Road diesel demand drivers

Natalie Cartwright **0300 068 5260** natalie.cartwright@energysecurity.gov.uk

Key headlines

Diesel is the main road fuel in the UK but demand following the COVID-19 pandemic has been muted, down 16 per cent in 2024 compared to 2019, in contrast to the six per cent increase in petrol demand over the same period. This article explores reasons for that decline by looking at changes in the vehicle fleet and the purpose of the miles being driven.

The analysis indicates that demand for road diesel has dropped because 1) changes to vehicle buying patterns have meant that there are now two million fewer diesel cars on UK roads in 2024 compared to 2019, and 2) miles being driven in diesel cars have also dropped sharply which is linked to changes in travel patterns post-pandemic.

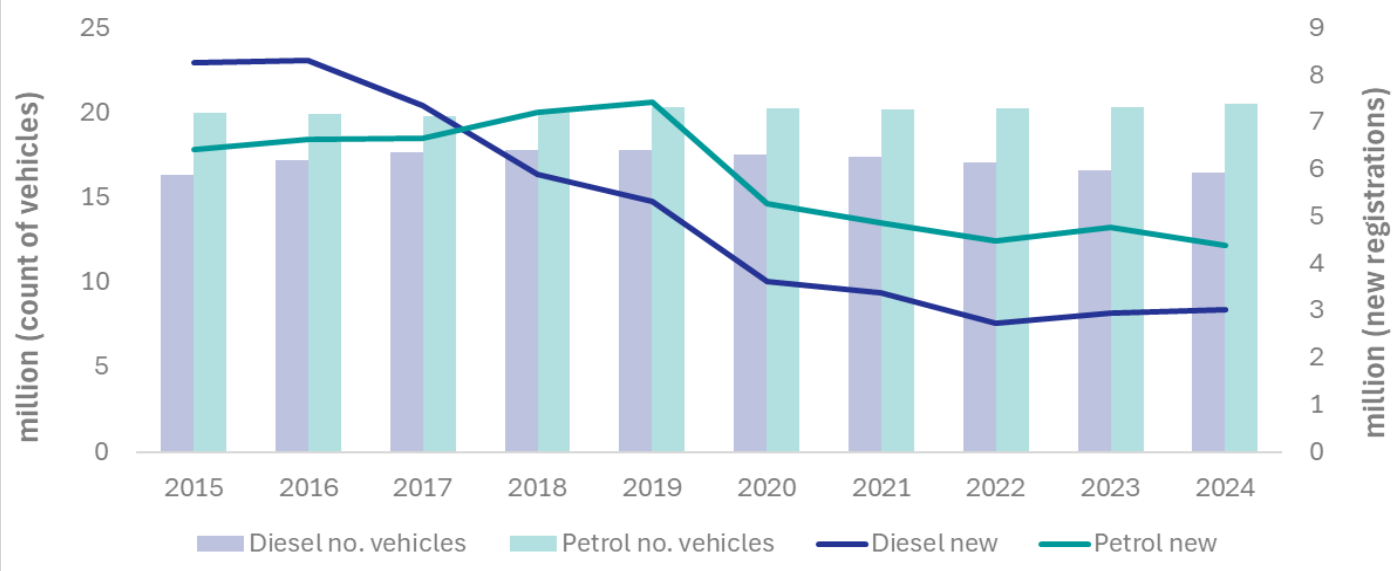
Road fuel demand trends are changing with a drop in diesel

Demand for road diesel had been increasing since the 1990s until 2018, with only one small annual drop following the 2008 recession. However, over recent years diesel demand has been in decline and in 2024 was down 16 per cent compared to 2019, the last full year before the COVID-19 pandemic[1]. In contrast, miles being driven has been increasing, and demand for petrol has bucked a pattern of decline to increase over the same period. This article seeks to understand the reasons for changing patterns of road diesel demand.

There are fewer diesel cars on UK roads

Demand for road fuels closely follows vehicle sales and registrations. Chart 1 shows the fall in new diesel vehicles from 2016 as evidence of manipulation of diesel emissions became widely known, and taxation changes increased the cost of owning a diesel vehicle.

Chart 1: Number of new registrations and count of vehicles in the UK fleet by petrol and diesel engines[2] (Department for Transport Vehicles statistics, Tables 1153a and 0105)



There were 2.8 million fewer diesel vehicles on UK roads in 2024 compared to 2019, with a 0.9 million increase in Light Goods Vehicles (LGVs) being more than offset by a sharp fall of 3.7 million diesel cars. There have been changes in both company and private patterns of car ownership in that time.

[1] All road fuel use data is taken from Energy Trends Tables 3.4 and 3.5 unless otherwise indicated.
[2] Note: Q3 and Q4 2024 new registrations estimated. 2024 count of vehicles is for the 12-month period ending June 2024.

