Department for Transport

Road Conditions in England 2017

Local authority managed 'A', 'B' and 'C' roads have gradually improved over the last 5 years, while unclassified roads have remained broadly stable.

About this release

This annual release presents information on the condition of roads in England, as well as other aspects of highways maintenance.

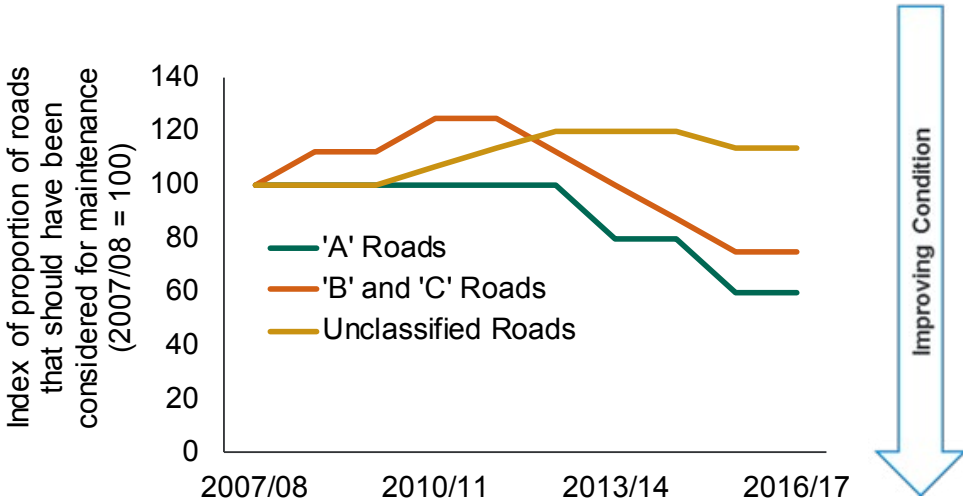
Automated survey machines and visual surveys are used by local authorities (LAs) and Highways England (HE) to determine the percentage of the network that *'should have been considered for maintenance'* (see side bar on page 3 for detail). The data can be used to make decisions about maintenance.

Figures for road condition are available back to 2007/08, with the most recent available data covering the period 2016/17. Regional and national figures include all LAs whose data passed validation checks.

Further information can be found via the road condition statistical series.

In this publication

Trend in the proportion of LA managed roads that should have been considered for maintenance, in England, by road type, 2007/08 to 2016/17 [RDC0120]



'A' roads and 'B' and 'C' roads combined have seen a gradual improvement (i.e. fewer roads should have been considered for maintenance) in the last five years. By contrast, unclassified roads have not seen the same improvement over this period.

There are many possible reasons for these changes. For example milder winters in recent years may explain part of the improvements seen. In addition, road maintenance strategies, funding, and the levels of road traffic and congestion can all affect the condition of the network.

