



Department for Transport

Provisional Road Traffic Estimates

Great Britain: April 2017 - March 2018

Methodology change

The Department for Transport has undertaken a review of the methodology used to produce the road traffic estimates. User engagement was sought through published reports. The review has now concluded and the recommended changes have been implemented in this release. More information can be found on [page 5](#).

Provisional estimates show motor vehicles travelled 326.2 billion vehicle miles in Great Britain for the year ending March 2018.

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About provisional traffic estimates

This release presents provisional estimates for road traffic in Great Britain for April 2017 to March 2018. Provisional estimates are published quarterly and remain provisional until after they have been constrained by the final annual estimates each year. These provisional estimates are based on traffic data collected continuously from a network of around 300 automatic traffic counters. Final annual figures also incorporate manual traffic count data.

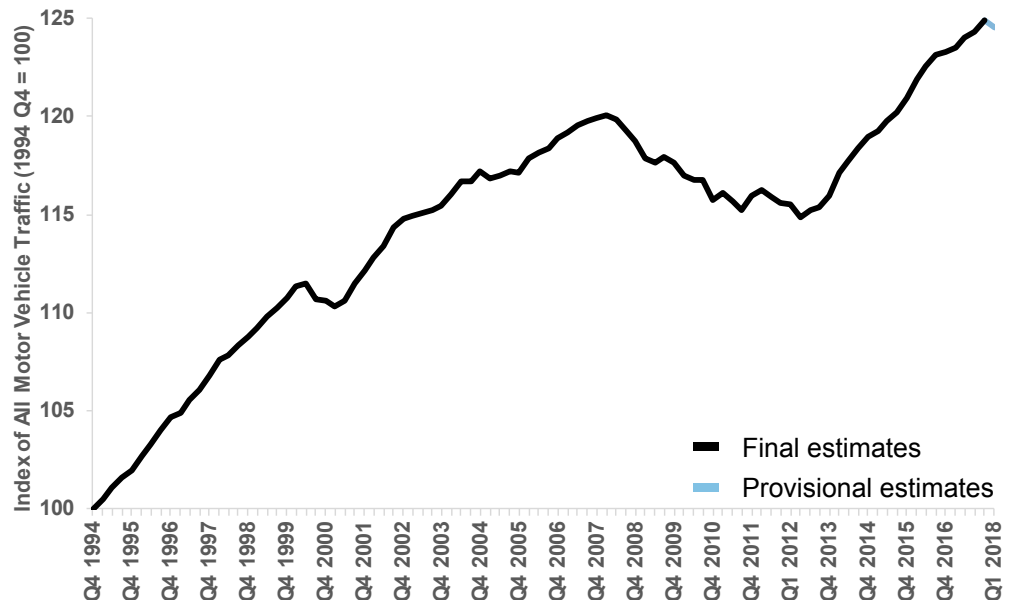
Traffic shows a seasonal pattern at the national level, being highest in summer and lowest in winter. This publication focuses on rolling annual traffic totals, which better illustrate medium and long term trends in traffic.

Key Findings

Compared to the year ending March 2017, in the year ending March 2018:

- ▶ **All motor vehicle traffic increased slightly by 0.8%.**
- ▶ **Traffic increased across all vehicle types.** Vans had the largest proportional increase of 3.1%. Lorry traffic increased by 1.1%, and car traffic remained broadly stable (with a slight increase of 0.5%).
- ▶ **Traffic increased across all main road types.** ‘A’ Roads, Minor Roads, and Motorways all saw an increase of between 0.6% and 1.1%.

Chart 1: Rolling Annual Indices of Road Traffic in Great Britain, from 1994



Compared to the year ending December 2017, in the year ending March 2018:

- ▶ **Traffic was broadly stable (-0.3%)** as shown in Chart 1. Exploratory analysis has shown that the very slight decrease of -0.3% is partly due to the effects of heavy snowfall in February and March 2018. See [page 2](#) for more information.

