RURAL ECONOMY AND CONNECTIVITY COMMITTEE

PRE-BUDGET/FINANCIAL SCRUTINY ON ROADS MAINTENANCE IN SCOTLAND

SUBMISSION FROM ASPHALT INDUSTRY ALLIANCE

Overview

The Asphalt Industry Alliance (AIA), a partnership between the Mineral Products Association and Eurobitume UK, has been promoting the benefits of asphalt to specifiers, policymakers and the general public since 2000.

Our work includes the development of the Annual Local Authority Road Maintenance (ALARM) survey, now in its 24th year, which is considered by industry, local authorities and Westminster as an authoritative and comprehensive study into local road maintenance funding and conditions. Although ALARM reports on findings from submissions received from local authorities in England (including London) and Wales, it provides valuable insights into the correlation between local road conditions and funding levels. We believe these are pertinent to the Scottish Parliament's current review into road maintenance, as also evidenced by its own Scottish Road Maintenance Condition Survey (SRMCS).

In summary, after reviewing the background information prepared by the Scottish Parliament's Rural Economy and Connectivity Committee, combined with the knowledge and understanding accumulated from over two decades of ALARM surveys, we would advocate the key issues that need to be considered are:

- Address the disparity which exists in Scotland between funding for trunk roads and the rest of the network.
- Introduce an invest to save programme for local roads, with a 10-year commitment to funding. This additional funding support would need to combine both a needs element and an investment element – to allow highway authorities to bring roads up to a condition from which they can be managed in a cost-effective way going forward.
- Continue and enhance the collaboration and engagement across the sector through the existing Scottish Pavement Forum to ensure the sharing of information on materials innovation and highway maintenance best practice to involve all Scottish highway authorities, industry and other stakeholders.

This submission supports that already made by Mineral Products Association (MPA) Scotland. MPA Scotland is affiliated to the MPA. MPA Asphalt is a constituent product group of MPA, which, with Eurobitume UK, co-funds the AIA.

Information on ALARM 2019, along with previous copies of the survey, can be found at: http://www.asphaltuk.org/alarm-survey-page/

OUR RESPONSE TO QUESTIONS POSED BY THE RURAL AND ECONOMY AND CONNECTIVITY COMMITTEE

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

- *Underfunding leads to increased prioritisation on the maintenance of principal routes*

on the local road network to the detriment of unclassified road conditions:

While the UK remains a roads-based economy, there will be need for new roads to support growth and community connectivity, for instance to open up development and housing land. However, the AIA advocates that maintaining the asset we have already needs to be given greater emphasis.

Every journey starts and ends on a local road. Road users – from bus passengers to cyclists, truck and car drivers – rely on them to get to school, work, hospital appointments, etc, and they make up the majority of the network, including in Scotland where 52,683km account for 93.5% of its 56,564km public road network. However, only 63% of local roads are stated as being in acceptable condition compared to 87% of trunk roads (Audit Scotland 2016 ***'Maintaining Scotland's Roads'***). This picture is similar to the situation reported in ALARM 2019, which also showed that only 63% of local roads were considered in a good state of repair.

However, ALARM condition data also showed that a higher proportion of principal and non-principal roads were reported as being in a good state of repair (74% and 70% respectively) with unclassified roads – which make up the majority of the network in mileage terms – lagging behind (at 55%).[1]From this we can surmise that underfunding leads to increasing prioritisation which impacts negatively on the resilience of the network. Achieving target conditions on all categories of local roads – from the high street to the residential type most people live on – is out of reach given insufficient funding.

- *Impact of road conditions on road users and associated compensation claims:*

The better the road condition, the less likely the need for unplanned repairs.

An underfunded and poorly maintained road network will lead to accelerated deterioration. Combined with increased traffic and the effects of adverse weather conditions, this can lead to more effort and cost needed to get the network back into a steady state.

