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REFORMING ROAD TAX

The case for a fair, sustainable pay-per-mile system in the UK

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Summary

- Historically, fuel duty has raised substantial revenue and (roughly) tracked road use. Electrification and increasing engine efficiency break its ability to do both, leaving a shrinking, tech-dependent tax base.

- Though the exact trajectory is dependent on several factors, the Office for Budget Responsibility expects fuel-duty receipts to rise to about £27 billion in 2028–29, then fall steeply over the coming decades.

- From 1 April 2028, Electric Vehicle Excise Duty (eVED) will charge 3p per mile for battery-electric vehicles (BEVs) and hydrogen cars, and 1.5p per mile for plug-in hybrids, on top of VED. Mileage estimations will be conducted through existing VED processes, avoiding GPS tracking.

- eVED correctly accepts that motoring taxation must change, but as a permanent BEV-only charge it would present electrification as a tax problem, penalise cleaner vehicle choices, and fragment the motor-tax system.

- A better reform is a national distance-based charge for all cars, paired with a reduction or replacement of fuel duty and reforms to VED. This transition should be gradual, revenue-neutral for the typical motorist, and retain environmental advantages for zero-emission vehicles.

- Drivers would not pay identical amounts in every circumstance under such a system. A simple base rate could be adjusted for vehicle weight, road class, time of day or congestion. However, such complexities should be introduced carefully, with the overriding objective to create a trusted, pri-

vacy-preserving charge and not a system of surveillance or dynamic pricing.

- Distance-based charging is practicable. Light BEVs and plug-in hybrids have been folded into New Zealand's Road User Charges system, while Oregon's (voluntary) OReGO programme receives mileage totals instead of location histories.

- Utah has also used road-usage charging for BEVs and hybrids. These examples do not prove that a similar system in Britain could be easily established, but they offer lessons on collection, vehicle categories, user choice, privacy, communications and implementation.

- This shift has risks, chiefly unfairness, public resistance, administrative cost, mileage fraud, privacy, and suppressing BEV adoption. These risks are manageable; they can be addressed in various ways, including a phased transition, revenue recycling, targeted support for low-income, disabled, and motor-dependent drivers, a non-telematics payment route, independent oversight, and committing to matching fuel-duty cuts.

- This paper's chief recommendation is to move from a BEV-only tax to a national pay-per-mile framework applied to all cars, with eVED as a transitional bridge. A fairer system would better reflect distance travelled, retain environmental incentives, and provide a stable revenue base for public services and transport investment.

Key recommendations

The Government could:

- publish a long-term road taxation roadmap setting out the transition from fuel duty and VED towards a universal distance-based charge for cars.
- treat the 2028 eVED scheme as an interim measure and commit to a review before 2030 on extending mileage charging to all cars.
- reduce fuel duty in a predictable, staged way as a universal mileage charge is introduced, avoiding double taxation and protecting revenue neutrality for typical drivers.
- set a simple national base rate, with any weight, emissions, location or time-of-day adjustments justified by transparent evidence and subject to regular review.
- use odometer-based reporting as the default, with independent verification through MOT alongside servicing and vehicle-registration processes; make GPS or telematics voluntary rather than compulsory.
- establish targeted protections for low-income households, disabled motorists, carers, rural residents and people with limited public transport alternatives.
- publish an annual account of revenue raised, administrative costs, distributional effects and the use of funds, supported by independent evaluation.
- pilot the universal model with public-sector and fleet vehicles before national roll-out, while testing customer experience, fraud controls and data protection.

Introduction: a tax system built around the internal combustion engine

The UK's motoring tax system was designed around a world in which almost every car and van used petrol or diesel. Fuel duty therefore provided a rather convenient way to tax vehicle use. It was collected at the point of purchase, was relatively cheap to administer, and broadly increased with the amount of fuel consumed. A driver travelling 20,000 miles in a large, inefficient vehicle would normally pay more fuel duty than a driver travelling 5,000 miles in a small, efficient car. It was never a perfect measure of road use: fuel economy differs, driving conditions vary, and the tax does not distinguish between a congested urban street and a quiet rural road. But it linked taxation to use more closely than a flat annual ownership charge.

That relationship is now being weakened by two developments. First, the growth of BEVs removes petrol and diesel consumption from the fiscal equation. Second, improvements in the fuel efficiency of conventional vehicles reduce fuel duty per mile even where annual mileage does not change. Plug-in hybrids complicate the picture further because some of their energy is purchased as electricity and some as taxed liquid fuel. The more the vehicle fleet changes, the less fuel duty can be relied upon as a consistent measure of motoring activity.

The issue is not whether BEV drivers should be permanently exempt from contributing to the costs of the transport system. It is whether the UK should respond by creating a separate charge for BEVs, or use the transition as an opportunity to modernise the whole structure of road tax. A system that charges only BEVs may

be a politically convenient first step, but it risks confusing the long-term principle. If the policy objective is to tax road use, the tax base should ultimately be road use, not the technology used to propel the vehicle.

