



House of Commons
Committee of Public Accounts

Maintaining strategic infrastructure: roads

Fifteenth Report of Sessions 2014–15

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

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Committee of Public Accounts

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Committee staff

The current staff of the Committee is Sarah Petit (Clerk), Claire Cozens (Committee Specialist), James McQuade (Senior Committee Assistant), Ian Blair, Sue Alexander and Jamie Mordue (Committee Assistants) and Janet Coull Trisic (Media Officer).

Contacts

All correspondence should be addressed to the Clerk, Committee of Public Accounts, House of Commons, 7 Millbank, London SW1P 3JA. The telephone number for general enquiries is 020 7219 5708; the Committee’s email address is pubaccomm@parliament.uk

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Summary

The Department for Transport (the Department) and the Highways Agency (the Agency) are making progress in improving the way in which road maintenance is carried out, but more needs to be done. The Department's piecemeal and stop-go approach to funding for road maintenance in recent decades has made it difficult for highways authorities to deliver maintenance cost-effectively, with too much reactive work in response to flooding and other events and not enough focus on preventative work that is less expensive in the long-term. Too many highways authorities are not basing their road maintenance programmes on good information and planning. Public satisfaction with the condition of our roads is at the lowest level since the survey assessing confidence began. However, we recognise that the Department is seeking to make funding more stable and predictable, which should help highways authorities to plan maintenance works more effectively. The Department is working to promote consistent good practice in local road maintenance but performance still varies between authorities.

Conclusions and Recommendations

1. The strategic and local road networks are England's most valuable infrastructure asset. They are valued at approximately £344 billion, and are made up of roads and other infrastructure such as bridges, embankments and drainage systems. The Highways Agency, which is an executive agency of the Department, is responsible for maintaining the strategic road network (4,400 miles), which includes almost all of England's motorways and its most important 'A' roads. The remaining local roads (183,000 miles) are maintained by 152 local highway authorities. In 2012-13 public spending on maintaining England's roads was £4 billion; of which the Agency spent £720 million (capital and revenue) and the Department provided £779 million capital for local highway authorities' road maintenance. The remainder was paid for from local authorities' other resources.

2. **The Department's unpredictable and fluctuating budgets for road maintenance over decades¹ have put value for money at risk.** Following the Spending Review 2010, the Department cut road maintenance budgets by £1.2 billion over the four years from April 2011. Since then it has intermittently made available a total of £1.1 billion additional funding on nine separate occasions for various reasons, including in response to flooding or winter damage to the roads. Infrastructure UK has reported that savings of 10-20% are associated with certainty of funding. It costs £52 to fill in a pothole (or £70 in London), yet it cost £31.6 million in 2013/14 to pay and process compensation claims from road users for damages arising from poor road conditions. The Department is taking steps to make its funding more certain in the future. It is in the process of changing the Agency's status to a limited company, with funding settlements of at least five-years and it has set out its capital allocation for local road maintenance: £976 million a year for the six years from April 2015.

Recommendation:

- *The Department should hold the new Highways Agency to account for delivering the improved value for money that should be achievable given the certainty that will be provided by the planned funding reforms.*

 - *The Department should keep to the long-term budget allocations it has set out for local highway authorities to enable them and the supply chain to plan ahead confidently and efficiently.*
3. **The Department has promoted best practice in local road maintenance but performance still varies locally.** The Department is funding a Highways Maintenance Efficiency Programme, which reinforces the need for authorities to plan long-term preventative maintenance based on good information on the condition of the infrastructure. The Department also encourages collaboration between highway authorities. Two thirds of local highway authorities have

1 C&AG's Report, *Management of Road Maintenance*, HC 438, Session 1990-91, 15 May 1991; [C&AG's Report, Maintaining England's Motorways and Trunk roads, HC 431](#), Session 2002-03, 5 March 2003, Figure 10, p 23; [C&AG's Report, Funding for local transport: an overview, HC 629](#), Session 2012-13, 25 October 2012, Paras 8, 1.15-1.17

formed alliances with other authorities which has reduced their costs. However, not all local authorities have adopted good practice and the Programme is not sufficiently targeted at assisting poor performing authorities. For example, 45 local highway authorities had not completed an asset management plan setting out the state of their roads. Public satisfaction with the condition of roads and the speed and quality of repairs stands at the lowest level since the survey began in 2008.

