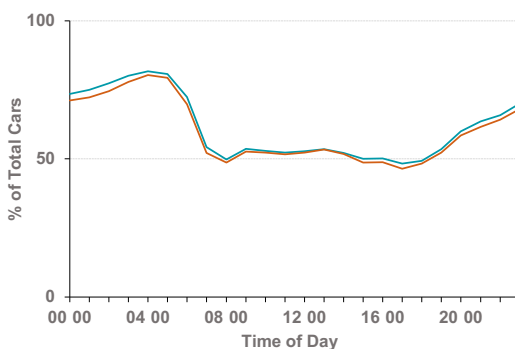
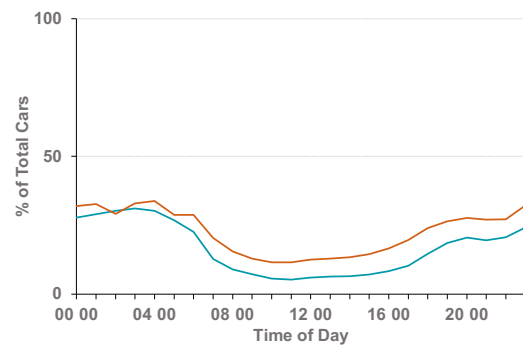
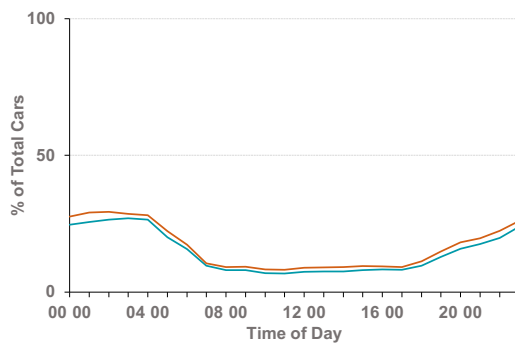
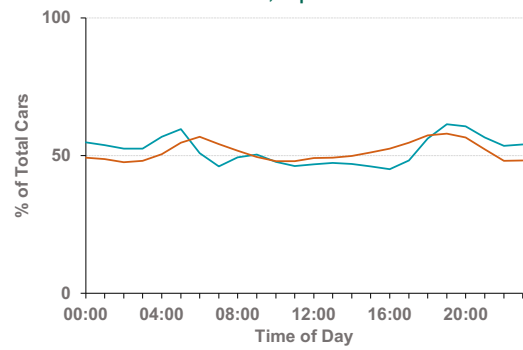
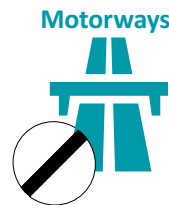
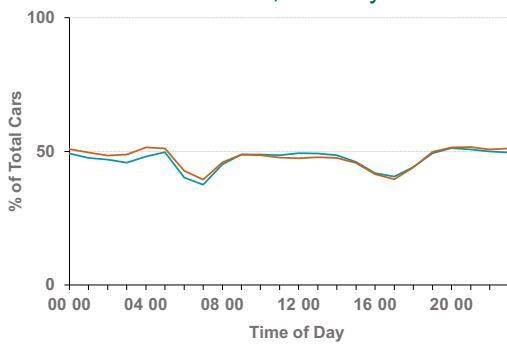
|  | 2019 |    | 2020 |    |
|--|------|----|------|----|
|  | Q1   | Q2 | Q1   | Q2 |
| <b>Motorways</b><br>Exceeding speed limit                    | 48   | 52 | 46   | 53 |
| <b>Single Carriageway</b><br>Exceeding speed limit by 10mph+ | 11   | 13 | 10   | 15 |
| <b>30 mph roads</b><br>Exceeding speed limit                 | 9    | 10 | 10   | 17 |
| <b>30 mph roads</b><br>Exceeding speed limit by 10mph+       | 1    | 1  | 1    | 3  |
| <b>30 mph roads</b><br>Exceeding speed limit                 | 54   | 56 | 53   | 63 |
| <b>30 mph roads</b><br>Exceeding speed limit by 10mph+       | 6    | 6  | 6    | 8  |

# Compliance with the speed limit by time of day



**Figure 5:** Cars exceeding the speed limit by time of day in Great Britain, January to March

**Figure 6:** Cars exceeding the speed limit by time of day in Great Britain, April to June



2019 2020

## Summary

These charts show how the percentage of cars exceeding the speed limit varied by time of day.

