Electric Vehicles Status Report for Washington State

177,866	21	330 Miles
Registered Electric Vehicles	Electric Utility Companies	Longest Range



Summary

Rapid Growth: 400% increase from 2017 in EV registrations, reaching 169, 504 EVs registrations by the end of 2023.

Popular Car Make: Tesla leads with 44.79% of the total EV population.

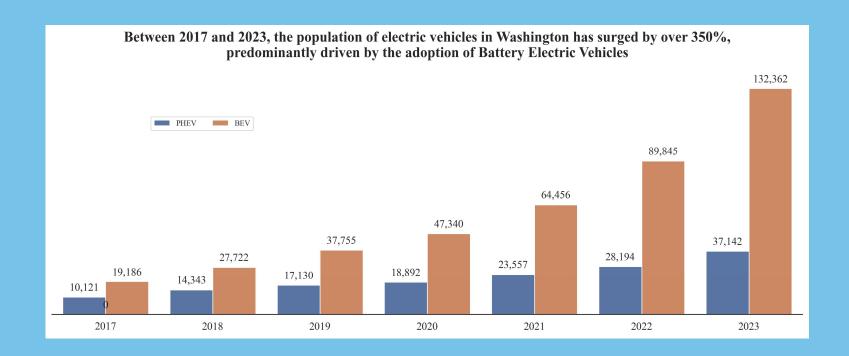
Electric Range: 50% of the vehicles have a range of 84 miles with a maximum of 330 miles and a minimum of 6miles.

Charging Infrastructure: There are a total of 21 electric utility companies. Puget Sound Energy Inc being the most popular.

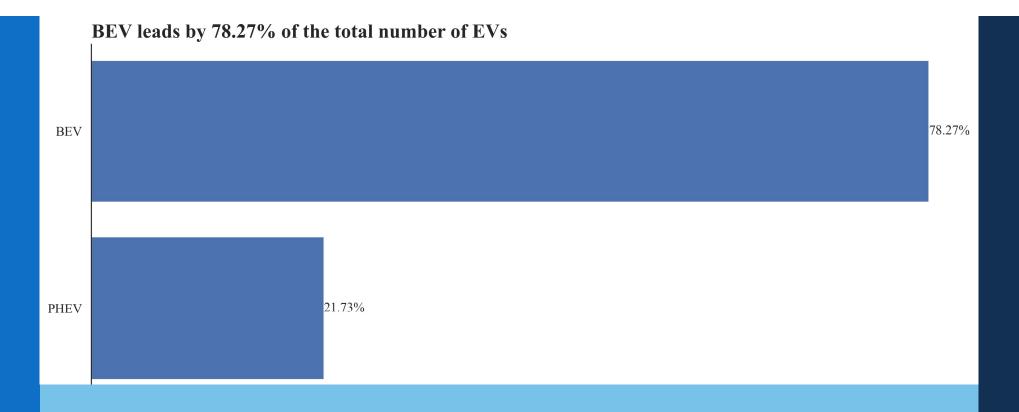
Environmental Impact: Only 37.29% of the EVs are eligible as Clean Alternative Fuel Vehicles with 51.7% being categorized as unknown since the battery range has not been researched.

Keywords: PHEV – Plug-In Hybrid Electric Vehicles BEV – Battery Electric Vehicles

