
BASIC ANALYSIS AND DASHBOARD

ELECTRIC VEHICLE POPULATION



A Presentation on Basic Analysis and Dashboard.

- Data Management and Big Data (ALY6110)
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AGENDA

DATASET

- Overview about dataset

1

ANALYSIS

- Basic EDA
- Business questions

2

DASHBOARDS

- Visualizations & Description

3

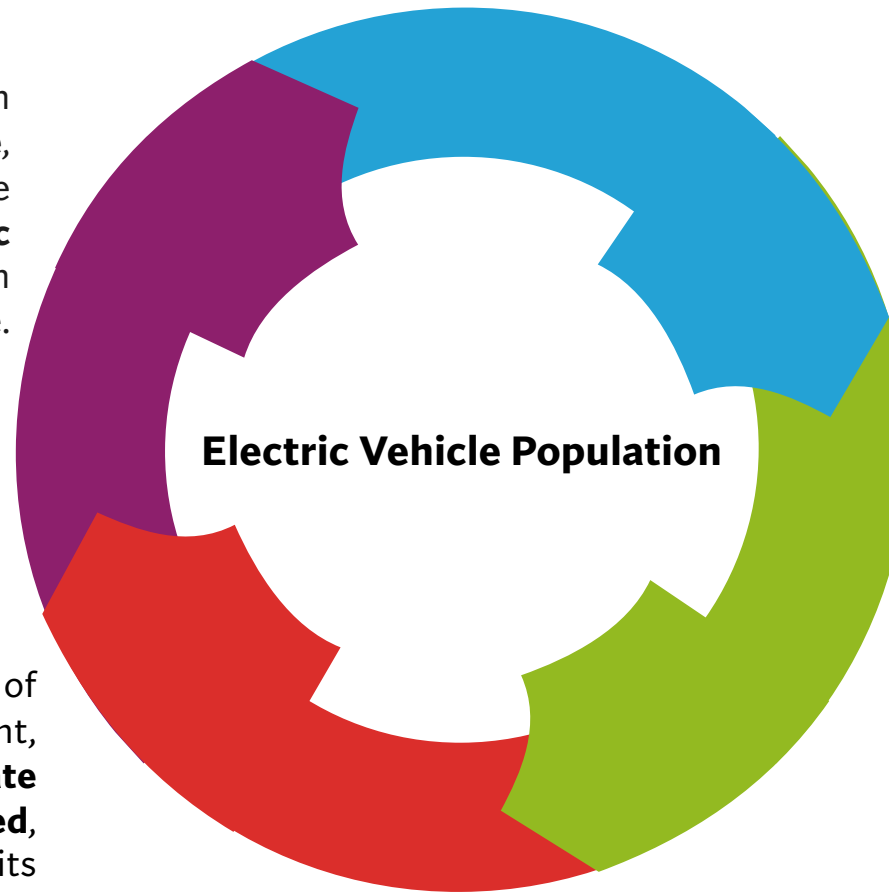
SUMMARY

- Conclusion
- Bibliography

4

DATASET

- Additionally, the **main components** of an electric vehicle, such as the **battery type**, eligibility for **alternative fuels**, and the dataset are all satisfied by the **EV's electric range**, for example, how far an EV can go on electricity after a charge.

