



# Maryland National Electric Vehicle Infrastructure Webinar

June 2024



## Welcome & Introductions

Deron Lovaas, Chief of Environmental & Sustainable Transportation Program Amanda Hinh, NEVI Program Manager Colleen Turner, Michael Baker International Rebecca Bankard, Michael Baker International



# Housekeeping

## **General:**

- This meeting is being recorded
- Slides & polling results will be available on EV
   Plan Website within 1 week

## Comments/Questions:

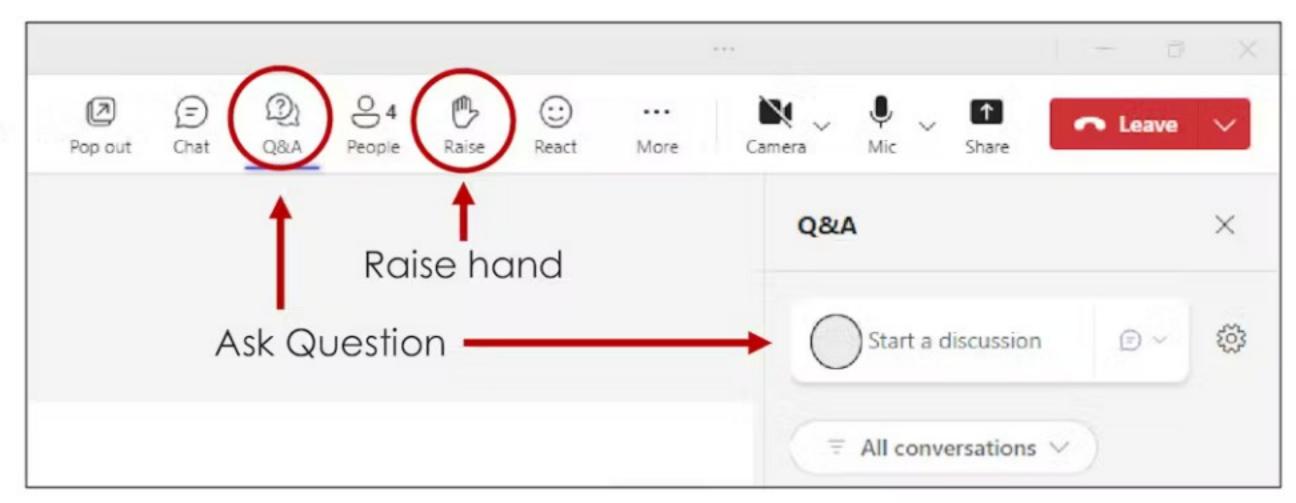
- Ask question in Q&A box
- Raise hand to be unmuted

## Polling:

Go to: Menti.com

Use Code: 7929 7775





## For assistance with technical difficulties:

Contact us via: <u>EVPlan@mdot.Maryland.gov</u>



# Agenda

- Introductions
- Opening Remarks
- Overview of Electric Vehicles & Charging with Interactive Polling
- Questions & Answers



