



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:

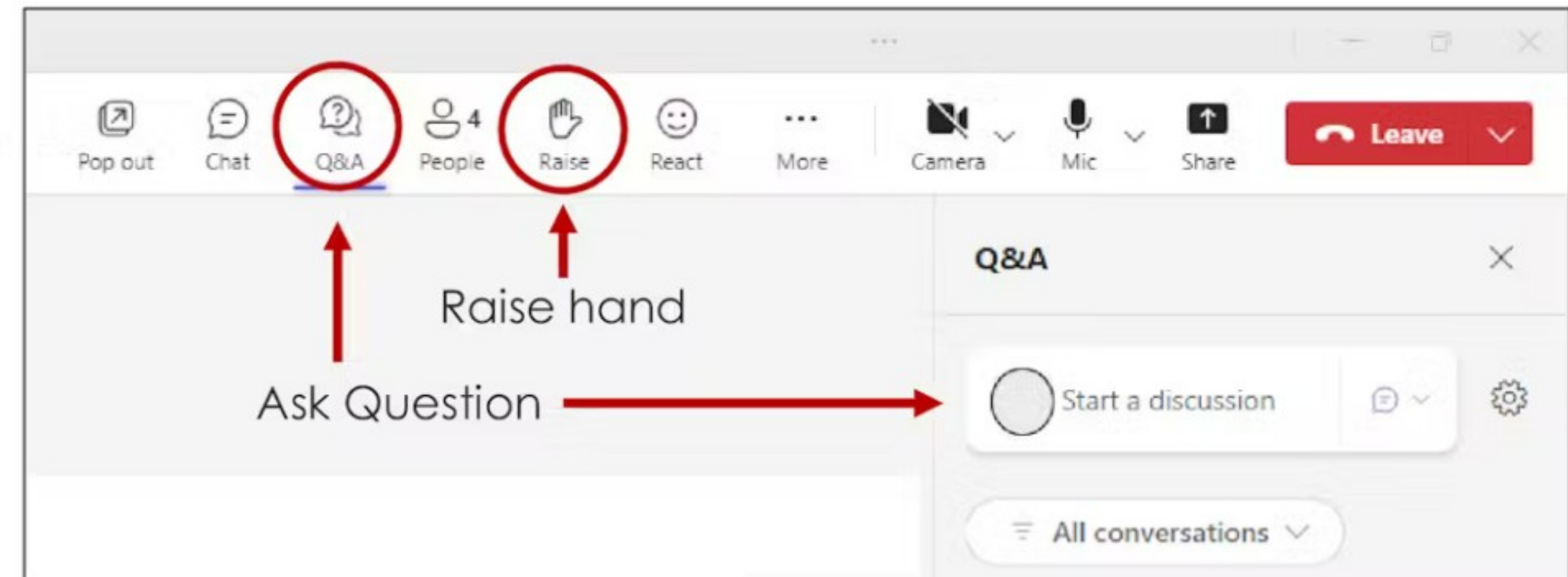
- This meeting is being recorded
- Slides & polling results will be available on EV Plan Website within 1 week

Comments/Questions:

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

Polling:

- Go to: [Menti.com](https://www.menti.com)
- Use Code: 5298 5713



For assistance with technical difficulties:

- Contact us via: EVPlan@mdot.Maryland.gov

Agenda

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

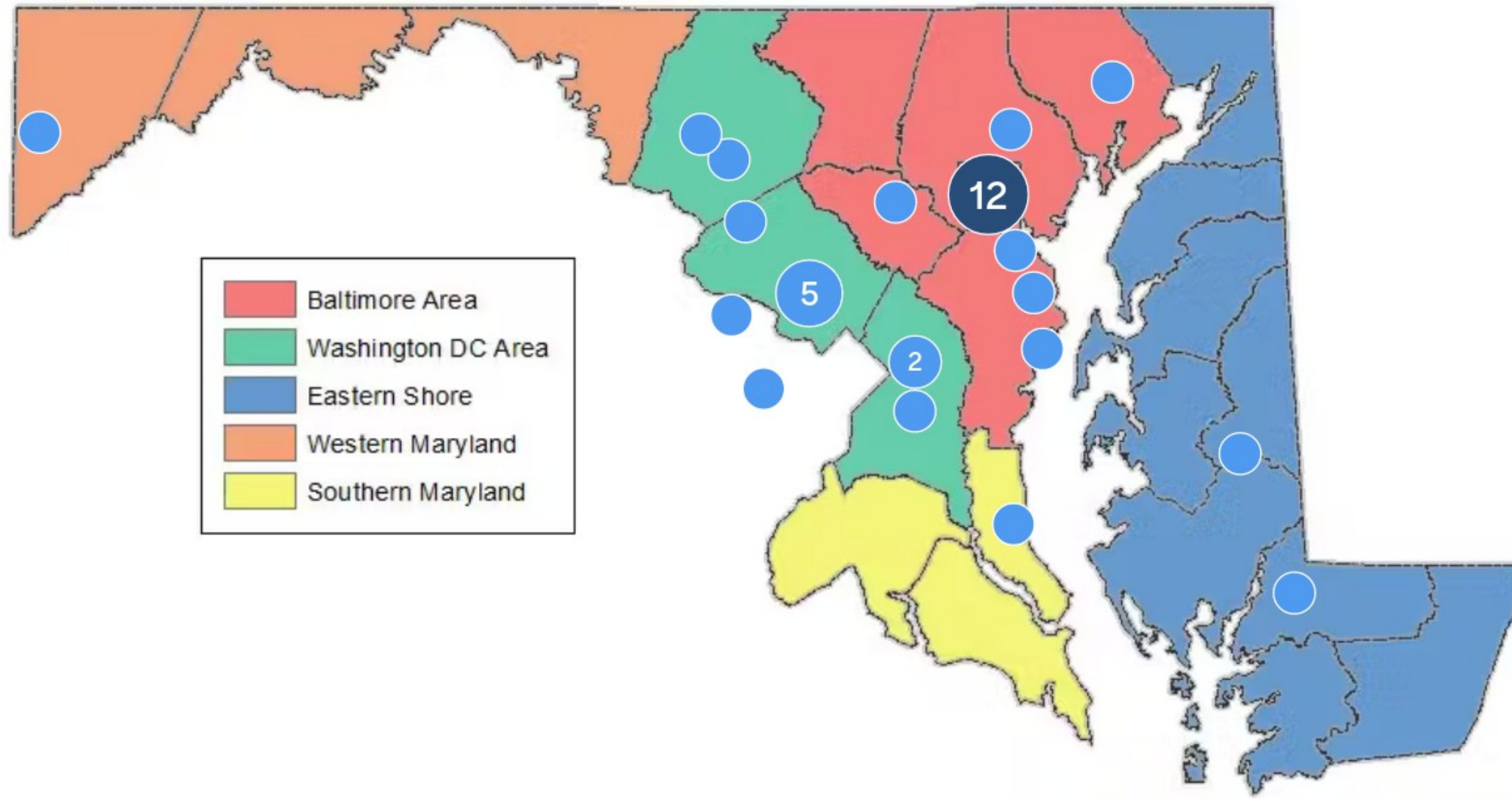
Opening Remarks

Deron Lovaas, Chief of Environmental & Sustainable Transportation Program

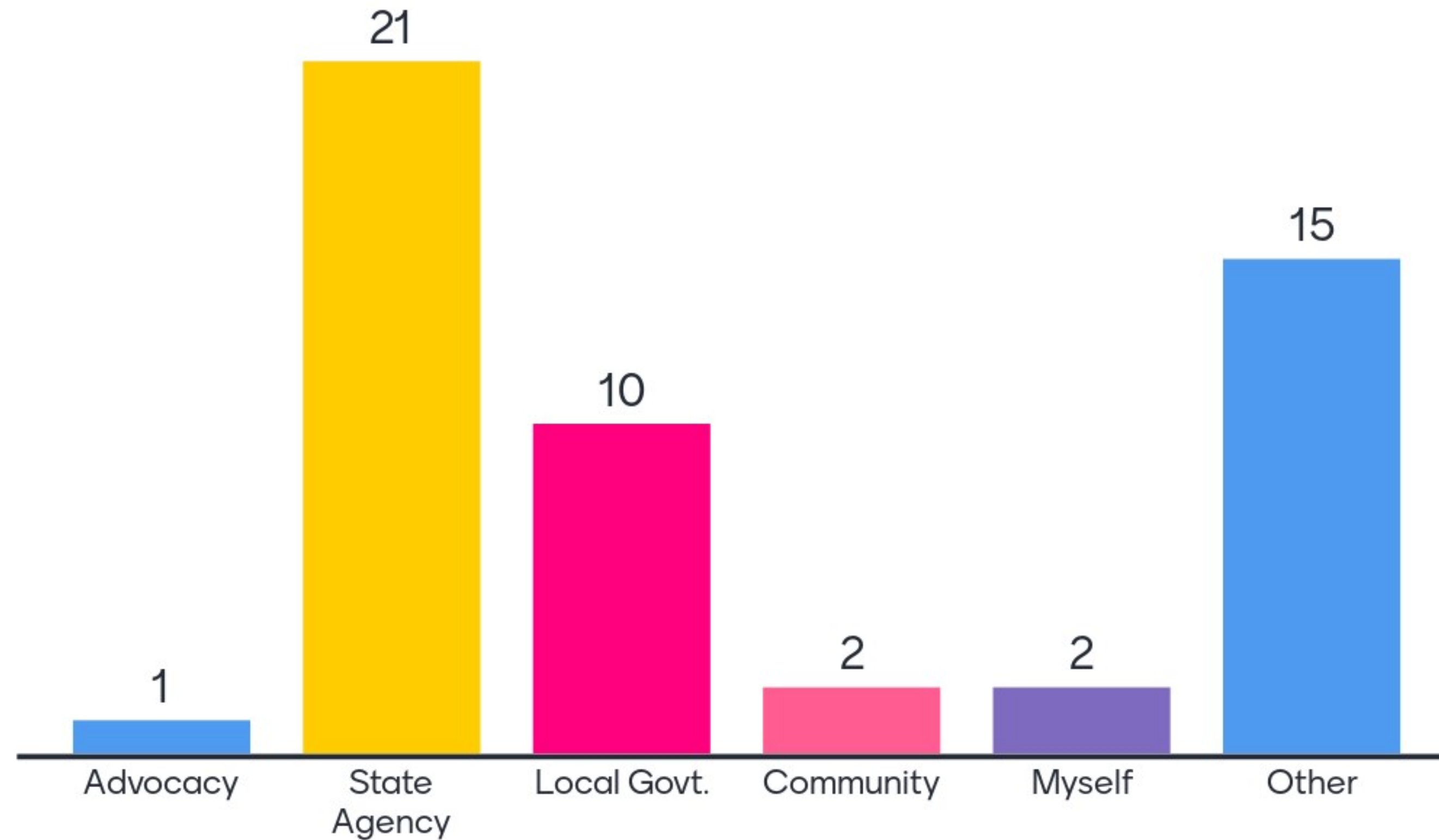
Polling

Mentimeter, Website, Code

Where are you joining us from?



