

Pay-As-You-Drive Road Pricing

Reform Scotland Briefing

The current system isn't working

Reform Scotland believes the way that we tax driving is unfair.

Although Vehicle Excise Duty (VED) takes account of the potential carbon emissions from a car, it punishes infrequent drivers by charging them the same, if not more, than frequent drivers. As a result, someone with an old car who doesn't drive very often can end up paying more than someone who has a newer car but drives all the time. As it is easier for wealthier individuals to upgrade to more fuel-efficient models on a more regular basis, it may also often be the case that this inbuilt unfairness penalises less well-off drivers.

In addition to VED, fuel duty is simply a blunt and unfair instrument which takes no account of where and when people are using the roads – many people living in remote areas or working unsociable hours have no alternative to the car.

Despite the unfairness of the way motoring is taxed, the revenue generated is an important revenue stream, accounting for nearly £2.3bn of tax income in Scotland in 2020/21.¹ However, while the number of licensed cars on Scotland's roads and number of kilometres driven continues to increase, the amount of tax raised, prior to the pandemic, has remained relatively static.

The sale of new petrol and diesel cars will be banned from 2030, which means revenue from the existing taxes will dwindle. Neither of the motoring taxes apply to electric vehicles, despite the fact that these cars still take up road space and impact congestion.

The current system is broken –

- *It takes no account of where and when people are driving, or the availability of public transport alternatives.*
- *Electric vehicles take up road space, contribute towards congestion and the need for roads to be maintained, but don't pay motoring taxes.*
- *Despite increases in vehicles and journeys, revenue has remained static and will likely decline as the ban on petrol and diesel cars approaches.*

¹ GERS 2020/1. This, however, is a fall from the pre-pandemic norm of roughly £2.8bn pa in 2017/18-19/20

Pay-As-You-Drive Road Pricing

Reform Scotland calls for a pay-as-you-drive system of road pricing to replace VED and fuel duty. Road pricing is intended to link drivers' choices with the actual costs they impose on the transport system. Pricing can better match the demands of road users with the available capacity or 'supply' of road space. This can encourage people to use roads more efficiently – by taking alternative modes of transport, consolidating trips, or travelling during less busy times of the day.

This would mean that people pay depending on which roads they use and when they use them. As a result, the amount they pay would be a better reflection of the emissions and congestion they cause, which is both a fairer and more efficient way of allocating scarce road space.

All of Scotland's roads would be covered by the scheme but the cost of using each road would depend on a number of factors, including the time of day and congestion levels. This means that many quieter roads, particularly in rural areas, would have no charge at all. The type of vehicle used could be taken into account too, with cleaner cars paying less, incentivising drivers towards lower-emitting vehicles. Local authorities could work with Transport Scotland to consider the charging levels appropriate for the circumstances in their areas.

Singapore has been using an electronic road pricing (ERP) scheme since 1998. It can charge different prices for the use of different roads and at different times of the day. Cars have an in-vehicle unit with a smart card and when they pass under one of 93 ERP gantries the system deducts the fee.

In 2004 the Department for Transport looked at road pricing but concluded low-cost mass market technology would not be available until 2014. The technology does now exist - for example some insurance providers use telematics technology inside cars to allow real-time data to be recorded and set the price of policies based on when and where they travel.² Such technology can also help change drivers' behaviour.

Pay-as-you-drive road pricing –

- *Allows all drivers to be charged fairly for the choices they make, for their impact on the road network and the wider environment.*
- *Ensures revenue is still raised from motoring despite changes to the types of cars driven.*
- *Can help encourage people to think more about the choices they make and look at public transport and active travel alternatives.*

² [Telematics explained - Confused.com](https://www.confused.com/telematics-explained)

Recent Developments

Reform Scotland published '[Pay-As-You-Drive: The Road to a Better Future](#)' in 2013. Since then the case for changing the way we tax motoring has increased. We are delighted that the policy is gaining momentum.

