

**PRESENTATION: THE CENTER FOR TRANSPORTATION TRAINING AND RESEARCH  
INVESTIGATING THE CHALLENGES IN MOVING TO US 2050 CLIMATE GOALS**

# **Texas Trends Survey Results: Electric Vehicles**

**Dr. Michael O. Adams  
Professor of Political Science  
Director, Executive Master of Public  
Administration Program  
November 3, 2022**



**TEXAS SOUTHERN UNIVERSITY**

Barbara Jordan – Mickey Leland  
School of Public Affairs  
Executive MPA Program

What this presentation covers

# Agenda

- I. Overview
- II. Key Findings: EV Ownership/Leasing
- III. Key Findings: Deterrents to Purchasing/Leasing
- IV. Key Findings: Support for EV Policies
- V. Closing Remarks
- VI. Q&A



# I. Overview



# **I. Overview: Texas Trend Survey**

- Texas Trends Survey
- Five-year survey research partnership--EMPA Program in the BJ-ML School of Public Affairs at TSU & the Hobby School of Public Affairs at UofH
- Project is currently in year two--released in 5 parts
- Key Topics: gun safety, the economy, judicial reform, healthcare, and voting preferences
- Oversampling of the state's largest racial/ethnic populations (African-American, Asian and Latino)

# I. Introduction

- Electrical Vehicle survey (Year 1)
- Fielded between October 4-21, 2021
- 2,067 respondents from across Texas
- Race/ethnicity, generation, income
- Key Issues:
  - Level of EV ownership in Texas
  - Level of Interest/Intent for future ownership/leasing
  - Support for three policy options related to EV

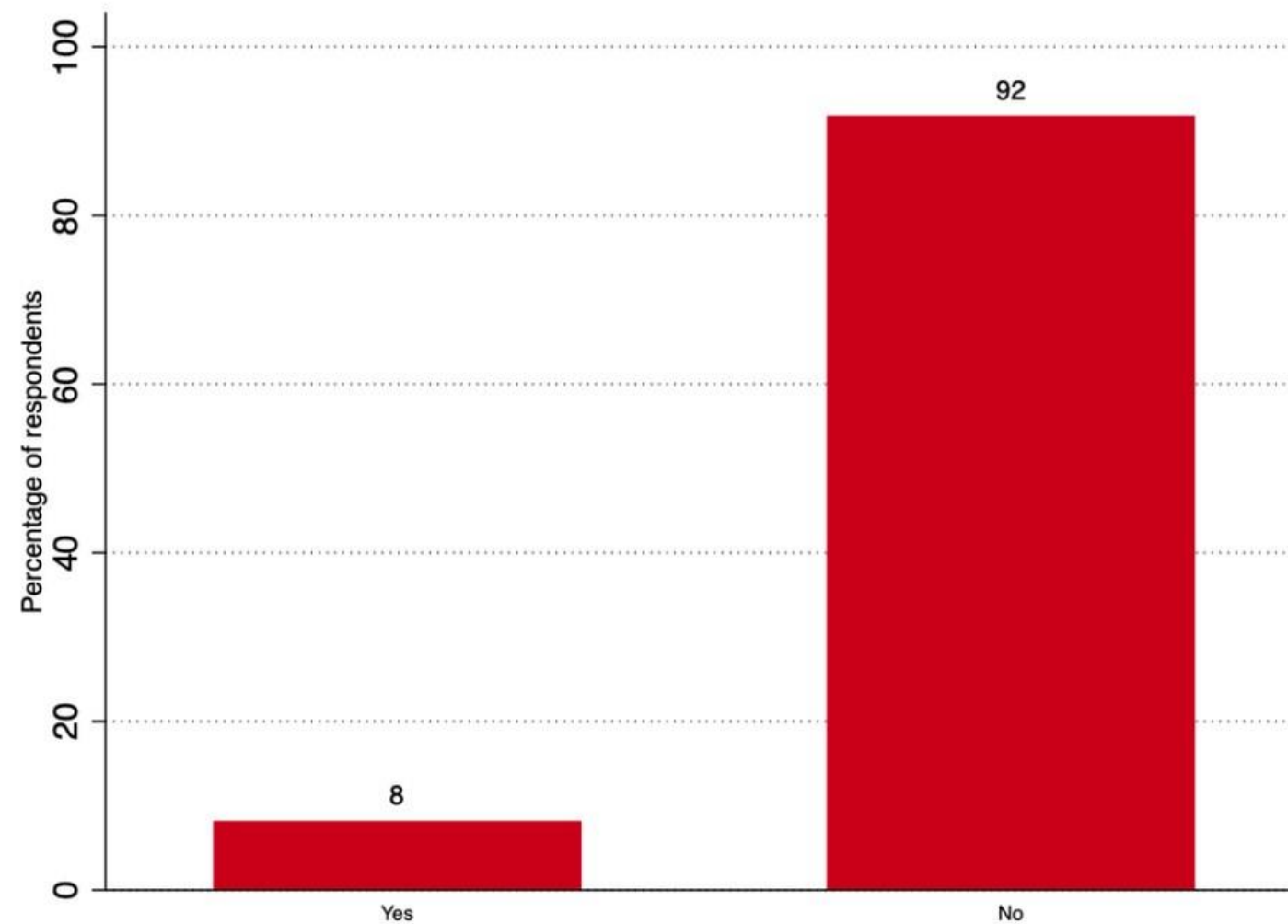


## **II. Key Findings**



# II. Key Findings: EV Ownership/Leasing

**Figure 2.1:** Do you currently lease or own an electric vehicle (a car, SUV or truck) that only uses electric power?



More than **90%** of survey respondents did not currently own or lease a vehicle that only uses electric power.

