# THE IMPACT OF ELECTRIC VEHICLES

# NORTH SAN ANTONIO CHAMBER OF COMMERCE

*PRESENTED BY:*

CPS Energy Products & Services

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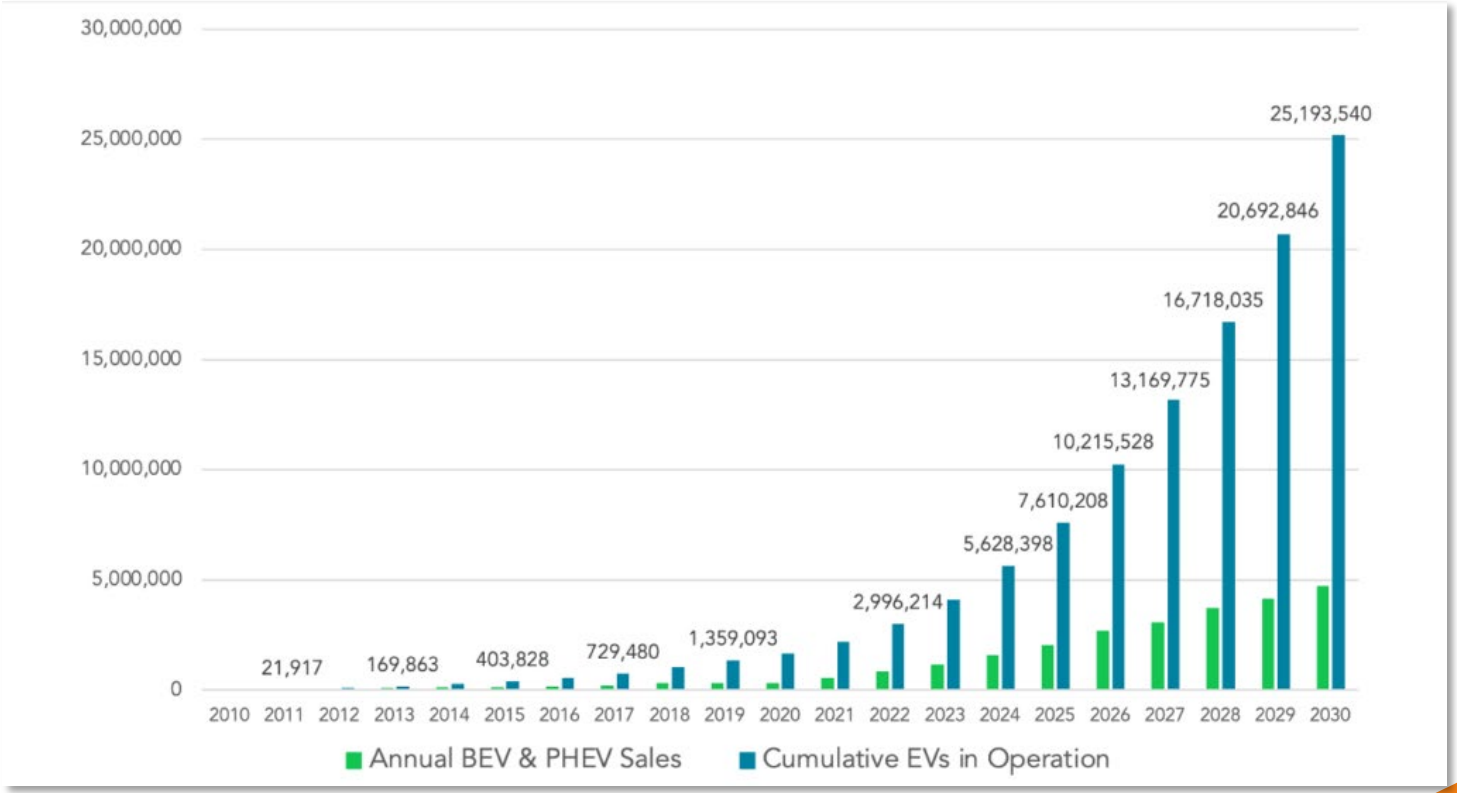
# THE EV MARKET