Diesel cars were initially displaced in the company-owned fleet by an increasing number of petrol cars, but companies quickly turned to adoption of alternative fuels and hybrid electric vehicles. Cars running on other fuels[3] have seen a rapid emergence, reaching 1.4 million cars and nearly half per cent of the company-owned fleet in 2024 compared to just 235,000 in 2019. Taken together, only just over half of the company-owned car fleet is now fuelled by petrol (around 40 per cent) or diesel (less than 20 per cent) with nearly half by alternative-fuelled engines.

Over the same period, private car ownership has also seen a switch away from diesel. In 2024 privately-owned diesel cars were down by one million compared to 2019 (-8.9 per cent) and had been displaced almost entirely by one million electric hybrid cars, 0.7 million other fuelled cars[3], and only one hundred thousand petrol cars.

Clearly, the total reduction in diesel cars contributed to the fall in diesel consumption.

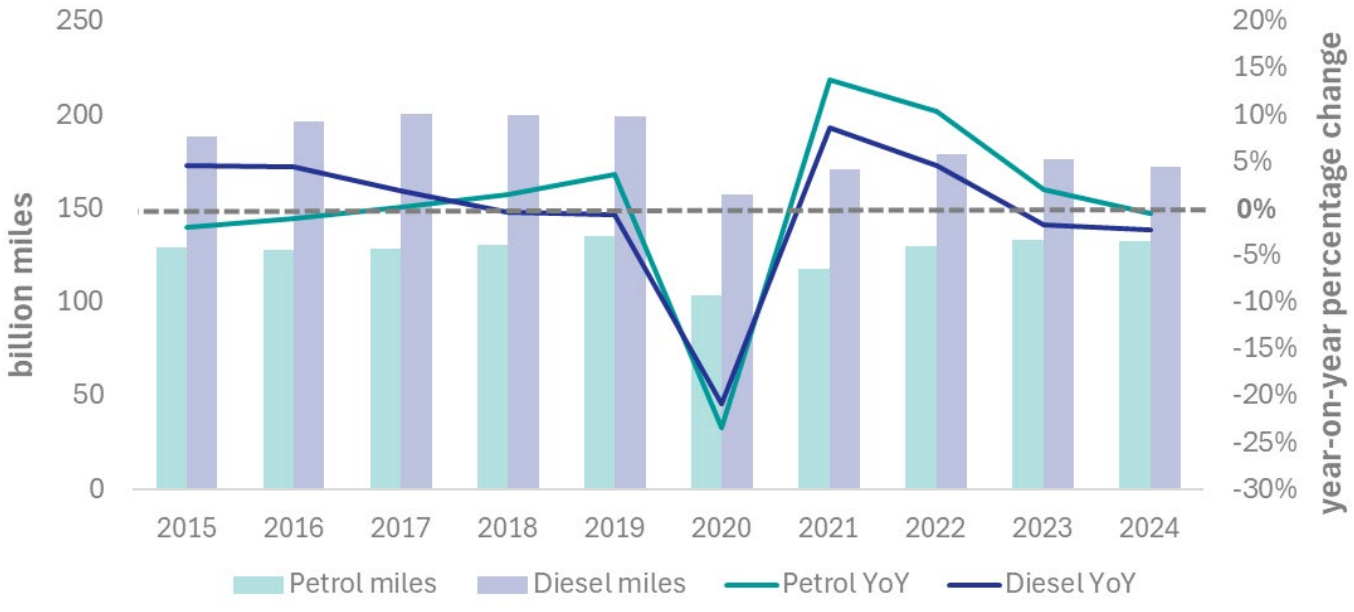
Fewer miles are being driven in diesel cars

While petrol vehicles have always dominated in number on UK roads, diesel vehicles such as Heavy Goods Vehicles (HGVs), LGVs, buses, and company-owned cars have been used to drive more miles. However, since the pandemic in 2020 the number of miles driven by diesel vehicles has not recovered in the same way that petrol miles have.

The lines in Chart 2 show the sharp drop - more than 20 per cent - in miles driven for both petrol and diesel vehicles in 2020, and the following recovery in petrol miles but smaller recovery in diesel miles in 2021.

The bars in Chart 2 show that by 2024 the number of miles driven by petrol vehicles had nearly recovered to levels in 2019 (down just 2.1 per cent), but diesel miles remained much reduced (down by 13 per cent). This corresponds closely with the 16 per cent drop noted in road diesel fuel demand in 2024 compared to 2019.

Chart 2: Miles driven and annual changes for petrol and diesel vehicles (analysis of Department for Transport Road Traffic Estimates Table TRA0101 and Transport Analysis Guidance Table A 1.3.9)



Diesel cars comprise nearly 60 per cent of all diesel miles driven so are an important factor in determining road diesel fuel demand. Provisional Department for Transport road traffic estimates for the period January to September 2024 shows diesel car miles were down by 19 billion miles (a reduction of a quarter), compared to

[3] Other fuels include battery electric, range extended electric, and petrol and diesel plug-in hybrid electric vehicles, Department for Transport Table 0142.

