



House of Commons  
Transport Committee

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# Local roads funding and maintenance: filling the gap

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**Tenth Report of Session 2017–19**

*Report, together with formal minutes relating  
to the report*

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to be printed 25 June 2019*

## Transport Committee

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## Summary

Local roads are the arteries of prosperous and vibrant villages, towns and cities: they are critical to the movement of goods as well as helping people to get around. However, many people will not have to travel further than their local shops to see an extreme state of disrepair.

This plague of potholes is a major headache for everyone. The consequences of a deteriorating local road network are significant. It undermines local economic performance and results in direct costs to taxpayers—either through rising costs of deferred work or through a mend and make do approach that does not represent good value for money in the long-term. It also affects motorists—damaging vehicles—and causes injuries to passengers, particularly those with existing medical conditions.

The safety of other road users, especially cyclists, is seriously compromised. Pedestrians, particularly those who are older or vulnerable, can be left feeling anxious and isolated, afraid to leave their own homes.

Our inquiry into local roads funding and maintenance looked at these issues in detail and this Report makes recommendations to address the problems and put them right.

### Funding

It is clear to us that the key issue is funding—there is not enough of it and what there is is not allocated efficiently or effectively. Local government revenue funding has fallen by about 25% since 2010. The allocation within it for local roads is not ring-fenced and is often used by councils to plug gaps in other budgets. Capital funding—through the Pothole Action Fund and other pots—is sporadic and time-limited. This lack of funding certainty has caused many councils to take short-term, reactive decisions on road maintenance, which is more expensive and less effective than proactive maintenance that can be planned well in advance and the cost spread out over a number of years.

To tackle this problem the Department for Transport should propose a front-loaded, long-term funding settlement to the Treasury as part of the forthcoming Spending Review so that local authorities can address the historic road maintenance backlog and plan confidently for the future. However, we are clear that this must not be an excuse for a budget cut. This settlement should not only include capital pots but should also roll up the revenue support elements of roads funding, administered by the Ministry of Housing, Communities and Local Government, into a five-year settlement.

The exact nature of the settlement should be determined in consultation with local authorities. They should be consulted about whether they would like to see a ‘totex’ allocation (i.e. funding that can be spent on capital or revenue, with no restrictions) and whether they want it to be ring-fenced for spending only on roads. It is also important that innovation, collaboration and good practice are properly incentivised through any settlement.

### Other issues

There are three further issues—linked to funding—that we consider in this Report: innovation, data collection and use and good practice and collaboration in highway management.

- Innovation is essential if the efficiency and effectiveness of local road maintenance is to continue to improve, which it must in the face of limited funding. It is right that the Government stimulates and encourages innovation but the value for money of any investment in innovation is only properly repaid when new technologies, ideas and ways of working are scaled up and available to all. In order to achieve this the Department for Transport, the Department for Business, Energy and Industrial Strategy and Innovate UK should work together to collate all innovation funding for local roads in one place. They should establish as far as possible common rules for bidding and assessment to allow local authorities to marshal their resources effectively and achieve efficiencies and economies of scale in the bidding process. The Government should also consider how it monitors the innovations it funds and what it needs to do to ensure that a greater proportion of innovations are made available on the widest possible basis.
- Local authorities will only be able to make better use of available funds for road maintenance if they can target such funding well; this requires good data. DfT publishes basic headline data on road condition. While this is a useful tool to compare a single data set over time, it is limited in scope and detail and does not provide the depth of information given in some third-party condition surveys. The DfT needs to be clear about whether the data it receives from local authorities on road condition is consistent and allows valid comparisons to be made, what it does with such data, how it is analysed and what action is taken on the back of conclusions that it draws. It should also make it easier for the public to report road condition concerns and access local authority road condition data. The Department for Transport should take the lead on this by running an innovation competition to develop a platform that the public can use to make online reports about road condition direct to the relevant council and access real-time local road condition data.
- Making the best use of available funding requires the sharing and adoption of good practice in road maintenance. This is a key role for Government. The Department for Transport must monitor the move to a new risk-based approach and by the end of 2021 it should publish a report setting out what effect the risk-based approach has had, how local authorities have adapted and adjusted and whether it has improved their efficiency and effectiveness. Local councils and industry are developing good practice in highway survey and maintenance. However, from the evidence we have received it is not always clear that this is being widely shared. We welcome the improvements made by regional highway alliances, but we think this should be taken further. Where alliances are developing their own good practice, they should be sharing this and benchmarking it against one another. The Department for Transport could do more to facilitate this, for example by providing a virtual good practice toolkit and repository so that councils across England can find examples of good practice.

# 1 The road network

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## Our inquiry and this Report

1. Local roads are the arteries of prosperous and vibrant villages, towns and cities. They are critical to the movement of goods as well as to helping people get around. However, many people will not have to travel further than their local shops to see an extreme state of disrepair.
2. This plague of potholes is a major headache for everyone. The consequences of a deteriorating local road network are significant. It impacts local economic performance and results in direct costs to taxpayers—either through rising costs of deferred work or through a mend and make do approach that does not represent good value for money in the long-term. It also affects motorists—damaging vehicles—and causes injuries to passengers, particularly those with existing medical conditions.
3. The safety of other road users, particularly cyclists, is seriously compromised. Pedestrians, especially those who are older or vulnerable, can be left feeling anxious and isolated, afraid to leave their own homes.<sup>1</sup> We decided to launch an inquiry into local roads funding and maintenance to look at these issues in detail and to make recommendations to address the problems and put them right.
4. The terms of reference for our inquiry are available on the Committee’s website.<sup>2</sup>
5. We received over 90 written submissions and held four oral evidence sessions, hearing from road users, the road maintenance industry, local authorities from across England, Transport for London (TfL) and Transport for the West Midlands (TfWM) and Jesse Norman MP, who was at the time Minister of State for Transport with responsibility for roads. A full list of witnesses is included at the end of this Report; the evidence can be found on our inquiry page.<sup>3</sup> We thank everyone who contributed to our work.
6. Our inquiry and this Report consider the situation in England; this issue is devolved across the rest of the United Kingdom. Our Report begins by considering the key issue that was flagged up to us throughout the evidence: funding. We then discuss three other issues: innovation, data collection and use, and collaboration and good practice.
7. We note that during our inquiry the Government acted on some of the issues on which we were taking evidence. On 31 March 2019 the Department for Transport (DfT) announced its intention to set up a new digital hub for experts to share and develop innovations; a new guide on best practice on pothole repair; a review of road condition surveying data and technology; and the establishment of a ‘Review and Audit Group’ in liaison with the highways sector to ensure adoption of best practice.<sup>4</sup>

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1 In May 2019 Living Streets found that nearly a third of adults over 65 felt reluctant to leave the house on foot due to the volume of cracks and uneven surfaces on surrounding streets; 60% of older people worried about the state of street surfaces, while nearly half felt that well-maintained pavements would make them more likely to go for a walk. From: “[Elderly prevented from walking on pavements due to potholes, survey finds](#)”, The Daily Telegraph, 1 May 2019

2 Transport Committee, “[MPs launch inquiry into poor state of local roads](#)”, 1 August 2018

3 <https://www.parliament.uk/business/committees/committees-a-z/commons-select/transport-committee/inquiries/parliament-2017/local-roads-funding-governance-17-19/>

4 DfT press notice, “[£201 million road repair fund to resurface extra 1,000 miles](#)”, 31 March 2019

## The English Local Road Network (ELRN)

8. England’s road network consists of motorways, major ‘A’ roads, and local classified and unclassified roads. The vast majority of motorways and major ‘A’ roads form the Strategic Road Network (SRN) and are managed by Highways England (HE). All other roads are managed by local authorities and make up the English Local Road Network (ELRN). The Department for Transport puts the asset value of the ELRN at £400 billion and describes it as:

... the largest and most visible community asset for which local highway authorities are responsible. It is used daily by the majority of people and is fundamental to the economic, social and environmental well-being of the country.<sup>5</sup>

The then Minister, Jesse Norman, told us that the ELRN is a “very important national asset”.<sup>6</sup>

### Box 1: Local road classification

The roads within the ELRN fall into the following four categories:

1. ‘A’ roads—major roads intended to provide large-scale transport links within or between areas.
2. ‘B’ roads—roads intended to connect different areas, and to feed traffic between ‘A’ roads and smaller roads on the network.
3. Classified unnumbered—smaller roads intended to connect unclassified roads with ‘A’ and ‘B’ roads, and often linking a housing estate or a village to the rest of the network. Like ‘minor roads’ on an Ordnance Survey map and sometimes known unofficially as ‘C’ roads.
4. Unclassified—local roads intended for local traffic. By length, most roads fall within this category.

Source: Department for Transport, [Guidance on Road Classification and the Primary Route Network](#), January 2012

9. In England, local authority-managed minor roads<sup>7</sup> make up 88% of road length but carry only 34% of motor traffic vehicle miles. Local authority-managed ‘A’ roads and motorways make up 9% of road length and carry 32% of motor traffic vehicle miles.<sup>8</sup> As explained above, HE maintains the SRN of motorways and major ‘A’ roads, which accounts for 2% of road length and carries around 34% of motor traffic vehicle miles.<sup>9</sup>

5 Department for Transport ([LRF0035](#))

6 [Q295](#)

7 Classified non-principal roads (‘B’ and ‘C’ roads) and unclassified (‘U’) roads

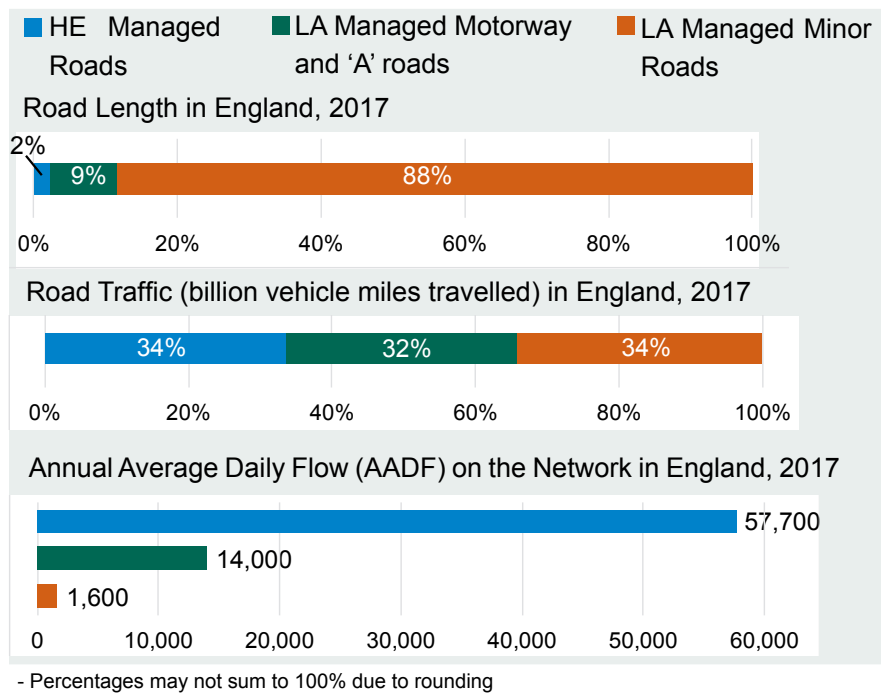
8 DfT, [Road conditions in England to March 2018](#), 31 January 2019

9 DfT, [Road conditions in England to March 2018](#), 31 January 2019



Figure 1: Road length and traffic by road type, 2017

## Road Length and Traffic by Road Type, 2017



Source: DfT, [Road conditions in England to March 2018](#), 31 January 2019

10. The Department for Transport (DfT) is responsible for funding local roads renewals and upgrades, while the Ministry for Housing, Communities and Local Government (MHCLG) provides revenue support to local highways authorities for routine road maintenance. In addition to funding, central government has a key role in policy development and setting the legislative framework through which the local roads sector operates.<sup>10</sup>

### Governance

11. The ELRN is managed by 153 local highway authorities. They are responsible for maintaining, managing and, where necessary, improving their portion of the network. This includes carriageways, footways, cycleways and verges and planting as well as drainage, street lighting, bridges and culverts. As well as a duty to maintain these assets in good order, they must promote safe and efficient road use by all types of users and meet increasingly demanding environmental standards.<sup>11</sup> The Government is aware of the need to ensure that it is not just the road or highway that is properly maintained.<sup>12</sup> Steve Berry, Head of Highways Maintenance, Innovation, Resilience, Light Rail and Cableways

10 Department for Transport, [Local authority highways maintenance funding: 2015/16 - 2020/21](#), November 2014, pp8–9

11 The main legislation being the [Highways Act 1980](#), the [Road Traffic Regulation Act 1984](#) and the [Traffic Management Act 2004](#)

12 There is no statutory definition of the 'extent' of the highway. In many ways this is a question of fact. For example, the existence of a metalled track does not necessarily mean that the public is confined to that track and in many cases strips of land alongside the metalled track form part of the dedicated highway. For the purposes of this Report the use of the terms 'road' and 'highway' should be taken to include pavements, verges etc. unless stated otherwise.

Branch at the Department for Transport, told us that the DfT had “been doing quite a lot of work recently in the footway and cycle management group, ... looking at how highway authorities can understand more about footways and cycleways under a risk-based approach”.<sup>13</sup>

12. The patchwork devolution that has developed in England since 1999, and that gained pace after 2010, has given rise to inconsistencies in the powers available to local highway authorities to manage their transport networks and raise the financing to pay for their upkeep and enhancement. Ann Shaw, Director of Network Resilience at Transport for West Midlands (TfWM) and Danny Rawle, Highway Asset Management Engineer at Coventry City Council, told us how the devolved settlement works in the West Midlands. Ms Shaw explained:

Road maintenance for the seven West Midlands metropolitan authorities comes through the combined authority, and the capital block is handed out to the authorities based on road length. [There are] incentive funds and challenge funds that also come via that. The settlement given two or three years ago and how that has been carried forward has given us an indication of what our annual budgets are and how we can progress improvements on the highway network as part of that.<sup>14</sup>

Mr Rawle thought that this was “working very well within the authorities”, due to the holistic approach taken:

... it is understanding how we deliver our services, how the funding is distributed and how it can best be used across the whole network, looking not just at Coventry in isolation but at the whole of the west midlands. It is looked at in that way, and I think the current model is working well.<sup>15</sup>

Others, such as Leicestershire County Council, were concerned that:

A fragmented approach to planning and investment across numerous bodies (including the DfT, Highways England, Sub-national transport bodies and local highway authorities with differing tiers, powers and responsibilities) is not conducive to achieving seamless journeys. Road users can experience dramatic changes in standards and quality as they move between sections of road network managed by differing bodies.<sup>16</sup>

13. The skills and capabilities of local highway authorities also differ across the country, resulting in varying local road conditions. Some suggested that a solution to this would be to consolidate highway authorities, particularly in metropolitan areas. Matthew Lugg, President of the Chartered Institution of Highways and Transportation (CIHT), used the example of rationalising these responsibilities in Greater Manchester:

There are 10 separate district highway authorities, but there is now a Greater Manchester combined authority, so why could that not be the highway

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13 [Q349](#)

14 [Q259](#)

15 [Q260](#)

16 [Leicestershire County Council \(LRF0058\)](#)

authority for all those districts, and not have each individual one having to resource the management skills and all the infrastructure? You could just do it once over a larger geographic area.<sup>17</sup>

On the broader point, he said that local government reform might be beneficial in rural as well as urban areas as there are parts of the country where agreement “can only go so far” because there are issues around governance and the management of procurement for highway maintenance “that mean you need a single authority rather than multiple ones” to achieve beneficial results. He went on to say that many local authorities would not in effect want to abolish themselves by agreeing to cede their highway powers to, for example, a Combined Authority and that the impetus for a strategic reform on this scale would have to come from Government.<sup>18</sup> Rick Green, Chair of the Asphalt Industry Alliance (AIA), agreed. He told us that the current situation is “very clearly suboptimal”, though he pointed to large rural councils where decision-making might be better placed at a lower level, to take account of significantly different geographies, weather conditions and traffic.<sup>19</sup>

**14. Almost every journey begins and ends on local roads. The English Local Road Network (ELRN) is of critical importance in connecting people and driving economic growth. We agree with the then Roads Minister that the ELRN should be treated as an important national asset. Like any asset, it must be managed appropriately. While the ELRN is a national asset, its value as a local asset must not be overlooked. Individuals, families and communities depend on their local road network and it acts as the key arterial system that drives economic growth in our villages, towns and cities.**

**15. There is unnecessary tension between central and local government—one of which controls the funding for maintaining the ELRN and the other that has responsibility for doing the work.**

**16. While there was no agreement amongst our witnesses about the governance arrangements for the ELRN, there was some evidence that a profusion of highway authorities, particularly in areas where there are now multiple levels of accountability (e.g. Mayoral Combined Authorities), adds to confusion and diminishes transparency. We recommend that the Government commission an independent review of local highway responsibilities, to evaluate whether current responsibilities sit at the right level. We recommend that the review be completed within 9 months and that the Government respond to it within 12 weeks, setting out what actions it will take as a result.**

### **Condition**

17. There are ongoing concerns about the general state of the road network, the backlog of repairs and the cost of bringing these defects up to standard.<sup>20</sup> For example, only 30% of respondents to the National Highways and Transport Public Satisfaction Survey (NHTPSS) were satisfied with how potholes and damaged roads are dealt with.<sup>21</sup>

17 [Q68](#)

18 [Qq68–69](#)

19 [Q70](#)

20 [HC Deb 5 June 2018, c56WH](#)

21 NHT Networks, [NHT Public Satisfaction Survey - Key Results of the 2018 Survey](#); NHTPSS is an annual survey benchmarking public perspectives on, and satisfaction with, local authority highway & transport services. It includes responses from more than 813,000 members of the public collected over 11 years.

