Congestion on local ‘A’ roads, England: October to December 2015

Main findings: Average speeds during the morning peak have continued to fall for over 3 and a half years

► The average speed on local ‘A’ roads in England during the weekday morning peak in the year ending December 2015 was 23.4 mph. This is a 0.7% decrease on the year ending September 2015.

► Average speeds on local ‘A’ roads in England were slower in each month from October to December 2015, with decreases of 2.3%, 3.0% and 2.9% respectively, compared to the same months in 2014.

Important note – planned changes to these congestion statistics

We propose to make the following changes for the next statistical release published in May 2016:

► To extend the average speed measure so that it covers all hours of the day (rather than just 7am to 10am during non-school holiday periods). For continuity purposes, we will continue to present average speed statistics on weekday morning peak period separately.

► To start publishing statistics on two additional travel time measures; average delay and reliability on locally managed ‘A’ roads.

Related to these changes, we are planning to improve the methodology used to produce the current average speed measure for locally managed ‘A’ roads presented in this release. Whilst we expect the new average speed levels to be similar to those in this release, they will not be directly comparable due to the changes in methodology.

For more information about these planned changes, and new travel time statistics that we plan to publish, please see page 6 of this release. If you would like to provide feedback, or would like further information, please use the contact details at the bottom of this page.
**Introduction**

Local ‘A’ roads account for around 9% of all roads in England, but carry around a third of all traffic.

Congestion on local ‘A’ roads is measured by estimating average speeds achieved by vehicles during the weekday morning peak, 7am to 10am. Any weekdays falling during school holiday periods and the month of August are excluded.

The data are based on journey times estimated using in-vehicle Global Positioning Systems (GPS) and flows estimated using the Department’s traffic count information.

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**Latest statistics:** Provisional data show that the average speed on local ‘A’ roads in England during the weekday morning peak was 23.4 mph in the year ending December 2015. This is a 0.7% decrease on the year ending September 2015.

Looking at individual months, the average speed in October 2015 was 22.8 mph (2.3% slower than in October 2014), in November 2015 it was 22.3 mph (3.0% slower than in November 2014) and in December 2015 it was 22.8 mph (2.9% slower than in December 2014).

**Average vehicle speeds during the weekday morning peak on local ‘A’ roads: England, monthly and annual averages from 2006/07**

(Table CGN0205)

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1. Morning peak defined as 7am to 10am. School holiday periods and the month of August are excluded.
2. Average speeds have been flow-weighted using DfT traffic estimates
3. Dashed line on chart indicates the figures are currently provisional
Why measure speeds during morning peak?

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

Recent trends: There were increases in annual average weekday morning peak speeds between the years ending December 2010 and February 2012. However, since March 2012, annual average speeds have generally decreased. The general downward trend in annual average weekday morning peak speeds observed over recent years is likely to be partly attributed to increases in traffic levels on ‘A’ roads over the same period. To a lesser extent, intermittent periods of high rainfall over this period may also help to explain some of the observed decreases in speed.

Between October 2015 and December 2015, preliminary estimates suggest that GDP has increased by 0.5% with traffic levels on ‘A’ roads (in Great Britain) increasing by 0.5% and average speeds on local ‘A’ roads falling by 0.7%. A stronger economy often results in more traffic, which can increase levels of congestion on roads.

Changes between year ending Sep 2015 and Dec 2015 ...

- Rainfall: 4.4%
- Gross Domestic Product: 0.5%
- Traffic on ‘A’ Roads in GB: 0.5%
- Average speeds on local ‘A’ roads: 0.7%
Regional congestion statistics

Regional trends for local congestion

At a regional level, all regions in England experienced slower average weekday morning peak speeds during the year ending December 2015 compared to the year ending December 2014. Between these years, London experienced the greatest fall in average speeds (4.5%) across all nine regions, followed by the West Midlands and North West (with falls of 3.2% and 3.1% in average speeds respectively). The East of England continues to have the highest average weekday morning peak speed and London continues to have the lowest (at 28.3 mph and 14.6 mph respectively in the year ending December 2015).

The recent falls in average speeds across London may be partly attributed to a reduction in speed limits in some London boroughs (e.g. the introduction of some 20mph wide zones to improve road safety).

Average vehicle speeds during the weekday morning peak on local ‘A’ roads: by region, years ending December from 2011 (Table CGN0206)

1. Morning peak defined as 7am to 10am. School holiday periods and the month of August are excluded.
2. Average speeds have been flow-weighted using DfT traffic estimates

p = provisional
The differences in regional average weekday morning peak speeds partly reflect physical differences in the types of roads in these areas. For example, in the East of England around 75% of locally managed ‘A’ roads are classified as rural compared to only 4% in London.

**Average vehicle speeds during the weekday morning peak on local ‘A’ roads, by region and urban/rural road length: year ending December 2015**

<table>
<thead>
<tr>
<th>England Region</th>
<th>Speed (mph)</th>
<th>Local 'A' Roads</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>% Urban Road \ % Rural Roads</td>
</tr>
<tr>
<td>London</td>
<td>96%</td>
<td>4%</td>
</tr>
<tr>
<td>North West</td>
<td>45%</td>
<td>55%</td>
</tr>
<tr>
<td>Yorkshire and the Humber</td>
<td>34%</td>
<td>66%</td>
</tr>
<tr>
<td>West Midlands</td>
<td>34%</td>
<td>66%</td>
</tr>
<tr>
<td>South East</td>
<td>31%</td>
<td>69%</td>
</tr>
<tr>
<td>South West</td>
<td>16%</td>
<td>84%</td>
</tr>
<tr>
<td>North East</td>
<td>32%</td>
<td>68%</td>
</tr>
<tr>
<td>East Midlands</td>
<td>20%</td>
<td>80%</td>
</tr>
<tr>
<td>East of England</td>
<td>25%</td>
<td>75%</td>
</tr>
</tbody>
</table>

The statistics in this release were designated as National Statistics in July 2012.

**Source**

Speeds: DfT Road Congestion Data  
Road lengths: DfT Road lengths in Great Britain 2014, Table RDL0101
Important note – planned changes to these congestion statistics

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► To start publishing statistics on two additional travel time measures; average delay and reliability on locally managed ‘A’ roads.

Related to these changes, we are planning to improve the methodology used to produce the current average speed measure for locally managed ‘A’ roads presented in this release. Whilst we expect the new average speed levels to be similar to those in this release, they will not be directly comparable due to the changes in methodology.

We are making these changes as a result of a long programme of work with Highways England, together with feedback and collaboration with a number of local authorities and other stakeholders. Taken together, the suite of three new travel time measures aims to provide a more complete picture of travel time performance on local ‘A’ roads.

In December 2015 we published statistics on average speeds, average delay and reliability on the Strategic Road Network. We are planning to publish statistics using the same travel time measures for local ‘A’ roads to bring these series closer together. This will allow us to compare statistics on local and strategic roads more easily.

After liaising with the UK Statistics Authority on the proposed changes to these statistics we are planning to publish the new statistics as National Statistics.

We intend to publish some ad hoc statistical analysis on these new travel time measures for local ‘A’ roads for the period January to December 2014 soon, along with further details about each of the travel time measures. If you would like to be informed once this analysis has been published or if you would like to provide any feedback, please get in touch using the contact details on the front cover of this release.
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 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: speeds and congestion statistics guidance

Users should also exercise caution when interpreting 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 be cautious when comparing average speeds reported for different local authorities or individual local ‘A’ roads as a measure of the relative levels of congestion within these areas. This is because physical differences in the types of roads 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 in our Congestion Methodology document.