Transport Select Committee

With the taxes currently reserved to Westminster, the February 2022 report from the House of Commons Transport Select Committee calling on the UK government to consider a road pricing scheme to replace VED and fuel duty is particularly relevant. The report stated:

“The Government must set out a range of options to replace fuel duty and vehicle excise duty. Those options should be revenue neutral and not cause drivers, as a whole, to pay more than they do currently. One of those options should be a road pricing mechanism that uses telematic technology to charge drivers according to distance driven, factoring in vehicle type and congestion.”³

The report noted that the revenue raised by fuel duty across the UK was equivalent to approximately five pence on the rate of income tax.

The potential loss of revenue was a main concern for the committee and it highlighted the problem that if electric vehicle drivers become accustomed to no-tax on their motoring, it could become more difficult politically for that to change in the future. Therefore, it was important to change the tax sooner rather than later. As a result, it also recommended that the UK Government start an honest conversation with the public on the funding implications for road development and maintenance and for other essential public services of decreased revenue from vehicle excise duty and fuel duty.

While the taxes are reserved to Westminster, transport is devolved in Scotland, and there are other areas of the UK which have implemented local toll roads, bridges and congestion charging zones, such as the London Congestion charge. Any new scheme would have to work alongside those. The report notes:

“The Government must examine how an alternative road pricing mechanism can be delivered alongside devolved local road charging schemes, while respecting the existing devolution settlement.” (recommendation 10)

“Bearing in mind the partial devolution of transport policy, consultation and agreement between the UK Government and the devolved Administrations will be key to developing and implementing an alternative road charging mechanism.” (recommendation 16)

³ [Road pricing - Transport Committee \(parliament.uk\)](#)

Transport Scotland Route Map

The Scottish Government is currently consulting⁴ on Transport Scotland's route map to achieving a 20% reduction in car kilometres by 2030. Transport accounts for a quarter of Scotland's greenhouse gas emissions, with cars making up almost 40% of transport emissions.⁵ In Scotland around 50 per cent of journeys are under 5 kilometres, while around 30 per cent are under 2 kilometres and 15 per cent are under 1 kilometre.⁶ Therefore, reducing car use is essential if Net Zero targets are to be achieved.

The route map highlights work from Scotland's Climate Assembly, in which 63 per cent of the Assembly members supported a recommendation to '*phase in increased road taxes for private car use and use the revenue to subsidise public transport*'. The report goes on to note that these views were consistent with other recent UK research which found that opinions on road pricing had changed since the 2000s, and that in 2021 more people support than oppose road pricing as a concept, with a majority of people agreeing that road pricing would reduce congestion and pollution.⁷

The route map states that further examination of measures to discourage car use, including road pricing, will be explored through the commissioning of additional research in 2022. This work will help develop a new Car Demand Management Framework.

With regard to VED and Fuel Duty, the route map states:

"The Scottish Government will continue to engage the UK Government on the need for reform of existing taxes related to motoring. This is essential in order to create a tax system that better incentivises the transition to zero emission vehicles, and protects future revenues to fund interventions that support a shift healthier, fairer and more sustainable travel."

Glasgow Transport Strategy

Glasgow City Council's Draft Policy Framework for its Transport Strategy⁸ sets out a plan to lobby the Scottish Government to introduce road pricing at a Scottish level, while considering a regional scheme.

"Policy 7.15: Lobby the Scottish Government and Transport Scotland to introduce road pricing / road user pays proposals at a national level with detailed guidance for regional schemes. [Policy linkage: Connectivity Commission] - Action 7.P: Subject to national support for road user charging, work with SPT and Glasgow City Region local authorities on a potential regional scheme."

⁴ [20% car kilometre reduction route map - Scottish Government - Citizen Space \(consult.gov.scot\)](#)

⁵ [20% car kilometre reduction route map - Scottish Government - Citizen Space \(consult.gov.scot\)](#)

⁶ [3. Interventions | Transport Scotland](#)

⁷ [A route map to achieve a 20 per cent reduction in car kilometres by 2030 \(transport.gov.scot\)](#)

⁸ [Glasgow Transport Strategy - Draft Policy Framework](#)

Policy recommendations

Reform Scotland believes that we need to replace VED and fuel duty with a pay-as-you-drive road pricing scheme and that the UK and Scottish governments should work together to develop pilot schemes in Scotland.