During the first quarter of 2020, these hourly patterns were very similar to those for 2019.

However, in the second quarter of 2020, when travel effects of the UK lockdown were seen, hourly patterns differed more significantly from quarter 2 2019. In quarter 2 2020:

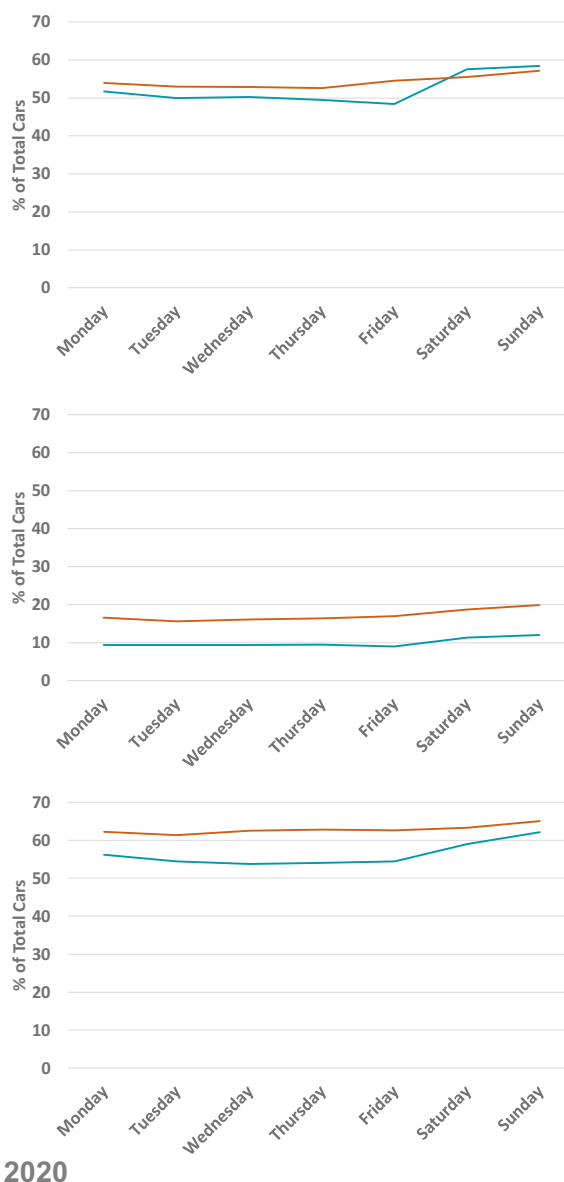
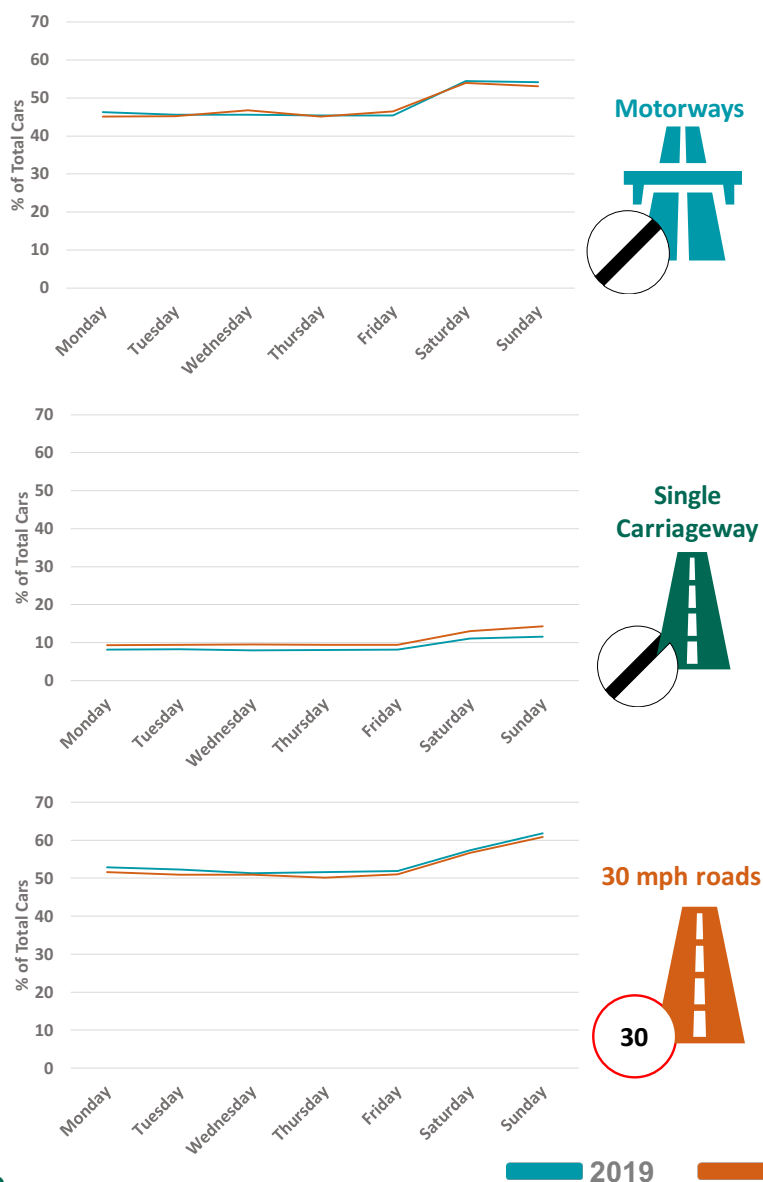
- ▶ On motorways, a lower proportion of cars exceeded the speed limit at night, but a greater proportion exceeded the speed limit during most of the day.
- ▶ On NSL single carriageways (60mph limit), a greater proportion of cars exceeded the speed limit at all times of day.
- ▶ On 30mph roads, the proportion of cars speeding at night showed little change from quarter 2 2019, but those exceeding the limit during the day increased.