The case for reform is therefore both fiscal and economic. It concerns the sustainability of public revenue, the fairness of contributions between motorists, the efficient management of scarce road space, the financing of transport infrastructure, and the credibility of the UK's decarbonisation strategy. A well-designed mileage charge can help reconcile these objectives. A poorly designed one could undermine all of them.

The fiscal problem: fuel duty is a declining tax base

The scale and trajectory of fuel duty

Fuel duty remains a big source of revenue for the Government. The OBR's March 2026 Economic and Fiscal Outlook put receipts at about £24.2 billion in 2025–26. On the policy assumptions then in place, receipts were forecast to rise as the temporary 5p cut was unwound and rates were uprated, reaching around £26.6–27 billion in 2028–29 before falling by about £0.9 billion by 2030–31 as the rising electric share of the fleet outweighed the effect of higher rates (OBR 2026a). These figures are forecasts, not certainties, and are sensitive to fuel-duty policy, economic conditions and the speed of electrification.

The longer-term picture is more important than any single Budget forecast. The OBR's July 2026 Fiscal Risks and Sustainability report identifies the decline in fuel duty as a structural fiscal risk. Even if fuel duty is uprated in line with inflation, the shift away from petrol and diesel reduces the taxable volume of fuel. The OBR estimates that the new eVED policy will offset only a portion of the long-run decline in fuel duty, partly because it applies to cars rather than all vehicle classes and because the rate is set below the average fuel-duty burden on petrol and diesel cars (OBR 2026b).

The tax base is also vulnerable to policy choices. The main fuel-duty rate has been frozen for many years, aside from the temporary 5p cut introduced in 2022. This has eroded the real value of the tax and weakened its revenue-raising capacity. Repeatedly postponing planned increases may be politically attractive in the short term, but does not resolve the underlying problem. As the

fleet electrifies, even a government willing to raise fuel duty will find that there are fewer litres on which to levy it.

Fuel duty is not simply a road-maintenance charge. It is a general tax whose proceeds support the wider public finances. It is therefore misleading to suggest that every pound of lost fuel duty automatically translates into a pound less for pothole repairs. Nevertheless, a sustained decline in motoring tax receipts creates a fiscal choice: replace the revenue, reduce spending, borrow more, or shift the tax burden elsewhere. The House of Commons Transport Committee warned that failure to replace the existing tax base could put pressure on public services and infrastructure, and called for an honest public conversation about the future of motoring taxation (House of Commons Transport Committee 2022).

A sustainable system must also account for the fact that road use will not disappear when the fleet becomes electric. Roads will still require maintenance, bridges and junctions will still need investment, and congestion will continue to impose costs on businesses, commuters and bus passengers. The source of propulsion changes; the need to manage and finance the road network does not.

Why eVED is an incomplete response

The Government announced eVED at the Autumn Budget 2025 and, following consultation, confirmed its design in July 2026. From 1 April 2028, BEVs and hydrogen fuel-cell cars are due to pay 3p per mile, while plug-in hybrids are due to pay 1.5p per mile. The charge will be additional to VED. Drivers will estimate their annual mileage, pay on that basis and reconcile the estimate against a later reading. The Government has said that drivers will not be required to report where or when they travel and will not need to install a tracker (HM Treasury 2026).

The Government's rationale is understandable. Petrol and diesel motorists pay fuel duty as they buy fuel; BEV motorists do not. A mileage-based charge gives BEV drivers a contribution linked to how far they travel and avoids the need to monitor journeys. The Government has also set the initial BEV rate at around half the average fuel-duty burden per mile for petrol and diesel cars, arguing that BEVs will continue to enjoy a relative tax advantage. The Government has committed to reinvesting a substantial share of early eVED receipts in support for consumers and the automotive transition (HM Treasury 2026).

However, the design creates a fundamental asymmetry. A petrol or diesel car pays fuel duty through the fuel it consumes, while a BEV pays a separate mileage tax. The system therefore taxes different technologies through different mechanisms and preserves incentives to buy vehicles with lower fuel consumption, but not necessarily incentives to drive fewer miles. It is also an additional charge on BEV ownership rather than a comprehensive reform of the tax burden on motoring.

The policy risks weakening the economic case for BEVs at precisely the point when the Government is seeking to accelerate adoption through its Zero Emission Vehicle (ZEV) mandate. The OBR's assessment of the original eVED policy estimated that the higher lifetime cost of BEV ownership would reduce demand relative to its previous forecast, with an estimated reduction of around 440,000 BEV sales over the forecast period, although other support measures were expected to offset much of that effect (OBR 2025; House of Commons Library 2026). This is an important warning: a tax can be fiscally rational in isolation while creating a behavioural response that works against another government objective.