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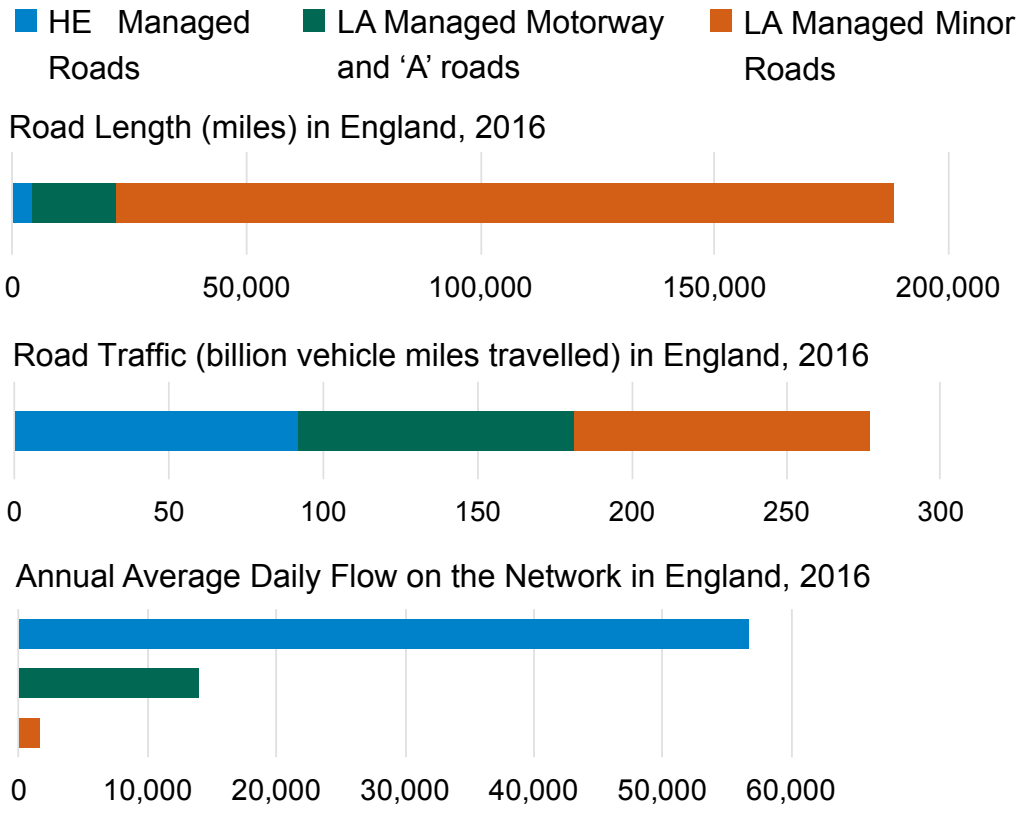
Contextual Information by Road Type in England



Road Types in England

Highways England (**HE) managed motorways and 'A' roads** make up the **Strategic Road Network** (SRN). In 2016, the SRN made up **2.4%** of road length but carried **33%** of motor traffic vehicle miles

All other road types are **managed by local authorities (LAs).** In 2016:

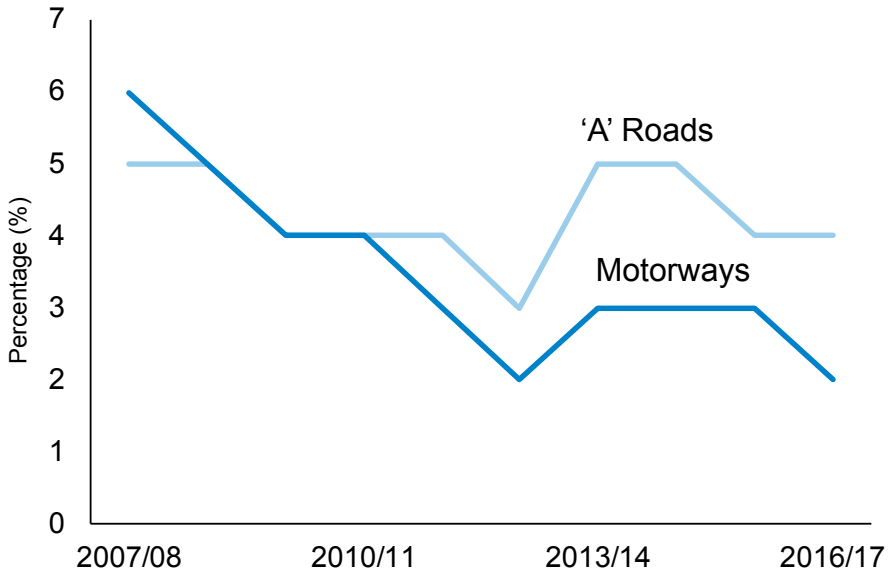
- **LA managed 'A' roads and motorways** made up **9%** of road length and carried **32%** of motor traffic vehicle miles.
- **Minor roads** are made up of **classified non-principal roads** ('B' and 'C' roads) and **unclassified ('U') roads**. They make up the majority of road length in England, at **88%**, but carried only **35%** of motor traffic vehicle miles

Statistics on road length in Great Britain are published here.

Statistics on road traffic in Great Britain are published here.