18. The public understandably focus on the formation of potholes (or rather what they call potholes) as these are particularly visible. There are numerous other defect types such as cracking, stone-loss, rutting, depressions, loss of texture/grip, etc. that are either indicative of approaching failure/end-of-life or present a more significant deterioration than potholes. These defects essentially make up the estimate of the road maintenance backlog.<sup>22</sup>

19. The Department for Transport's latest annual road condition data published in January 2019,<sup>23</sup> showed a gradual reduction in the number of 'A', 'B' and 'C' roads that should have been considered for maintenance in the five years to 2017/18 (indicating an overall improving road state), though most of this improvement occurred before 2016/17. Over the five-year period the number of unclassified roads requiring maintenance remained relatively flat. All road types saw a flattening out of the numbers requiring maintenance over the two years to 2017/18.<sup>24</sup> We received several written submissions arguing that the data did not reflect the true state of the local roads network.<sup>25</sup> For example, Hampshire County Council said:

The concern is that by looking at the reported condition figures in isolation they provide Government with a distorted view of the local road network. They do not provide a true reflection of road condition or convey the extent of the problem Local Highway Authorities are facing.<sup>26</sup>

Steve Berry, from the DfT, told us that the Department had not undertaken any detailed analysis of the differences between the DfT data and the annual Asphalt Industry Alliance (AIA) Annual Local Authority Road Maintenance (ALARM) survey. But he told us that "the trend over time ... follow[s] a similar pattern to our road condition statistics in terms of the amount of treatment".<sup>27</sup> In terms of differences, he emphasised that the ALARM survey covers a wider definition of the extent of the highway than the official road condition statistics do (including footways and pavements) and indicated that analysis of the respective (and likely similar) data sets may in part drive differences.<sup>28</sup>

20. The March 2019 AIA ALARM survey found that around 11% of the ELRN (excluding London) was in poor condition, with a further 25% showing some deterioration.<sup>29</sup> It further estimated that over 22,000 miles of road are likely to require maintenance in 2019–20.<sup>30</sup> AIA estimated that it would take 10 years to get local roads back into a reasonable 'steady state'—a significant fall from the 14 years estimated in the 2018 survey.<sup>31</sup> It also stated that the cost of a one-time 'catch up' to deal with the maintenance backlog would cost £9.8 billion, approximately £70 million per authority in England and £32 million per London authority.<sup>32</sup> The average annual carriageway maintenance budget shortfall per authority in England was £4.1 million in 2018/19—despite an increase in funding from the previous

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22 Kent County Council ([LRF0068](#))

23 For background info about this publication, see: DfT, [Road condition statistics guide](#), 31 January 2019

24 DfT, [Road conditions in England to March 2018](#), 31 January 2019

25 Thurrock Council ([LRF0012](#)); Suffolk County Council ([LRF0029](#)); Devon County Council ([LRF0031](#)); and Gaist ([LRF0042](#))

26 Hampshire County Council ([LRF0041](#))

27 [Q304](#)

28 [Q304](#)

29 AIA, [Annual Local Authority Road Maintenance Survey 2019](#), 26 March 2019, p11

30 AIA, [Annual Local Authority Road Maintenance Survey 2019](#), 26 March 2019, p11

31 AIA, [Annual Local Authority Road Maintenance Survey 2019](#), 26 March 2019, p9

32 AIA, [Annual Local Authority Road Maintenance Survey 2019](#), 26 March 2019, p9

year, costs have increased at a higher rate, meaning the shortfall has increased (from £3.4 million in 2017/18).<sup>33</sup> However, AIA data shows that this is a significant decrease from the shortfall reported 20 years ago—of £9.14 million per authority in 1999.<sup>34</sup>

21. Anonymous comments provided to the 2001 AIA ALARM survey by local authority highway engineers make for familiar reading and show how concerns about inadequate funding have persisted for more than twenty years. One commented that in the ten years to 2001 local authorities had seen a 60% cut in their highway maintenance budgets, while another lamented the move from preventative to reactive maintenance and remarked that “... all we can do is plan to react”.<sup>35</sup>

22. Problems with reduced funding and highways maintenance are often only likely to become evident over several years, as Gateshead County Council said: “the main implications of past budget cuts are now only starting to become evident”.<sup>36</sup>

23. The then Minister for Transport, Jesse Norman MP, admitted to us that the ELRN is “not in a great state in many ways”, but pointed to a relative improvement compared to historical data:

Broadly speaking, as you will have seen, it has been improving in the A and B roads. The U roads and the less high-status roads are a different matter altogether. As you know, of course, there are a lot of different figures batted around as to how far this very important national asset needs a new round of capital investment.

[...] we are ... subject to confirmation bias. We think the roads are in a terrible state, and everything we see seems to confirm that the roads are in a terrible state. We do not take a historical view. If we took a historical view, we might not come to quite that conclusion.

[...] There are lots of different forms of evidence one can have about it, but my point is that the situation of the local roads network is not good, but it is not new either.<sup>37</sup>

24. The less frequently a road surface is replaced or ‘re-carpeted’ with a new surface dressing the more prone it will be to degradation, the breaking up of patches and the formation of potholes. The rate of pothole formation is often a function of the deterioration of the underlying structural condition of the road network and must be reactively repaired by local highway authorities.<sup>38</sup>

25. The number of potholes filled annually and the cost per pothole of doing so has fluctuated over the past nine years, according to AIA data. We were told that some local councils have made substantial efficiency savings since 2010, implying that they are “doing more with less rather than competing in a race to low cost/low quality”.<sup>39</sup> Indeed, overall the data shows that councils are driving higher value for money and the cost of filling a pothole is the lowest it has been in a decade:

33 AIA, [Annual Local Authority Road Maintenance Survey 2019](#), 26 March 2019, p9

34 AIA, [Annual Local Authority Road Maintenance \(ALARM\) Survey 2001](#), 4 April 2001, Appendix [kindly provided to the Committee by the AIA]

35 AIA, [Annual Local Authority Road Maintenance \(ALARM\) Survey 2001](#), 4 April 2001, sections 2 and 5

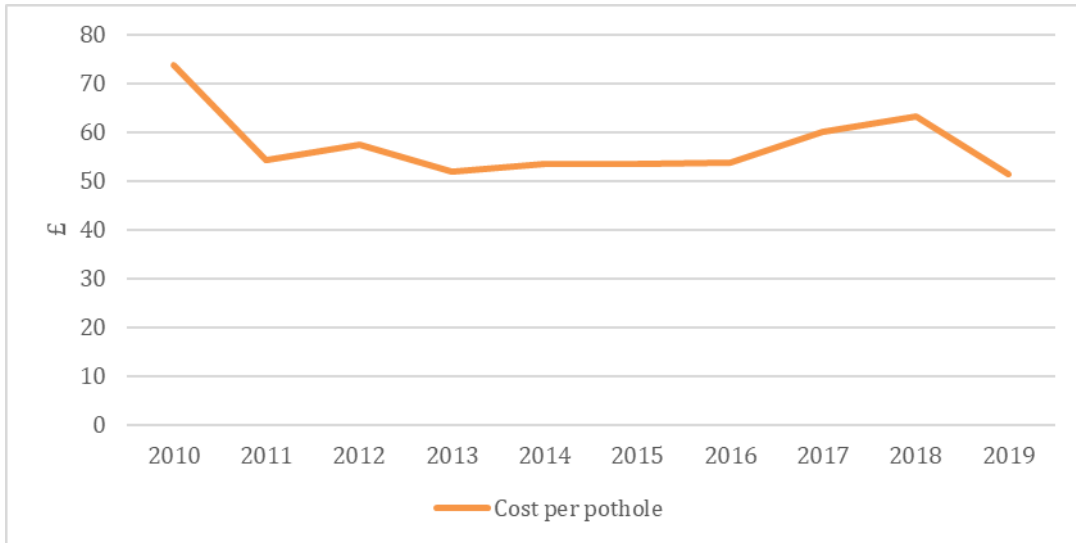
36 Gateshead Council ([LRF0075](#))

37 [Qq295–296](#)

38 Asphalt Industry Alliance (AIA) ([LRF0044](#)); and Lincolnshire County Council ([LRF0077](#))

39 Institute for Transport Studies and [measure2improve](#) ([LRF0067](#))

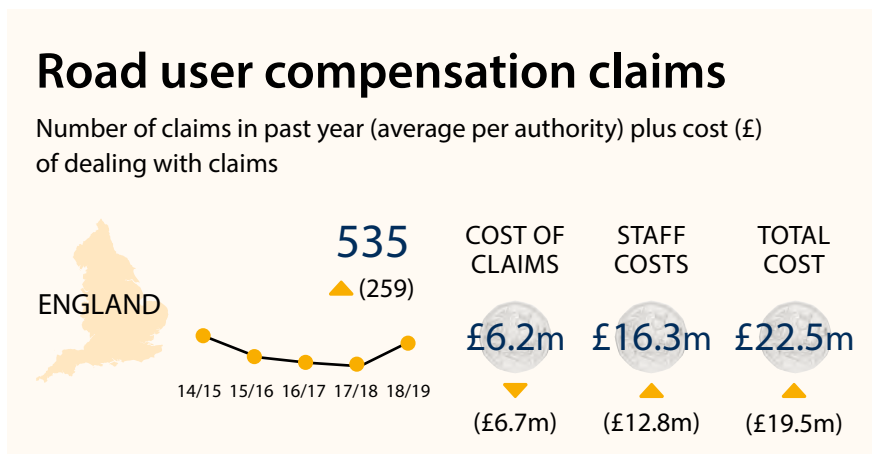
Figure 2: Cost of filling potholes, 2010–19 (£ per pothole)



Source: AIA, [Annual Local Authority Road Maintenance Survey 2019](#), 26 March 2019, p7

26. Potholes have direct and indirect costs to local authorities, motorists and other road users. Lincolnshire County Council told us that the absolute number of compensation claims has been increasing and that this may in part be due to technology, which has made it easier for road users to make a claim.<sup>40</sup> The AIA reported that in 2018/19 there were an average of 535 claims for road user compensation (motorists, cyclists and pedestrians) against local authorities in England, at a total cost of £22.5 million (the bulk of which is rising staff costs):<sup>41</sup>

Figure 3: Road user compensation claims England, 2018/19



Source: AIA, [Annual Local Authority Road Maintenance Survey 2019](#), 26 March 2019, p14

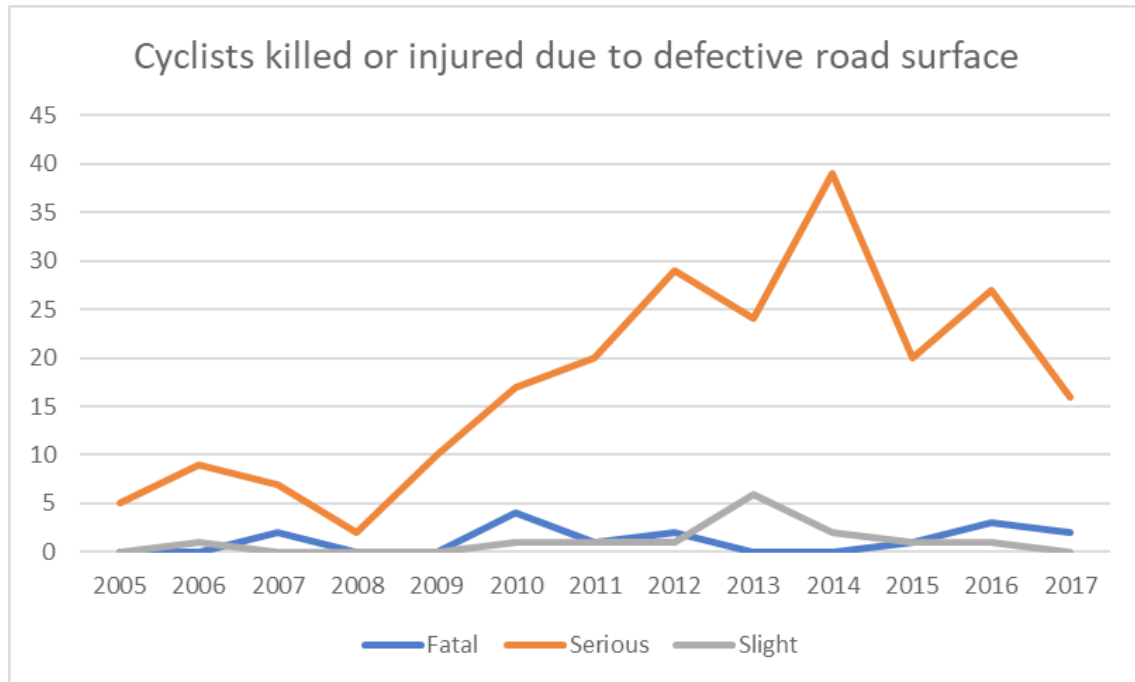
40 Lincolnshire County Council ([LRF0077](#))

41 AIA, [Annual Local Authority Road Maintenance Survey 2019](#), 26 March 2019, p14

Kwik Fit estimated that the damage caused to vehicles from potholes in 2017 cost £915 million to repair, an increase of 34% on the £684 million repair bill in 2016.<sup>42</sup> Based on its share of Britain’s car insurance market, the AA estimated that 3,500 claims had been made for pothole damage in 2017.<sup>43</sup>

27. Potholes pose a significant risk to non-vehicular road users—pedestrians, cyclists, motorcyclists and others. DfT data shows that the number of cyclists killed or injured due to defective road surface more than tripled between 2005 and 2017:<sup>44</sup>

**Figure 4: Cyclists killed or injured due to defective road surface, 2005–2017**



Source: DfT, [STATS19 database](#)

28. Evidence shows that over the past 20 years spending on maintenance has increased and councils are getting more for their money as the cost of repairing and maintaining roads has fallen. However, the ‘one time catch up’ cost of repairing local roads—now over £9 billion—has seen a moderate increase and local authorities face a significant budgetary shortfall on the completion of necessary works. Road users’ lived experience is at odds with official data—drivers, cyclists and pedestrians all report large numbers of defects, and public portals like ‘Fix My Street’ name and shame egregious examples of maintenance failure.

29. In the past year local authorities paid out £22.5 million in compensation claims for damages arising because of defects in the road surface. We believe this taxpayers’ money would be better spent upgrading the road network and that the case for better maintenance, which should lead to fewer pay outs, is clear.

42 “Kwik Fit estimates pothole vehicle damage bill at £915m”, FleetNews, 21 March 2018

43 “Potholes cost £1m a month in car repair bills – are you owed money?”, Which?, 11 May 2018

44 Similar official data is not available for pedestrians; STATS19 does not show pedestrians incidents where death or injury was *due* to a defective road surface; the closest it can be filtered to is to show incidents where pedestrians were killed or injured *and* where the road surface was defective

30. **The fact that the ELRN has been allowed to decay to the point where it would take more than a decade to bring it up to a reasonable standard is a national scandal that shows a dereliction of duty by successive governments and individual local councils. The Government must act now to remedy this.** We suggest how this might be done in the rest of this Report.