Poor road conditions inevitably also impact on the public, resulting in disruption to journeys and even health and safety risks for vulnerable road-users. And, for highway authorities, it can result in increased time and money spent dealing with compensation claims. ALARM 2019 figures, for example, showed that 89% of claims related specifically to pothole damage.[2]

Likely effects of current roads maintenance spending on road users, businesses, public services and the economy?

- *Investment in local roads provides dividends for local economies:*

A well-maintained and safe road network is integral for connectivity, supporting all aspects of our work and home lives. With 37% of the local road network in Scotland requiring maintenance (comparable with ALARM 2019 figures of 45% for English local roads[3]), a full asset management approach that includes whole life costing and lifecycle planning is not achievable within current budgets. Without sustained investment, local road conditions will only worsen and result in the asset not being fit for purpose with a knock-on effect to the businesses, public services and users that rely on them daily.

The link between adequate local road maintenance budgets and local economies is

[1] ALARM 2019 Road Condition Index pp 10-11. Figures quoted above refer to English local authorities (excluding London).

[2] ALARM 2019 Road user compensation claims p12

[3] ALARM 2019 Structural Road Conditions

recognised by the OECD. Similarly, the DfT's '***Eddington Study'*** of 2007, stated that 'expenditure on local roads has a Benefit Cost Ratio of 4.23', while the 2016 paper by Philipp Thiessen (DfT) and Tom Buckland and Richard Abbell (TRL), '***Valuing the wider benefits of road maintenance funding***' sets out that 'significant additional investment provides benefits in excess of costs of more than 4.5 times.'

This view is supported by a number of other highway industry organisations including the RAC Foundation and the Highways Term Maintenance Association (HTMA) which stated in its 2015 report***, 'Invest to Save: Benefits of early intervention for highway maintenance'***, that the costs of inaction compounds the costs of future repairs as well as associated costs, such as third party compensation claims. The report concluded that, when part of a highways asset management programme, every £1m invested on the network generated savings in the order of £2.2m.

With the committee's briefing information to its call for views stating that '13.4% of motorways, 8.6% of trunk road dual carriageway and 11.3% of trunk road single carriageway [are] 'life expired' and requiring reconstruction (2017/18) as well as 37% of local roads in Scotland needing of some type of maintenance, it is apparent that the overall resilience of Scotland's road network is under severe pressure. This will lead to increased rates of reactive maintenance, rising compensation costs (see above) and decreasing road resurfacing frequency.

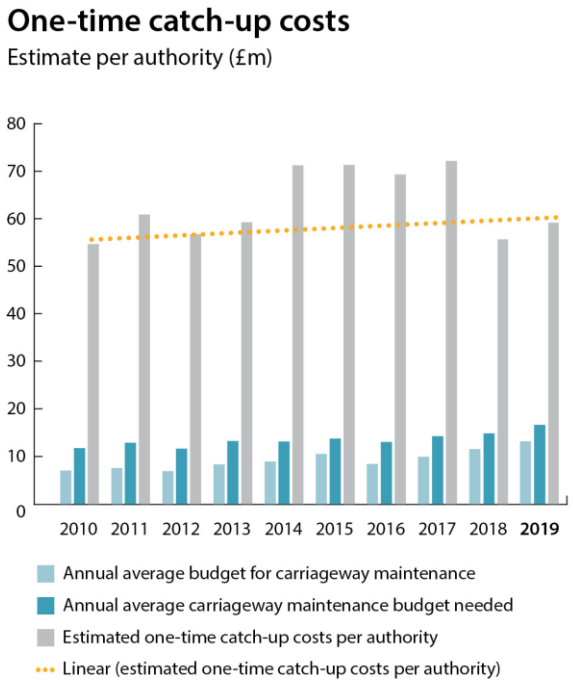
It can be assumed that limited funding leaves local authorities trapped in a cycle of patch and mend to keep the highway open, with budgets being spent in an inefficient way. Properly funded, planned preventative maintenance is the best way to ensure consequences of poorly maintained roads, such as potholes, don't occur. We believe that security of sufficient long-term funding is key to helping local authorities plan with more confidence (see below).

