Dualling the A9: Petition PE1992

Transform Scotland response

For the Scottish Government, through Transport Scotland, to make an informed decision about investing in dualling the remaining single carriageway sections of the A9 between Perth and Inverness, several factors must be considered, including: safety, cost efficiency, and climate-compatibility.

Safety

Addressing safety takes us into the realms of the highly charged media and political environment in which demands for dualling are being promoted. In this context, we highlight the official statistics used to assess how dangerous the A9 is compared with other roads. This data should inform investment priorities.

The Department for Transport (DfT) reports on accidents per million vehicle miles driven to provide an indication of road safety risk. Figures produced by the DfT for the whole of the UK, using this method and aggregated over the years 2007-16, show that only three Scottish roads were in the top 50 'most dangerous roads' in the UK. These were the A7, A82 and A71 in that order. The A9 was not in the top 50.

The DfT is not alone in ranking the A9 as low risk. <u>EuroRap (the European Roads</u> <u>Assessment Programme)</u> set out the statistical risk of a crash resulting in death or serious injury for the period 2015-2017 in its 2019 report on a five-point scale and found <u>the most</u> <u>dangerous section of the A9 – between Dalwhinnie and Perth – rated Low-Medium risk</u> (the second safest category).

When considering safety, it is also important to consider which interventions are the most efficient. That is: is full dualling the most effective way to reduce crashes and accidents?

The Scottish Government, through Transport Scotland, takes the <u>Safe System</u> approach as part of its Road Safety Framework, with a target for a reduction in death and serious injuries by 2050. Central to the Safe System approach is safe speeds. Dualling of the A9 will almost inevitably lead to higher speeds driven and this goes against the ethos of this approach. **Designing for safety requires a reduction in speed driven.** The UK is a signatory to the <u>Stockholm Declaration</u> (Third Global Ministerial Conference on Road Safety, 2020) which includes the following statement on speed:

"Focus on **speed management**, including the strengthening of law enforcement to prevent speeding and mandate a maximum road travel speed of 30 km/h in areas where vulnerable road users and vehicles mix in a frequent and planned manner, except where strong evidence exists that higher speeds are safe, noting that **efforts to reduce speed in general will have a beneficial impact on air quality and climate change as well as being vital to reduce road traffic deaths and injuries.**"

Moreover, the <u>Scottish Parliament's Information Centre (SPICe)</u> found that the road safety benefits of the dualling scheme have been significantly undermined by effective, and far less

costly, measures that have been brought in since the commitment to dual the A9 was initially made. In 2014, average speed cameras were installed and the HGV speed limit was raised from 40mph to 50mph. The impact of the speed cameras has been significant. In the three years following their introduction, the <u>average annual fatalities and the average number of collisions decreased by 40% and 23%</u> respectively (despite a 13% increase in traffic volume).

In the context of a severely constrained Government budget, consideration must be given to the relative effectiveness of interventions which aim to reduce road fatalities and injuries. Therefore the Government must review whether the most appropriate way to save lives is through a single multi-billion pound road scheme, or through more targeted and specific road safety measures all across Scotland. At £3,000m, the cost of the A9 scheme represents the equivalent of 120 years of the Scottish Government's budget for all road safety interventions nationwide.

Cost efficiency

In light of the fact that road safety improvements can be made via alternative and cheaper means (such as installing speed cameras and lowering speed limits), it is worth reviewing the economic case made for dualling.

To justify the scheme, the <u>Scottish Transport Appraisal Guidance (STAG)</u> method for calculating a benefit-to-cost ratio (BCR) was used, and considered the monetary equivalent of journey time savings, reduced vehicle operating costs, and increased road safety as benefits. However, this showed the cost of the project would be £419 million more than the costs, giving a BCR of 0.78. So Wider Economic Benefits were included as well – but this still only raised the BCR to 0.89. In order to achieve a positive BCR, a novel metric was created: 'reduced driver frustration'. This is a metric that has not been used before or since, and assigned a monetary benefit to lower levels of frustration. With the driver frustration metric included, the <u>BCR inched above the threshold to 1.12</u>. The addition of this metric illustrates a deviation from accepted processes to justify intervention in the A9.

