



Vehicle Speed Compliance Statistics, Great Britain: 2019

About this release

This statistical release 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 p. 22).

The release also presents information from a range of other sources releveant to vehicle speeds and compliance.

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In 2019, under free-flowing traffic conditions, 50% of cars exceeded the speed limit on motorways compared to 54% on 30mph roads and 9% on 60mph roads.

Figure 1: Vehicles Exceeding Speed Limits by Road Class in Great Britain, 2019

Road Type	© © Cars	LCVs (Vans)	Articulated HGVs	Rigid HGVs	Short Buses	Long Buses	Motorcycles
Motorways	50%	49%	1%			53%	53%
National Speed Limit Single Carriageways	9%		27%	34%	36%	34%	26%
30mph Roads	54%	55%	44%	47%	37%	33%	63%
Data is not available							

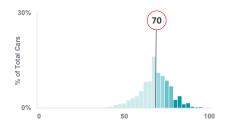
The proportion of cars exceeding the speed limit by more than 10 mph was much lower, at 12% on motorways, 6% on 30 mph roads and 1% on 60mph roads.

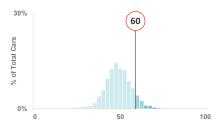
For all vehicle types, compliance tended to be highest on national speed limit single carriageways and lowest on 30mph roads.

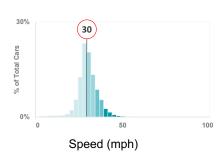
Overall vehicle compliance with speed limits has remained broadly stable since 2011.

The average car speeds under free flow conditions were close to the speed limit on motorways (69mph) and 30mph roads (31mph) and under the speed limit on 60mph roads (50mph).

Figure 2: Car speeds by road speed limit in Great Britain, 2019







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Compliance With Speed Limits Summary

Understanding and Interpreting these statistics





What do free	Free flow speeds reflect the speeds	They are not representative of the level		
1				
flow speeds tell	drivers may travel at when free to do			
us?	SO.	network – which we would expect to be		
		lower.		
What roads are	Only sites where the road conditions	The statistics do not cover roads where		
covered?	are free flowing and there are no	the road layout or traffic calming		
	junctions, hills, sharp bends, speed	measures are likely to constrain vehicle		
	enforcement cameras or other traffic	speeds. This includes smart motorways.		
	calming measures.	·		
	auming measures.			
Comparing	Only broad-scale comparisons of	Due to a significant reduction in sites		
Data Between	patterns in compliance and speeds	used in the sample this year, the speed		
Years?	over time periods of 5 or more years	limit compliance figures should not be		
	can be made confidently.	compared directly to previous years.		
	,			
What The 20mph free-flow sites have no		20mph roads should not be compared		
conclusions can traffic calming measures or other		year-on-year due to the high turnover		
be drawn from	features to restrict speed, and tend to			
the 20mph	be through-roads, so are not typical			
sample?	of all 20mph.			

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

All vehicles have the same speed limit on 20mph and 30mph roads. On other road types, speed limits differ by vehicle type (see Background Information section).

For some combinations of vehicle and road type, the Automatic Traffic Counters used to collect the data do not have the information required to determine which speed limit applies, so for these combinations speed limit compliance statistics are not shown.

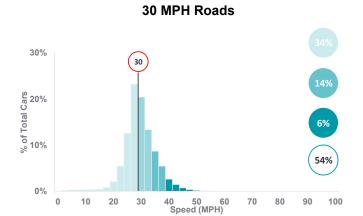
Summary

The number of vehicles exceeding the speed limit varies by road and vehicle type. More detailed results for each vehicle type, as well as results for 20mph roads, are shown on the following pages.

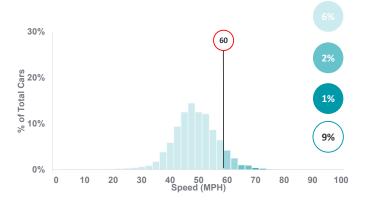
Car compliance with speed limits



Figure 3: Distribution of car speeds by road type in Great Britain, 2019 (Table SPE0111)



Single Carriageways



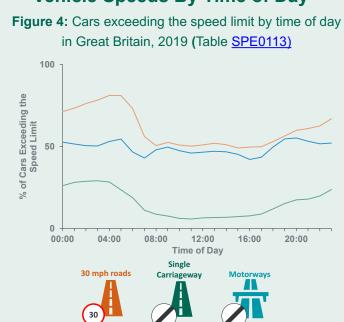
30% 23% 20% 8 10% 0 10 20 30 40 50 60 70 80 90 100 Speed (MPH)

Motorways

Summary

- ▶ Under freeflowing conditions, the proportions of cars complying with the speed limit were 50% on motorways, 91% on national speed limit (NSL) single carriageways and 46% on 30mph roads.
- ➤ On NSL single carriageway roads 9% of cars exceeded the speed limit, compared to 54% on 30mph roads and 50% on motorways.
- ► The proportion of cars exceeding the speed limit by over 10mph on 30mph roads was 6%, whilst 1% and 12% exceeded the speed limit by more than 10mph on NSL single carriageway roads and motorways respectively.

