

Written evidence submitted by Transport Associates Network (EVP0129)

Transport Associates Network is group of UK-based transport experts, many of whom have held senior posts in government or major firms. Together we offer a unique combination of expertise and objectivity. We provide independent consultancy advice for a variety of clients, and offer our services as individuals or small groups, drawing on a wide range of skills and experience.

1. Headlines

- i. The push towards low emission vehicles creates a real opportunity to introduce a system of charging for road use which is fairer, with better environmental outcomes, improved alternatives to car, and more reliable car journeys.
- ii. A small amount of background information leads to higher levels of support for road pricing.
- iii. Road pricing offers a means to replace current vehicle taxation, and an opportunity to fund public transport and active travel. Some people are determined to drive at any cost, and others are content to switch, so leverage exists to raise funds for alternatives whilst improving road journeys. It may offer the best prospect of switching demand, and providing funding for non-car modes whether localised, centralised or a mix.
- iv. The time is ripe for a new initiative from government 'It could be a vote winner, especially among older, younger and urban residents'.
- v. The design of the system must be linked clearly to benefits, both personal benefits in driving journey times and/or alternatives, and societal benefits such as fairness and environmental improvements. A mileage-based system with pricing linked to externalities would be both most effective and most transparently fair, and has the added benefit that higher driving costs would apply where the provision of alternatives is most economic (urban areas).

2. Call for evidence

- i. The UK Parliament Transport Committee issued a call for evidence on zero emission vehicles, with a follow on request for evidence on road pricing, given that zero emission vehicles will in the short term reduce and should in the long run remove fuel duty.
- ii. This response addresses three of the four points on road pricing requested by the Committee:
 - The case for introducing some form of road pricing and the economic, fiscal, environmental and social impacts of doing so;
 - Which particular road pricing or pay-as-you-drive schemes would be most appropriate for the UK context and the practicalities of implementing such schemes;
 - The level of public support for road pricing and how the views of the public need to be considered in the development of any road pricing scheme;

with an eye to the concern in the first point of the TOR on low emission vehicles that there are challenges as well as opportunities in accelerating low emission vehicles.

3. Paying for road use today – in a nutshell

- i. The current system for charging for road use has been clever, and very efficient. Taxing, through Fuel Duty, the motive power (petrol or diesel) needed for motorised use of roads takes account of distance covered, and, to a small extent and indirectly, time and place of driving (through higher cost of stop-start or slow driving). It collects around four times what is currently spent on roads, which is seen as justified to reflect the adverse externalities of road use.
- ii. Vehicle Excise Duty (VED) has been an underpowered add-on. The rationale for a fixed access charge has veered around, and may revert soon to giving extra impetus to shift to alternative fuel vehicles. The current hypothecation of revenue to spend on the Strategic Road Network (SRN) was an appealing start to users paying for what they get, but the logic of applying it to just 2% of roads was not immediately evident.
- iii. The problem at the heart of the system now is that it fails to collect enough from urban driving that imposes the greatest external costs, and where there is more chance of public or active transport alternatives being available. But we should not underestimate how sub-optimal that alternative is for many urban and suburban journeys. By contrast, driving on rural and strategic roads costs too much.

4. The impact of Low Emission Vehicles on how we pay for roads

- i. There will be a steep fall in revenue as the proportion of journeys run on fossil fuels falls.
- ii. The logic of the current system is being increasingly undermined by the rise of EV users getting pretty much a free ride over the road network.
- iii. The regressive nature of fuel duty being paid increasingly by those who cannot afford to switch to newer, electric vehicles will increase. Users who cannot afford an EV will be left with the 'old fleet', meaning growing inequality until EVs cascade through the second hand markets.
- iv. Fuel duty is becoming a cost burden and a differentiator for businesses. The expense of EVs is a burden for SMEs, whilst higher capitalised businesses can afford to replace their fleets. There are adverse impacts on remotely located businesses where charging infrastructure is rare and distances driven make electric vehicles less practical.
- v. The new regime should be planned now, given the lead times for a new system to be introduced. The imperative for a new regime should also be presented as an opportunity to be fairer on rural driving, reflect societal costs of urban driving and improve travel experience through reduced congestion and more reliable public transport. Increasing the overall take from motoring provides an opportunity to channel more investment funds into road improvements and/or alternative modes.

5. Some key aspects of a road pricing system

- i. The scheme needs to be fair and be seen to be fair, with the price reflecting the true cost of the trip but also the availability of realistic alternatives. Citizens should be involved in the design of the scheme and particularly in resolving debating points which arise from survey findings.