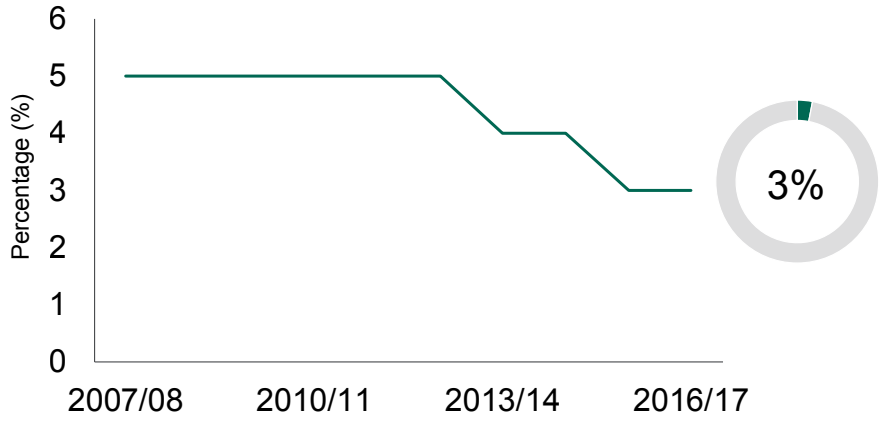
Road Condition - Highways England Managed Roads

Chart 1: Proportion of the HE managed road network that should have been considered for maintenance, by road type, 2007/08 to 2016/17 [RDC0201]



For HE managed motorways the proportion of the network that should have been considered for maintenance in 2016/17 was lower than the previous year, and matches the previous lowest result in 2012/13. For HE managed 'A' roads this remained at the same level as the previous year.

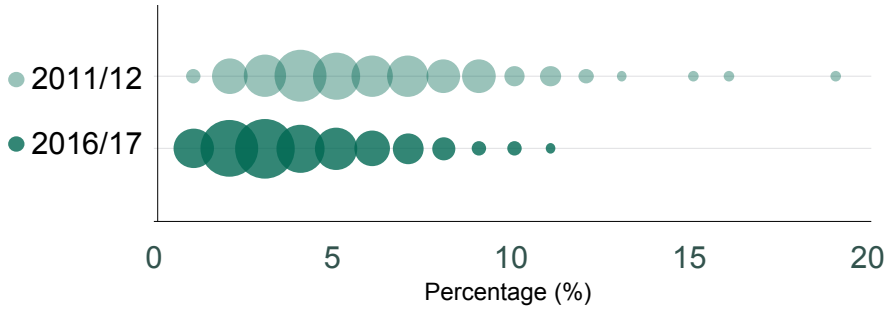
Chart 2: Proportion of LA managed 'A' roads that should have been considered for maintenance, 2007/08 to 2016/17 [RDC0120 RDC0121]



LA managed 'A' roads account for around 9% of the road network in England. The proportion of these roads that should have been considered for maintenance in 2016/17 was 3%, the same as the previous year.

There has, however, been a gradual fall in the proportion of LA managed 'A' roads that should have been considered for maintenance over time, from 5% in 2012/13 to 3% in 2016/17.

Chart 3: Change in proportion of the LA managed 'A' road network that should have been considered for maintenance between 2011/12 and 2016/17 [RDC0120 RDC0121]



- Figures rounded to nearest whole percentage, an LA can report a figure of zero if below 0.5%.
- The size of the bubble indicates the number of LAs reporting that percentage.

The gradual improvement reflects the improved results reported by LAs in 2016/17 when compared to 5 years ago. There are a number of factors that can affect the condition of the road network, as cited on page 1 of this release.

Measuring road condition

The Road Condition Indicator (RCI) is made up of several factors, which combine to give an overall measure of the state of the road.