Vehicle Speeds By Time of Day



Exceeding the Speed Limit

By up to 5 MPH

Between 5 and 10 MPH



By more than 10 MPH

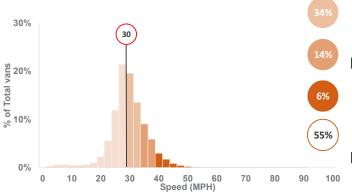


Light Commercial Vehicle (van) compliance with speed limits



Figure 5: Distribution of van speeds by road type in Great Britain, 2019 (Table SPE0111)

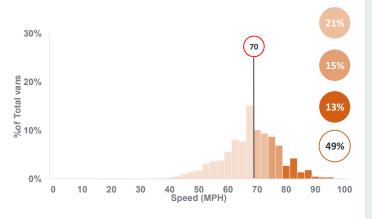
30 MPH Roads



Single Carriageways

Statistics on van compliance on national speed limit single carriageways are not collected. The speed limits applicable to different types of van on this road type depends on the maximum laden weight and construction of the vehicle, which cannot be determined by our data source.

Motorways



Summary

- ► In free flow conditions, the proportions of vans complying with the speed limit were 51% on motorways and 45% on 30mph road.
- ► On motorways 49% of vans **exceeded** the speed limit compared to 55% on 30mph roads.
- ► The proportion of vans exceeding the speed limit by over 10mph on 30mph roads was 6%, while 13% exceeded the speed limit on motorways by more than 10mph.

Vehicle Speeds By Time of Day

Figure 6: Vans exceeding the speed limit by time of day in Great Britain, 2019 (Table <u>SPE0113)</u>



Exceeding the Speed Limit



By up to 5 MPH



Between 5 and 10 MPH



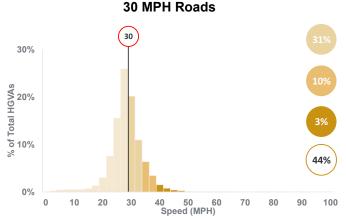
By more than 10 MPH



Articulated HGV (HGVA) compliance with speed limits

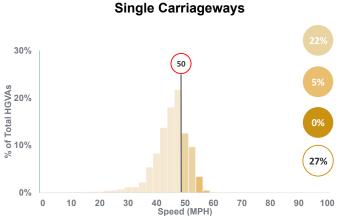


Figure 7: Distribution of Articulated HGV speeds by road type in Great Britain, 2019 (Table <u>SPE0111</u>)

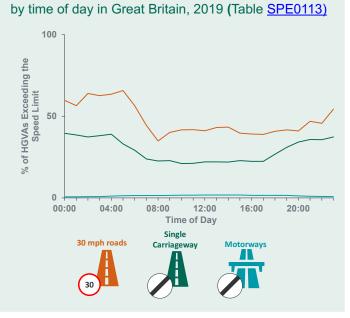


Summary

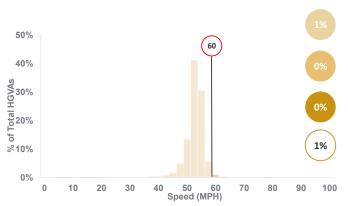
- ▶ In free flow conditions, the proportions of articulated HGVs **complying** with the speed limit were 99% on motorways, 73% on national speed limit single carriageways and 56% on 30mph roads.
- On motorways, 1% of articulated HGVs exceeded the speed limit, compared to 27% on (NSL) single carriageway roads and 44% on 30mph roads.
- ➤ The proportion of articulated HGVs exceeding the speed limit by over 10mph on 30mph roads was 3%, while less than 1% exceeded the speed limit by more than 10mph on motorways and NSL single carriageway roads.







Motorways



Exceeding the Speed Limit





Between 5 and 10 MPH



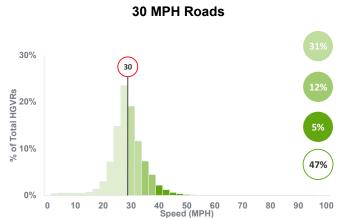
By more than 10 MPH



Rigid HGV (HGVR) compliance with speed limits



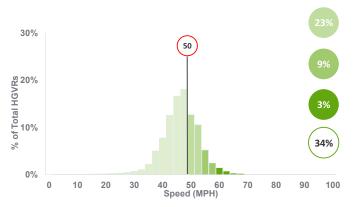
Figure 9: Distribution of Rigid HGV speeds by road type in Great Britain, 2019 (Table SPE0111)



Summary

- ► In free flow conditions, the proportions of rigid HGVs **complying** with the speed limit were 66% on national speed limit (NSL) single carriageways and 53% on 30mph roads.
- On NSL single carriageway roads 34% of rigid HGVs exceeded the speed limit, compared to 47% on 30mph roads.
- ► The proportion of rigid HGVs exceeding the speed limit by over 10mph on 30mph roads was 5%, and 3% on NSL single carriageways.

Single Carriageways



Motorways

Statistics on rigid HGV compliance on motorways are not collected. There are significant numbers of rigid HGVs both above and below the 7.5 tonne gross weight threshold, which are subject to different motorway speed limits. Our data does not collect weight information to enable vehicle data to be matched to the applicable speed limit.

