

CITY OF WOLVERHAMPTON COUNCIL

Electric Taxis and Private Hire Vehicles: Information, Availability & Performance



Battery Electric Vehicle Availability & Performance

- Ever-growing number of suitable electric vehicles
- There are currently 166 fully electric car models available to buy
- Currently not many offerings of WAVs but expected to increase with vehicle converters
- Petrol & Diesel vehicle sales banned from 2030
- Typical suitable vehicles currently have estimated real-world range of 150-250 miles (approx. 20% lower than manufacturer provided figures)
- Range is primarily affected by the following:
 - Driver style (aggressive decreases range, smoother – increases range)
 - **Driving environments** (motorway style journeys decrease range, urban driving increase range)
 - **Weather** (colder temperatures will reduce range by approximately 20%)
- All vehicles can be charged at home, typically fully recharged within 6-11hrs. However, a driveway is required for installing the chargepoint
- Alternatively, using public rapid chargers, most vehicles are able to be recharged within 30-60mins (additional costs are expected with public charging)
- Locations of these chargepoints can be found on apps or websites such as "Zap Map"
- Electric cars provide a better driving experience: Faster and more responsive acceleration rates, better handling, increased safety and quieter operation
- Improved air quality around taxi ranks reducing potential health problems
- Overall 5 tonnes greenhouse gas reduction annually per vehicle (including the production of the electricity), resulting in less contribution to climate change. This is expected to improve further as the grid continues to move towards renewable energy sources.



















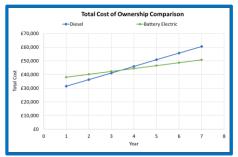
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Costs and Financing Options of Electric Taxis and Private Hire Vehicles

- Fuel costs lower than diesel/petrol:
 - Electric vehicle costs approx. £34 per week to run (8p per mile)*
 - Diesel vehicle costs approx. £74 per week to run (18p per mile)*
- Reduced maintenance costs due to fewer parts (approx. 30% cheaper)
- Brand new, purpose-built taxis are eligible for a £7,500 discount from the government
- Significant cost savings over the life of the vehicle, over
 £5,000 with an assumed ownership period of 7 years and annual mileage of 22,000 miles
- Higher capital cost of electric car pays itself back after 3 years of ownership
- Zero road tax required on electric cars until 2025
- Upfront costs for EVs are expected to be equivalent to a diesel alternative within the next few years
- Wide range of EV leasing opportunities available from approximately £290 per month
- Over 18,000 used EVs available on Autotrader (March 2023)







*using diesel at £1.48/L and electricity at 21p/kWh, annual mileage of 22,000mi



Current and Future Council Incentives

- Clipper cab's inclusion as an approved Hackney Carriage is being consulted on
- The age limit for battery electric vehicles has been removed
- £500,000 has been invested in 20 rapid chargers
- Council's fleet of vehicles is transitioning to electric, with the mayor's electric vehicle suitable for private hire













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Current Electric Vehicle Operator Testimonial: Go Zero travel

"We have been running a fleet of 17 electric vehicles since 2018 and have found that it is easy to do and beneficial for a number of reasons. Charging has not been a problem, utilising public chargers (from Tesla) and home charging. Vehicle range, whilst a key factor, can be effectively planned around and does not affect business. For example, for a 5-hour journey there would be a pre-defined stop agreed with the customer and we have found that they enjoy the comfort break and are generally very interested to hear about how we operate our EVs.

We save approximately 40% in costs when compared to using standard vehicles due to cheaper fuelling and exceptional reliability and low maintenance. We run vehicles with 250,000 miles that still drive like new, even finding that in addition to the lack of oil/filter changes, brakes last longer (200,000 miles plus). When buying used, we do not even consider the mileage as a factor for purchase, with 100,000 miles not a problem at all.

We have no hesitation in recommending other taxi or private hire companies to switch to electric vehicles, they are **better for the environment**, **better on costs** and the **customer prefer them** due to the **quieter**, **more luxurious** ride they offer."

- Andrew Taylor, COO of Go Zero travel







Further Information

- Find further resources regarding electric vehicles at: https://www.cenex.co.uk/resources/
- Database of all currently available electric cars: https://ev-database.org/uk/
- An interactive map showing locations of all public EV chargepoints:
 https://www.zap-map.com/
- Useful tool for determining whole-life CO2 savings of electric vehicles: https://www.transportenvironment.org/discover/how-clean-are-electric-cars/