Tracking the growth and the current Number of EVs

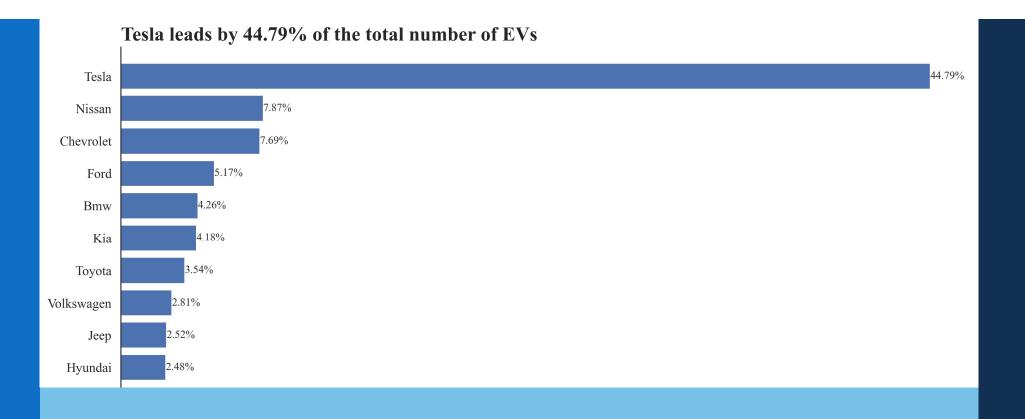


EV Growth trend

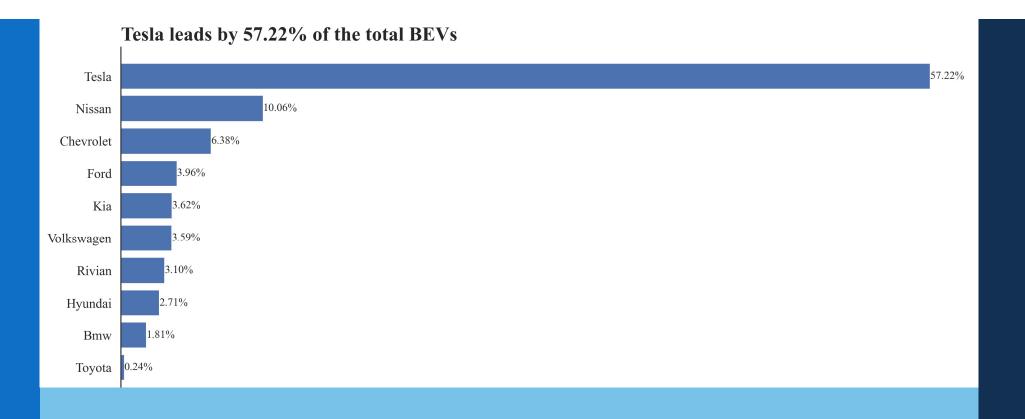


As of February 2024, total number of registered EVs reached 177,866.