Vehicle Speeds By Time of Day Figure 10: Rigid HGVs exceeding the speed limit by time of day in Great Britain, 2019 (Table SPE0113) 100 100 100 100 12:00 16:00 16:00 16:00 10

Exceeding the Speed Limit By up to 5 MPH Between 5 and 10 MPH By more than 10 MPH Total

HGV speed limit changes on national single carriageways



Change in speed limits for HGVs over 7.5 tonnes maximum laden weight

On 6 April 2015, in England and Wales only, the national speed limit for HGVs more than 7.5 tonnes maximum laden weight increased from 50 mph to 60 mph on *dual carriageways*, and from 40 mph to 50 mph on *single carriageways*.

Limitations to the HGV dataset

This page summarises some of the related trends for HGVs on single carriageway roads. Dual carriageways are not included at all in this publication due to the small number of sites with data. More detailed studies have been conducted by the department (see box below).

Because rigid HGVs above and below the 7.5 tonne threshold have different applicable speed limits and the ATC sites cannot determine laden weight we cannot calculate speed compliance data. Therefore speed compliance statistics are only avaliable for articulated HGVs.

What is the impact on HGVs in our sample of roads in free flowing conditions?

Figure 11: Articulated HGVs exceeding the speed limit on national single carriageways roads (%), Great Britain: 2011 to 2019 (Table <u>SPE0112</u>)

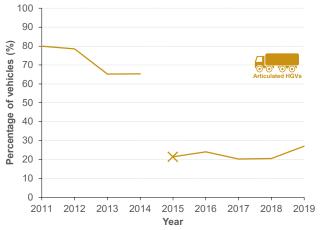


Figure 12: Average free flow speed (mph) of rigid and articulated HGVs on national single carriageway roads, Great Britain: 2011 to 2019 (Table SPE0112)



- Virtually all articulated HGVs are in the over 7.5 tonnes category, for which the speed limit on single carriageway roads increased from 40 to 50 mph. The percentage of articulated HGVs exceeding the speed limit has reduced noticeably from 80% in 2011 before the speed limit change to 21% in 2015 when the new speed limit came into effect, and increased to 27% in 2019.
- ▶ Over the same period, the average speed of HGVs has varied between 42-47mph for articulated HGVs and between 45-48mph for rigid HGVs.

HGV Speed Limit Evaluation

More detailed studies of the impact of these changes have been produced, and these have been published here:

https://www.gov.uk/government/publications/finalreport-on-the-increased-speed-limit-for-heavy-goodsvehicles

Short Bus compliance with speed limits



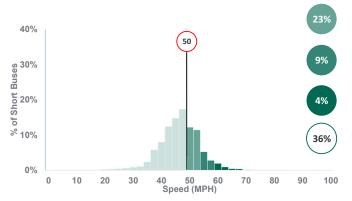
Figure 13: Distribution of Short Bus speeds by road type in Great Britain, 2019 (Table SPE0111)

30 MPH Roads 26% 40% 8% 30 26% 26% 20% 20% 20% 20% 37% 37% 37% 37%

Summary

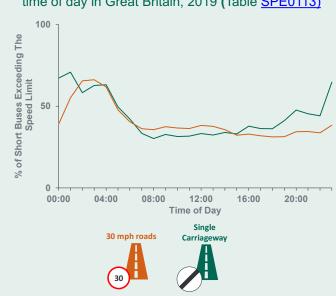
- ▶ In free flow conditions, the proportions of short buses (under 12m) **complying** with the speed limit were 64% on NSL single cariageway and 63% on 30mph roads.
- ► In free flow conditions, the proportions of short buses **exceeding** the speed limit was 36% on NSL single carriageways and 37% on 30mph roads.
- ► The proportion of short buses **exceeding** the speed limit by over 10mph on NSL single carriageway and 30mph roads was 4% and 2% respectively.

Single Carriageways



Vehicle Speeds By Time of Day

Figure 14: Short Buses exceeding the speed limit by time of day in Great Britain, 2019 (Table <u>SPE0113</u>)



Motorways

Statistics on short and long buses' speed compliance on motorways are not published, as the sample size did not meet the data quality threshold required for publishing.

Exceeding the Speed Limit



By up to 5 MPH



Between 5 and 10 MPH



By more than 10 MPH



Long Bus compliance with speed limits



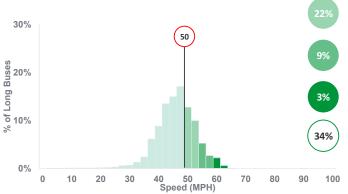
Figure 15: Distribution of Long Bus speeds by road type in Great Britain, 2019 (Table SPE0111)

30 MPH Roads 27% 5% 20% 80 20% 0 10 20 30 40 50 60 70 80 90 100 Speed (MPH)

Summary

- On 30mph roads and national speed limit (NSL) single carriageways 67% and 66% of long buses (over 12m) complied with the speed limit respectively.
- ▶ In free flow conditions, the proportions of long buses exceeding the speed limit was 34% on NSL single carriageways and 33% on 30mph roads.
- ► The proportion of long buses **exceeding** the speed limit by over 10mph on 30mph roads and NSL single carriageways was 2% and 3% respectively.

Single Carriageways



Vehicle Speeds By Time of Day

Figure 16: Long Buses exceeding the speed limit by time of day in Great Britain, 2019 (Table <u>SPE0113</u>)



Motorways

Statistics on short and long buses' speed compliance on motorways are not published, as the sample size did not meet the data quality threshold required for publishing.

