Congestion Statistics

Statistical Release

14 February 2013



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FURTHER INFORMATION

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Congestion on local authority managed 'A' roads, England: October to December 2012

This statistical release presents provisional information about congestion on local authority managed 'A' roads in England between October and December 2012.

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 slightly slower in October 2012 (down 0.4 per cent) and slower in November 2012 (down 2.0 per cent) and December 2012 (down 2.7 per cent) compared to the same months in 2011.
- These decreases in average speeds are likely to have been influenced by the increase in rainfall in each of these months compared with the same months in 2011.
- Following a long period of increases since December 2010, there has been a downward trend in annual average weekday morning peak speeds over the last year. Annual average speeds generally decreased between the years ending March 2012 and December 2012.

1. Congestion on local authority managed 'A' roads

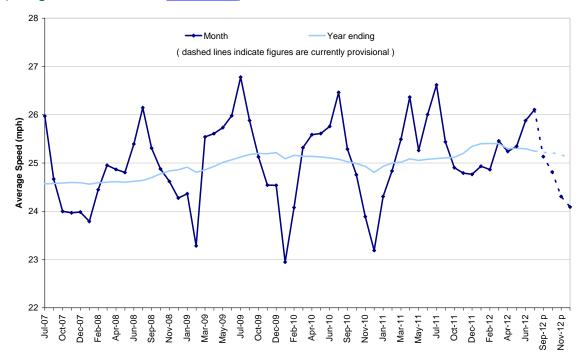
This release contains monthly and annual estimates of average speeds achieved during the weekday morning peak on locally managed 'A' roads in England. Statistics for periods to July 2012 have been finalised, while statistics for the period September to December 2012 are currently provisional.

The key findings for October 2012 to December 2012 are as follows:

- The average speed during the morning peak in October was 24.8 mph (0.4 per cent slower than in October 2011), in November was 24.3 mph (down by 2.0 per cent from November 2011) and in December was 24.1 mph (2.7 per cent slower than December 2011).
- Annual average weekday morning peak speeds showed an upward trend between the years ending December 2010 and February 2012. From March 2012, however, annual average speeds have generally decreased up to the year ending December 2012.
- The downward trend observed over most of the 2012 calendar year can be largely attributed to the amount of rainfall over this period. Met office data show that rainfall in January and February 2012 decreased compared with the equivalent period in 2011. Consequently, average speeds in these two months were higher in 2012 than in 2011. However, rainfall was higher in the remaining months of 2012 than in 2011 and is likely to explain the decreases in average speeds from March 2012 onward.

Average vehicle speeds (flow-weighted) during the weekday morning peak¹ on locally managed 'A' roads: England, July 2007 to December 2012^p

(Congestion web table CGN0205)

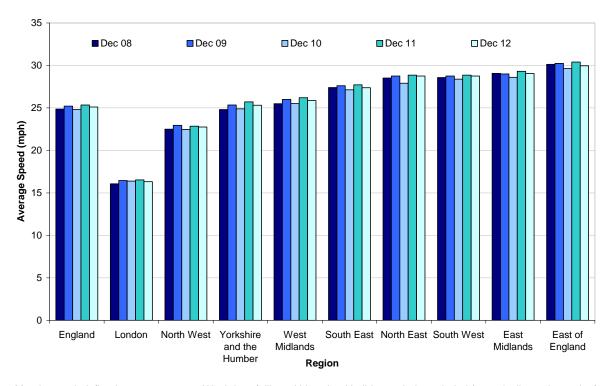


^{1.} Morning peak defined as 7am to 10am. School holiday periods and the month of August are excluded. p = provisional

• At a regional level, each of the nine regions in England had slower average weekday morning peak speeds during the year ending December 2012 compared to the year ending December 2011. Between these years, Yorkshire & the Humber and East of England experienced the greatest proportional decline in speed (1.5 per cent) while South West experienced the smallest decline (0.3 per cent). The East of England continues to have the highest average weekday morning peak speed and London continues to have the lowest (at 30.0 mph and 16.3mph respectively in the year ending December 2012).

Annual average vehicle speeds (flow-weighted) during the weekday morning peak¹ on locally managed 'A' roads, by region: years ending December 2008 to December 2012 ^p

(Congestion web table CGN0903)



1. Morning peak defined as 7am to 10am. Weekdays falling within school holiday periods excluded (so typically no data exist for the month of August).

p = provisional

Please note that table CGN0903 now contains regional annual average weekday morning peak speeds for the years ending July 2007 to December 2012 (including the estimates presented in the chart above). We have made this change to provide a more detailed picture of trends in regional average speeds, as well as providing a series that is directly comparable with the national speeds in table CGN0205. The 'three month period' average speeds previously included in this table continue to be included in table CGN0206. However, we will be reviewing the contents of table CGN0206 over the next few months with a view to replacing all 'three month period' average speeds with annual averages.

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.

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

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 December 2012 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. In addition, a detailed table showing the effect of reweighting the statistics at a local authority level is available at:

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

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%

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 unweighted 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.
 <u>https://www.gov.uk/government/publications/british-social-attitudes-survey-2011-attitudes-to-transport</u>
- 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_co_nfirmation_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. We have now completed the quality assurance of the un-weighted congestion statistics for 2011/12. These are presented in tables CGN0203 and CGN0902.
- 10. The next Congestion Statistics release will be published in May 2013. It will contain provisional estimates of vehicle speeds on locally managed 'A' roads between January and March 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.