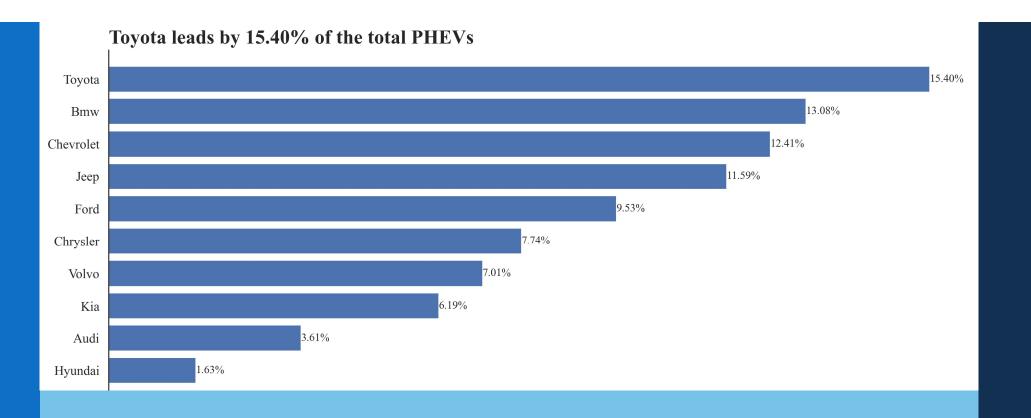
Most Popular EV Make



Top 10 EV makes



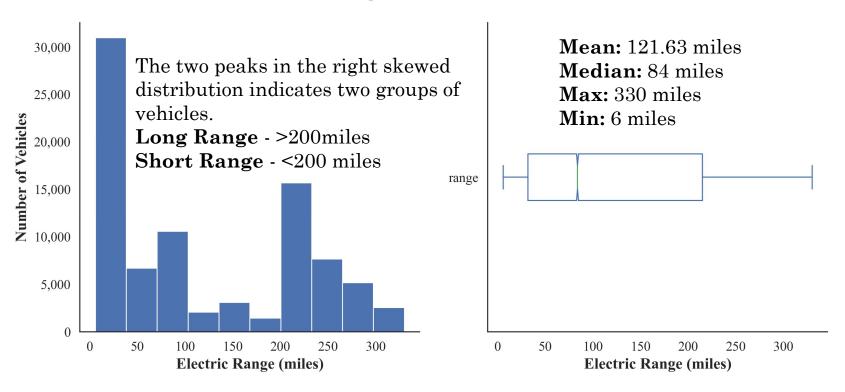
Top 10 BEV makes

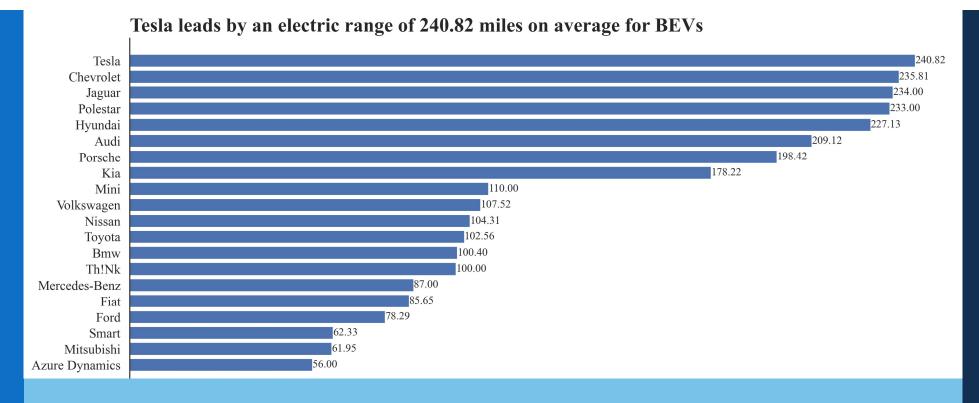


Top 10 PHEV makes

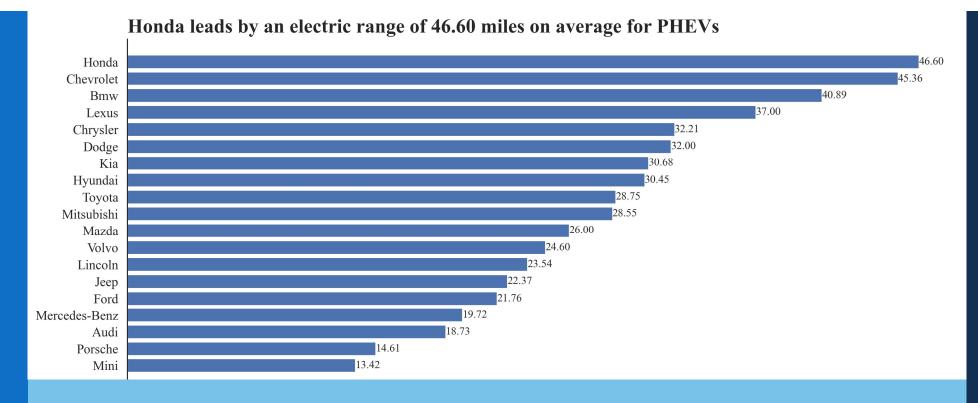
Electric Range of EVs

EV Electric Range Distribution of Individual Cars



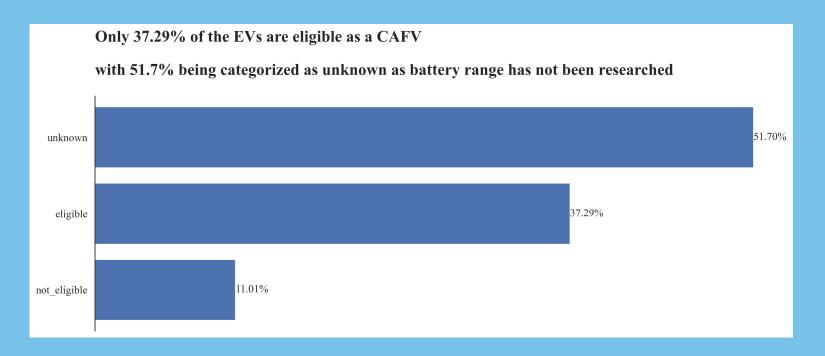


Average Electric Range per Make for BEV category



Average Electric Range per Make for PHEV category

Environmental Impact



Clean Alternative Fuel Vehicle (CAFV) Eligibility

Recommendations



- Maintain and adapt support for EVs to encourage long term sustainable growth as electric mobility matures this include expanding charging infrastructure.
- PHEVs manufacturers should improve on the electric range of their battery.
- Implement policies to reduce the number of combustion engines and fasten the research of the battery range to ensure a higher number of EVs being categorized as Clean Alternative Fuel Vehicle.

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Data Source: Electric Vehicle Population Data

Data Tools: Pandas, NumPy, SciPy, SQL, Matplotlib, Seaborn