Recommendation:

- *The most effective way in which the Department can influence practice is through its funding of road maintenance. The Department should use the way it allocates its funding to incentivise efficiency and collaboration and it should not fund poor performance.*
- *The Department should identify those local highway authorities that carry out maintenance less efficiently and target the Highways Maintenance Efficiency Programme at them.*

4. **A lack of information and understanding of road infrastructure and the costs of maintenance hinders decision-making on when and where it is best to spend the money.** A good understanding of the state of the roads is absolutely essential for planning cost-effective preventative maintenance. Yet the Agency holds no information on 70% of its drainage systems. There are too many gaps in highways authorities' information about what road infrastructure assets they have and what condition they are in; and there is an inadequate understanding of how different types of infrastructure (apart from road surfaces) deteriorate over time. Some highways authorities have taken steps to improve their information but further work is needed.

Recommendation:

- *The Department should work with local highway authorities to ensure that they all develop appropriate data and understanding of their road infrastructure.*
- *The Agency should also improve its understanding of its road infrastructure, how this deteriorates over time and the costs of maintenance interventions.*

5. **Whilst we understand the unpredictable nature of winter weather, too much road maintenance is inefficient because it is reactive and unplanned.** At present too much road maintenance is carried out in the winter months between December and March at the end of the financial year. The Highways Agency spent 3% of its maintenance budget in April 2013 and 21% the following March. Concentrating activity in a few months and doing the work in the winter is inefficient and costly. Long-term programmes of preventative work are the most efficient way of maintaining road infrastructure. While there will always be a need to perform some emergency and reactive maintenance, highways authorities need to plan and prioritise their maintenance activities over the whole life of their road infrastructure assets to get best value for money. Some local highway authorities have built up their information and understanding so they can plan and prioritise work efficiently, but others are still far too reactive to events, rather than anticipating, predicting and preventing disrepair. In

addition, the Department and the Agency recognise the need for a more even spread of maintenance work across the year.

Recommendation:

- *The Department should ensure that Government funding promotes and supports the more even spread of expenditure over the year, with work carried out during the time when costs can be minimised.*
- *The Highways Agency should develop longer-term plans for preventative maintenance and streamline its annual planning process to spread work more evenly across the year.*
- *The Department should use the Highways Maintenance Efficiency Programme to help local authorities quantify the benefits of more preventative work and to anticipate problems rather than react to them.*

6. Routine maintenance is essential to deal with increasingly frequent severe weather and to prevent long-term damage to infrastructure but a fall in the proportion of revenue funding to capital funding risks a reduction in this type of maintenance. Essential routine maintenance activities such as inspections, clearing drains and winter gritting can only be paid for from revenue funds. Maintaining good drainage, in particular, is vital to reducing flooding as well as preventing costly damage to road infrastructure from water penetration. The Agency's revenue spending was 29% lower in 2012-13 than it was in 2010-11. Although local authorities' capital funding has increased slightly, their revenue funding from central government reduced by around a third over the four years of the 2010 spending review, and it is set to fall by a further 10% from 2015-16 to 2020-21.

Recommendation:

- *The Department should ensure the Highways Agency has the right balance of revenue and capital funding to enable it to carry out essential routine maintenance activities.*
- *The Department for Transport and the Department for Communities and Local Government should examine the cumulative impact of their combined funding decisions on local authorities' road maintenance, and they should adjust their approach accordingly to support essential routine road maintenance activities.*

1 Funding for road maintenance

1. On the basis of a Report by the Comptroller and Auditor General, we took evidence from the Department for Transport (the Department) and the Highways Agency (the Agency) on the maintenance of England's road infrastructure.²

2. England's strategic and local road networks are made up of 187,000 miles of roads, 61,000 bridges and numerous other infrastructure assets including embankments, retaining walls, and drainage systems. The strategic road network, which includes almost all motorways and the most important 'A' roads, consists of 4,400 miles of road with 9,000 bridges. The remaining local roads are 183,000 miles long, including 113,000 miles of urban backstreets and rural lanes. The combined networks carry 90% of passenger traffic and 68% of freight movements and are the nation's most valuable infrastructure asset at around £344 billion. Just under 1% of the asset value (£4 billion) was spent on maintaining England's roads in 2012-13.³

3. The Department is responsible for operating, maintaining and improving the strategic road network through the Agency. In 2012-13, the Agency received £2 billion from the Department and £68 million from other sources, of which it spent £720 million on maintenance.⁴ Local roads are managed and maintained by 152 local highway authorities, including Transport for London. The Department sets the legislative and policy framework and provides guidance on network management to local highway authorities. The local highway authorities spent £3.3 billion on maintaining local roads in 2012-13, including £779 million capital funding provided by the Department. Local authorities' revenue funding comes mainly from the Department for Communities and Local Government, council tax and a share of business rates that they retain. Authorities use this funding for a range of services, including road maintenance.⁵