# Opening Remarks

Deron Lovaas, Chief of Environmental & Sustainable Transportation Program

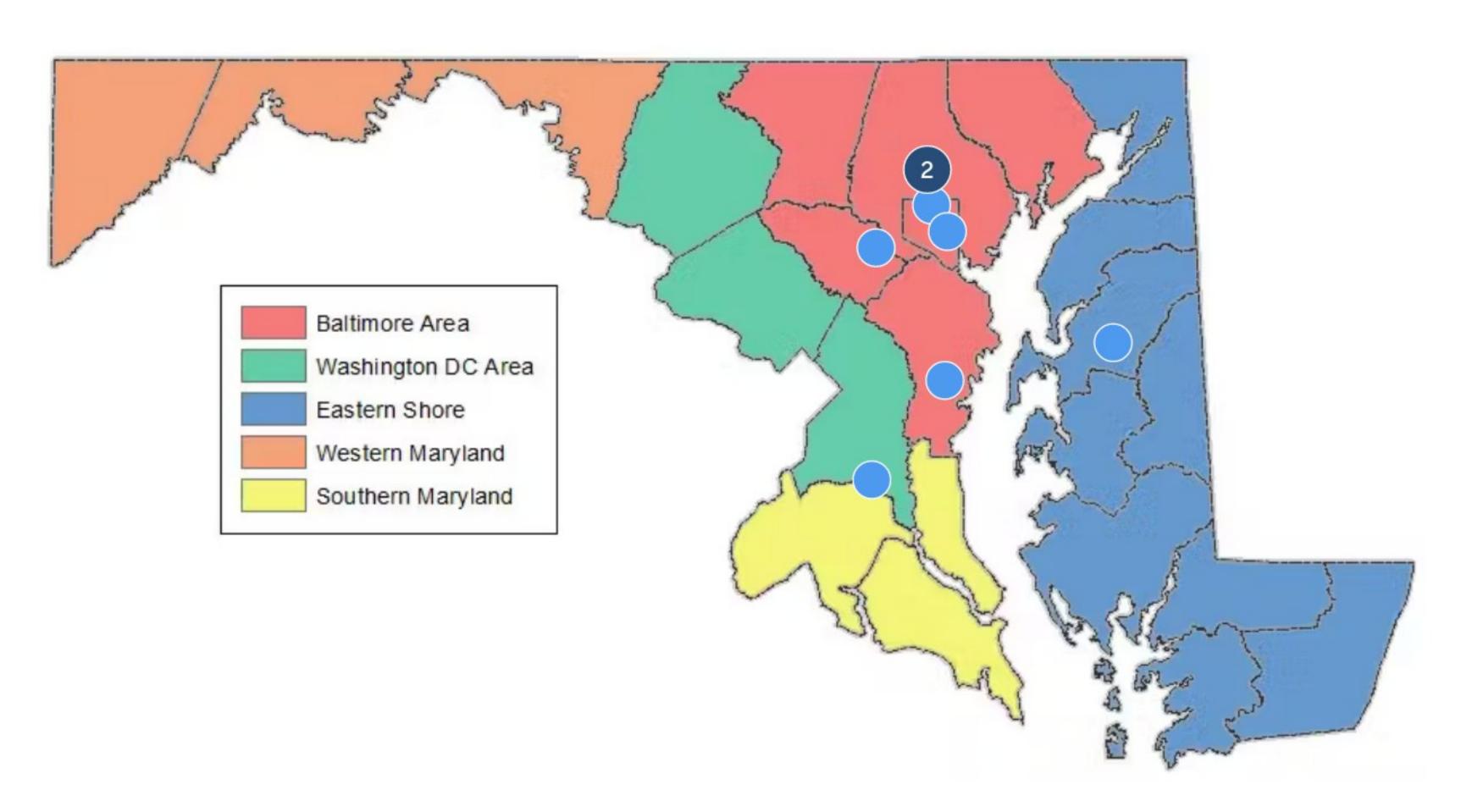


# Polling

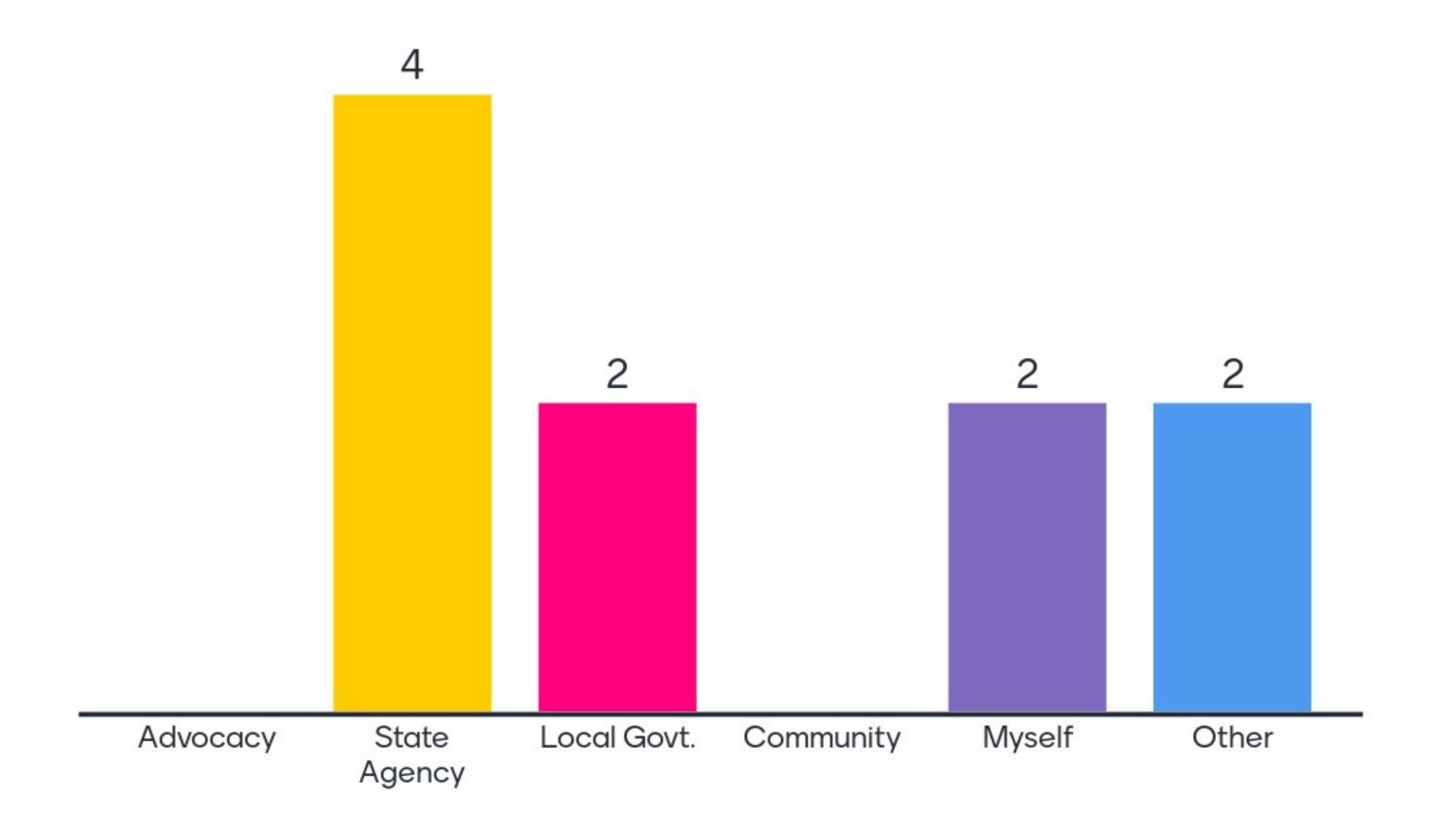
Mentimeter, Website, Code



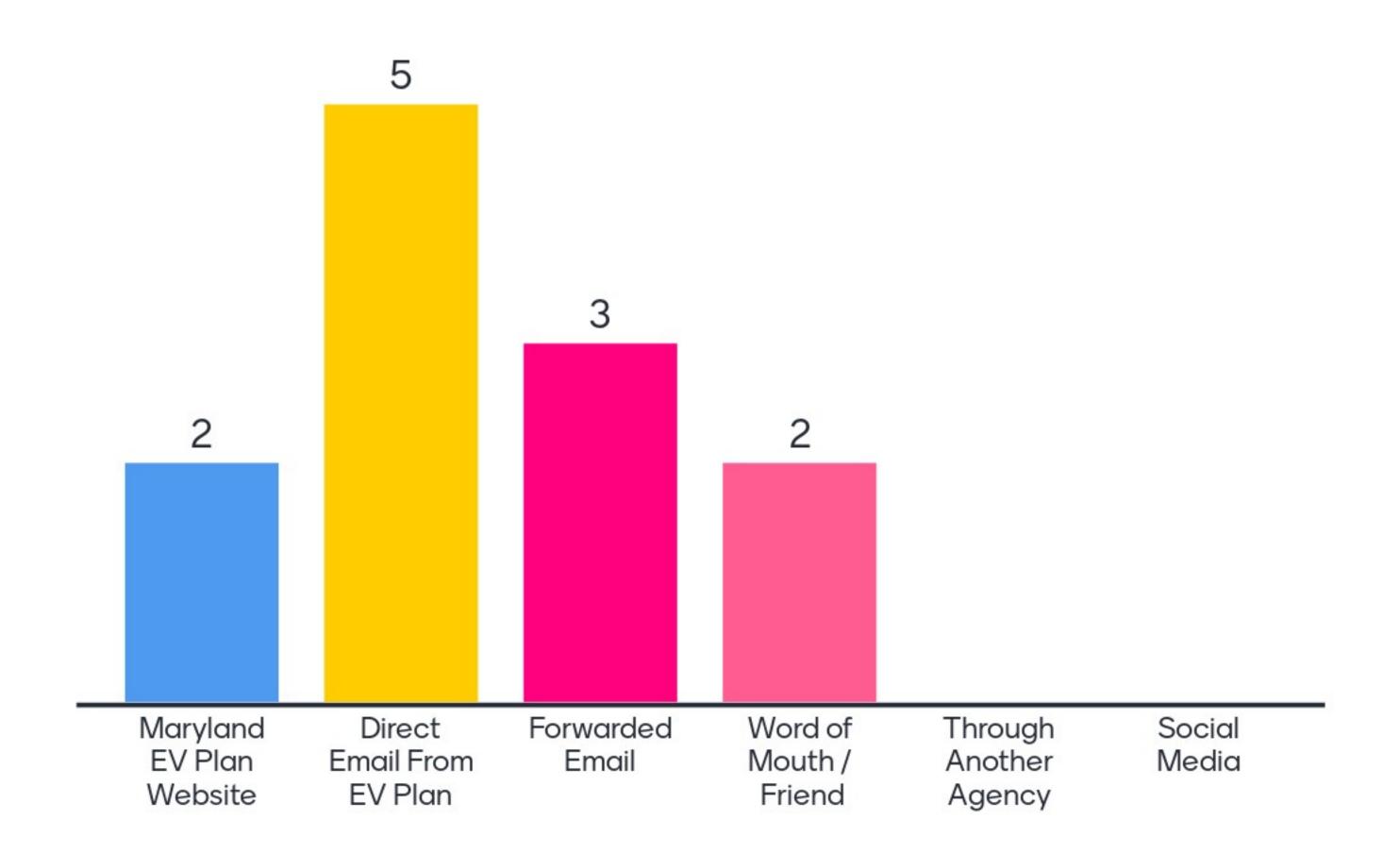
# Where are you joining us from?



# What org. or agency do you represent?



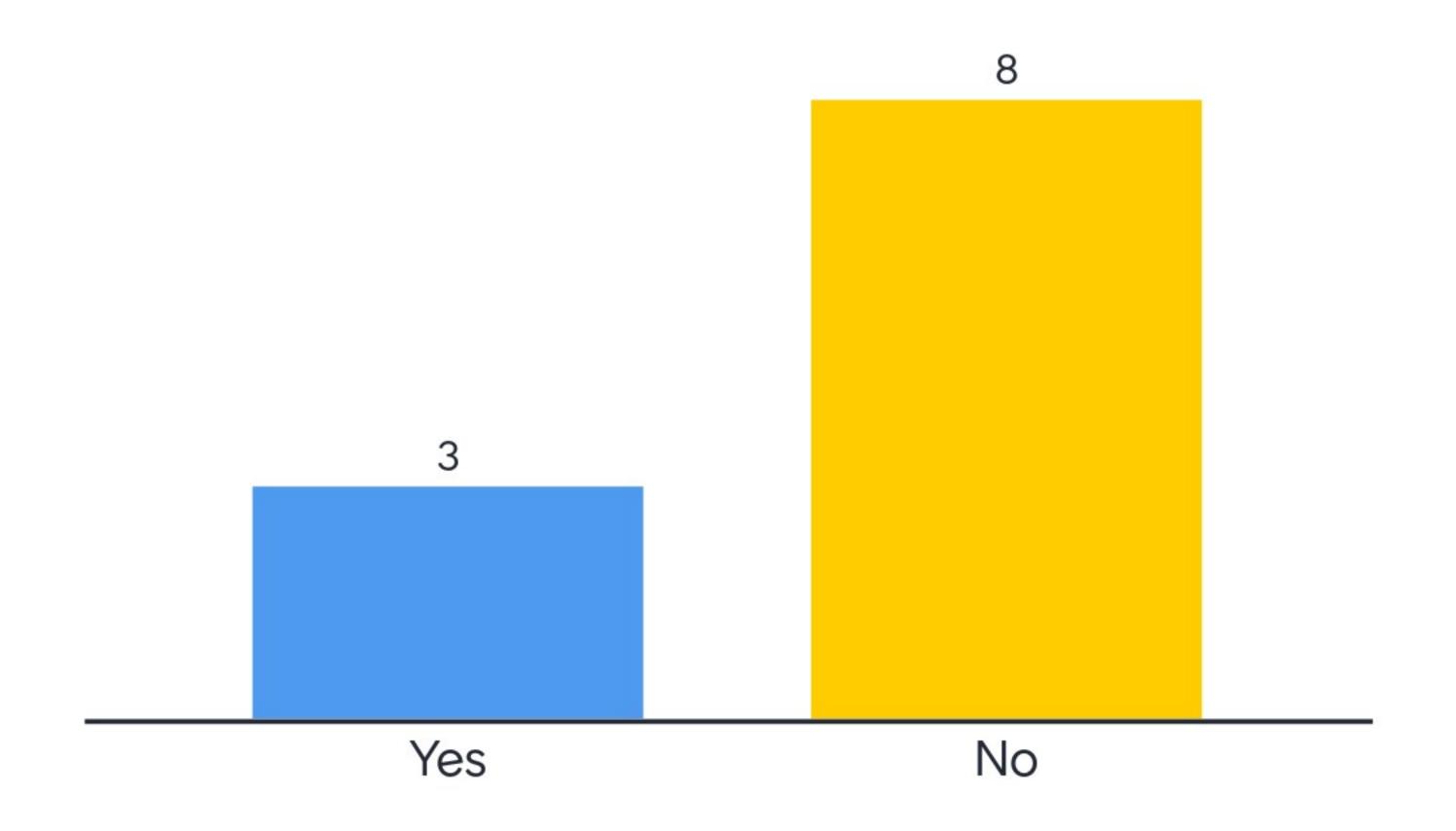
# How did you hear about this webinar?





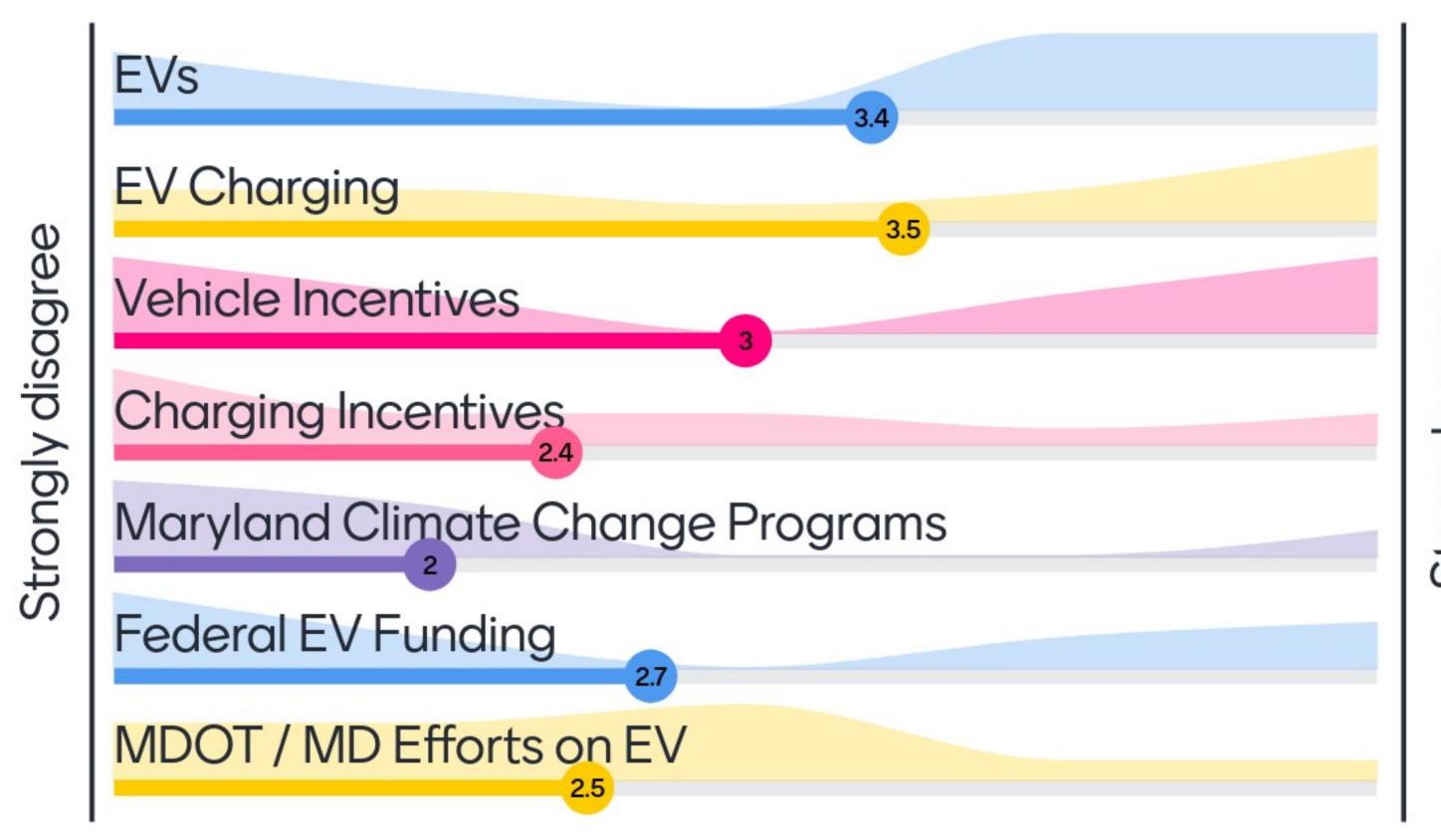


# Do you own or regularly drive an EV?





# I am very familiar with



Strongly agree



# What do you like most about EVs?

28 responses

```
charge at work not pollut
                    lower fueling costs
                                       quieter than ice
                     smooth driving
                          evgateway network
                                                  green
     low maintenance
                                       garage charging
         evgateway
                      no fossil fuel
advanced tech
                     zero emissions
                 convenience
 sustainable
                              elon musk
                                                       charge at home
                                              tellus
                      ncentives
                              tellus charger
             great
                                                  good for environment
                             energy efficiency
                             zero emmissios
                           climate friendly
```