## 2 Funding and expenditure

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### Local roads

31. Local roads funding covers capital expenditure on new roads (improvements) and capital and resource expenditure on maintenance and the renewal of existing roads. In this inquiry we have been concerned only with the funding for maintenance and renewals, not new or upgraded roads. For this reason, Government funding through the National Productivity Investment Fund (NPIF)<sup>45</sup> and the Safer Roads Fund, which are generally intended for infrastructure improvements rather than routine maintenance, do not form part of this Report.

32. Local road maintenance expenditure can be classified as ‘capital’ or ‘revenue’ and is covered by a combination of local government revenues<sup>46</sup> and central government grants:

- a) **Capital** maintenance expenditure is primarily devoted to the structural renewal of highway assets and is funded by the DfT;
- b) **Revenue** maintenance expenditure mainly covers the routine works required to keep the highway serviceable and reactive measures to rectify defects. It is funded by the Ministry of Housing, Communities and Local Government (MHCLG) through the revenue support grant.<sup>47</sup>

33. Funding from the DfT is provided through several different streams. These have been simplified in recent years, to provide more certainty over the medium-term funding outlook. Several submissions praised the DfT for the reforms it has made in this area.<sup>48</sup>

34. The DfT estimated total local authority road maintenance expenditure<sup>49</sup> at £3.65 billion in 2017/18. This is lower than in 2009/10, but an increase on the low point of £3.53 billion in 2012/13. Of this, local ‘A’ road maintenance expenditure has increased slightly since 2009/10 (and recovered from a sharp fall in intervening years), while expenditure on minor roads has decreased sharply, by approximately £600 million.<sup>50</sup>

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45 DfT, [Roads Funding: Information Pack](#), November 2018

46 This includes prudential borrowing, use of capital reserves and monies collected through parking fines and other fees

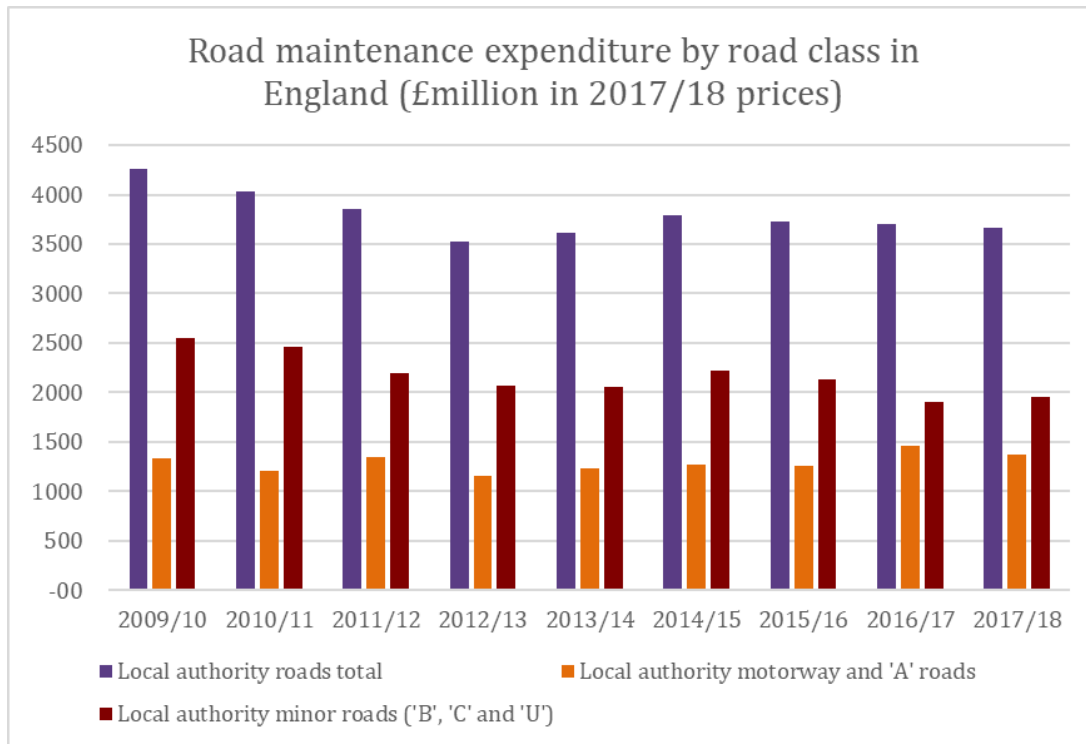
47 DfT, [Gearing up for efficient highway delivery and funding](#), January 2014, para 1.9

48 e.g. Hampshire County Council ([LRF0041](#))

49 Including structural works, routine maintenance and repairs and policy, planning and strategy

50 DfT, [Maintenance expenditure by road class in England](#), Table RDC0310, 31 January 2019; There was a change in Government accounting implemented in 2009/10 moving from UK GAAP (Generally Accepted Accounting Practice) to IFRS (International Financial Reporting Standards) reporting, making it difficult to sensibly compare spending before this date.

Figure 5: Road maintenance expenditure by road class in England (£million in 2017/18 prices)



Source: DfT, [Maintenance expenditure by road class in England](#), Table RDC0310, 31 January 2019

35. The squeeze on local authority budgets has also meant that councils are ‘raiding’ their highways and transport budgets to fund social care and other core services.<sup>51</sup> This has been a common thread in the three inquiries the Transport Committee launched in 2018—into buses, active travel and this inquiry into local roads.<sup>52</sup> Local authorities were forecast to spend £4.24 billion on highways and transport over 2017–18, but outturn figures for the same period show that they spent £3.99 billion, with an underspend of over £240 million, caused by councils reallocating highways funds to other services.<sup>53</sup> National Audit Office (NAO) figures also show that local authorities’ overall non-social-care spend went down by 33% (in real terms) between 2010/11 and 2016/17, with highways and transport services, including highways maintenance, experiencing a 37% cut.<sup>54</sup>

51 Road Surface Treatments Association, “[New Government data show how councils are forced to raid their highway budgets to fund other services](#)”, 31 August 2018, based on analysis of MHCLG data, [Local authority revenue expenditure and financing England: 2017 to 2018 provisional outturn](#), 23 August 2018

52 We discuss this in the context of local bus services in England in our 22 May 2019 report [Bus services in England outside London](#)

53 MHCLG, [Local Authority Expenditure and Financing 2018–19 Budget: England](#), 28 June 2018

54 NAO, [Financial sustainability of local authorities 2018](#), HC 834, 2017–19, 8 March 2018, figure 10

## Local highways maintenance block funding formula

36. A revised formula to calculate individual funding allocations to each local highway authority in England, outside London, was implemented following consultation with the sector in 2014.<sup>55</sup> This provides funding through a formula based on the assets for which each local highway authority is responsible.<sup>56</sup> The main aspects of the formula, which took effect from 2015, are set out below:

- a) Most of the funding is provided on a ‘needs basis’. This means that every local highway authority receives funding allocated based on a formula that takes into account factors such as road length, bridges, street lighting and footways and cycleways. Funding is not ringfenced and local authorities are “free to prioritise their spending as appropriate to meet local needs”.<sup>57</sup> In 2014 DfT decided that traffic volumes should not be included in the funding formula.<sup>58</sup> The element relating to cycleways and footways was only introduced from 2018/19 onwards.<sup>59</sup>
- b) The second element of the funding, which was introduced in 2015, is distributed on an ‘incentive basis’. It was envisioned that the level of funding a local highway authority would receive would be based on its record in pursuing efficiencies and proper asset management or its public commitment to adopt these practices within an agreed period. It was also intended to encourage local authorities to adopt new, innovative techniques. In 2014 the DfT anticipated that the incentive element of the pot would increase annually from £50 million in 2015/16 to £176 million in 2018/19.<sup>60</sup> The allocation for 2018/19 was £150 million, out of a total of approximately £975 million.<sup>61</sup> Almost every council in England receives the incentive element.<sup>62</sup>
- c) The third element is the Challenge Fund (CF), a ‘bid-for’ fund intended for highways maintenance and/or other projects such as improving cycle and footway infrastructure. In 2014 the DfT decided to set aside a proportion of funding from the local highways maintenance block grant each year between 2015 and 2021 for the CF.<sup>63</sup> The intention is to enable local highway authorities in England to bid for major maintenance projects that are otherwise difficult to fund through the Needs Based Formula funding they receive.<sup>64</sup> At the time it projected total funding over the period of £600 million. Generally, the maximum DfT funding a local authority can bid for is capped at £10 million, though higher bids up to a maximum of £20 million may be accepted by exception.<sup>65</sup>

55 Less than two thirds of councils in England responded to the consultation on the new funding formula (95/153), and of those who replied just over half (52%) supported the principle of a revised funding model as proposed by the DfT in the consultation and 50% agreed with the idea of a Challenge Fund, see: DfT, [Response to the Consultation on Local Highways Maintenance Block Funding 2015/16 onwards](#), December 2014, p4

56 Department for Transport (LRF0035)

57 DfT, [Local authority highways maintenance funding: 2015/16 - 2020/21](#), November 2014, para 3.5

58 DfT, [Local authority highways maintenance funding: 2015/16 - 2020/21](#), November 2014, para 3.20

59 DfT, [Explanatory note: calculation of Highways Maintenance Block ‘needs’ funding, 2015/16 to 2020/21](#)

60 DfT, [Local authority highways maintenance funding: 2015/16 - 2020/21](#), November 2014, para 2.20

61 DfT, [Roads Funding: Information Pack](#), November 2018, p4; needs, incentive and challenge funding - this is not an exact total as the Challenge Fund is allocated over a two year period

62 For individual allocations by local authority, see: DfT, [Roads Funding: Information Pack](#), November 2018

63 DfT, [Local authority highways maintenance funding: 2015/16 - 2020/21](#), November 2014, chapter 4

64 DfT, [Roads Funding: Information Pack](#), November 2018, p4

65 DfT, [Explanatory note: calculation of Highways Maintenance Block ‘needs’ funding, 2015/16 to 2020/21](#)

## Criticisms

37. Several local authorities were critical of the method for calculating both their revenue and capital support and claimed that it is ‘too simplistic’.<sup>66</sup> Some criticised it for not taking account of traffic volume or capacity levels; others for being an allocation of available budget against asset inventory rather than a reflection of highway authority ‘need’.<sup>67</sup>

38. Others were supportive. For example Andrew Haysey, Transport Planning Manager at Gateshead Council, told us that the formula “works reasonably well”, and that the incentive element had been “quite useful” in providing focus on longer-term asset management. Stephen Hall, Assistant Director, Economy and Environment at Cumbria County Council, agreed. He told us that the incentive element had “driven good behaviours and has focused our attention on the right areas of improvement, which has been very beneficial”.<sup>68</sup> While he agreed that the block funding was generally fine, Andrew Loosemore, Head of Highways Asset Management at Kent County Council, criticised the Challenge Fund part of it:

Maybe the Challenge Fund bit needs some review in order to understand that, if everything is challenging for all highway authorities, there should be even more funding in that pot, or maybe it should be removed and put back into the incentive fund element so that we can bid for it as part of that...<sup>69</sup>

39. We heard some criticisms of how capital and revenue is accounted for in local authority accounts and what it can be spent on, including limits on ‘capitalisation’.<sup>70</sup> Several submissions stated that capital funding was regularly being used to cover revenue expenditure shortfalls via capitalisation.<sup>71</sup> For example, the Local Government Technical Advisors Group (LGTAG) said that “many councils are taking different approaches to what is defined as ‘Revenue’ or ‘Capital’”.<sup>72</sup> Mr Loosemore from Kent County Council explained that local authorities have become more flexible on these categorisations in recent years, but require further guidance on what is permissible:

About three or four years ago, some very important guidance came out from CIPFA [Chartered Institute of Public Finance and Accountancy] that gave us the green light, essentially, that potholes that were permanent repairs could be determined as adding value back to the asset and could be capitalised. That kind of guidance enables us as engineers to—dare I say it?—go into battle with our accountant colleagues and say, “No, this is actually allowed now.” It breaks down that barrier ... more guidance around what you can and cannot do would be helpful.<sup>73</sup>

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66 Hampshire County Council ([LRF0041](#)); London Borough of Islington ([LRF0059](#)); Surrey County Council ([LRF0062](#)); and Kent County Council ([LRF0068](#))

67 Luton Borough Council ([LRF0036](#)) and Oxfordshire County Council ([LRF0038](#))

68 [Q237](#)

69 [Q237](#)

70 In generally accepted accounting practice, capital resources can only be spent on capital expenditure. Local authorities may transfer money earmarked for revenue expenditure into their capital account, but may not transfer money from their capital account into their revenue account without permission from central government. Transferring money from the capital to the revenue account is known as ‘capitalisation’. For more information, see the relevant government guidance: [Statutory Guidance on the Flexible Use of Capital Receipts \(updated\)](#), March 2016

71 Institute of Highway Engineers ([LRF0020](#))

72 Local Government Technical Advisors Group (LGTAG) ([LRF0023](#))

73 [Q226](#)

Lynne Wait, Interim Engineering Manager, Growth and Infrastructure at the Borough of Poole agreed that “having a bit more flexibility on the capital-revenue split or some further definition of what you can capitalise might help people”.<sup>74</sup>

## Fair funding review

40. In February 2016 the Government announced a ‘fair funding review’, followed by consultations in July 2016 and December 2017.<sup>75</sup> The review will affect how funding is allocated and redistributed between local authorities from 2020 onwards. It is expected to use three main ‘cost drivers’—population, deprivation and sparsity—together with additional cost drivers related to specific local authority services.<sup>76</sup>

41. The 2017 consultation indicated a broad consensus for using ‘road length’ and ‘traffic flow’ as the main cost drivers for the highways maintenance allocation. Accordingly, the Government indicated that it intends to implement “a straightforward formula for this service area that incorporates these two cost drivers”.<sup>77</sup>

## Pothole Action Fund

42. Over the past few years the Government has provided additional, discrete pots of capital funding for local councils to help repair potholes and to undertake other routine maintenance. This is usually limited to the financial year in which it is allocated, so must be spent by the end of the financial year, every 31 March.

43. The main capital funding pot for routine maintenance outside the block funding is the Pothole Action Fund. It was announced in Budget 2015 with the aim of fixing over 5 million potholes by 2020/21. The funding is calculated according to the size of the local road network in each area.<sup>78</sup>

44. In March 2019 the Government announced £50 million for potholes and flood resilience—this is the 2019/20 allocation from the Pothole Action Fund (£25 million) and the Flood Resilience Fund.<sup>79</sup> The profile for the Pothole Action Fund is:

**Table 1: Pothole Action Fund allocations 2016-21 (£million)**

2016/17	50
2017/18	121
2018/19	50
2019/20	25
2020/21	50
<b>Total</b>	<b>296</b>

Source: Department for Transport

74 [Q224](#)

75 MHCLG, [Call for evidence on needs and redistribution: summary of responses received and government response](#), 5 July 2016 and [Fair funding review: a review of relative needs and resources: Technical consultation on relative need](#), December 2017

76 For an overview see House of Commons Library insight, [The Fair Funding Review: What does it mean for local government?](#), 31 May 2018

77 MHCLG, [Fair Funding Review: a review of relative needs and resources - Technical consultation on relative need - December 2017: Summary of responses received and Government response](#), December 2018, para 94

78 DfT, [Cash for councils to fill almost 1 million potholes](#), 7 April 2016 and [Roads Funding: Information Pack](#), November 2018, p4

79 DfT, [£201 million road repair fund to resurface extra 1,000 miles](#), 31 March 2019

Councils are required to report on their spending from the fund. While these reports are usually discoverable through search engines on individual council websites, they are not collected centrally.<sup>80</sup>

## Bid-for funding

45. Having multiple funding streams, many of which must be competitively bid for on an *ad hoc* basis, makes getting funding a costly process for many local highway authorities. In some cases, it has disincentivised or prevented them from bidding for available funding.<sup>81</sup> Leicestershire County Council told us that it has been successful at securing monies from various funding ‘pots’, including through Growth Deals, the NPIF and the Local Large Majors Fund. However, it had concerns about how resource intensive the bidding process was (with no guarantee that authorities’ bids will be successful) and about funds generally only covering relatively short timeframes.<sup>82</sup> The South West Highways Alliance (SWHA) supported this view and said that many authorities experience accessibility issues with bid-for funding, particularly those that have experienced significantly decreased funding and staffing levels. They argued that where authorities are already struggling to deliver day-to-day maintenance activities, due to constrained resources, the lack of capacity to take on additional work may prevent them from being able to prepare meaningful bids in a timely manner. SWHA thought that this could be improved if the DfT worked with local authorities:

... to develop transparent, robust and light touch evaluation criteria and agreeing the frequency and timing of bidding opportunities with the industry, to avoid inadvertently excluding certain authorities.<sup>83</sup>