4. In 2012, we reported in *Reducing costs in the Department for Transport* that the Department cut road maintenance budgets by £1.2 billion over the four years to March 2015.⁶ We concluded that the Department did not have a full understanding of the likely impact of these reductions, and that these reductions risked deterioration of the road network and higher costs in the long run.⁷ The Department and Agency told us that since then, highways authorities have taken a range of actions to reduce their maintenance expenditure.⁸ For example, the Agency told us that instead of requiring its contractors to keep incident support staff on standby around the clock, it now specifies that roads should be kept operational. This means that staff are now able to do other work, such as grass cutting, when they are not needed to deal with incidents on the network. We were also told that some highway authorities are

2 [C&AG's Report, *Maintaining strategic infrastructure: roads*, HC 169 Session 2014-15, 6 June 2014](#)

3 [Q 1; C&AG's report, Key facts, para 1](#)

4 [C&AG's report, para 1.6](#)

5 [Qq 44, 66; C&AG's report, paras 1.7-1.9](#)

6 [Committee of Public Accounts, *Reducing costs in the Department for Transport*, Seventy-first Report of Session 2010-12, HC 1760, 13 March 2012](#)

7 [Committee of Public Accounts, *Reducing costs in the Department for Transport*, para 5](#)

8 The term 'highways authorities' refers to the Agency together with local highway authorities

achieving efficiency savings through innovative methods such as sharing depots with other authorities or by sharing examples of good practice.⁹

5. Although it is too early for us to judge the long-term impact of budget reductions, the most recent data show that the surface condition of the strategic road network has not declined. There is less information on the state of local roads but the Department admitted that there is evidence of stress and strain with the greatest problems in London and the South-East. The Department told us that it is aware of public concern about the state of local roads. This is highlighted by the National Highways and Transport Survey, which reported that only 30% of the public were satisfied with the condition of the roads and the speed and quality of repairs, the lowest level since the survey began in 2008.¹⁰

6. In the 2010 Spending Review, the Department cut road maintenance budgets by £1.2 billion for the four years from April 2011. However, on nine occasions since then it has announced additional funds for road maintenance which total £1.1 billion. Thirty-five of 46 local highway authorities in the National Audit Office survey said that the stop-start funding had hindered them from getting value for money.¹¹ The extra money has reduced the extent of the planned budget reductions. The fall in the Agency's budget will now be 7% over the 4-year period to March 2015 instead of the 19% that was announced in the Spending Review 2010. Local highway authorities' capital funding from the Department for road maintenance is increasing by £97 million (3%) over the four years instead of the planned £557 million reduction (15%).^{12 13}

7. We were concerned that funding uncertainty has undermined value for money. The Department agreed that funding needs to be more predictable so that highways authorities can plan properly. Unpredictability also deters the right behaviours in the supply chain, such as investing in training and other ways of improving efficiency. Infrastructure UK has reported that certainty of funding is associated with cost savings of 10-20% for routine maintenance.¹⁴ The Asphalt Industry Alliance reported earlier this year that the average cost of filling a single pothole in England and Wales was £52, or £70 in London. It also reported that it cost £31.6 million in 2013/14 to pay and process compensation claims from road users for damage to persons or vehicles arising from poor road conditions.¹⁵

8. We heard from the Department that it is working to provide the Agency and local highway authorities with more predictable funding. The Department explained that it has set out its capital funding for local road maintenance for the six years from 2015-16 to 2020-21: £976 million a year. The Department also told us that it plans to provide greater predictability of funding to the Agency through its reforms included in the Infrastructure Bill. The Department and Agency told us that the reforms would change the Agency's status to a limited company wholly owned by the government,

9 [Qq 33, 48, 52, 55-57; C&AG's Report, paras 1.20-1.21](#)

10 [Qq 41, 63-65; C&AG's Report, para 9, 1.32-1.35](#)

11 [Qq 10, 29-30, 44; C&AG's Report Figure 2](#)

12 [C&AG's Report, paras 7, 1.12 and Figures 2, 3](#)

13 Figures are in cash terms so there will be additional pressures on road maintenance budgets due to inflation

14 [Qq 29, 44-45; C&AG's Report, paras 12, 2.5, Figure 13](#)

15 http://www.asphaltindustryalliance.com/images/library/files/ALARM_Survey_2014.pdf

with at least five-year funding settlements for capital projects and maintenance.¹⁶ These new arrangements are a step in the right direction but by themselves are not enough to guarantee improved value for money. For example, Network Rail has had fixed 5-year funding settlements for over a decade but still faces challenges in maintaining the rail network in the most cost-effective way.¹⁷