## SHIFT FROM "IF" TO "HOW QUICKLY"

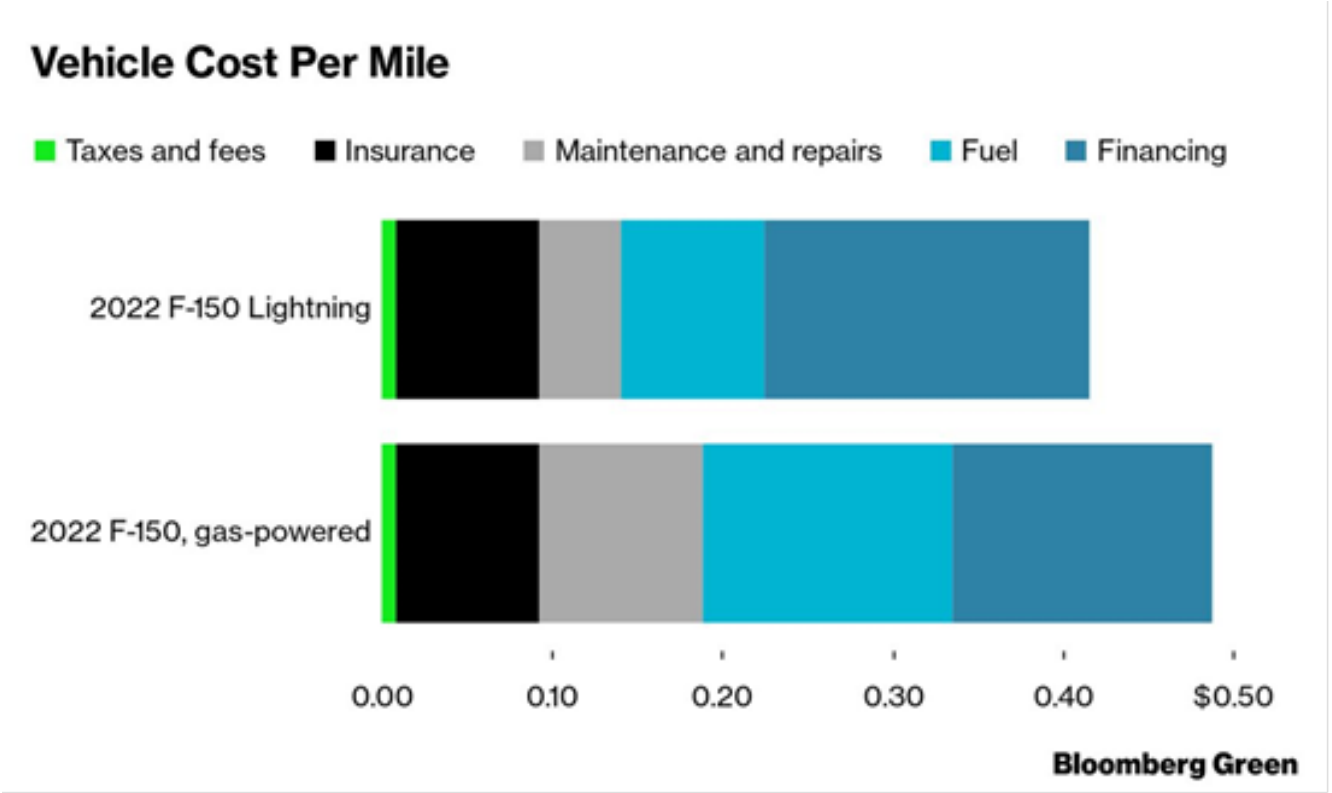
- All major automakers expected to have at least 40% of their total sales be battery electric vehicles by 2030.
- EVs are expected to drop in price by over 20% over the next 5 years spurring additional adoption.