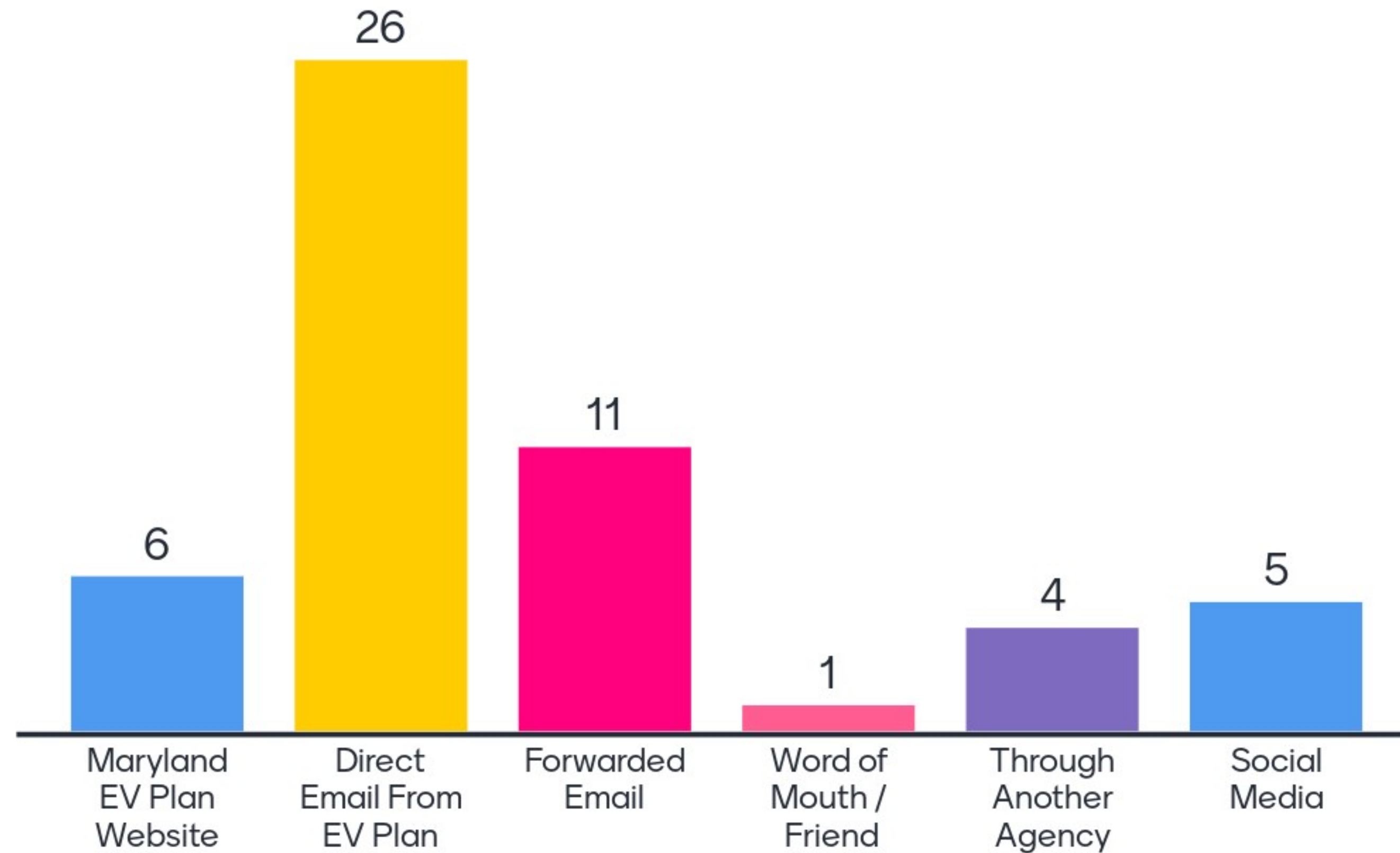
What org. or agency do you represent?



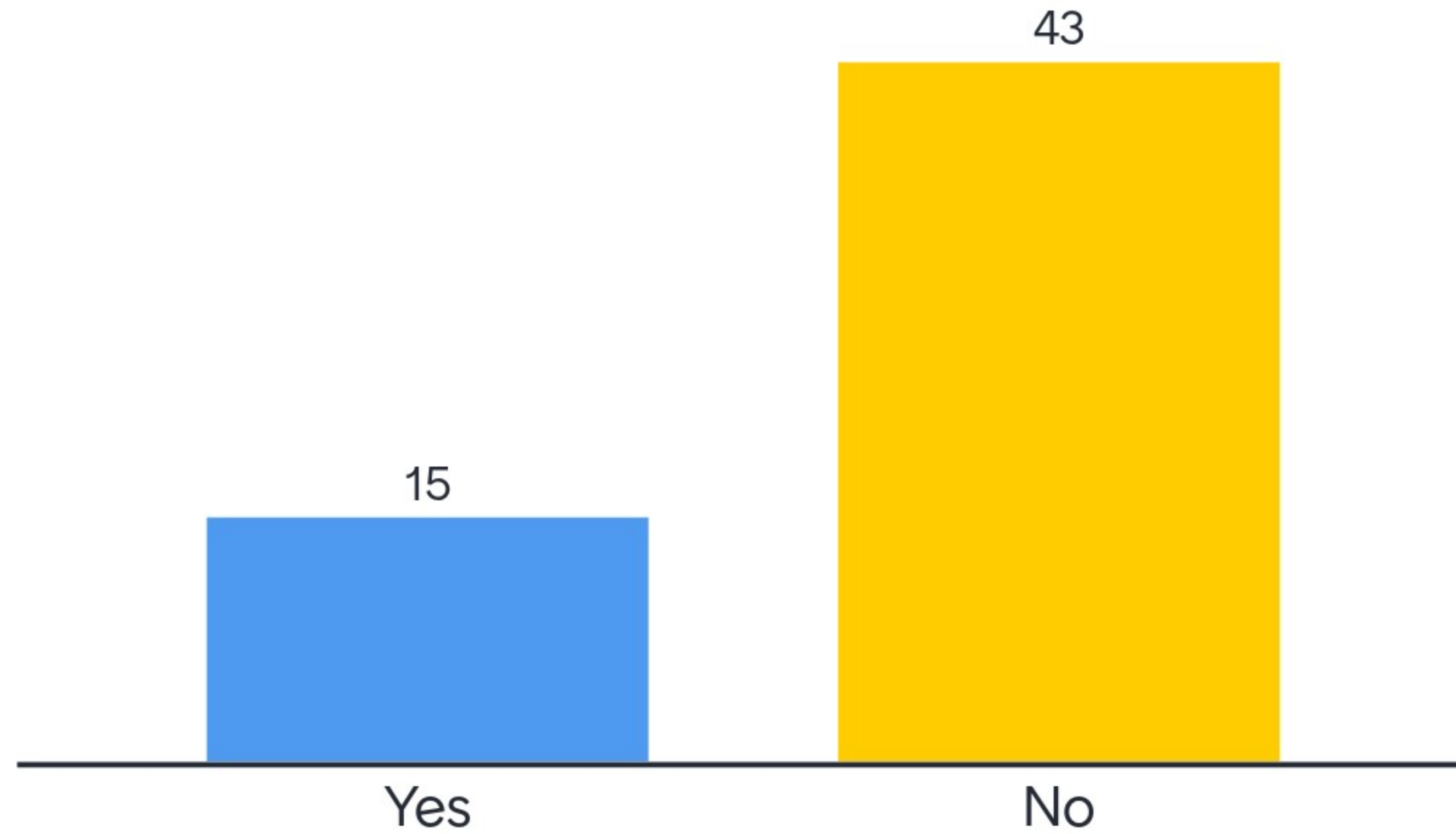
"Other" Responses Included the Following:

- Utility (1)
- Advocacy (1)
- Local Government (1)

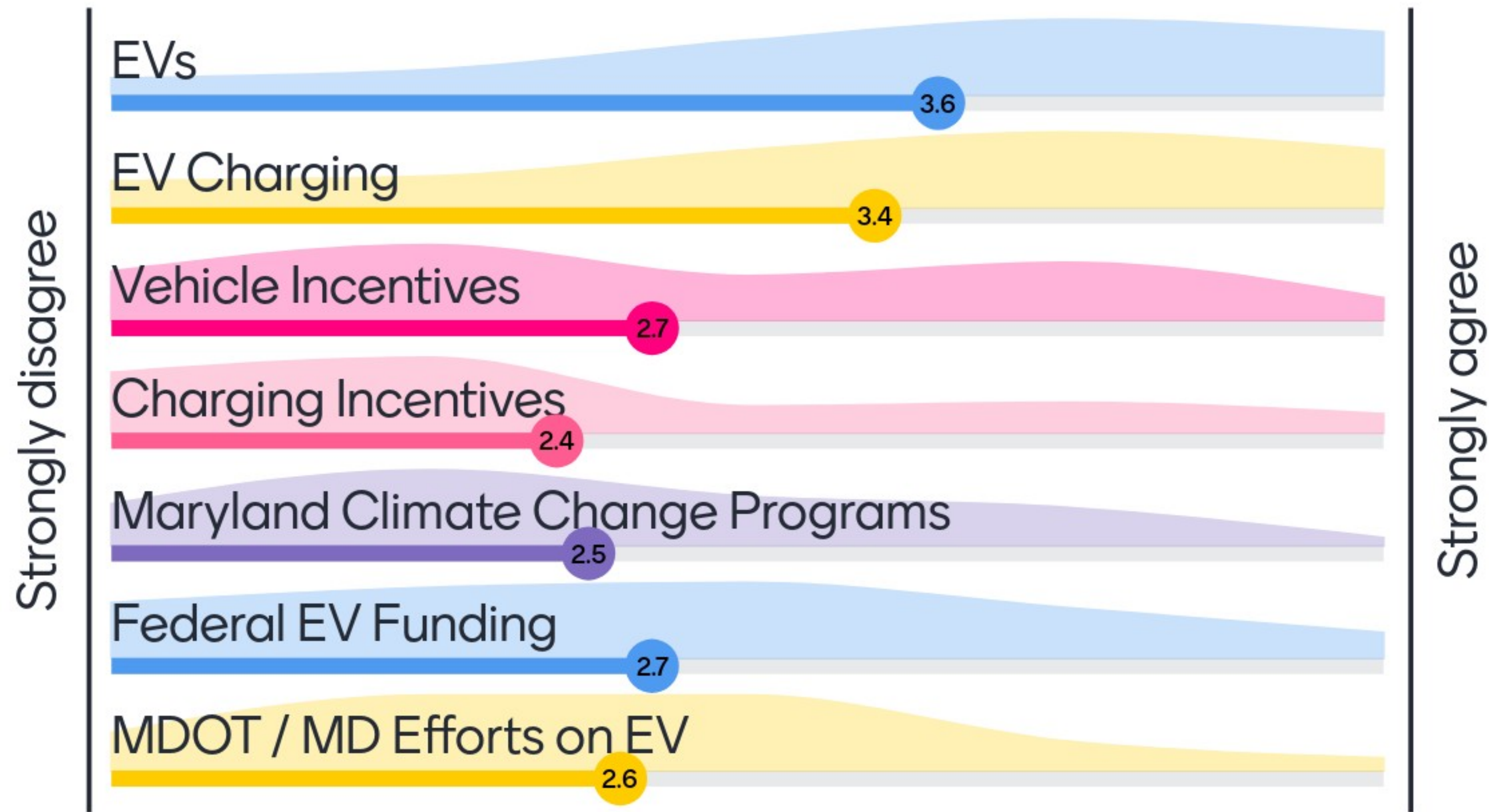
How did you hear about this webinar?



Do you own or regularly drive an EV?



