



Transport policy for a post-Covid UK

EPRG Working Paper 2024

Cambridge Working Paper in Economics 2081

David Newbery

The UK Government is now contemplating its exit strategy from the period of lock-down. In March, the Chancellor claimed to “get Britain building” by investing in roads and broadband internet. Within a month lawyers acting for Transport Action Network sent a Pre Action Protocol Letter for Judicial Review opposing the Government’s strategic plan to spend £27.4 billion on the Strategic Roads Network because “the Secretary of State must have regard, in particular, to the effect of the Strategy on the environment (underline added).”

Transport strategy and Government policy needs re-orienting after the Covid-19 lock-down to deliver sustainable and equitable growth. The paper offers two key messages for that change in direction. First, project appraisal needs to include all external effects, both good and bad, as set out in the Government’s Appraisal Manuals (*The Green Book*). The choice of investments must then be guided by that proper investment appraisal. Second, as part of getting prices right, fuel duty rates need to be considerably increased as a prelude to proper road pricing.

The Chancellor’ March emphasis on roads was partly counterbalanced by the greener February *Cycling and Walking Investment Strategy Report to Parliament*. Since the launch of the 2017 *Cycling and Walking Investment Strategy* investment in cycling and walking infrastructure has averaged £600 million/year. That is 6% of the annual amount spent on UK roads (£10.2 bn. in 2018/19), somewhat less than the share of distance walked or cycled in distance travelled by private transport (6.7%). Government accepts that the benefit-cost ratio of cycle investment is 13:1, which would be increased if health benefits were included, and is anyway higher than that for road investment (and much higher than for rail). This reference to a benefit-cost ratio underlines the importance of making transport (and other) investment decisions of a fully social (i.e. with all impacts priced) cost-benefit appraisal.

The next *National Infrastructure Plan* will not be published until later this year. The *National Infrastructure Delivery Plan 2016 to 2021* shows the cumulative allocation to transport (all sectors) at about 30% of the total of all infrastructure, both



in the past and in the post-2020 pipeline. However, 88% of the post-2020 transport pipeline is for rail, and only 0.3 of 1% for roads (and that is less than 0.1 of 1% of total infrastructure spending in the post-2020 pipeline). If we look at the cumulative averages from 2018/19 to 2020/21 the share of road investment in transport investment rises to 15% and for rail falls to 53% (4% and 15% of total infrastructure investment over that period). It is therefore difficult to see how this is in any way excessive.

Total UK revenue from road fuel duty and Vehicle Excise Duty (excluding VAT) was £34.7 bn. in 2018/19 and total public expenditure on roads was £10.2 bn. Total maintenance expenditure has fallen by more than 50% from 2010/11. Total (investment and maintenance) expenditure per vehicle km travelled (VKT) has fallen by 25% from 2010/11 while total revenue per VKT has fallen by 19%.

Given the recent rapid increase in public borrowing, future tax increases are inevitable, while the net-zero 2050 legislated carbon target makes it imperative that investment is green. Decarbonising transport means moving to battery electric vehicles (BEVs). Under current road taxation, BEV's are heavily subsidized as they do not pay fuel excise duty and hence do not contribute to the cost of the road network. If the switch to BEVs is successful, that lost tax revenue will need to be replaced, logically with road pricing. Fuel duty would be reduced to levels justified by carbon prices and charges for other externalities (other air pollutants, such as NO_x, particulates, etc.), and the residual cost of the road network, with the rest collected through road pricing.

Five reasons for raising fuel excise duty

Until road pricing can be introduced there is a strong case for raising the road fuel duty, for five reasons. The first is that it is currently well below the corrective tax that would charge for pollution, accidents, and congestion. The estimates provided in the paper suggest raising petrol fuel duty for this reason alone by a factor of 1.55 and diesel by a factor of 2.15. Duty per litre has fallen in real terms by 17% since 2010. Higher pollution costs higher distance travelled per litre of diesel argue for higher duty than petrol.

The second reason is that pre-tax fuel prices have fallen over time, and recently dramatically with the fall in demand caused by the pandemic. The pre-tax petrol price has fallen by 38% since 2010, leading to a fall in the pump price of petrol of 24%. The best time to raise taxes is when the pre-tax prices have fallen, so the rise in the pump price compared to the past will not seem so high. Calculations show that the rates could immediately be raised to 99p/litre for petrol, higher than all the external costs (of 90p/l). A tax of 90p/l would restore the petrol pump price to somewhat less than its recent real level. Higher pollution and congestion argue for 124.5p/l for diesel

The third reason is that the Budget will need extra tax revenue, soon in very substantial amounts to pay down the high deficits of supporting the economy during



the pandemic. Better to tax in ways that brings prices closer to their efficient level than increase taxes on already taxed goods. In a green future taxes on fossil fuels have an obvious political attraction.

The fourth reason is that the population is wary of exposure to Covid-19 on public transport and prefers the self-isolation of private transport. Congestion charging and/or higher fuel taxes encourage more use of public transport, generating revenue to finance a more frequent service that in turn makes the service more attractive. The same goes for encouraging bike use which, by lowering traffic makes bike use safer, raising its appeal and inducing more motorists to switch mode.

The fifth reason is that it should facilitate the move to road pricing, as this could be pre-announced with an offsetting future reduction in road fuel duty, as part of gaining public support for road pricing (at present many consider that road pricing would be an addition to existing perceived to be high fuel taxes). The change from fuel taxes to road pricing could be designed so that a considerable majority of car users paid less in total under road pricing than fuel taxation.

Much has been made (mostly by the Government) of their claimed ambitious plans for more road building. To date these are underwhelming. Eddington in his 2006 Report noted “Incremental improvements will not be sufficient. ... road pricing is an economic no-brainer. However, a sensible road pricing regime will still require additional road build.” The main addition to make to that is to redress the underinvestment in walking and cycling. That would naturally happen if infrastructure investment were guided by a proper social cost benefit analysis.

Contact	dmgn@cam.ac.uk
Publication	September 2020
Financial Support	N/A