# What do you like least about EVs?

23 responses

temperature sensitivity increased weight

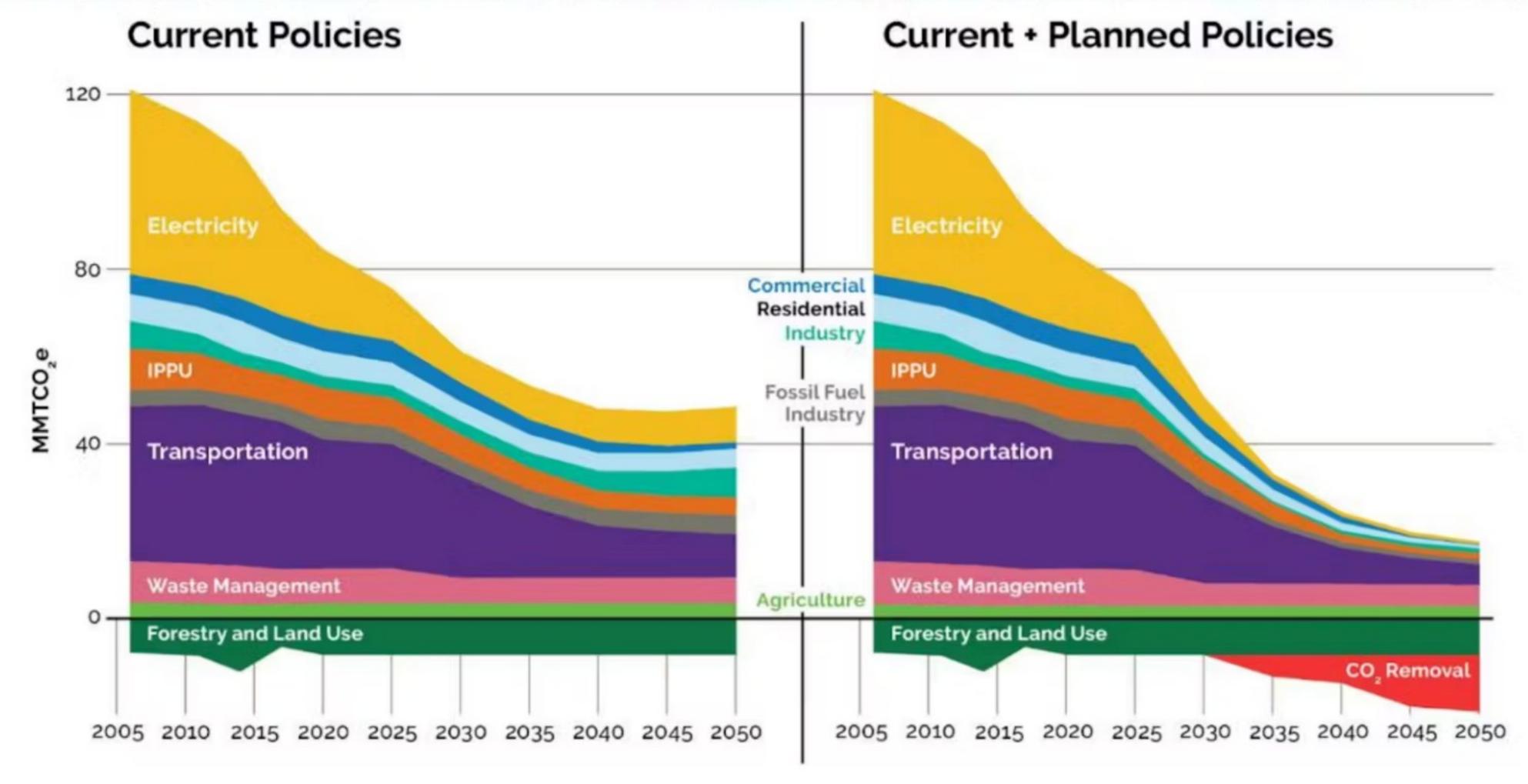
too few chargers Price tesla COST charging level fluctuates charging access chargers dont always wor

# Background



# Why Is Maryland Working On EVs?

Maryland's Statewide GHG Emissions and Sequestration Trends, Historical and Projected from 2006 to 2050 based on Current and New Policies

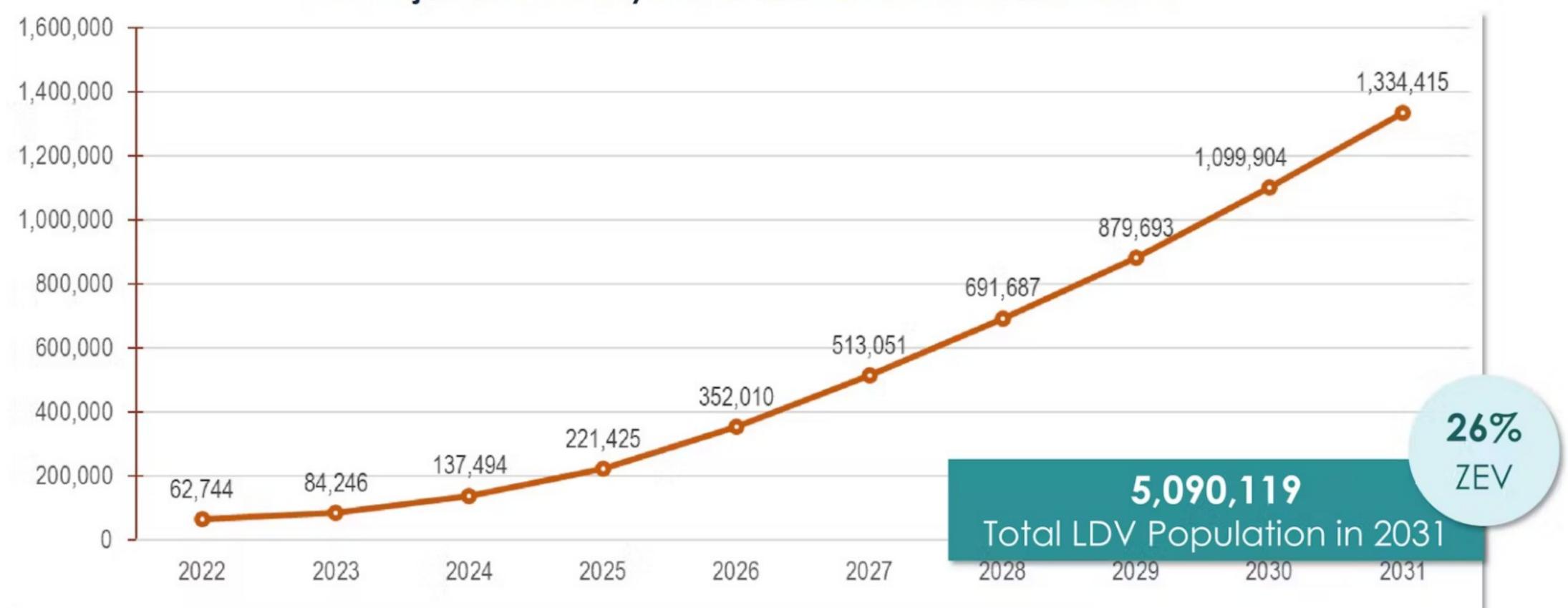


Climate Pollution Reduction under the Maryland Climate Solutions Now Act of 2022



# Why Is Maryland Working On EVs?

EV Projections in Maryland Under Advanced Clean Cars II



## ACC II (State Policy)

Requires 100% of new cars, light-duty trucks, and sport utility vehicles (SUVs) sold in Maryland to be ZEVs by 2035

## IIJA (Federal Policy)

- NEVI \$5 Billion
- CFI \$2.5 Billion



# Who Are The Key Agencies Involved?

## **Maryland Department of Transportation (MDOT)**

- Vehicle electrification & charging infrastructure strategy
- Making transportation in Maryland more 'green'

## Maryland Department of the Environment (MDE)

Regulations

## Maryland Energy Administration (MEA)

Incentives







## Maryland is leading by example:

- Transitioning fleet to EVs
- Deploying EVSEs at State sites



# What Is MDOT Working On?

## National Electric Vehicle Infrastructure (NEVI)

- Part of the larger national electrification effort & charging network
- Approximately \$60 million will be invested in Maryland
  - Round 1 RFP Closed April 10th

# Electric Vehicle Charging Reliability Accessibility & Accelerator (EVCRAA)

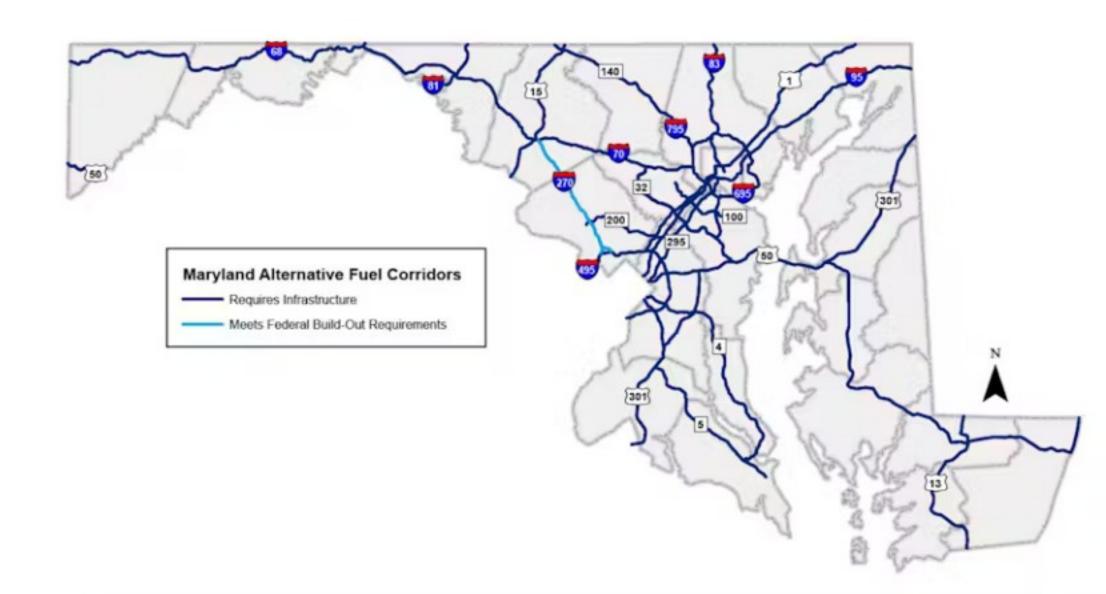
- Repair & replace existing public charging stations
  - Received \$4.36 million in Maryland