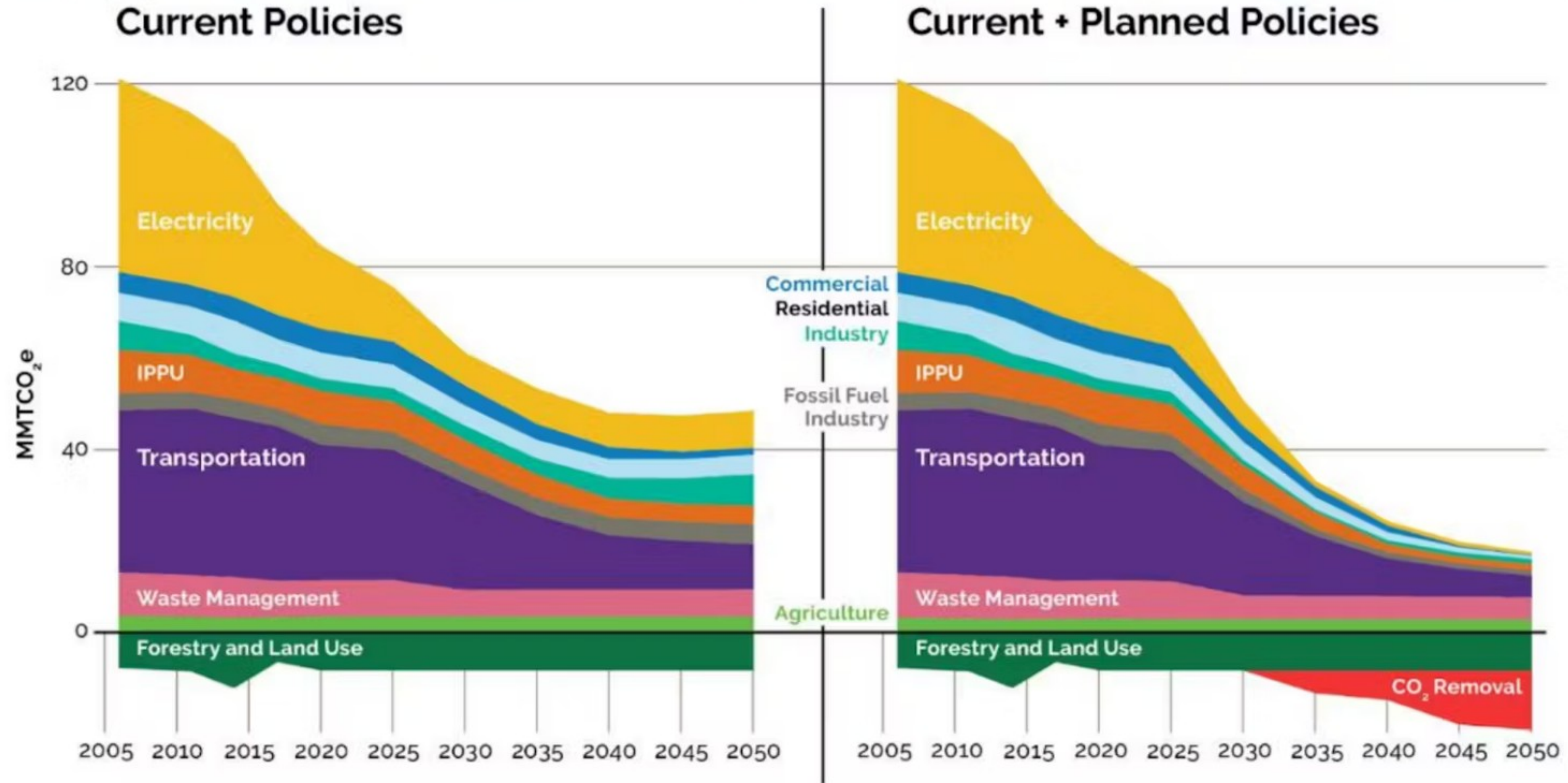
I am very familiar with



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

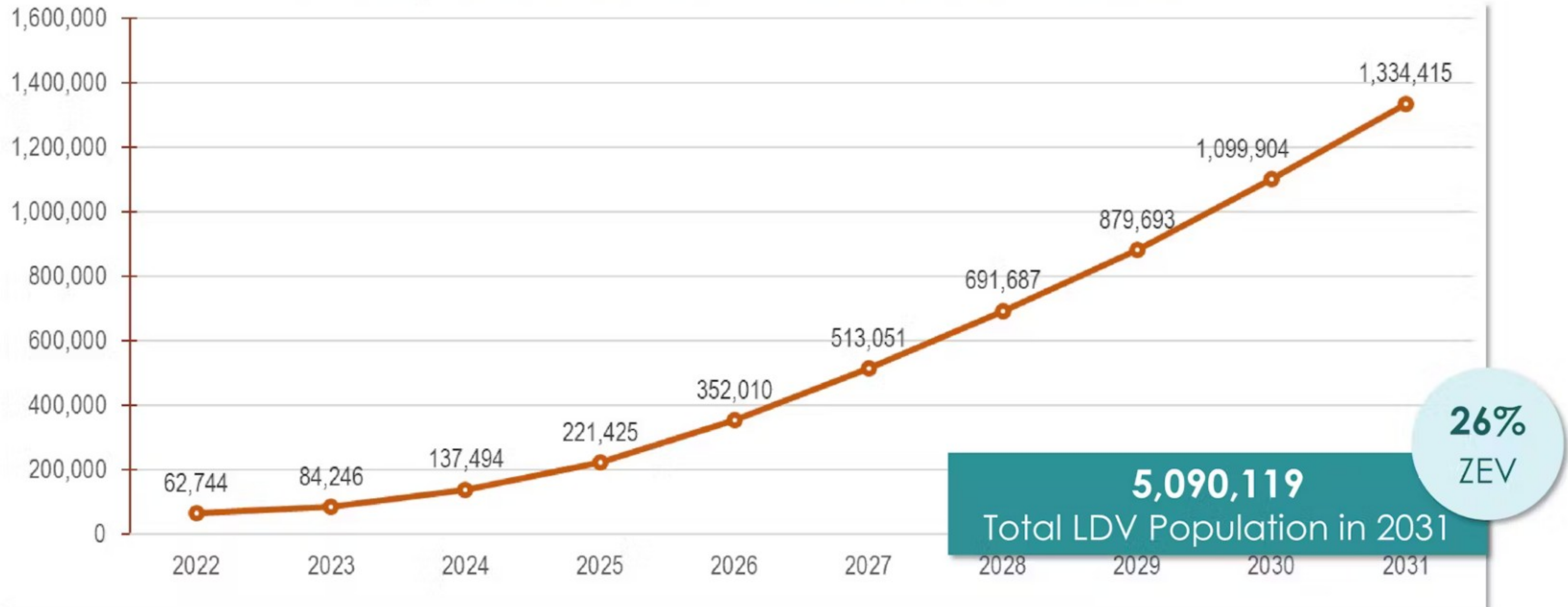


Climate Pollution Reduction under the Maryland Climate Solutions Now Act of 2022

60% reduction from 2006 levels by 2031 and Net Zero Emissions by 2045

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
Department of
the Environment



Maryland
Energy
Administration

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)

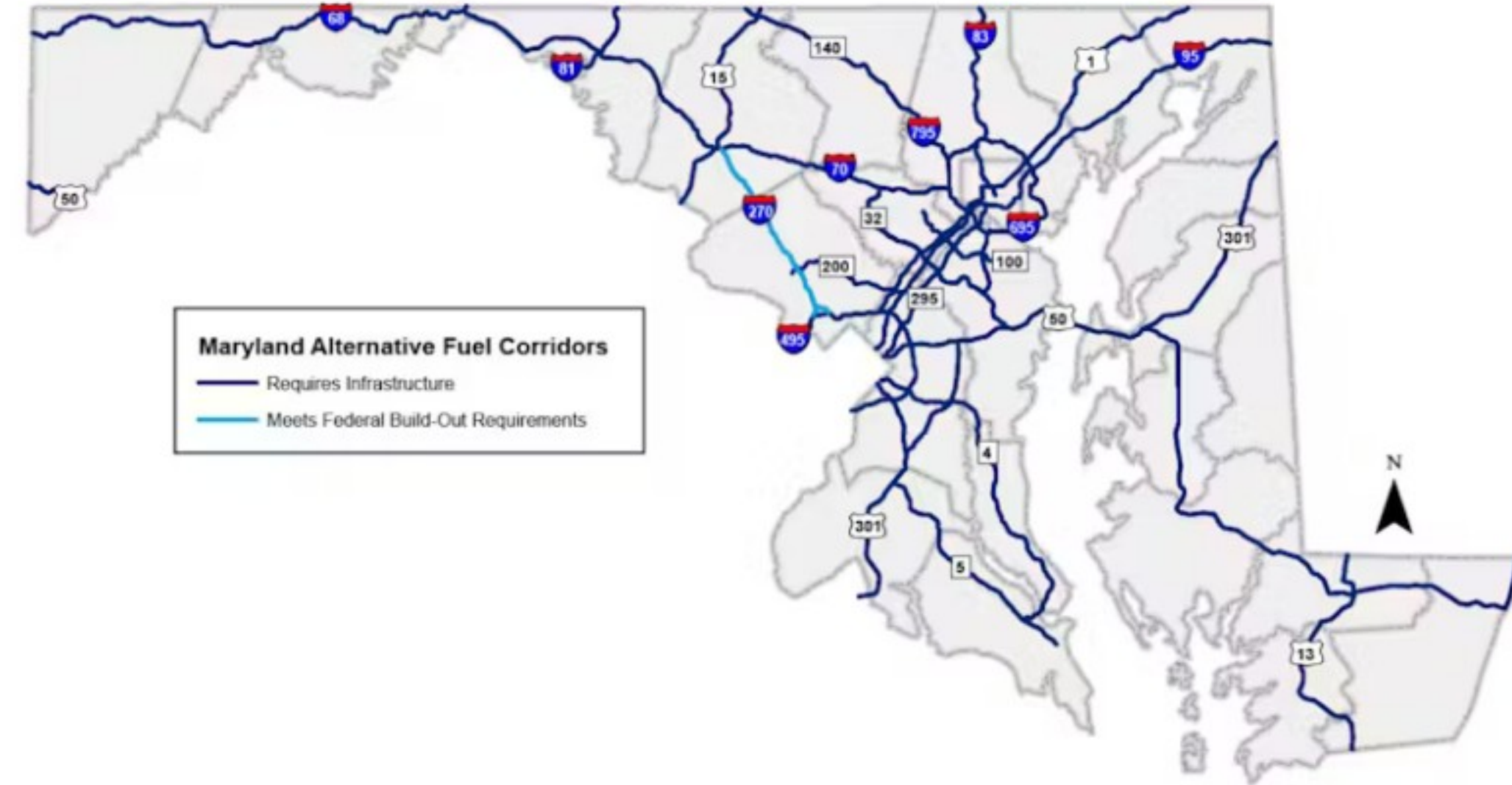
- Repair & replace existing public charging stations
 - Received \$4.36 million in Maryland

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

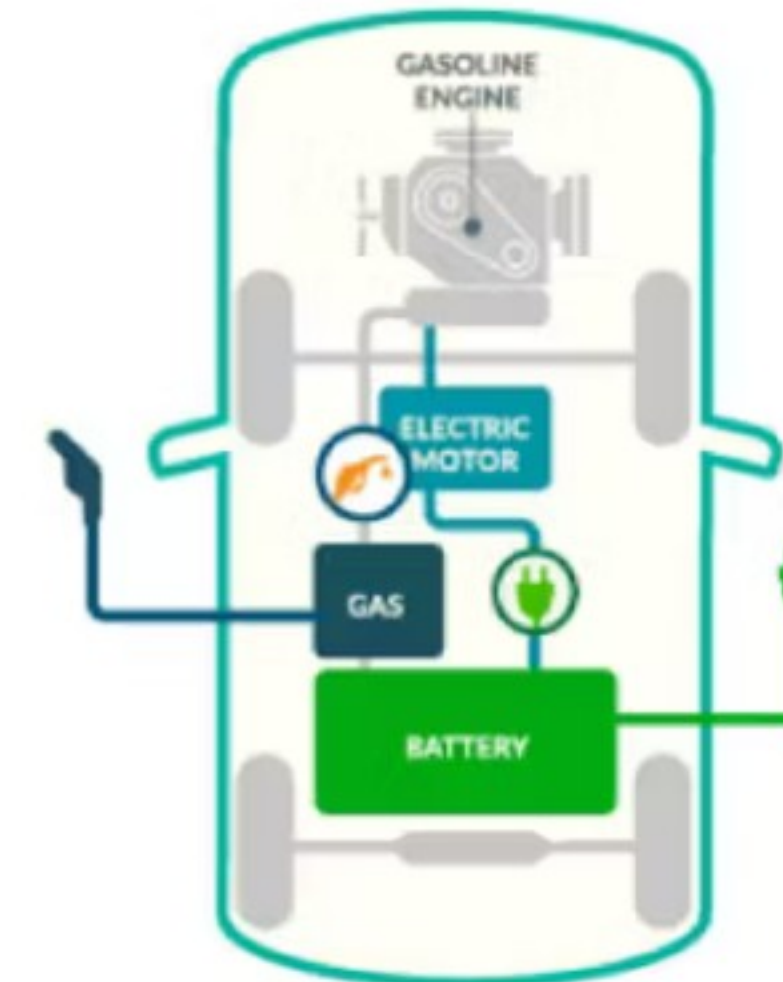
Cost Savings

- Lower maintenance and overall lifetime costs

Environmental & Health Benefits

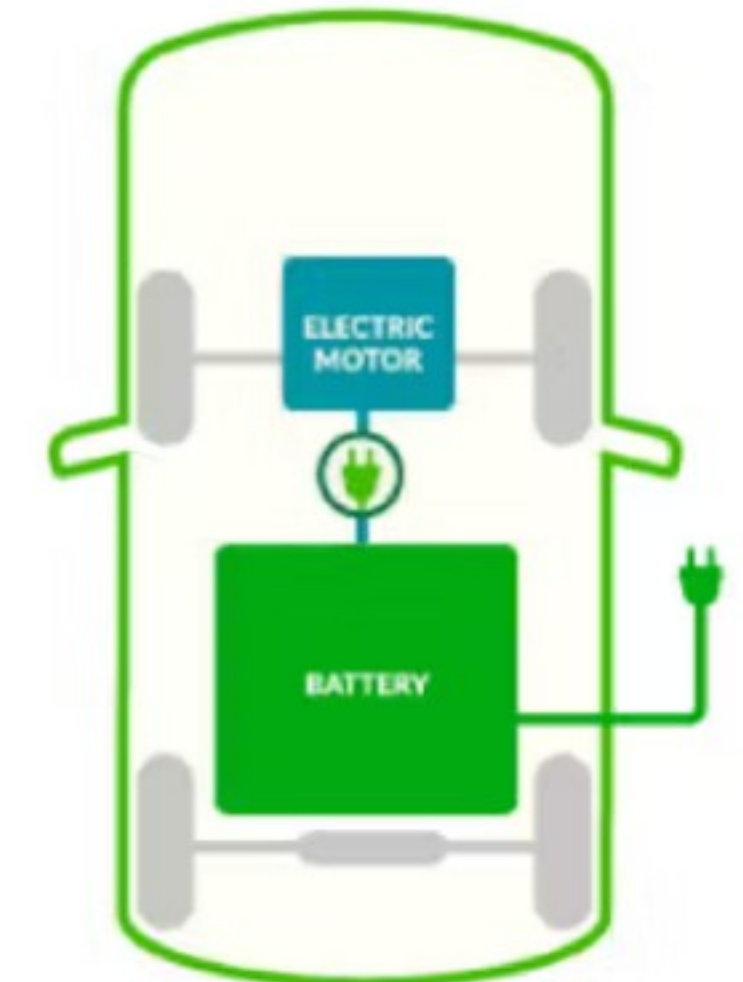
- Lower GHG emissions
- Reduced air pollution

PHEVs



PLUG-IN HYBRID ELECTRIC VEHICLES

BEVs



BATTERY ELECTRIC VEHICLES


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



The infographic is divided into three vertical panels with a green-to-dark-green gradient background. Each panel features an illustration of a charging station and its associated electrical components. The first panel shows a simple wall outlet with a charging cable. The second panel shows a wall-mounted charging station connected to a three-pronged outlet. The third panel shows a large, upright DC fast charging station.