46. Other witnesses thought that more benefit could be driven from bid-for maintenance funding—as well as improvement schemes, which is where it is focused at present. For example, Lynne Stinson, Team Manager, Assets and Major Programmes Team at Leicestershire County Council, told us that:

The shiny new stuff is something we get an awful lot of opportunity to bid for [...] Bidding for maintenance at the same time is not as easy or as prevalent. There should be more flexibility for authorities to bid for funding for maintenance, as well as improvements. Currently, it tends to be ring-fenced for improvement schemes. It is not necessarily about making more money available for roads. The ability to choose to maintain, rather than improve, in certain areas would be beneficial.<sup>84</sup>

80 For example: Northamptonshire County Council, [Pothole Action Fund 2017 to 2018 annual progress](#); Oldham Council, [Final Monitoring Report on Department for Transport \(DfT\) Pothole Fund 2017/18](#) and East Riding of Yorkshire Council, [Department for Transport Pothole Action Fund 2018/19](#)

81 Urban Transport Group ([LRF0013](#)); North East Combined Authority ([LRF0049](#)); Transport for West Midlands (TfWM) ([LRF0074](#)); South West Highway Alliance ([LRF0080](#))

82 Leicestershire County Council ([LRF0058](#))

83 South West Highway Alliance ([LRF0080](#))

84 [Q220](#)

## Strategic Road Network (SRN)

47. For the first Road Investment Strategy (RIS1) from 2015 to 2020 the Government allocated over £15 billion to the SRN for improvement schemes and new roads.<sup>85</sup> The draft RIS2 strategy for 2020 to 2025 was published in October 2018, alongside the Budget. It comes with a £25.3 billion funding envelope. The funding for RIS2 will be provided through the National Roads Fund, which reserves the revenues of Vehicle Excise Duty (VED) within England for investment in roads. The final RIS2 will define how this funding is split between capital and resource expenditure and outline the main categories of spend.<sup>86</sup>

48. Several submissions were critical of the disparity in funding and maintenance standards between the ELRN and the SRN. For example, the Local Government Association (LGA) claimed that the Government will invest approximately £21,600 per mile in local roads, compared to £1.1 million per mile for maintenance of the SRN over the five-year period to 2020.<sup>87</sup>

## Major Roads Network (MRN)

49. As part of the July 2017 Transport Investment Strategy, the Government committed to creating a Major Road Network (MRN)<sup>88</sup> across England and in December 2017 published its proposals for this network for consultation.<sup>89</sup> The MRN will consist of strategic local routes in England, managed by local authorities. It will receive dedicated funding from the National Roads Fund of £3.5 billion (about 12% of the total fund).<sup>90</sup> In December 2018 the Government published guidance setting out the final eligibility criteria for the MRN programme, explained the roles and responsibilities of local and regional bodies in the MRN and how they should work with stakeholders and set out the process for submitting scheme proposals for the Large Local Majors programme and how it aligns with the MRN.<sup>91</sup>

## Impact of revenue cuts

50. Funding challenges have affected the extent and quality of maintenance and upgrades that have taken place on the ELRN in recent years. For example, Lynn Wait, from the South West Highway Alliance, told us that councils in the South West face “real problems,

85 DfT, [Road investment strategy: 2015 to 2020](#), 1 December 2014; There have been reports that not all the schemes planned for RIS1 will be delivered. The Times reported in April 2019: “of the original 112 schemes 29 had been finished, 15 were under way and 18 would start this year ... 37 would start in the next five-year cycle, including the A303 upgrade and a scheme to remodel junction 10 of the M25 ... [Highways England] revisited 11 and the return on investment just wasn’t good enough [and have been paused]”, from [“Road upgrades are quietly scrapped as money runs out”](#), The Times, 24 April 2019

86 DfT, [Draft Road Investment Strategy 2: Government objectives](#), 29 October 2018, p15

87 Local Government Association, [LGA responds to AA poll of drivers on the condition of roads](#), 26 February 2018

88 For more background about the proposal, see: Rees Jeffreys Road Fund, [Major Roads for the Future](#), October 2016

89 DfT, [Transport investment strategy](#), 5 July 2017, p47; this was reported in the press as a ‘bypass fund’ of sorts. The Daily Mail reported: “Mr Grayling said he plans to ensure part of the fund – believed to be around £1billion – is earmarked for local councils so they can improve or replace major strategic roads such as A-roads and by-passes”, from [“Crumbling roads to get £1bn upgrade: Councils to use money to revamp A-roads and fix bottlenecks that blight the transport network”](#), Daily Mail, 5 July 2017

90 DfT, [Proposals for the Creation of a Major Road Network](#), December 2017 and HMT, [Budget 2018](#), HC 1629, October 2018, p55

91 DfT, [Major Road Network and Large Local Majors programmes investment planning](#), 18 December 2018

because their revenue budgets have been cut to the absolute minimum, to the point where they cannot be cut any more”.<sup>92</sup> The Association of Directors of Environment, Economy, Planning and Transport (ADEPT) criticised the way the limited amount of funding is distributed and described the current funding system as “broken”.<sup>93</sup>

51. The Urban Transport Group (UTG) said that the decline in revenue funding has made it difficult to consistently implement an asset management approach characterised by planned, proactive and preventative interventions.<sup>94</sup> This was a view mirrored by many other stakeholders, including the Asphalt Industry Alliance (AIA), which commented that “preventative maintenance is now often beyond the reach of cash-strapped councils and this, combined with increased traffic and rainfall, has contributed to the continued decline of the carriageway”.<sup>95</sup> The Liverpool City Region Combined Authority also observed that: “Without long term funding certainty ... the reality is that if cuts are to be made then planned/preventative maintenance has to suffer in favour of reactive maintenance”.<sup>96</sup>

#### Box 2: Local road maintenance funding in London

Funding is different in London from the rest of England. Neither Transport for London (TfL) nor the 32 London Boroughs and the City of London (‘the councils’) receive any funding from central government to maintain London’s roads. The Greater London Authority (GLA) is the only region in England where this is the case.

In London, the councils receive transport funding from TfL for the Local Implementation Plans (LIPs) that they use to deliver the Mayor’s Transport Strategy. This includes a pot for ‘borough assets’, which is based on a roads condition formula. This provides funding only for planned maintenance of Principal Roads (‘A’ roads), which leaves about 90% of London’s roads (most of the local road network) to be funded through the councils’ own capital borrowing arrangements. Additionally, this funding is dependent upon TfL’s own financial situation.

Over the decade to 2019/20, core funding from central Government to the councils will have fallen by 63% in real terms on a cumulative like-for-like basis. The London Councils’ Technical Advisers Group (LoTAG) reported in 2017 an annual shortfall in highway maintenance funding of £92 million for all road assets. If the GLA was treated in the same way as the rest of England, TfL has calculated the needs-based funding allocated to maintain all London’s non-SRN carriageway roads would total around £81.5 million for the period 2018/19 to 2020/21.

TfL spends approximately £500 million per year operating and maintaining the TfL Road Network (TLRN). This includes approximately £150 million per year to the councils for their roads to support their LIPs. Congestion charging and enforcement activities generate around £300 million gross income per year, leaving an annual net operating deficit of around £200 million.

This funding requirement is currently filled by revenue raised from London Underground fares. TfL states that this is an unsustainable funding model for both the Underground and local roads. Historically, TfL spent between £100 and £150 million proactively renewing its road assets, however, due to the removal of the Government’s operational grant non-safety critical renewals have been paused for two years. Renewals have reduced to between £50 and £70 million for 2018/19 and 2019/20.

Source: London Councils ([LRF0079](#)); Transport for London ([LRF0086](#))

92 [Q224](#)

93 Association of Directors of Environment, Economy, Planning and Transport (ADEPT) ([LRF0028](#))

94 Urban Transport Group ([LRF0013](#))

95 Asphalt Industry Alliance (AIA) ([LRF0044](#))

96 Liverpool City Region Combined Authority ([LRF0072](#))



## Funding reform

52. Much of the evidence we received either made a case for or simply stated that there is a need to increase the amount of funding available for local roads.<sup>97</sup> In addition, several suggestions were put to us for reform of road maintenance funding. One proposal elicited widespread support: a long-term, front-loaded funding settlement. We discuss this in more detail below.

53. We also heard views on other issues such as the removal of competitive bidding, changing local authority accounting rules, and road pricing. There was no overwhelming evidence of support for any of these, though each clearly have their supporters.<sup>98</sup> There was also some support for ring-fencing local highways maintenance block funding to avoid it being reallocated to competing local authority demands (e.g. social care), but there was no consensus on this.<sup>99</sup> Mr Berry told us that the DfT has been working with MHCLG and CIPFA on the fair funding review and capitalisation rules, to enable capital funding to be spent on things like pothole repairs. He said that the Department had been making the case “quite heavily” for revenue support grant to be used for capital works.<sup>100</sup>

### *Front-loaded, long term funding settlement*

54. Several councils recommended a frontloading of investment to deal with the backlog of maintenance and a streamlined, long-term funding settlement to move away from multiple funding sources and short-termism.<sup>101</sup> Witnesses had differing views about ring-fencing any future settlement.<sup>102</sup>

55. The Urban Transport Group (UTG) said that frontloading funding over the next Spending Review period “would lead to a gradual reduction in expensive reactive maintenance and ensure a more cost-effective use of future maintenance funding”.<sup>103</sup> Stephen Hall, Assistant Director, Economy and Environment at Cumbria County Council, made the case to us that longer-term funding certainty is critical if local authorities are to deliver durable, cost efficient road maintenance:

At the moment, we have certainty over an annual period, with indicative funding for two or three years. If the funding quantum stayed the same, having certainty across a five to seven-year period of time would enable us to do better planning. We could do better asset management prioritisation,

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97 e.g. Sustrans ([LRF0010](#)); Urban Transport Group ([LRF0013](#)); JPCS Ltd ([LRF0016](#)); Mr Chris Capps ([LRF0017](#)); Coventry City Council ([LRF0021](#)); Local Government Technical Advisors Group (LGTAG) ([LRF0023](#)); Mr Mark Morrell ([LRF0026](#)); Suffolk County Council ([LRF0029](#)); Devon County Council ([LRF0031](#)); RAC Foundation ([LRF0037](#)); Association for Consultancy and Engineering (ACE) ([LRF0046](#)); Liverpool City Council ([LRF0050](#)); Cheshire East Council ([LRF0070](#)); and Gateshead Council ([LRF0075](#))

98 e.g. [Q233](#) (Lynne Stinson, Leicestershire County Council) and Hampshire County Council ([LRF0041](#)) for removing competitive bidding; [Q221](#) (Andrew Loosemore, Kent County Council) and Asphalt Industry Alliance (AIA) ([LRF0044](#)) for changing local authority accounting rules and CIHT ([LRF0025](#)) and Jacobs & Volterra ([LRF0085](#)) for road pricing

99 e.g. The Road Surface Treatments Association ([LRF0008](#)); IAM RoadSmart ([LRF0022](#)); and Norfolk County Council ([LRF0056](#))

100 [Q300](#)

101 The Road Surface Treatments Association ([LRF0008](#)); Oxfordshire County Council ([LRF0038](#)); Transport for the North ([LRF0039](#)); Transport for West Midlands (TfWM) ([LRF0074](#)); South West Highway Alliance ([LRF0080](#))

102 e.g. [Q47](#) [Matthew Lugg, Chartered Institution of Highways and Transportation] and [Q235](#) [Lynne Wait, South West Highway Alliance]

103 Urban Transport Group ([LRF0013](#))

because we would be able to plan over a longer term and have certainty to design schemes that offered better value. We would be able to have a much more open conversation with delivery chains, whether internal resource or externally contracted supply chains, that would enable us to get better value for money, because we could do much more open and sophisticated resource planning.<sup>104</sup>

Andrew Loosemore from Kent County Council agreed. He told us that:

... a longer-term understanding of what the finance was going to be over, say, a five-year period, even though it may not be the right level of funding that we would expect to maintain our highway asset, would enable us to look at the deterioration model, how our asset is going to perform over a three, five or 10-year period, and what expectation levels we can set for that asset performance.<sup>105</sup>

56. Others were more prescriptive as to what a multi-year funding settlement should look like. For example, Tarmac said that, at a minimum, there should be a five-year rolling funding plan to enable local highways authorities to develop robust preventative maintenance strategies.<sup>106</sup> Matthew Lugg, President of the Chartered Institute of Highways and Transportation (CIHT), told us that “if you want to bring the roads up to standard, you need longer term certainty of funding” and recommended a longer-term horizon of more than 10 years.<sup>107</sup> The AIA agreed and recommended that highway authorities in England be allocated an additional £1 billion a year for 10 years for road maintenance. This additional funding would comprise £390 million a year to stop further deterioration in conditions and £660 million a year to bring the local network up to a level “where it can effectively support communities and drive economic growth”.<sup>108</sup> The AIA suggested hypothecating income from fuel duty to fund this.<sup>109</sup>

57. Other witnesses told us that Vehicle Excise Duty (VED) income should be hypothecated to fund all roads, including local roads.<sup>110</sup> This would require a rethink of current plans for the SRN, given that over the period between 2020 and 2025 almost all VED income is earmarked to pay for the road improvements that form RIS2 (see above). There are other calls for VED to be devolved, so that for example money raised in London is retained by Transport for London and London Councils for use on the London road network. This would also effectively reduce the overall pot available for other projects.<sup>111</sup>

58. We were pleased to hear the then Minister, Jesse Norman, agreeing with the principle of a multi-year funding allocation. He told us that coming out of the Spending Review this autumn “we should have a five-year local road settlement”:

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104 [Q218](#)

105 [Q221](#)

106 Tarmac ([LRF0083](#))

107 [Q40](#)

108 Asphalt Industry Alliance (AIA) ([LRF0044](#))

109 Asphalt Industry Alliance (AIA) ([LRF0044](#)); In 1999 the Labour Government promised to ring-fence real terms increases in fuel duties into a fund for improving public transport and modernising the road network. In practice, this never happened (it was not legislated for).

110 e.g. Living Streets ([LRF0047](#)) and Federation of Small Businesses ([LRF0054](#))

111 London Councils ([LRF0079](#))

The key point of these settlements is that, once you have established the envelope, it is set ... local authorities and their supply chains ... know what to expect. They know what the numbers will look like, broadly speaking, from year to year. They know what the project numbers will look like for the work they are doing, and therefore they can organise their supply chain.

[...] I would look for a road funding settlement for local roads that is independent of the RIS2 funding settlement and ... significantly larger.<sup>112</sup>

59. Jesse Norman also offered support for combining funding from across Government Departments in this settlement, particularly the significant amount of funding that local authorities receive through the local highways maintenance block grant. He said:

You have to include the MHCLG funding pot and other pots of money that [local authorities] raise themselves and/or developer contributions and the like. If we are to have an integrated approach, we need to make an argument about the overall pot of money and make sure that it is not hoovered up elsewhere in the system by Government or by other Departments.<sup>113</sup>

He was supportive of a long-term settlement to give local authorities “more financial scope to, if not borrow against it, at least make deals that reflect the certainty of future income”.<sup>114</sup> He also thought there was scope for ongoing alternative funding mechanisms involving private finance, in certain circumstances where they make sense (e.g. PFI street lighting agreements).<sup>115</sup>

60. Funding to local authorities to maintain the local road network is too often short-term, stop-start and incoherent. Revenue funding comes primarily from MHCLG, while capital funding usually comes from the DfT, following an allocation from the Treasury. Other funding is available through BEIS and Innovate UK. It is no surprise that local authorities are seeking long-term funding security to enable them to better plan and deliver road maintenance. **We conclude that the current short-term approach to funding local road maintenance is not fit for purpose.**

61. Funding for road maintenance is not ring-fenced and may be used by local authorities on other priorities. The then Minister told us that councils had actively lobbied the Government in 2010 to remove ring-fencing from local authority budgets; but in evidence to us there was substantial—though not universal—support for its return.

