



Department for Transport

# Vehicle Speed Compliance Statistics, Great Britain: October - December 2020

## About this release

This statistical release is a 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).

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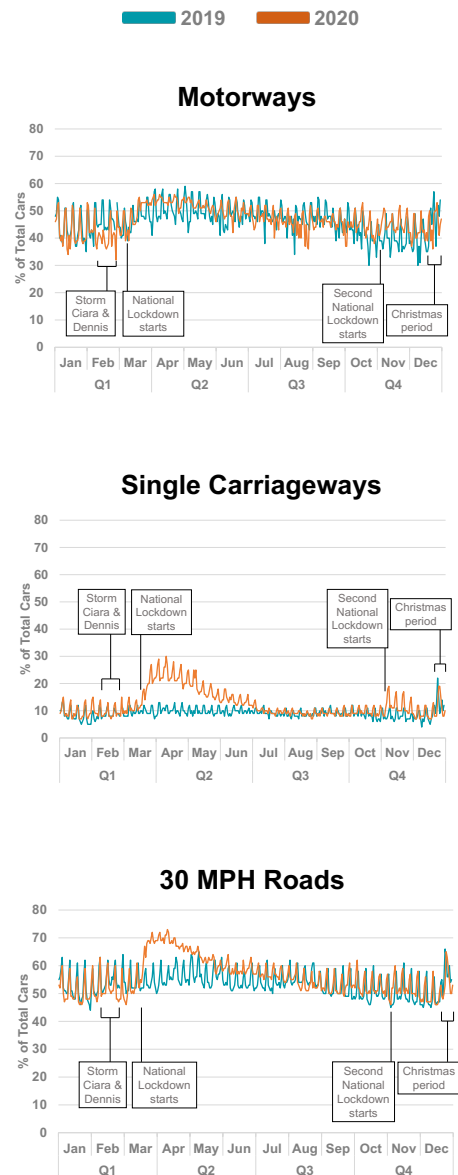
The proportion of cars exceeding the speed limit during **October to December 2020, which included the second national lockdown, was broadly similar when compared to the equivalent period of 2019.**

In quarter 4 2020, (47%) of cars in free flowing conditions **exceeded** the speed limit on motorways. On National Speed Limit (NSL) single carriageways with a car speed limit of 60mph, (10%) of cars **exceeded** the speed limit, while on 30mph roads (52%) of cars **exceeded** the speed limit. These figures are similar to what was seen in Q4 2019.

In Q4 2020 restrictions related to the coronavirus pandemic included local and national lockdowns. At the start of the second national lockdown in November, speed limit exceedance rose slightly, unlike Q2 2020 where speed limit exceedance increased sharply after the first national lockdown.

Throughout Q4 2020 daily road traffic figures varied but did not drop to levels seen in Q2 2020.

Figure 1 Proportion of cars exceeding the speed limit

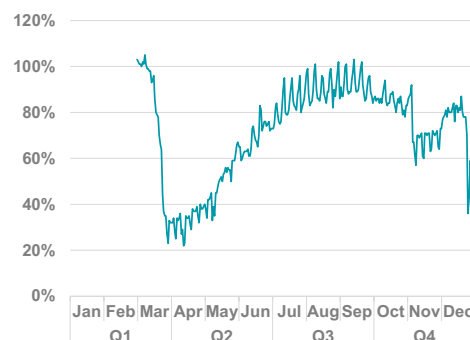


## Important information about this release

### Context

- ▶ The annual speed compliance statistics normally 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.
- ▶ In Q4 2020 stricter tier restrictions began in England and Scotland. Wales implemented a firebreak lockdown from 23 October to 9 November. England implemented a national lockdown between 5 November and 2 December. These strengthening restrictions have coincided with changes in traffic levels throughout Q4 2020.
- ▶ In Q4 2020 there were two sharp declines in daily traffic figures. The first decline seen in November coincided with the second national lockdown. The second decline seen in December reflects trends seen every year due to the quieter Christmas period, but also coincides with tier 4 restrictions introduced in large parts of England from 26 December.

**Figure 2: Daily 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 October to December 2020 and therefore cannot be directly compared to annual publications. 2019 quarterly statistics are provided throughout the release for comparative purposes.
<b>Comparing Data Between Quarters?</b>	Comparisons should generally be made with the same quarter of the previous year, otherwise seasonal factors such as differences in light or weather conditions may distort the result.	Comparisons with a different quarter of the year may be biased by seasonal patterns. If a difference between quarters was the same in other years, this is likely down to the seasons.

