
Assessing Environmental Impacts

with Team Tree Huggers & Porsche

Identifying Opportunities for EV Growth

- What are the locations with demand for more EV charging infrastructure?
- What types of charging infrastructure are lacking or are popular in the locations of demand?
- What are the locations with demand for EV at the Porsche price level?
- Who are the consumers that live around these locations of demand?
- What are the preferred EV attributes for these consumers in these locations?

Charging Infrastructure for EV

Where is the demand?

Stations by State

State
of Electric Charging Stations
of Electric Charging Outlets

Triage approach

States with the most
charging stations

States with average number
of charging stations

States with the fewest
charging stations

of stations vs. sales

Triage approach

States with highest market share

States with medium market share

States with lowest market share

States with highest share increase

States with medium share
increase

States with lowest share increase

EV Market Share by State

State
EV Sales 2018
2018-2017 Sales Increase
EV Market Share 2018
2018-2017 EV Market Share Increase

States with highest sales numbers

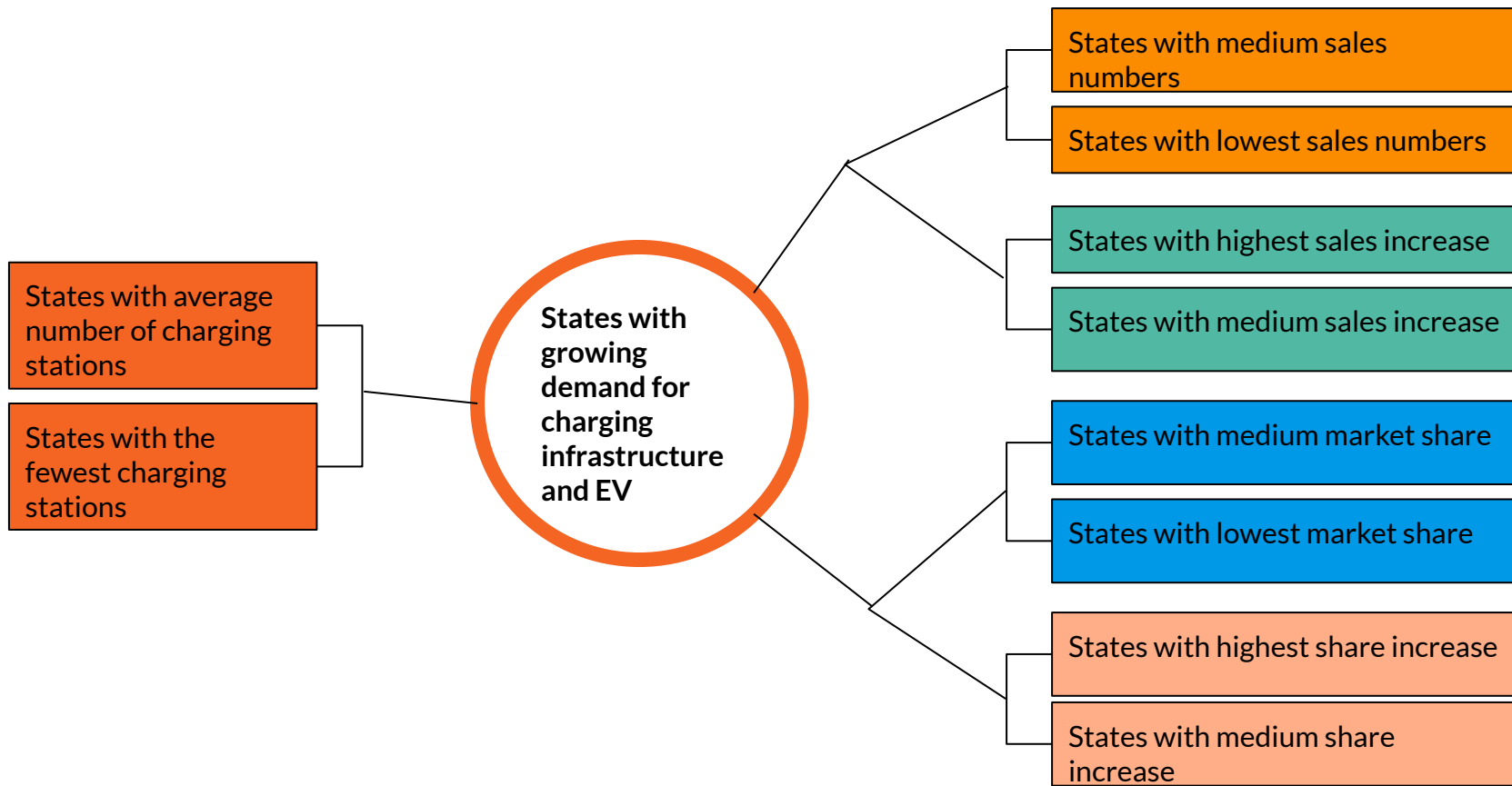
States with medium sales
numbers

States with lowest sales numbers

States with highest sales increase

States with medium sales increase

States with lowest sales increase



Charging Infrastructure for EV

What types are needed?

