**Electric Vehicle Population Data**

**Data:** Washington State Electric Vehicle Registration Data

**About:** *This dataset provides detailed information on electric vehicles (EVs) registered in Washington State. It includes vehicle and ownership characteristics, geographic distribution, electric utility service information, and economic data points. The dataset is valuable for analysing trends in electric vehicle adoption, understanding regional EV distribution, supporting sustainable transportation planning, and assessing infrastructure requirements for EV support across the state.*

**Data Source:**

* *Data is sourced from Washington State Department of Licensing and Homeland Infrastructure Foundation Level Database (HIFLD).*
* [***https://catalog.data.gov/dataset/electricvehiclepopulationdata***](https://catalog.data.gov/dataset/electricvehiclepopulationdata)

**Keywords:** *Electric Vehicles, Washington State, EV Registration, Clean Alternative Fuel Vehicles, Vehicle Data, Legislative Districts, Census Tracts, Geographic Information, Sustainability, Electric Range, MSRP, Electric Utility Service*

**Update Frequency:** *Annually*

**Geography Coverage:** *Washington State, United States; may include vehicles registered in Washington but located in other states.*

**Objective:** *Our project aims to analyse the population of electric vehicles (EVs) registered in Washington State, focusing on Battery Electric Vehicles (BEVs) and Plugin Hybrid Electric Vehicles (PHEVs). By studying this data, our team seeks to identify trends in EV ownership, understand how adoption is progressing, and explore the impact on sustainability in transportation. We are especially interested in how regions like Seattle, known for its tech influence, are contributing to these trends. Through this analysis, we hope to provide insights that support policy discussions, infrastructure development, and environmental goals across Washington.*

**Background of Dataset:** *Our team chose this dataset because it is readily accessible, regularly updated, and provides relevant information for analysing EV adoption in Washington. Given Seattle's status as a major tech city, we believe Washington State is positioned to lead in sustainable transportation. By examining this data, our team can explore how the state—and particularly Seattle—is advancing toward cleaner energy and environmentally friendly transportation solutions. This dataset allows us to transparently assess Washington's EV landscape, supporting informed discussions and actionable insights into sustainable transportation.*

**Data Types:** *Text, Number, Point*

**Data Usage and Applications:**

* *Policy development and tracking of EV adoption rates.*
* *Geographic analysis for electric vehicle infrastructure planning.*
* *Economic analysis regarding MSRP and fuel savings in the EV market.*
* *Urban planning and legislative efforts for clean transportation initiatives.*

**Access and Usage Rights:** *Open data; freely available for public use. Users must acknowledge the Washington State Department of Licensing and HIFLD as data sources.*

**Citation:** *Washington State Department of Licensing and HIFLD. "Washington State Electric Vehicle Registration Data." Updated annually.*

**Meta Data and Definitions:**

1. VIN (110)
   * Description: The first 10 characters of each vehicle's Vehicle Identification Number (VIN).
   * API Field Name: vin\_1\_10
   * Data Type: Text
2. County
   * Description: The county where the vehicle’s owner resides; may include out of state owners.
   * API Field Name: county
   * Data Type: Text
3. City
   * Description: City of residence for the registered owner.
   * API Field Name: city
   * Data Type: Text
4. State
   * Description: State associated with the owner's address, potentially outside Washington.
   * API Field Name: state
   * Data Type: Text
5. Postal Code
   * Description: 5 digit zip code of the registered owner’s residence.
   * API Field Name: zip\_code
   * Data Type: Text
6. Model Year
   * Description: Vehicle model year, derived from the VIN.
   * API Field Name: model\_year
   * Data Type: Text
7. Make
   * Description: Vehicle manufacturer, based on the VIN.
   * API Field Name: make
   * Data Type: Text
8. Model
   * Description: Vehicle model, determined by the VIN.
   * API Field Name: model
   * Data Type: Text
9. Electric Vehicle Type
   * Description: Type of EV, distinguishing between all electric and plugin hybrid.
   * API Field Name: ev\_type
   * Data Type: Text
10. CAFV Eligibility
    * Description: Indicates Clean Alternative Fuel Vehicle (CAFV) eligibility under Washington House Bill 2042.
    * API Field Name: cafv\_type
    * Data Type: Text
11. Electric Range
    * Description: Distance the vehicle can travel on electric power alone.
    * API Field Name: electric\_range
    * Data Type: Number
12. Base MSRP
    * Description: Lowest Manufacturer's Suggested Retail Price for the model.
    * API Field Name: base\_msrp
    * Data Type: Number
13. Legislative District
    * Description: Washington State legislative district of the vehicle owner’s residence.
    * API Field Name: legislative\_district
    * Data Type: Text
14. DOL Vehicle ID
    * Description: Unique ID for each vehicle, assigned by the Department of Licensing.
    * API Field Name: dol\_vehicle\_id
    * Data Type: Text
15. Vehicle Location
    * Description: The centre point of the ZIP Code associated with the vehicle.
    * API Field Name: geocoded\_column
    * Data Type: Point
16. Electric Utility
    * Description: Electric power service territories serving the vehicle's address, with different delimiters indicating ownership types.
    * API Field Name: electric\_utility
    * Data Type: Text
17. 2020 Census Tract
    * Description: Census tract identifier (GEOID) for the registered vehicle’s address.
    * API Field Name: 2020\_census\_tract
    * Data Type: Text
18. Car Price Today
    * Description: Car price as of today 2024.
    * API Field Name: Car Price Today
    * Data Type: Number
19. Car Price Launched
    * Description: Car Price when launched.
    * API Field Name: Car Price Launched
    * Data Type: Number
20. Income
    * Description: Average Income of Individuals based on Postal codes.
    * API Field Name: Income
    * Data Type: Number

**Json Meta Data:**

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