



Congestion on local authority managed 'A' roads, England: January to March 2013



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This statistical release presents provisional information about congestion on local authority managed 'A' roads in England between January and March 2013.

Locally managed 'A' roads account for around nine per cent of all roads in England, but carry around a third of all traffic.

Congestion on locally managed 'A' roads is measured by estimating the average speed achieved by vehicles during the weekday morning peak, from 7am to 10am. School holidays and the month of August are excluded from this measure.

The data used to estimate average speeds are based on GPS location reports from a fleet of probe vehicles and, in the case of the statistics published in this release, are weighted to take account of the relative traffic flow on each road.

The key findings from this statistical release include:

- Provisional data show that average speeds during the weekday morning peak on locally managed 'A' roads in England were slower in January 2013 (down 4.4 per cent), February 2013 (down 1.8 per cent) and March 2013 (down 1.9 per cent) compared to the same months in 2012.
- Following a long period of increases since December 2010, there has been a downward trend in annual average weekday morning speeds on locally managed 'A' roads in England over the last year. Annual average speeds generally decreased between the years ending March 2012 and March 2013.
- The decreases in average speed over the last year are likely to have been influenced by the increase in rainfall in each of the months over this period compared to the same months in the previous year. The larger decrease in average speeds observed in January 2013 is likely to be explained by a period of significant snowfall across much of the country in that month, which caused considerable disruption on the roads.

FURTHER INFORMATION

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1. Congestion on local authority managed 'A' roads

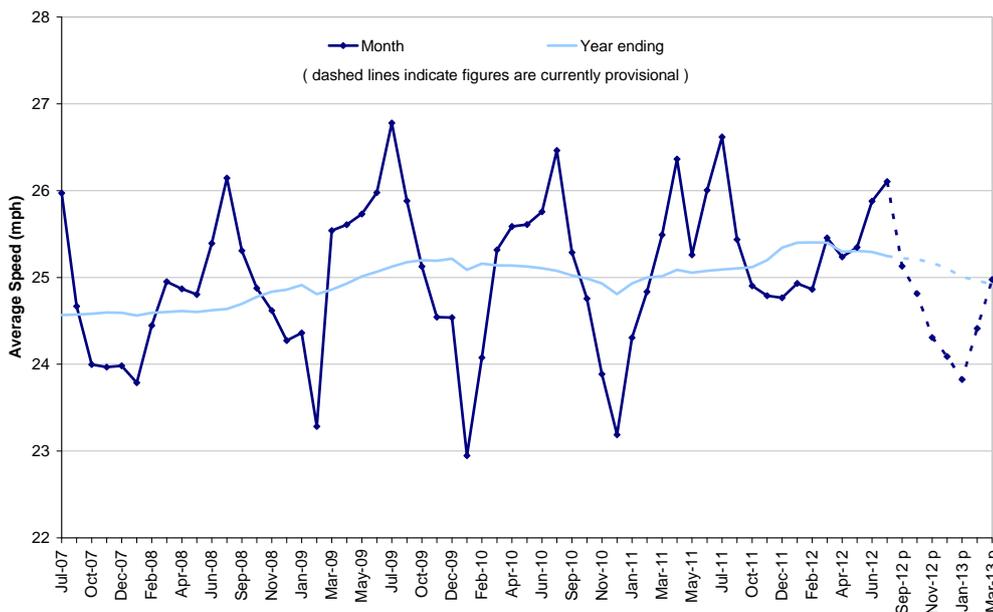
This release contains monthly and annual estimates of average speeds achieved during the weekday morning peak on locally managed 'A' roads in England. Statistics for periods to July 2012 have been finalised, while statistics for the period September 2012 to March 2013 are currently provisional.

The key findings for January 2013 to March 2013 are as follows:

- The average speed during the morning peak in January was 23.8 mph (4.4 per cent slower than in January 2012), in February was 24.4 mph (down by 1.8 per cent from February 2012) and in March was 25.0 mph (1.9 per cent slower than March 2012).
- Annual average weekday morning peak speeds showed an upward trend between the years ending December 2010 and February 2012. However, from March 2012, annual average speeds have generally decreased up to the year ending March 2013.
- The downward trend in average weekday morning peak speeds observed over the last year (March 2012 to March 2013) can be largely attributed to the amount of rainfall over this period. Met office data show that rainfall in England was higher in each of the months over this period compared to the same months in the previous year. In addition, the larger decrease in average weekday morning peak speeds in January 2013 is likely to be explained by a period of significant snowfall across much of the country in that month, which caused considerable disruption on the roads. Furthermore, intermittent periods of snow in some parts of England towards the end of March 2013 may also have had some effect on the drop in average speeds observed in March 2013 compared to March 2012.