9. The main effect of changes to road maintenance budgets has been a fall in revenue funding. The reduction in revenue funding is concerning because essential routine maintenance activities such as inspections, clearing drains and winter gritting can only be paid for from revenue funds. We therefore challenged the Department on whether the fall in revenue funding will increase the risk of flooding and long-term damage to infrastructure, particularly with increasingly frequent severe weather conditions.¹⁸ The Agency spent 29% less revenue funds in 2012-13 than it had in 2010-11. Local highway authorities' revenue funding, which is for all local authority services, fell by around 33% in real terms over the 4 years from April 2011, and it is set to fall by a further 10% in real terms from 2015-16 to 2020-21. Local highway authorities' actual revenue spending on road maintenance has fallen less steeply, it was 7% lower in 2012-13 than in 2010-11.^{19 20}

10. The Department told us that it understands the importance of revenue funding for road maintenance. It said that it will work with the Agency to ensure that it has the appropriate level of capital and revenue funding.²¹ However, the Department explained that the £976 million a year that it is to provide for local road maintenance from 2015-16 is all capital. Revenue funding comes from the Department for Communities and Local Government and local authorities' own resources. The Department therefore argued that the level and use of revenue funding for local road maintenance is a matter for the Department for Communities and Local Government, local authorities and their taxpayers.²²

16 [Qq 27, 29, 44-45, 49](#)

17 [Q 1; C&AG's Report, para 2.20](#)

18 [Qq 7-9, 36, 42-43, 49, 66; C&AG's Report, paras 1.5, 1.17, Figure 1](#)

19 [C&AG's report, paras 1.13-1.14, 1.18-1.19](#)

20 Changes to budgets and spending are in cash terms throughout unless otherwise stated.

21 [Qq 43, 66](#)

22 [Qq 10, 49, 66](#)

2 Maintaining the road networks

11. We welcome the progress the Department and the Agency have made in improving the way in which road maintenance is carried out. We heard about the Department's Highways Maintenance Efficiency Programme which it set up in 2011 to help local authorities become more cost-effective in response to the budget reductions in the Spending Review 2010.²³ The Agency has introduced new contracts and strengthened its central decision making since our last report on road maintenance in 2010.²⁴

12. It is clear to us that in order to get best value for money, highways authorities need to focus on planned preventative maintenance. The Department told us that too many local highway authorities react to events instead of anticipating and preventing disrepair. According to the Audit Commission it can cost three times as much to reconstruct a road that has been allowed to fail than it does to carry out preventative maintenance. In particular, significant costs in later years can be saved by preventing water from penetrating the road surface and damaging supporting structures and foundations.²⁵ Despite the importance of planning we heard that at least 45 local highway authorities did not have an asset management plan when surveyed in early 2014. The Agency has an asset management plan but it does not cover the whole life of its assets although it is currently trialling the development of a 30-year plan in its East Midlands Area.²⁶

13. Neither the Department nor the Agency were able to tell us how much it should cost to maintain the road networks, because of a lack of evidence about how road infrastructure deteriorates over time and the costs of different maintenance activities.²⁷ The Agency has no information on 70% of its drainage systems and many local highway authorities have incomplete inventories of their bridges, drains, footways and street lighting. Some local authorities have invested in information about what assets they own and their condition but this is not universal.²⁸

14. The Department explained that most local highways authorities have an understanding of how road surfaces deteriorate over time but this does not extend to other types of infrastructure. We heard that the Agency had predicted future demands for resurfacing based on its knowledge of road surfaces.²⁹ The Agency is also making progress on understanding how best to maintain its structures, although this work is not yet complete.³⁰ It is also working to understand the costs of maintenance better.³¹ Many local highway authorities would like more help from the

23 [Qq 1, 8, 47-49; C&AG's Report, para 17](#)

24 [Q1; C&AG's Report, paras 1.21-1.24, 2.13-2.14; Committee of Public Accounts, *Highways Agency: Contracting for Highways Maintenance*, Fourth Report of Session 2009-10, HC 188, 7 January 2010](#)

25 [Qq 7; C&AG's Report, paras 2.3, 2.16](#)

26 [Q 32; C&AG's Report, para 2.4](#)

27 [Qq 1, 3-4, 49, 61-62](#)

28 [Qq 2, 3; C&AG's Report, paras 2.11-2.12](#)

29 [Qq 2, 3, 7, 60](#)