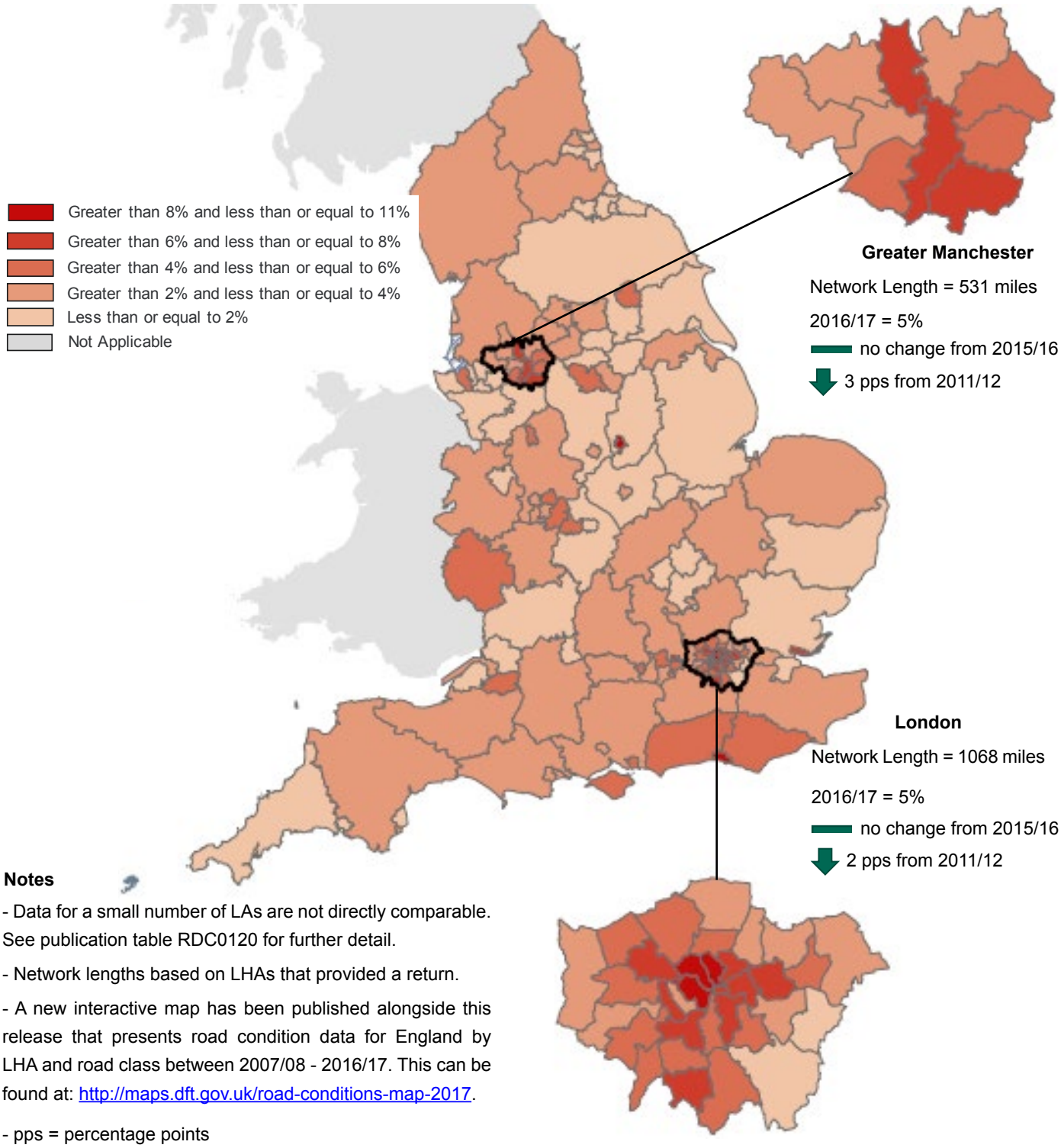
Based on their RCI score, the condition of the roads can be split into three categories (red, amber and green). Roads classified as red are those that are described as "*should have been considered for maintenance*" in this release. The roads categorised as 'red' will not necessarily require immediate treatment, but they should be inspected to determine whether maintenance is required.

As data for other road condition categories (green and amber) are not currently collected, the figures should only be taken as an indication of whether condition is improving or worsening. Comparisons of road condition across different road types should be made with caution due to differing methods.