## MarylandEV

Provide consumer awareness on EVs, charging, incentives

## Zero Emission Electric Vehicle Infrastructure Council (ZEEVIC)

 Development of policies, recommendations, and incentives that increase of ZEV awareness



23 Designated EV
Alternative Fuel Corridors



# Benefits



## Electric Vehicles

## Types of EVs

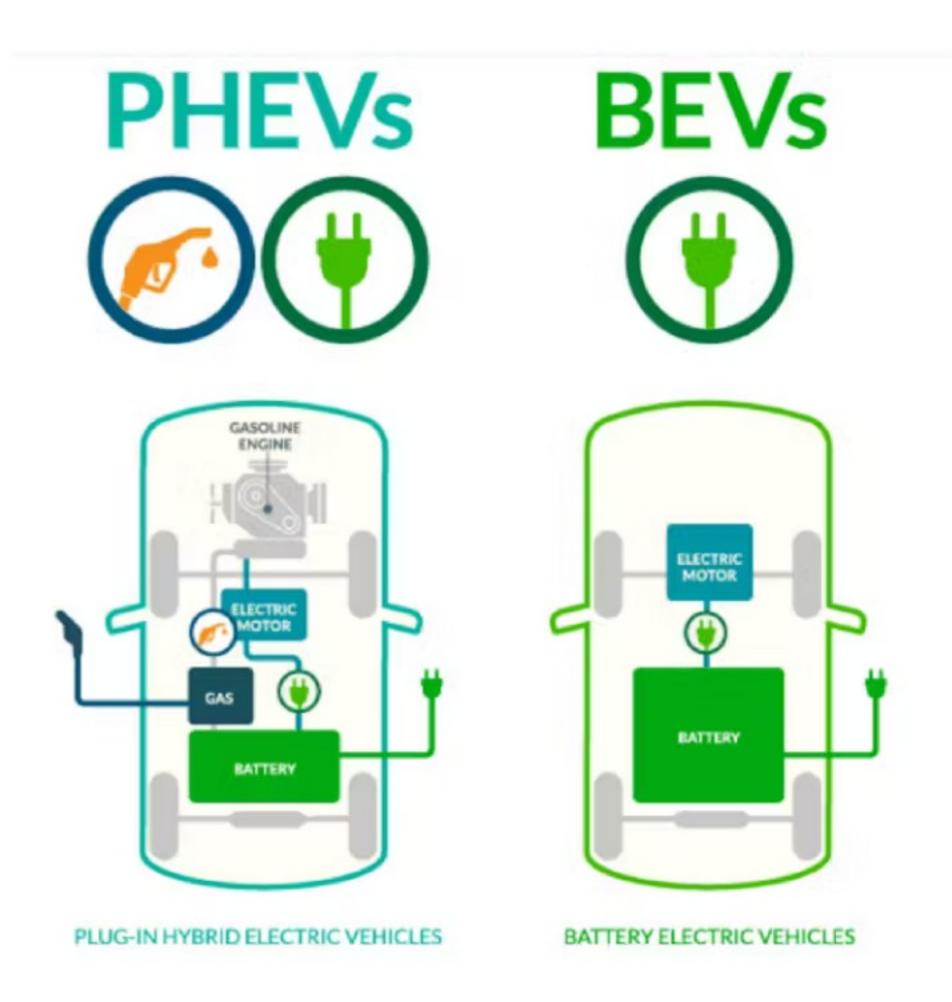
- Battery Electric Vehicle (BEV)
  - Zero-emission
- Plug-in Hybrid Electric Vehicles (PHEV)
  - Lower emission
  - Minimal range anxiety

## **Cost Savings**

Lower maintenance and overall lifetime costs

## **Environmental & Health Benefits**

- Lower GHG emissions
- Reduced air pollution





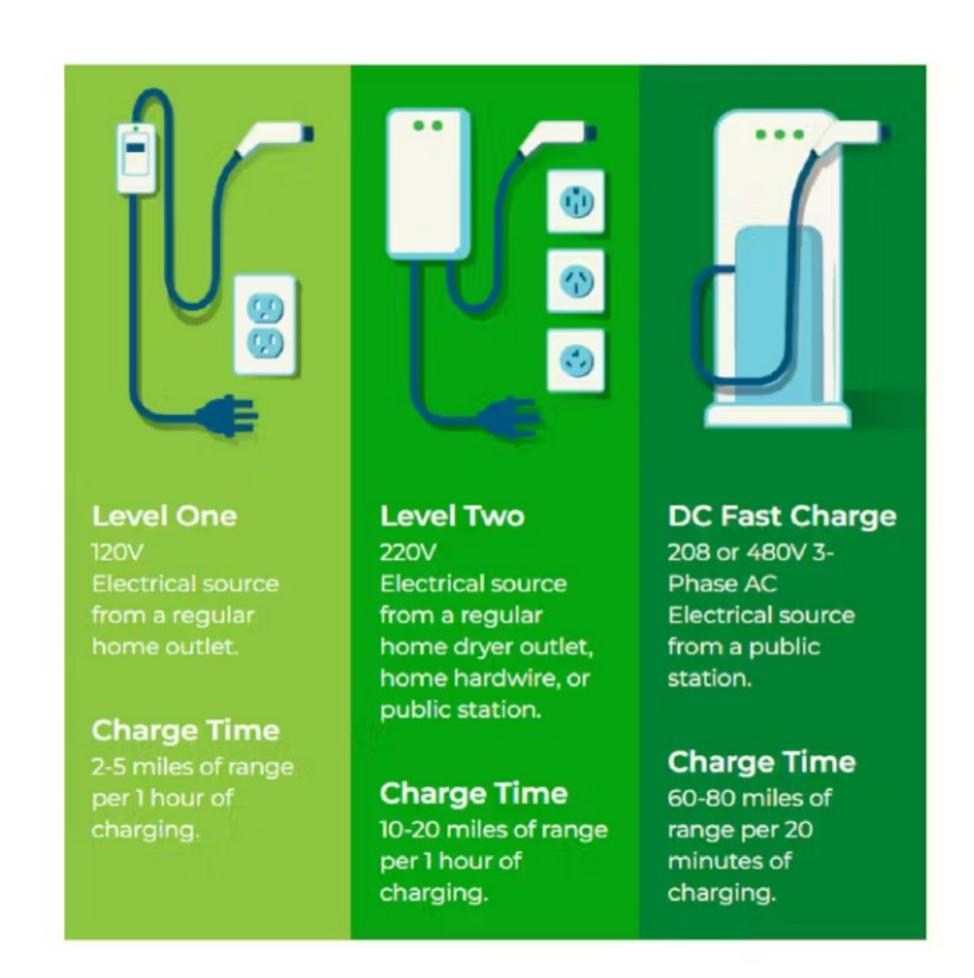
# Charging Stations

## **Types of Charging Stations**

- Level 1
  - Regular home outlet
- Level 2
  - Charge at home overnight or during work
- DC Fast
  - Provides 80% charge in 30 minutes

## Interconnected Network of Charging

- Facilitates data collection, access, and reliability
- Chargers in BOTH community and along highways
- Reduced range anxiety





## What Incentives Are Available?

## **MEA's EV Charging Rebate Program**

- Rebate for 50% of eligible costs up to \$700 incurred acquiring and installir qualified charging stations
- FY 2024 Funding \$2.5 Million

### **MVA's Excise Tax Credit**

- One-time excise tax credit up to \$3,000 for the purchase of a qualified ZE\
- Current FY funds have been depleted

## **Federal Tax Credit Program**

- Tax credit up to \$7,500 for the purchase of a qualified new ZEV
- Tax credit up to \$1,000 for the cost of hardware and installation of charging stations

## Utility

- Rebate Programs
- Time of Use Rate Plans

MDE-V MARYLAND EV

101 - UVDBOGEN 101

1 EV CHARGING

NTIVES LOCAL EV PRO

ALEV PROGRAMS ~ RESOUR

## Incentives

See how much you can save by going electric!

There are many federal and state tax incentives, as well as state grants, vouchers and rebates, for the purchase of plug-in electric vehicles and electric vehicle supply equipment.