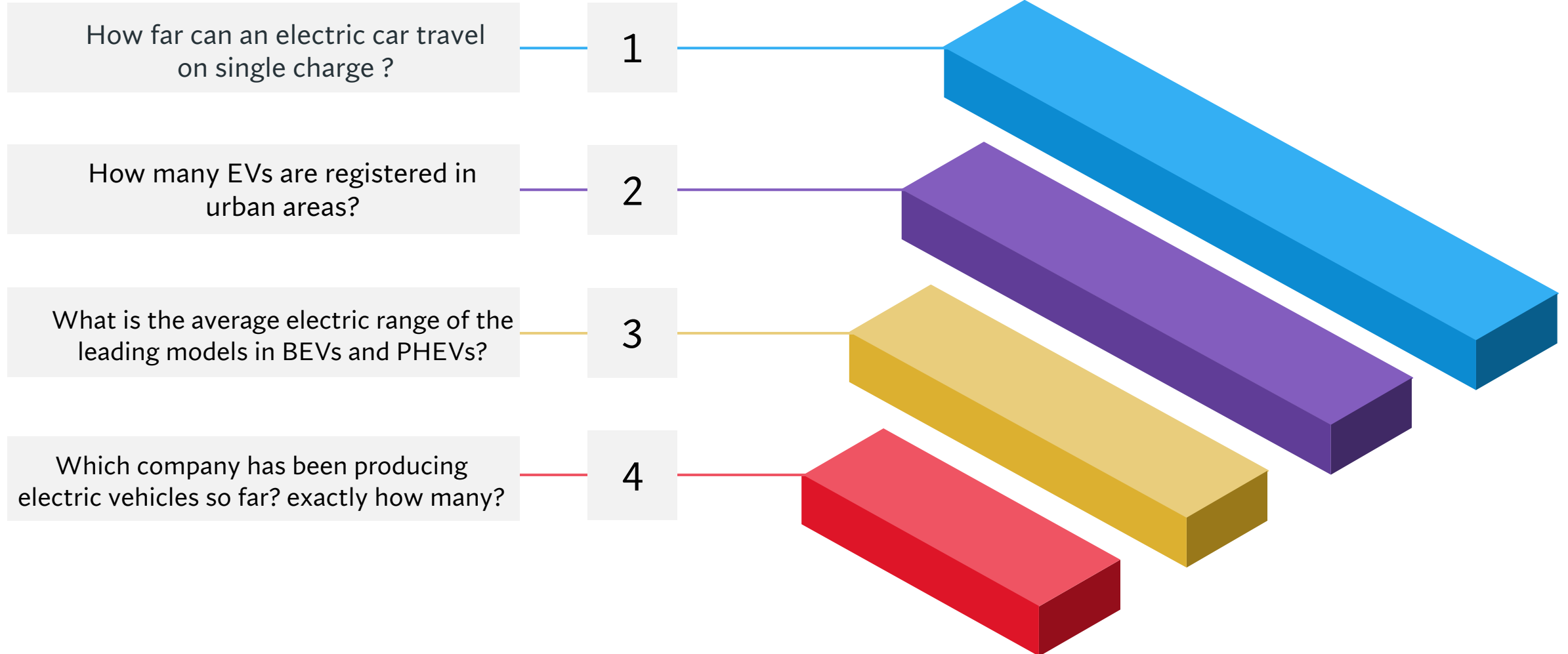


- The data variables include every piece of information that could be relevant, including the **country, city, and state where an electric vehicle is registered**, as well as the **car's model** and its **manufacturer**.

- Data.gov is used to collect the electronic vehicle population data. This dataset displays all **Battery Electric Vehicles (BEVs)** and **Plug-in Hybrid Electric Vehicles (PHEVs)** that have been registered with the **Washington State Department of Licensing** as of the time being (DOL).