See here the Road Network Size and Condition Statistics Guidance for further detail.

Other measures of condition also exist. The Asphalt Industry Alliance carry out the Alarm Survey and report on a measure of structural condition alongside other measures (see here). The RAC have also introduced a pothole index using their members' breakdown data, and are using this as an ongoing measure of the state of the UK roads (see here).

Map 1: Proportion of LA managed 'A' roads where maintenance should have been considered, by local authority in England, 2016/17 [RDC0120 RDC0121 Interactive Map]

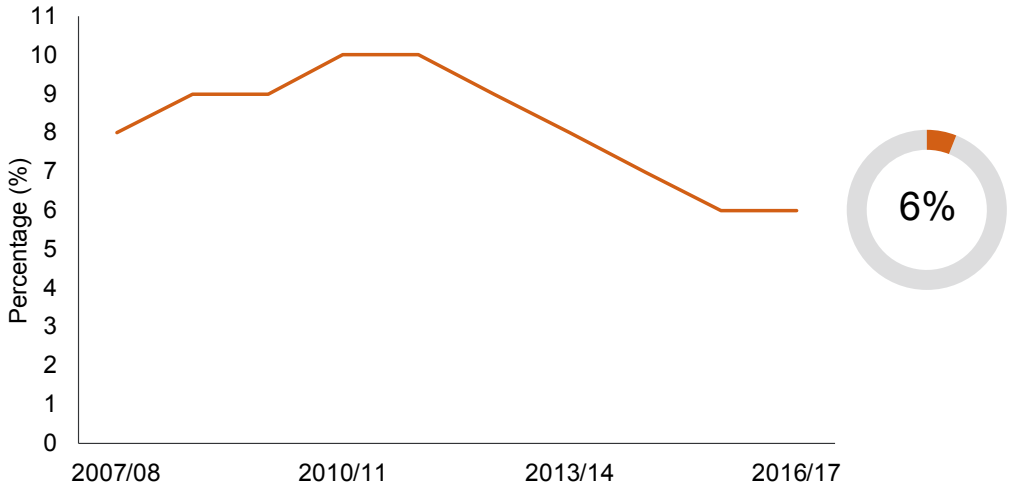


Notes

- Data for a small number of LAs are not directly comparable. See publication table RDC0120 for further detail.
- Network lengths based on LHAs that provided a return.
- A new interactive map has been published alongside this release that presents road condition data for England by LHA and road class between 2007/08 - 2016/17. This can be found at: http://maps.dft.gov.uk/road-conditions-map-2017.
- pps = percentage points

By region, the proportion of the LA managed 'A' roads that should have been considered for maintenance varied regionally between 5% for London and 2% for the East Midlands. Compared to the previous year there were only two changes, an increase and decrease of 1 percentage point for the South West and North West respectively. The variation across regions may be influenced by a range of factors as cited on page 1 of this release.

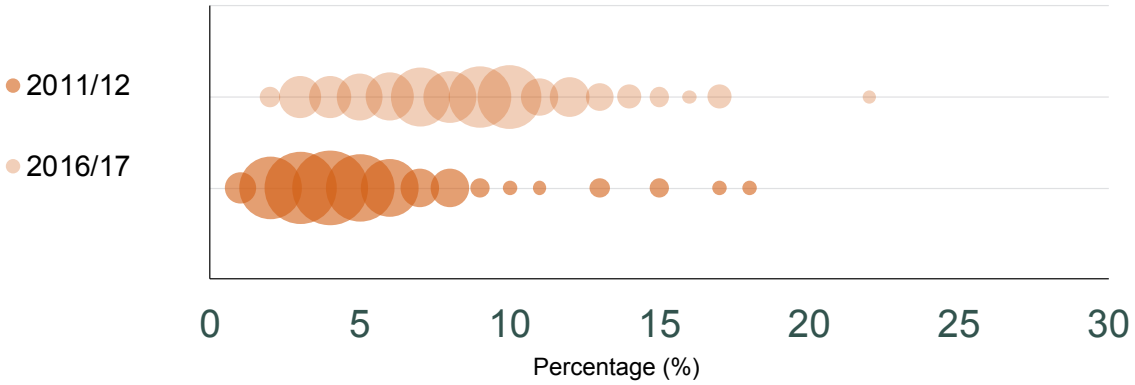
Chart 4: Proportion of LA managed ‘B’ and ‘C’ roads that should have been considered for maintenance , 2007/08 to 2016/17 [RDC0120 RDC0121]



LA managed ‘B’ and ‘C’ roads form part of the minor road network in England.

