

RURAL ECONOMY AND CONNECTIVITY COMMITTEE

PRE-BUDGET/FINANCIAL SCRUTINY ON ROADS MAINTENANCE IN SCOTLAND

SUBMISSION FROM AUDIT SCOTLAND

I refer to the Rural Economy and Connectivity's call for evidence regarding its planned pre-budget scrutiny on roads maintenance in Scotland.

As the Committee is aware, Audit Scotland has undertaken audit work on roads maintenance in Scotland on a number of occasions since 2004. This response, on behalf of the Auditor General and the Accounts Commission, is primarily based on our [August 2016 performance audit report](#) and our [impact report](#) published in June 2018.

Feedback on our previous reports indicates that the condition of roads is of key interest to the general public but it is also clear there is a clear gap between road condition survey data and public perception. For example, our 2013 report referred to an AA survey in January 2013 which found that 45 per cent of local road users in Scotland considered road conditions to be poor, very poor or terrible. This was the worst rate in the UK.

How have recent spending decisions on roads maintenance affected the quality of Scotland's roads, road users, businesses, public services, and the economy?

Our previous audit reports have indicated that overall expenditure on roads maintenance in Scotland has been declining over the past 15 years. Our 2016 report indicated that, after taking road construction inflation into account, councils' expenditure on local roads maintenance fell from £302 million in 2011/12 to £259 million in 2014/15, while Transport Scotland's expenditure on trunk roads maintenance fell from £168 million to £162 million over the same period.

The condition of council-maintained roads is measured using a surface survey which makes a number of measurements that describe the quality of the road surface. It also provides an indicator of the condition of the lower road layers but not an absolute measure. Transport Scotland supplements the surface survey with a Deflectograph to estimate the remaining useful life of trunk roads and to identify areas requiring strengthening.

The condition of Scottish road network has worsened since 2011, mainly as a result of a decline in the condition of motorways. The proportion of council-maintained roads in acceptable condition remained the same between 2011/12 and 2014/15 at around 63 per cent (Exhibit 1 of our 2016 report). A-class roads are generally the best maintained (72 per cent in acceptable condition), while unclassified roads are least well-maintained (60 per cent in acceptable condition).

Using Transport Scotland's method of assessing road condition, the condition of trunk roads declined from 90 per cent in acceptable condition in 2011/12 to 87 per cent in 2014/15. Dual and single A-class roads are in better condition than motorways. Motorways declined from 79 per cent in acceptable condition in 2011/12 to 74 per cent in 2014/15 (Exhibit 4). Transport Scotland attributes much of the decline in motorway condition to doing more resurfacing work instead of reconstruction, which would also improve the condition of the lower road layers.

It is important to recognise that a road assessed as being in acceptable condition does not necessarily mean it is free of any defects. Equally, a road that is in poor condition does not necessarily mean it is unusable. But a road in poor condition:

- May require vehicles to travel at lower speed
- Increases the risk of vehicular suspension and other damage
- Could represent an increased safety risk, for example owing to the road's anti-skid properties.

It is difficult to assess fully the impact of declining road condition on road users and the wider economy. Our 2016 report noted that police accident records suggested that poor and defective road conditions may have been a contributory factor in a relatively small number of fatal and serious road accidents (less than one per cent - around one death and 12 serious injuries each year). The 2016 report also found that that users continue to report that road condition is a major concern, with five per cent of people surveyed as part of the Scottish Household Survey stating that they did not cycle to work because the road conditions are dangerous.

Similarly, our [2011 report](#) found that councils had paid out £5 million over five years in respect of 7,000 compensation claims received from motorists who had suffered damage to their vehicles from potholes and similar defects. But we were unable to identify any clear pattern or trend to allow us to draw conclusions about the levels of compensation paid or the impact of road defects in relation to the costs of car repairs.

While Transport Scotland published research in 2017 on the value of the trunk road network to society and the economy (<https://www.transport.gov.scot/media/33629/value-of-society-economy-to-trn-final-report-feb-2017.pdf>), we are not aware of any other research which evaluates the economic impact of declining road condition.

If spending on roads maintenance continues at current levels, what could be the likely effects of the above groups?

While it might be reasonable to expect that reduced expenditure would result in a decline in the proportion of roads in acceptable condition, this might not always be the case. Our 2016 report found there were wide variations between individual councils in spend per kilometre on roads maintenance (Exhibit 7) and road condition

(Exhibit 2), and how spend (Exhibit 8) and condition (Exhibit 3) had changed over time.