# Compliance with the speed limit by day of week



**Figure 7:** Cars exceeding the speed limit by day of week in Great Britain, January to March

**Figure 8:** Cars exceeding the speed limit by day of week in Great Britain, April to June



## Summary

These charts show how the percentage of cars exceeding the speed limit varied by day of week. During the first quarter of 2020, these daily patterns mirrored those for 2019. However, in the second quarter of 2020, when travel effects of the UK lockdown were seen, daily patterns differed more significantly from quarter 2 2019. In quarter 2 2020:

- ▶ On motorways, speed exceedance on weekdays were more in line with weekend levels. A slightly lower proportion of cars exceeded the speed limit on weekends compared to quarter 2 2019.
- ▶ On NSL single carriageways (60mph limit), although the proportion of cars exceeding the speed limit was much higher, weekday and weekend patterns remained similar.
- ▶ On 30mph roads, differences between weekday and weekend patterns reduced compared to quarter 2 2019.

## What's new in this release

This release has been produced in addition to the annual publication, due to be released June 2021. This is to provide a quarterly breakdown of car speed compliance statistics during periods covering the coronavirus pandemic, to investigate the trends during the UK lockdown, which started in March 2020.

This first release covers the period January to June 2020, broken down by quarter. It will be updated quarterly. It looks at car speed compliance on motorways, National Speed Limit single carriageways and 30mph roads.

A daily time series analysis of car speed exceedance between January to June 2020 is also provided. Also, a weekly time series of car usage on roads has been included to provide additional context regarding the UK lockdown. These will be updated quarterly.

## Vehicle definitions

**Car:** Includes cars, car-derived vans and dual-purpose vehicles (definition of these vehicles can be found at <https://www.gov.uk/government/publications/car-derived-vans-and-dual-purpose-vehicles>).

More information is available in the [notes & definitions](#) document.

## Sources, strengths and weaknesses of the data

- ▶ These estimates are based on traffic speed data collected from a current sample of 79 Automatic Traffic Counters (ATCs) operated by DfT. In some cases (e.g. motorways), two ATCs may be covering different directions of traffic flow at the same location. The number of individual cars observed in the production of the January to June 2020 statistics was 91 million. The breakdown for each year is shown in **Table 1**.

**Table 1: Number of Automatic Traffic Counters and Vehicles used to produce Free Flow Vehicle Speed Statistics for Great Britain, 2011 to 2020**

| Year         | Automatic Traffic Counters Used | Vehicles used (millions) | Significant proportion of data removed from (sites) | Number |
|--------------|---------------------------------|--------------------------|---|--------|
| 2011         | 99                              | 685                      | 3 motorways   |        |
| 2012         | 99                              | 702                      | 3 motorways   |        |
| 2013         | 98                              | 605                      | 3 motorways   |        |
| 2014         | 105                             | 567                      | 3 motorways   |        |
| 2015         | 107                             | 743                      | 3 motorways   |        |
| 2016         | 107                             | 725                      |   | 0      |
| 2017         | 92                              | 637                      |   | 0      |
| 2018         | 102                             | 655                      |   | 0      |
| 2019         | 79                              | 510                      |   | 0      |
| 2020 Jan-Jun | 79                              | 91 (cars only)           |   | 0      |

## Sources, strengths and weaknesses of the data (cont.)

- ▶ The ATC technology used to collect this data can experience technical failures and produce output data which is incorrect and not representative of the traffic passing the counter. The methodology accounts for these occasions and removes any data which is not accurate. The ATCs classify vehicles using the number of axles, the axle spacing and the length of the vehicle.
- ▶ Full guidance on the sources and methods used to compile these statistics, plus information on speed limits, can be found at <https://www.gov.uk/government/collections/speeds-statistics>.
- ▶ Average speed statistics for both local authority managed 'A' roads and the Strategic Road Network are available online as part of a suite of travel time measures from the Road Congestion and Reliability Statistics series at <https://www.gov.uk/government/collections/road-congestion-and-reliability-statistics>. Note that this series also uses the term "free flow speed" but this is calculated in a different way (e.g. 'capped' at national speed limits) and using a different data source to the statistics presented in this release. recorded, as well as during times when traffic volumes are abnormally low or high.

## Next update

The July to September 2020 release is due to be published early 2021. We are continuing to review methodologies and the coverage of these statistics and further changes may be reflected in the next publication. We welcome feedback on this publication including content, timing, and format via email to [roadtraff.stats@dft.gov.uk](mailto:roadtraff.stats@dft.gov.uk).

## National Statistics

National Statistics are produced to high professional standards set out in the National Statistics Code of Practice. They undergo regular quality assurance reviews to ensure they meet customer needs.

Free Flow Vehicle Speed Statistics were assessed by the UK Statistics Authority against the Code of Practice and were [designated as National Statistics in February 2013](#).

Details of Ministers and officials who receive pre-release access to these statistics up to 24 hours before release can be found here: <https://www.gov.uk/government/publications/pre-release-access-lists-for-road-traffic-speeds-and-congestion-series>.

## Department for Transport (DfT) statistics Twitter feed



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