# II. EV Ownership/Leasing by Generation and Race/Ethnicity

Figure 2.2: Lease or own electric vehicle by generation

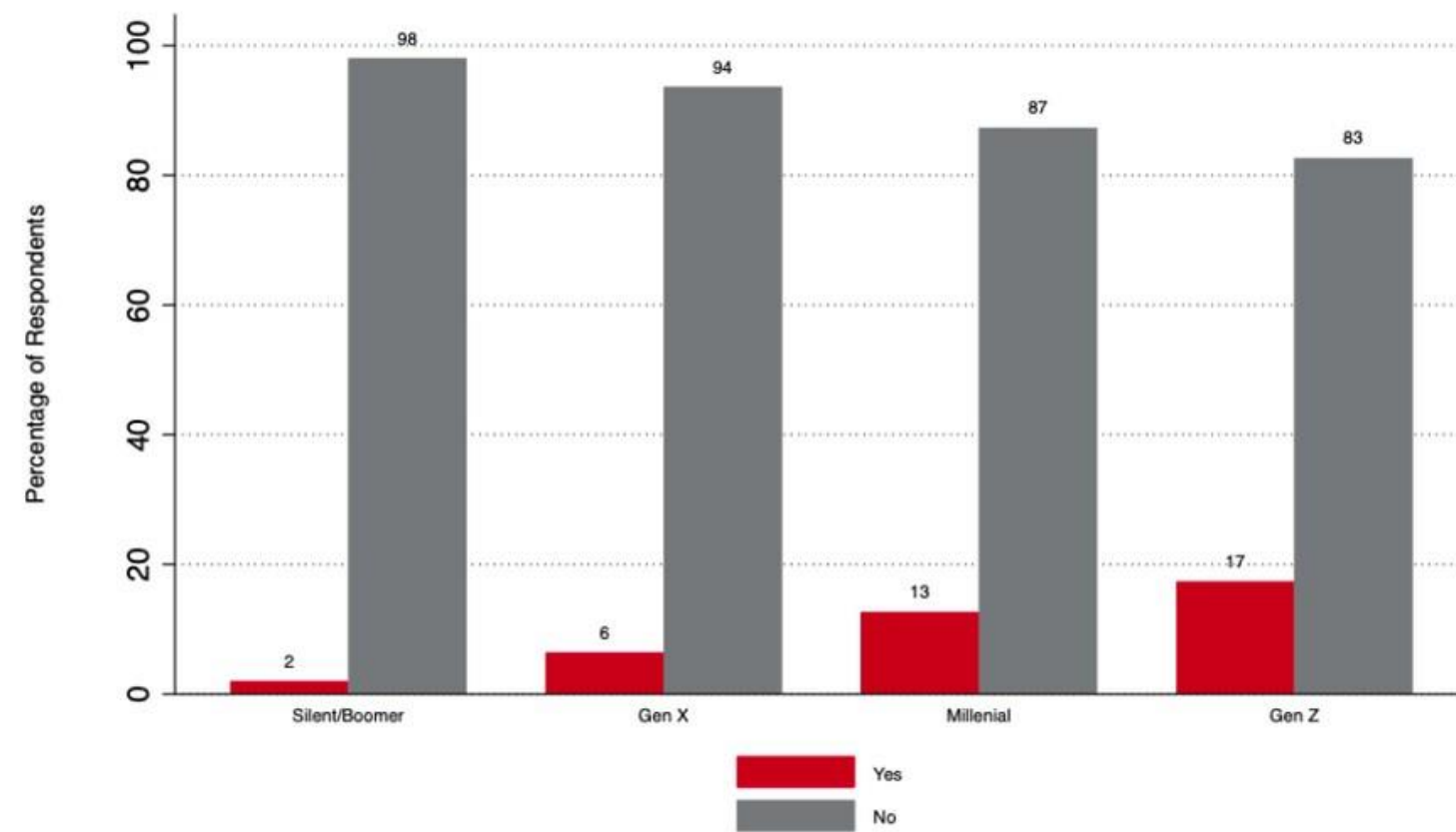


Table 2.1: Lease or own electric vehicle by race/ethnicity

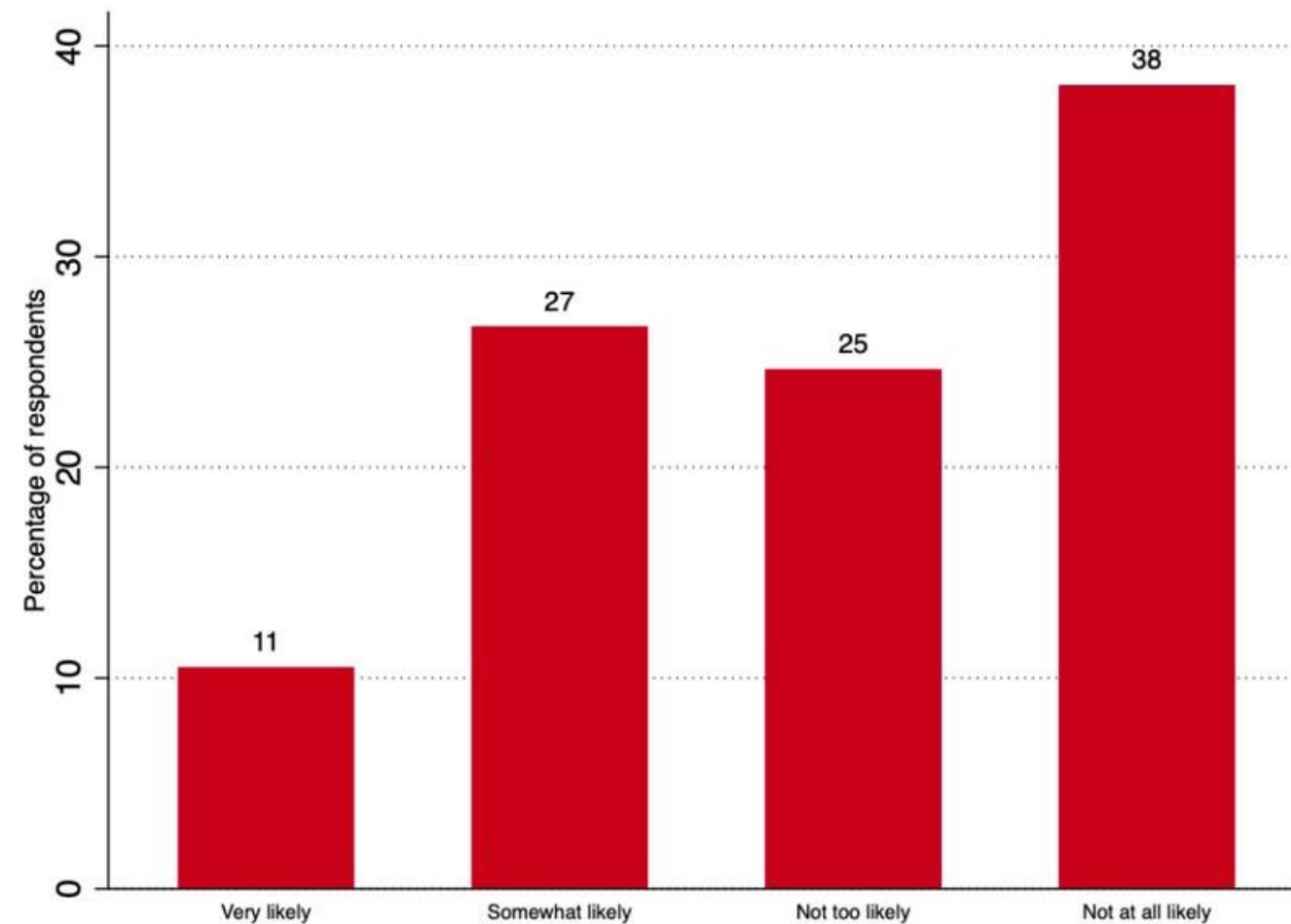
	Race/Ethnicity			Total
	White	Black	Hispanic	
	%	%	%	%
Yes	4	11	12	8
No	96	89	88	92
<b>Total</b>	100	100	100	100

**Asians** and those who belonged to the **Millennial** or **Gen Z** generations were more likely to currently own or lease an EV.