Average vehicle speeds (flow-weighted) during the weekday morning peak¹ on locally managed 'A' roads: England, July 2007 to March 2013^P

(Congestion web table [CGN0205](#))



1. Morning peak defined as 7am to 10am. School holiday periods and the month of August are excluded.

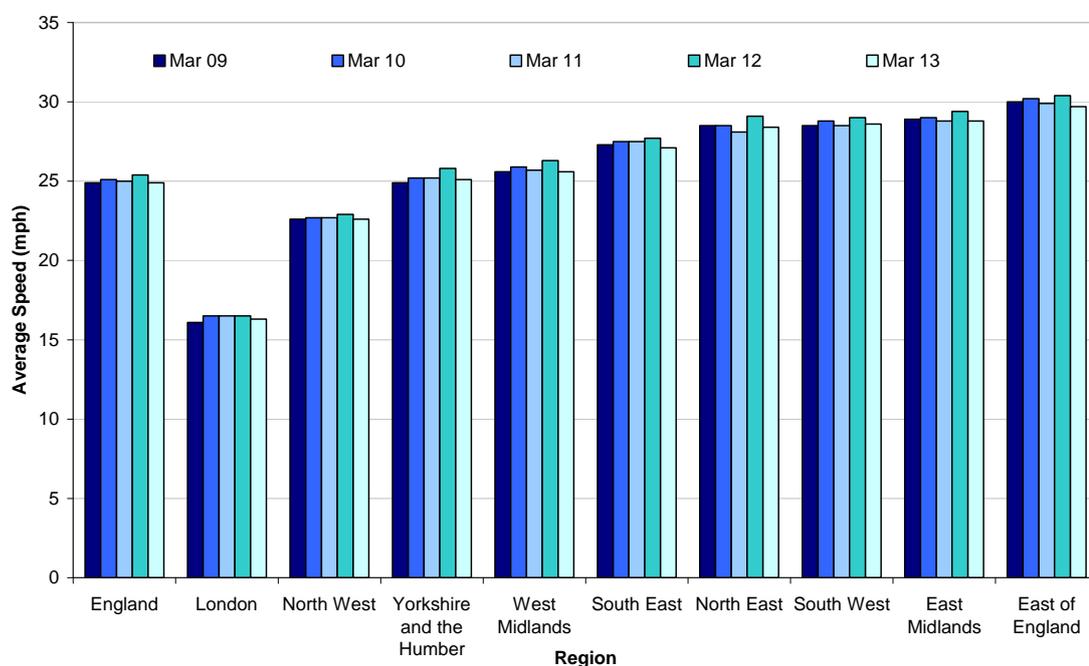
2. Figures in this chart have not been seasonally adjusted.

p = provisional

- At a regional level, each of the nine regions in England had slower average weekday morning peak speeds during the year ending March 2013 compared to the year ending March 2012. Between these years, Yorkshire & the Humber and West Midlands experienced the greatest proportional decline in speed (2.7 per cent) while London experienced the smallest decline (1.2 per cent). The East of England continues to have the highest average weekday morning peak speed and London continues to have the lowest (at 29.7 mph and 16.3mph respectively in the year ending March 2013). The differences in regional average weekday morning peak speeds will partly reflect physical differences in the types of roads in these areas. For example, in the East of England around 80 per cent of locally managed 'A' roads are classified as rural whereas in London only 4 per cent is classified as rural (with the remainder classified as urban).

Annual average vehicle speeds (flow-weighted) during the weekday morning peak¹ on locally managed 'A' roads, by region: years ending March 2009 to March 2013^P

(Congestion web table [CGN0903](#))



1. Morning peak defined as 7am to 10am. School holiday periods and the month of August are excluded.

2. Figures in this chart have not been seasonally adjusted.

p = provisional

Following the changes made to table CGN0903 (which includes the regional estimates presented in the chart above) in the previous quarter's publication, the format of table [CGN0206](#) has been changed in a similar way. The 'three month period' averages previously presented in table CGN0206 have been replaced with annual average weekday morning peak speeds for each local authority. This change has been made to provide a fuller picture of trends in local authority average speeds on their locally managed 'A' road network, as well as to providing a series that is directly comparable with the national speeds in table CGN0205.

Statistics tables and maps on "Congestion on local authority managed 'A' roads" broken down by regions and local highways authorities can be found at:

<https://www.gov.uk/government/organisations/department-for-transport/series/road-congestion-and-reliability-statistics#statistical-data-sets>

2. Strengths and weaknesses of the data

Being a measure of the average speed achieved during one of the busiest time periods, these statistics allow users to assess the trends in the level of congestion on locally managed 'A' roads over time. Reductions in the speeds reported suggest that general congestion levels on these roads have increased over the period while increases in speeds suggest congestion levels have fallen.

The measure estimates average speeds achieved by vehicles during the weekday morning peak, 7am to 10am. Any weekdays falling during school holiday periods or on bank holidays are excluded so that the measure reflects conditions when demand for the network is highest. Therefore, sample sizes for some months will vary significantly depending on when school holidays fall. Data for August are excluded due to very low sample sizes. None of the statistics in this series are seasonally adjusted.