Federal Incentives

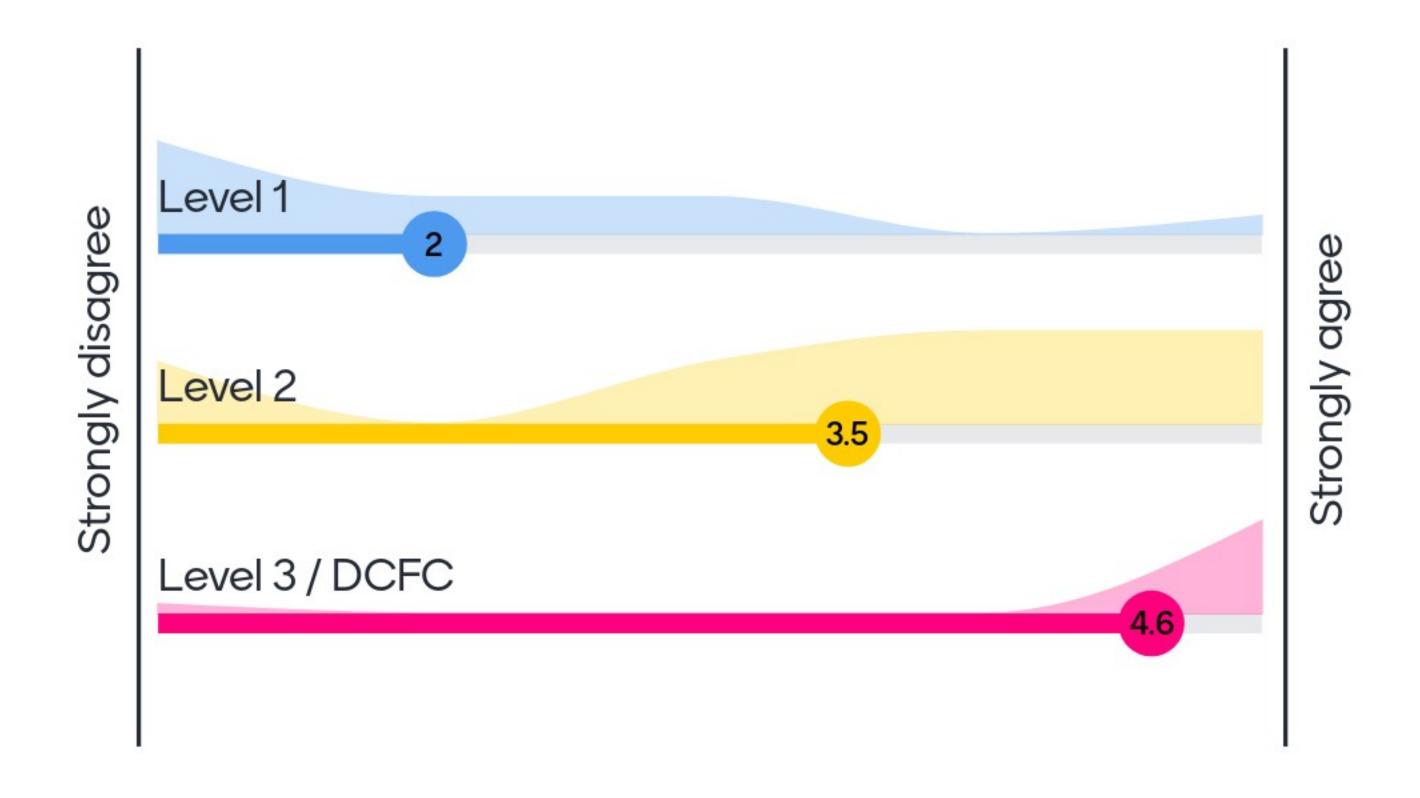
State Incentives

Utility Incentive

Visit MarylandEV.org for more information on incentives



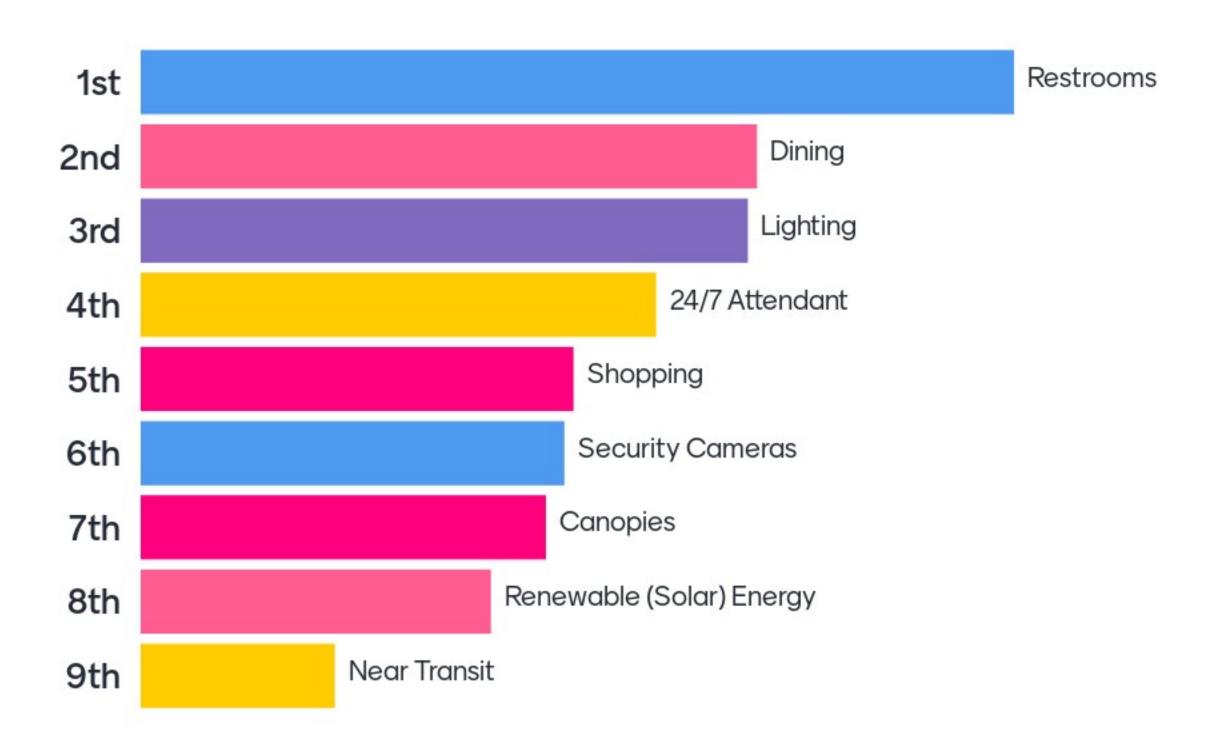
# What level of charging do you think is needed most?