Exceeding the Speed Limit



By up to 5 MPH



Between 5 and 10 MPH



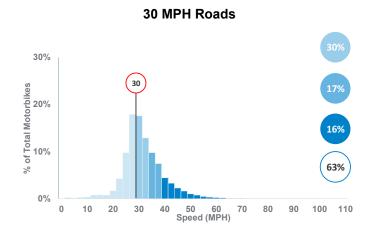
By more than 10 MPH



Motorcycle compliance with speed limits



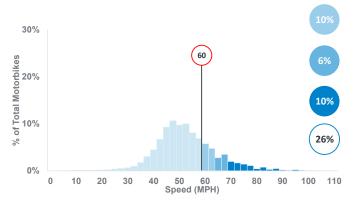
Figure 17: Distribution of motorcycle speeds by road type in Great Britain, 2019 (Table SPE0111)



Summary

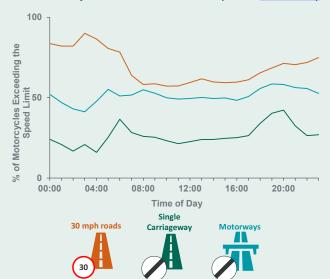
- ► In free flow conditions, the proportions of motorcycles complying with the speed limit were 47% on motorways, 74% on NSL single carriageways and 37% on 30mph roads.
- On motorways and 30mph roads 53% and 63% of motorcycles exceeded the speed limit respectively, compared to 26% on national speed limit (NSL) single carriageways.
- The proportion of motorcycles exceeding the speed limit by over 10mph on motorways was 19%, higher than other vehicle types, compared to 16% of motorcycles on 30mph and 10% on NSL single carriageway roads.



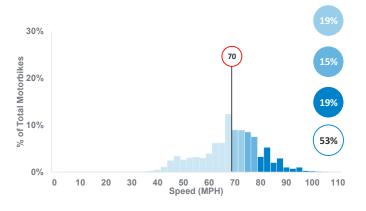


Vehicle Speeds By Time of Day





Motorways



Exceeding the Speed Limit



By up to 5 MPH



Between 5 and 10 MPH



By more than 10 MPH

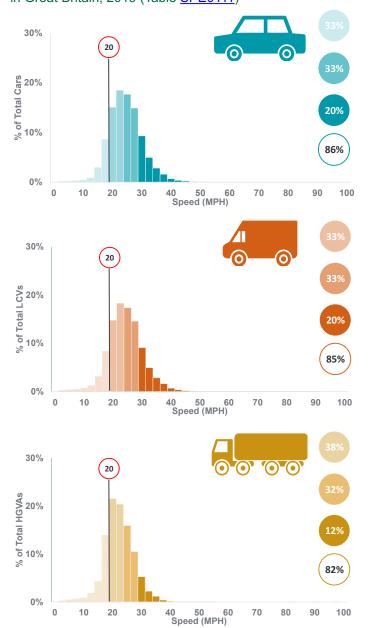


Vehicle Speeds on 20mph roads



The Department also has data for a number of 'free-flow' sites with 20mph speed limits, however the data from these need to be interpreted with additional caution because:

Figure 19: Distribution of vehicle speeds on 20mph roads in Great Britain, 2019 (Table SPE0111)



- ▶ By their nature, roads with 20mph speed limits are particularly likely to have traffic calming measures in place, or not be 'free flow' for other reasons (e.g. narrow, or with many corners and bends). Indeed DfT guidance suggests that 20mph limits are most effective when they have traffic calming measures or when average vehicle speeds are already below 24 mph.
- ► The 20mph 'free flow' sites tend to be on 'through routes' rather than smaller residential streets – reflecting the constraints both of finding 'free flow' traffic conditions and locations suitable for the installation of automatic traffic monitoring equipment. Thus quieter residential streets which may make up a large proportion of 20mph roads will be under-represented in the data.

Therefore the 'free flow' 20 mph sites in this data set will tend to be unrepresentative of 20mph limits in general, and this effect will be much greater than for other speed limits considered above. These factors need to be taken into account when looking at the results for 20 mph sites available in this data set.

In 2018 DfT published the results of a detailed research study into 20mph limits without traffic calming measures, which can provide a more detailed and rounded picture for these roads (see box below).

20mph (Signed-Only) Research Study

Key findings of DfT research published in November 2018:

- 20mph limits are supported by the majority of residents and drivers
- There has been a small reduction in average (median) speed less than 1mph
- Vehicles travelling at higher speeds before the introduction of the 20mph limit have reduced their speed more than those already travelling at lower speeds

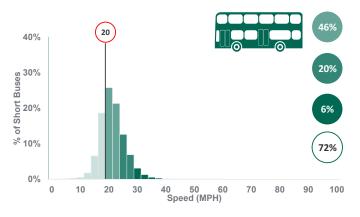
https://www.gov.uk/government/publications/20-mph-speed-limits-on-roads

Vehicle Speeds on 20mph roads (continued)

20

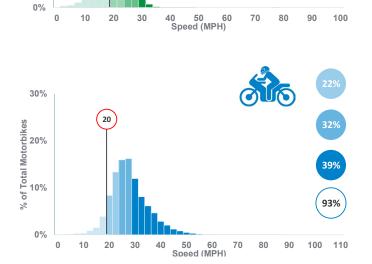
Figure 20: Distribution of vehicle speeds on 20mph roads in Great Britain, 2019 (Table <u>SPE0111</u>)