States with
growing
demand for
charging
infrastructure
and EV

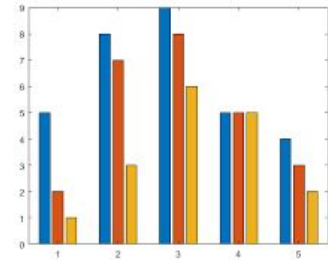
State-Specific Stations

Station Name
Street Address
City
State
Zip
Groups with Access
Access Days Time
Cards Accepted
EV Connector Types
EV Pricing
Owner Type Code

Visual analysis

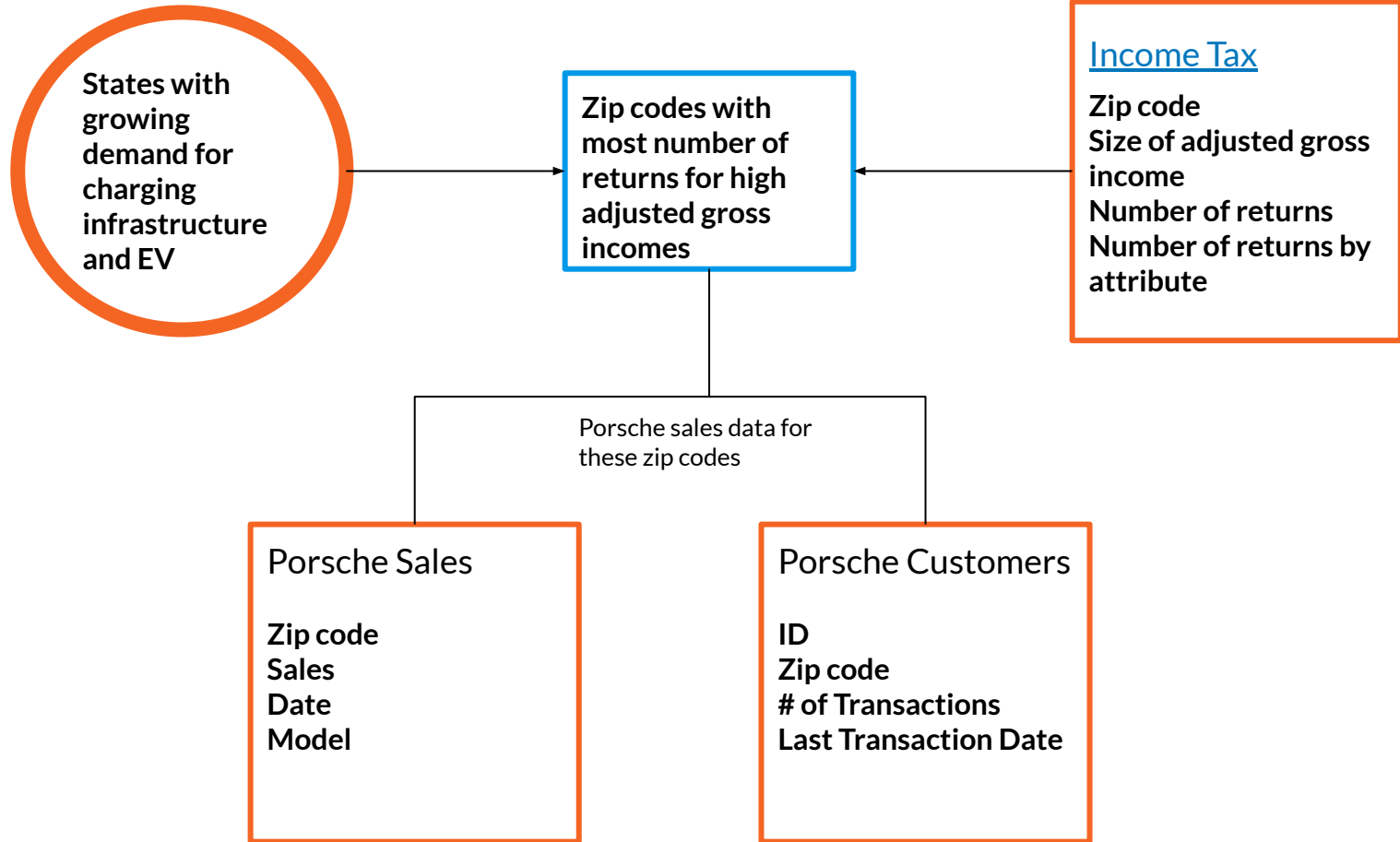


Visual analysis



Porsche's Electric Vehicle Offering

Where?