We noted that it is difficult to establish a clear link between changes in councils' spending on maintenance and changes in road condition. Exhibit 11 outlines that between 2011/12 and 2014/15:

- Seven councils increased their roads maintenance spending and the proportion of roads in acceptable condition improved.
- Eight councils reduced their roads maintenance spending and the proportion of roads in acceptable condition declined.
- In six councils the road condition declined, despite spending more on maintenance.
- In 11 councils the road condition improved, despite spending less on maintenance.

This would suggest there is not a direct causal link between road maintenance spend and condition. Consequently, how road expenditure is incurred, where and on what, may have a greater or lesser

effect on road condition. For example, depending on the scale of deterioration, roads engineers might decide that one section of road needed less expensive surface dressing while another section required more expensive reconstruction. Both road sections would be returned to an acceptable condition but at greatly difference cost and resulting lifespan.

Other factors influencing the relationship between spending and condition include:

- Traffic volumes - greater traffic volumes may mean some roads need maintained more often. Similarly, heavier vehicles may cause roads to wear out quicker than before.
- Weather conditions - localised flooding can damage roads and take money away from a budget that could otherwise be spent on structural maintenance that would improve the condition of roads.
- Historic patterns of investment - a council that has previously invested heavily in roads maintenance is more likely to be able to maintain road condition at lower cost than a council that has not historically invested in its roads.
- The extent to which spend is focussed on maintenance activities that make the greatest contribution to road condition. For example, our 2016 report noted that Perth and Kinross Council planned to save £280,000 in 2016/17 by reducing the frequency of certain roads maintenance activities such as road sign maintenance and verge and ditch clearing. This meant that a greater proportion of the available roads maintenance budget could be used on activities which did most to maintain road condition.

How could any negative effects of reduced road spending best be addressed?

In the face of declining roads maintenance budgets, the key challenge for Transport Scotland and councils is to make best use of the money available.

Our 2016 report found that Transport Scotland and councils were making greater use of asset management hierarchies to prioritise roads of greater strategic importance and intervene earlier when roads begin to deteriorate, rather than treating those in the worst condition.

We noted that Aberdeen City Council had improved road condition while reducing roads maintenance expenditure through a combination of approaches, including targeting roads which were in the worse condition and making more use of surface dressing as an alternative to reconstruction where appropriate. Transport Scotland was also focusing on maintaining the condition and safety of trunk roads through resurfacing, as an alternative to more costly strengthening or reconstruction options.

These approaches help make available budgets go further but carry risks. For example, prioritising roads which are of greatest strategic importance may mean that the condition of less important roads will deteriorate over time. While surface dressing can be effective at halting deterioration, it can be more expensive in the long term than reconstruction due to having a much shorter expected lifespan. Surface dressing could also be hiding the true condition of roads. This is because road condition surveys do not always pick up the full extent of failures in the structural integrity of lower road layers.

Other areas our 2016 report commented on which may help offset the effect of declining roads maintenance budgets included:

- The role of the Scottish Road Works Commissioner in monitoring the quality of road works, especially reinstatements. The Roads (Scotland) Bill 2018, which has now passed Stage 2 of the Parliamentary approval process, provides the SRWC with enhanced powers to enforce the quality of road works.
- The role of the Scottish Roads Research Board in developing innovative approaches to roads maintenance, such as using bitumen as a binder for asphalt and fabric reinforcement to surface dressing
- The development of benchmarking and use of performance indicators to help assess and compare how efficient councils are at roads maintenance.

Is the current model of funding and delivering roads maintenance, which is split between Transport Scotland and local authorities, the most economic and efficient option?

Our previous audit reports have commented on the progress made in developing a shared services approach to roads maintenance as a means of making available budgets go further. While there are specific examples of shared services being introduced, for example East Ayrshire Council and South Ayrshire Council establishing the Ayrshire Roads Alliance in 2014, most collaborative working to date has been on specific areas of activity, such as the shared procurement of weather forecasting services.

However, it is clear that there is now a growing consensus that the current model of 33 roads authorities responsible for roads maintenance delivery in Scotland is likely to be unsustainable. The Strategic Action Group's response to our 2016 report (reproduced in our 2018 impact report) notes that the focus to date has been on voluntary collaboration between roads authorities but this could now benefit from "a more targeted and possibly statutory approach".

The 2016 report and 2018 impact report also comment on the Roads Collaboration Programme's progress in promoting collaboration between councils through regional partnerships. While we do not have up-to-date information on the current status of the various collaboration forum which have been set up, it would appear that there are still challenges to overcome before there are significant structural changes to the way roads maintenance is delivered.

The Scottish Government's consultation on the National Transport Strategy 2, published in July 2019, acknowledges that both trunk and local roads face considerable maintenance backlogs and need significant investment to ensure they are appropriately maintained. The Scottish Government commits to considering maintenance as part of its Strategic Transport Projects Review.

I hope the Committee will find these comments useful