Congestion Statistics

Statistical Release

8 November 2012



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FURTHER INFORMATION

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Congestion on local authority managed 'A' roads, England: 2011/12

This Statistical Release presents information about congestion on local authority managed 'A' roads in England. The release finalises the statistics for 2011/12 (September 2011 to July 2012). It also presents provisional congestion statistics for September 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, 7am to 10am. School holidays and the month of August are excluded from this measure. The data 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:

- The average speed achieved during the weekday morning peak on locally managed 'A' roads in England between September 2011 and July 2012 was 25.3 mph. This is 0.8 per cent faster than the average speed observed last year, and 2.6 per cent faster than the average speed achieved during 2006/07 when this measure first started.
- The largest speed increases relative to last year were observed in November 2011, December 2011 and January 2012, whereas April 2012 and July 2012 saw the largest drops in average speed when compared to last year's figures.
- Provisionally, the average speed achieved over the morning peak during September 2012 was 25.1 mph, 1.2 per cent slower than the previous September.

1. Congestion on local authority managed 'A' roads

This release contains monthly, quarterly and annual estimates of the speeds achieved during the weekday morning peak on locally managed 'A' roads.

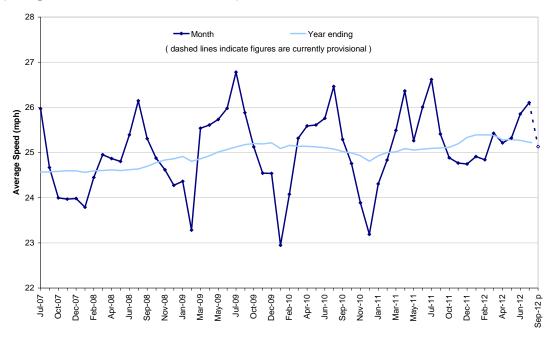
Statistics for 2011/12 (September 2011 to July 2012) are now final, while statistics for September 2012 are currently provisional.

The key findings for 2011/12 were as follows:

- The average speed achieved during the morning peak in 2011/12 was 25.3 mph. This is 0.8 per cent faster than the average speeds observed during 2010/11 (25.1 mph) and 2.6 per cent faster than those observed during 2006/07 (24.6 mph).
- During the first five months of 2011/12, September 2011 to January 2012, average morning peak speeds were faster than those achieved the previous year. However, average monthly speeds were noticeably slower in April 2012 and July 2012 compared to the same months in 2011.
- Consistent increases in annual average speeds were observed from June 2011 to February 2012 and were particularly apparent between November 2011 and January 2012. These increases are believed to be the result of a relatively mild winter in 2011/12, compared to 2010/11. Between March 2012 and September 2012, annual average speeds have consistently fallen, with the exception of May 2012. It is likely that these recent drops in annual average speeds were caused by the substantial amount of rainfall experienced in spring and summer of 2012 compared with the same period in 2011.

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

(Congestion web table CGN0205)

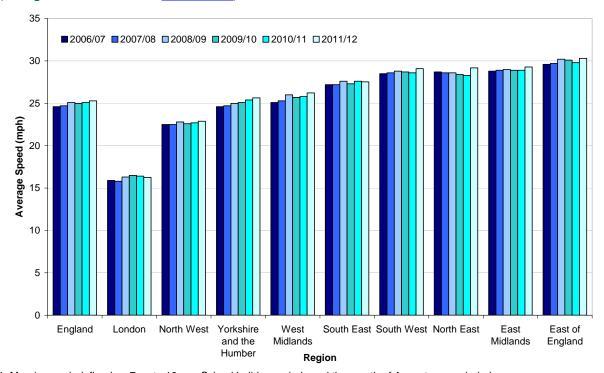


1. Morning peak defined as 7am to 10am. School holiday periods and the month of August are excluded. p = provisional

- Focussing on the last two months of 2011/12, the average weekday morning peak speed in England during June and July 2012 was 26.0 mph. 1.1 per cent slower than the same two month period in 2011.
- Provisionally, the average speed achieved during the morning peak in September 2012 was 25.1 mph, 1.2 per cent slower than during September 2011 (25.4 mph).
- At a regional level, seven of the nine English regions had faster average weekday morning peak speeds in 2011/12 than in 2010/11. London experienced the greatest proportional decline in speed (1.2 per cent) while the North East region experienced the largest proportional increase (3.1 per cent). The East of England was the only region where the average weekday morning peak speed was over 30 miles per hour (30.3 mph).

Average vehicle speeds (flow-weighted) during the weekday morning peak¹ on locally managed 'A' roads, by region: annually from 2006/07

(Congestion web table CGN0901)



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

Statistical tables on "Congestion on local authority managed 'A' roads" broken down by regions, local authorities and Transport for London managed roads can be found by following the link: http://www.dft.gov.uk/statistics?post_type=table&series=congestion-and-reliability

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: http://www.dft.gov.uk/statistics/series/congestion-and-reliability/

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 quarterly congestion statistics published between September 2011 and June 2012 were published as provisional estimates as they had been weighted by traffic flow information from 2010. The final figures for this period are weighted by the latest traffic flow data available for the network and are published in this release. The small differences between the provisional and final versions of the national-level statistics published in previous years are shown below. Congestion statistics for July 2012 were not published previously, but the differences using the 2010 and latest traffic flow data are also presented in the table below for completeness. In addition, a detailed table showing the effect of re-weighting the statistics at a local authority level is available at: http://www.dft.gov.uk/statistics/series/congestion-and-reliability/

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%

The provisional congestion statistics for September 2012 in this release will be finalised in November 2013.

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: http://www.dft.gov.uk/statistics?post_type=table&series=congestion-and-reliability
- 2. Full guidance on the methods used to compile the flow-weighted vehicle speeds on locally managed 'A' roads can be found here:

http://assets.dft.gov.uk/statistics/series/congestion-and-reliability/flow-speed-calculation.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:

http://assets.dft.gov.uk/statistics/series/congestion-and-reliability/an-introduction-into-the-department-for-transport-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:
- http://assets.dft.gov.uk/statistics/series/congestion-and-reliability/vehicle-speed-estimates.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: http://www.dft.gov.uk/statistics/series/traffic/
 - Public attitudes towards road congestion:
 http://assets.dft.gov.uk/statistics/series/congestion-and-reliability/roadcongestion.pdf

- British social attitudes survey: attitudes to transport:
 <u>http://www.dft.gov.uk/statistics/releases/2010-british-social-attitudes-survey-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 letter of confirmation as National Statistics can be found here: http://assets.dft.gov.uk/statistics/series/congestion-and-reliability/UKSA-letter-congestion-and-reliability.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:

http://assets.dft.gov.uk/statistics/series/congestion-and-reliability/pre-release-urban.pdf

- 9. We have not published un-weighted congestion statistics for 2011/12 (presented on tables CGN0203 and CGN0902) to support this Statistical Release as they were not fully quality assured at the time of publication. We will continue to check these statistics in order to publish them as soon as possible. Flow-weighted speed estimates have been quality assured and are not derived from the un-weighted estimates. The paper referenced at point 4 above provides further information on the difference between flow-weighted and un-weighted speed estimates.
- 10. The next Congestion Statistics release will be published in February 2013. It will contain provisional estimates of vehicle speeds on locally managed 'A' roads between October 2012 and December 2012.

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.