62. **We welcome the work the Department for Transport has been doing with the Ministry for Housing, Communities and Local Government and the Chartered Institute of Public Finance and Accountancy on the fair funding review and capitalisation rules, to enable capital funding to be spent on things like pothole repairs.**

63. **We welcome the then Minister’s statement that he would like to see a five-year funding settlement for local roads. We recommend that the Department should propose a front-loaded, long-term funding settlement to the Treasury as part of the forthcoming Spending Review so that local authorities can address the historic road maintenance backlog and plan confidently for the future. However, we are clear that this must not**

112 [Q299](#)

113 [Q299](#)

114 [Q338](#)

115 [Qq330–340](#)

*be an excuse for a budget cut. We recommend the Treasury give the proposal serious consideration given that proactive maintenance provides better value for money than reactive maintenance. We consider it critical that the DfT engage with MHCLG to roll up the revenue support elements of roads funding into a five-year settlement.*

64. The DfT should take the lead on consulting with local authorities about the exact nature of a five-year settlement. This should include whether they would like to see a ‘totex’ allocation (i.e. funding that can be spent on capital or revenue, with no restrictions) and whether they want it to be ring-fenced for spending only on roads. It is important that innovation, collaboration and best practice are properly incentivised through any settlement; this should be part of any consultation. The DfT should also include London councils in the consultation to seek their views on whether the London funding settlement is fit for purpose

65. The then Minister told us that in future, local authorities should be able to borrow against a five-year settlement, allowing them to raise more money to spend on road maintenance. While we welcome this idea in principle we are concerned as to how it would work in practice, given local authorities would still have to repay lenders and roads do not currently generate income. *We recommend that in its response to this Report the Department set out what borrowing against a multi-year settlement would mean for local authorities and how such a scheme could work.*

### 3 Innovation

66. In recent years there has been a welcome growth of innovation in the field of highway inspection and road management and maintenance. Individual councils, industry, tech companies and academia are working together to provide better and cheaper solutions to the challenges facing local highway authorities. The Government contributes to this effort by providing funding through the Department for Transport, the Department for Business, Energy and Industrial Strategy (BEIS) and Innovate UK. The then Minister, Jesse Norman, also emphasised the importance of preparing the road network for a future in which Connected and Autonomous Vehicles (CAV) are in widespread use.<sup>116</sup>

#### Highways inspection and imaging

67. In recent years advances in video capture, big data and more accurate depreciation software have shown a potential to drive benefits to local highways authorities.<sup>117</sup> We heard about some examples of innovations in highways inspection and imaging including:

- a) Thurrock, York and Wiltshire councils and two private-sector SMEs, Gaist and SOENECS, are working on a DfT-funded trial to revolutionise the way potholes are identified and managed, through a '[Pothole Spotter](#)'.<sup>118</sup> Advanced analytical software and high-definition cameras, attached to refuse collection vehicles and buses, provide images of the road surface, allowing maintenance to be prioritised.<sup>119</sup> The DfT told us that there are currently ten official 'pothole-spotter' vehicles out on the roads and an electric bicycle has been added to the trial to assess the imagery collected from a cyclist's perspective;<sup>120</sup>
- b) Blackpool Council is leading on a digital inspector scheme with 8 councils, involving high definition cameras mounted on vehicles collecting data on road and path conditions, which is then analysed by computers to highlight where roads are deteriorating;<sup>121</sup>
- c) Swindon Borough Council is conducting a trial of the use of smartphone sensors to collate road conditions;<sup>122</sup> and
- d) Suffolk Highways, in partnership with Computer Vision (CV) system suppliers Vaisala, is implementing an innovative automated road condition monitoring technology that uses data from connected vehicles to provide dynamic and continuous updates on road condition. This includes the identification of potholes, cracking and edge defects.<sup>123</sup>

116 [Qq297–298](#)

117 Local Government Technical Advisors Group (LGTAG) ([LRF0023](#)); Association of Directors of Environment, Economy, Planning and Transport (ADEPT) ([LRF0028](#)); North East Combined Authority ([LRF0049](#))

118 Tarmac ([LRF0083](#)); for more information, see: <http://www.pothole-spotter.co.uk/>

119 Local Government Association ([LRF0053](#))

120 Department for Transport ([LRF0035](#))

121 DfT press notice, "[Pothole fund boosted to repair roads after winter damage](#)", 26 March 2018

122 DfT press notice, "[Pothole fund boosted to repair roads after winter damage](#)", 26 March 2018

123 Suffolk CC, [Funding for Innovation: Connected Vehicle Data - Application Form](#)

## Managing and maintaining highway assets

68. Technology, data analytics, new materials and repair methods also have the potential to play a more important role in managing highways assets. Cheshire East Council, for example, reflected the view of several witnesses, in saying that “continued research is required into the development of quick, safe and durable defect repair solutions”.<sup>124</sup> We also heard about some examples of the innovations in managing and maintaining highway assets, including:

- a) Suffolk Highways has trialled mobile asphalt plants, which heat up the existing material excavated from the road surface, blend it with other material and put it back in the hole. It is also looking into thermal road repairs.<sup>125</sup> In January 2019 Radio 4 reported on the work of Dr Mujib Rahman, a former road-repair engineer (dubbed “the pothole doctor”). Dr Rahman has demonstrated that using infrared preheating improves the bond between the road and the repair, reducing the need for re-repairs;<sup>126</sup>
- b) Automated paving technology can enhance and improve surfacing quality during the laying and compaction process by collecting data that can be combined with manufacturing information to create an accurate record of the condition and material composition of a road;<sup>127</sup>
- c) Through its ‘SMART local highways and AV live labs’ initiative, the Association of Directors of Environment, Economy, Planning and Transport (ADEPT) is working with commercial partners and the DfT on a £25 million two-year project designed to bring digital innovation to local roads;<sup>128</sup>
- d) There are a few examples of recycled plastic being used to fill potholes on local roads (for example Coventry, Cumbria and Enfield).<sup>129</sup> In May 2018 the then Minister, Jesse Norman, said that recycled plastic materials had been used on a small proportion of the SRN for high friction surfacing, and on one short stretch of public road in England;<sup>130</sup>
- e) Professor Phil Purnell of the School of Mechanical Engineering at Leeds University is working on a project to make potholes “self-repairing”, with the aspiration of zero disruption from street works within three decades. His team at Leeds is investigating the use of drones and 3D printing for preventative maintenance;<sup>131</sup>

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124 Cheshire East Council ([LRF0070](#))

125 [Q52](#)

126 “Potholes could be ‘self-repairing’ in the next 30 years, say experts”, The Independent, 9 January 2019

127 “Highways innovations paving the way to a digital future”, Infrastructure Intelligence, 9 May 2018

128 Association of Directors of Environment, Economy, Planning and Transport (ADEPT) ([LRF0028](#)) and [Prospectus: SMART Local Highways & AV Live Labs](#), August 2018

129 [Qq239–240](#) [Stephen Hall, Cumbria County Council] and [Q269](#) [Stephen Skinner, Enfield Council and Danny Rawle, Coventry City Council]

130 [Roads: Repairs and Maintenance: Written question - 145382](#), 24 May 2018

131 “Potholes could be ‘self-repairing’ in the next 30 years, say experts”, The Independent, 9 January 2019 and “Drones will take to the skies to detect and repair small potholes by scanning roads for cracks and filling them with 3D printed asphalt”, Daily Mail, 21 January 2019

- f) Dr Alvaro Garcia, from the Nottingham Transportation Engineering Centre (NTEC), has been exploring how the addition of microcapsules of oil to asphalt could be used to create self-repairing road surfaces. The project has been partly funded by Highways England, and trialled on the SRN;<sup>132</sup>
- g) Kent County Council, with Amey (contractor), University of Birmingham, MAP16, UI and Rezatec, is in receipt of funding for a local highway asset management technology incubator and a centralised digital hub for all asset management data. This would link dynamic network sensors to assets such as drainage, winter service (gritters) and gullies. It is hoped this will lead to a more efficient highways maintenance service and allow funding to go further;<sup>133</sup> and
- h) Graphene-based roads will be trialled under plans to reduce the number of potholes. The new road surface, known as Eco Pave, works by adding a small amount of a graphene-based additive to asphalt. Developers expect a UK test, possibly in London, following a successful trial in Italy where it is claimed to have boosted the lifespan of a road by 250%.<sup>134</sup>

## Uptake of new technology

69. The uptake of new technology across local highway authorities is inconsistent.<sup>135</sup> The reasons for this are varied and include insufficient or inconsistent funding, sometimes inappropriately targeted and that might be better spent elsewhere;<sup>136</sup> the capacity of local authorities to bid for, procure and/or assess innovative products;<sup>137</sup> and that the UK does not have the right incentives for innovation to grow to its full potential.<sup>138</sup> The Road Condition Management Group (RCMG) also pointed to commercial difficulties for new products entering the market.<sup>139</sup> There are also questions about how quickly and broadly innovations can be shared. Matthew Lugg of CIHT told us that “when there is new technology and innovation there is no central reciprocal way that it can be shared” and added that, although there is scope for transformational change in data collection practices, “because of the issue about skills and resources, authorities are not necessarily capable of taking that on”.<sup>140</sup> We examine this further in Chapter 5, below.

70. The then Minister, Jesse Norman, and Steve Berry, Head of Highways Maintenance, Innovation, Resilience, Light Rail and Cableways Branch at the Department for Transport, acknowledged that at present there are unnecessary limitations on research, development and take up of innovative practices, in part due to a lack of cohesive funding. The then Minister said that he hoped a long-term funding settlement would “take off some of the dampeners that have been inhibiting innovation”.<sup>141</sup>

132 [“MasterChef inspires Highways England funded self-healing road project”](#), The Engineer, 18 October 2017 and Highways England, [Strategic Road Network Initial Report](#), December 2017, p67

133 DfT [Technological trials to help future proof roads](#), 31 January 2019

134 [“Super-strong graphene to tackle pothole plague”](#), The Times, 14 May 2019

135 Tarmac ([LRF0083](#))

136 [Q270](#) (Patrick Doig, Transport for London and Anne Shaw, Transport for West Midlands); Rochdale Borough Council ([LRF0043](#)); Lincolnshire County Council ([LRF0077](#))

137 The Road Surface Treatments Association ([LRF0008](#)); South West Highway Alliance ([LRF0080](#))

138 RAC Foundation ([LRF0037](#))

139 Road Condition Management Group (subgroup of the UK Roads Board) ([LRF0051](#))

140 [Qq27-28](#)

141 [Q358](#)

71. Mr Berry told us that the Department for Transport has directly spent between £25 and £30 million on road innovation funding to date,<sup>142</sup> however the then Minister explained that it is difficult to establish a firm figure due to the Department's indirect support for innovation through other pots of funding, such as the Transforming Cities Fund and the National Productivity Investment Fund.<sup>143</sup> He also told us that innovation has its limits and that in many cases improvements can be driven through getting the basics right, or a 'checklist' system.<sup>144</sup> He explained:

Have [local highway authorities] actually gone through all the little checks and balances, outcomes and tests that cover the whole network to make sure they are doing their job properly? That is really valuable. It is not direct innovation, but it is incredibly valuable. It is transformative in terms of value for money from a local authority standpoint. I do not want to get too lost in the word "innovation".<sup>145</sup>

72. We asked Mr Berry and the then Minister how the innovation the DfT funds and supports can be pulled through into widespread use and scaled for affordable general use. Jesse Norman told us that his concerns were "more on the basic research side than at the applied end" and that he was less concerned with applications entering the marketplace than with "the deep research part and the academic support for transport as such" on the R&D side.<sup>146</sup> It is easy to see how the transition from pilot to practice is well-supported by the DfT on technical innovations, but less obvious in terms of service or process.

73. The Department told us that it intends to carry out a review of the future of road condition monitoring and reporting following the outcome of the 2019 Spending Review.<sup>147</sup> It has said that it will seek views on the current methodology used to monitor road condition as well as how councils and the wider sector can harness new forms of technology and data to improve local roads and infrastructure.<sup>148</sup> Mr Berry from the DfT also highlighted a new digital intelligence innovation hub, working with academia.<sup>149</sup> He told us that the hub:

... is looking at how we can work more closely with SMEs and academia. One of the problems that we are asking them to consider, for example, is the pothole problem. Could we look at it in a different way? We have tried and tested a number of repair technologies. What is out there now? For example, we are aware that some universities are working on 3D printing for potholes. How can we bring all of that together and then disseminate it more widely across the highway sector?<sup>150</sup>

74. We have heard about numerous examples of innovation. We are encouraged by the willingness of councils and the industry to innovate. We also applaud the then Minister's obvious enthusiasm and support for this work. However, we are concerned that the disparate pools of funding for innovation could cause confusion and generate competing incentives.

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142 [Q359](#)

143 [Q359](#)

144 The Minister referred to Atul Gawande's 2011 book *The Checklist Manifesto: How to Get Things Right*

145 [Q360](#)

146 [Q364](#)

147 Department for Transport ([LRF0035](#))

148 DfT press notice, "[£201 million road repair fund to resurface extra 1,000 miles](#)", 31 March 2019

149 Announced in January 2019, see: DfT, [Technological trials to help future proof roads](#), 31 January 2019

150 [Q363](#)



Innovation is essential if the efficiency and effectiveness of local road maintenance is to continue to improve, which it must in the face of limited funding. It is right that the Government stimulates and encourages innovation but the value for money of any investment in innovation is only properly repaid when new technologies, ideas and ways of working are scaled up and available to all. *We recommend the DfT, BEIS and Innovate UK collaborate to collate all innovation funding for local roads in one place and effectively disseminate this to local highway authorities. They should establish as far as possible common rules for bidding and assessment to allow local authorities to marshal their resources effectively, and achieve efficiencies and economies of scale in the bidding process. We also recommend that the Government consider how it monitors the innovations it funds and what it needs to do to ensure that a greater proportion of innovations are made available on the widest possible basis.*

75. We welcome the DfT's support for a new digital hub for experts to share and develop innovations. We want to see this active as soon as possible and ask the DfT in its response to this Report to set out how it will be funded, what it is expected to achieve, and how its effectiveness will be assessed. *We recommend that DfT produce a report, within 12 months of the hub going live, that assesses the costs and benefits of the new digital hub.*

76. Looking ahead to a future in which we may see connected and autonomous vehicles (CAVs) making increasing use of local roads, the then Minister told us that those roads need to be 'good enough' to accommodate these vehicles. While we caution against too optimistic a view as to the rapidity with which CAVs can be deployed and how quickly they may become a common form of transport, we accept the principle that these vehicles may require changes to road surfacing and indeed the technology embedded in and adjacent to those roads. However, the Department should not get carried away and lose focus from the urgent issues facing all current road users who struggle to travel along potholed and cracked streets. *We recommend that the Department set out a timeline to show their expectation of how connected and autonomous vehicle technologies will evolve and enter service. This should include the Research and Development, setting of standards, procurement and deployment of infrastructure on roads needed to support CAVs, maintenance and management of such infrastructure through its lifecycle and showing how additional technology deployed in the roadway affects maintenance and renewal processes. This could be a useful supplement to the Department's ongoing work around the Future of Mobility.*

## 4 Data collection and use

77. The Road Condition Management Group (RCMG), on behalf of the UK Roads Board,<sup>151</sup> leads on the development and the consistency of road condition data as used by all highway authorities in England and the rest of the UK.<sup>152</sup>

78. Roads in England are inspected by local authorities, with the frequency determined according to the value and strategic importance of the road. Residential roads, for example, are typically only inspected once a year, compared to once a month for motorways and major A roads,<sup>153</sup> though the specific frequency varies by local highway authority.<sup>154</sup> The monitoring of local road conditions provides important evidence on the quality of local roads, priorities for focusing resources, the effect of treatment and data required for lifecycle modelling.<sup>155</sup> It also ensures that nationally consistent data can be collected to help central and local government understand the scale of the maintenance problem on the local roads network and determine how funds can best be allocated.

