

Congestion on local 'A' roads, England: July to September 2013



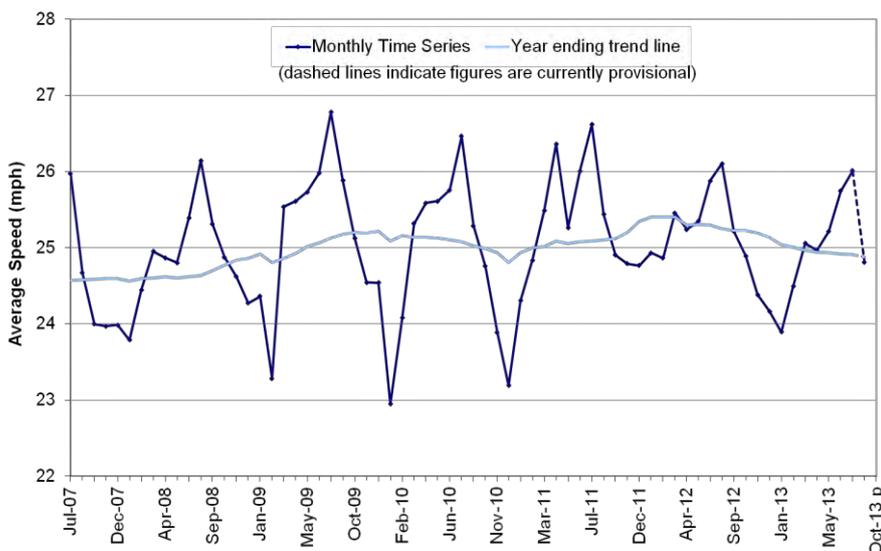
Department
for Transport

Main findings: Weekday morning peak speeds broadly stable in the last 6 months

In the year ending September 2013, provisional data show that the average speed on locally managed 'A' roads in England during the weekday morning peak was 24.9 mph. This is a 0.2% decrease on the year ending June 2013.

- For individual months, average speeds on locally managed 'A' roads in England were slightly slower in July 2013 (down 0.4%) and September 2013 (down 1.6 %) compared to the same months in 2012.
- Looking further back, there were increases in speeds between the years ending December 2010 and February 2012. However, from the year ending March 2012, average speeds gradually decreased over the following 12 months and have been broadly stable in more recent periods.

Average vehicle speeds (flow-weighted) during the weekday morning peak¹ on locally managed 'A' roads: England, monthly and annual averages from 2006/07 (congestion web table: [CGN0205](#))



Why measure speeds during morning peak?

Speeds are measured during the weekday morning peak as this is when demand on locally managed 'A' roads is typically at its highest. This high demand often leads to physical congestion and low speeds.

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About this release

This statistical release presents information about congestion on local highway authority managed 'A' roads in England. 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. Speeds are estimated using data from in-vehicle Global Positioning Systems (GPS).

Further information:

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Introduction

Locally managed 'A' roads account for around 9% of all roads in England, but carry around a third of all traffic.

The measure estimates average speeds achieved by vehicles during the weekday morning peak, 7am to 10am. Any weekdays falling during school holiday periods or the month of August are excluded. Speeds are measured during the weekday morning peak as this is when demand on locally managed 'A' roads is typically at its highest. This high demand often leads to physical congestion and low speeds. In interpreting the data, 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 data are based on journey times estimated using in-vehicle Global Positioning Systems (GPS) and flows estimated using automatic traffic counters.

For further information, a useful introduction to the Department's congestion and reliability statistics, including the different measures, how they are published and the ways in which they are used is available here:

[An introduction into the Department for Transport's congestion statistics](#)