In 2016/17, 6% of LA managed ‘B’ and ‘C’ roads in England should have been considered for maintenance, the same as in the previous year. Prior to this there had been a gradual decline from a peak in 2010/11 and 2011/12. The overall proportion has consistently remained at a higher level than LA managed ‘A’ roads.

Chart 5: Change in proportion of the LA managed ‘B’ and ‘C’ road network that should have been considered for maintenance between 2011/12 and 2016/17 [RDC0120 RDC0121]

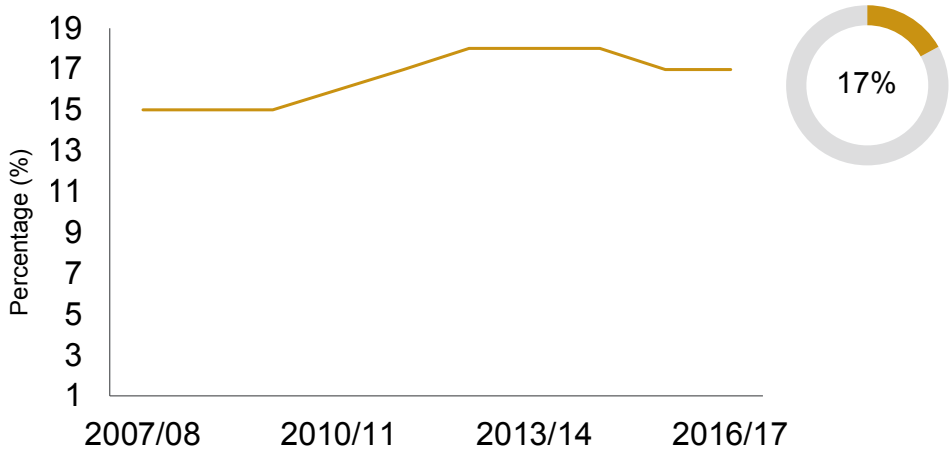


- Figures rounded to nearest whole percentage, an LA can report a figure of zero if below 0.5%.
- The size of the bubble indicates the number of LAs reporting that percentage.

There has been an improvement in the ‘B’ and ‘C’ roads that LAs manage. In 2016/17, 74% of LAs reported that 5% or less of their ‘B’ and ‘C’ road network should have been considered for maintenance. This compared with 22% in 2011/12. These changes are likely to be a result of similar factors to those affecting LA managed ‘A’ roads.

Road Condition - Local Authority Managed Unclassified Roads

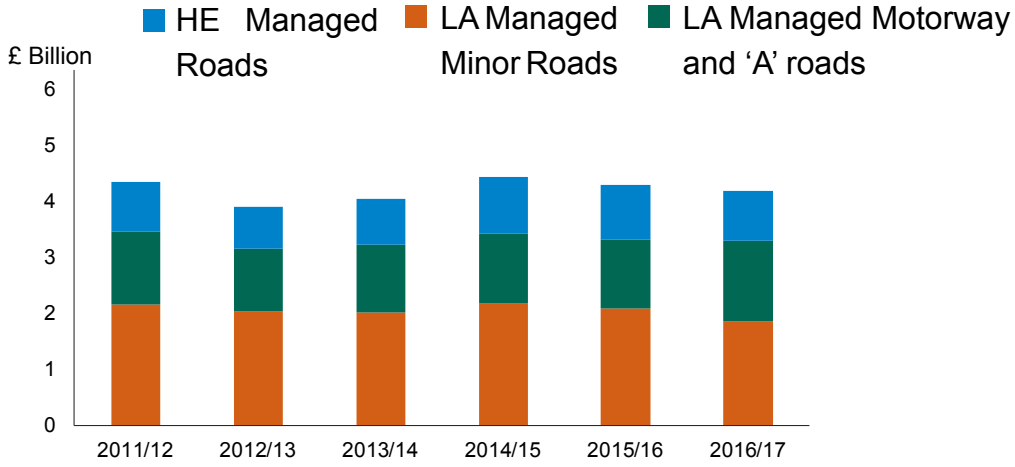
Chart 6: Proportion of unclassified roads that should have been considered for maintenance , 2007/08 to 2016/17 [RDC0130 RDC0131]