30%

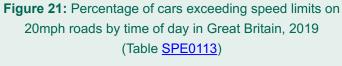
sos 20% of Long Buses 10%

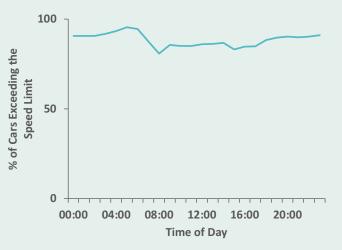


Summary

- Vehicle speeds on 20mph roads in the sample reflect patterns seen on other roads types for each vehicle class; HGVs and buses saw greater speed compliance than cars, vans and motorcycles.
- Under free flow conditions 86% of cars exceeded the speed limit at the 20mph sites.
 20% exceed the speed limit by more than
 10mph (figure 19 and 20).
- On 20mph roads 86% of cars exceeded the speed limit during weekdays, and 91% during the weekend (figure 21).
- Most vehicle classes saw a higher percentage of vehicles exceeding the speed limit during the night and a lower percentage of vehicles exceeding the speed limit during the rush hour (figure 22).

Vehicle Speeds By Time of Day





6%

80%

Speed Compliance by Day of Week and Road Type

The following section presents speeds on the road network distributed across days of the week for 30mph roads, National Speed Limit (NSL) single carriageways and Motorways for a selection of different vehicle classes.

Key findings:

- ▶ On all road types the percentage of vehicles exceeding the speed limit is consistent from Monday to Friday and between Saturday and Sunday. Therefore we are able to categorise the exceedance or compliance with speed limits by weekday or weekend.
- ➤ On Motorways 48% of cars exceeded the speed limit during weekdays, rising to 55% on weekends. On 30mph roads 52% of cars exceeded the speed limit on weekdays and 59% on weekends, compared to 9% on weekdays for NSL single carriageways rising to 11% on weekends.
- ➤ On almost all vehicle classes and road types the percentage of vehicles exceeding speed limits on weekends are equal to or higher than the percentage exceeding the speed limit on weekdays; short buses on 30mph roads are an exception.

Figure 22: Cars exceeding speed limits by day of the week, Great Britain, 2019 (Table <u>SPE0115</u>)

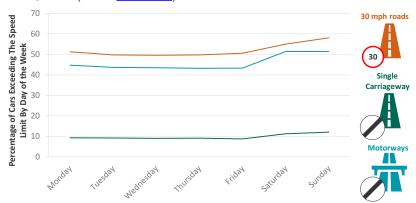
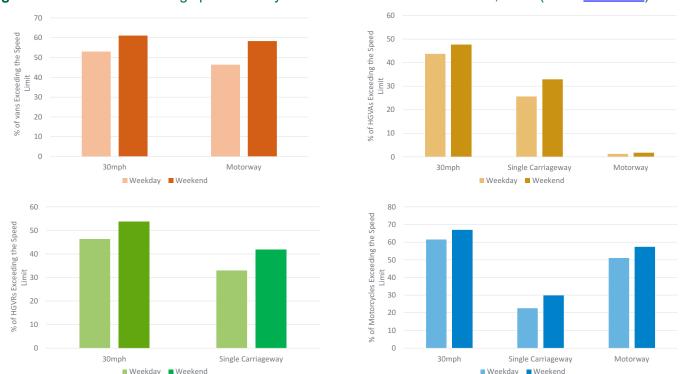


Figure 23: Vehicles exceeding speed limit by time of the week in Great Britain, 2019 (Table SPE0115)



Speed by Road and Vehicle Type

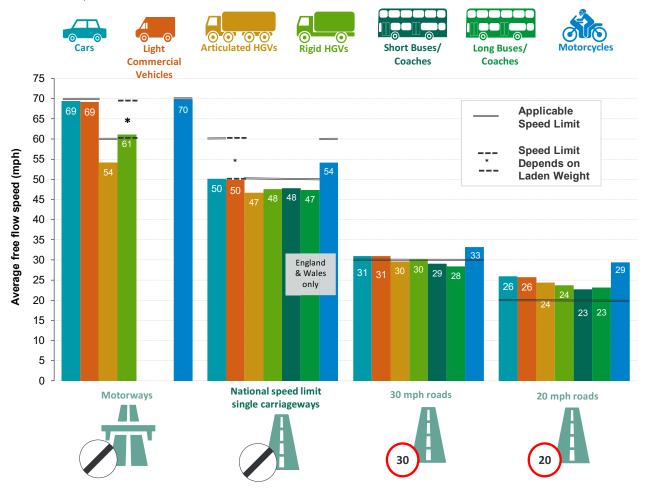
Average Speeds on the Network

The following section presents the average free flow speeds at which drivers choose to travel as observed at sampled ATC locations. These are not average speeds across the whole network. This data can be found at: https://www.gov.uk/government/collections/road-congestion-and-reliability-statistics

Key findings:

- ► The average free flow speed for each vehicle type is correlated with the applicable speed limit for that road type. These are not average speeds across the whole network (see box above).
- ► For motorways and national speed limit single carriageway sites, the average free flow speed is at or below the designated speed limit for each vehicle type. This is particularly marked for single carriageway sites where speeds are significantly below the relative speed limits, which is consistent with the greater compliance with speed limits on those roads that were observed earlier.
- ▶ For 30mph sites the average free flow speed is slightly above the speed limit for three vehicle types (cars, motorcycles and vans), with averages ranging from 28mph to 33mph overall. For the 20mph sites (which are not thought to be representative of all 20mph roads, see page 11), the average speed is above the speed limit for all vehicle types, ranging from 23mph to 29mph but below the average speeds seen on the 30mph roads.