# II. Future Ownership/Leasing Preferences

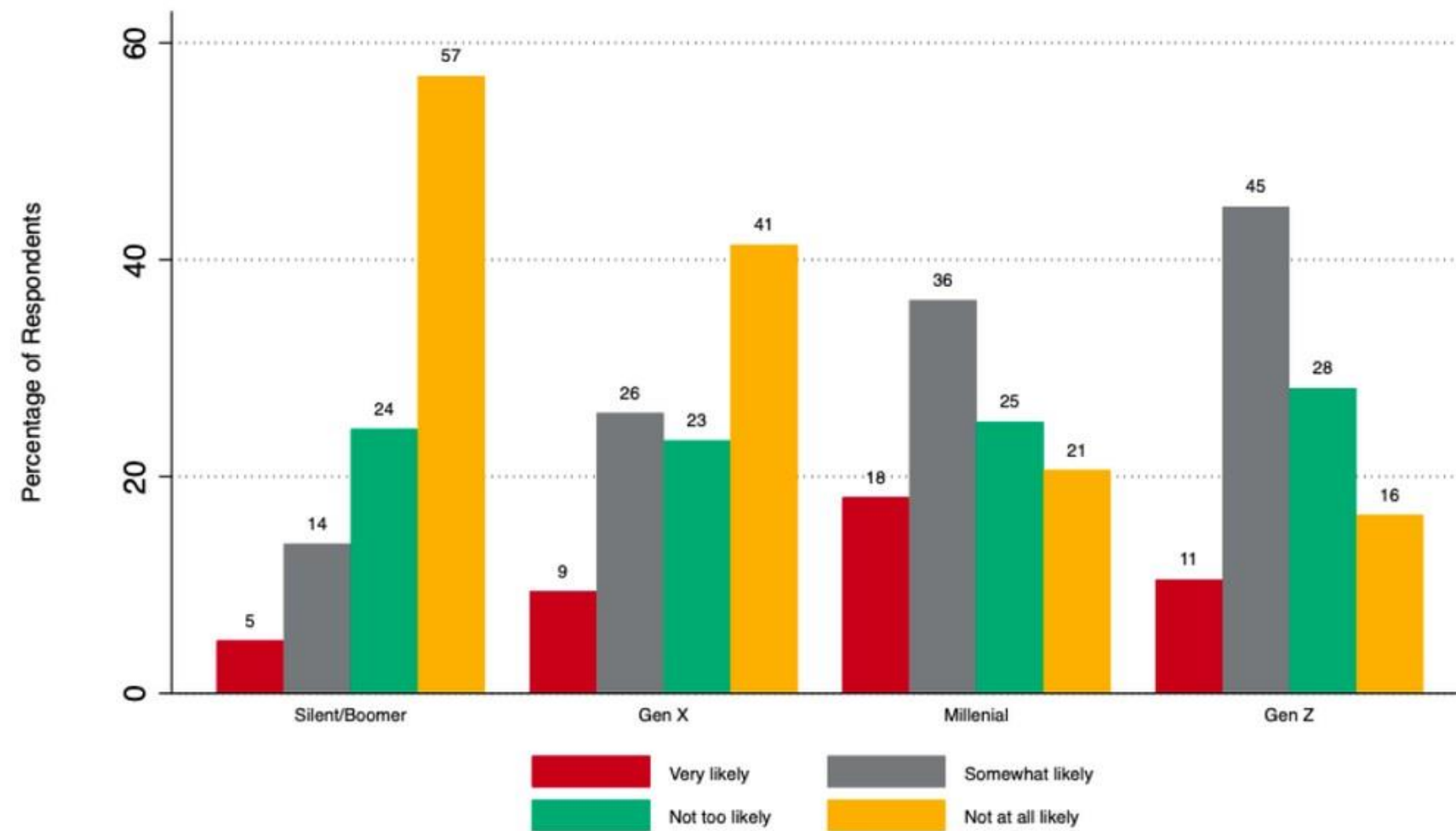
**Figure 2.3:** Based on what you know about electric vehicles (cars, SUVs and trucks) that only use electric power, the next time you lease or purchase a vehicle, how likely are you to seriously consider leasing or purchasing an electric vehicle?



- 11% of Texans said they were **very likely** to own or lease an EV
- 27% were **somewhat likely**
- 25% were **not too likely**
- 38% were **not at all likely**

# II. Future Ownership/Leasing Preferences by Generation

Figure 2.4: Likelihood of owning or leasing an electric vehicle by generation



- Most respondents from the **Silent/Boomer** generation (**57%**) were **not at all likely** to purchase or lease an EV
- A further **24%** of Silent/Boomer generation indicated they were **not too likely**.
- In contrast, **45%** of **Gen Z**'ers and **36%** of Millennials--**somewhat likely** to purchase or lease an EV in the future.

# II. Future Ownership/Leasing Preferences by Race/Ethnicity

Table 2.2: Likelihood of leasing or purchasing electric vehicle by race and ethnicity

	Race/Ethnicity			
	White	Black	Hispanic	Total
	%	%	%	%
Very likely	11	13	10	10
Somewhat likely	19	31	34	27
Not too likely	24	27	24	25
Not at all likely	46	29	32	38
<b>Total</b>	100	100	100	100

- No racial group was overwhelmingly **very likely** to purchase or lease an EV
- Among racial groups **Black (31%)** and **Latino (34%) somewhat likely**--were more likely than **White (19%)** to consider a future EV purchase/lease.