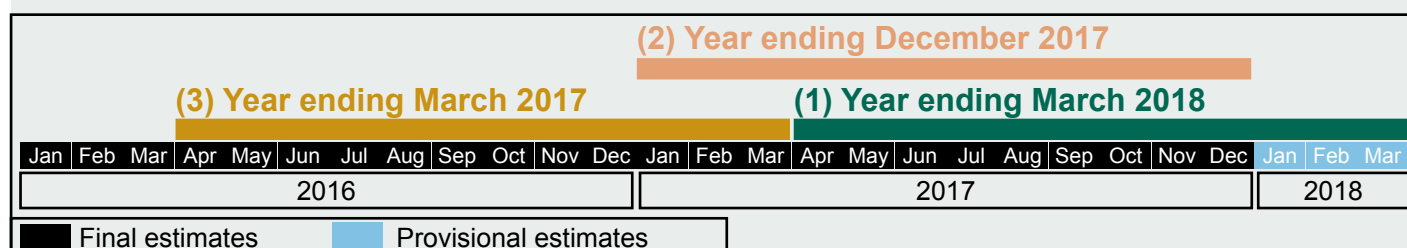
Summary Figures

The summary table below shows how vehicle traffic in the year ending March 2018 compares to that in the year ending December 2017, and across a range of earlier years. More information on our provisional estimates, along with our [TRA25](#) series of provisional traffic estimate tables, can be found online [here](#).

	Vehicle Miles (Provisional) <i>Year ending Mar 2018</i>	Percentage change from...				
		Last Quarter	Last Year	Five Years Ago	Ten Years Ago	Twenty Years Ago
		<i>Year ending Dec 2017</i>	<i>Year ending Mar 2017</i>	<i>Year ending Mar 2013</i>	<i>Year ending Mar 2008</i>	<i>Year ending Mar 1998</i>
↔ is used for negligible changes, defined as: • 0.5% or less for 0-5 years • 5% or less for 10 years and over						
All Motor Vehicle Traffic	326.2 billion	↔ -0.3%	↑ 0.8%	↑ 8.5%	↔ 3.7%	↑ 15.8%
Cars and Taxis	253.0 billion	↔ -0.5%	↔ 0.5%	↑ 6.0%	↔ 2.2%	↑ 10.7%
Light Commercial Vehicles (Vans, or LCV)	51.0 billion	↑ 1.0%	↑ 3.1%	↑ 23.9%	↑ 21.3%	↑ 66.3%
Heavy Goods Vehicles (Lorries, or HGV)	17.1 billion	↔ 0.3%	↑ 1.1%	↑ 10.8%	↓ -6.4%	↔ 0.8%
Motorways	67.9 billion	↔ -0.2%	↑ 1.1%	↑ 10.1%	↑ 8.9%	↑ 32.6%
'A' Roads	146.6 billion	↔ -0.3%	↑ 0.6%	↑ 8.4%	↔ 4.5%	↑ 12.6%
Minor Roads	111.7 billion	↔ -0.3%	↑ 1.1%	↑ 7.6%	↔ -0.1%	↑ 11.3%

About Rolling Annual Figures

Rolling annual comparisons provide insightful results into the nature of road traffic in Great Britain.



Comparison with the previous quarter: (1) against (2)

Comparison with the previous year: (1) against (3)

The first comparison shows a very slight decrease whereas the second comparison shows a very slight increase, but both staying broadly stable (less than 0.5% change).

Factors Affecting Traffic - Adverse Weather

The upward quarterly trend of the last 5 years has flattened in Q1 2018. Exploratory analysis suggests this is partly due to the extreme weather conditions between the 28th of February and the 4th of March known as the "Beast from the East".



It is estimated that the figure for the year ending March 2018 would have been slightly higher than the observed value, by about 0.4%. Whilst this would have the same effect of flattening the upward quarterly trend, removing the effects of the extreme weather suggests there would have been a very slight increase for the year ending March 2018 when compared to the year ending December 2017, as opposed to the very slight decrease that was observed.

Vehicle Type

Provisional estimates indicate that car, van, and lorry traffic all increased over the last year.

Compared to the year ending March 2017, in the year ending March 2018:



Car and taxi traffic increased slightly by 0.5% to 253.0 billion vehicle miles. 77.6% of traffic was driven by cars, and whilst this is the lowest ever proportion, it continues the slowly decreasing trend for car proportion. Note that the volume of traffic for cars is still increasing overall.



Van traffic increased by 3.1% to 51.0 billion vehicle miles. For the last five years, van traffic has been the fastest growing traffic type (in percentage terms).



Lorry traffic increased by 1.1% to 17.1 billion vehicle miles. However, this figure remains around 6.4% lower than the highest level, which was recorded 10 years ago. The peak was recorded in 2008, just before the recession started.