Level One	Level Two	DC Fast Charge
120V Electrical source from a regular home outlet.	220V Electrical source from a regular home dryer outlet, home hardwire, or public station.	208 or 480V 3-Phase AC Electrical source from a public station.
Charge Time 2-5 miles of range per 1 hour of charging.	Charge Time 10-20 miles of range per 1 hour of charging.	Charge Time 60-80 miles of range per 20 minutes of charging.

What Incentives Are Available?

MEA's EV Charging Rebate Program

- Rebate for 50% of eligible costs up to \$700 incurred acquiring and installing 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 ZEV
- 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

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



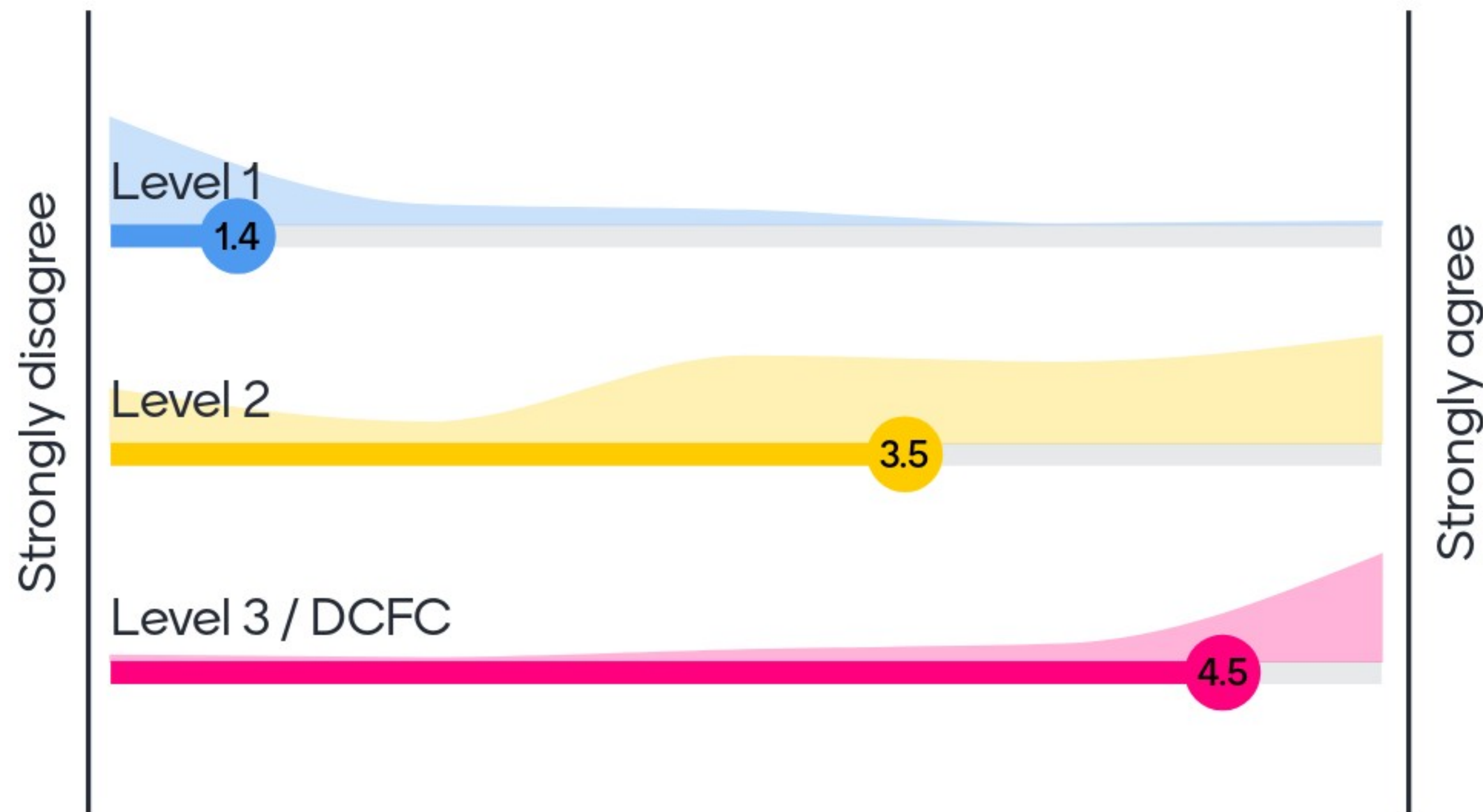
State Incentives



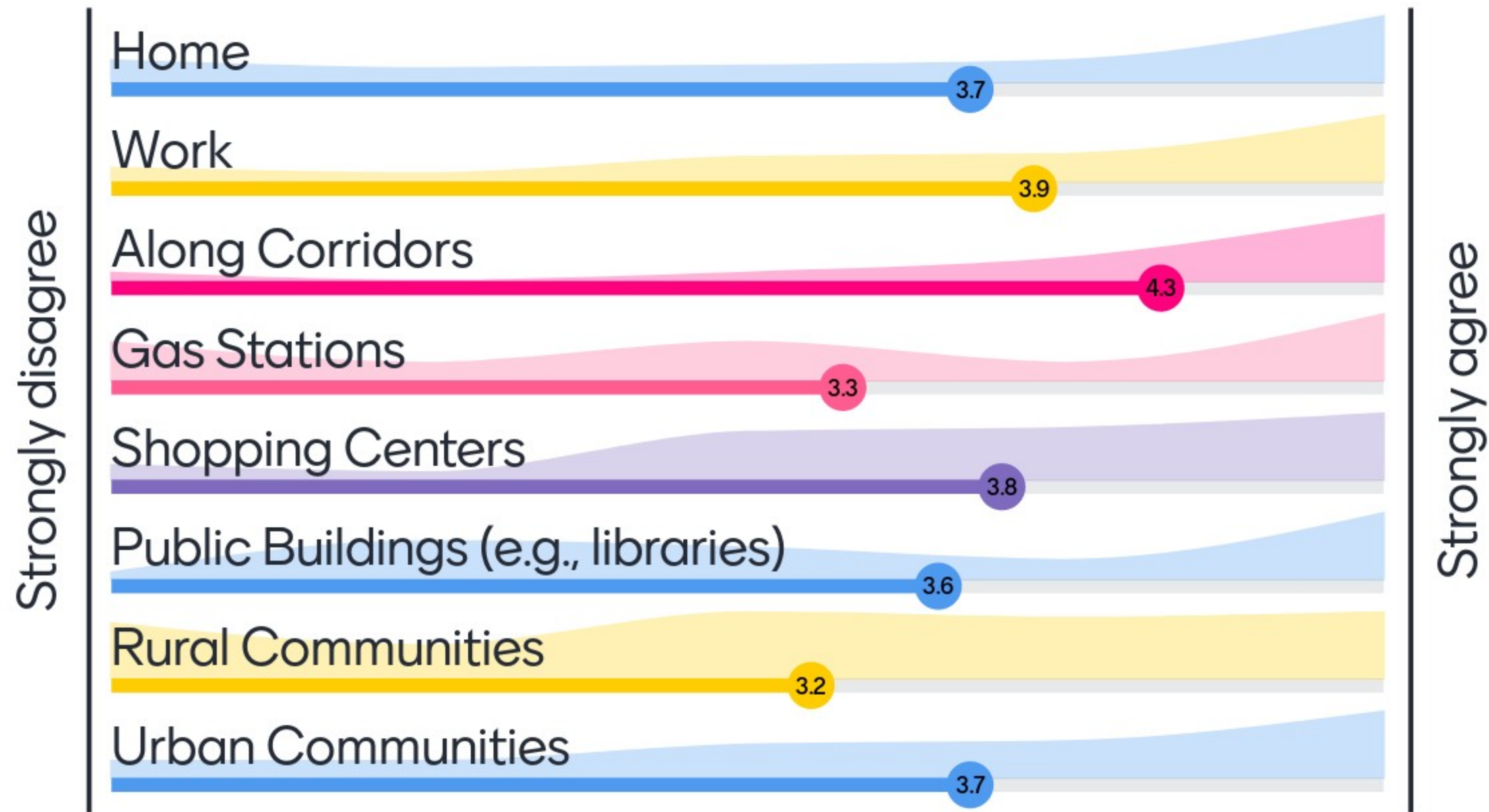
Utility Incentives

Visit MarylandEV.org
for more information on incentives

What level of charging do you think is needed most?