Figure 24: Average free flow speeds by vehicle type and road type on roads in Great Britain, 2019 (Table SPE0111)

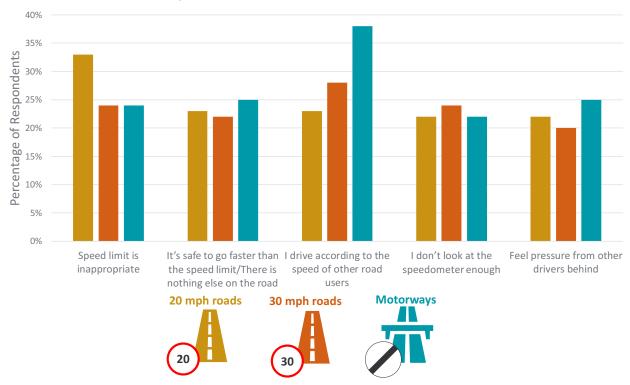


Reasons given for breaking the speed limit

Key findings:

- ► The RAC Report on Motoring 2019 asked users to select up to three reasons why they exceed the speed limit for each road class. The respondents who admitted to exceeding the speed limit on motorways selected a greater number of reasons on average than those who admitted exceeding the speed limit on 20mph roads.
- ▶ Of these five reasons, the top reason given was "I drive according to the speed of other road users" and was given by 38% of motorway users and 28% of 30mph road users. On 20mph roads, users most often cited the speed limit being inappropriate as the contributor to their exceeding the speed limit (33%).

Figure 25: Reasons for breaking the speed limit on motorways, 30mph and 20mph roads Source: RAC Report on Motoring, 2019



This data comes from the RAC's Report on Motoring 2019. The report is published annually and is based on drivers' attitudes to motoring, including a section on speeding and attitudes to speeding. It is based on an online quota-based survey of UK motorists. Drivers who admitted to exceeding the speed limit on particular types of road were asked their reasons for doing so, which are shown here. These are not National Statistics, but are included here to provide additional context.

+ := for motorways, there is a category in the reasons given called "It is safe to go faster than the speed limit". For 30mph roads, this category is not present but there is another category called "No vehicles/pedestrians on the road". These two have been taken together in this analysis, as it is deemed that they are covering broadly the same safety issue but fitted for the differing nature of the different road types.

The results are taken from respondents who self-reported as speeding "frequently" or "occasionally" on the listed roads. The sample size was higher for motorways (971) than for 30mph roads (759) or 20mph road (761) with each respondent able to choose up to 3 answers. As respondents are able to select more than one answer, the total percentage exceeds 100% for each road type; this does not indicate more individuals exceeding the speed limit, but a wider variety of reasons given.

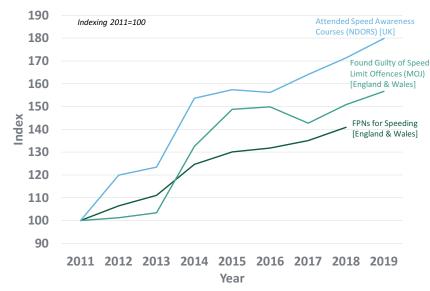
Speed offences

This section reports on previously published data directly relating to speeding offences and road traffic accidents involving speeding.

Motor vehicle offences relating to exceeding the speed limit;

Sources: Home Office (HO), Ministry of Justice (MoJ) and National Driver Offender Retraining Scheme (NDORS)

Figure 26: Indices of motor vehicle offences relating to exceeding the speed limit, 2011 to 2019 (Table <u>SPE0201</u>)



Outcomes following speed limit offences

- ► The PentiP system recorded 2.11 million speed limit offences in England and Wales in 2018, an increase of 4.3% compared with the previous year.
- ➤ The scope of the Home Office series includes those cases which resulted in either a fixed penalty notice (FPN) being issued to the driver, a driver retraining course (such as a speed awareness course) was attended by the individual, or cases where the individual faced court action.

Key terms

Fixed Penalty Notice (FPN)

Offered to motorists to avoid prosecution for various motoring offences (e.g. speeding, neglect of traffic directions and using a mobile phone while driving) by paying a prescribed financial penalty.

Speed Awareness Courses

National Driver Offender Retraining Scheme (NDORS) is a set of schemes unique to the UK, where a motorist who has been caught committing a traffic offence at a 'low level', such as speeding, is given an opportunity to attend a course focusing on re-education designed to achieve greater compliance with the Road Traffic legislation.

Conviction Ratio

The number of convictions as a proportion of the number of proceedings. These are calculated on a principal offence basis.