There is also a question of policy coherence. The Government is asking households and businesses to invest in new vehicle tech-

nology, while simultaneously introducing a new usage charge on that technology. The fact that the rate is lower than the equivalent fuel-duty burden is relevant, but it does not remove the signal that the running-cost advantage of BEVs will be narrowed. A universal mileage charge, introduced alongside reductions in fuel duty, would be easier to explain as a reform of the whole system rather than a penalty attached to one propulsion technology.

The case for pay-per-mile

Fairness between motorists

A universal distance-based charge would apply the same underlying principle to all cars: the more a vehicle is driven, the greater its contribution to the public finances. This is not the same as saying every motorist should pay exactly the same amount per mile. There may be good reasons to vary rates by vehicle weight, emissions, road type or congestion. But the basic tax base would be consistent: measured distance travelled.

The current system produces anomalies. A low-mileage petrol car can pay relatively little fuel duty, while a high-mileage BEV may pay no fuel duty at all. A fuel-efficient petrol car pays less per mile than an inefficient one, even if both use the same road space and contribute similarly to congestion. A mileage charge would make the usage component more transparent. Drivers would be able to see the marginal tax cost of an additional mile rather than having the tax embedded in the price of fuel.

The principle also helps address fairness between current and future generations of motorists. As the vehicle fleet changes, the tax system should not leave a growing group of drivers outside the usage-related tax base while the remaining petrol and diesel drivers carry a disproportionate share. Equally, the transition should not impose a sudden extra burden on BEV owners who bought vehicles in good faith under the previous policy framework. A staged and predictable transition is essential.

A universal system could also be fairer to motorists who drive relatively little. Under a flat annual tax, a low-mileage driver pays the same VED as a high-mileage driver of the same vehicle. A mileage charge makes the usage component vary with actual use.

VED can continue to reflect vehicle ownership or external characteristics, but the distinction between ownership taxation and usage taxation should be made explicit.

Fiscal resilience and a broader tax base

The principal fiscal advantage is that a distance-based charge is not dependent on the fuel or energy source used by a vehicle. It would continue to raise revenue as the fleet electrifies, becomes more efficient, or adopts technologies that are not yet widely used. In this sense it is a more future-proof tax base than fuel duty. It also gives the Government a route to replace fuel duty gradually rather than waiting until receipts have fallen substantially.

A national mileage charge could be applied to cars first and extended to vans and other vehicle classes over time, with appropriate distinctions for commercial use and heavy vehicles. This matters because fuel duty is paid by a wide range of road users, not just private cars. The OBR has highlighted that excluding vans and heavy vehicles from eVED limits its capacity to offset the long-term decline in fuel duty. A comprehensive reform should therefore avoid designing a system that solves only the passenger-car element of the problem.

Revenue stability does not mean that the rate should automatically rise to maximise receipts. The purpose should be to establish a predictable and defensible contribution to the public finances, with rates reviewed against explicit objectives. A mileage charge can be designed to be revenue-neutral at the point of transition for a representative driver, while generating more or less revenue over time depending on policy choices. Transparency about those choices is critical to legitimacy.

Better alignment between tax and the costs of driving

Fuel duty is an imperfect proxy for the external costs of motoring. It taxes fuel consumption, which is partly related to vehicle efficiency and driving style, rather than directly reflecting road wear, congestion, noise, accident risk or local pollution. A distance charge would create a platform for a more rational structure in which different components of the charge reflect different costs.

For example, vehicle weight is relevant to road wear, especially for heavier vehicles. Congestion costs are highest at busy places and times. Local air pollution varies by vehicle technology and location. Carbon emissions are better addressed through fuel and energy taxation or a carbon price than through a flat mileage charge. A carefully designed system could therefore separate the objectives: a basic per-mile contribution for general road use; a weight-related element for road damage; and targeted congestion charges in places and at times where traffic imposes particularly high costs.

There is a danger, however, of trying to do too much too soon. A national scheme that immediately varies by every road, time period, vehicle characteristic and emissions class would be pretty difficult to explain to the public and expensive to administer. The case for a simple universal base charge should be kept distinct from the case for targeted congestion pricing. The first is primarily about a sustainable tax base and fair contribution; the second is about managing scarce road space.

Supporting a more efficient transport system

A mileage charge can make the cost of driving more visible. When the marginal cost of an additional journey is hidden in fuel duty, drivers may not consider the full cost of road use when deciding whether to drive, combine trips, car-share or use another mode of transport. A transparent charge can encourage more

considered travel choices. The size of this behavioural effect will depend on the rate, the availability of alternatives and the degree to which motorists can adjust their journeys.

A flat national rate alone will not solve congestion. If the policy objective is to reduce peak-period traffic in city centres, a national rate may be too blunt. But a national system could provide the administrative and technical foundation for more targeted measures in the future, provided that local congestion pricing is separately justified and subject to democratic accountability.