Long term trends

Over the last 20 years, traffic has increased at varying rates across vehicle types:

All Motor Vehicles 15.8%



10.7%

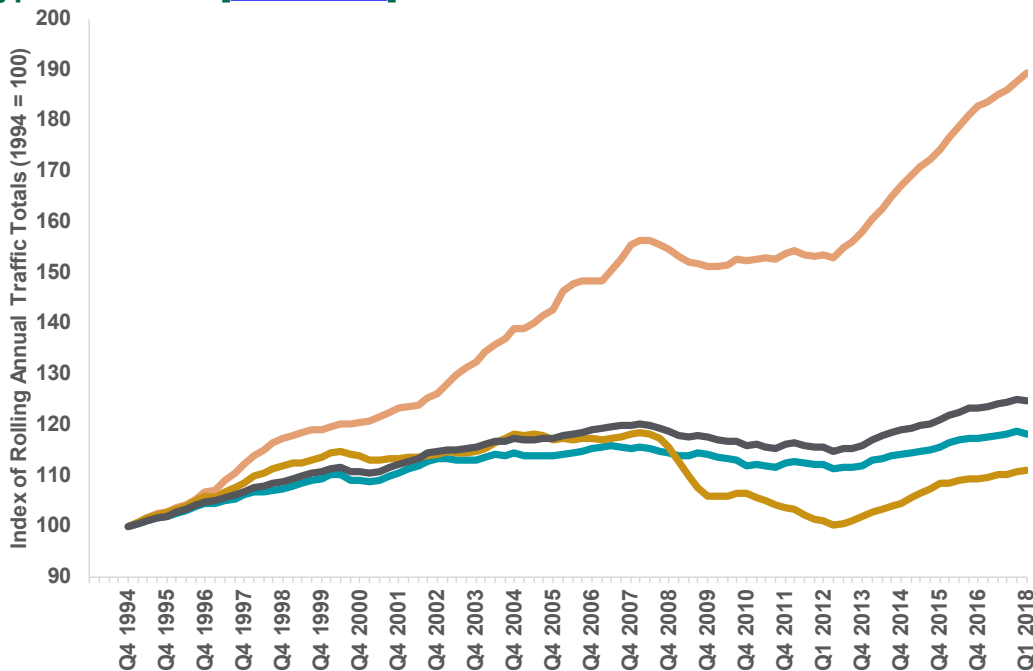


66.3%

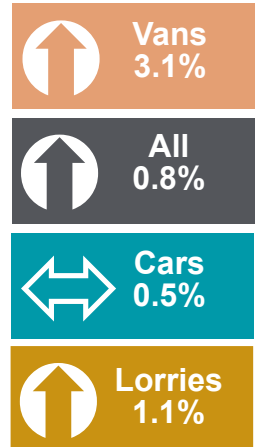


0.8%

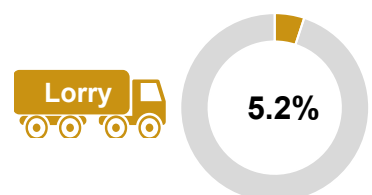
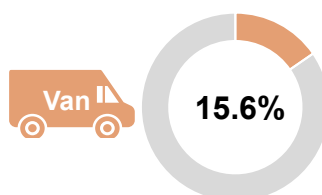
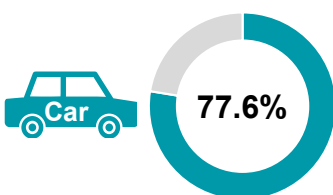
Chart 2: Rolling annual index of road traffic in Great Britain, by vehicle type from 1994 [\[TRA2501b\]](#)



% Change from year ending March 2017...



Share of traffic by vehicle type, in the year ending March 2018



Road Type

Provisional estimates across all road types varied from an increase of 2.8% to a decrease of 3.7%

Compared to the year ending March 2017, in the year ending March 2018:

- **Motorway traffic** increased by 1.1% to 67.9 billion vehicle miles.
- **'A' road traffic** showed an overall increase of 0.6%. This was driven by traffic on **rural 'A' roads**, which grew by 2.8% to 98.1 billion vehicle miles. Traffic on **urban 'A' roads** decreased by 3.7% to 48.5 billion vehicle miles.
- **Minor road traffic** increased in total by 1.1%, reaching 45.3 billion vehicle miles for rural minor roads, and 66.4 billion vehicle miles for urban minor roads.

Long term trends over the last 20 years

Levels have changed at varying rates across road types.