### Key Dates in 2020

<b>23 March</b>	UK enters first National Lockdown
<b>30 June</b>	UK introduces first Local Lockdown
<b>14 Oct</b>	England introduces 3 tier system
<b>23 Oct</b>	Wales introduces Firebreak, ends 9 Nov
<b>2 Nov</b>	Scotland introduces 5 tier system
<b>5 Nov</b>	England enters second National Lockdown, ends 2 Dec
<b>19 Dec</b>	Tier 4 introduced for London, South East and East of England
<b>26 Dec</b>	Large parts of England enter Tier 4

### 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.

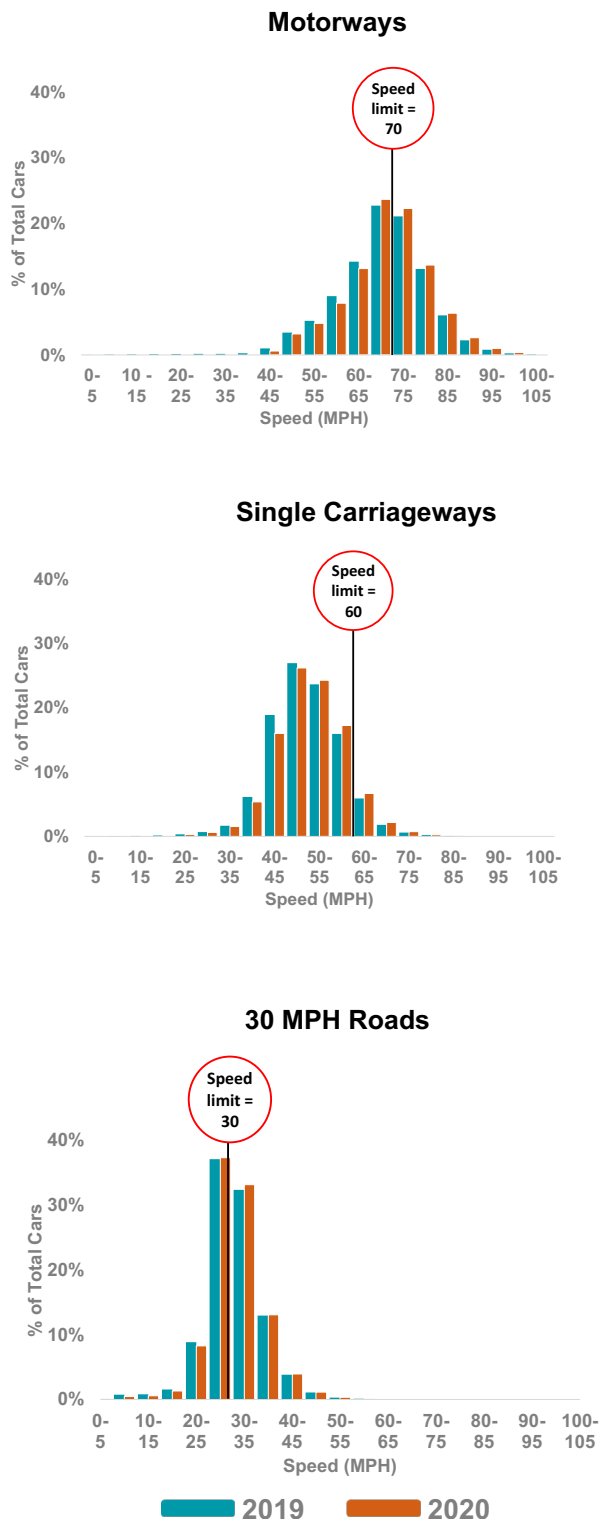
#### Speed Limits

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>.

# Distribution of car speeds by road type



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



## Summary

- ▶ In Q4 2020, the distribution of car speeds across motorways was slightly higher (47% exceeding the speed limit) compared to Q4 2019 (44%), but remained similar on NSL single carriageways and 30mph roads.

**Figure 4:** Percentage of Cars exceeding the speed limit by road type (Table SPE2501)

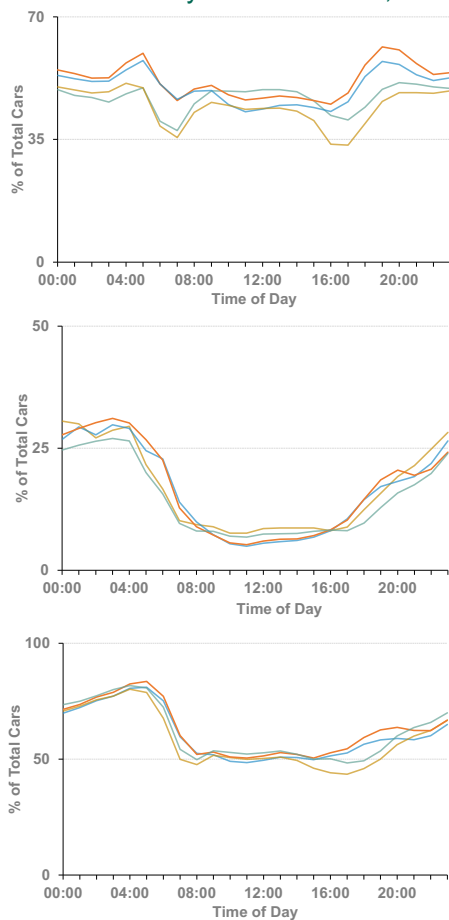
	2019				2020			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Exceeding speed limit	48	52	50	44	46	53	49	47
Exceeding speed limit by 10mph+	11	13	12	9	10	15	11	11
Exceeding speed limit	9	10	9	9	10	17	9	10
Exceeding speed limit by 10mph+	1	1	1	1	1	3	1	1
Exceeding speed limit	54	56	54	51	53	63	55	52
Exceeding speed limit by 10mph+	6	6	6	5	6	8	6	6

