

Harsh Bajpai

Business Requirement Document

Dashboard Title: Electric Vehicle Trends in the US - 2025

Purpose

This interactive Tableau dashboard analyzes Electric Vehicle (EV) adoption trends in the U.S. for 2025, with a specific focus on Washington state.

It presents key EV metrics including total vehicles, BEV and PHEV share, average electric range, and Clean Alternative Fuel Vehicle (CAFV) eligibility.

Users can explore EV growth by model year, view the top makes and models, and examine regional adoption patterns using fully interactive filters.

Business Value & Insights

- Tracks annual EV adoption trends, highlighting peak vehicle registrations around 2022.
- Identifies market leaders in EV production, with Tesla standing out among top manufacturers.
- Visualizes state-level EV adoption to guide infrastructure and charging station planning.
- Evaluates CAFV eligibility to support policy incentives and environmental strategies.
- Enables exploration through filters for model, type, and geography for detailed analysis.

Key Performance Indicators (KPIs)

- Total Vehicles: 246,740
- Average Electric Range: 44.60 miles
- Total BEV Vehicles: 196,699 (79.72%)
- Total PHEV Vehicles: 50,041 (20.28%)

Charts and Visualizations

- Total Vehicles by Model Year: Line/Area Chart showing growth trend from 2010-2025.
- Total Vehicles by State: Map Chart showing regional adoption, with emphasis on Washington.
- Top 10 Total Vehicles by Make: Bar Chart highlighting dominant manufacturers like Tesla.
- Total Vehicles by CAFV Eligibility: Donut Chart showing vehicle eligibility breakdown.
- Total Vehicles by Model: Table showing top models such as Model Y and Model 3.

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Filters and Interactivity

- Filter by CAFV eligibility, EV type, model, and state.
- Interactive filtering through selections (e.g., clicking on chart bars or segments).
- Hover tooltips show detailed values.
- All visuals and KPIs update dynamically based on filters.

Export Options

- Dedicated PDF export option.
- Exported dashboard includes all KPIs, charts, filters.
- Branded with light watermark if needed.

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Electric Vehicle Trends in the US – 2025

Insights into EV adoption, range, eligibility, and distribution