The revenue from a mileage charge could also support a wider transport settlement. This should not mean that all receipts are ring-fenced for roads: fuel duty currently supports general public expenditure. However, transparent reporting of the contribution made by motorists and the use of a defined share for local transport, road maintenance and alternatives to car use could strengthen public confidence.

International evidence and lessons

New Zealand: national road user charges

New Zealand offers the clearest example of a national distance-based charging framework that includes BEVs. Its Road User Charges (RUC) system has long applied to diesel vehicles and heavy vehicles, which do not pay petrol excise duty in the same way as petrol cars. In March 2024, legislation brought light BEVs and plug-in hybrids into the RUC system from 1 April. At introduction, light BEVs paid NZ$76 per 1,000 kilometres and plug-in hybrids a reduced rate of NZ$38 per 1,000 kilometres, recognising that plug-in hybrids also consume taxed petrol (New Zealand Ministry of Transport 2024).

The New Zealand model demonstrates that a distance-based system can be integrated into an established national road-funding framework. Drivers purchase a distance licence and display it in the vehicle; the system does not require the UK to adopt a universal GPS tracking model. It also illustrates the need to treat plug-in hybrids carefully, because their drivers pay some fuel excise on the liquid fuel they use.

The lesson for the UK is not that New Zealand's rates should be copied. The countries differ in geography, fuel-tax arrangements, road funding, vehicle markets and public transport provision. Rather, the lesson is institutional: a mileage charge can be administered as a normal part of vehicle taxation, with clear rules and a differentiated approach for vehicles that already pay fuel duty. The New Zealand experience also highlights the importance of communication when a previously exempt group is brought into a usage-based tax system.

Oregon: OReGO and privacy by design

Oregon's OReGO programme is a long-running US road-usage charging initiative. The state sets the current charge as two US cents per mile, with revenue directed to the State Highway Fund for the maintenance and improvement of roads and bridges. Oregon's stated rationale is that increasingly fuel-efficient and electric vehicles contribute less through the traditional fuel tax, weakening the revenue base for transport infrastructure (Oregon Department of Transportation n.d.).

An important feature of the OReGO programme is the privacy arrangement. Oregon states that the Department of Transportation does not receive vehicle location data. Private account managers report the number of miles driven by a vehicle identification number, rather than providing a detailed record of where the vehicle has travelled. This is a valuable lesson for the UK: mileage measurement does not inevitably require government access to journey histories.

As Oregon's programme is voluntary, there are limits to what it can tell us about the public acceptability of a mandatory nationwide charge. Voluntary participation can attract motorists who are comfortable with the system and may not reflect the attitudes of the wider population. Nevertheless, it still provides practical evidence about account management, mileage reporting, customer service and privacy safeguards. It also demonstrates the value of giving motorists a clear comparison between the road-use charge and the fuel tax or registration fee it replaces.

Utah: incremental implementation and user choice

Utah has also explored road-usage charging, initially focusing on electric and hybrid vehicles. The Utah Foundation's review of the state's programme and wider US pilots found that road-usage charges are technically feasible, but that full-scale implementation can involve significant cost and complexity. It also identified

potential fairness and privacy issues, while noting that distance charging can be fairer than fuel taxation in some respects (Utah Foundation 2021).

Utah's experience supports a gradual approach. Pilots allow governments to test technology, reporting methods, customer support and enforcement before moving to a compulsory system. They also allow different approaches to be compared, including odometer reporting, devices and smartphone-based systems. For the UK, this would suggest having a phased national programme rather than a sudden switch.

The broader US experience also shows that road-usage charging can be designed as an alternative to a fixed BEV registration surcharge or as a payment option alongside existing taxes. This kind of choice can help build confidence, although it may add complexity and can complicate revenue forecasting. Any UK option should therefore be evaluated against administrative cost and the risk of creating loopholes.

The Netherlands and the wider experience

The Netherlands has been examining the potential role of road user charging as part of its climate and fiscal transition. An International Monetary Fund (IMF) analysis of the Dutch case concluded that a road user charge applied to all vehicles could help achieve fiscal, climate and non-climate objectives, while also identifying distributional impacts that would need to be managed. The IMF analysis suggested that a charge applied only to BEVs could have less favourable emissions effects and deliver only part of the potential revenue benefits. Combining road user charging with targeted BEV support could improve distributional outcomes (IMF 2025).

This is especially relevant to the UK debate. A BEV-only charge can weaken the incentive to adopt zero-emission vehicles without

establishing a coherent long-term system for all motorists. A universal charge, combined with targeted support for households facing affordability barriers, is potentially more consistent with both fiscal sustainability and decarbonisation.

Wider experience with congestion charging, including systems in Singapore, Stockholm, Gothenburg and London, also demonstrates that road pricing can influence travel behaviour when charges vary by location and time. It should be stressed that these are not the same as a national per-mile tax: they are targeted instruments designed to manage congestion in specific areas. The UK should not assume that a national mileage charge will itself resolve urban congestion, but it can coexist with local congestion pricing where there is a clear case.