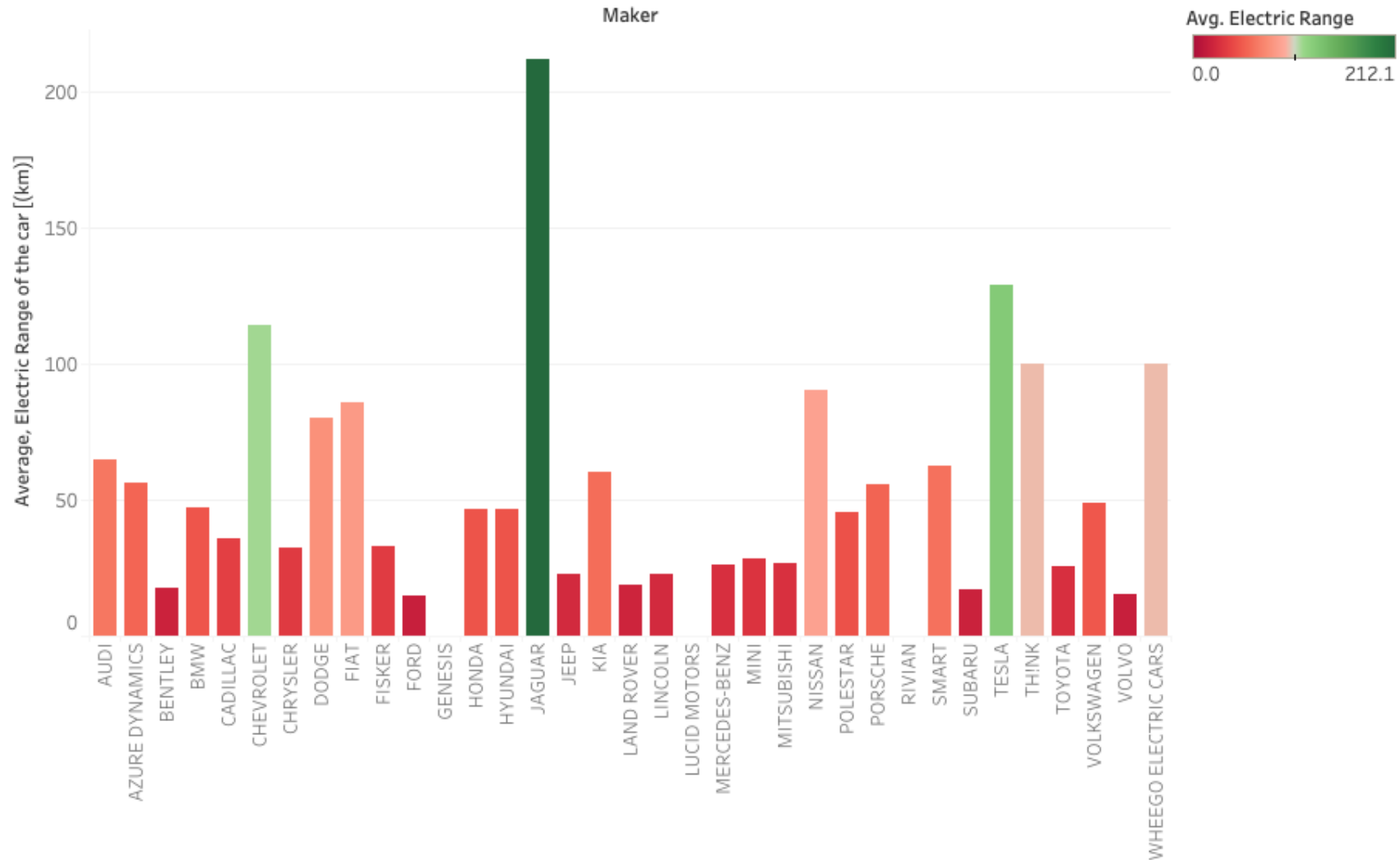
- Furthermore, there are **17 variables** in the dataset, each of which is broken down into **thousands of additional observations**.