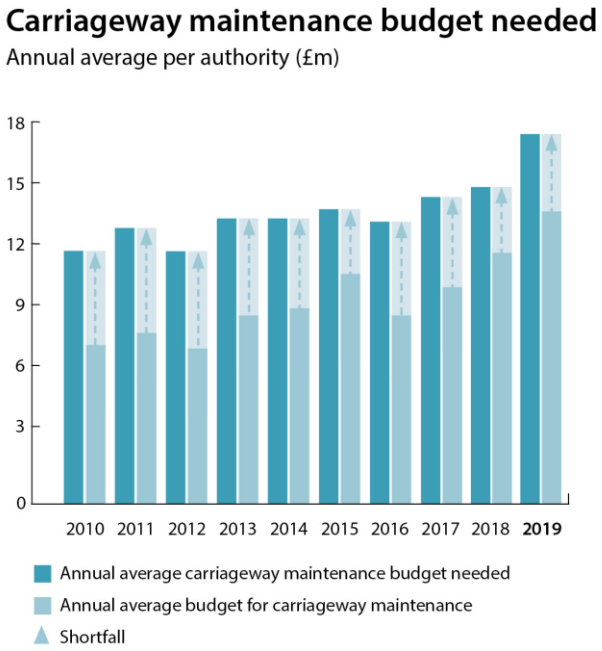
How could negative effects of reduced road spending be addressed?

- *Addressing a rising backlog through a long-term invest to save approach:*

In 2014/2015 the 32 local authorities responsible for local road management and maintenance in Scotland reported spending £33 million less on planned and routine maintenance. This decline was attributed mostly to fiscal pressures on other local authority spending including on education, health and social care and the resulting road maintenance backlog – or one-time-catch-up cost – is now calculated to be £1.2 billion [Roads Maintenance Strategic Action Group 2018 response to Audit Scotland 2016 ***'Maintaining Scotland's Roads'***].

This maintenance backlog, per km of local road, is actually around a quarter less than that reported in ALARM 2019. Nevertheless, our annual analysis of local authority data received via ALARM over the last decade indicates that the one-time-catch up cost will continue to rise unless tackled.





One of the key reasons for this is that local highway authorities don't have sufficient highway maintenance budgets to stand still – let alone improve the network. This is shown in the chart above right by the continued upward trajectory of the shortfall in annual highway maintenance budgets. The shortfall is calculated as the gap between the annual budget highways departments require to keep the carriageway in reasonable order and the actual budget they receive.

Research carried out by the AIA indicates that planned preventative maintenance can be up to 20 times more cost effective per square metre than reactive work such as patching potholes through economies of scale and a right first-time approach. Implementing a longer-term funding commitment to local roads would enable hard-pressed local authorities to invest to save, so that local roads can be brought up to target conditions allowing them to be maintained in a cost-effective way in the future. Last year the AIA set out that £1.5 billion additional funding was needed for local roads each year in England, London and Wales for the next 10 years to allow them to be brought up to a condition from which they can be managed in a cost-effective way. We would advocate a similar long-term approach for Scotland.

Our calculations on the sums needed to carry out a successful 'invest to save' programme are based on the assumption that not all roads can be repaired at once and this means that parts of the network would continue to decline over the catch-up period. Plus, local authorities may have to deal with the effects of unexpected events, such as impacts of extreme weather.

Another way of setting this out is to break down additional funding into 'needs funding' and 'investment funding'. ALARM 2019 reports that the annual shortfall in budgets (in England and Wales, including London) is now £657 million, which is the amount needed as an absolute minimum just to meet current target conditions and **halt** further deterioration. This could be described as the 'needs element' to cover the annual shortfall.

The rest of the extra funding we are calling for is the investment element and would allow local highway authorities to tackle the underlying backlog and seek to improve the network**.** Crucially, it's this combination of additional funding covering both needs and investment that we believe is required to allow the condition of local roads to be improved.