What the international evidence does, and does not, show

The international evidence establishes that distance-based charging is operationally possible. It also shows that there is no single model. New Zealand provides a national licensing approach; Oregon demonstrates a privacy-conscious voluntary system; Utah illustrates staged implementation; and the Netherlands example provides modelling of the wider fiscal and environmental implications. These examples support the case for reform, but they do not eliminate some key political and distributional challenges.

Moreover, the evidence should be interpreted carefully. Some schemes apply only to BEVs or selected vehicle classes, some are voluntary, and some are designed primarily to fund roads rather than replace a large national tax. The UK's scale, road network, existing fuel-duty system and constitutional arrangements are different. A British system would need its own appraisal, pilot programme and public consultation. International experience is best used to identify design options and risks, not to claim that a particular rate or collection method can simply be imported.

Disadvantages and how to address them

Distributional effects and rural dependence

A major objection to a flat pay-per-mile charge is that it can impose higher costs on people who have little practical choice about how far they drive. Rural households may travel longer distances to work, education, healthcare and shops. People living in areas with weak public transport may depend on a car even when they would prefer alternatives. Shift workers, carers and people with irregular working hours can also have limited options. A uniform charge may therefore be regressive in its effects, even if it is formally equal per mile.

The answer is not to abandon distance charging, but to distinguish between the general principle and the distributional package. The Government should publish detailed modelling by income, geography, disability, household type and access to public transport. Targeted support should be delivered through existing systems where possible, rather than through a maze of mileage exemptions that is difficult to administer and easy to exploit.

Possible measures include a refundable mobility credit for eligible low-income households, targeted support for disabled motorists and carers, and transitional relief for households in remote areas with very limited alternatives. The design should avoid creating incentives to drive unnecessarily or encouraging people to register vehicles at a different address. Support should be means-tested where appropriate, transparent and periodically reviewed.

The distributional assessment must consider the whole package, not the mileage charge in isolation. If fuel duty is reduced as the

charge is introduced, some petrol and diesel motorists will pay less. If revenues fund better bus services and local transport, some households may gain access to alternatives over time. Conversely, if the mileage charge is added on top of existing taxes without offsetting reductions, the burden will be much harder to justify.

Impacts on BEV adoption and climate objectives

A mileage charge increases the marginal cost of driving a BEV. If it is introduced only for BEVs, or at a rate that removes much of the running-cost advantage, it may weaken the incentive to switch from petrol and diesel. This matters not only for emissions but also for industrial strategy. The UK automotive sector is investing in electric vehicle production, batteries, supply chains and charging infrastructure. A policy that makes the domestic market less attractive could undermine investment confidence.

A universal mileage charge offers a better route. It would be accompanied by a reduction in fuel duty for petrol and diesel vehicles, while retaining a lower overall usage-tax burden for zero-emission vehicles during the transition if that is judged necessary to meet climate targets. Environmental incentives can also be delivered through purchase grants, company-car taxation, charging infrastructure and targeted support for lower-income buyers.

The policy should not assume that every BEV should pay exactly the same rate as every petrol car from day one. A transitional discount for zero-emission vehicles may be justified, provided it is transparent, time-limited and linked to a clear decarbonisation objective. The crucial distinction is that any discount should be part of a coherent system for all motorists, not a separate tax regime that singles out BEVs for a new charge.

Privacy, surveillance and public trust

A national road-use charge inevitably raises questions about how mileage is measured. GPS-based systems could enable precise charging by location and time, but they also create a risk of government or private-sector access to sensitive journey data. Concerns may extend beyond the data actually collected to the perception that every journey is being monitored.

The Government should adopt privacy by design. The default system should not require GPS tracking, continuous telematics or the reporting of journey destinations. Odometer readings can be submitted at annual VED renewal and verified through MOT tests, servicing records and other existing vehicle checks. The Government's eVED design already points in this direction, and Oregon provides an example of a system in which the transport authority receives mileage totals rather than location histories.

Where digital or telematics-based options are offered, they should be voluntary, independently certified and governed by strict data minimisation rules. The law should prohibit the use of road-pricing data for unrelated law-enforcement, insurance or commercial purposes except under tightly defined legal safeguards. Data retention periods, access rights, security standards and appeal processes should be published. An independent regulator or auditor should report on compliance.

Trust will depend on more than technical compliance. Ministers should explain in plain language what information is collected, who sees it, how long it is retained and what it cannot be used for. The public should not have to accept a surveillance system in order to pay a road tax.

Administrative cost, compliance and fraud

A mileage tax creates administrative tasks that fuel duty largely avoids. The system must register vehicles, collect readings, calcu-

late liabilities, process payments, handle refunds, identify non-compliance and resolve disputes. There is also a risk of odometer tampering, inaccurate estimates, vehicles changing ownership mid-year, cross-border use and difficulties for fleets and leased vehicles.