# I think charging is best located at



# What charging amenities are most important to you?



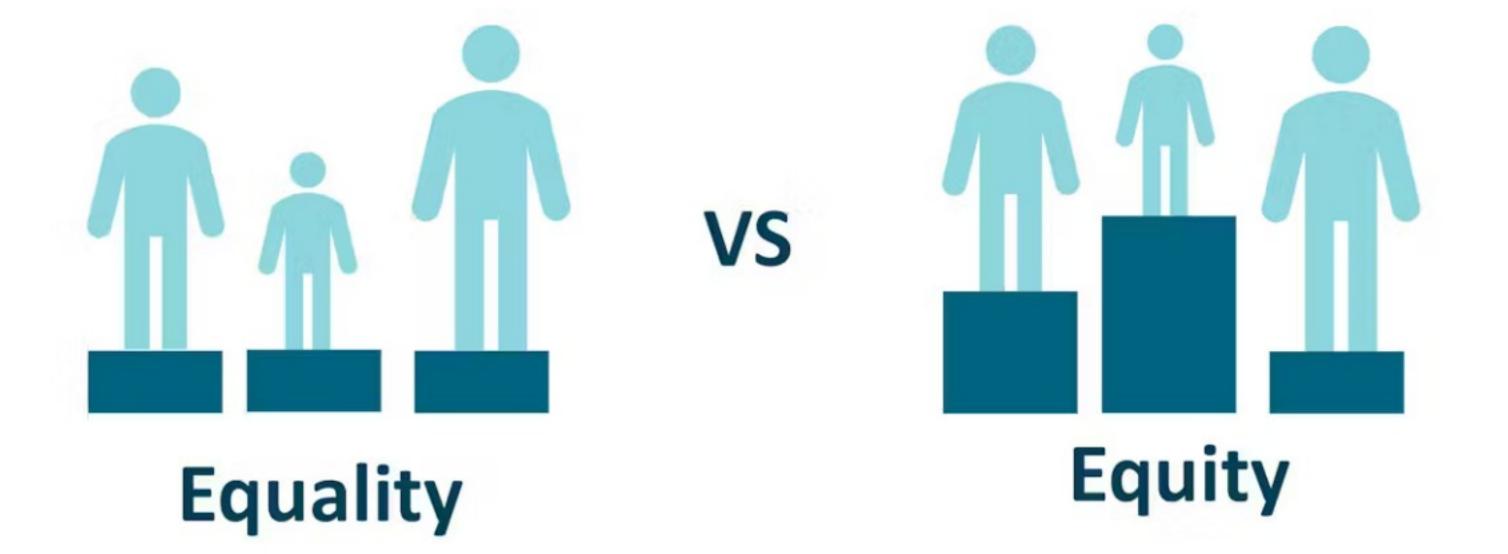




# Equity

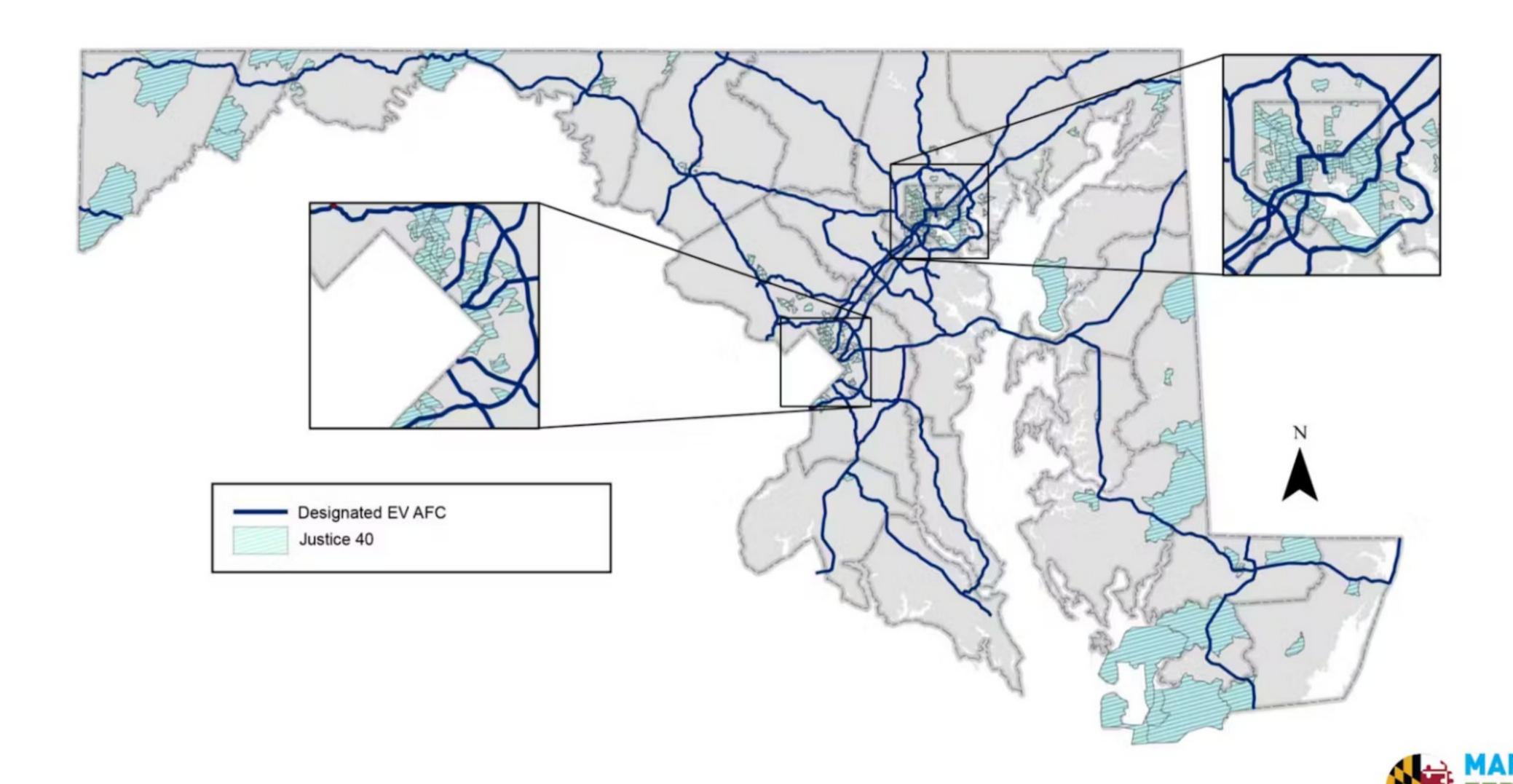


# What is equity?

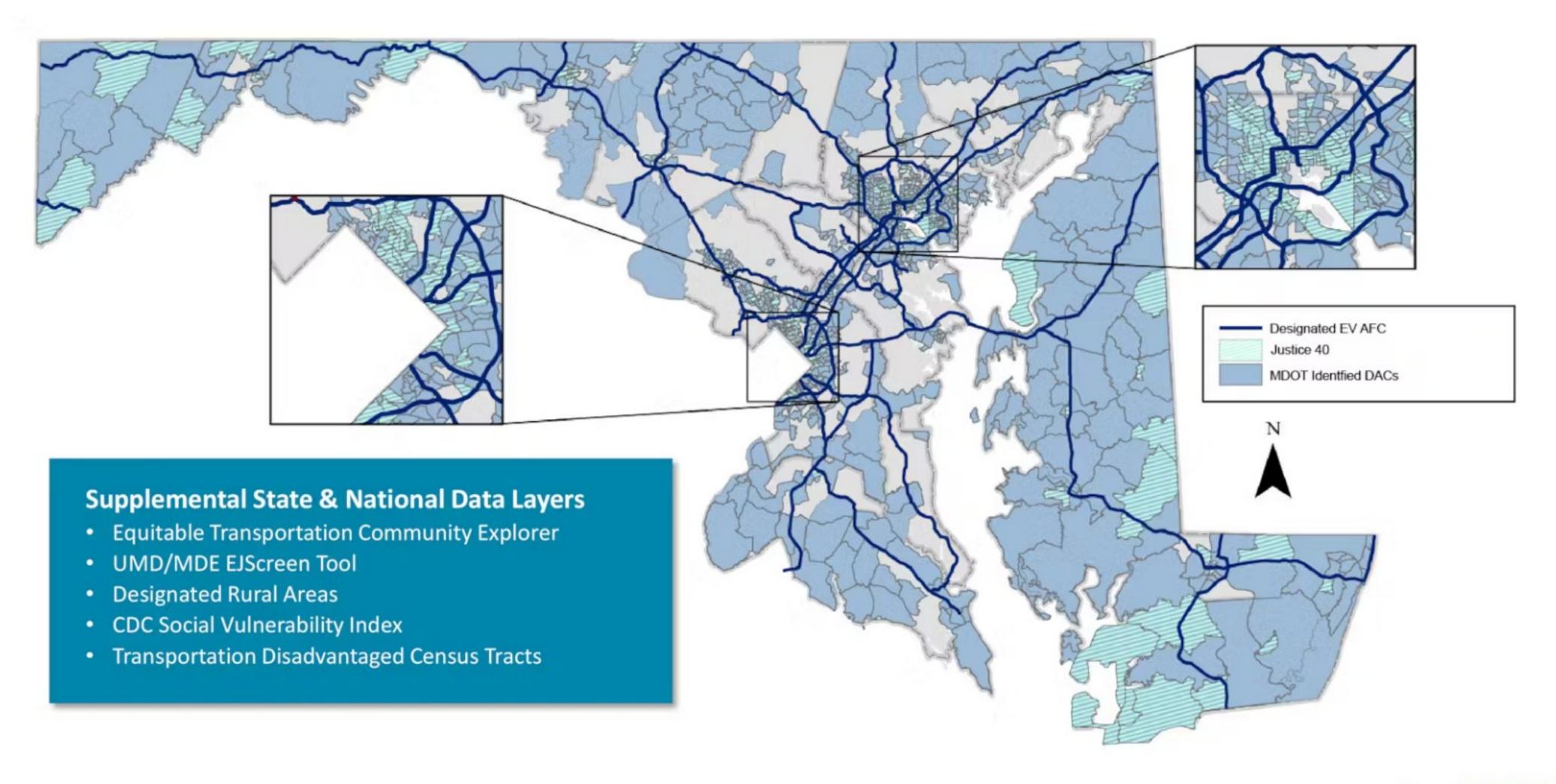




## What is Justice 40?



# Going Beyond Justice 40





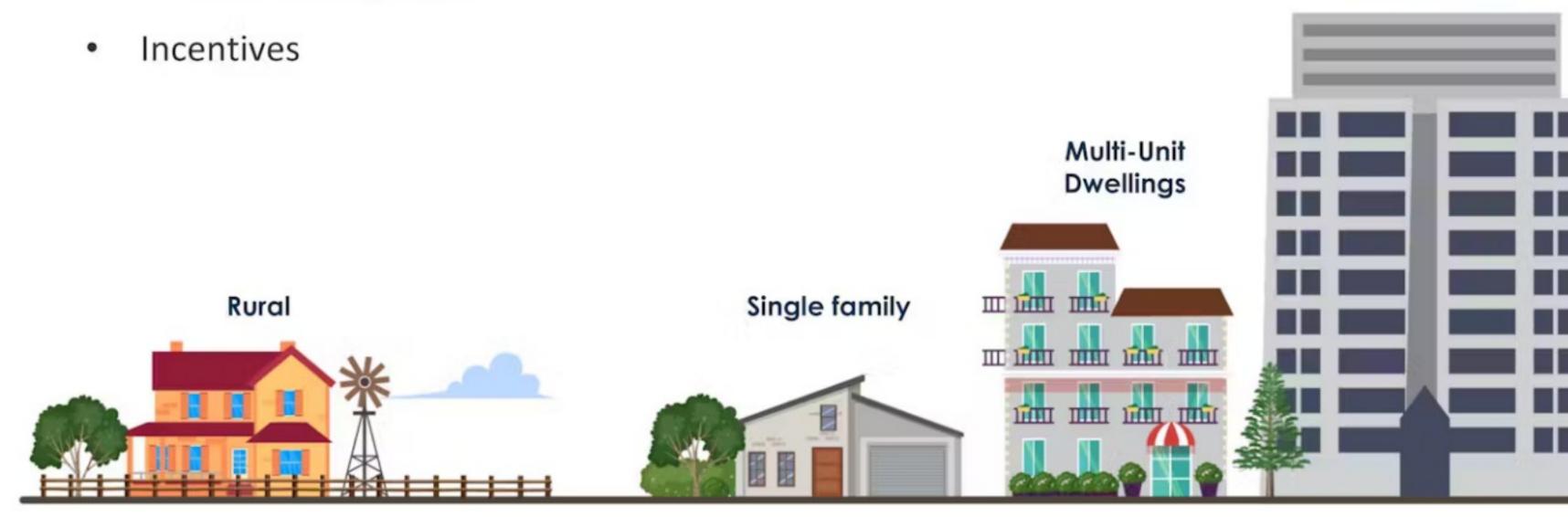
# How does this relate to equity?

## Accessibility

- Increasing public awareness about EVs, EVSEs, and incentives
- Expanding EV adoption, ownership, and usage
- Expanding the charging network
  - Home, workplace, multi-unit dwellings, community, and along highways
- Ensuring a reliable charging network

## Affordability

Ensure access to all people of all income brackets

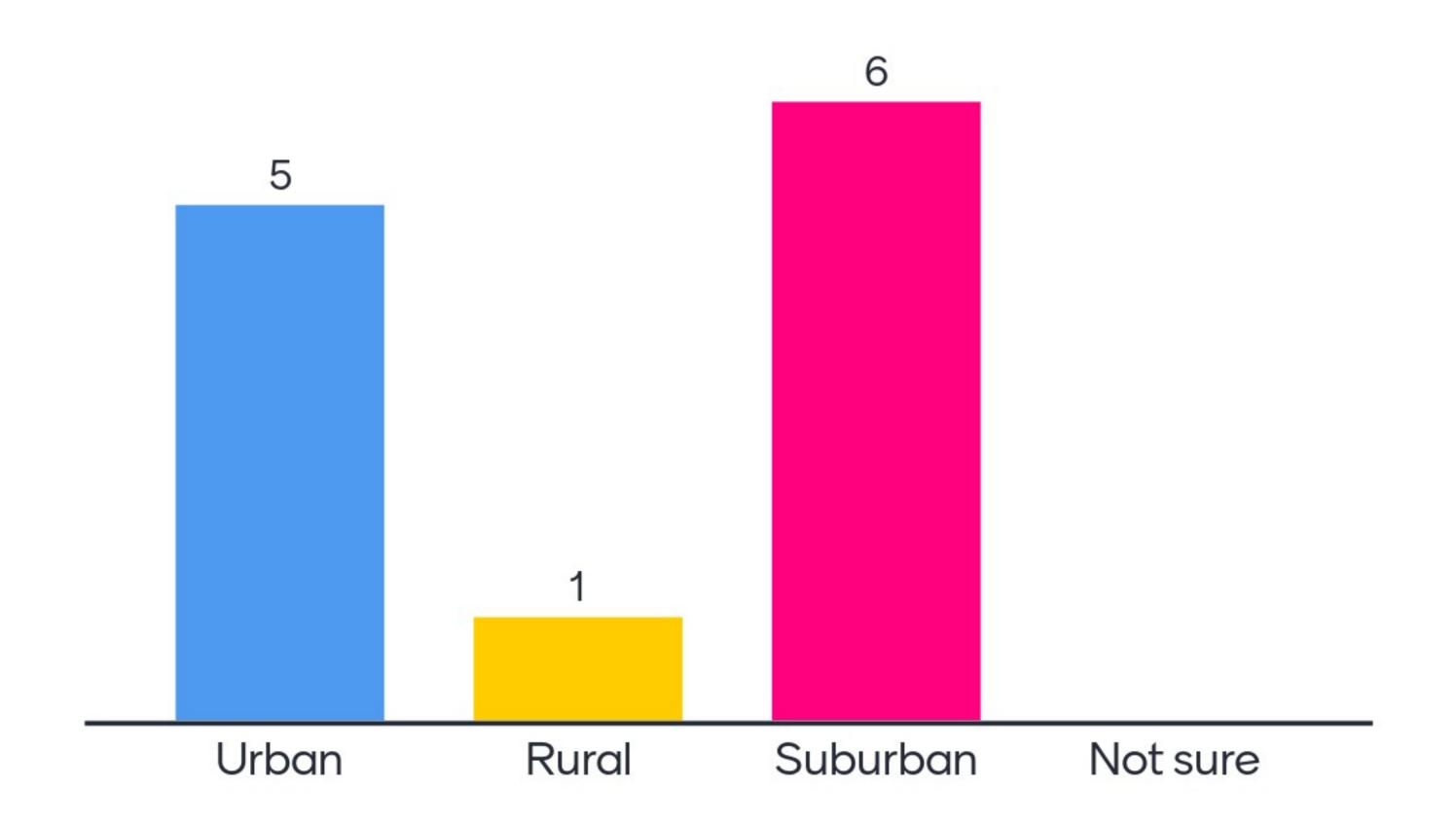




Mixed-Use/

Commercial

# Would you describe your community as:







# What does equity with respect to EVs mean to you?

22 responses

```
charging siting
                             vehicles and charging
accessibility to chargers
                             convenient charging
    income groups
                    affordability
lower cost vehicles
                                       free charging
                    incentives
safety measures
                                               afordability
                     charging in all areas
                                          availabilty to lower
             chargers everywhere
      well placed
                         cheap prices of evs
         accesability
           total cost of ownership
           proximity to charging
```

# Outreach Efforts



# What Has MDOT Done Previously?

### Webinars

Initial stakeholder webinars in June 2022

## **Meetings & Presentations**

Utilities | ZEEVIC | Local Government

#### Website & Tools

EV Plan Website | EV Dashboard | EV Charging Siting Tool | MarylandEV

## **MetroQuest Survey**

681 Respondents | NEVI Vision & Goals | Prioritization Criteria |
 Concerns | Optimal Charging Station Locations

## Request for Information (RFIs)

 NEVI Formula Funding | EVSE End-to-End Data Collection & Data Reporting Solution

#### **ZEEVIC Events**

11 community events | 5,200+ Touchpoints

# Outreach by the Numbers



2,099

**Total Survey Participants** 



11

**Community Events** 



5,242

People Engaged



53

**Total RFI Respondents** 



502

**Optimal Sites Identified** 



# What Is MDOT Currently Doing?

#### Webinars

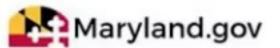
- Three Webinars
  - June 11, June 18, June 20
- Focused on education and why NEVI matters
  - Audience: Public