BUSINESS QUESTIONS



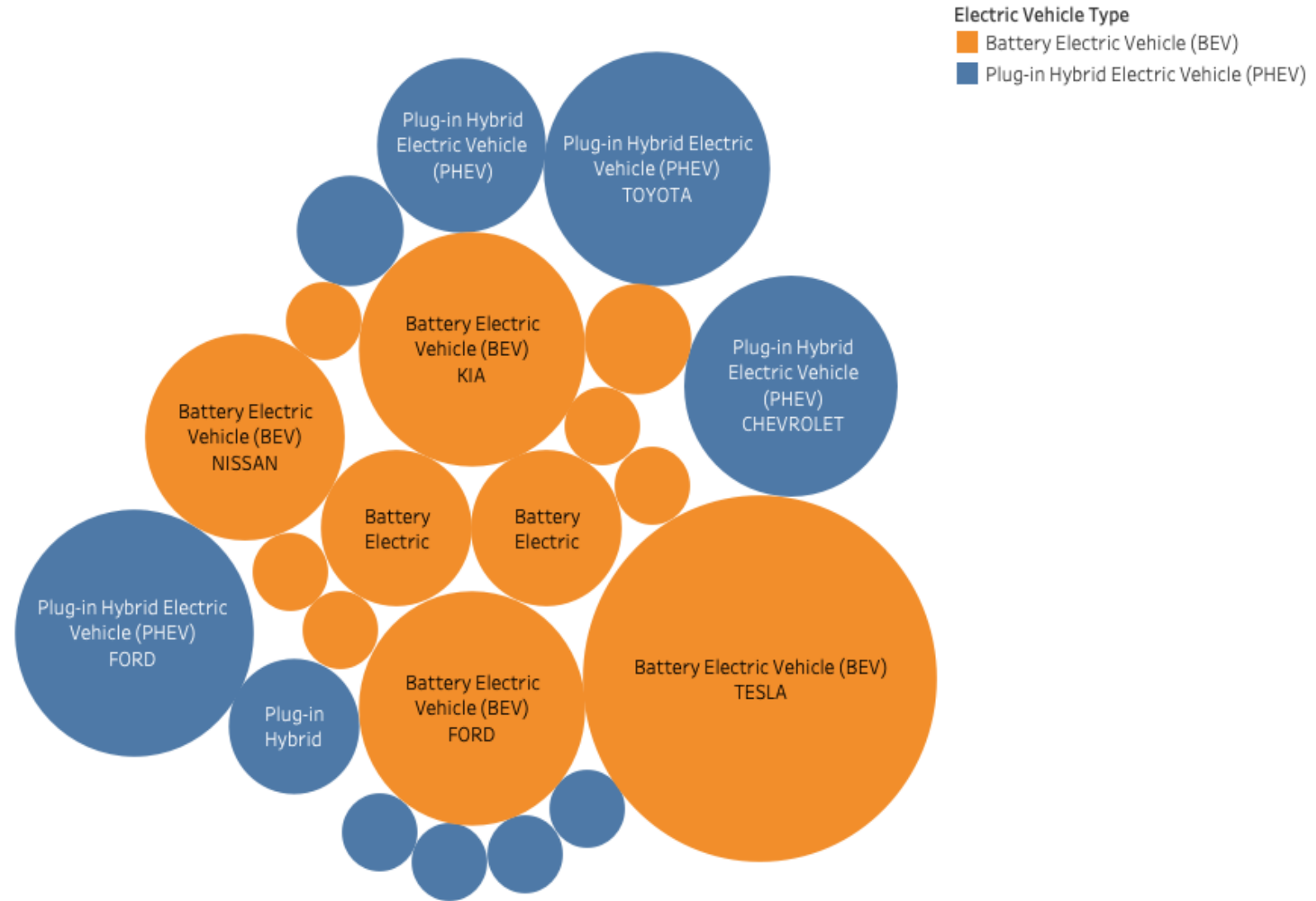
VIZUALIZATIONS

Electric Vehicle range distribution



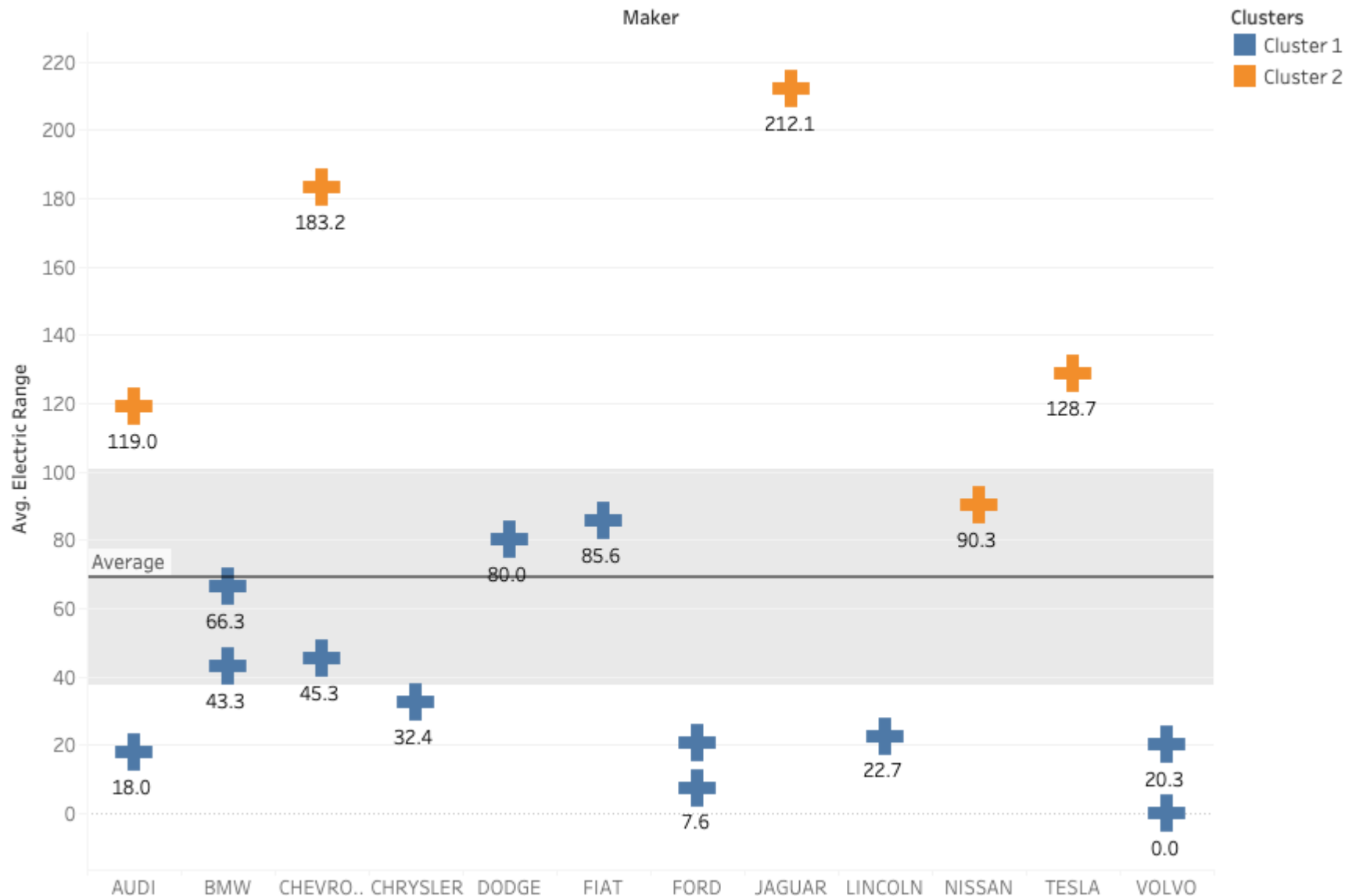
Average of Electric Range for each Maker. Color shows average of Electric Range. The view is filtered on Maker and average of Electric Range. The Maker filter keeps 35 of 35 members. The average of Electric Range filter ranges from 0.0 to 212.1.