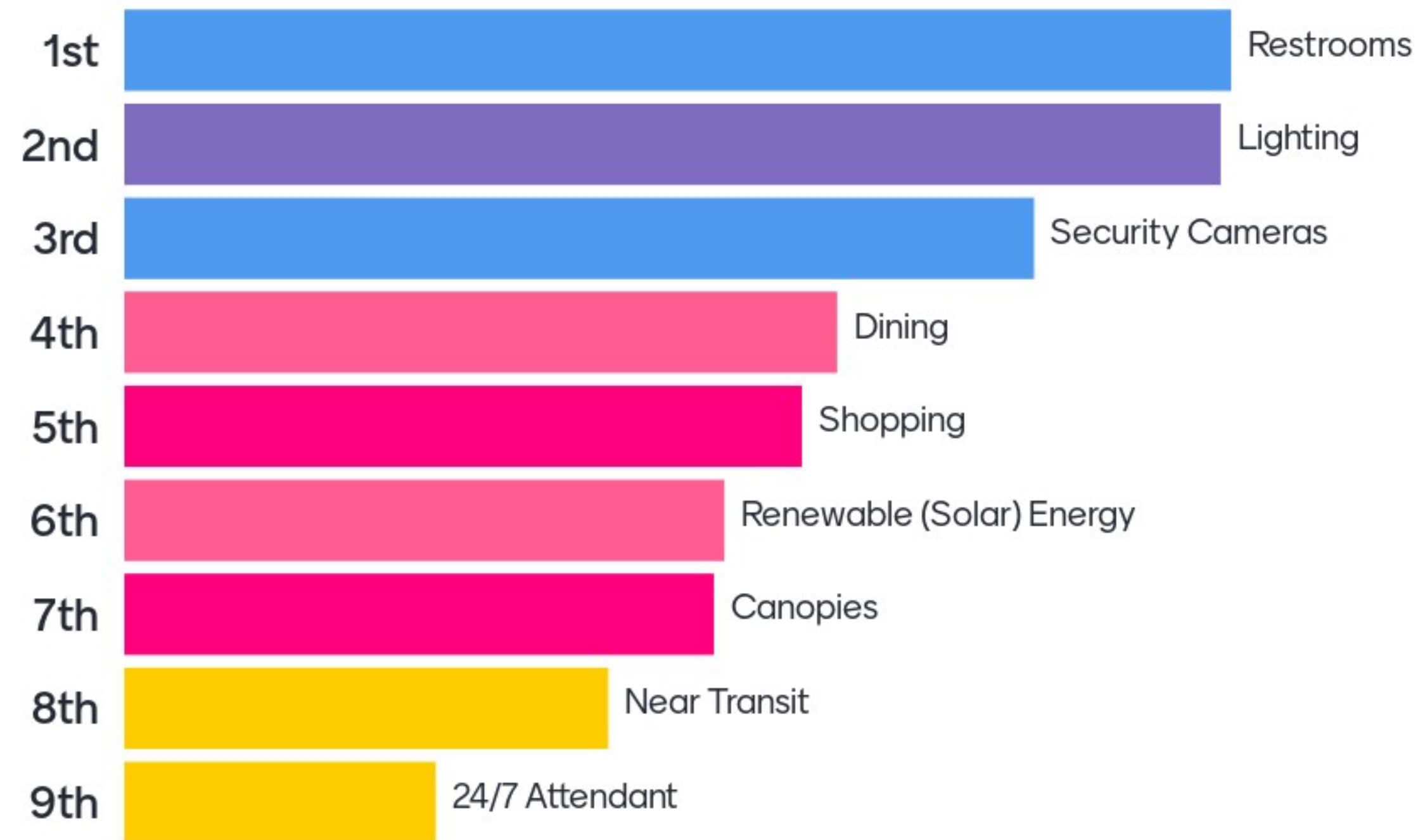
I think charging is best located at



51

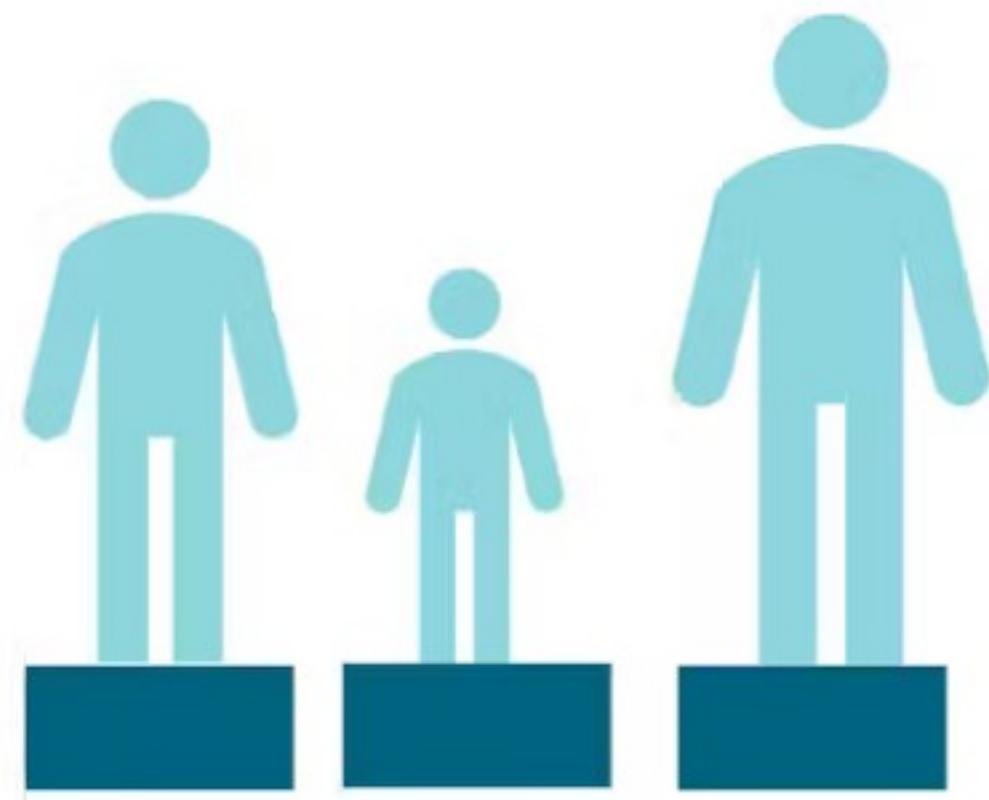


What charging amenities are most important to you?



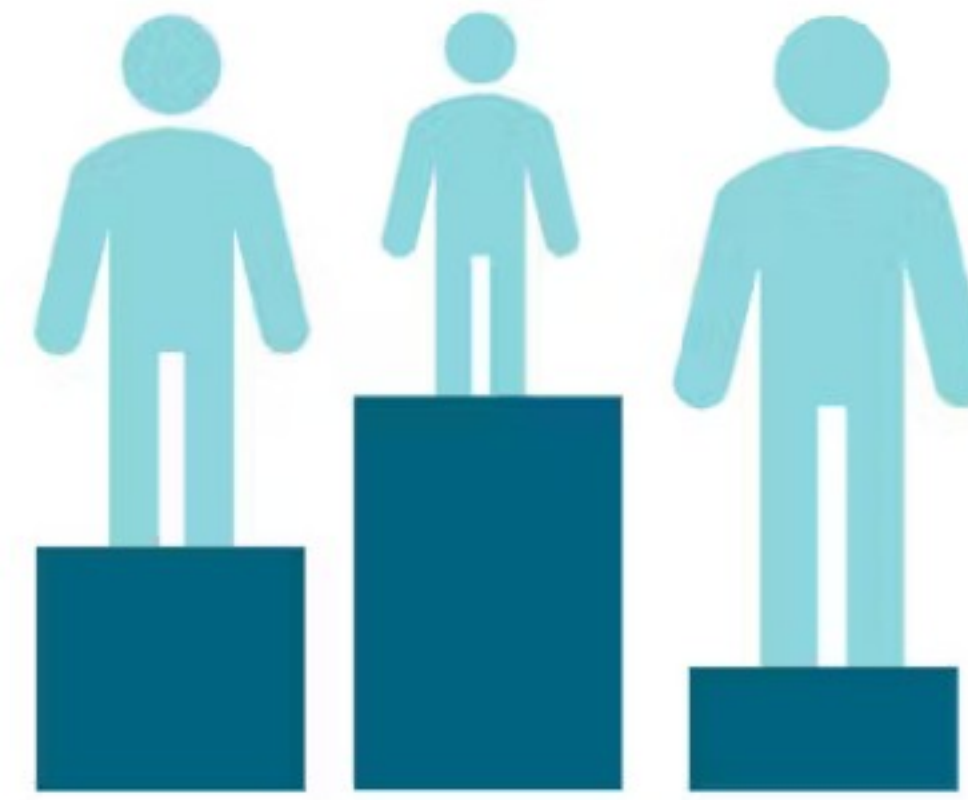
Equity

What is equity?



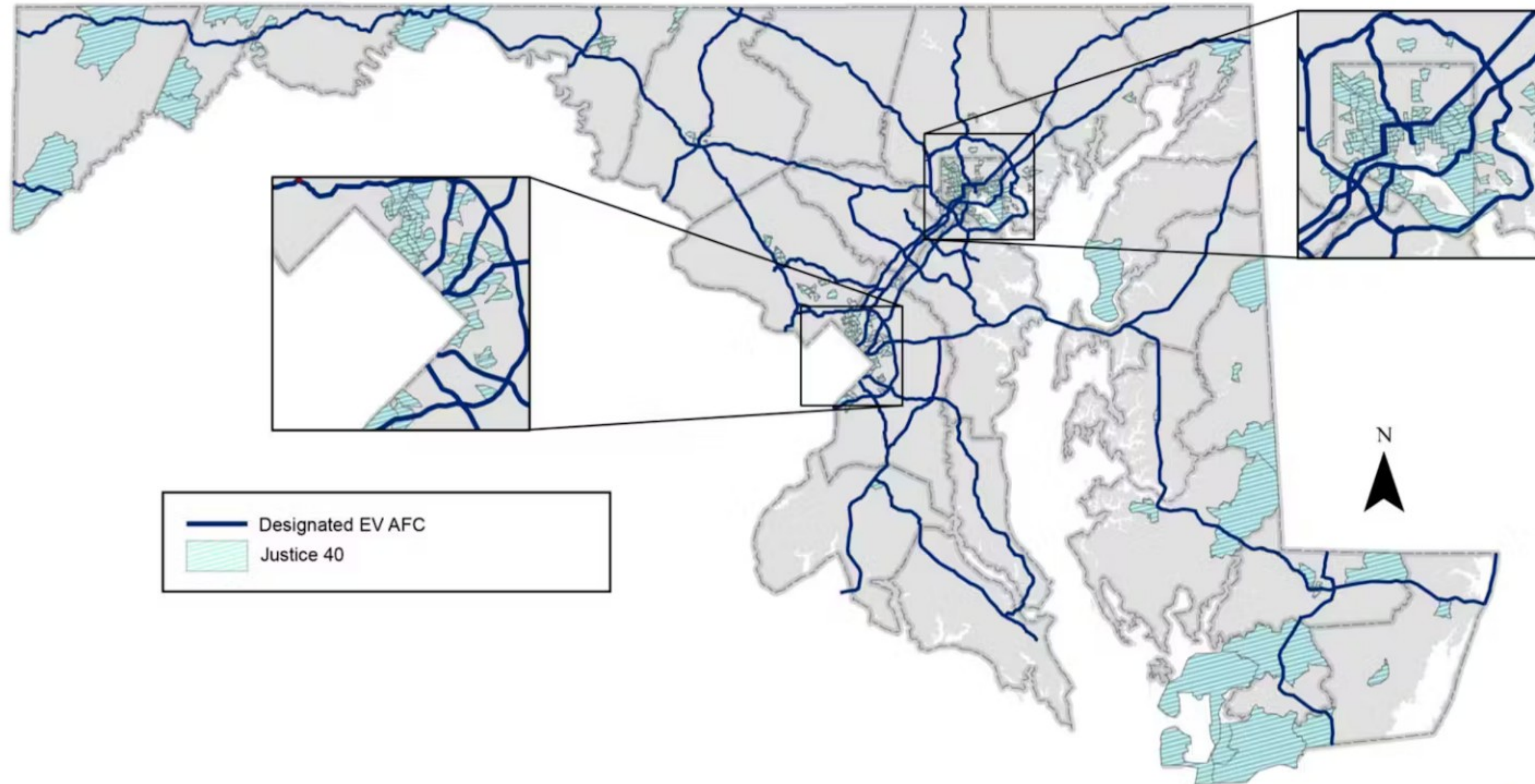
Equality

VS

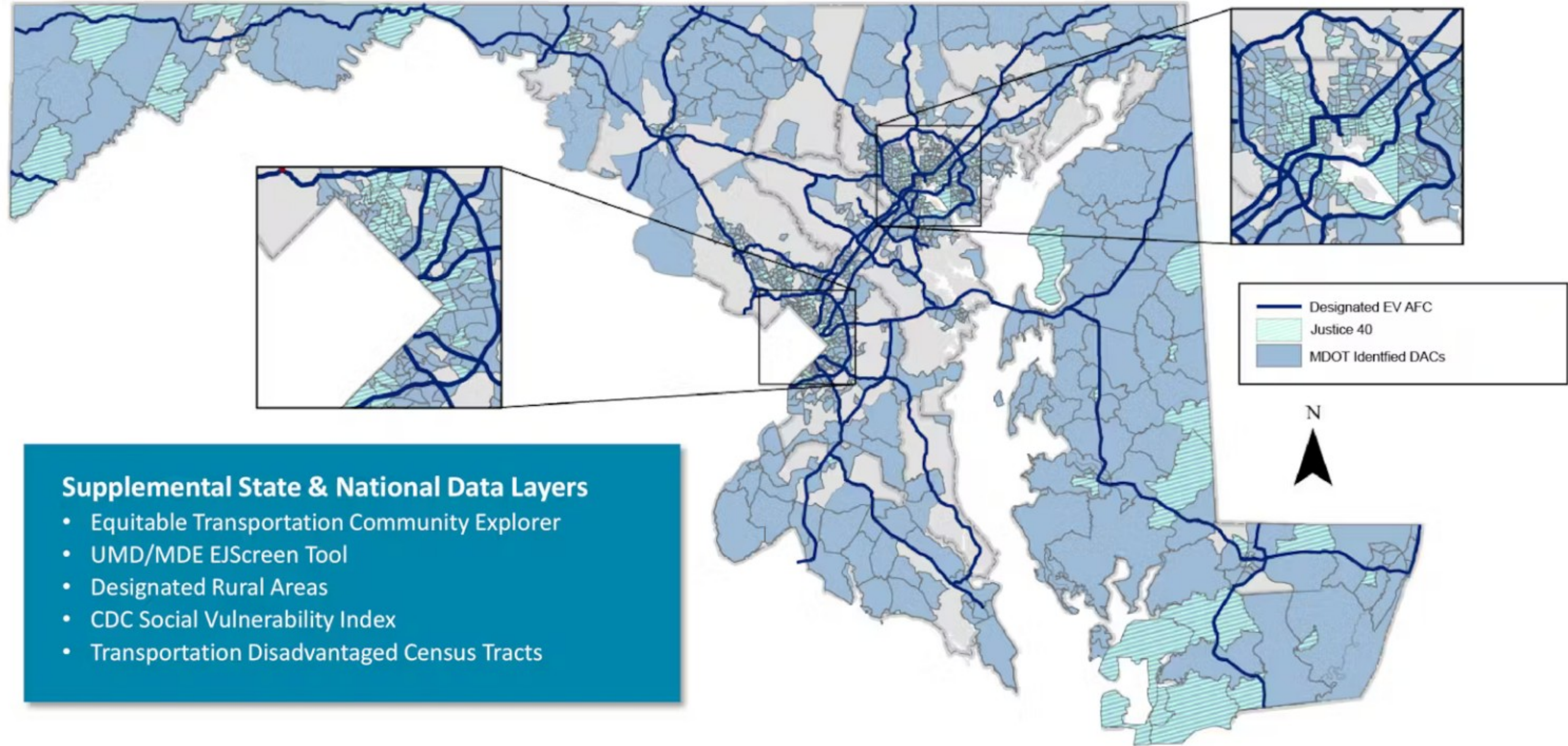


Equity

What is Justice40?