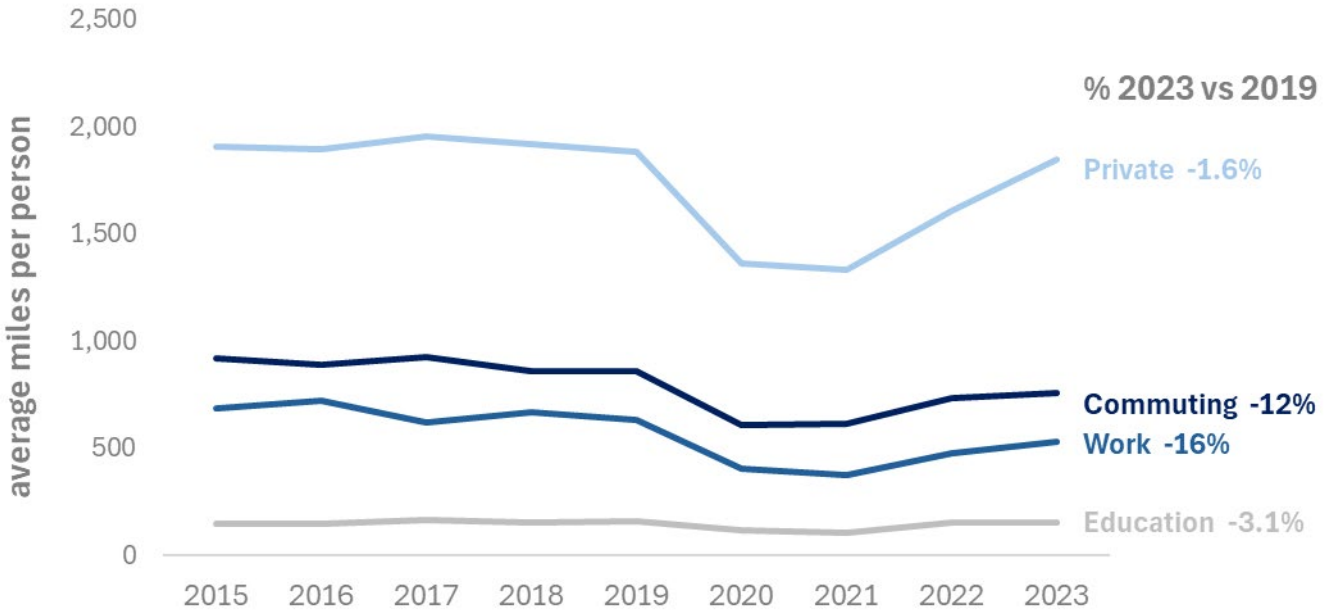
the same period in 2019. Around a third of diesel miles are driven in LGVs, and these were up by five billion miles (an increase of 9.7 per cent), reflecting the uplift in delivery vans as shopping habits move online, while HGVs and buses were broadly stable compared to 2019.

The drop in diesel car mileage is very likely related to changes in work and social patterns since the pandemic.

Reasons for travel have changed since restrictions during the COVID-19 pandemic

Chart 3 shows that mileage travelled in any vehicle for private reasons (including shopping, personal business and leisure) was down by around 30 miles per person per year (just 1.6 per cent) in 2023 compared to 2019. However, mileage for commuting and work were down by 12 per cent and 16 per cent respectively, equalling a reduction of around 200 miles per person per year and reflecting increased working from home and fewer business trips since the nature of some office-based roles remains changed by lockdown travel restrictions.

Chart 3: Average annual mileage in vehicles, per person, by purpose (Department for Transport National Travel Survey, Table NTS0409b, 2024. England only. Available to 2023.)



The reduced miles driven for commuting and work are key to understanding diesel demand because many would have driven been in work vehicles, and company-owned cars were historically diesel[4].

Conclusion

The recent decline in demand for diesel road fuel has been caused directly by a sharp reduction in the number of diesel car miles being driven over recent years, which can be explained by two main factors.

First, diesel car ownership has fallen sharply following the emissions scandal and changes to tax policy. By the end of 2024 the total number of licensed private- and company-owned diesel cars had fallen by more than two million from the peak in 2018.

Second, a compounding factor to the reduced number of diesel cars in the company-owned fleet is the reduced number of miles driven for work and commuting purposes. These miles have not recovered since the COVID-19 pandemic in the same way as for private purposes due to fundamental changes to work culture in some sectors. Work miles (and likely many commuting miles) are driven in company-owned cars, which were historically diesel but are being replaced by alternative-fuelled and hybrid cars.

Taken together, changes to the way that we travel for work since the pandemic and changes in the composition of commercial and private car fleets are the key factors affecting road diesel demand trends.

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[4] Road Traffic Statistics, Department for Transport, Table TRA2501, 2025

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