Sources: Historical Sales Data; IHS/ Auto Manufacturers Alliance, Loren McDonald

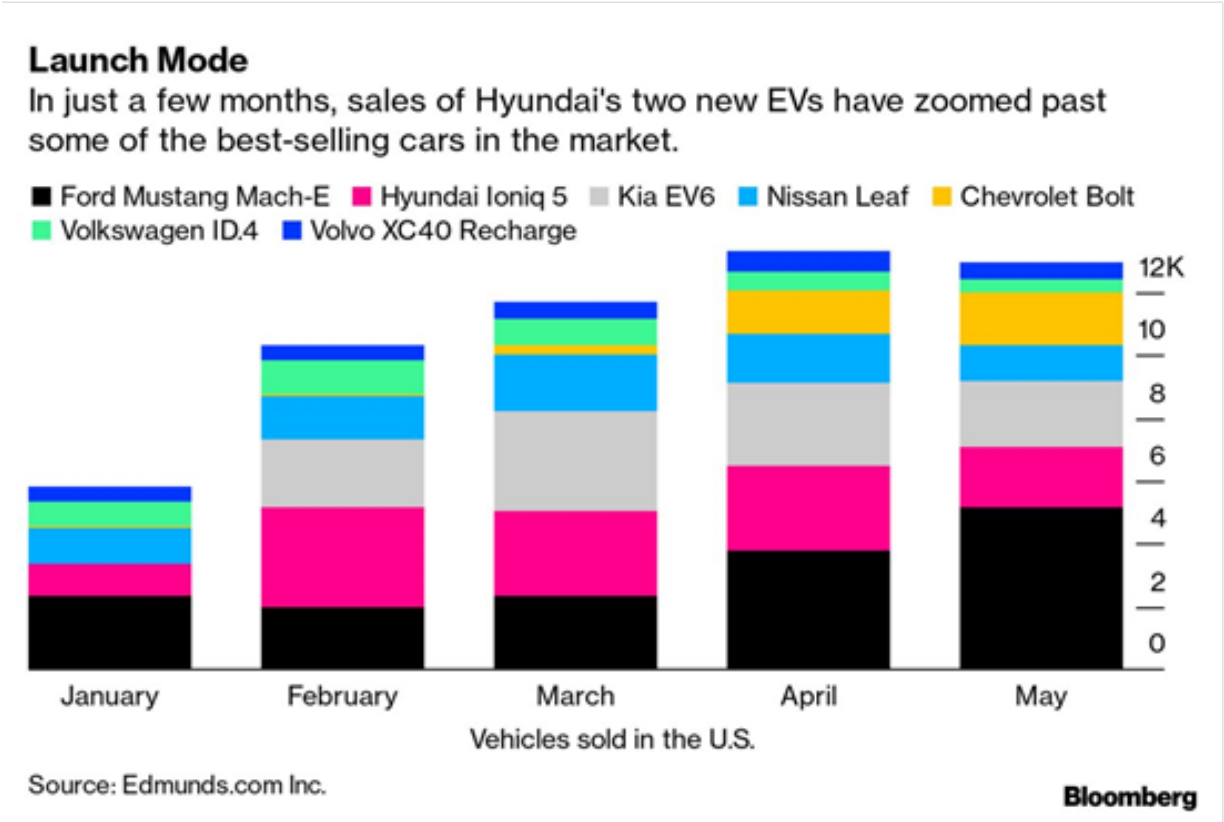
# THE EV MARKET
## PROJECTING ADOPTION

- Estimated 45,000 EVs in San Antonio by 2025
  - ERCOT LTSA estimates Texas EV adoption at 250k in 2023
  - At least 85% of these will be pure battery-electric
  - San Antonio has held 4% of Texas EV market share for the last 3 years