Trends in speeds, and therefore congestion, can be reliably assessed both nationally and at a regional or local authority level and although some data imputation is necessary, this is generally very small and has a minimal effect on the published estimates. Detailed tables showing the amount of data imputation necessary in the calculation of each published statistic are available at: <https://www.gov.uk/transport-statistics-notes-and-guidance-road-congestion-and-reliability#technical-information>

We have improved the way we present imputation levels this quarter. Imputation levels for monthly and annual average speed estimates (relating to tables CGN0205, CGN0206 and CGN0903) are now based on the proportion of road length where average speed figures are imputed using average speeds from other road sections in the same local authority area. This provides a clearer representation of imputation levels than the previous presentation based on the number of traffic count point areas imputed.

Users should, however, exercise caution when assessing the statistics over short periods of time when temporary factors such as road works or bad weather may have influenced the speeds reported. This is particularly important when interpreting the data for relatively small areas where a small change on one or two roads can have a large effect on the overall average speeds reported. In addition, users should not take a direct comparison of the average speeds reported for different local authorities or regions as a measure of the relative levels of congestion within these areas as physical differences in the types of roads in these areas and their speed limits will also have a large bearing on driving speeds.

The congestion statistics for September 2012 to March 2013 are currently published as provisional estimates as they have been weighted by traffic flow information from 2011. These estimates will be updated using 2012 traffic data in November 2013 and made final at this point. The small differences between the provisional and final versions of the national-level statistics published in previous years are shown below.

Difference between final and provisional monthly speed statistics

Month	Difference
September 2011	0.10%
October 2011	0.08%
November 2011	0.10%
December 2011	0.08%
January 2012	0.10%
February 2012	0.10%
March 2012	0.11%
April 2012	0.10%
May 2012	0.09%
June 2012	0.10%
July 2012	0.11%

In addition, a detailed table showing the effect of re-weighting the statistics at a local authority level is available at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/51135/la-data-quality-provfinaldiff.xls

3. Background notes

1. The web tables give further detail of the key results presented in this statistical release and statistics on other related topics. They are available here:

<https://www.gov.uk/government/organisations/department-for-transport/series/road-congestion-and-reliability-statistics#statistical-data-sets>

2. Full guidance on the methods used to compile the new flow-weighted vehicle speeds on locally managed 'A' roads can be found here:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/51130/Methodology_for_calculation_of_flow-weighted_vehicle_speeds_on_locally_managed_A_roads.pdf

3. A useful introduction into the Department's congestion and reliability statistics, providing more detail as to what the different statistics measure, how they are published and the ways in which they are used is available here:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/51125/An_introduction_into_the_Department_for_Transport_s_congestion_statistics.pdf

4. A short paper outlining the differences between the flow-weighted and un-weighted vehicle speeds on locally managed 'A' roads can be found here:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/51131/Exploration_of_differences_between_flow-weighted_and_un-weighted_estimates_of_vehicle_speed_on_locally_managed_A_roads.pdf

5. There are many interlinking factors that may have a bearing on the statistics published in this release. Amongst others, these include traffic volumes, road conditions, localised traffic interventions, driver behaviour and the weather. Recent statistics published by the Department relating to some of these areas are available at:

- Traffic volume and flow;
<https://www.gov.uk/government/organisations/department-for-transport/series/road-traffic-statistics>
- Public attitudes towards road congestion;
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/51137/Public_attitudes_towards_road_congestion_November_2009_to_February_2010.pdf
- British social attitudes survey: attitudes to transport.
<https://www.gov.uk/government/publications/british-social-attitudes-survey-2011-attitudes-to-transport>

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

<http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html>

7. In July 2012, the United Kingdom Statistics Authority designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics.

Designation can be broadly interpreted to mean that the statistics:

- meet identified user needs;
- are well explained and readily accessible;
- are produced according to sound methods, and
- are managed impartially and objectively in the public interest.

The assessment of compliance with the Code of Practice for Official Statistics and the letter confirming the designation of these statistics can be found here:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/51139/Assessment_of_compliance_with_the_Code_of_Practice_for_Official_Statistics_-_Statistics_on_Road_Reliability_and_Congestion.pdf

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/51140/Letter_of_confirmation_as_National_Statistics.pdf

8. 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/uploads/system/uploads/attachment_data/file/51142/Pre-release_access_list_-_Congestion_on_local_authority_managed_A_roads.pdf

9. The next Congestion Statistics release will be published in August 2013. It will contain provisional estimates of vehicle speeds on locally managed 'A' roads between April and June 2013.

4. Request for feedback

We are always keen to receive feedback from users of transport statistics. If you have any comments about how the statistics in this release are presented or analysed, please contact us using the details listed on the first page of this release.