Speeding Offences

- ► There was an 88% conviction ratio for people proceeded against for speed limit offences in England and Wales in 2019 (175,000 were found guilty).
- ▶ 28% of motoring convictions in 2019 were for speed limit offences.
- ▶ The number of people found guilty of speed limit offences has increased since 2018. The number of people found guilty of all motoring convictions (not shown in the chart above) has also increased.

Speed Awareness Courses

- ▶ In 2019, 1.39 million drivers attended a speed awareness course in the UK. Since 2014 there have been over 1 million speed awareness course attendences per year.
- ▶ The recent increase in Speed Courses attended reflects changes to courses that are available.
- ► The speed awareness course data include those Driver Retraining Course Attendances processed in Scotland, Northern Ireland or locally by police forces that are not included in Home Office's FPN series.

Speed as a contributory factor in road accidents

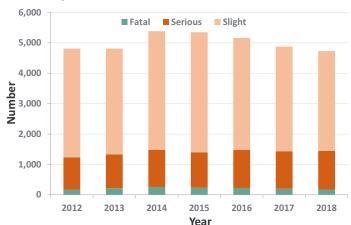
Under presumed free flow¹ conditions:

- ► Exceeding the speed limit was reported as a contributory factor for 5.1% (4,096) of accidents in 2018, an increase from 4.8% (4,261) in 2017. The total number of reported accidents where any contributory factor was reported decreased from 2017.
- ► The share of fatal and serious accidents where exceeding the speed limit was reported as a contributory factor was 6.6% (1,259) in 2018. This has remained broadly stable since 2013.

Figure 27a: Reported accidents where exceeding the speed limit was reported as a contributory factor, by severity, 2012 to 2018, excluding non-free flow conditions¹ (Table <u>SPE0204</u>)



Figure 27b: Reported accidents where exceeding the speed limit was reported as a contributory factor, by severity, 2012 to 2018 (Table SPE0202)



► The proportions of accidents when excluding or including contributory factors of abnormal or non-free flow conditions¹ are very similar. This suggests that free flow roads may reflect conditions on the wider road network.

¹Those accidents with contributory factors relating to traffic calming, stolen vehicle, road layout, temporary road layout, vehicle in course of crime, and emergency vehicle on a call have been excluded. Accident sites may still have these conditions, but they were not recorded as a contributory factor, no contributory factors were recorded or a police officer did not attend the scene.

Source: DfT Road Accidents and Safety Statistics.

Key terms

Accident

Involves personal injury occurring on the public highway (including footways) in which at least one road vehicle or a vehicle in collision with a pedestrian is involved and which becomes known to the police within 30 days of its occurrence. Damage-only accidents with no human casualties or accidents on private roads or car parks are not included.

Fatal accident

An accident in which at least one person is killed.

Serious accident

One in which at least one person is seriously injured but no person (other than a confirmed suicide) is killed

Slight accident

One in which at least one person is slightly injured but no person is killed or seriously injured.

Contributory factor

Contributory factors provide some insight into why and how road accidents occur. They are designed to give the key actions and failures that led directly to the actual impact to aid investigation of how accidents might be prevented. Please note that this *does not assign blame* for the accident to any specific road user, but gives an indication of which factors the attending officer thought contributed to the accident.

More information is available in the notes & definitions document.

Speed as a contributory factor in road accidents

Key findings:

- ▶ In 2018, for all accidents, 3.0% (4,725) of vehicles had an exceeding the speed limit contributory factor allocated to them. This percentage has increased since 2014, although raw numbers have decreased, with the value being 2.5% (5,381) in 2014.
- ▶ Motorcycles were the vehicle type with the highest proportion of all accidents (5.7%) where exceeding the speed limit was a contributory factor, in 2018. 17.8% of fatal motorcycle accidents had exceeding the speed limit as a contributory factor, compared to 7.0% for all vehicles.
- ► HGVs had the lowest proportion of all accidents (0.5%) in 2018 where exceeding the speed limit was a contributory factor. This may relate to HGVs being speed limited or the drivers being professionally trained.

Figures 28a to 28b: Percentage of vehicles with an exceeding the speed limit contributory factor by vehicle type, split by severity, 2018 (Table <u>SPE0203</u>)

Figure 28a: All Accidents



Figures 29a to 29b: Percentage of vehicles with an exceeding the speed limit contributory factor by vehicle type, split by severity, 2012 to 2018 (Table <u>SPE0203</u>)

Figure 29b: Fatal Accidents

Figure 29a: All Accidents

30 30 25 25 ²⁰ ⊗ _∞ 20 Percentage (centage (10 5 n 2012 2013 2014 2015 2016 2017 2018 2012 2013 2014 2015 2016 2017 2018

Vehicle Headway

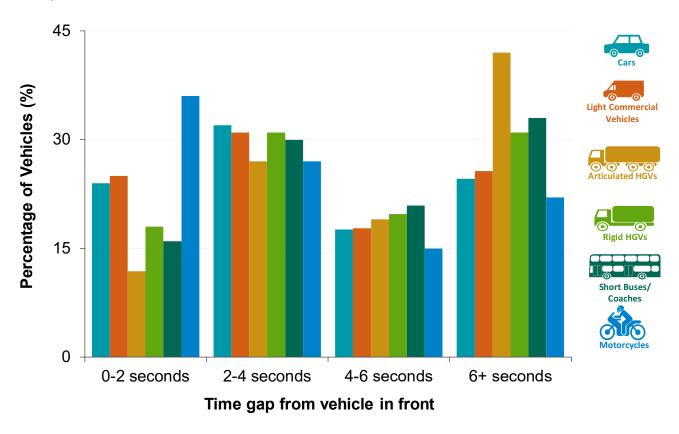
This section provides information about the time gaps between pairs of vehicles. This time gap is referred to as headway.