# THE EV MARKET
## NON-STANDARD GROWTH

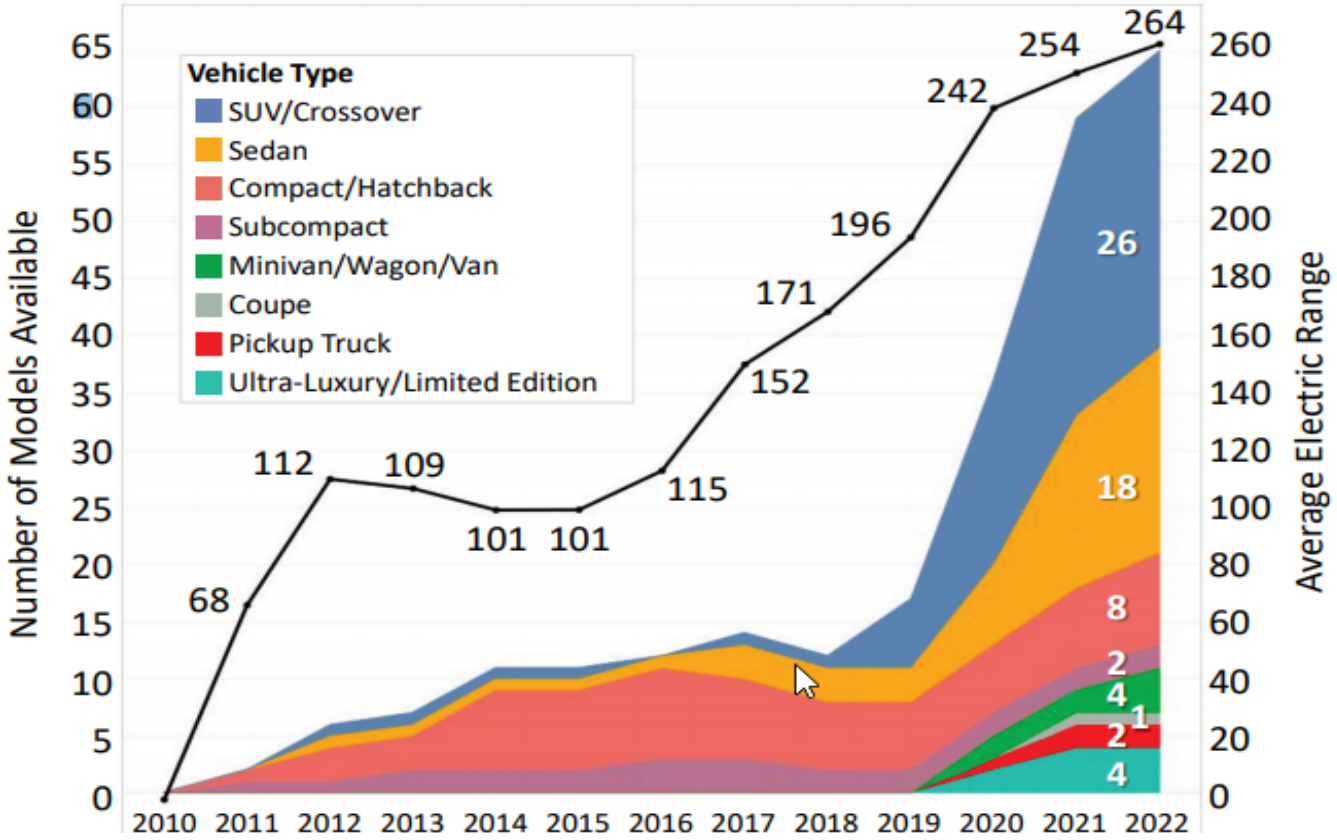
- A new design or model of electric vehicle can spike adoption.
- Predicting when the growth curve will accelerate is difficult however experts agree on the end result.