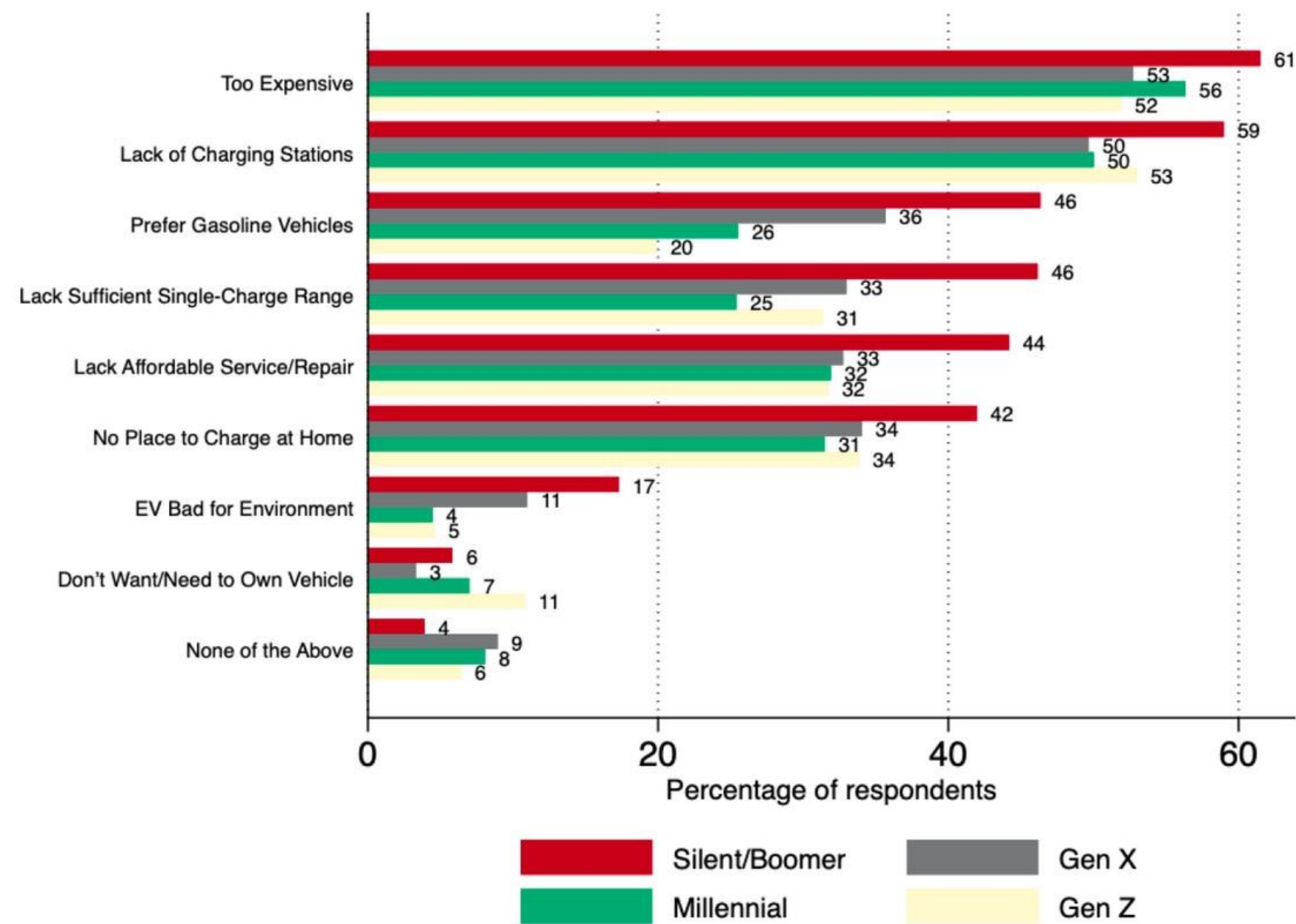


## **III. Key Findings: Deterrents to Purchasing or Leasing an EV**



# III. Deterrents by Generation

Figure 3.1: Reasons for not wanting to purchase or lease an electric vehicle by generation



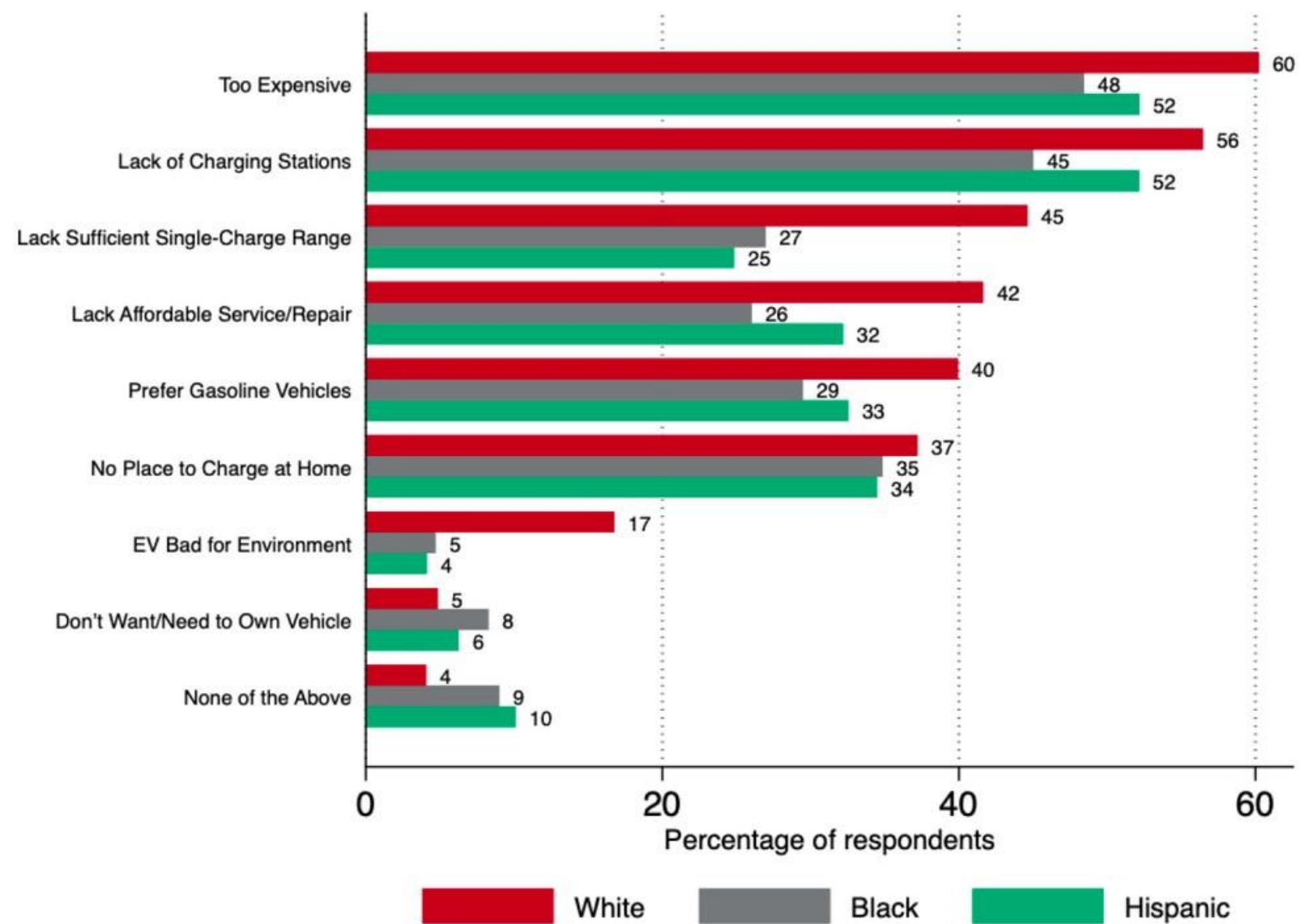
## Top 5 Reasons:

- Too Expensive
- Lack of charging stations
- Prefer gasoline vehicles
- Lack of sufficient single charge range
- Lack of affordable service repair

*Note: Deterrents are overwhelmingly low with even the top deterrent--cost across generations accounting for a small majority.*

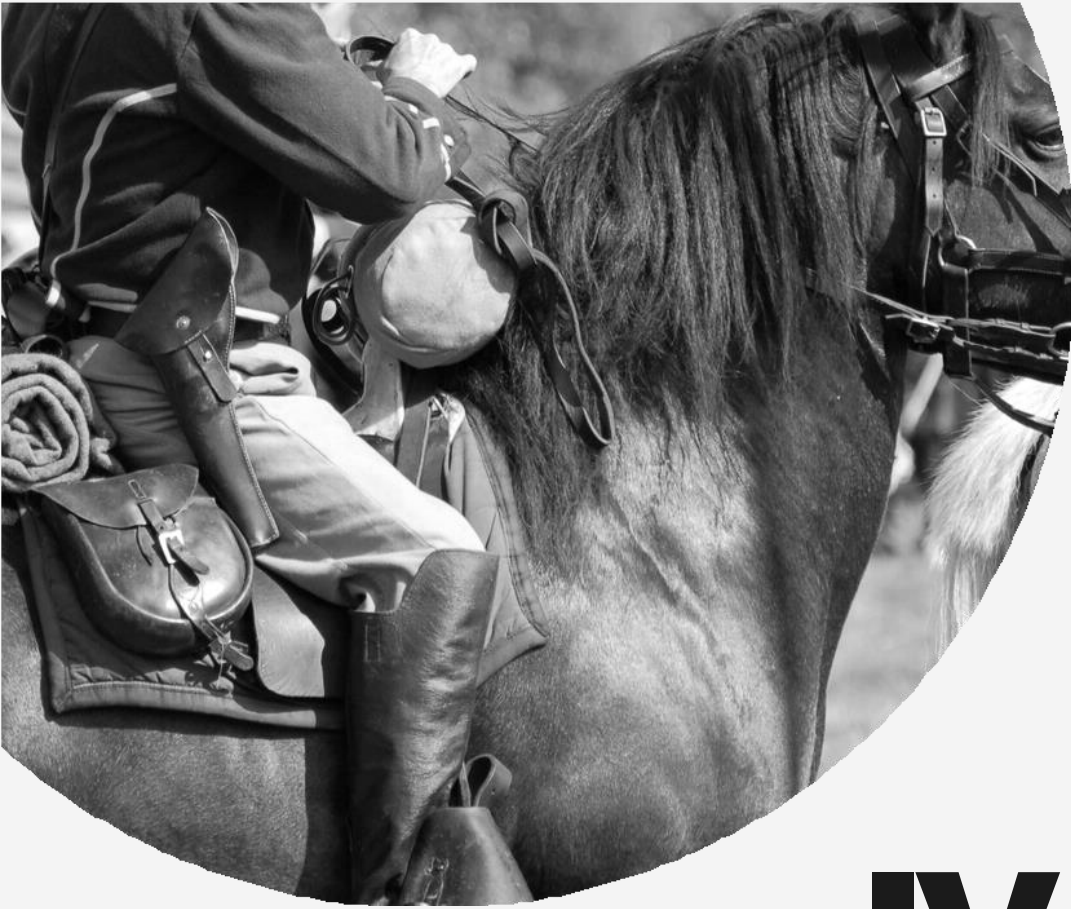
# III. Deterrents by Race/Ethnicity

Figure 3.2: Reasons for not wanting to purchase or lease an electric vehicle by race/ethnicity