The UK could build on the existing VED processes of the Driver and Vehicle Licensing Agency (DVLA) and the MOT system, rather than create a wholly separate agency. Mileage reporting should be integrated with annual vehicle-tax renewal. For vehicles under three years old, which do not generally require an MOT, the Government should use proportionate options such as dealer/service records, voluntary digital submissions or estimates reconciled at the first MOT, rather than requiring additional inspections. The July 2026 consultation response has already moved away from requiring extra mileage checks for vehicles under three years old, recognising the burden such a rule could create (HM Treasury 2026).

Fraud controls should be risk-based. Large discrepancies between reported mileage, service records and subsequent MOT readings can trigger checks. Penalties should be proportionate and distinguish deliberate evasion from honest error. There should be a clear appeals process, independent review and a simple mechanism for correcting readings. The Government should publish administrative cost estimates and ensure that collection costs do not consume a disproportionate share of revenue.

Fleet and leasing arrangements require particular attention. Companies may manage thousands of vehicles, with drivers changing frequently and vehicles moving between businesses. Bulk licensing, consolidated reporting, monthly payment options and clear rules for vehicle transfers can reduce compliance costs. Such processes should be tested with employers, rental firms,

leasing companies and trade bodies before national implementation.

The double tax danger

The most politically damaging design would be to add a new mileage charge while leaving fuel duty and VED unchanged. Motorists would understandably see this as an additional tax rather than a replacement for a declining one. The House of Commons Transport Committee recommended that any alternative road-charging mechanism should replace fuel duty and VED rather than simply be added to them, and that the transition should be revenue-neutral for most motorists (House of Commons Transport Committee 2022).

A universal mileage charge should therefore be introduced as part of a published tax-switching package. Fuel duty should be reduced in a staged and predictable way as the mileage charge expands. VED should be reviewed so that the distinction between ownership and use is clear. The Government may decide to retain an annual ownership charge for certain purposes, but it should not obscure the fact that the mileage charge is replacing the usage-related component of fuel duty.

A revenue-neutral transition does not mean every driver must pay the same as before. Some high-mileage drivers may pay more; some low-mileage drivers may pay less. The principle is that the reform should not be used as a stealth increase in the overall tax burden on ordinary motorists. The Government should publish illustrative household examples and an independent distributional analysis before each stage.

Regional and local government implications

Road taxation reform will affect local authorities as well as central government. Local councils are responsible for much of the road network and have a major role in public transport, active

travel and local congestion management. A national mileage charge could provide a stable source of revenue, but it should not centralise all decisions about how the money is spent.

A proportion of revenue could be allocated through transparent formulae that reflect road condition, traffic volumes, deprivation, rurality and transport need. Local authorities should have a role in deciding how best to combine road maintenance with bus priority, safer walking and cycling routes, and access to essential services. The aim should be to avoid a system that simply raises money from motorists without improving the transport choices available to them.

The Local Government Association's research into local authorities' views on national road user charging identified both the fiscal challenge created by electrification and the potential for a national system to affect local transport outcomes (LGA 2022). This underlines the importance of involving local government from the outset.

Designing a workable UK model

A phased transition rather than a cliff edge

The Government should publish a 10-year roadmap, with clear milestones and a commitment to review the design as evidence accumulates. The 2028 eVED implementation can provide an administrative test of annual mileage reporting, reconciliation and payment. However, the review should not be limited to whether eVED can be collected efficiently. It should assess whether the system is creating a disincentive to BEV adoption and whether the UK should move to a universal charge.

A practical sequence would be: first, implement eVED with strong privacy and simplicity safeguards; second, pilot a universal mileage charge with public-sector and commercial fleets, including both electric and combustion vehicles; third, offer voluntary participation to private motorists with a transparent comparison against existing taxes; and fourth, legislate for a gradual transition to a universal system once administrative and distributional tests have been met.

The transition should be linked to reductions in fuel duty. The timing and scale of those reductions should be announced in advance, subject to a transparent fiscal framework. A staged approach will allow households and businesses to plan vehicle purchases and avoid sudden changes in the cost of motoring.

A simple national base rate

The first national model should use a single base rate per mile for private cars, irrespective of powertrain. This is easier to understand, easier to administer and less likely to create incentives to manipulate vehicle classifications. A rate should be set following

detailed modelling of current fuel-duty payments, VED, vehicle efficiency, mileage distribution and revenue requirements.

The Government should publish a range of illustrative rates rather than announce a politically convenient figure without explanation. For example, it should show what different rates would mean for a driver travelling 4,000, 8,000, 12,000 and 20,000 miles a year, and compare those liabilities with the current combined fuel-duty and VED burden. The examples should cover small petrol cars, large petrol cars, diesel vehicles, hybrids and BEVs.