### Inspection data

#### SCANNER

79. The condition of the local ‘A’, ‘B’ and ‘C’ roads in England is measured using a long-established technology called SCANNER (Surface Condition Assessment for the National Network of Roads). SCANNER involves a specially adapted vehicle driving the network, with lasers and video equipment measuring a range of parameters, such as cracking of the road, and ruts. A number of these parameters are then combined to give an overall score that indicates the condition of each section of the road—the Road Condition Indicator (RCI). SCANNER brings the benefits of coverage, objectivity, consistency and it has a nationally recognised quality assurance regime that helps local authorities assure the National Audit Office (NAO) and the DfT of the robustness of their data and the comparability with other local authorities.<sup>156</sup>

80. SCANNER is not the only technology available. Steve Berry from the DfT said that some councils are using Gaist as an alternative.<sup>157</sup> Paula Clayton-Smith, Managing Director of Gaist, explained to us how their technology works:

We have a range of five high-definition cameras that capture an image every metre of the road. We then stitch that into video-like quality, which means you almost get Google Street View on steroids. [...] We pick up about 35 different types of defects, including potholes, edge deterioration and a whole range of defects that are more likely to be spotted by a road user or a cyclist, or a general member of the public, from a user perspective.<sup>158</sup>

151 UKRB is one of three Boards of the UK Roads Liaison Group (the others being Bridges and Lighting). For full membership, see the [website](#)

152 To read more about the RCMG, see their [website](#)

153 Automobile Association ([LRF0045](#))

154 North East Combined Authority ([LRF0049](#))

155 Leicestershire County Council ([LRF0058](#)); East Riding of Yorkshire Council ([LRF0060](#))

156 Road Condition Management Group, [SCANNER](#)

157 [Q354](#)

158 [Qq78–79](#)

Alex Wright, Group Manager at the Transport Research Laboratory, explained that there are similarities and differences between SCANNER and Gaist and that in some ways Gaist builds on the good work done by SCANNER and can measure a wider range of parameters.<sup>159</sup>

81. Once the roads have been inspected, UK Pavement Management System-accredited systems are used by local authorities to submit road condition data to central government.<sup>160</sup>

### **Other inspection methods**

82. There is a less systematic approach for assessing conditions on unclassified roads. Some highways authorities use Detailed Visual Inspections (DVI) and Coarse Visual Inspection (CVI) (i.e. people going out to look at the state of the roads.), whilst others use the Annual Engineers Inspection.<sup>161</sup> Some witnesses told us of their concerns that local road inspectors are not sufficiently trained, do not always pick up defects early enough and are not given sufficient guidance to properly assess defects and their impacts on non-vehicular road users such as pedestrians and cyclists.<sup>162</sup> There are also concerns about the unclassified road network, where SCANNER does not work. Mark Stevens, Assistant Director Operational Highways of Suffolk County Council and Chair of the Engineering Board at the Association of Directors of Environment, Economy, Planning and Transport (ADEPT), commented:

More than half of our network is unclassified; [SCANNER] does not work in those environments. We do not have a robust process to pick that up in a consistent way and compare it nationally, but it all boils down to the extent to which each local authority can afford to carry out those surveys.<sup>163</sup>

83. Councils also encourage public reporting, including online reporting using their own websites<sup>164</sup> or via services such as FixMyStreet.<sup>165</sup> The quality of reports and the way councils respond to them varies widely. Lincolnshire County Council explained its processes:

Our increased use of technology through the implementation of a web portal allows for a member of the public to directly report a defect on our road network. This information gets fed through to the relevant Highways Officer immediately and increases confidence in our service whilst improving efficiency.<sup>166</sup>

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159 [Q80](#); these are complex technical arguments about which the Committee does not hold a view but where there is lively debate, see for example: RCMG-supplementary written evidence ([LRF0092](#)); W.D.M Limited ([LRF0094](#)) and Gaist ([LRF0096](#))

160 Road Condition Management Group, [UK Pavement Management System \(UKPMS\)](#)

161 Midland Service Improvement Group ([LRF0063](#)); An AEI is a visual survey method that is carried out by engineers. It is outcome based, i.e. focuses on the type of treatments (if any) that are required for a given section of road

162 Mr Dave Gaster ([LRF0032](#)) and [Qq34–36](#) (Roger Geffen, Cycling UK)

163 [Q17](#)

164 For example, in Suffolk: <https://highwaysreporting.suffolk.gov.uk/>

165 <https://www.fixmystreet.com/>

166 Lincolnshire County Council ([LRF0077](#))

Anti-pothole campaigner Mark Morrell (‘Mr Pothole’) told us that in his view there are too many different reporting systems across highways authorities and that many of them are “not fit for purpose and outdated in the modern world. Some show previous reports made where others don’t, some allow pictures to be uploaded, some give feedback to reporters. Updating of information can be poor with reports showing as open months after repairs”.<sup>167</sup> He recommended that there should be a “national reporting system for highways defects using smart technology” to solve these problems.<sup>168</sup>

## Collecting, monitoring and managing data

84. In 2014 the National Audit Office (NAO) recommended that the DfT improve its understanding of the current condition and future needs of the local road network.<sup>169</sup> The then Minister, Jesse Norman, told us that it is key for the Department for Transport to have “datasets that are of high quality and are consistent”. He emphasised that:

... the consistency part is really important. You do not get the comparisons without it. That has a backward drag. It sometimes means that one can be too tied to a particular data source or method of gathering because one wants to ensure consistency. There is a question about how you bring in new technology to overlap with that.

You see that now. Historically, it was done by visual inspection. Then you had SCANNER. Now you have Gaist and other tools. They are doing different things when it comes to assessing the state of the road, but the goal is to try to build a consistent national picture [...] It is not a perfect position and there is plenty of scope for improvement, but it is still worth valuing and appreciating.<sup>170</sup>

85. Tarmac said that the Government “has an opportunity to support nationally consistent ways of monitoring/managing data and information to make the most effective decisions”.<sup>171</sup> The Association for Consultancy and Engineering (ACE) argued that a consistent reporting framework across local authorities would allow conditions to be easily assessed and facilitate comparisons in and across areas.<sup>172</sup> The Road Condition Management Group (RCMG) proposed a new approach to the collection and management of data, which would “offer the potential for local highway authorities to procure their data using new and more flexible types of procurement”.<sup>173</sup>

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167 Mr Mark Morrell (LRF0026)

168 Mr Mark Morrell (LRF0026)

169 NAO, [Maintaining strategic infrastructure: roads](#), HC 169, session 2014–15, 6 June 2014, p9

170 [Q351](#)

171 Tarmac (LRF0083)

172 Association for Consultancy and Engineering (ACE) (LRF0046)

173 Road Condition Management Group (subgroup of the UK Roads Board) (LRF0051); this would involve a core condition dataset that covers only the condition parameters that would be used by local and central government to meet national and local statistical/benchmarking/financial needs. Commercial providers would be able to provide this data using their preferred technique, allowing them to innovate, offer a wider range of survey methods, and additional data/condition parameters.

86. Matthew Lugg from CIHT told us that there is a ‘critical link’ between funding and data collection, and that the DfT “does not know what level of investment to make for the outcome it wants to achieve, it is working in the dark. There needs to be a national lead on what should be collected and how it is used”.<sup>174</sup> Steve Berry from the Department for Transport rejected this criticism. He told us that “road condition or the condition of the assets is not tied to the funding”.<sup>175</sup> He referred to the Department’s announcement on 31 March 2019 that it is planning a review of road condition surveying data and technology, to seek views on the current methodology used to monitor road condition as well as how councils and the wider sector can harness new forms of technology and data to improve local roads and infrastructure.<sup>176</sup> Mr Berry told us that the review is intended to answer questions such as:

Are we collecting the right information? Should we be collecting more information? How does that affect highways maintenance funding?

[...] The key point is that the call for evidence will take into account what the CIHT is saying. We need to understand data and we need local authorities to understand that data much more. A lot of authorities have done that assessment. They have an asset management strategy or plan, but when you start to ask in more detail about each of their specific assets, they say, “Well, we’re not entirely sure.” Are we [DfT] in the dark or are they [local authorities] in the dark?<sup>177</sup>

## Problems with the current approach

87. Despite the existence of long-established inspection technology such as SCANNER, comprehensive and comparable data on local road conditions in England is limited.<sup>178</sup> This is partly due to the complex nature of the road assets being assessed and the difficulty in reliably establishing the exact condition of some types of road assets.<sup>179</sup> In oral evidence, Matthew Lugg from CIHT noted the lack of information about these assets:

On footways, we have no national indicators and very little data. There are other assets. I talked about drains, but signs and markings are really important to the user for navigating the network and for road safety. They are not measured in any way at national level. The regime is quite weak, and ... I am not sure that it really reflects the true picture.<sup>180</sup>

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174 [Q22](#)

175 [Q352](#); from 2013/14, ‘road condition’ was removed as a factor in determining the local highways maintenance grant

176 DfT press notice, “[£201 million road repair fund to resurface extra 1,000 miles](#)”, 31 March 2019

177 [Q352](#)

178 Local Government Technical Advisors Group (LGTAG) ([LRF0023](#)); RAC Foundation ([LRF0037](#))

179 For full discussion, see: RAC Foundation, [The Condition of England’s Local Roads and how they are Funded](#), November 2015, p.4–7; Association for Consultancy and Engineering (ACE) ([LRF0046](#)); Local Government Association ([LRF0053](#))

180 [Q19](#)

88. There are also concerns about the variety of inspection methods used by local highway authorities<sup>181</sup> and the fact that the data they collect only assesses the surface level condition of the road and is not reflective of underlying structural conditions.<sup>182</sup> As a result, there is a lack of confidence amongst many authorities about these underlying conditions. For example, Thurrock Council said that “[road condition] results can be misleading. [For example], recent reactive works give an indication of ‘good’ condition despite having a much shorter lifespan than a ‘good’ condition unpatched carriageway”.<sup>183</sup>

89. There are ways of addressing this, though these methods are not in widespread use. For example, Surrey County Council told us about deflectograph surveys, which provide structural data.<sup>184</sup> However, they are uneconomical for use across the entirety of the network due to slow speed and cost. Surrey said that “there is a gap in the market for a traffic speed deflectograph that can be used on local roads”.<sup>185</sup> They also told us that current survey approaches stifle development and consistency:

While other surveys have begun to be developed by companies keen to move things forward, these are not nationally recognised or audited and the lack of a national lead and funding mechanism is leading to fragmentation in surveys which will ultimately lead to a lack of consistent data for national benchmarking.<sup>186</sup>

90. Other stakeholders believe the deficiencies in data are down to the SCANNER technology. Lincolnshire County Council expressed “concerns over the discrepancy between the results of SCANNER surveys and the perception of the condition of the network” and said that this has “led to the reintroduction of visual surveys across the whole of our network”.<sup>187</sup> Luton Borough Council also believe that the survey “is not fit for purpose [because] it is designed for motorways and not for local roads, which are subject to differing patterns of traffic speed, volume and manoeuvres”.<sup>188</sup> The RCMG pointed out what it perceived as shortcomings with the SCANNER technology.<sup>189</sup>

91. Local authorities collect data on the condition of their networks using both technology and visual inspection methods. There is mixed evidence about how they can deploy this data in meaningful ways to cut maintenance costs and make the right decisions.

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181 Association for Consultancy and Engineering (ACE) ([LRF0046](#))

182 [Q18](#); Thurrock Council ([LRF0012](#)); Association of Directors of Environment, Economy, Planning and Transport (ADEPT) ([LRF0028](#)); Asphalt Industry Alliance (AIA) ([LRF0044](#)); Surrey County Council ([LRF0062](#))

183 Thurrock Council ([LRF0012](#))

184 A [Deflectograph](#) is a survey vehicle used to produce data for the assessment of pavement strength. It is a lorry-based system, with a pair of wheels at the front and a pair of double wheels at the rear. At the start of testing a pair of deflection beams are lowered onto the road surface. The Deflectograph then moves forward, so that the double wheels on the rear of the vehicle straddle the two beams. This causes the pavement to deflect (due to the vehicle’s weight) which is measured in the two beams. Once the rear wheels have reached the end of the beams, the beams are brought forward and the process is repeated again. This results in deflection measurements taken at approximately 4m intervals.

185 Surrey County Council ([LRF0062](#))

186 Surrey County Council ([LRF0062](#))

187 Lincolnshire County Council ([LRF0077](#))

188 Luton Borough Council ([LRF0036](#))

189 Road Condition Management Group (subgroup of the UK Roads Board) ([LRF0051](#))

92. We believe that local authorities will only be able to make better use of available funds for road maintenance if they can target such funding well; this requires good data. Some of the data local authorities collect on the condition of the road network is passed to the Department for Transport. We are not confident that this data gives the DfT a true picture of the state of the local roads or that any comparison of areas would compare 'like with like' and allow meaningful conclusions to be drawn.

93. DfT publishes basic headline data on road condition. While this is a useful tool to compare a single data set over time, it is limited in scope and detail and does not provide the sort of detail given in external condition surveys published by third parties (e.g. the AIA in its annual ALARM survey). **We welcome the DfT's review of road condition surveying data and technology. We recommend that, given the previous Minister's concerns about whether third party data is reliable, the DfT conduct an analysis of the merits of collecting richer data from local authorities and what cost this would represent to the taxpayer.**

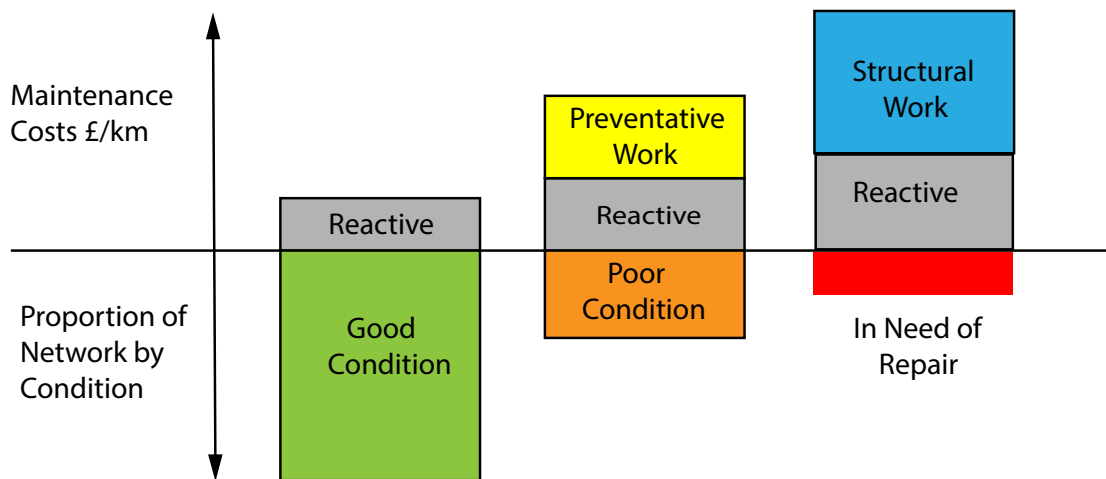
94. *We recommend that, in its response to this Report, the Department explain whether the data it receives from local authorities on road condition is consistent and allows valid comparisons to be made, what it does with such data, how it is analysed and what action is taken on the back of conclusions that it draws.*

95. Irrespective of the Department's view on the merits of it collecting and publishing further data, it should make it easier for the public to report road condition concerns and access local authority road condition data. *We recommend that DfT run an innovation competition to develop a platform that the public can use to make online reports about road condition direct to the relevant council and access real-time local road condition data. It could be searchable by factors such as council, constituency and postcode. It could also be used by councils to monitor their own performance and to generate data to allow them to benchmark on a time or geographical basis.*

## 5 Good practice and collaboration in highway maintenance

96. Like any physical asset, the highway network requires maintenance and renewal to counter deterioration. Planned, preventative maintenance, which involves resurfacing at regular intervals, is the most cost-effective method of keeping the road surface in good repair.<sup>190</sup> The consequence of delaying essential work on roads is often to increase the bill for fixing the problem in the future, as well as additional costs from public liability exposure.<sup>191</sup> In other words, as the DfT has said: “The costs of fixing the roads will rise exponentially if problems are left unattended—so holding back from work is truly a false economy”.<sup>192</sup> The figure below illustrates how, as roads are left to deteriorate to a greater state of disrepair, the costs of maintenance increases:<sup>193</sup>

Figure 6: Road maintenance costs and network condition



Source: DfT, Coventry City Council ([LRF0021](#))

### Legislation and guidance

97. Highway authorities have a legal duty for the upkeep of highways ‘maintainable at public expense’ (i.e. not private or unadopted roads) under section 41 of the Highways Act 1980, as amended. We heard some suggestions that this duty should be amended so that it better reflects a “requirement for long-term planning and efficient maintenance strategies” or, alternately—given how much time would be needed to amend primary legislation—that the Government should introduce a rigorous audit process linked to funding.<sup>194</sup> This view was not widely shared.<sup>195</sup>

190 More info, see: All Party Parliamentary Group on Highway Maintenance, [Managing a valuable asset: improving local road condition](#), October 2013

191 Asphalt Industry Alliance (AIA) ([LRF0044](#))

192 DfT, [Action for Roads](#), July 2013, para 1.43

193 Coventry City Council ([LRF0021](#))

194 Metis Consultants Ltd. ([LRF0024](#))

195 Only two pieces of written evidence referenced it in a negative way in addition to Metis: RAC Foundation ([LRF0037](#)); Lincolnshire County Council ([LRF0077](#))



98. There are two defences available to a highway authority faced with claims under section 41 for failure to maintain the highway: a common law defence and a statutory defence provided for in section 58 of the 1980 Act.<sup>196</sup> We heard some criticisms of section 58, particularly about it being out of date,<sup>197</sup> while others told us it is necessary to ensure that local authorities are not overrun with applications for compensation, which would drain even more resources than at present.<sup>198</sup> It is worth noting that section 58 ultimately derives from section 1 of the Highways (Miscellaneous Provisions) Act 1961. It was introduced not to give local authorities a ‘get out clause’ but to extend liability where it could be proven—prior to the introduction of section 1 of the 1961 Act local highway authorities could not be sued at all for failure to maintain the highway.<sup>199</sup>

99. Set up in 2011, the UK Roads Liaison Group (UKRLG) brings together national and local government from across the UK to consider road infrastructure engineering and operational matters. Steve Berry from the Department for Transport praised UKRLG as: “a repository of best practice ... a key group in terms of where we share best practice ... That has really been helpful”.<sup>200</sup>

100. The standards that must be followed by local highway authorities are set out in *Well-managed highway infrastructure: a code of practice*, which was published by UKRLG in October 2016.<sup>201</sup> Adoption of its recommendations is a matter for each highway authority, based on their own legal interpretation, risks, needs and priorities.<sup>202</sup> The three main features of the 2016 guidance are:

- a) The adoption of a risk-based approach, where authorities must assess their network needs, with the aim of maximising the serviceable life of assets and reducing the frequency of asset renewals.<sup>203</sup> This move, away from the prescriptive guidance to a risk-based approach, should, according to Zurich Insurance, “enable local authorities to better balance their resources with their own individual highways risks”.<sup>204</sup> CIHT said that “the risk-based approach is a much more comprehensive way of trying to determine priorities than just looking at single attributes”.<sup>205</sup> East Riding of Yorkshire Council, however, told us that the “move to a risk-based approach has been challenging and will take a few years to bed in”.<sup>206</sup>

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196 For full details, see section 4 of House of Commons Library briefing paper [Local road maintenance in England](#), CBP 8383, 19 February 2019

197 Lincolnshire County Council ([LRF0077](#))

198 Zurich Insurance Plc ([LRF0052](#))

199 There is a legal and historical description as to how this came about given [by Lord Molson at Second Reading](#) of what became the 1961 Act in the House of Lords on 5 July 1961.