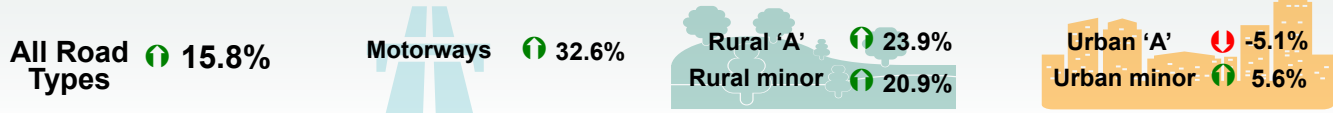
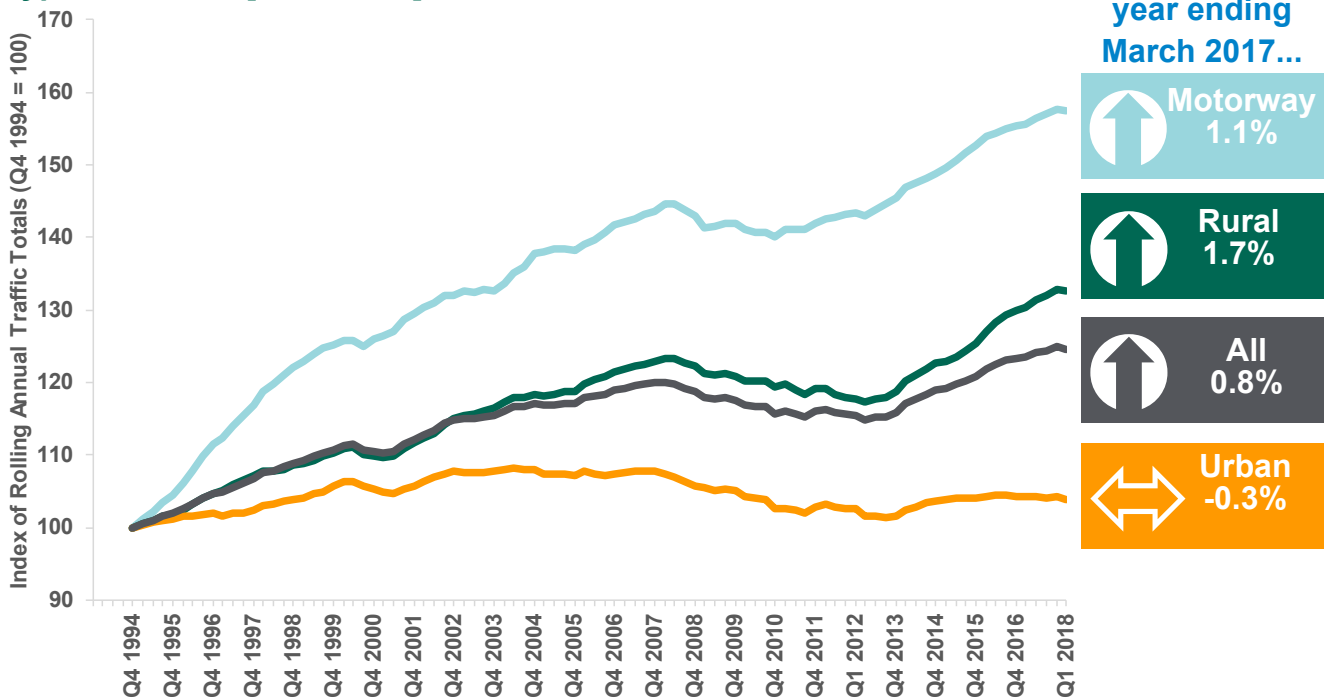
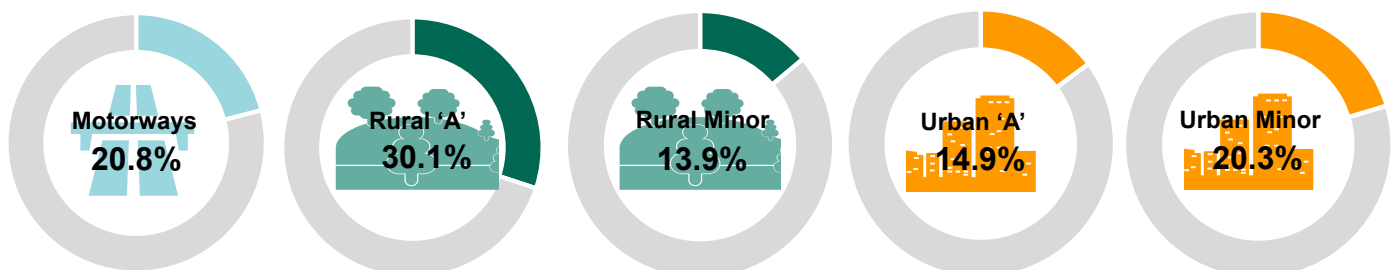


Chart 3: Rolling annual index of road traffic in Great Britain by road type from 1994 [TRA2502b]