A weight-related supplement may be justified for heavier vehicles because road wear is not identical across vehicle classes. However, the relationship between vehicle weight and road damage is complex and should be based on engineering evidence. A simple weight band may be sufficient initially. Heavy goods vehicles should be considered through a separate but compatible framework that recognises their greater contribution to road wear and their role in freight supply chains.

Odometer-first collection and voluntary technology

For most private cars, annual odometer reporting is likely to be the most acceptable starting point. The reading could be submitted when VED is renewed and reconciled with MOT records. Drivers should be able to pay upfront or by monthly instalments, and should be able to update their mileage estimate during the year if circumstances change. Where the actual mileage is lower than estimated, a credit or refund should be available.

The system should not require continuous GPS tracking. Voluntary telematics may be useful for drivers who want more frequent payments, fleet managers or those who wish to distinguish business and private use, but participation should be genuinely optional. The Government should ensure that motorists who do not

use smartphones or digital accounts can comply through telephone, post or an authorised service point.

The system should also be designed for people who cannot easily submit readings themselves. Accessible interfaces, alternative reporting routes and support through garages or trusted intermediaries can reduce exclusion. The administrative experience should be tested with older motorists, disabled people, rural households and small businesses before national roll-out.

Differentiating rates: keep the objectives distinct

There are legitimate arguments for varying charges, but the Government should avoid using one tax instrument to pursue incompatible objectives. A national base mileage charge should provide a stable contribution for general road use. Congestion charging should be targeted at places and times where congestion costs are high. Carbon emissions should be addressed through fuel and energy taxation, vehicle standards and climate policy. Road wear should be reflected, where justified, through vehicle-weight bands.

This separation makes the system easier to understand and evaluate. A zero-emission car should not face a carbon-related mileage penalty simply because it uses the road. At the same time, BEVs should contribute to general road funding as part of a universal system. A transitional discount for zero-emission vehicles may be justified, but it should be explicit, time-limited and regularly reviewed against the pace of decarbonisation.

Location-based or time-of-day rates could eventually help manage congestion, but they should be introduced only after public debate and local consultation. The UK already has experience with targeted congestion charging in London and tolling on specific roads. A national mileage tax should not be used as a back

door to impose widespread congestion charges without a separate case.

Revenue use and public legitimacy

A new charge will be more acceptable if motorists can see what it is for. The Government should publish an annual road user charging statement showing total receipts, collection costs, the distribution of liabilities, the amount returned through reductions in fuel duty and the amount allocated to transport investment. It should also explain how revenue supports local road maintenance, strategic infrastructure and public transport.

There is a strong case for allocating a defined share of revenue to local transport, particularly in places where car dependence is high and alternatives are poor. This would help address a central objection to mileage charging: that drivers are being asked to pay more without receiving better roads or better alternatives. A transparent settlement can link the charge to improved accessibility, reliability and safety.

The Government should also establish an independent oversight body or assign the role to an existing institution with suitable powers. Its responsibilities should include monitoring distributional effects, privacy compliance, administrative efficiency, revenue neutrality and the effect on BEV uptake. Annual reporting would make it harder for the system to drift into an unannounced tax increase.

Economic and industrial policy implications

The design of motoring tax has implications beyond the Treasury. The automotive sector is undergoing a major transformation and restructuring as manufacturers invest in electrification, batteries, software and new supply chains. The UK is competing to attract investment in vehicle assembly, battery production, charging infrastructure and associated technologies. Policy uncertainty around the cost of ownership can influence consumer demand and manufacturers' decisions about where to allocate investment.

A BEV-only mileage tax risks reinforcing the perception that government support for electrification is conditional or temporary. A universal system is more coherent because it treats the charge as a long-term reform of road taxation rather than a levy on one technology. If BEVs retain a clear environmental and, during the transition, tax advantage, the system can support the shift to zero-emission vehicles while ensuring that all motorists contribute.

A more predictable tax framework could also benefit fleet operators and businesses. Companies making decisions about vans, cars and logistics fleets need to forecast total cost of ownership over several years. A transparent mileage charge, combined with a clear fuel-duty transition, would make those calculations easier. However, commercial vehicles should be treated carefully: their usage patterns, vehicle weights and role in supply chains differ from private cars. The Government should consult freight, logistics and small-business representatives before extending the system to vans and heavy goods vehicles.

The reform could also encourage innovation in vehicle data management, secure payment systems and fleet services, provided that privacy and competition safeguards are in place. The aim should not be to create a compulsory market for proprietary tracking devices. Instead, government should set open standards that allow competing providers to offer secure and accessible services.