In Q4 2020:

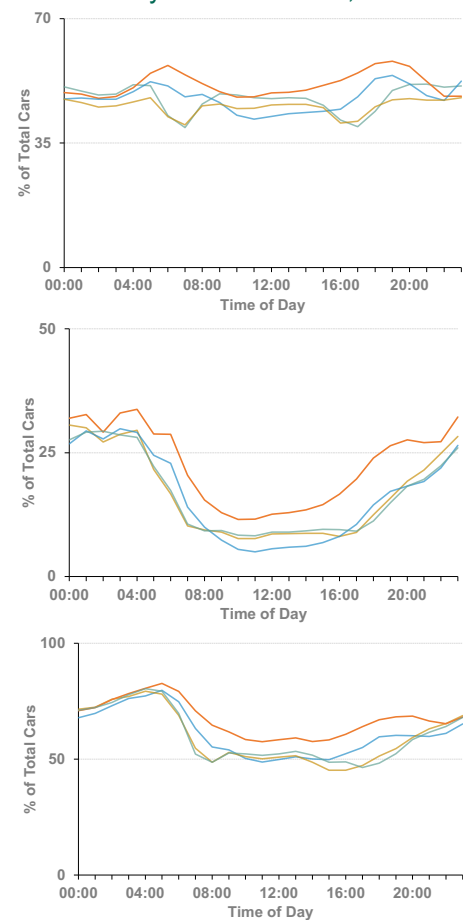
- ▶ When comparing speed limit exceedance to the first period of national lockdown in Q2 2020, overall levels of speed limit exceedance across different road types were lower in Q4 2020. This may be in part due to seasonal differences between the quarters.
- ▶ On motorways, the proportion of cars exceeding the speed limit was lower (47%), when compared to Q2 2020 (53%).
- ▶ On NSL single carriageways (60mph limit), the proportion of cars exceeding the speed limit was lower (10%), when compared to Q2 2020 (17%).
- ▶ On 30 mph roads, the proportion of cars exceeding the speed limit was lower (52%), when compared with Q2 2020 (63%).



**Figure 5: Cars exceeding the speed limit by time of day in Great Britain, 2019**



**Figure 6: Cars exceeding the speed limit by time of day in Great Britain, 2020**



Quarter 1 (January to March)

Quarter 2 (April to June)

Quarter 3 (July to September)

Quarter 4 (October to December)