- ► In 2019, 75% of cars and Light Commerical Vehicles, and 64% of motorcycles left the recommended two-second gap between themselves and other vehicles.
- ► A higher percentage of vehicles with slower speed limits leave the recommended minimum two-second gap: 88% of articulated HGVs, 82% of rigid HGVs and 84% of buses and coaches.
- Adherence to the recommended two-second gap has remained relatively stable since 2011 (SPE0114).

Headway

Headway is the measurement of time between two vehicles. The Highway Code (rule 126) states that all drivers "should allow **at least a two-second gap** between you and the vehicle in front on roads carrying faster-moving traffic", and "this should be at least doubled" in inclement conditions. More information can be found at https://www.gov.uk/guidance/the-highway-code/general-rules-techniques-and-advice-for-all-drivers-and-riders-103-to-158.

Figure 30: Distribution of time gaps between vehicles, split by type of vehicle behind, 2019 (Table SPE0114)



Background information

What's changed in this release

Several new additions are included in this release, alongside some changes to previous datasets, including:

Refined number of sites

Since the last release of this series we have conducted another review of our list of ATC sites to ensure they continue to reflect free flow sites of each road class. Sites that have been removed have changed road class, road layout, or have in-road traffic calming measures such as chicanes or speed bumps. Motorways undergoing smart motorway works or which have become smart motorways have been excluded from the sample. Due to a significant reduction in sites used in the sample this year, the speed limit compliance figures should not be compared directly to previous years.

► Headway data sample size

Prior to 2019, the headway analysis was based on a fixed, but small sample of 14 sites (7 locations), which are not necessarily all free flowing. In this year's release the headway data is collected from a larger set of free-flowing motorway sites used in the speed compliance analysis (31 sites, 19 locations). They are still only based on traffic in the inside lane.

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).

LCV (van): Light Commercial Vehicle, goods vehicle of 3.5 tonnes gross weight and under.

HGV: Heavy Goods Vehicle, goods vehicle of over 3.5 tonnes gross weight. For the purpose of these statistics, rigid 2-axle HGVs cannot be assigned definitively to a national speed limit, since it is not known whether or not they are over 7.5 tonnes gross weight. Therefore no speed limit compliance statistics can be produced for these vehicles for motorways. All other observed HGVs are assumed to have more than 7.5 tonnes maximum laden weight and therefore have been assigned the speed limit for such vehicles.

Motorcycle: Two Wheel Motor Vehicles, here simplified to motorcycles, including scooters and mopeds.

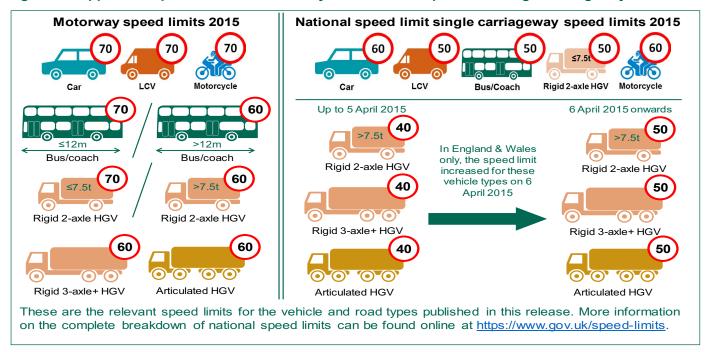
Short Bus: Includes buses and coaches of 12m length or below.

Long Bus: Includes buses and coaches over 12m in length. Long buses have different speed restrictions on motorways to short buses, therefore seperate statistics are produced for each.

Speed limits on different road types

Information on speed limits is provided in Figure 28.

Figure 31: Applicable speed limits for motorways and national speed limit single carriageways



All vehicles have the same speed limit on 20 mph and 30 mph roads.

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 vehicles observed in the production of the 2019 statistics was 510 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 2018

			Number
Year	Automatic Traffic Counters Used	Vehicles used (millions)	Significant proportion of data removed from (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	

➤ 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 accurately recorded, as well as during times when traffic volumes are abnormally low or high.

- ▶ 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.
- ▶ Detailed information on the Reported accidents data used in this release can be found at https://www.gov.uk/government/statistics/reported-road-casualties-in-great-britain-annual-report-2018
- ▶ Detailed information on the Home Office data used in this release can be found at https://www.gov.uk/gov.uk/government/publications/police-powers-and-procedures-in-england-and-wales-201112-user-guide.
- ▶ Detailed information on the Ministry of Justice data used in this release can be found at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/910198/criminal-justice-statistics-guide-december-2019.pdf or in their statistical release at https://www.gov.uk/government/collections/criminal-justice-statistics-guarterly.
- ▶ Detailed information on the NDORS data used in this release can be found at https://ndors.org.uk/faqs/.
- 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.

Next update

The 2020 release of this publication is due to be published in summer 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.

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 <u>designated as National Statistics in February 2013</u>.

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.

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