Porsche's Electric Vehicle Offering

To whom?

Zip codes of growing demand for EV with most number of returns for high adjusted gross incomes

filter

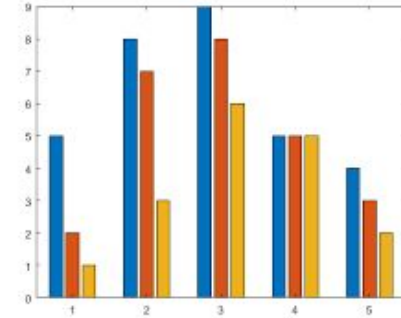
Demographics by Zip Code

Zip Code
Percent for each demographic attribute (male, female,)

Porsche Customers

ID
Zip code
of Transactions
Last Transaction Date
Gender
Nationality
Ethnicity
Profession

Visual analysis of demographics



Porsche's Electric Vehicle Offering

What vehicle attributes?

EV Sales by Model

Vehicle
2011-2017 Sales
Sales Total
2017-2016 Sales Increase
2017-2011 Sales Increase

Vehicle Attributes by
Model

Vehicle
Attribute

Attributes
of EV with
highest
growth in
demand

Porsche and EV
attributes of
growing demand

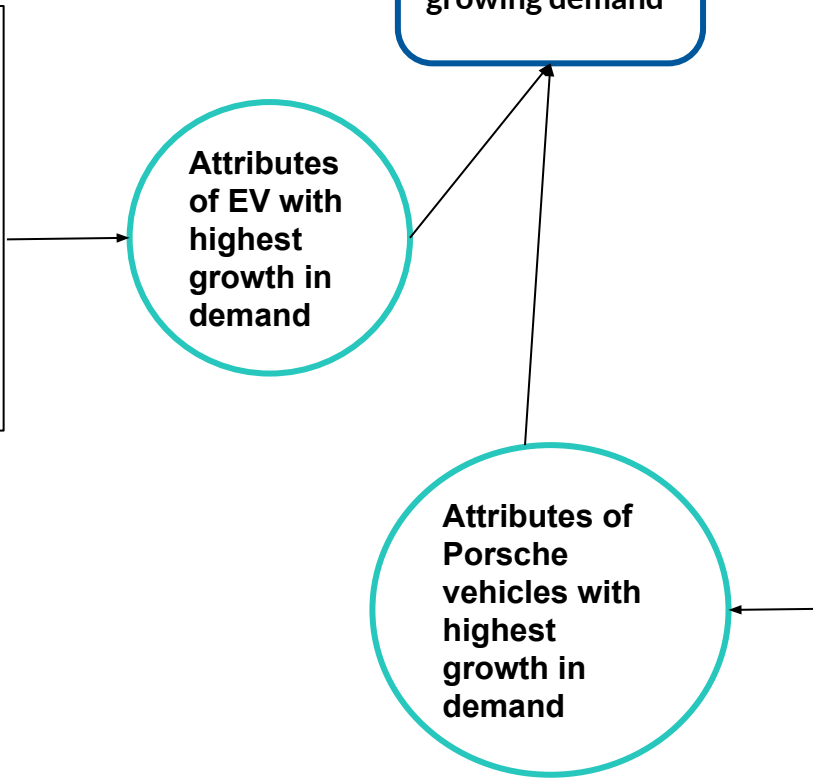
Attributes of
Porsche
vehicles with
highest
growth in
demand

Porsche Sales

Model
Date
2011-2018 Sales
2018-2017 Sales Increase
2018-2011 Sales Increase
Sales Total

Vehicle Attributes by
Model

Vehicle
Attribute



Summary

Where to go?

- States with growing demand for EV and charging infrastructure
- Zip codes in these states with high gross incomes

Whom to talk to?

- Consumers with higher adjusted gross incomes
- Demographic statistics in the zip codes with growing EV demand

What to do?

- Station attributes in the states with growing EV demand
- Attributes of electric and Porsche vehicles in growing demand