

# Electric Vehicle Data (1997-2024)

Here's a brief description of each column:

1. County: The county where the electric vehicle is registered or located.
2. City: The city or town where the electric vehicle is registered or located.
3. State: The state where the electric vehicle is registered or located.
4. Postal Code: The postal code or ZIP code of the location where the electric vehicle is registered.
5. Model Year: The year of manufacture or model year of the electric vehicle.
6. Make: The manufacturer or brand of the electric vehicle.
7. Model: The model name or number of the electric vehicle.
8. Electric Vehicle Type: The type or category of the electric vehicle (e.g., electric car, electric truck).
9. CAFV: Clean Alternative Fuel Vehicle designation, indicating the vehicle's use of clean alternative fuel.
10. Electric Range: The electric range or distance the vehicle can travel on electric power alone.
11. Base MSRP: The manufacturer's suggested retail price of the electric vehicle.
12. Legislative District: The legislative district associated with the vehicle's location.
13. DOL Vehicle ID: Identification number associated with the electric vehicle from the Department of Licensing (DOL).
14. Electric Utility: The electric utility provider associated with the vehicle's location.
15. 2020 Census Tract: The census tract where the electric vehicle is registered.
16. Longitude: The longitude coordinate of the vehicle's location.
17. Latitude: The latitude coordinate of the vehicle's location.

With the electric vehicle dataset containing information about electric vehicles, their specifications, location, and legislative details, there are several potential analyses and tasks that you can perform. Here are some common data analysis and research areas that can be explored with this dataset:

1. **Electric Vehicle Adoption Analysis:** Analyze the distribution of electric vehicles across counties, cities, and states to understand the adoption rate and popularity of electric vehicles in different regions.

2. **Electric Vehicle Types:** Explore the types of electric vehicles (e.g., electric cars, electric trucks) and their prevalence in the dataset.
3. **Electric Range and Pricing Analysis:** Study the relationship between electric range and base MSRP to identify patterns and trends in electric vehicle pricing.
4. **Clean Alternative Fuel Vehicles:** Investigate the usage of clean alternative fuel vehicles and their distribution across different areas.
5. **Legislative District Impact:** Analyze how legislative districts influence electric vehicle adoption and clean alternative fuel vehicle usage.
6. **Electric Vehicle Locations:** Visualize the geographic distribution of electric vehicles using longitude and latitude coordinates.
7. **Electric Utility Analysis:** Study the association between electric vehicles and the electric utility providers in different areas.
8. **Spatial Analysis:** Conduct spatial analysis to identify clusters or hotspots of electric vehicle adoption.
9. **Electric Vehicle Trends:** Explore trends in electric vehicle adoption over model years.
10. **Electric Vehicle Market Analysis:** Understand the market share of different electric vehicle makes and models.
11. **Electric Vehicle Price Range:** Determine the price range of electric vehicles and identify factors influencing pricing.
12. **Electric Vehicle Census Tract Analysis:** Study electric vehicle distribution within specific census tracts.