Latest statistics

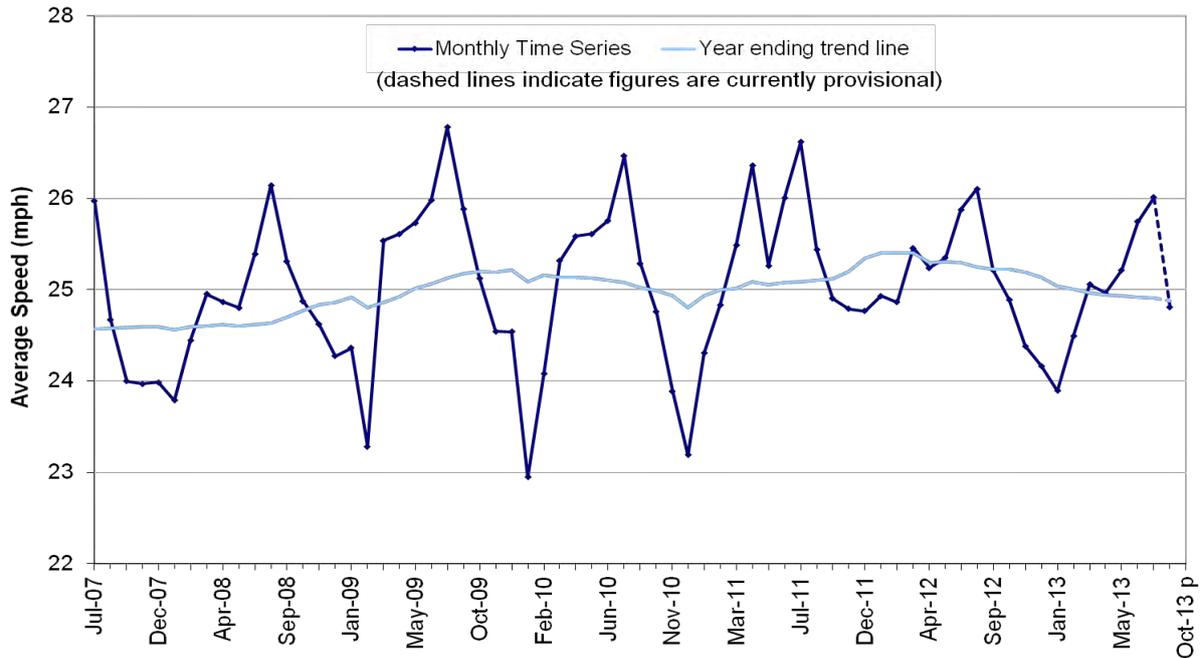
Provisional data show that the average speed on locally managed 'A' roads in England during the weekday morning peak was 24.9 mph between October 2012 and September 2013. This is a 0.2% decrease on the year ending June 2013.

For individual months, the average speed in July 2013 was 24.8 mph (0.4% slower than in July 2012) and in September 2013 was 26.0 mph (1.6% slower than September 2012).

There was an increase in annual average weekday morning peak speeds between the years ending December 2010 and February 2012. However, from March 2012, annual average speeds have generally decreased. Following a period of relatively large decreases in average speed between the years ending November 2012 and March 2013, decreases have been smaller in recent months with annual average speeds remaining broadly stable at 24.9 miles per hour between March 2013 and September 2013.

The downward trend in annual average weekday morning peak speeds observed since March 2012 can be partly attributed to the amount of rainfall over this period. Met office data show that 2012 was the wettest year on record in England and rainfall was higher in every month from March 2012 to March 2013 compared to the same month 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, compared to the previous year, which caused considerable disruption on the road.

Average vehicle speeds (flow-weighted) during the weekday morning peak¹ on locally managed 'A' roads: England, monthly and annual averages from 2006/07 (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

Congestion statistics to July 2013 are now final, while statistics for September 2013 are currently provisional.

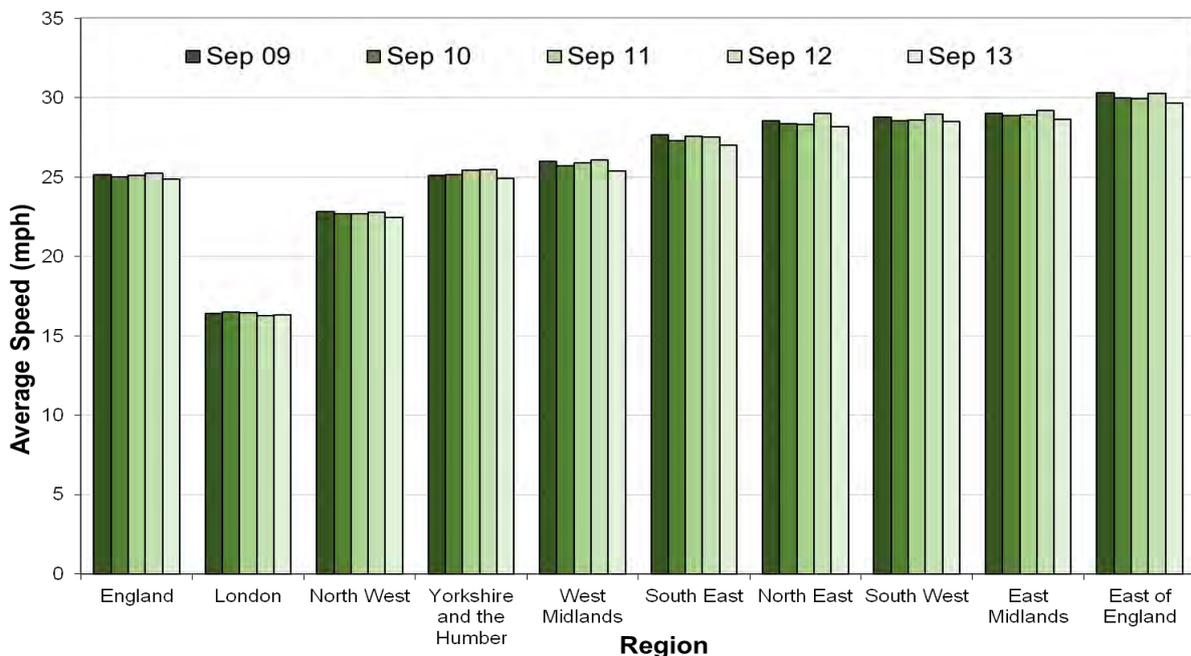
Increase in vehicle fleet used to estimate journey times