- *Sustained spending on road maintenance needed to improve conditions:*

Increased road maintenance budgets have been found to improve road conditions in a fairly short time period. For example, following the introduction of the ***'Wales Infrastructure Investment Plan 2012'***, the percentage of Welsh roads classed as structurally poor (having five years of life remaining) dropped from a high of 20% (ALARM 2012) to 6% (ALARM 2016). Unfortunately, this improvement was short-lived, as increased funding was not sustained.

Greater investment over a sustained period of time is the only way the cumulative impact on reduced road spending can ultimately be addressed. This would allow the network to be maintained in a cost-effective way going forward, increase efficiency and provide a more durable network. It would also deliver positive outcomes for health and the environment – well maintained roads will encourage more cyclists, cut congestion and improve air quality. The experience for all local road users would be improved.

A longer-term approach to road maintenance funding has been acknowledged as a key component to improving conditions in reviews recently carried out in other parts of the UK:

- At Westminster, the Transport Select Committee's June 2019 report, '***Local road funding and maintenance; filling the gap***' concluded that 'the current short-term approach to funding local road maintenance is not fit for purpose' and that 'a make do and mend approach' is not good value for money.'

- Similarly, the National Assembly for Wales Economy, Infrastructure and Skills Committee's 2018 report, '***The State of Roads in Wales'*****,** called for a longer term-approach to funding, stating that: ' If Welsh Government can provide five-year funding to Transport for Wales then it can – and should – do the same for local authorities.'

- In Northern Ireland, the Comptroller and Auditor General's 2019 report, '***Structural Maintenance of the Road Network***', stated that 'the securing of a long-term funding option needs to be a priority.'

- *Collaboration to enable opportunities to be seized:*

Continued and further collaboration between industry bodies, Transport Scotland, stakeholders and local authority highway teams – so they can share thinking on how best to shape the future of Scotland's roads and implement best practice – could help enhance the network for all road users.

This could include shared learning between highways engineers and local authorities on successful road maintenance practices to improve effectiveness across Scotland as a whole and maintaining close working relationships with industry via the Scottish Pavement Forum to advise on the most effective materials and processes.

For example, many local councils in Scotland have recently declared climate emergencies[4] and greater collaboration with industry could ensure that those with responsibility for highways are able to put their theoretical support for environmental measures into practice. Increased understanding and further research into the performance and benefits associated with specifying more sustainable materials, such as Warm Mix Asphalts for example, could help cut emissions associated with road maintenance, improve safety for contractors and cut congestion as roads would be able to be trafficked sooner[5].

Is split spending on roads maintenance between Transport Scotland and local authorities the most efficient option?

- *A more equitable approach to funding across the network is more important than changes to management structures:*

Valued at £20.8 billon, trunk roads are the Scottish Ministers' single biggest asset. However, they only make up 6.5% of Scotland's public road network and spend per km on maintenance is 8.5 times higher than that of local roads[6].

Although this discrepancy is significantly less than that reported in England between the Strategic Road Network (SRN), managed by Highways England, and the local road network managed by local authorities, it does highlight the funding challenges Scottish local authority highway teams are under.

Local roads keep communities connected and the economy flowing and the AIA advocates increased, secure and sustained funding to support the network now and in the future. The link between funding and conditions cannot be ignored and further consideration needs to be given to the allocation of maintenance funding for local roads. The provision of ring-fenced funds or a new funding stream to provide security of funding to facilitate investment in the local road network may be required so that the condition of local roads in Scotland can be improved to that expected by their users.

[4] https://climateemergencydeclaration.org

[5] The All Party Parliamentary Group on Highways report Working for better roads: Warm Mix Asphalt: reducing carbon emissions and improving efficiencies

[6] Calculation based on figures in Audit Scotland's 'Maintaining Scotland's Roads' report, 2016