

RURAL ECONOMY AND CONNECTIVITY COMMITTEE

PRE-BUDGET/FINANCIAL SCRUTINY ON ROADS MAINTENANCE IN SCOTLAND

SUBMISSION FROM THE RAIL FREIGHT GROUP

The Rail Freight Group (RFG) welcomes this opportunity to highlight how modal switch from road haulage to rail freight can help to reduce trunk road damage and associated maintenance costs across Scotland.

RFG represents users and suppliers of rail freight throughout Britain: our members include Network Rail, rail hauliers, logistics companies, port authorities, manufacturers, processors and retailers. The current RFG Chair, Ken Russell is from the Scottish logistics / road haulage sector (Russell Logistics), underlining the multi-modal background of our membership.

Our contribution to the RECC consultation perhaps best fits within the question posed on: 'How could any negative effects of reduced road spending best be addressed?'

Road damage by HGVs:

We note from 'Maintaining Scotland's roads: a follow-up report' by Audit Scotland in 2016ⁱ that:

- Motorways and trunk roads make up only six per cent of the road network but, based on vehicle mileage, carry over a third of the traffic and nearly two-thirds of heavy goods vehicles (HGVs).
- 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. [If this decline has been sustained, the 'acceptable' proportion will have dropped to 82-83% now.]

In Scotland it is evident that the Scottish Government priority has been to build new roads – such as the M74 Northern Extension, completing the M8 and the M80, the Aberdeen Western Peripheral Road, A9 and A96 dualling etc – ahead of making better use of existing assets through enhanced road maintenance and freight modal switch from road to rail.

We also note that the largest and heaviest HGVs (mostly but not entirely articulated) cause a great deal more road damage than smaller HGVs (over 100,000 times more than cars).ⁱⁱ This reflects the Generalized Fourth Power Law.ⁱⁱⁱ The standard six-axle 44 tonne 16.5 metre truck is 100,000 times more damaging to road surfaces than a Ford Focus. Therefore some of the heaviest road repair costs are almost exclusively attributable to the heaviest vehicles, rail freight's main competitors. The damage caused by 44-tonners is very evident in the wheel depressions and cyclic potholes which appear on Scotland's trunk road system.

Latest research shows that HGVs are currently paying (through taxation) only 11% of their road damage costs. In contrast to the heaviest HGVs, the much smaller and lighter 7.5 tonne lorry is 3,000 times more damaging than a Ford Focus and yet there is no differentiation in the charging of differing lorry weights.^{iv}

The rail freight alternative:

Rail already moves substantial quantities of freight over routes which parallel the Scottish trunk road network, including the West Coast Main Line, East Coast Main Line, Carlisle-

Dumfries-Kilmarnock-Glasgow, the Central Belt to Aberdeen and Inverness, and the West Highland Line to Fort William. A wide variety of commodities are moved by rail, including:

- alumina
- cement
- china clay
- coal
- oil
- containerised Deep Sea and European exports
- containerised retail / supermarket supplies.

Rail freight potential:

Government policy at all levels supports a shift of freight from road to rail, as this brings a range of wider economic, environmental and road safety benefits – but action is less evident. The Scottish Government does recognise these benefits through its Freight Facilities Grant and Mode Shift Revenue Support grants, but the role of rail freight in helping to reduce road damage and maintenance costs has only recently begun to be recognised by policymakers.

There is spare capacity on a variety of routes and through a variety of rail terminals in Scotland to accommodate short and medium term shifts of freight from road to rail. In the longer term, targeted investment – such as route electrification, benefitting both freight and passenger traffic – will allow rail to carry substantially greater volumes of freight transferred from the trunk road system.

Cross-modal appraisal:

An important step in helping to realise the potential of rail will be to examine each mode in a 'corridor' context, to assess the nature of the problems (in line with the Scottish Government's STAG appraisal technique), and to then evaluate the best mix of modal shift, maintenance and upgrade works (on road and rail) to meet Scottish Government policy objectives – and to reduce trunk road damage and associated maintenance costs.

If we can reduce long-distance lorry miles through modal switch to rail freight, Scotland's trunk roads will last a lot longer and the benefits will start to be realised in the very short term, as well as providing a long-term solution.

ⁱ https://www.audit-scotland.gov.uk/uploads/docs/report/2016/nr_160804_maintaining_roads.pdf

ⁱⁱ <https://bettertransport.org.uk/sites/default/files/18.03.26.MTRU-HGVs.pdf>

ⁱⁱⁱ It is normally assumed that the damage caused by the weight on a truck axle increases with a fourth power relationship, such that double the weight results in 16 times the damage:

See paragraph 2.23 of <http://www.standardsforhighways.co.uk/ha/standards/dmrb/vol7/section2/hd2406.pdf>

^{iv} <http://www.freightonrail.org.uk/HotTopicsLorriesAreOnlyPayingAThirdOfTheCostsTheyImposeOnUsAll.htm>