Going Beyond Justice40



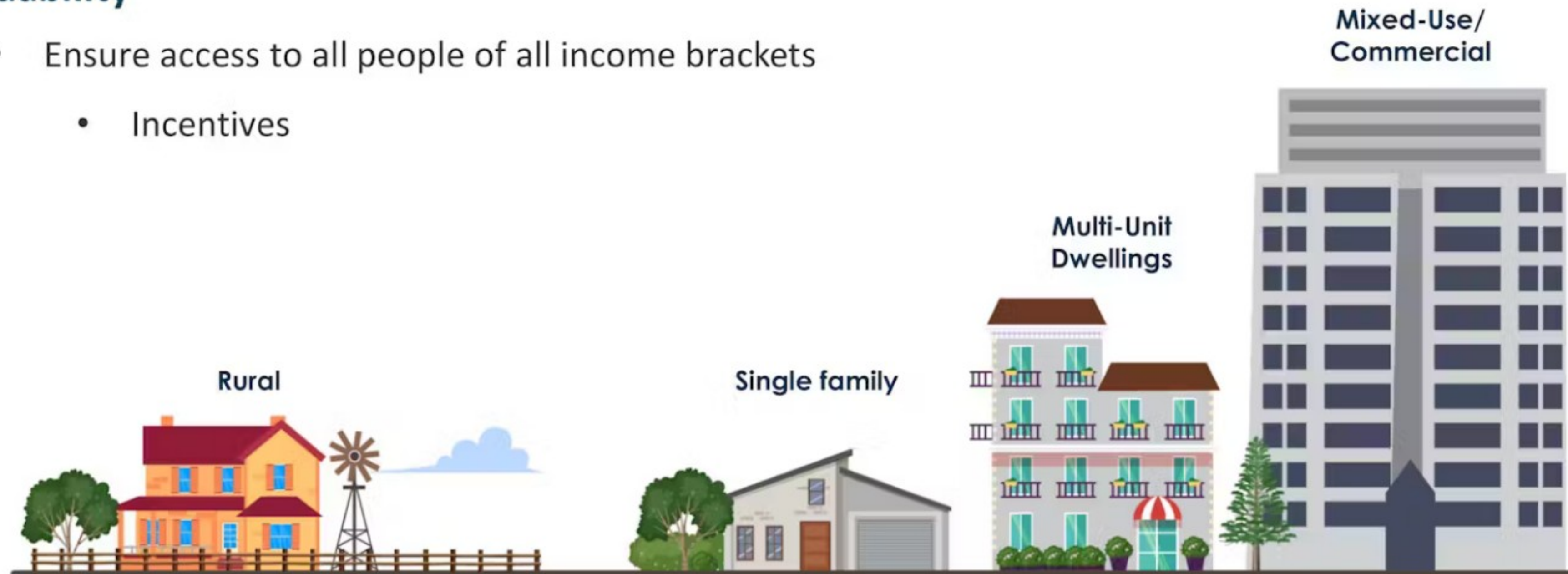
How does this relate to equity?

Accessibility

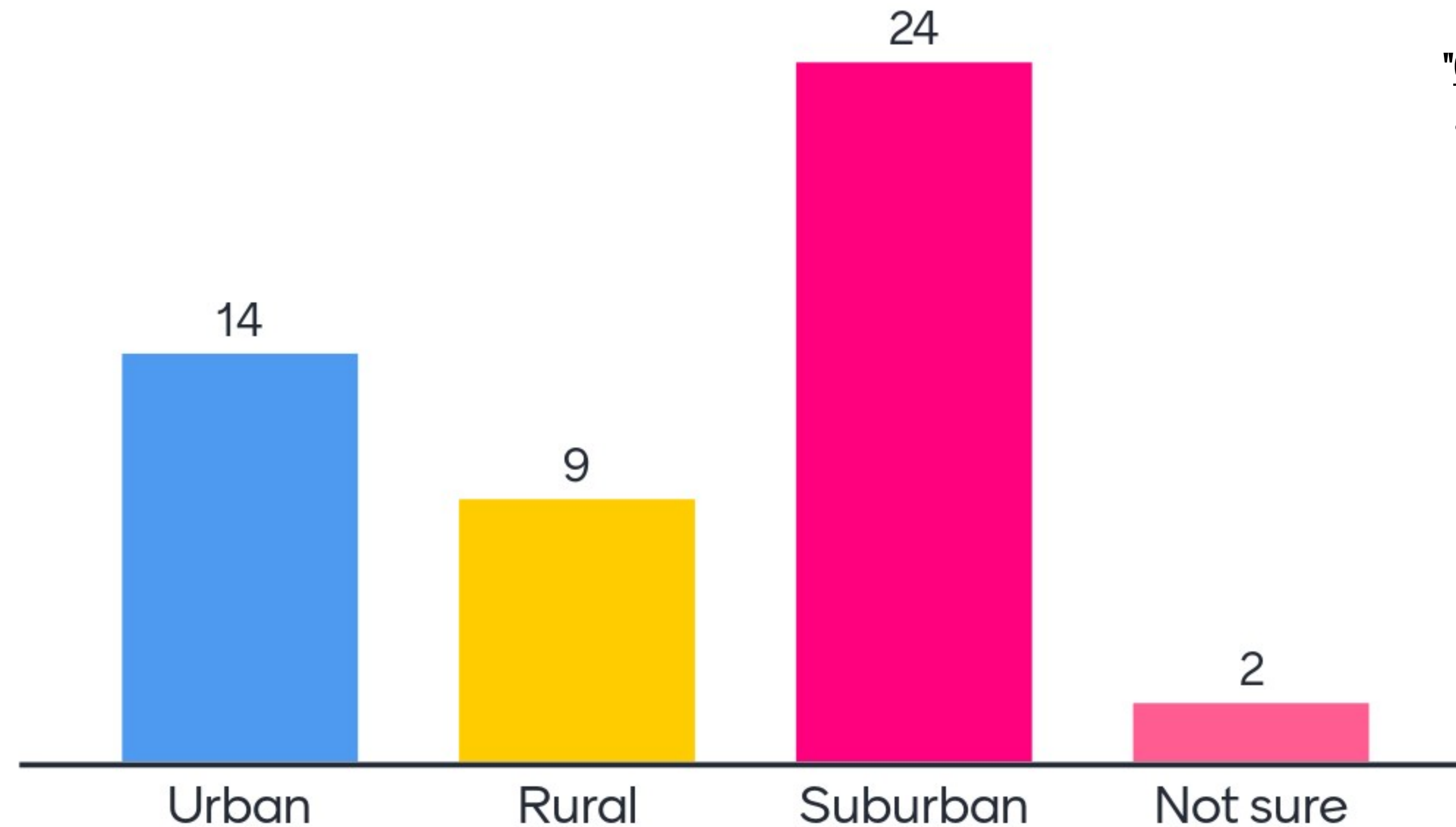
- Increasing public awareness about EVs, EVSEs, and incentives
- Expanding EV adoption, ownership, and usage
- Expanding the charging network
 - Home, workplace, multi-unit dwellings, community, and along highways
- Ensuring a reliable charging network

Affordability

- Ensure access to all people of all income brackets
 - Incentives



Would you describe your community as:



"Other" Responses Included the Following:

- My community is a beach resort area -- urban for 4 months per year and kinda suburban (and even somewhat isolated) at other times.

What does equity with respect to EVs mean to you?

74 responses



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





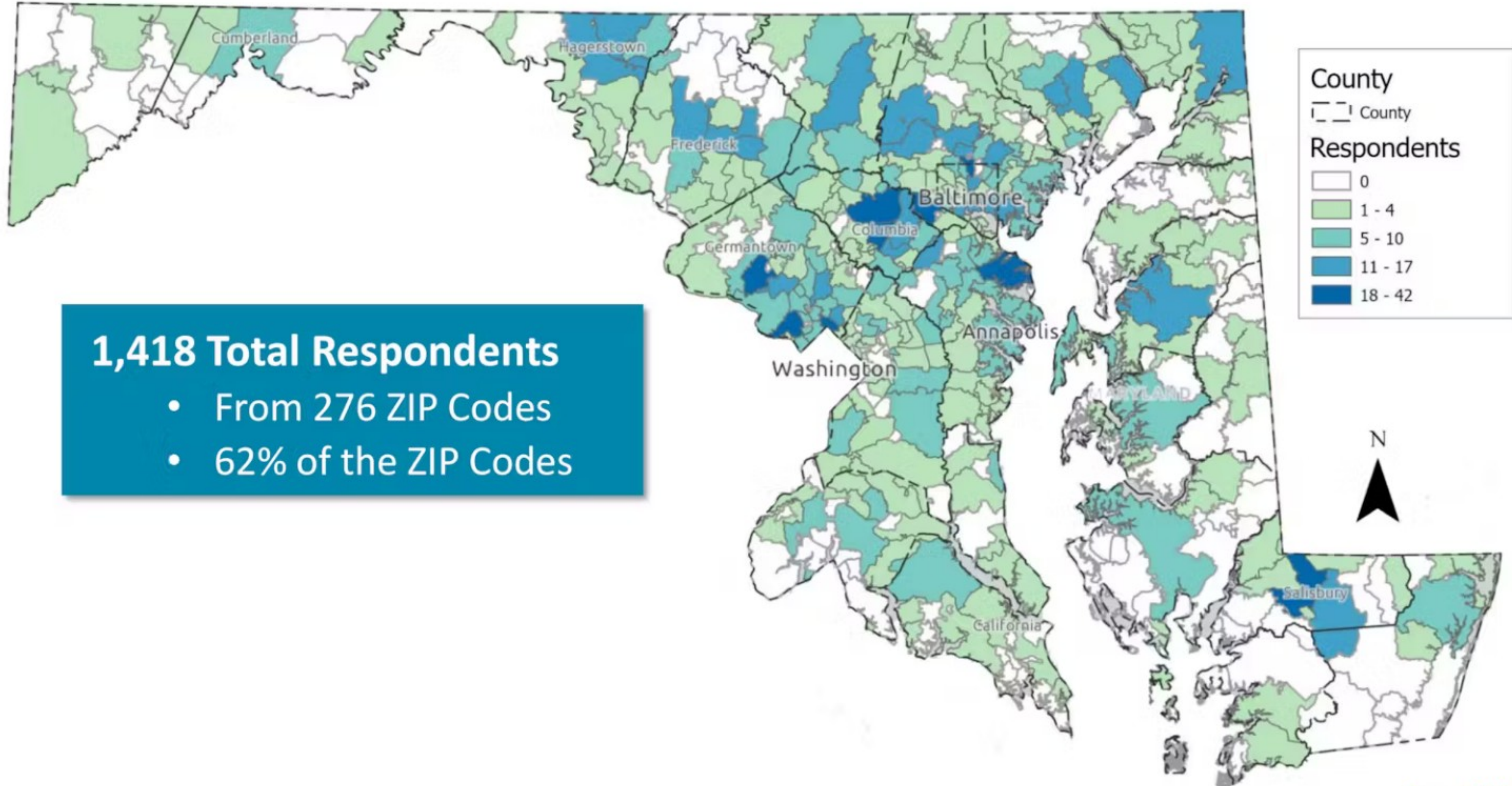
Get Plugged into the Future of Electric Vehicles!