## Summary

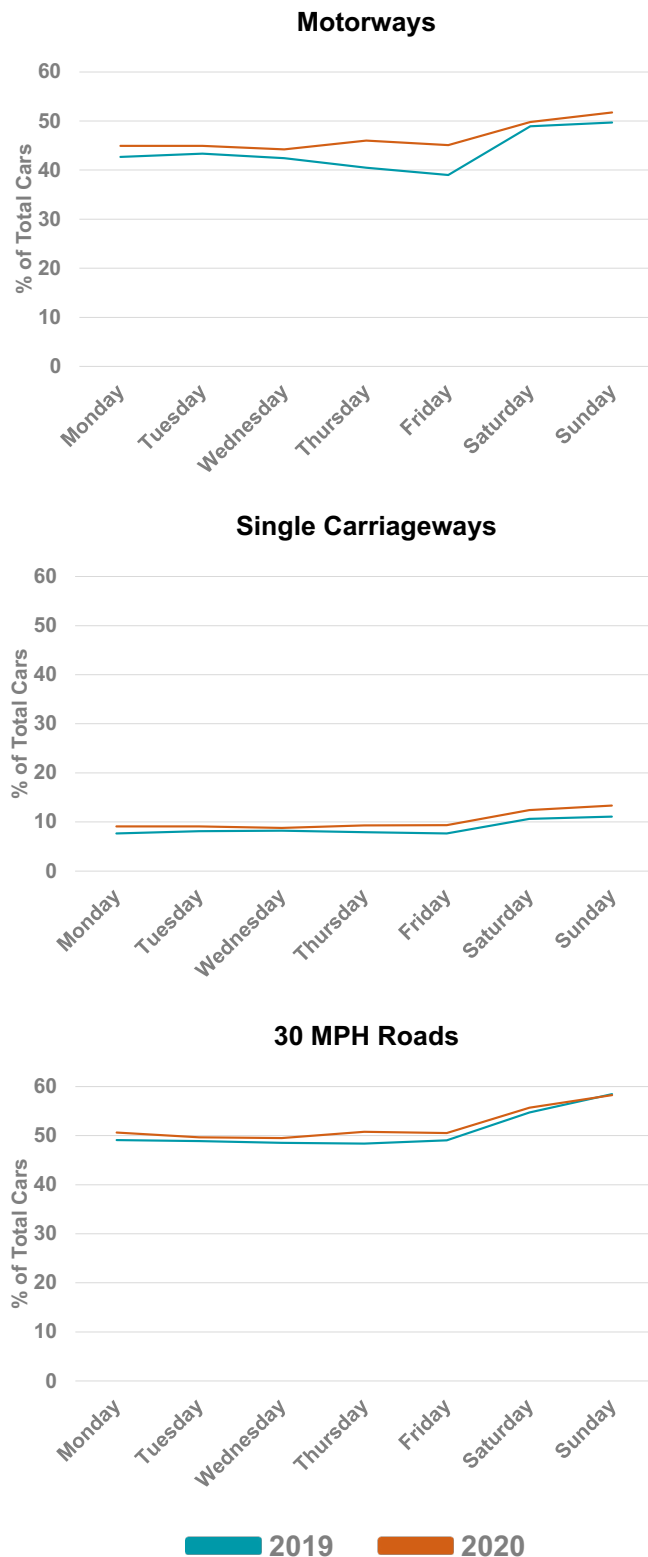
These charts show how the proportion of cars exceeding the speed limit varied by time of day for all four quarters in 2019 and 2020. In Q4 2020:

- ▶ On motorways, a slightly higher proportion of cars exceeded the speed limit during the day (44%), when compared to the figure in Q4 2019 (41%).
- ▶ The hourly profile of cars exceeding the speed limit remained similar to that seen in Q4 2019, with only slight increases in speed limit exceedance seen in motorways and 30mph roads during rush hour periods.
- ▶ Compared to Q2 2020 (the first national lockdown), the proportion of cars exceeding the speed limit was lower across all road types throughout the day.

# Compliance with the speed limit by day of week



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



## Summary

These charts show how the proportion of cars exceeding the speed limit varied by day of week. On all road types, the proportion of cars exceeding the speed limit remained higher on weekends than on weekdays. Throughout the week Sundays saw the highest proportion of cars exceeding the speed limit.

**Figure 8:** Percentage of Cars exceeding the speed limit on weekdays and weekends (Table SPE2503)

	2019				2020			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Motorways</b>								
Weekday	46	50	48	42	44	53	47	45
Weekend	54	58	54	49	52	55	52	51
<b>Single Carriageway</b>								
Weekday	8	9	9	8	9	17	9	9
Weekend	11	12	10	11	14	19	11	13
<b>30 mph roads</b>								
Weekday	52	55	53	49	51	62	54	50
Weekend	60	61	59	57	59	64	58	57

- ▶ Although overall speed limit exceedance was lower compared to Q2 2020 for both weekdays and weekends in Q4 2020, the percentage point decline is slightly greater for weekdays.
- ▶ On motorways the proportion of cars exceeding the speed limit during both weekdays and weekends were lower in Q4 2020 than Q2 2020.
- ▶ On National Speed Limit single carriageways (60mph), speed limit exceedance in Q4 2020 was lower than the unusually high level seen in Q2 2020. Levels in Q4 2020 were in line with previous trends.
- ▶ On 30mph roads, speed limit exceedance in Q4 2020 was lower than Q2 2020.
- ▶ On motorways Fridays saw an increase in speed limit exceedance from Q4 2019 (39%), to Q4 2020 (45%).

## Background information

### What's included in this release

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

This third quarterly release covers the period October to December 2020. It looks at car speed limit compliance on motorways, National Speed Limit single carriageways and 30mph roads.

A daily time series analysis of car speed limit exceedance between October to December 2020 is provided. A separate daily time series chart of car usage on roads is included to provide additional context.

### 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 77 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 October to December 2020 statistics was 50 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 (number of sites)
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	78	91 (cars only)	1 motorway
2020 Jul-Sep	77	66 (cars only)	1 30mph road
2020 Oct-Dec	77	50 (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. The data for this release has been recorded consistently well during times when traffic volumes are abnormally low or high.

## Next update

The January to March 2021 release is due to be published in May 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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