Registered EV Types in citites



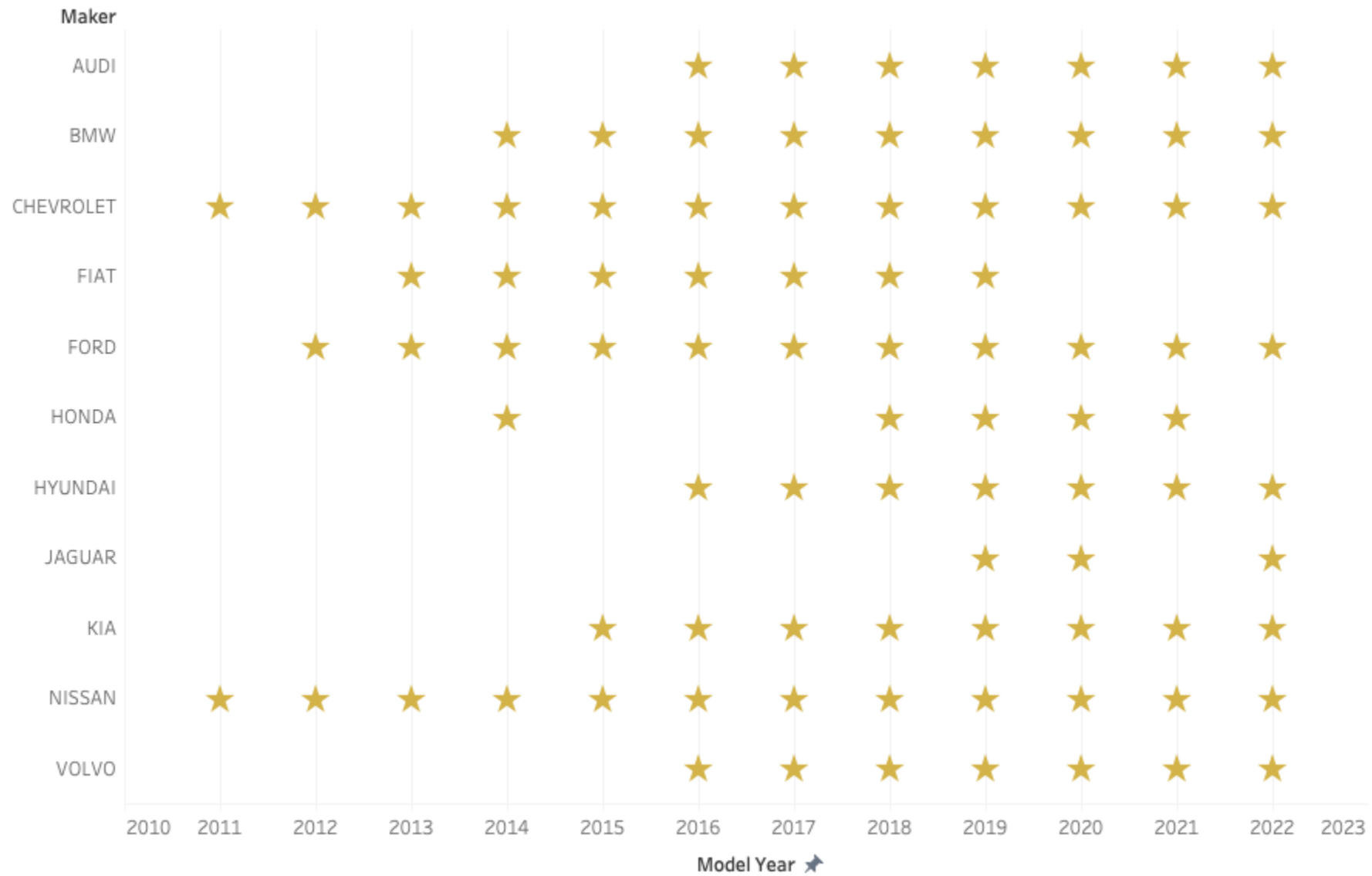
Electric Vehicle Type and Maker. Color shows details about Electric Vehicle Type. Size shows count of Electric Vehicle Type. The marks are labeled by Electric Vehicle Type and Maker. The data is filtered on City, which keeps Aberdeen, Baring and Bedford. The view is filtered on Maker, which keeps 35 of 35 members.

Distribution of top models in BEV & PHEV by average electric range.



Average of Electric Range for each Maker. Color shows details about Clusters. Details are shown for Electric Vehicle Type. The view is filtered on Maker, which keeps 12 of 35 members.

Evolution of EV's



Model Year for each Maker. The view is filtered on Model Year and Maker. The Model Year filter ranges from 2004 to 2022. The Maker filter keeps 12 of 35 members.

CONCLUSION

01

We worked on some important questions about the population of electronic vehicles as a result of this study.

02

The range of EVs, the best EV models, average vehicle range, etc. were taken into consideration when identifying the questions.

03

Additionally, an evolution of electric vehicles is also presented, with the stars designating the manufacturers of EV since the 1960s.



BIBLIOGRAPHY

- Github Repository :
https://github.com/pratik4511/Module_4_Group-4
- *Electric Vehicle Population Data - Catalog*. (n.d.). Electric Vehicle Population Data - Catalog. Retrieved December 3, 2022, from <https://catalog.data.gov/dataset/electric-vehicle-population-data>