200 [Q347](#)

201 UKRLG, [Well-managed highway infrastructure: a code of practice](#), October 2016; this replaced all previous guidance. The UKRLG also published the Highway Infrastructure Asset Management Guidance (HIAMG) in May 2013, which is aimed at local highway authorities and provides advice on how asset management principles may be used to support a more efficient approach to maintaining highway infrastructure assets. For more information, see: UKRLG, [Highway Infrastructure Asset Management Guidance \(HIAMG\)](#), May 2013

202 The Code of Practice is not statutory but provides highway authorities with guidance on highways management.

203 Leicestershire County Council ([LRF0058](#))

204 Zurich Insurance Plc ([LRF0052](#))

205 [Q33](#)

206 East Riding of Yorkshire Council ([LRF0060](#))

- b) The adoption of an integrated asset management approach to highway infrastructure, where highways authorities establish their own service standards based on a sound risk assessment using clear evidence of their asset condition and the local context in which the infrastructure exists.<sup>207</sup> CIHT explained that: “authorities will be trying to make sure that they invest the money where it is most needed. Sometimes that might not be in the street where the public would like it most, because, based on the data available, another bit of the network might need the money more urgently”.<sup>208</sup>
- c) National guidance to promote a joined-up approach between adjacent authorities.<sup>209</sup>

101. Adoption of the risk-based approach varies around the country, as do its perceived impacts on maintenance priorities and repair times. In January 2019 the RAC Foundation reported that:

- a) the risk-based approach had been widely adopted and would shortly be almost universal;
- b) almost all authorities still set minimum investigation levels (based on depth and width measurements) below which they will not assess potholes or assign response times based on the dangers they pose; and
- c) investigation levels vary considerably, with significant divisions between local authorities as to whether they would, for example, investigate further when a pothole was between 20–30mm deep.<sup>210</sup>

The Institute of Highway Engineers (IHE) expressed concerns that local authorities who have so far failed to adopt a risk-based approach to repairs risk an increase in their number of public liability claims.<sup>211</sup> The Local Government Transport Advisory Group (TAG) believes that an asset management approach of planned, preventative maintenance would see “large revenue spends on call centres, complaints and reactive teams replaced with smart systems and asset management”.<sup>212</sup>

102. As discussed in Chapter 2, some local authorities have told us that a lack of available funding has prevented them from fully implementing asset management approaches, leading to a significant reduction in planned programmes of preventative maintenance.<sup>213</sup> The levels of road surfacing frequency have yo-yoed over the years. The annual AIA ALARM survey revealed that in 2001 the average frequency of surfacing was 113 years in England and 33 years in London; that is now 79 years in England and 28 years in London, though there have been some variations in the years between.<sup>214</sup>

207 Institute of Highway Engineers ([LRF0020](#))

208 [Q32](#)

209 Oxfordshire County Council ([LRF0038](#))

210 RAC Foundation, “[Potholes. Does size matter?](#)”, 18 January 2019

211 Institute of Highway Engineers ([LRF0020](#))

212 Local Government Technical Advisors Group (LGTAG) ([LRF0023](#))

213 The Road Surface Treatments Association ([LRF0008](#)); Thurrock Council ([LRF0012](#)); Urban Transport Group ([LRF0013](#)); Institute of Highway Engineers ([LRF0020](#)); Oxfordshire County Council ([LRF0038](#)); Asphalt Industry Alliance (AIA) ([LRF0044](#)); Zurich Insurance Plc ([LRF0052](#)); Surrey County Council ([LRF0062](#)); Kent County Council ([LRF0068](#))

214 For example, it fell to 55 years in England in 2017, rising to 92 years in 2018, before falling again; see: AIA, Annual Local Authority Road Maintenance (ALARM) Survey 2001, 4 April 2001; [Annual Local Authority Road Maintenance Survey 2018](#), 20 March 2018, p13; [Annual Local Authority Road Maintenance Survey 2019](#), 26 March 2019, p13

## Contract management

103. Many local authorities contract-out road surfacing, while others perform the function in-house. We heard about the pros and cons of a range of practices. For example, Lynne Wait from the South West Highways Alliance told us that across the South West there is “a whole range of delivery models from very light-touch clients through to in-house” and that in her own authority of Poole, most services are delivered in-house.<sup>215</sup> Anne Shaw from Transport for the West Midlands described a similar picture across that region. She explained:

Some authorities have the capacity [to do in-house works], some have a smaller capacity in putting together programmes and contracting out the delivery of those sorts of things. At the moment, for each authority responsible for that maintenance, there are different levels of capacity that probably need to be looked at to ensure that we get best value across the region and can support each other where we have other organisations that have access to the labour that can do the improvements.<sup>216</sup>

104. Andrew Haysey said that Gateshead Council, as part of a procurement organisation called the North East Procurement Organisation (NEPO), used an in-house contractor who subcontracts some work, like surfacing, to third parties.<sup>217</sup> Andrew Loosemore told us that Kent County Council used third-party highways maintenance contractors, who were performance-managed through “a suite of indicators”:

The current contract has about 35 live performance indicators that we monitor on a monthly basis. There is a financial incentive around those not to fail, and to deliver a good service for us.<sup>218</sup>

105. Where local authorities use contracts, it is critical that they are driving value for money and achieving effective resurfacing. Third party contractors need to be properly supervised and the contracts need to have incentives and oversight mechanisms to ensure that works are effective.<sup>219</sup> Stephen Hall told us about Cumbria’s mixed model, which involves a core in-house service to provide responsive maintenance (e.g. pothole fixing) and third party framework contracts for things like surface dressing and larger-scale civil engineering projects.<sup>220</sup> Mr Hall explained the importance of establishing that “both the client and the contractor are commercially important to each other”:

The issue of importance to each other commercially drives behaviours that become more important than key performance indicators and penalty clauses, because they say, ‘We are invested in solving a problem’, as opposed to defending a position.<sup>221</sup>

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215 [Q250](#)

216 [Q274](#)

217 [Q250](#)

218 [Q250](#)

219 Highways England uses a contractual framework for work on the SRN that includes both financial rewards and penalties, depending on performance against the agreed cost of work undertaken. There is also a process of redress for poor quality, including non-compliance with contract, standards or statutory obligation. This ranges from contractors having to bear the cost of correcting defective work through to contract termination [[Roads: Repairs and Maintenance: Written question - HL14913](#), 10 April 2019]

220 [Q250](#)

221 [Q250](#)

Lynne Stinson told us that Leicestershire has a similar mixed model to Cumbria and that for large schemes it is part of the Midlands Highways Alliance:

All our big maintenance or improvement schemes go out through that. It has a full set of KPIs, but it also has community. We have collaboration meetings and board meetings; we have joint working groups with the contractors, so we are building up that relationship. We are developing relationship management plans with most of those contractors as well. It is all about working together to deliver schemes.<sup>222</sup>

Transport for London works on a similar basis; Patrick Doig told us that TfL has in-house expert engineers, asset managers and inspectors, but maintenance and upgrade works are contracted out. He explained how the contracts are managed:

We give the contractor a fixed amount of money every month for a set of service standards around routine things. It provides a level of risk transfer to the private sector to deliver against those activities and all the maintenance that we call off specifically ourselves.

Similarly, there is a range of performance matrices. With our current set of seven-year contracts we are trying to have a more collaborative alliance approach that is slightly less contractualised and more around working together to a common set of overall outcomes over the life of the contract.<sup>223</sup>

## Collaboration

106. Stakeholders told us that all councils should engage with good industry practice and new products and process innovations that would enable them to get “more for less”.<sup>224</sup> Further, sustained and effective collaboration, and sharing of knowledge and resources between the local and regional alliances can support and enable the development of best practice approaches and enable their deployment with an appropriate consistency.<sup>225</sup> There are good examples of this. For example, Coventry City Council told us about the Midland Service Improvement Group (MSIG), which supports and enables the development of best practice approaches and their consistent deployment; the MSIG Highway Maintenance and Asset Management Task Group has worked to develop a set of high-level principles for a risk-based approach to safety inspections and defect response times.<sup>226</sup> The London Highways Alliance Contract, developed as a joint initiative between TfL and London’s boroughs, extends collaboration by encouraging the four area-based contractors and 34 highway authorities to work together across boundaries, provide joint support, share best practice and success factors in performance and encourage innovation across and through the supply chain.<sup>227</sup>

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222 [Q250](#)

223 [Q274](#)

224 The Road Surface Treatments Association ([LRF0008](#))

225 Midland Service Improvement Group ([LRF0063](#))

226 Coventry City Council ([LRF0021](#))

227 Transport for London ([LRF0086](#))

107. More widely, the Road Surface Treatment Association (RSTA), the Association of Directors of Environment, Economy, Planning and Transport (ADEPT), and the Local Councils Road Innovation Group (LCRIG) are further examples of well-developed and effective collaboration across the highway sector.<sup>228</sup> Steve Berry from the Department for Transport told us that it does “quite a lot of work” with these sector groups and that where it supports projects (such as Live Labs), it wants to share the work and ultimately results of such projects “across all highway authorities. Any highway authority is open to go and see what is actually happening, so that maybe they can replicate it”.<sup>229</sup>

108. Stakeholders suggested that in addition to the improvement and implementation of new guidance, the Highways Maintenance Efficiency Programme (HMEP)<sup>230</sup> promotes collaboration across the sector and has produced several useful improvement products.<sup>231</sup> However, some witnesses told us that it requires more funding and support from central government if it is to achieve its full potential.<sup>232</sup> More generally, Patrick Doig from TfL advised us that for all the good work happening at local and regional levels, more could be done nationally:

... to harmonise approaches across the country so that we can make sure we have a consistent approach that particularly helps address the risk of liability or claims that could be exploited if different authorities do things in different ways, and enables us to defend that in a robust and consistent manner.<sup>233</sup>

109. On 31 March 2019 the Department for Transport announced a ‘Review and Audit Group’ in liaison with the highways sector to ensure the adoption of good practice.<sup>234</sup> Steve Berry from the DfT explained that the group is intended to assess the effectiveness of the incentive element of local highway maintenance funding (see Chapter 2, above) in encouraging asset management, best practice, collaboration and more standardisation of contracts and how to take it forward from 2021.<sup>235</sup>

**110. It is too early to judge what the shift to a risk-based approach will mean for local authority resourcing and effectiveness. We got no clear picture of whether authorities understand what resources they need and the cultural change associated with it. This is unsurprising given that it has taken more than two years for the adoption of the new approach to become widespread. We are concerned that we may have simply replaced the need for prescriptive guidance on asset management with a need for prescriptive guidance on risk assessment. Making the best use of available funding requires the sharing and adoption of good practice. We conclude this is a key role for Government. We recommend that the Department continue to monitor the move to a risk-based approach. By the end of 2021 it should publish a report setting out what effect the risk-based approach has had, how local authorities have adapted and adjusted and whether it has improved their efficiency and effectiveness.**

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228 Midland Service Improvement Group ([LRF0063](#))

229 [Q344](#)

230 For more information, see: <http://www.highwaysefficiency.org.uk/>

231 Metis Consultants Ltd. ([LRF0024](#)); Devon County Council ([LRF0031](#)); Local Government Association ([LRF0053](#)); Midland Service Improvement Group ([LRF0063](#))

232 Oxfordshire County Council ([LRF0038](#)) and Herefordshire Council ([LRF0055](#))

233 [Q271](#)

234 DfT press notice, “[£201 million road repair fund to resurface extra 1,000 miles](#)”, 31 March 2019

235 [Q348](#)

111. It is clear to us that local councils and industry are developing good practice in highway survey and maintenance. However, from the evidence we have received it is not always clear that this is being shared widely. We welcome the improvements made in this regard by regional highway alliances, but we think this should be taken further. Where alliances are developing their own good practice, they should be sharing this and benchmarking it against one another. The DfT could do more to facilitate this, for example by providing a virtual good practice toolkit and repository so that councils across England can find examples of good practice by road type, maintenance method etc. along with contact information for the relevant council or alliance.