Source: EPRI EV registration data

# THE EV MARKET

## NEW PRODUCTS





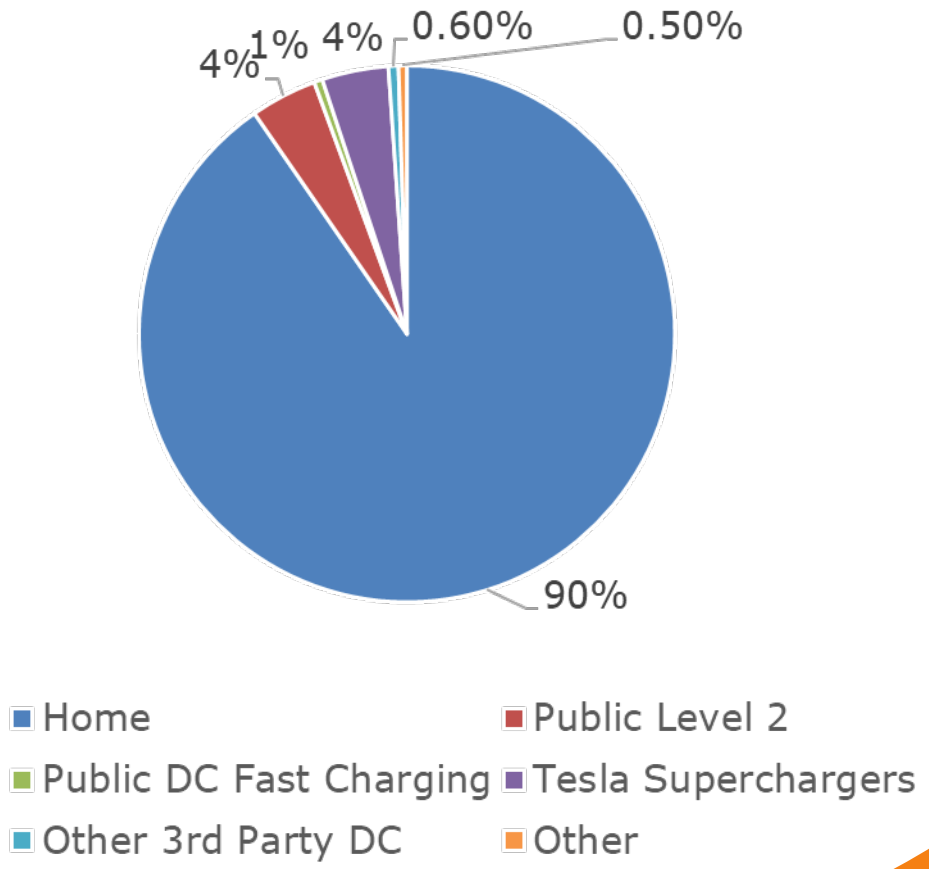

### By 2025

- ~80 EV models will be on the market
- Average range will be ~260 miles
- More SUVs/crossovers
- Pickup trucks – Predicted to be the biggest single factor in EV adoption in Texas

# EV CHARGING

## CONSUMER EV CHARGING

- ~80% of charging happens at home
- >86% of charging is done off-peak
- Current infrastructure is suitable for near-term EV growth
- Long-term growth will require investment




We must support our customers by allowing them to take advantage of new technologies and economies related to electrification.

# EV BENEFITS

- More of San Antonians' dollars staying in San Antonio
  - Purchase of $1 of Gasoline results in ~$.02 in recirculated revenue
  - Purchase of $1 of Electricity results in ~$.76 in recirculated revenue
- Fleet Managers
  - Electricity rates are relatively stable compared with Gasoline prices
  - EV maintenance cost are roughly 14% of similar ICE vehicles
  - Fleet managers can better predict cost and better plan for fleet expenses
- Reduction of localized pollutants
  - EVs produce significantly less pollutants per mile traveled than ICE vehicles regardless of source of power
  - Bexar County moved to a "moderate" ozone non-attainment

EVs don't require emissions testing

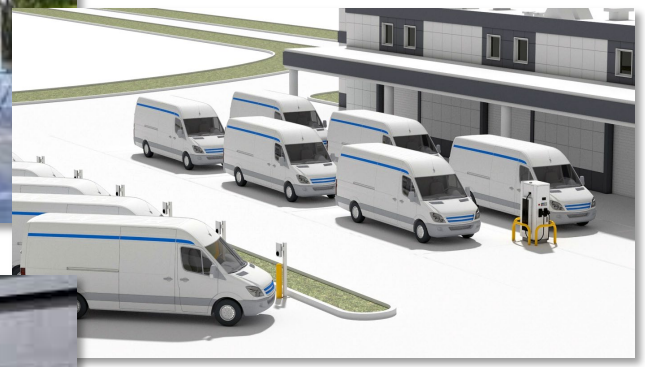
# ITEMS FOR CONSIDERATION

- Grid Capacity
  - Older infrastructure is at risk of being overwhelmed and may need to be upgraded
  - New infrastructure for EV specific uses like Direct Current Fast Charging (DCFC) may be impacted by Supply Chain shortages
- Equity
  - As EVs are produced in greater numbers the cost to own and maintain ICE vehicles will likely increase
  - Infrastructure to support EVs will have to be located in all areas to ensure all customers have access.

# EV CHARGING

## OPPORTUNITIES & CHALLENGES

- Multi-Unit Dwelling
- Fleet Management
- Long-Haul Trucking

The future is bright with many opportunities for innovation.


# *Thank You*