TABLE 1 – Debating points		
<p>Many drivers do not want to be tracked by ‘the government’ (perhaps compounded by high profile coverage of system failures during the pandemic – from track & trace to hotel booking).</p> <p>Road pricing should be delivered by perceived neutral agencies: mobile phone companies, power companies, insurance companies, etc. (Is there a side-benefit: a reduction in uninsured vehicles if access to fuel – electric or at pump – were only through the car’s insurance?)</p> <p>Choice is critical. Drivers want to be able to switch if they perceive a better customer service offer or a package which fits with other aspects of their lifestyle. ‘Will my power company charge me less for domestic energy if I buy their charging package for our cars?’</p> <p>This retains the advantage of road tax being collected by the private sector.</p>	<p>By contrast, one survey¹ found Highways England trusted to deliver pricing, with a non-profit agency second favourite and long leases to private companies supported by only 6%.</p> <p>‘Selling the railways hasn’t worked out well, so we should learn the lesson and keep the roads owned by the public.’</p> <p>‘The money from road charging should be spent on the roads; private companies would spin it off for shareholders.’</p> <p>‘The new regional authorities are the obvious ones to manage it.’</p>	<p>Surveys have found a preference for workplace parking levy over mileage based pricing in county² areas, which represent a significant proportion of car trips. This should not be the case with an externalities based mileage payment system, since a rural mile will cost far less than a London or Nottingham mile.</p>

- ii. The new system must retain distance-related elements of payment for road use, and add a much stronger element of charging by time and place of journey (to take account more precisely of the externalities of road use).
- iii. The fairness principle includes transparency over what happens to the revenue collected.
- iv. Many disabled and older people have no alternative to the private car, so there must be a mechanism such that people don’t lose their independence and mobility because

they can't afford to drive. Currently, those with severe disabilities are exempt from VED.

- v. There is little point in a new charge applying only to certain types of roads, given almost all journeys use a mix of road types. The danger of perverse incentives particularly comes with the 'easiest' form of charging: starting with more easily monitored purpose-built roads such as the SRN. This risks diversion of traffic to less suitable roads, so causing greater harm. Strategic roads should be the cheapest to use, not the most expensive.
- vi. The right tariff will be crucial. The need is to balance ease of understanding with a charge appropriate to different types of driving. We do not recommend fully dynamic pricing as users are entitled to know up-front what they will pay for a journey. The extreme range of costs of externalities (est. range 0.9p/km to £2.45/km) demands a pricing structure which accounts for context. A simple tariff covering all roads could differentiate by just three time-of-travel bands and by the speed limit in force, as a surrogate for safety and community impacts.

6. Ask the Fellows Who Cut the Hay

- i. There have been countless studies on attitudes to road pricing. Attitudes have changed over time, partly because the old insistence on privacy has been undermined by our phones knowing everything about us. Many third parties also know where we are and what we're doing. Attitudes are further softened by raised awareness that each car trip has an impact on things which are largely invisible, such as air quality, noise and climate change. That said, there is a disconnect between 'what should be done' and the lens of one's own behaviour. E.g. high road charges could apply near schools – surely, we won't argue against paying for the cost to a child's health? But much reckless driving and parking near schools is by parents.
- ii. 'Ask the Fellows Who Cut the Hay', from Chinese classical poetry, warns that the exalted thinking of officials may not be followed by the masses.

TABLE 2 – Survey results		
<p>Motoring is a special case, and undermining the 'freedom' is acceptable in return only for clear benefits. The link between congestion, price and time saving is increasingly understood, so the benefit derives from others being priced off the road, leading to more certain journey times.</p>	<p>People are open to pricing as an influencer of choice both for individuals and businesses: 'If driving at peak times cost more, the company would be more likely to agree flexitime'³. People are familiar with time based charging from rail travel, delivery charges and home energy charges.</p>	<p>Driving is no longer 'cool'⁴. Societal shifts which combine to make charging more acceptable include urbanism, the ageing population, climate consciousness, an increase in cycling particularly among young men and reductions in the need to travel for many purposes.</p>

- iii. The multi-layered responses to consultation can be partly explained by personality type and lifecycle stage: some people will pay almost anything to continue to drive;

others are probably already trying alternatives. Surveys⁵ based on typology show clear patterns of response, indicating that the volume of people willing to pay to drive is more than sufficient to provide funds to upgrade the alternatives for those willing to switch away from car. (This is partly because of the overwhelming numbers currently driving.) Road pricing can, therefore, provide higher cost but reliable road journeys for those who are cash rich and time poor, plus better alternatives for those shifted off the road.

- iv. In all consultations, if the ways in which we might pay for roads are explained, people are willing to engage. Facile consultation on a Likert scale or conjoint⁶ basis, presenting options as if they are choices in cosmetics, produce anger and division.
- v. Our current sense of drivers' opinion is that many still feel they're paying over the odds for road use, particularly where they have little alternative. In practice, an increasing number are not paying their way, with a flat Fuel Duty rate since 2010 and better fuel economy in cars. Many drivers understand that, whilst they are undoubtedly paying more than the operation, maintenance and improvement costs of roads, they are not paying the full external costs. Translating that into a willingness to pay those external costs may be a different matter.
- vi. Drivers do want to see any replacement system being fairer. There is a clear preference for revenue-neutrality, although losers would complain and winners keep quiet, as with any reform. We believe there would be user support for a modest uplift in the overall take from motoring charges, if the extra is dedicated to investment in roads – argued to give some of the strongest returns on any public sector investment – and/or in alternatives to attract some users away from roads and so offer more reliable journeys.
- vii. Finally, behavioural economics⁷ tells us, inter alia, that the acceptability of a message depends a great deal both on how it is framed and the degree of trust in the messenger. This will require testing during design of the new system. The table below offers a framework for a check list when considering road pricing options.