112. **We welcome the DfT's announcement of 31 March 2019 of a new guide on best practice in pothole repair, developed with the Association of Directors of Environment, Economy, Planning and Transport and the establishment of a 'Review and Audit Group', in liaison with the highways sector, to ensure the adoption of good practice through the innovation strand of local highway funding. *We recommend that the DfT set clear goals for what it wants the guide and the group to achieve. It should set and publish measurable targets. Within 12 months of the publication of the guide and the establishment of the group, the Department should report on the effectiveness of the guide and group, how they have performed against the goals and targets initially set out for them, and what they have achieved.***

# Conclusions and recommendations

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## The road network

1. Almost every journey begins and ends on local roads. The English Local Road Network (ELRN) is of critical importance in connecting people and driving economic growth. We agree with the then Roads Minister that the ELRN should be treated as an important national asset. Like any asset, it must be managed appropriately. While the ELRN is a national asset, its value as a local asset must not be overlooked. Individuals, families and communities depend on their local road network and it acts as the key arterial system that drives economic growth in our villages, towns and cities. (Paragraph 14)
2. There is unnecessary tension between central and local government—one of which controls the funding for maintaining the ELRN and the other that has responsibility for doing the work. (Paragraph 15)
3. While there was no agreement amongst our witnesses about the governance arrangements for the ELRN, there was some evidence that a profusion of highway authorities, particularly in areas where there are now multiple levels of accountability (e.g. Mayoral Combined Authorities), adds to confusion and diminishes transparency. *We recommend that the Government commission an independent review of local highway responsibilities, to evaluate whether current responsibilities sit at the right level. We recommend that the review be completed within 9 months and that the Government respond to it within 12 weeks, setting out what actions it will take as a result.* (Paragraph 16)
4. Evidence shows that over the past 20 years spending on maintenance has increased and councils are getting more for their money as the cost of repairing and maintaining roads has fallen. However, the ‘one time catch up’ cost of repairing local roads—now over £9 billion—has seen a moderate increase and local authorities face a significant budgetary shortfall on the completion of necessary works. Road users’ lived experience is at odds with official data—drivers, cyclists and pedestrians all report large numbers of defects, and public portals like ‘Fix My Street’ name and shame egregious examples of maintenance failure. (Paragraph 28)
5. In the past year local authorities paid out £22.5 million in compensation claims for damages arising because of defects in the road surface. We believe this taxpayers’ money would be better spent upgrading the road network and that the case for better maintenance, which should lead to fewer pay outs, is clear. (Paragraph 29)
6. The fact that the ELRN has been allowed to decay to the point where it would take more than a decade to bring it up to a reasonable standard is a national scandal that shows a dereliction of duty by successive governments and individual local councils. The Government must act now to remedy this. (Paragraph 30)

## Funding and expenditure

7. We conclude that the current short-term approach to funding local road maintenance is not fit for purpose. (Paragraph 60)
8. We welcome the work the Department for Transport has been doing with the Ministry for Housing, Communities and Local Government and the Chartered Institute of Public Finance and Accountancy on the fair funding review and capitalisation rules, to enable capital funding to be spent on things like pothole repairs. (Paragraph 62)
9. We welcome the then Minister's statement that he would like to see a five-year funding settlement for local roads. *We recommend that the Department should propose a front-loaded, long-term funding settlement to the Treasury as part of the forthcoming Spending Review so that local authorities can address the historic road maintenance backlog and plan confidently for the future. However, we are clear that this must not be an excuse for a budget cut. We recommend the Treasury give the proposal serious consideration given that proactive maintenance provides better value for money than reactive maintenance. We consider it critical that the DfT engage with MHCLG to roll up the revenue support elements of roads funding into a five-year settlement.* (Paragraph 63)
10. The DfT should take the lead on consulting with local authorities about the exact nature of a five-year settlement. This should include whether they would like to see a 'totex' allocation (i.e. funding that can be spent on capital or revenue, with no restrictions) and whether they want it to be ring-fenced for spending only on roads. It is important that innovation, collaboration and best practice are properly incentivised through any settlement; this should be part of any consultation. The DfT should also include London councils in the consultation to seek their views on whether the London funding settlement is fit for purpose. (Paragraph 64)
11. The then Minister told us that in future, local authorities should be able to borrow against a five-year settlement, allowing them to raise more money to spend on road maintenance. While we welcome this idea in principle we are concerned as to how it would work in practice, given local authorities would still have to repay lenders and roads do not currently generate income. *We recommend that in its response to this Report the Department set out what borrowing against a multi-year settlement would mean for local authorities and how such a scheme could work.* (Paragraph 65)

## Innovation

12. Innovation is essential if the efficiency and effectiveness of local road maintenance is to continue to improve, which it must in the face of limited funding. It is right that the Government stimulates and encourages innovation but the value for money of any investment in innovation is only properly repaid when new technologies, ideas and ways of working are scaled up and available to all. *We recommend the DfT, BEIS and Innovate UK collaborate to collate all innovation funding for local roads in one place and effectively disseminate this to local highway authorities. They should establish as far as possible common rules for bidding and assessment to allow local authorities to marshal their resources effectively, and achieve efficiencies and*



*economies of scale in the bidding process. We also recommend that the Government consider how it monitors the innovations it funds and what it needs to do to ensure that a greater proportion of innovations are made available on the widest possible basis. (Paragraph 74)*

13. We welcome the DfT's support for a new digital hub for experts to share and develop innovations. We want to see this active as soon as possible and ask the DfT in its response to this Report to set out how it will be funded, what it is expected to achieve, and how its effectiveness will be assessed. *We recommend that DfT produce a report, within 12 months of the hub going live, that assesses the costs and benefits of the new digital hub. (Paragraph 75)*
14. *We recommend that the Department set out a timeline to show their expectation of how connected and autonomous vehicle technologies will evolve and enter service. This should include the R&D, setting of standards, procurement and deployment of infrastructure on roads needed to support CAVs, maintenance and management of such infrastructure through its lifecycle and showing how additional technology deployed in the roadway affects maintenance and renewal processes. This could be a useful supplement to the Department's ongoing work around the Future of Mobility. (Paragraph 76)*

### Data collection and use

15. We believe that local authorities will only be able to make better use of available funds for road maintenance if they can target such funding well; this requires good data. Some of the data local authorities collect on the condition of the road network is passed to the Department for Transport. We are not confident that this data gives the DfT a true picture of the state of the local roads or that any comparison of areas would compare 'like with like' and allow meaningful conclusions to be drawn. (Paragraph 92)
16. We welcome the DfT's review of road condition surveying data and technology. *We recommend that, given the previous Minister's concerns about whether third party data is reliable, the DfT conduct an analysis of the merits of collecting richer data from local authorities and what cost this would represent to the taxpayer. (Paragraph 93)*
17. *We recommend that, in its response to this Report, the Department explain whether the data it receives from local authorities on road condition is consistent and allows valid comparisons to be made, what it does with such data, how it is analysed and what action is taken on the back of conclusions that it draws. (Paragraph 94)*
18. Irrespective of the Department's view on the merits of it collecting and publishing further data, it should make it easier for the public to report road condition concerns and access local authority road condition data. *We recommend that DfT run an innovation competition to develop a platform that the public can use to make online reports about road condition direct to the relevant council and access real-time local road condition data. It could be searchable by factors such as council, constituency and postcode. It could also be used by councils to monitor their own performance and to generate data to allow them to benchmark on a time or geographical basis. (Paragraph 95)*

### Good practice and collaboration in highway maintenance

19. It is too early to judge what the shift to a risk-based approach will mean for local authority resourcing and effectiveness. We got no clear picture of whether authorities understand what resources they need and the cultural change associated with it. This is unsurprising given that it has taken more than two years for the adoption of the new approach to become widespread. We are concerned that we may have simply replaced the need for prescriptive guidance on asset management with a need for prescriptive guidance on risk assessment. Making the best use of available funding requires the sharing and adoption of good practice. We conclude this is a key role for Government. *We recommend that the Department continue to monitor the move to a risk-based approach. By the end of 2021 it should publish a report setting out what effect the risk-based approach has had, how local authorities have adapted and adjusted and whether it has improved their efficiency and effectiveness.* (Paragraph 110)
  
20. We welcome the DfT's announcement of 31 March 2019 of a new guide on best practice in pothole repair, developed with the Association of Directors of Environment, Economy, Planning and Transport and the establishment of a 'Review and Audit Group', in liaison with the highways sector, to ensure the adoption of good practice through the innovation strand of local highway funding. *We recommend that the DfT set clear goals for what it wants the guide and the group to achieve. It should set and publish measurable targets. Within 12 months of the publication of the guide and the establishment of the group, the Department should report on the effectiveness of the guide and group, how they have performed against the goals and targets initially set out for them, and what they have achieved.* (Paragraph 112)

# Formal minutes

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**Tuesday 25th June 2019**

Members present:

Lilian Greenwood, in the Chair

Ruth Cadbury

Graham Stringer

Robert Courts

Draft Report (*Local roads funding and maintenance: filling the gap*), proposed by the Chair, brought up and read.

*Ordered*, That the draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 112 read and agreed to.

Summary agreed to.

*Resolved*, That the Report be the Tenth Report of the Committee to the House.

*Ordered*, That the Chair make the Report to the House.

*Ordered*, That embargoed copies of the Report be made available, in accordance with the provisions of Standing Order No. 134.

[Adjourned till Wednesday 3 July at 9.15am

## Witnesses

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The following witnesses gave evidence. Transcripts can be viewed on the [inquiry publications page](#) of the Committee's website.

### Monday 19 November 2018

**Darren Shirley**, Chief Executive, Campaign for Better Transport, **Roger Geffen**, Policy Director, Cycling UK, **Rick Green**, Chair, Asphalt Industry Alliance, **Mark Stevens**, Chair of the Engineering Board, Association of Directors of Environment, Economy, Planning and Transport, **Matthew Lugg**, President, Chartered Institution of Highways & Transportation

[Q1–76](#)

### Monday 3 December 2018

**Paula Clayton-Smith**, Managing Director, Gaist, **Paul Fleetham**, Managing Director Contracting, Tarmac, **Richard Hayes**, Chief Executive, Institute of Highway Engineers, **Howard Robinson**, Chief Executive, Road Surface Treatment Association, **Alex Wright**, Group Manager, Transport Research Laboratory, Road Condition Management Group

[Q77–210](#)

### Wednesday 27 February 2019

**Stephen Hall**, Assistant Director Economy and Environment, Economy & Infrastructure, Cumbria County Council, **Andrew Haysey**, Transport Planning Manager, Gateshead Council, **Andrew Loosemore**, Head of Highways Asset Management, Kent County Council, **Lynne Stinson**, Team Manager, Assets and Major Programmes Team, Leicestershire County Council, **Lynne Wait CEng MICE**, Interim Engineering Manager, Growth and Infrastructure, Borough of Poole, on behalf of South West Highway Alliance, **Danny Rawle**, Highways Asset Management Engineer, Coventry City Council, **Stephen Skinner CEng MICE**, Head of Highway Services, Enfield Council, **Patrick Doig**, Divisional Finance Director for Surface Transport, Transport for London (TfL), **Anne Shaw**, Director of Network Resilience, Transport for the West Midlands (TfWM)

[Q211–293](#)

### Wednesday 24 April 2019

**Jesse Norman MP**, Minister of State, and **Steve Berry OBE**, Head of Highways Maintenance, Innovation, Resilience, Light Rail and Cableways Branch, Department for Transport

[Q294–365](#)

## Published written evidence

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The following written evidence was received and can be viewed on the [inquiry publications page](#) of the Committee's website.

LRF numbers are generated by the evidence processing system and so may not be complete.

- 1 Asphalt Industry Alliance (AIA) ([LRF0044](#))
- 2 Association for Consultancy and Engineering (ACE) ([LRF0046](#))
- 3 Association of Directors of Environment, Economy, Planning and Transport (ADEPT) ([LRF0028](#))
- 4 Automobile Association ([LRF0045](#))
- 5 Balfour Beatty ([LRF0076](#))
- 6 Mr Frank Bedford ([LRF0087](#))
- 7 Mr Frank Bedford ([LRF0091](#))
- 8 The Bluebell Christian Spiritual Church ([LRF0066](#))
- 9 British Ports Association (BPA) ([LRF0073](#))
- 10 Bury Council ([LRF0057](#))
- 11 Campaign for Better Transport ([LRF0033](#))
- 12 Mr Chris Capps ([LRF0017](#))
- 13 Cheshire East Council ([LRF0070](#))
- 14 CIHT ([LRF0025](#))
- 15 Coventry City Council ([LRF0021](#))
- 16 Cycling UK ([LRF0064](#))
- 17 Department for Transport ([LRF0035](#))
- 18 Devon County Council ([LRF0031](#))
- 19 Mr Keith Dixon ([LRF0071](#))
- 20 East Riding of Yorkshire Council ([LRF0060](#))
- 21 Dr Bill Edwards ([LRF0005](#))
- 22 Mr Roger Elphick ([LRF0034](#))
- 23 Federation of Small Businesses ([LRF0054](#))
- 24 Freight Transport Association ([LRF0078](#))
- 25 Gaist ([LRF0042](#))
- 26 Gaist ([LRF0096](#))
- 27 Mr Dave Gaster ([LRF0032](#))
- 28 Gateshead Council ([LRF0075](#))
- 29 Mr Andy Graham ([LRF0002](#))
- 30 Hampshire County Council ([LRF0041](#))
- 31 Herefordshire Council ([LRF0055](#))
- 32 Mr Ian Hollidge ([LRF0048](#))
- 33 IAM RoadSmart ([LRF0022](#))

- 34 Institute for Transport Studies and measure2improve ([LRF0067](#))
- 35 Institute for Transport Studies and measure2improve ([LRF0089](#))
- 36 Institute of Highway Engineers ([LRF0020](#))
- 37 ITS United Kingdom ([LRF0088](#))
- 38 Jacobs & Volterra ([LRF0085](#))
- 39 Mr C Jones ([LRF0084](#))
- 40 Mr Nigel Jones ([LRF0006](#))
- 41 JPCS Ltd ([LRF0016](#))
- 42 Kent County Council ([LRF0068](#))
- 43 Leicestershire County Council ([LRF0058](#))
- 44 Lincolnshire County Council ([LRF0077](#))
- 45 Linhay Consultancy Ltd ([LRF0014](#))
- 46 Liverpool City Council ([LRF0050](#))
- 47 Liverpool City Region Combined Authority ([LRF0072](#))
- 48 Living Streets ([LRF0047](#))
- 49 Local Government Association ([LRF0053](#))
- 50 Local Government Technical Advisors Group (LGTAG) ([LRF0023](#))
- 51 London Borough of Islington ([LRF0059](#))
- 52 London Councils ([LRF0079](#))
- 53 Luton Borough Council ([LRF0036](#))
- 54 Metis Consultants Ltd. ([LRF0024](#))
- 55 Midland Service Improvement Group ([LRF0063](#))
- 56 Mr Patrick Moore ([LRF0090](#))
- 57 Mr Mark Morrell ([LRF0026](#))
- 58 Norfolk County Council ([LRF0056](#))
- 59 North East Combined Authority ([LRF0049](#))
- 60 Northumberland County Council ([LRF0040](#))
- 61 Oxfordshire County Council ([LRF0038](#))
- 62 Mrs Kay Parton ([LRF0009](#))
- 63 RAC Foundation ([LRF0037](#))
- 64 RAC Motoring Services ([LRF0018](#))
- 65 RCMG-supplementary written evidence ([LRF0092](#))
- 66 Suzy Richards ([LRF0019](#))
- 67 Ringway Infrastructure Services Ltd ([LRF0095](#))
- 68 Road Condition Management Group (subgroup of the UK Roads Board) ([LRF0051](#))
- 69 Road Haulage Association Ltd ([LRF0027](#))
- 70 Road Safety Markings Association ([LRF0082](#))
- 71 Road Safety Markings Association ([LRF0093](#))

- 72 The Road Surface Treatments Association ([LRF0008](#))
- 73 Rochdale Borough Council ([LRF0043](#))
- 74 Mr David Snow ([LRF0003](#))
- 75 South West Highway Alliance ([LRF0080](#))
- 76 Mr John Stillman ([LRF0004](#))
- 77 Street Works UK ([LRF0081](#))
- 78 Suffolk County Council ([LRF0029](#))
- 79 Surrey County Council ([LRF0062](#))
- 80 Sustrans ([LRF0010](#))
- 81 Tarmac ([LRF0083](#))
- 82 Christopher and Nicole Taylor ([LRF0011](#))
- 83 Christopher and Nicole Taylor ([LRF0097](#))
- 84 Thurrock Council ([LRF0012](#))
- 85 Transport for London ([LRF0086](#))
- 86 Transport for the North ([LRF0039](#))
- 87 Transport for West Midlands (TfWM) ([LRF0074](#))
- 88 Urban Transport Group ([LRF0013](#))
- 89 W.D.M Limited ([LRF0094](#))
- 90 West Yorkshire Highway Authorities ([LRF0030](#))
- 91 Zurich Insurance Plc ([LRF0052](#))

## List of Reports from the Committee during the current Parliament

All publications from the Committee are available on the [publications page](#) of the Committee's website. The reference number of the Government's response to each Report is printed in brackets after the HC printing number.

### Session 2017–19

First Report	Community transport and the Department for Transport's proposed consultation	HC 480 (HC 832)
Second Report	Improving air quality	HC 433 (HC 1149)
Third Report	Airports National Policy Statement	HC 548 (Cm 9624)
Fourth Report	Rail Infrastructure investment	HC 582 (HC 1557)
Fifth Report	Intercity East Coast rail franchise	HC 891 (HC 1729)
Sixth Report	Appointment of the Chair of the Office of Rail and Road	HC 1510 (HC 1859)
Seventh Report	Rail timetable changes: May 2018	HC 1163 (HC 1939)
Eighth Report	Mobility as a Service	HC 590 (HC 1984)
Ninth Report	Bus services in England outside London	HC 1425
First Special Report	Vauxhall Zafira fires: Government Response to the Committee's Tenth Report of Session 2016–17	HC 516
Second Special Report	Community transport and the Department for Transport's proposed consultation: Government Response to the Committee's First Report of Session 2017–2019	HC 832
Third Special Report	Improving air quality: Government Response to the Committee's Second Report of Session 2017–2019	HC 1149
Fourth Special Report	Rail infrastructure investment: Government and Office of Rail and Road Responses to the Committee's Fourth Report of Session 2017–19	HC 1557
Fifth Special Report	Intercity East Coast franchise: Government Response to the Committee's Fifth Report of Session 2017–19	HC 1729
Sixth Special Report	Appointment of the Chair of the Office of Rail and Road: Government Response to the Committee's Sixth Report	HC 1859
Seventh Special Report	Rail timetable changes: Government and Office of Rail and Road Responses to the Committee's Seventh Report	HC 1939
Eighth Special Report	Mobility as a Service: Government Response to the Committee's Eighth Report	HC 1984