A public engagement strategy: explain the bargain

The politics of road pricing have repeatedly proved difficult. Motorists are suspicious of new charges, particularly when they believe existing taxes are already high or when public transport alternatives are inadequate. The Government should not present reform as a technical fix for a Treasury revenue problem. It should explain the bargain clearly: as the fuel-duty system becomes less capable of raising revenue fairly, the tax base will change; in return, the new charge will replace rather than simply supplement existing usage taxes, protect privacy, and support a more reliable transport system.

Public engagement should begin before legislation is finalised. The Government should publish worked examples, independent distributional analysis and a clear account of the alternatives. It should involve motoring organisations, environmental groups, local authorities, trade unions, business associations, disability organisations, rural representatives and the automotive industry. The aim should be to identify where the design is unfair and correct it, not simply to secure endorsement for a pre-determined scheme.

A citizens' panel or deliberative process could help test the trade-offs between a flat rate, weight adjustments, rural support, congestion pricing and revenue allocation. Public pilots should be independently evaluated and their results published. The Government should be prepared to change the design if the evidence reveals unacceptable impacts.

Above all, ministers should avoid implying that the charge is solely about road maintenance. Fuel duty has long been a general

tax. The honest case is that the Government needs a sustainable and fair way to tax motoring as the vehicle fleet changes, while continuing to fund public services and transport infrastructure. Credibility depends on saying what the money will do and what taxes it will replace.

Conclusion: use electrification as an opportunity for reform

The decline of fuel duty is not a temporary accounting problem. It is the predictable consequence of a transition away from petrol and diesel, compounded by years of real-terms erosion in the duty rate. The Government cannot rely indefinitely on a tax whose base is being deliberately phased out. Nor is it fair or sustainable to allow the burden of motoring taxation to fall increasingly on those who continue to use internal combustion vehicles.

The introduction of eVED from April 2028 is an important recognition of this challenge. It creates a mileage-based charge for BEVs and plug-in hybrids, uses existing VED processes and avoids mandatory GPS tracking. But as a long-term model it is incomplete. It applies to selected powertrains rather than all cars, risks weakening the incentive to adopt BEVs, and leaves the wider structure of motoring taxation unresolved.

The better destination is a universal distance-based road user charge, introduced gradually and linked to reductions in fuel duty. Such a system would be more resilient to technological change, make the usage component of motoring taxation more transparent, and provide a platform for fairer treatment of motorists. It could also support better management of congestion and road wear if differentiated charges are introduced carefully and on the basis of evidence.

The disadvantages are substantial but can be managed. Distributional effects require targeted relief and better transport alternatives. Privacy concerns require an odometer-first model and strict limits on data use. Administrative costs require integration with DVLA and MOT systems, robust pilots and independent scrutiny.

BEV uptake requires a clear environmental incentive and a predictable transition. Public acceptance requires a genuine tax switch, not an additional levy.

The choice is not between taxing BEVs and leaving fuel duty untouched. It is between patching a tax system designed for the internal combustion engine and building one that is fit for a mixed and eventually largely electric fleet. The UK should take the opportunity to make that transition fair, transparent and sustainable. Pay-per-mile charging should be the foundation of that reform, but only if it applies to all motorists, replaces rather than compounds existing usage taxes, and is designed around public trust.

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Appendix A: Illustrative mileage-charge basics

The following examples are illustrations, not proposed rates or forecasts. At a rate of 3p per mile, an annual mileage charge would be £120 for 4,000 miles, £240 for 8,000 miles, £360 for 12,000 miles and £600 for 20,000 miles. At a universal rate of 2p per mile, the equivalent liabilities would be £80, £160, £240 and £400. These figures show why the rate and the treatment of existing fuel duty matter: a seemingly small pence-per-mile charge can create a material annual bill for high-mileage households.

Any policy proposal should compare the new charge with the fuel duty and VED that a driver currently pays, rather than presenting the mileage charge in isolation. It should also model different vehicle efficiencies and the effect of fuel-duty reductions. A rate that is revenue-neutral for an average driver may produce significant gains or losses for individual households, which is why distributional analysis and targeted relief are essential.

Appendix B: Some questions for consultation and appraisal

- What share of motoring-tax receipts should be raised through a national mileage charge, and what share should remain in ownership, fuel or carbon-related taxes?
- Should the initial universal rate be flat, or should it include a modest vehicle-weight adjustment from the outset?
- How should fuel duty be reduced as mileage charging expands, and how can the Government demonstrate that the reform is not simply an additional tax?
- What level and form of support is justified for low-income, rural, disabled and mobility-dependent motorists?
- Can annual odometer reporting, MOT verification and existing DVLA processes deliver sufficient accuracy at acceptable administrative cost?
- What privacy protections should be placed in primary legislation, including restrictions on location tracking, data retention and secondary use?
- How should vans, taxis, private hire vehicles, motorcycles and heavy goods vehicles be incorporated over time?
- What proportion of revenue should be allocated to local transport and road maintenance, and how should that allocation be determined?

- What evidence from pilots would be required before moving from voluntary participation to a mandatory national system?

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