Share of traffic by road type, in the year ending March 2018



Glossary

	Term	Definition
	<i>Billion</i>	A thousand million
	<i>Great Britain</i>	England, Wales, and Scotland
	<i>Index Number</i>	Comparing changes over time from a selected base year, often across multiple indicators where they cannot be directly compared
	<i>Q1</i>	Quarter 1: 1st January to 31st March. Similar for other quarters
	<i>Traffic</i>	Total distance travelled by vehicles, combining the number of vehicles on the road and how far they drive
	<i>Vehicle miles</i>	The units that traffic is measured in. Three vehicles travelling for four miles each would account for 12 vehicle miles worth of traffic
Vehicle Types	<i>Van</i>	A goods vehicle under 3.5 tonnes gross vehicle weight
	<i>Lorry / HGV</i>	A goods vehicle over 3.5 tonnes gross vehicle weight
Road Types	<i>Major</i>	'A' roads and Motorways
	<i>Minor</i>	'B', 'C' and unclassified roads
	<i>Rural</i>	Roads within an area with a population of under 10,000 people
	<i>Urban</i>	Roads within an area with a population of 10,000 or more people

Road Traffic Methodology Review

The Department for Transport's Road Traffic Statistics Team have conducted a review of the traffic estimates for Great Britain. The aim of the review was to seek opportunities for innovation and efficiencies in the production of traffic statistics, without degrading their quality in terms of accuracy and reliability, timeliness and meeting user needs.

The result of this review was the implementation of a more robust method for producing provisional road traffic estimates. The methodology improvements are:

- New stratification categories.
- Innovations in the processing and imputation of data from the Department for Transport's automatic traffic counters.
- Improvements to the benchmarking, weighting, and sample ratio calculation of the provisional quarterly estimates

These methodology improvements have been applied to all data presented in this publication. This has resulted in an improvement of the robustness of the statistics, and the trends have remained very similar. Further guidance is available in the Technical Note that accompanies this publication: www.gov.uk/government/statistics/road-traffic-statistics-methodology-review

Altering TRA25 Table Series - on Seasonality

For future quarterly publications, the Road Traffic Statistics Team are proposing that seasonally adjusted estimates are removed from the table sets. This is due to the fact that rolling annual figures are the primary data metric used, and they are not affected by seasonality. Also, seasonal estimates for historic data can vary when new data is added, which is potentially misleading. Please note that the effects from the "Beast from the East" in this quarter are represented in both the seasonal and unadjusted data sets. To comment on this proposal, please email us at roadtraff.stats@dft.gov.uk

Background Information

Users and uses of these statistics

Road traffic data are a key source of management information on the country's infrastructure. Main uses of road traffic statistics are summarised online in our report "[Meeting customers' needs: Users and uses of road traffic statistics and data](#)". These include:

- Highways England, Local Authorities (including Transport for London) and devolved governments, who use the data for transport planning, road engineering and policy monitoring at a regional or local level.
- Road accident and safety statistics, who use our annual and quarterly traffic estimates to produce road safety and accident rates, as required for the Strategic Framework for Road Safety.

We welcome **feedback** on any aspects of the Department's road traffic statistics including content, timing, and format. Please send any queries you have by email, to roadtraff.stats@dft.gov.uk.

Sources, strengths and weaknesses of the data

Provisional estimates are based on data from around 300 automatic traffic counters and give an indication of changes in traffic levels for different types of vehicle and on different types of road in Great Britain as a whole. Final annual estimates make use of data from around 8000 manual traffic counts in addition to the data from the automatic traffic counters and can estimate traffic levels in local areas and on specific road links, which cannot be produced from the provisional data.

Automatic traffic counters classify vehicle types based on characteristics such as axle-spacing and vehicle length. This creates the possibility for misclassification of vehicles with atypical characteristics, meaning that **provisional estimates** for different vehicle types are less robust than the final estimates which also utilise the more accurate manual count data. The classification algorithms are continually developed to ensure that vehicle classification is as accurate as possible.

Further statistical guidance can be found online here: <https://www.gov.uk/government/publications/road-traffic-statistics-guidance>.

Due to the methodology used to produce provisional traffic estimates, historic figures are subject to revision. However, these revisions are typically minor and will not affect qualitative patterns in the data. Provisional quarterly and annual traffic estimates for all motor vehicles have historically been accurate (typically within 1.5%) when compared with the final estimates, as illustrated in the table below.

All motor vehicle traffic	2016				2017			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Provisional estimates at time of publication	318.4	319.3	320.0	-	324.3	325.1	325.5	-
Final estimates	319.3	320.9	322.5	322.9	323.5	324.9	325.7	327.1
<i>Difference (%)</i>	<i>-0.3</i>	<i>-0.5</i>	<i>-0.8</i>	<i>-</i>	<i>0.2</i>	<i>0.1</i>	<i>-0.1</i>	<i>-</i>

National Statistics

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

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

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