The chart shows data at the national level. Data below this level should be compared with caution, as the data are collected via different methods, with LAs using the method they consider most appropriate to monitor their network. The most common method in 2016/17 was visual surveys, with over 75% of LAs using these (of those who returned data). It is noticeable that the method used appears to affect the results, with visual surveys generally indicating worse network condition than automated surveys.

Maintenance Expenditure on Roads in England

Chart 7: Maintenance expenditure by road class, in England, from 2011/12 to 2016/17 [RDC0310]



- Figures exclude Highways Maintenance Policy, Planning and Strategy as this cannot be broken down by local authority road type.

In 2016/17, £4.5 billion was spent on the maintenance of roads in England. Of this, £900 million was spent on HE managed motorways and 'A' roads, and £3.6 billion on LA managed roads. Spend on minor roads fell in 2016/17 compared to recent years, while spend on LA managed 'A' roads and motorways increased.

Roads Funding

Funding for local road maintenance from DfT comprises a block capital grant, plus several smaller elements.

In 2016/17 these elements included £100 million to local authorities in England outside London for the Highways Maintenance Challenge Fund, and a further £50 million through the Pothole Action Fund.

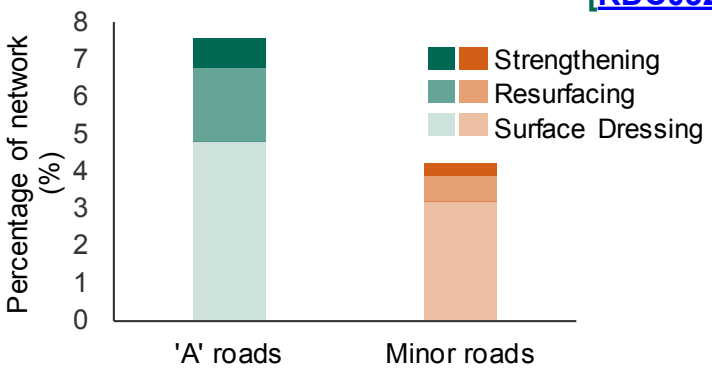
During the Spending Review period, 2015/16 to 2020/21, the Department for Transport will provide over £1.5 billion to local authorities through the Integrated Transport Block for capital investment in small transport improvement projects.

Maintenance Treatments on Local Authority Managed Roads

Levels of treatment applied to roads fluctuate, and are influe ced by a range of factors such as weather and funding.

In 2016/17, 7.6% of the LA managed 'A' road network and 4.3% of the minor road network ('B', 'C' and 'U' roads) received maintenance treatment, both similar to the previous year.

Chart 8: Percentage of local authority managed roads receiving maintenance treatments in 2016/17 [RDC0320]



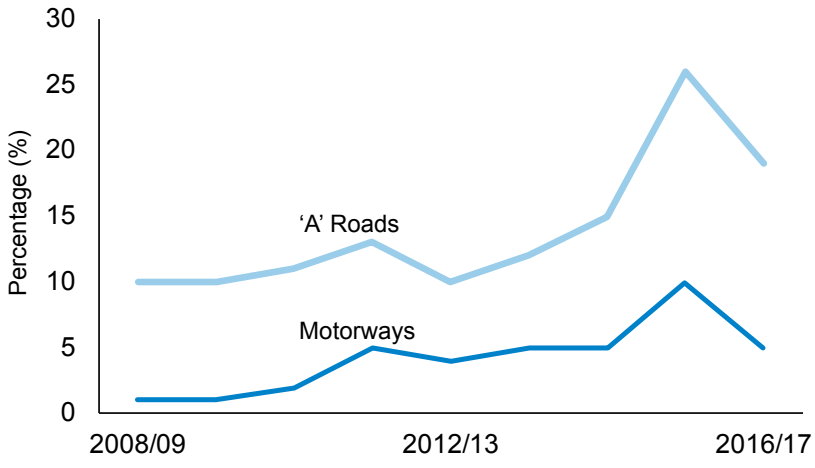
Surface dressing (layers of chippings and binder), a relatively minor treatment, accounted for 63% and 74% of all treatments on LA managed 'A' roads and minor roads respectively in 2016/17.