## **NEVI Plan Survey**

- Feedback on electrifying transportation sector and developing statewide EV infrastructure plan
  - Audience : Public

## Maryland NEVI Round 1 RFP Survey

- Gather feedback from on Round 1 RFP
  - Targeted Audience : Potential NEVI Applicants







#### Get Plugged into the Future of Electric Vehicles!

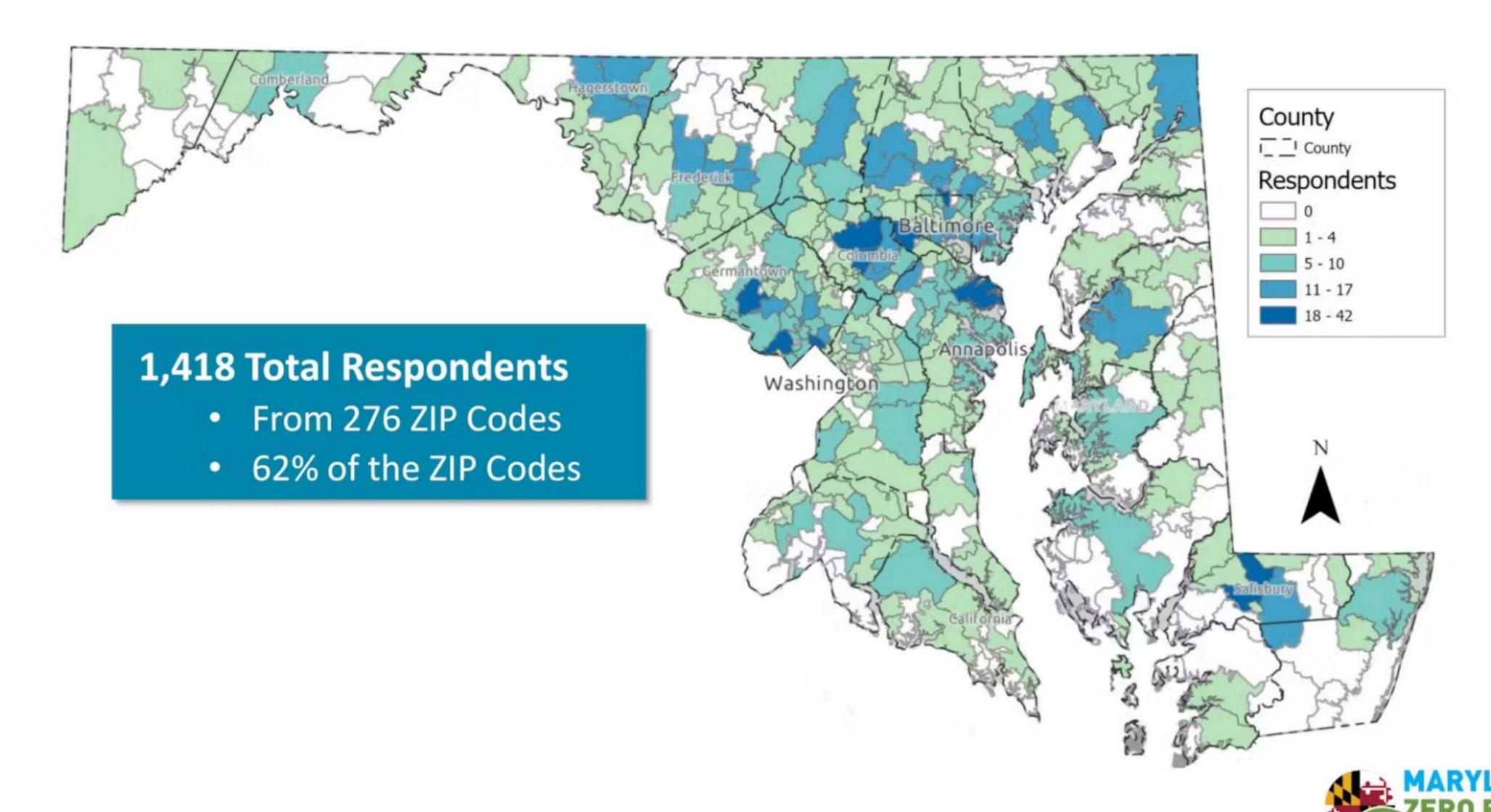
The Maryland Department of Transportation (MDOT) invites you to join one of our virtual informational webinars to learn about Maryland's National Electric Vehicle Infrastructure (NEVI) Plan and NEVI Program, the adoption of electric vehicles (EVs) across Maryland, and the installation of EV Charging Stations.

The same information will be shared at all three webinars, so we invite you to register for **one** of the webinars below:

Tuesday, June 11, 2024 — 11:00 a.m. to 12:30 p.m. Tuesday, June 18, 2024 — 11:00 a.m. to 12:30 p.m. Thursday, June 20, 2024 — 6:00 p.m. to 7:30 p.m.

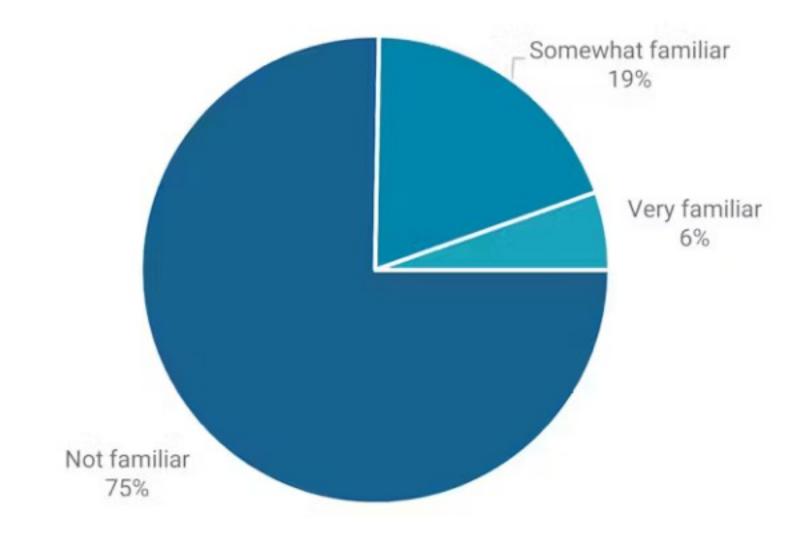


# Survey Results

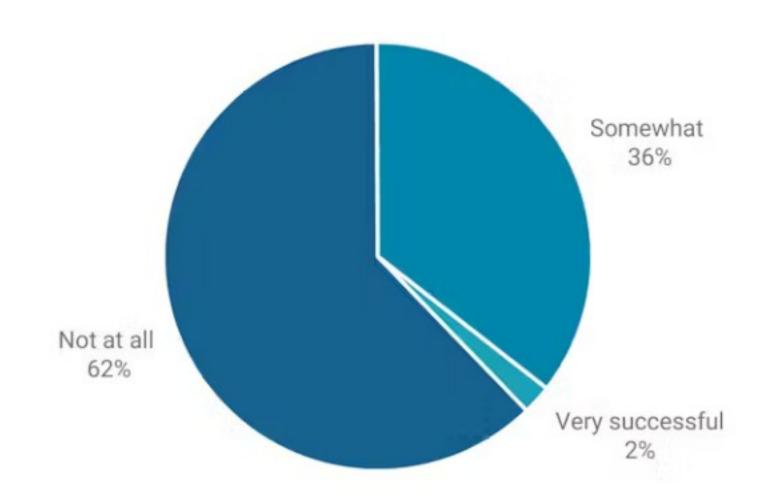


### What we heard

Familiarity with NEVI



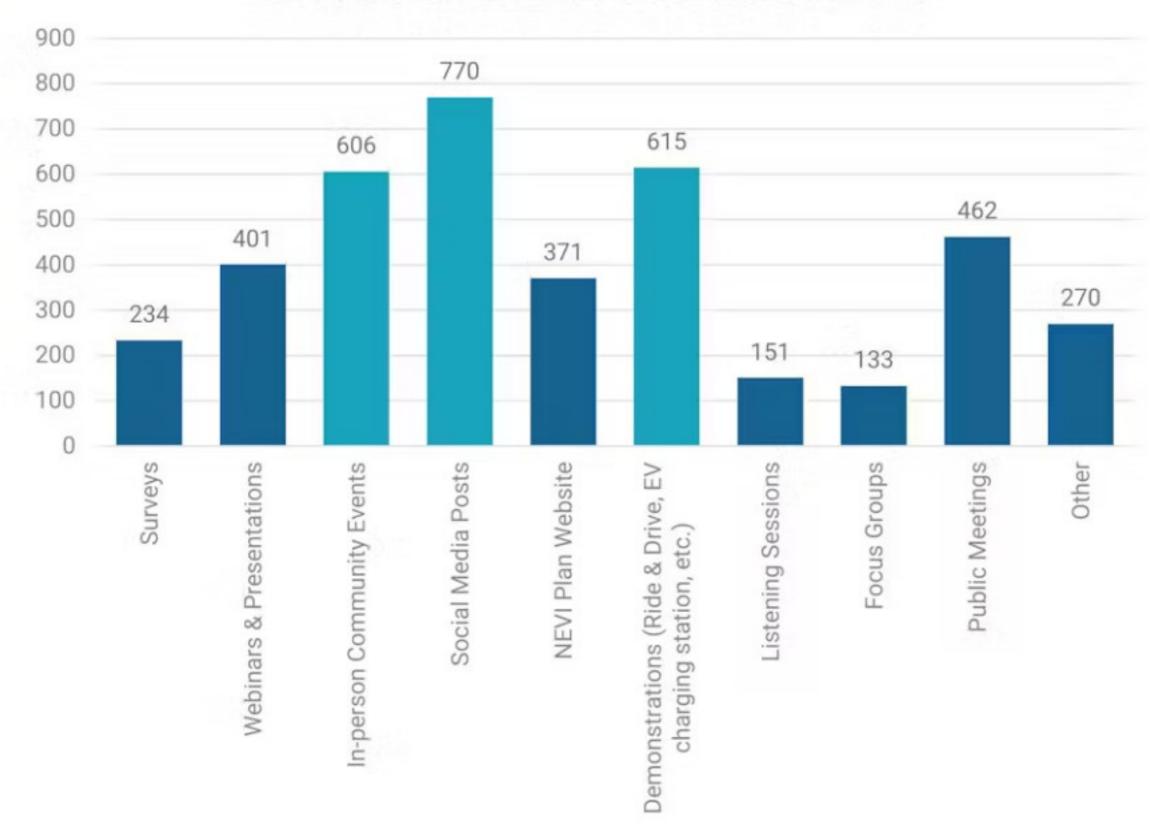
How Successful NEVI Outreach & Education to the Public Have Been