For data from September 2013, there has been an increase of around 25,000 vehicles in the fleet used to estimate journey times to produce the local congestion statistics (prior to this there were approximately 75,000 vehicles in the fleet). The size of the vehicle fleet used has always fluctuated between time periods, mainly depending on usage and sales, but the change to data in September 2013 is much larger than usual. Analysis of these additional vehicles shows that they are broadly representative of the current fleet in terms of vehicle type and journey times, but will increase coverage (reducing imputation levels) and so improving the quality of the local congestion statistics.

Regional trends for local congestion

At a regional level, eight of the nine regions in England had slower average weekday morning peak speeds during the year ending September 2013 compared to the year ending September 2012. London was the exception, which observed a 0.4% increase. Between these years, North East experienced the greatest proportional decline in speed (2.9%) followed closely by West Midlands (2.7%). 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 16.3 mph respectively in the year ending September 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% of locally managed 'A' roads are classified as rural compared to only 4% in London.

Average vehicle speeds (flow-weighted) during the weekday morning peak¹ on locally managed 'A' roads: by region, years ending September from 2009 (Congestion web table [CGN0206](#))



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

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>

Changes to statistical tables supporting this release

In August this year, we asked all users of our statistics release for feedback on five proposals to rationalise the statistics tables which support this release. In addition, we proposed publishing average speeds for individual roads, provided they were sufficiently robust for publication purposes.

As a result of the feedback received, we decided not to remove journey time tables (published alongside average speeds). We have implemented most of the other proposals for this release, including the removal of un-weighted average speed estimates and separate regional tables. We are currently developing statistics for average speeds on individual roads and are planning to publish these statistics in February 2014.

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.

Because the measure estimates average speeds during school-term weekday morning peak period (classified as 7am to 10am), sample sizes for some months will vary significantly depending on when school holidays fall.

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. However, users should exercise some caution as any small fluctuations in average speed estimates over time may be due to large changes in imputation levels. Different levels of imputation may be a result of the number of school days in an individual month (e.g. months with school holidays are likely to have higher levels of imputation). Detailed tables showing the amount of data imputation necessary in the calculation of each published statistic are available at: <https://www.gov.uk/government/publications/road-traffic-speeds-and-congestion-statistics-guidance>

Users should also 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.

Methodology and technical detail

Full guidance on the methods used to compile the 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

A detailed table showing the differences in calculated flow weighted speeds as a result of the additional 25,000 vehicles added to the vehicle fleet (as explained) is available at:

<https://www.gov.uk/government/publications/road-traffic-speeds-and-congestion-statistics-guidance>

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-2012-attitudes-towards-transport>

National Statistics

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>

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.

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/230511/pre-release-list-traffic-congestion-reliability.pdf

Next Release

The next release on local congestion statistics will be published on 13 February 2014. It will contain provisional information about average weekday morning peak speeds on the English local 'A' road network in the year ending December 2013. Figures on average speeds for September 2013 onwards will remain provisional until November 2014, once they are weighted by traffic flow information for 2013. Changes in our estimated figures on average speeds, from provisional to final, at local authority level can be found at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/230522/la-data-quality-provfinaldiff.xls

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.