30 [C&AG's Report, para 2.15](#)

31 [Q 61](#)

Department to understand the factors that drive maintenance costs and to quantify the benefits of preventative maintenance.³²

15. We challenged the Department and the Agency on why most road maintenance work is carried out in the winter months which is less efficient due to longer nights and cold and wet weather. The Department and the Agency explained that while local highway authorities are at liberty to carry their main funding from the Department forward to future years, the Highways Agency cannot do this. The Agency told us that even though the Department confirms its budget in December of the preceding financial year, it is then unable to get design and planning work done quickly enough to avoid an increase in spending towards the end of the financial year. For example, the Agency spent less than 3% of its annual maintenance expenditure in April 2011 but this increased to 21% spent in the following March.³³

16. The Department told us that its Highways Maintenance Efficiency Programme has raised the profile of good asset management principles with local highway authorities.³⁴ We questioned why not all local highway authorities are taking advantage of the guidance and toolkits it provides, for example on areas such as pothole repair and managing drainage assets.³⁵ The Department told us that it recognises that there is a need to target the Programme at those local authorities that most need to improve road maintenance efficiency. It told us that the most effective way to raise performance was to encourage local highway authorities to find their own solutions through the Programme, rather than the Department telling authorities what to do.³⁶

17. However we questioned the Department about how it uses its funding to incentivise local highway authorities to become more efficient, for example to become better at planning or to collaborate more with each other. The Department told us that it has introduced some incentives in relation to how it allocates its Pothole Fund (of around £170 million), but the mechanism for allocating the Department's main funding for local highway authorities (£779 million in 2012-13) does not include rewards for better performers or penalties for the least efficient. The Department told us that it is planning to issue a consultation this summer on how best to allocate its £976 million a year funding for 2015-16 to 2020-21.³⁷

18. The Department told us that the Highways Maintenance Efficiency Programme also encourages local highway authorities to work together. Two thirds are now members of highways alliances which allow them to share best practice and reduce costs through shared procurement arrangements. The new London Highways Alliance Contract also enables participating highways authorities to benchmark the four main contractors' prices and performance against each other. However, a substantial number of local highway authorities still work alone so do not get the benefits of collaboration.³⁸ The Agency provided an additional example of

32 [C&AG's Report, para 2.23](#)

33 [Qq 10, 15, 20, 26-28; C&AG's Report, Figure 14](#)

34 [Qq 8, 22, 48](#)

35 [Qq 32, 47; C&AG's Report, paras 17, 1.26](#)

36 [Qq 44-48](#)

37 [Qq 22, 32, 39-41, 47-48; C&AG's Report, paras 16, 1.7, 2.21](#)

38 [Qq 8, 32, 47-48, 66; C&AG's Report, paras 15, 1.30-1.31, Figure 9](#)

collaboration, describing how it works with the highway authorities in Scotland, Wales and Northern Ireland to identify and share good practice.³⁹

39 [Qq 54-57](#)

Formal Minutes

Wednesday 10 September 2014

Members present:

Mrs Margaret Hodge, in the Chair

Mr Richard Bacon
David Burrowes
Jackie Doyle-Price
Chris Heaton-Harris

Meg Hillier
Mr Stewart Jackson
Austin Mitchell
Nick Smith

Draft Report (Maintaining strategic infrastructure: roads), proposed by the Chair, brought up and read.

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

Paragraphs 1 to 18 read and agreed to.

Conclusions and recommendations agreed to.

Summary agreed to.

Resolved, That the Report be the Fifteenth 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 Monday 13 October at 3.00 pm]

Witnesses

Wednesday 18 June 2014

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Philip Rutnam, Permanent Secretary, Department for Transport; and
Graham Dalton, Chief Executive, Highways Agency

[Q1-66](#)

List of Reports from the Committee during the current Parliament

The reference number of the Government's response to each Report is printed in brackets after the HC printing number.

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Fourth Report	Monitor: regulating NHS Foundation Trusts	HC 407
Fifth Report	Infrastructure investment: impact on consumer bills	HC 406
Sixth Report	Adult social care in England	HC 518
Seventh Report	Managing debt owed to central government	HC 555
Eighth Report	Crossrail	HC 574
Ninth Report	Whistleblowing	HC 593
Tenth Report	Major Projects Authority	HC 147
Eleventh Report	Army 2020	HC 104
Twelfth Report	Update on preparations for smart metering	HC 103
Thirteenth Report	Local government funding: assurance to Parliament	HC 456
Fourteenth Report	DEFRA: oversight of three PFI waste projects	HC 106