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

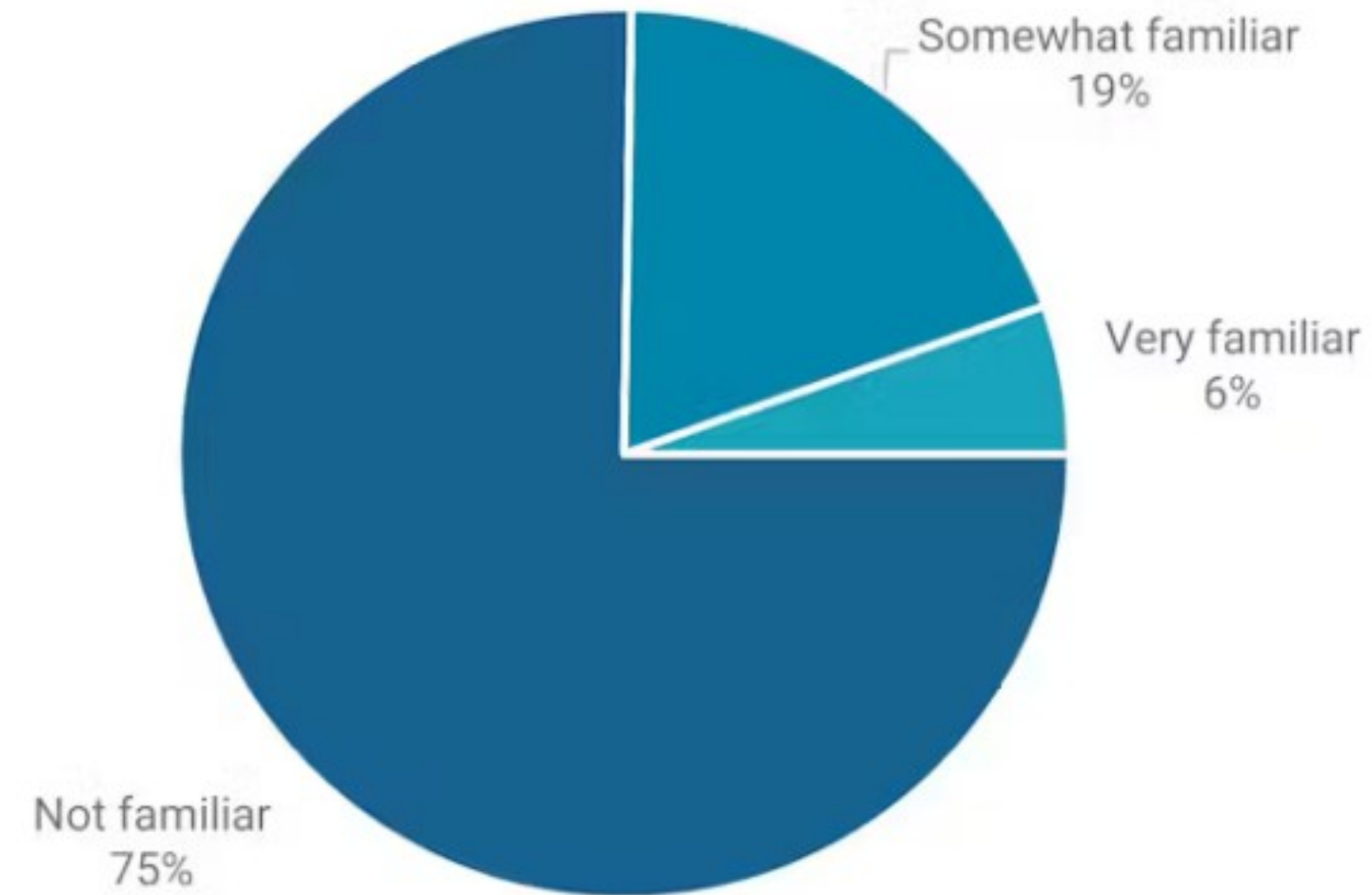


1,418 Total Respondents

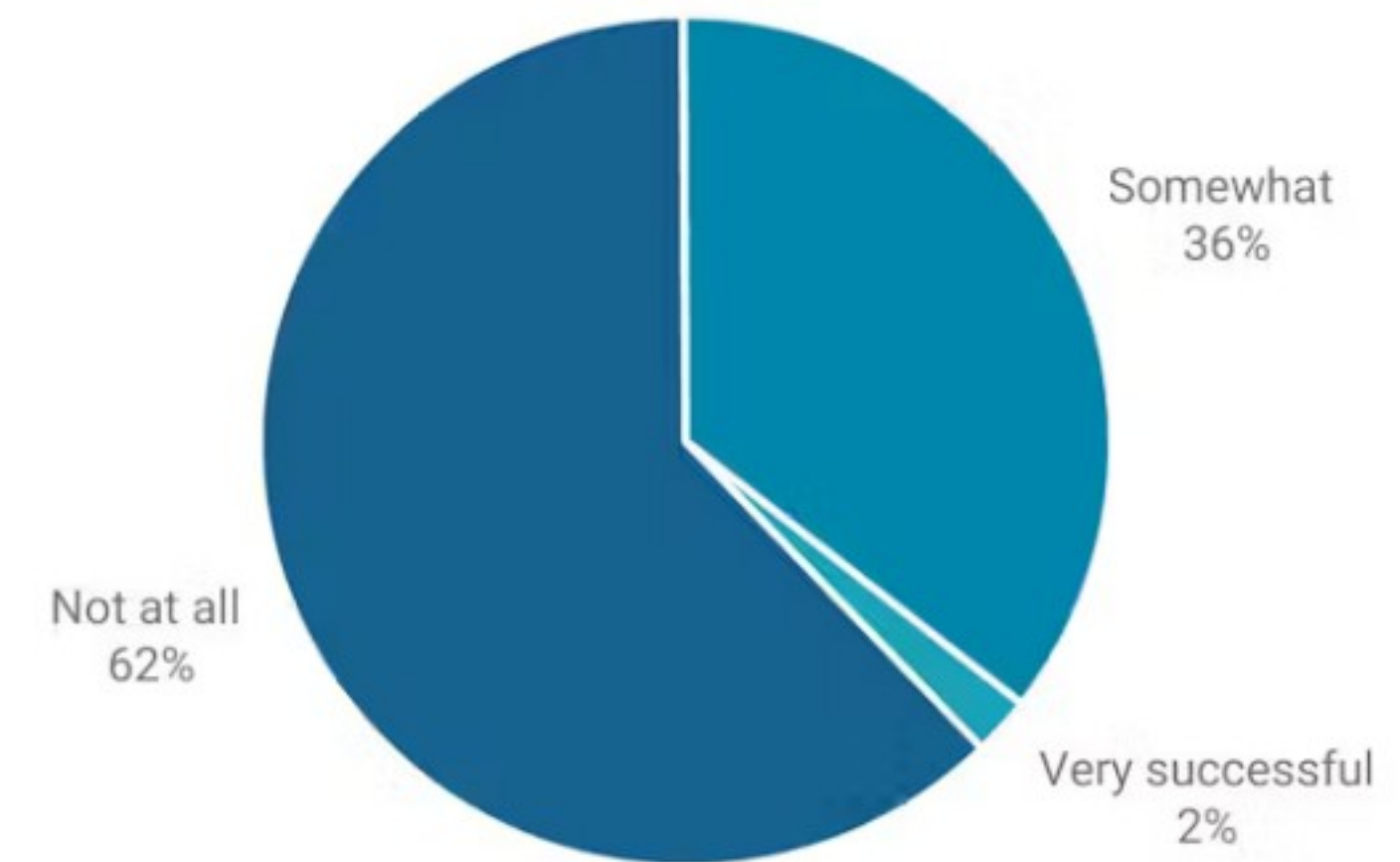
- From 276 ZIP Codes
- 62% of the ZIP Codes