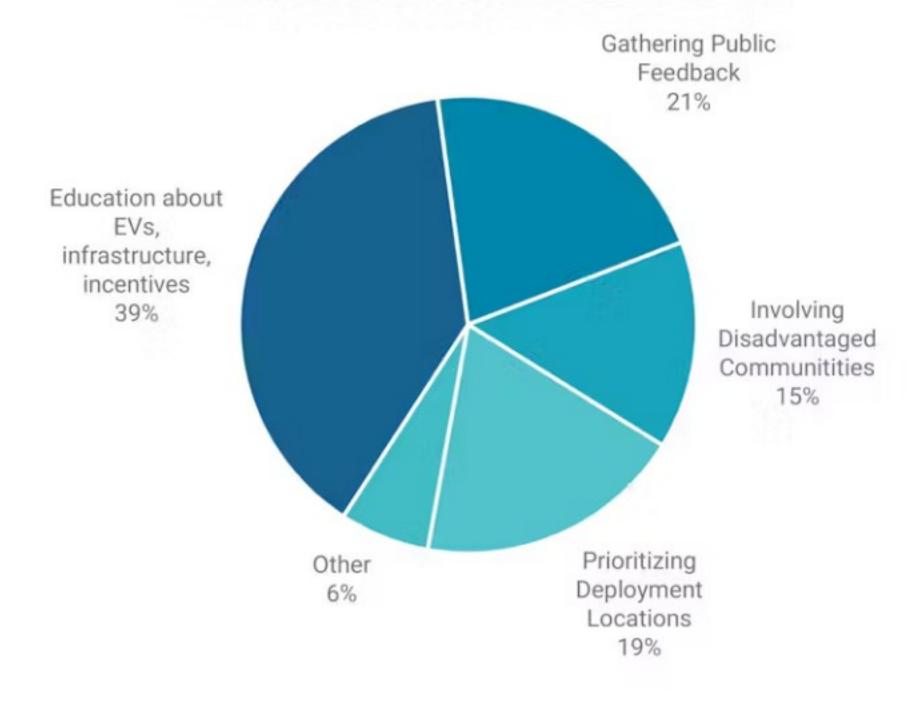


### What we heard





#### What Should Outreach Focus On?





# Are there any events you recommend we attend?

16 responses

# What do you think would get you and your community interested in EVs?

10 responses

money saving like tou

interactive sessions

show and tell

advantages incentives

federal tax credit cheaper evs

demonstrations

### What else can we do to increase public awareness?

Flyers, seminars, explanations, education about

MVA centers

Ad campaign, psa's, radio spots

Make BGE expand Tou ( my ev is ineligible :-(

Messaging at gas stations.

Surveys with gift cards

**BGE** bills

Partner with modes to give them info when they go out too

### What else can we do to increase public awareness?

School programs: Reach out to high school students - next generation of car owners and they can influence their parents.

Neighbors speak to neighbors

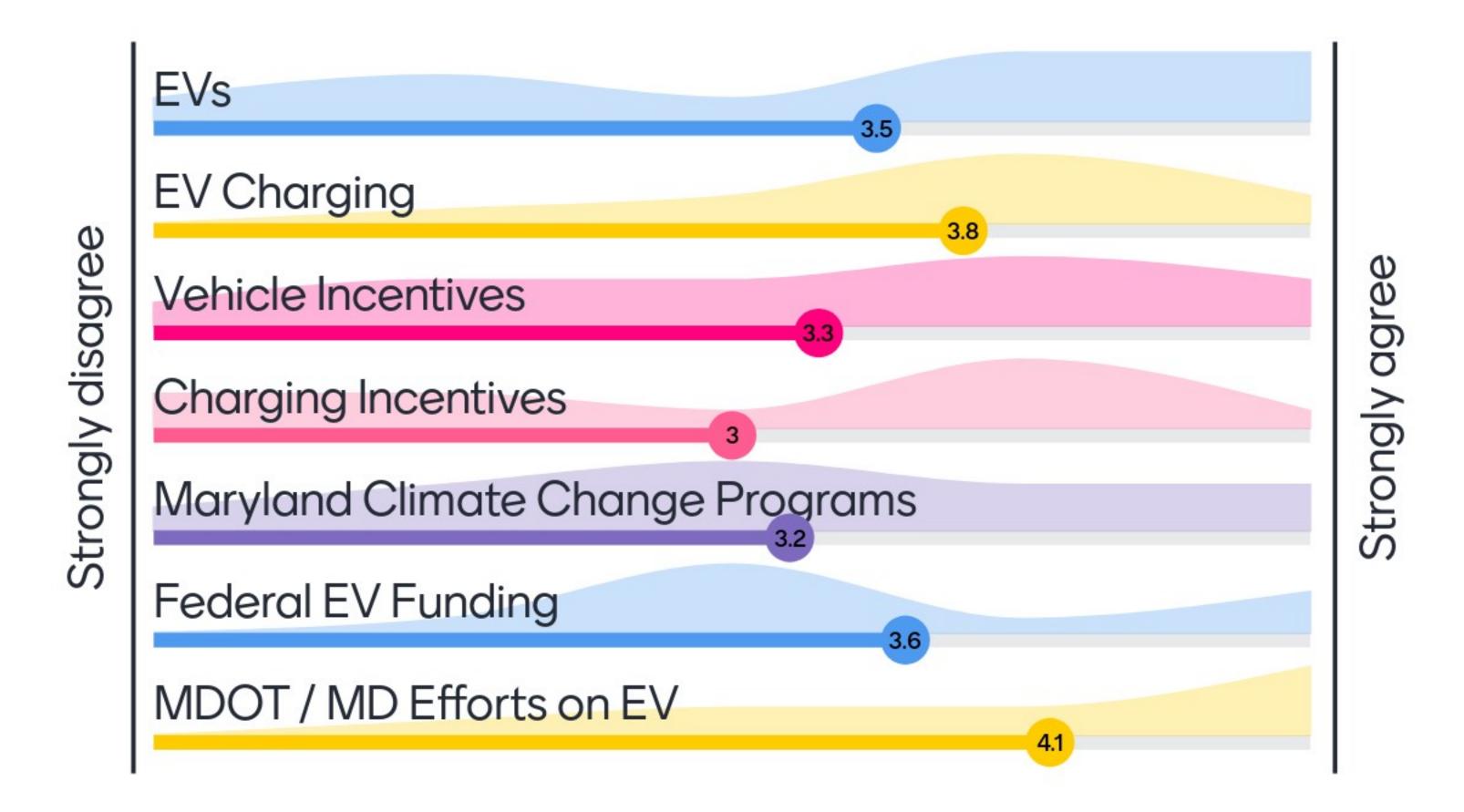
Direct mail with MVA correspondence

Comparison study GAS VS EV

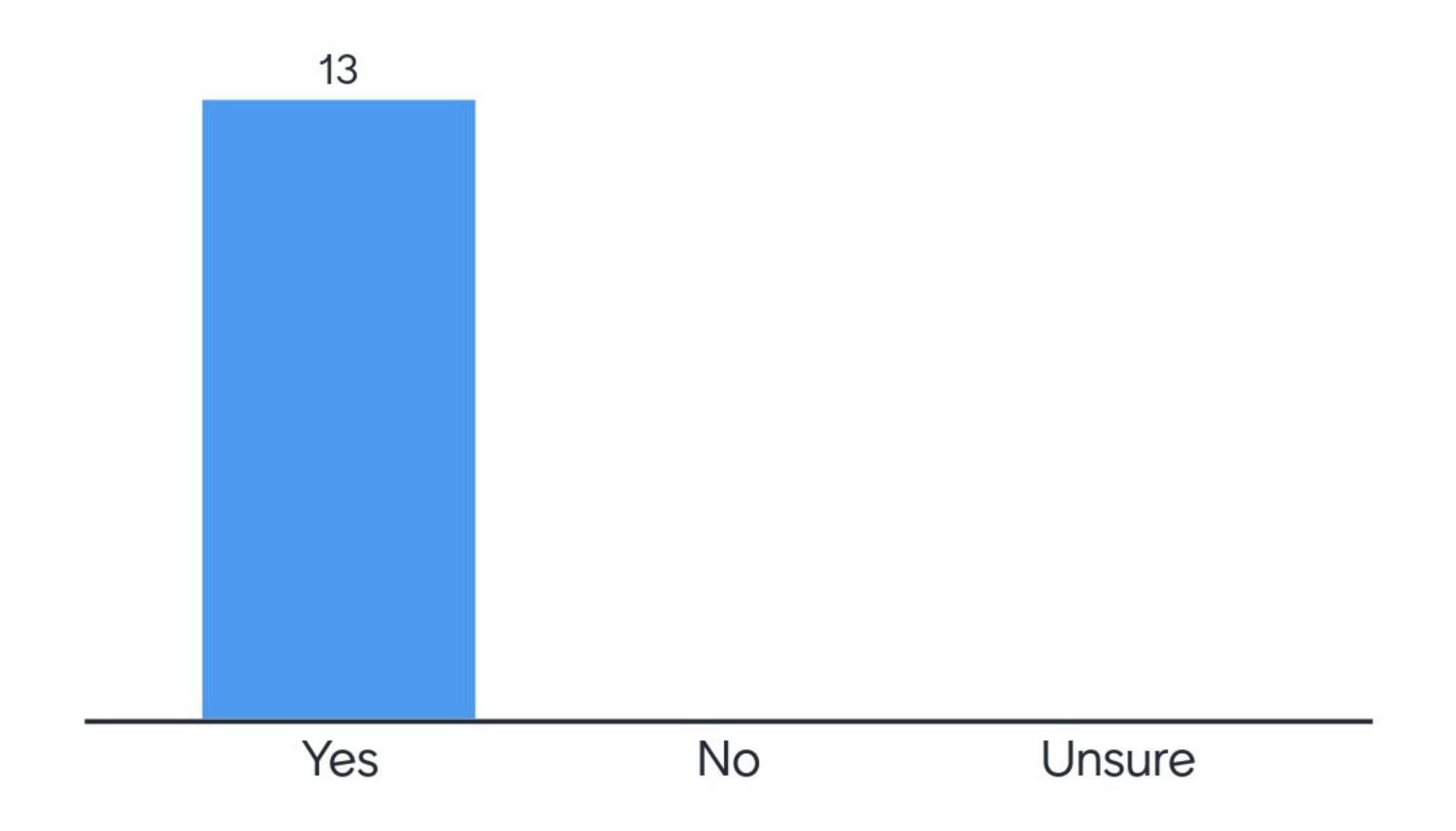
Elect a president who is not against evs

Work with auto dealerships

### I feel more familiar with



## I found this webinar informative







# How can we improve our webinars?

17 responses

```
love the polling
more on incentives
links to ev stats
links to ev stats
links to ev stats
demonstration videos
show cars
freebeis
interactive poll system
polling is great
timelines for improvement
how to use chargers
loved the polling
bumper stickers
offer in person option
```

# Question & Answer

Ask question in Q&A Box Raise hand to be unmuted



# Resources



### Websites & Links

#### **Maryland NEVI Plan and Program**

https://evplan.mdot.maryland.gov/

#### Join our NEVI Mailing list

https://evplan.mdot.maryland.gov/join-our-mailing-list/

### MarylandEV

https://marylandev.org/

#### **MDOT EV Dashboard**

 https://experience.arcgis.com/experience/d8d908d9e62f4054b14ec8f6cbb5392b/page/Dash board-%26-Metrics/?views=Registration%2CEV-Registered

#### ZEEVIC

https://www.mdot.maryland.gov/tso/pages/Index.aspx?PageId=81



### Contact Information



EV Plan

Email: EVplan@mdot.Maryland.gov







# Thank You!