Prior to the introduction of road pricing in Singapore, the government tested prototype systems and gathered feedback to help develop the final policy. Similar work could and should be trialled in Scotland.

Reform Scotland first called for a road pricing scheme to be introduced in 2013. Since then there are over 280,000 more cars and nearly 3bn addition vehicle kilometres driven by cars each year on Scotland's roads. We can't afford to keep waiting.

Key facts:

Table 1: Revenue from motoring taxes, Scotland

<i>£million</i>	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Fuel duties	2,193	2,258	2,201	2,191	2,211	2,224	2,241	2,274	2,299	2,290	2,248	1,708
VED	449	457	467	474	483	464	463	468	498	520	548	545
Total motoring taxes	2,642	2,715	2,668	2,665	2,694	2,688	2,704	2,742	2,797	2,810	2,796	2,253

Source: Government Expenditure and Revenue Scotland 2020/21, Supporting documents

Table 2: Vehicles licensed at 31 December in Scotland

<i>thousands</i>	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	2,684	2,685	2,691	2,717	2,759	2,821	2,863	2,919	2,962	2,991	3,041
Cars	2,249	2,255	2,264	2,285	2,319	2,369	2,394	2,433	2,462	2,486	2,524
Cars as % of total	83.8%	84.0%	84.1%	84.1%	84.1%	84.0%	83.6%	83.4%	83.1%	83.1%	83.0%
By method of propulsion											
Petrol	1,701	1,656	1,619	1,592	1,567	1,552	1,522	1,509	1,497	1,503	1,533
Diesel	974	1,018	1,061	1,113	1,178	1,252	1,321	1,386	1,435	1,450	1,459
Hybrid											
Electric	3	4	5	6	8	9	11	14	19	27	35
Electricity	2	2	2	3	4	5	6	7	9	10	12
Gas Bi-Fuel	2	2	2	2	2	2	1	1	1	1	1
Gas or petrol/gas	2	2	1	1	1	1	1	1	1	1	1

Source: Scottish Transport Statistics 2020

Table 3: New vehicle registrations in Scotland

<i>thousands</i>	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
All new registered vehicles	216	209	202	216	241	262	268	270	250	233	221
Cars	186	177	168	183	205	222	222	222	204	188	178
Cars as a % of total	86.1%	84.7%	83.2%	84.7%	85.1%	84.7%	82.8%	82.2%	81.6%	80.7%	80.5%
By method of propulsion											
Petrol	124	108	98	110	119	125	125	128	124	131	128
Diesel	91	99	102	104	120	133	138	137	118	92	80
Hybrid											
Electric	1	1	1	1	1	2	3	3	6	8	9
Electricity	1	1	1	1	1	2	1	1	2	2	3

Source: Scottish Transport Statistics 2020

Table 4: Million vehicle kilometres on all roads in Scotland

<i>million km</i>	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
All traffic on all roads	44,219	43,496	43,406	43,573	43,909	44,963	45,555	46,696	48,036	48,175	48,714
Cars	34,392	33,593	33,583	33,786	33,849	34,491	34,786	35,484	36,174	36,381	36,747
Two wheeled motor vehicles											
Buses	322	290	296	292	288	299	295	292	309	314	324
Light goods vehicles	635	649	606	582	604	605	583	555	571	500	563
HGVs	6,027	6,113	6,132	6,135	6,348	6,719	7,036	7,527	8,087	8,064	8,126
Pedal cycles	2,557	2,551	2,484	2,469	2,492	2,479	2,512	2,550	2,602	2,604	2,586
Pedal cycles	287	298	305	310	329	369	342	288	292	313	367
Cars as a % of all	77.8%	77.2%	77.4%	77.5%	77.1%	76.7%	76.4%	76.0%	75.3%	75.5%	75.4%

Source: Scottish Transport Statistics 2020