Skidding Resistance

LA level skidding resistance data are typically averaged over three years, to allow the entire network to be assessed. This means data are influenced by values from previous years. Over the period 2014/15 to 2016/17, 27% of the LA managed motorway and 'A' road road network in England required further investigation. This was an increase of 4 percentage points from the period 2011/12 to 2013/14. The London Boroughs had the highest proportion of the road network requiring further investigation, at 48%.

In 2016/17, 5% of the HE managed motorway required further investigation, while for HE managed 'A' roads this was 19%, both falling from a peak in 2015/16. Skidding resistance figures do not necessarily reflect safety levels on the network. They indicate sites where further investigation is required.

Chart 9: Proportion of HE managed roads requiring further investigation for skidding resistance, by road type, 2008/09 to 2016/17 [RDC0210]



Highways Monitor - ORR

The Office of Rail and Road (ORR), as part of their function as Highways Monitor, produce an annual assessment of HE's performance. This includes information regarding road condition and HE's expected targets. Their latest report covering April 2016 – March 2017 can be found here.

HE provided an overall network condition figure of 94.3% for 2016/17, increasing from the previous year but still lower than the target of 95%.

ORR said that this figure was below target primarily due to a low skidding resistance measurement.

Background Notes

Technical information

Further information about road condition data and surveys can be found in the guide, notes and definitions and technical note, which can all be found on the Road Condition Statistics webpage: https://www.gov.uk/government/publications/road-network-size-and-condition-statistics-guidance.

Further data on road expenditure and on road construction can be found in tables TSGB0717 to TSGB0720: https://www.gov.uk/government/statistical-data-sets/tsgb07.

Further information on the Single Data List can be found here: https://www.gov.uk/government/publications/single-data-list.

Official Statistics

Official Statistics are produced to high professional standards as per the Code of Practice for Official Statistics. They undergo regular quality assurance reviews to ensure they meet customer needs.

Details of ministers and officials who received pre-release access to these statistics up to 24 hours before release can be found in the pre-release access list: https://www.gov.uk/government/publications/roadnetwork-size-and-condition-statistics-pre-release-access-list.

Strengths and Weaknesses

Figures in this publication come from a wide range of sources. Consequently the accuracy of figures will vary between tables. Users are recommended to refer to separately published guidance for more detail on how information for each table was collected: https://www.gov.uk/government/publications/road-network-size-and-condition-statistics-guidance

SCANNER (Surface Condition Assessment for the National Network of Roads) data are collected using automated road condition survey machines. Although each machine is accredited for accuracy and readings fall within the accepted boundaries of the SCANNER specification for road condition, there is still variability between the results that each machine delivers. It can lead to small changes in the figures over time that are for reasons beyond the condition of the road, and above the expected range of variability that already exists within the data. Caution should therefore be taken when comparing the figures over time, particularly for the LAs and regions flagged in the publication tables.

Users should note that different survey methods are used for different types of roads in some local authorities. While visual surveys are largely used for unclassified roads, automated survey machines are the most common method for ‘A’, ‘B’ and ‘C’ roads. The method used will affect the results.

The next update, Road Conditions in England: 2018, and accompanying tables are due to be published in 2019. In the meantime, continued engagement with stakeholders will be undertaken to improve the usability and relevance of the statistics (roadmaintenance.stats@dft.gsi.gov.uk).

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