## Top 5 Reasons:

- Too Expensive
- Lack of charging stations
- Lack of sufficient single-charge range
- Lack of affordable service repair
- Prefer gasoline vehicles

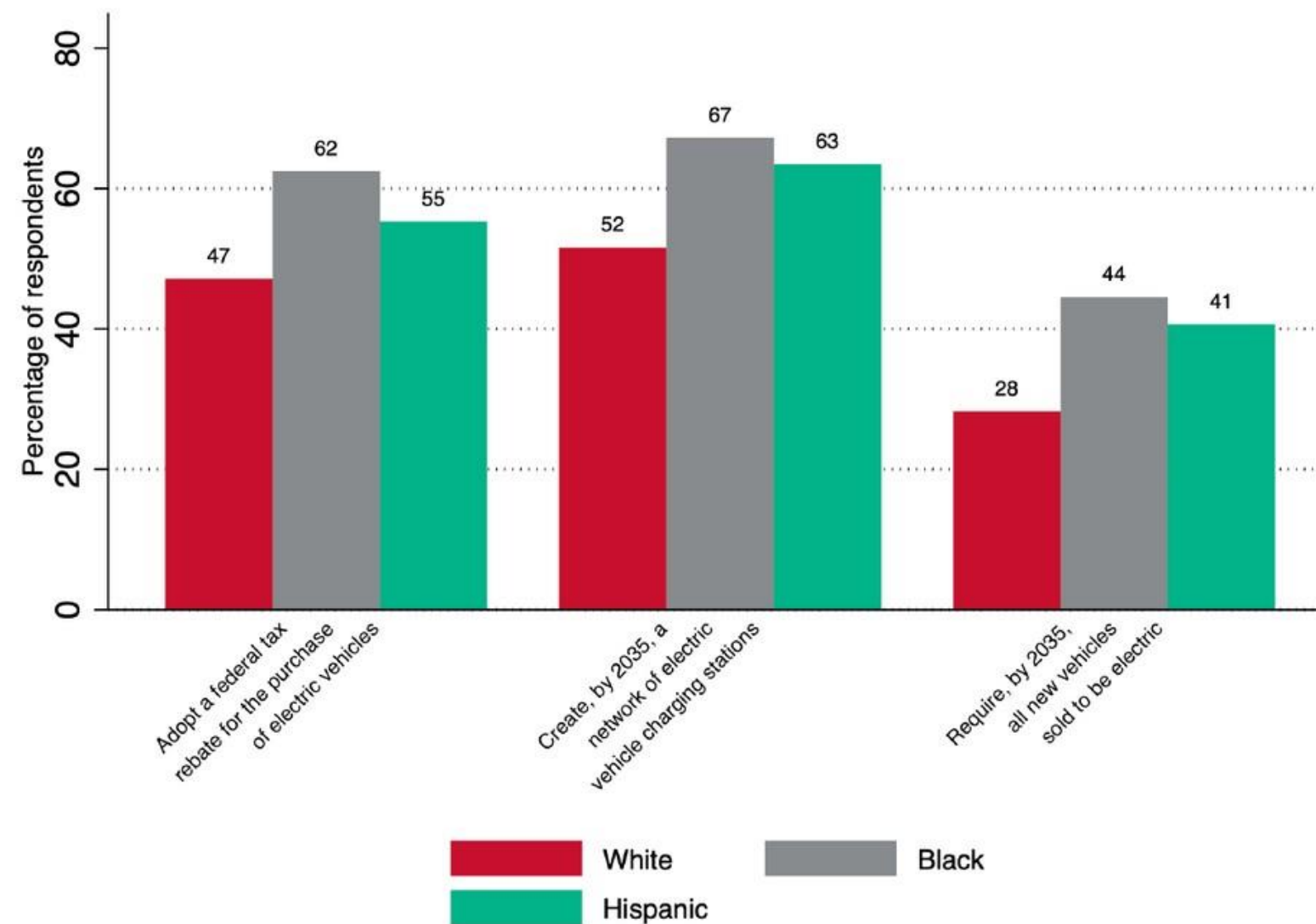


## **IV. Support for EV Policies**



# IV. EV Policy Support by Race/Ethnicity

Figure 5.2: Electric vehicle policy support by race and ethnicity

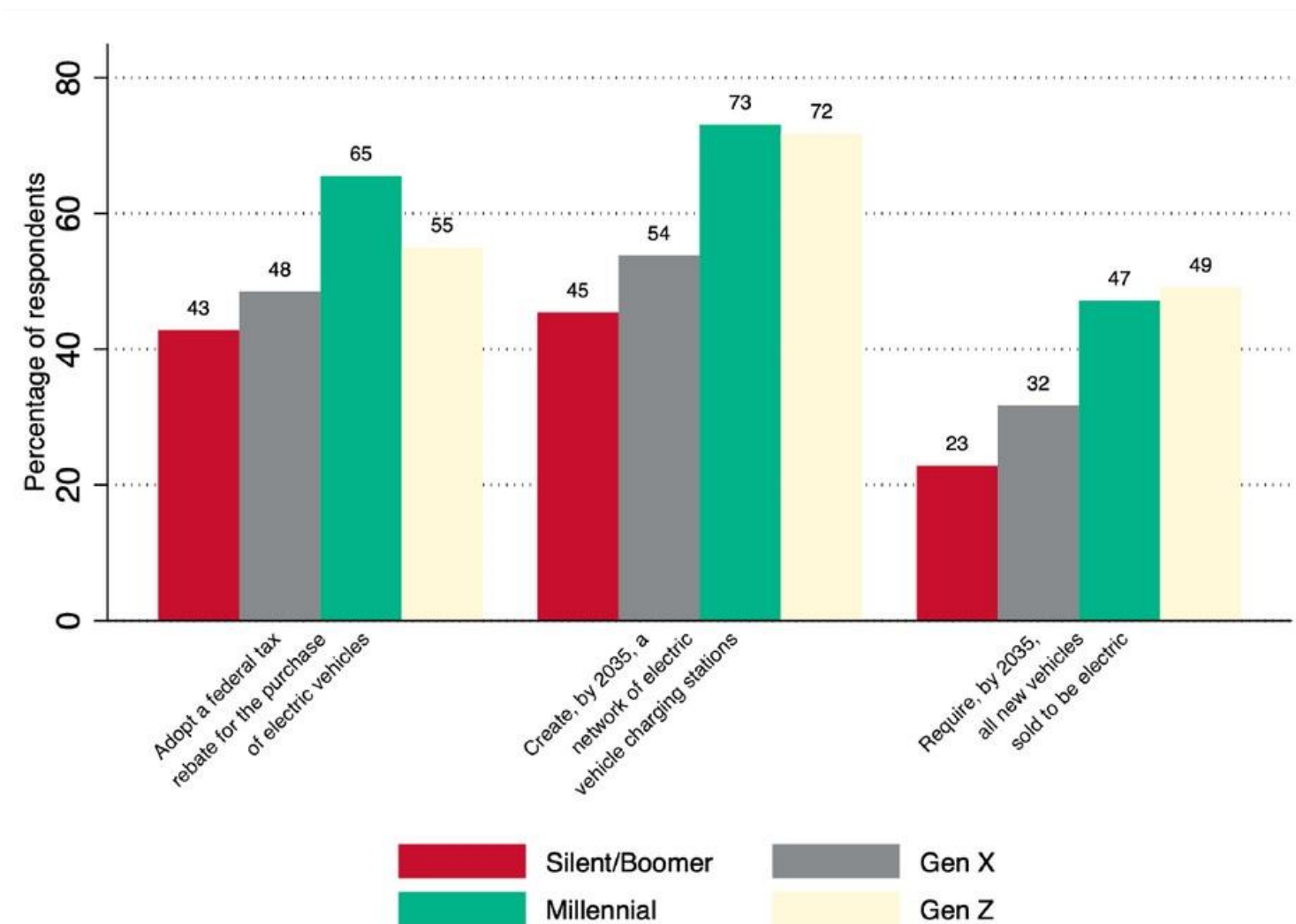


- Support for a network of electric charging station by 2035
  - **Black (67%), Hispanic (63%), White (52%)**
- Support for federal tax rebate to purchase EV **Black (62%), Hispanic (55%), White (47%) strongly or somewhat**
- By 2035--require that all new vehicles sold are EV **Black (44%), Hispanic (41%), White (28%)**



# IV. EV Policy Support by Generation

Figure 5.1: Electric vehicle policy support by generation



- Support for a network of electric charging station by 2035
  - **Silent/Boomer (45%), Gen X (54%), Millennial (73%), Gen Z (72%)**--strongly or somewhat
- Support for federal tax rebate to purchase EV **Silent/Boomer (43%), Gen X (48%), Millennial (65%), Gen Z (55%)**--strongly or somewhat support
- By 2035--require that all new vehicles sold are EV **Silent/Boomer (23%), Gen X (32%), Millennial (47%), Gen Z (49%)**—somewhat support



# **V. Closing Remarks**



# Closing Remarks

- Cultural shift
  - Understanding global warming in Texas
  - Branding/history of the South in oil/gas
  - Fossil fuel to renewable energy
  - 2021 Texas Freeze
    - Stressed, aging, neglected power infrastructure
- Unpacking dependency on transportation
  - Race/ethnicity and Texas' younger generation
  - Post-pandemic blue-collar vs. white-collar (remote)
  - By 2035 Boomers will be b/w 71-89 years of age



## **VI. Q&A**



# Thank you!

Please reach out to me if you have any questions. You can also use this QR code to book a call with me directly.



**Phone Number**

(713) 376-0205

**Email Address**

michael.adams@tsu.edu