What we heard

Familiarity with NEVI

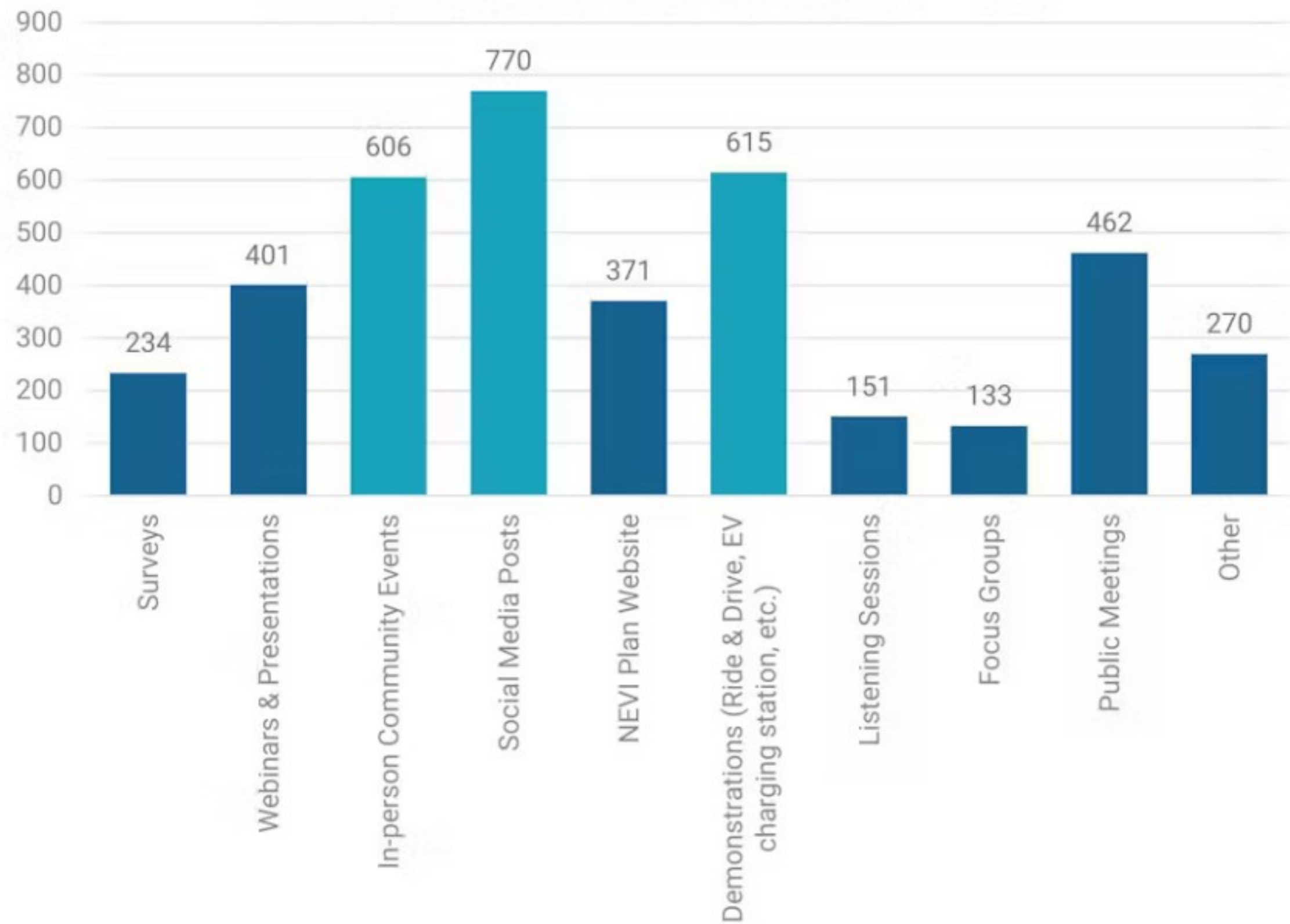


How Successful NEVI Outreach & Education to the Public Have Been

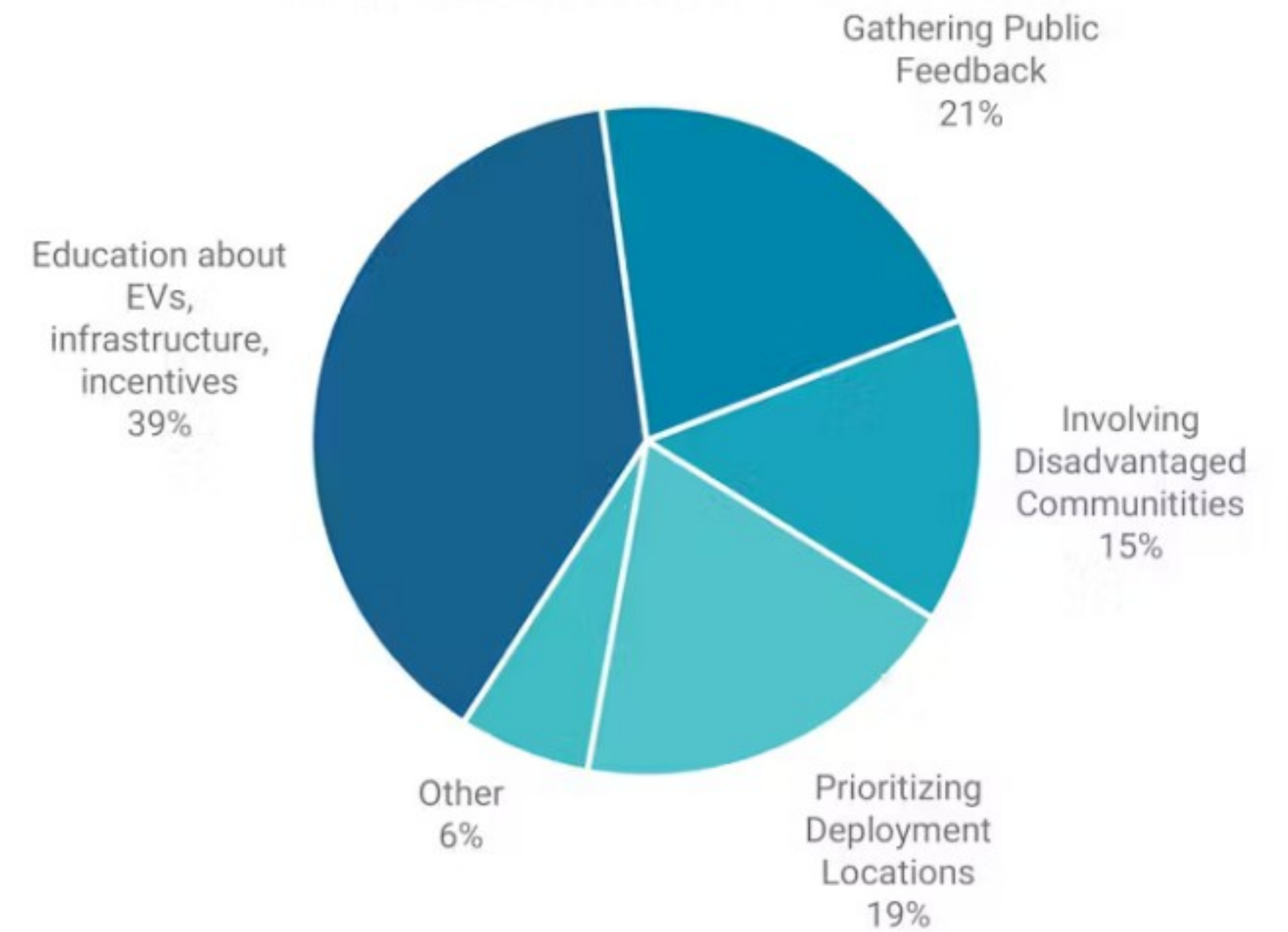


What we heard

Best Methods for Successful Outreach



What Should Outreach Focus On?



Are there any events you recommend we attend?

39 responses



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

58 responses



NOW THAT WE'VE DESCRIBED HOW WE ARE REACHING OUT

What else can we do to increase public awareness?

Direct mailers

Feature event on
Maryland Public
Television

Radio interviews; deep
dive podcast
appearances

Attend lots of events.
Organize local EV owners
to help out.

Public Forums

TV ads explaining benefits to
health and the environment -
tying to HEAT

TV news programs

tv advertising



25



NOW THAT WE'VE DESCRIBED HOW WE ARE REACHING OUT

What else can we do to increase public awareness?

Testimonials from real people

Build out your electronic distribution list to underserved communities.

partnerships with community organizations

EVs are coming; use incentives to get on board now

tell a story : what is a day - to - day life with an EV

Have a parade specifically about EVs, etc.

Attend events that are not related to EVs

Incentivize any televised events such as movies and tv programs taking place in the state to have EVs.



25



NOW THAT WE'VE DESCRIBED HOW WE ARE REACHING OUT

What else can we do to increase public awareness?

Sponsor opportunities for people to experience them firsthand.

Provide laymans data that shows benefits.

Local news papers

Newspaper interviews.
Maryland Public
Television

Myth dispelling on radio and tv interviews. Talk about how chargers get their energy. How people can get incentives. Good for everyone, not just suburb/wealthy areas.

targeted ads on youtube and other streaming platforms

High profile events to inaugurate new EV charging stations.

Visibility through demographics- bill boards, social media, community events, library programs, reels and Tik Toks, What's App messaging, mailers



25



NOW THAT WE'VE DESCRIBED HOW WE ARE REACHING OUT

What else can we do to increase public awareness?

Have a town hall type event for Q/A

Host events at Transportation Agencies

Create a calendar for events

Connect with solar installers

Send reps to the Counties

Provide data that shows benefits

Incentivize celebrity endorsement

Billboards



25



NOW THAT WE'VE DESCRIBED HOW WE ARE REACHING OUT

What else can we do to increase public awareness?

Sexy ads - "EVs are HOT!"

Offer help to fill out state rebate forms

federal

I host a highly rated sustainability podcast, The Green Insider. I would be glad to have you all as a guest on my podcast.

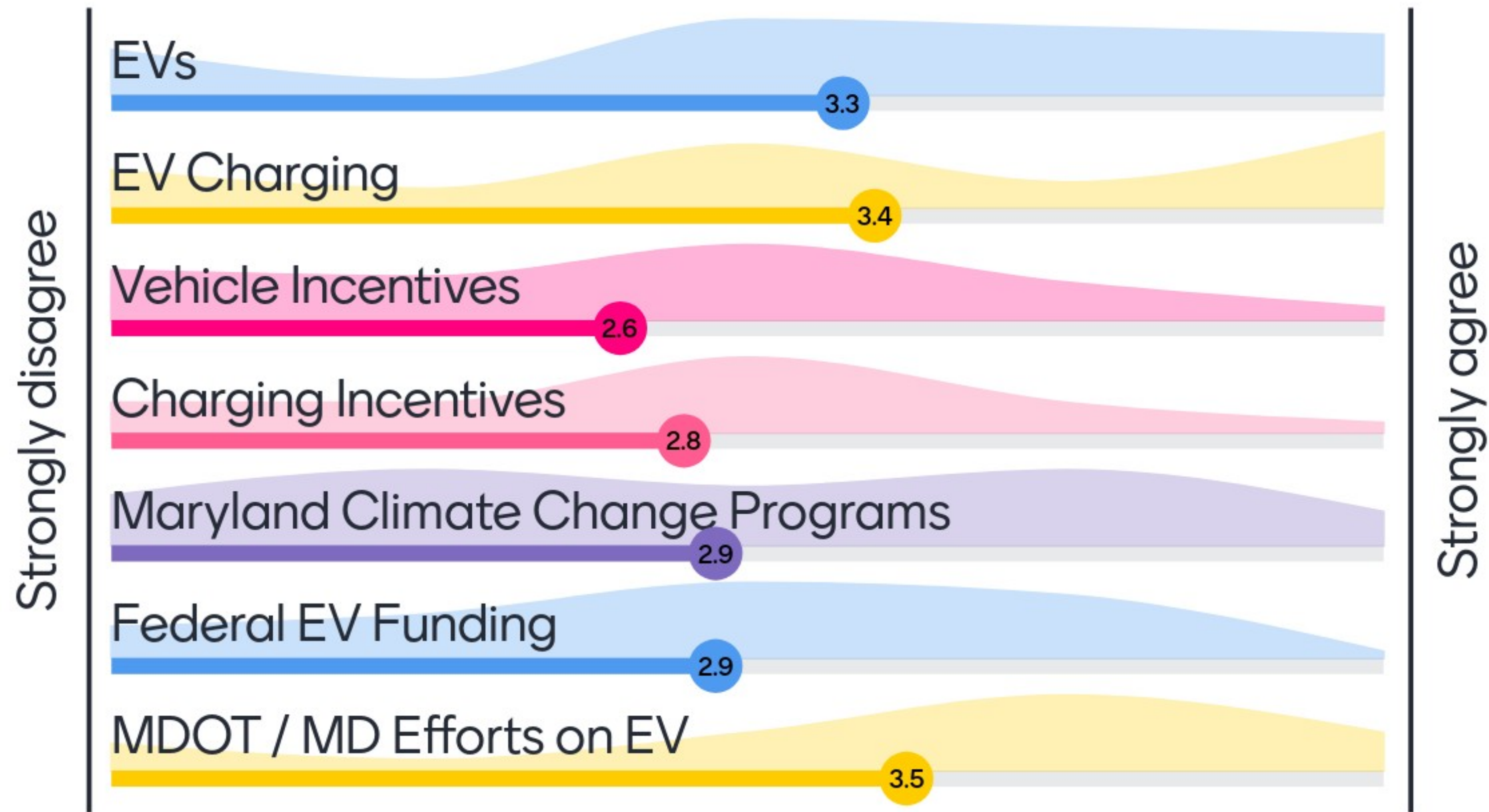
Motorweek with John Davis is a very popular TV show. He often profiles an EV or PHEV.



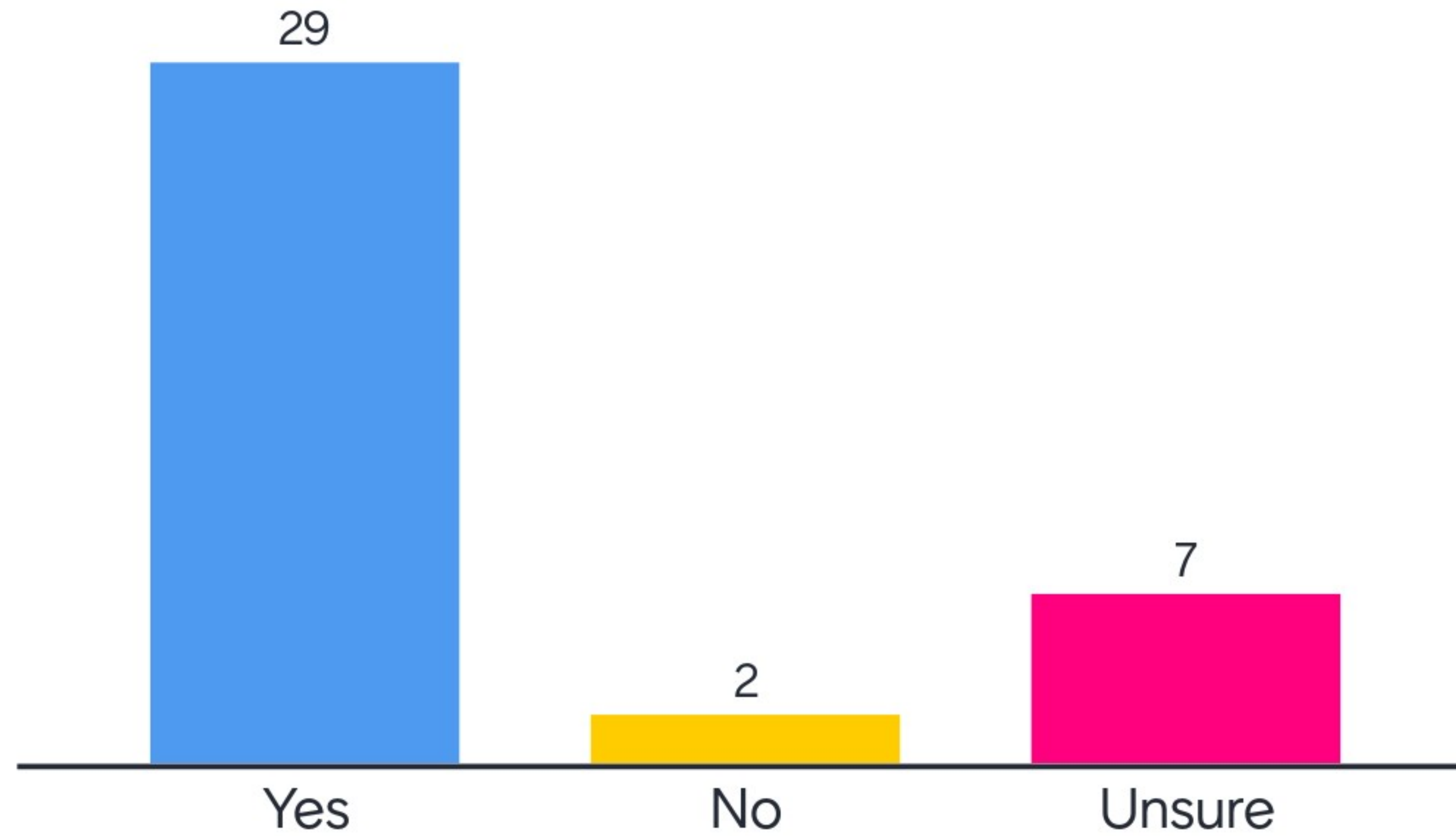
25



I feel more familiar with



I found this webinar informative



How can we improve our webinars?

44 responses



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/Dashboard-%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!