This is particularly concerning given the large amount of public money at stake. In 2008, the original budget for the A9 was set at £3bn; yet, <u>Scotland's track record reveals that</u> <u>road-building project costs overrun by 86% on average</u>. We would therefore expect that the bill to the Scottish taxpayer is likely to increase by a further £2bn – for a project which failed the standard appraisal methodology.

Discussion on alternative affordable and effective solutions to safety concerns are described in the appendix, many of which could be more swiftly deployed.

Climate-compatibility

In addition to safety concerns, another reason for converting a road to dual carriageway is to increase capacity. However, neither Transport Scotland's <u>2008 'Strategic Transport Projects</u> <u>Review'</u> nor <u>'A9 Dualling case for Investment' report</u> give capacity constraints as a reason for dualling the road. Moreover, the Government's modal shift targets will result in more spare capacity.

The climate emergency and the need to reduce Scotland's greenhouse gas emissions is urgent, particularly in transport: the most polluting sector of the economy which has made nearly no progress in emissions reduction over the past 30 years. Therefore, the Scottish Government's legally binding climate targets must inform any transport investment decisions. To meet these, the Government has committed to reducing car traffic by 20% by 2030. Yet, building new roads, or expanding capacity on existing ones, results in people making trips they otherwise would not have made. That is, <u>building more roads creates more traffic</u>. It is therefore illogical in a time of climate emergency to pursue the dualling of roads.

Conclusion

Overall, it is evident that the project to dual the A9 is both economically inefficient and incompatible with existing climate commitments. The likely £5bn+ cost to the Scottish taxpayer cannot be justified on safety or economic grounds, with the business case even failing the Government's own standard appraisal processes. Alternative effective and affordable safety measures should instead be prioritised alongside investment in low-carbon transport initiatives.

Appendix: Potential alternatives to full dualling

Transform Scotland has long been critical of the Scottish Government's failure to carry out a full multi-modal appraisal of the Perth-Inverness corridor, instead pursuing an entirely roads-based approach. Had this course of action instead been pursued, a full consideration could have been given to alternatives to road capacity increases which would likely have delivered safety improvements in a more timely and cost-effective fashion. Here we note some potential interventions; however, it is long overdue for Transport Scotland to come forward with a full set of alternatives.

The main dangers on single carriageway roads, such as parts of the A9, are junctions where turning traffic crosses the path of oncoming vehicles, incompetent overtaking and foreign visitors driving on the wrong side of the road. Dangerous junctions can only be avoided by installing grade separation or LILO (left in, left out). The latter involves providing a roundabout or nearby grade separated junction for right-turning vehicles to use. Dualling does not remove dangerous junctions unless grade separation is also included, for example the Auchterarder junctions on the A9 south of Perth require traffic to cross the carriageways.

Incompetent overtaking can only be avoided by dualling all single carriageway roads; this is beyond the capacity of any government to afford, hence the need to assess where the greatest need exists. The government should increase awareness of the dangers involved in speeding and overtaking, using both signage and all available methods of public education. Policing levels must also be improved in terms of regular patrols and speed checks.

The issue of foreign drivers forgetting which side of the road to use is already tackled to some degree on the A93 Deeside Road and other roads in that area, by painting regular pairs of direction arrows on the road as a reminder. The most likely moment when a driver used to driving on the right might make a mistake is when turning right from a side road. Driver-facing warning signs are used extensively at junctions with one-way streets, signs reminding drivers to drive on the left, along with painted road-surface arrows immediately after the junction, could be installed at all such junctions on the A9.

A possible solution to the twin dangers of visitors forgetting to drive on the left and dangerous overtaking, would be to install Sweden's <u>'2+1 with wire rope median' system</u>. This can probably be achieved within the existing footprint of the single carriageway sections of the A9. Combined with grade separated junctions and LILO rules for minor roads this might cost far less than the likely £5bn+ of full dualling.

The money saved pursuing alternative and more cost-effective safety improvements on the A9 could be invested in major improvements to the parallel running Highland Main Line, amongst other things. It is worth noting that the Highland Main Line currently has less capacity than when built in the 19th century. To achieve modal shift and climate targets, far more investment is required. For instance, if car drivers are to be tempted to use trains instead, there will need to be much faster, more frequent and reliable services than exist at present. It is currently far quicker to drive between Inverness and the Central Belt than to go by train, in spite of promises made by the Scottish Government in 2008. Furthermore, freight trains will require more paths than are available at present; this will only be achieved by installing double track and/or passing loops.