TABLE 3 – Behavioural Checklist

Behavioural concept	Short description
Ambiguity aversion	People don't like ambiguity and seek clarity and simplicity. This presents a challenge for a smart road pricing scheme which is sensitive enough for the price to reflect real costs, which are inherently highly variable. Lessons can be learnt from other products and services, such as mobile phone and home energy.
Blame avoidance	Drivers will underplay the impact of their own car use and overplay the necessity of their car journeys. A communications and information programme will be needed to reduce the blame avoidance effect
Easy	People are generally looking to make their lives easier and reduce the hassle factor. Simplicity and convenience are key, and to facilitate a behaviour any friction should be reduced. Technology can make things easy for the road user, but must be tried and tested to avoid glitches, and to avoid disadvantaging the less 'tech savvy'.

Fairness (or inequity aversion)	The road pricing scheme will need to be fair, and be seen to be fair. The price paid should reflect the real cost of the journey including externalities such as air quality, noise pollution and road congestion. However, it would be unfair if people were priced out of their cars with no suitable alternative, so it should reflect the availability of alternatives, or have revenues clearly hypothecated to provide alternatives. It should not further disadvantage low income, ‘unbanked’, older or disabled people.
Framing (also Anchoring, Choice Architecture)	Choices are heavily influenced by the way they are presented and, for example, which (and how many) options are shown. ‘Nudging’ is a subset of this.
Habit	Most behaviour is habitual with minimal conscious thought. This creates inertia and puts a brake on change. It is easier to change behaviour at a point when habits are interrupted. Most car trips are made habitually without any real consideration given to them. The introduction of road pricing will force people to think about their choices, so provides an opportunity (a “change moment”) to encourage people to switch to travel options which benefit the individual and society. Complementary measures aimed at facilitating behaviour change will improve acceptance of road pricing, and would be consistent with being Fair: those who cannot afford to pay or who are willing to change behaviour are compensated by improved facilities and services.
Herd behaviour	People unconsciously follow what others are doing rather than acting independently. Herd behaviour can work for or against road pricing, reinforcing the importance of a trouble-free implementation and technology and of having a trusted communications strategy - including social media to counter any mis-informed anti-road pricing movement.
Loss aversion	People are more affected by losses than gains. Road pricing replaces something which is seen to be free. Communications should emphasise that free-at-the-point-of-use has never been the same as free.
Messenger	The impact of a message depends as much on the messenger as the message itself. The messenger should be seen by drivers as being one of them and not someone looking down on them and telling them what to do. It will be crucial for the messenger to be trusted and to be seen as both knowledgeable and empathetic.
Present bias (also hyperbolic discounting or short termism)	Things occurring imminently are given far more importance than those in the future. The loss in revenue from the introduction of EVs is not immediate so isn’t seen as relevant for a journey which needs to be made now. Behaviour change and charging messages around air pollution and noise are more immediate than, say, climate change. But, even with noise and congestion, drivers may see themselves as suffering from the effects of other people rather than being part of the problem – blame avoidance.
Primacy of emotion	Emotions are triggered in advance of rational thought and emotions drive decision-making, with conscious thought mainly rationalising

	decisions which have already been made. Hard facts will have minimal effect on attitudes: communications will need to address fears of loss of freedom, people being penalised unfairly, drivers being demonised for something which isn't their fault, etc.
Relativity	People think in relative terms. E.g. people living in rural areas will compare themselves to others who have better access to alternatives to car and will feel hard done by. An externalities scheme would charge rural drivers less, and any scheme which takes into account the context (alternatives available, level of congestion) will help to reduce feelings of unfairness fuelled by such comparisons. Even if the overall amount paid by drivers in tax is held neutral, this may not mollify those who feel they are losing out.

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Endnotes

¹ "Paying for Roads and Road Use" Social Research Associates (SRA) (2014)

² Zvesper, A., Gilliard, E. and Beuret K. (2003) Road pricing research for Directors of Transport and Environment; & (2004) Road pricing research: County Towns and Cities

³ SRA, ibid

⁴ "On the Move:" Exploring attitudes to road and rail travel (SRA, 2015)

⁵ Zvesper et al., ibid

⁶ Common survey techniques based on sound mathematical concepts but which exclude context.

⁷ Duckenfield, A. (2020) 'What Behavioural Economics can tell us about Road Pricing'.