



# MARYLAND ZERO EMISSION

**Electric Vehicle Infrastructure Council**

July 16, 2020

# Agenda

---

- Welcome and Announcements
- Introductions
- Public Comments
- Maryland EVSE Incentive Availability
- Communications Working Group Update
- Legislative Discussion
- Emerging Technologies Outreach
- State Agency Updates
- Utility Update
- Closing Remarks

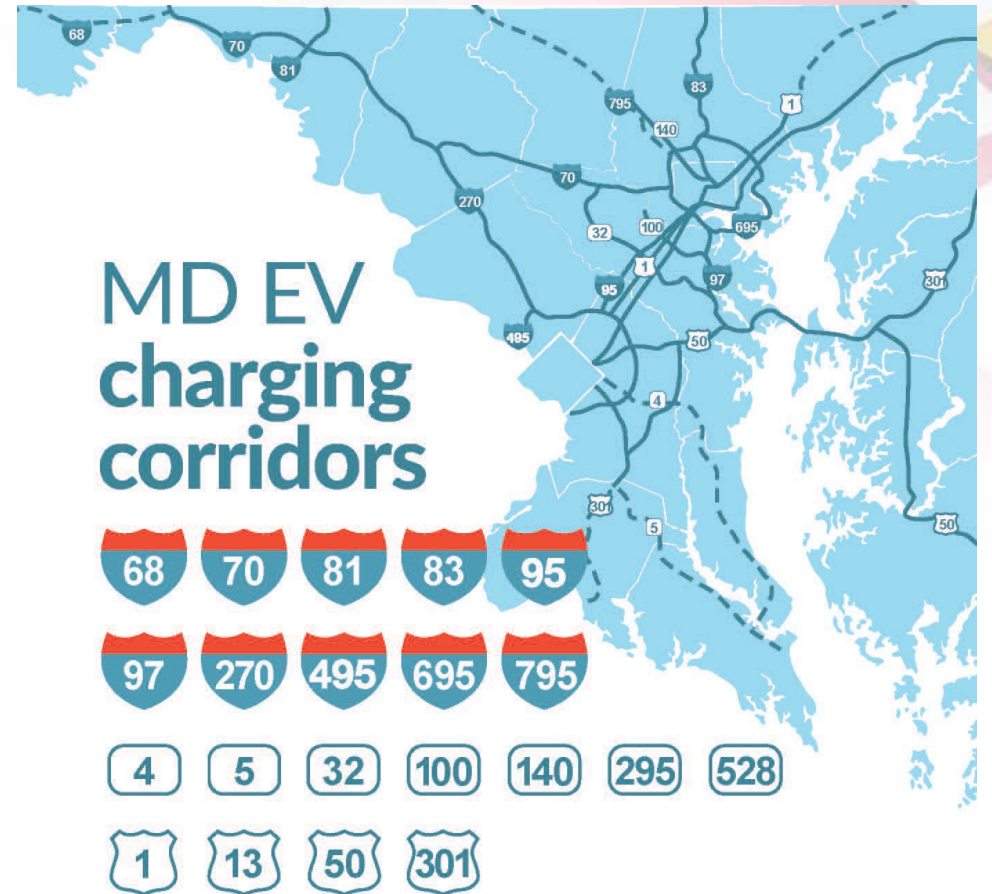
# Welcome and Announcements

Deputy Secretary Lewis, MDOT



# Maryland's EV Charging Corridors

- 21 Corridors
- MD 295 Newly Designated
- I-70 to PA Line Corridor Ready
- Maryland Featured in AFC National Report:
- <http://altfueltoolkit.org/materials/alternative-fuel-corridor-convenings-final-summary-report/>



# Electrify America Approach – 3 Focus Areas

We are seeking the following seven types of input

**1** Suggestions and Data Relevant to Cycle 3 Investments

**2** Information regarding ZEV Policy in your Community

Education & Access Suggestions

Specific site locations

Cycle 1 and 2 Comments and Feedback

Vendor interest

**3** Event invitations

# Maryland Signs M/HDV ZEV MOU



Governor Larry Hogan

Lt. Governor Boyd K. Rutherford

Maryland Environment Secretary Ben Grumbles

Maryland Transportation Secretary Gregory Slater

FOR IMMEDIATE RELEASE:

July 14, 2020

Contacts:

MDE: Jay Apperson, [jay.apperson@maryland.gov](mailto:jay.apperson@maryland.gov), 443-604-0091

MDOT: Erin Henson, [ehenson@mdot.maryland.gov](mailto:ehenson@mdot.maryland.gov), 410-865-1025

MULTI-STATE MEDIUM- AND HEAVY-DUTY ZERO EMISSION VEHICLE

MEMORANDUM OF UNDERSTANDING

HOGAN ADMINISTRATION JOINS MULTI-STATE CLEAN TRUCK INITIATIVE

*Maryland, with 14 other states and the District of Columbia, signs agreement to increase electric medium- and heavy-duty vehicles, reduce emissions*

# Introductions



# New ZEEVIC Member

---

Delegate William Wivell  
*District 2A, Washington County*





# Public Comments





# Maryland EVSE Incentive Availability

Mike Jones, MEA

A stylized graphic in the top right corner showing two hands, one in red and one in white, holding a globe. The globe is composed of yellow, grey, and red segments. The hands are rendered in a simple, modern style with white outlines and flat colors.

# Communications Working Group Update

- Colleen Turner, MDOT

# Recommendations to ZEEVIC

---

- **Work with the Maryland Commission on Climate Change (MCCC)**
  - Education Communications and Outreach (ECO) Working Group
  - Messaging related to ZEV and Re-Opening
- **Pursue Dealership Outreach Efforts**
  - Coordinate with Utilities
  - Electrify America Funding

# Website Analytics

June 5 – July 10, 2020

**Page Views:** 2,780

## **Audience Overview:**

Search Traffic\*: 62%

Referral Traffic: 11%

Direct Traffic: 28%

\*Search traffic has increased due to search engine optimization (SEO) efforts

## **Top Referral Traffic:**

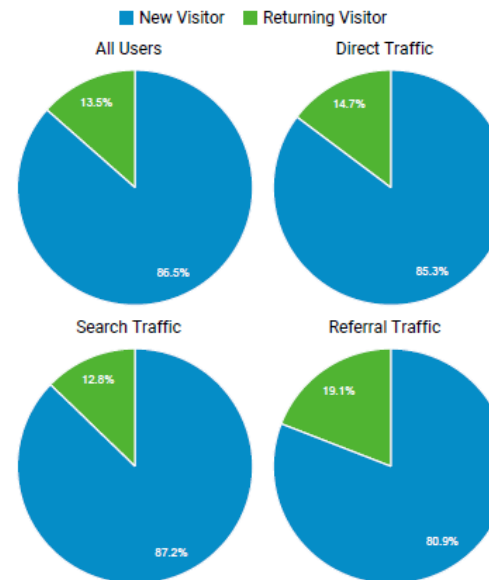
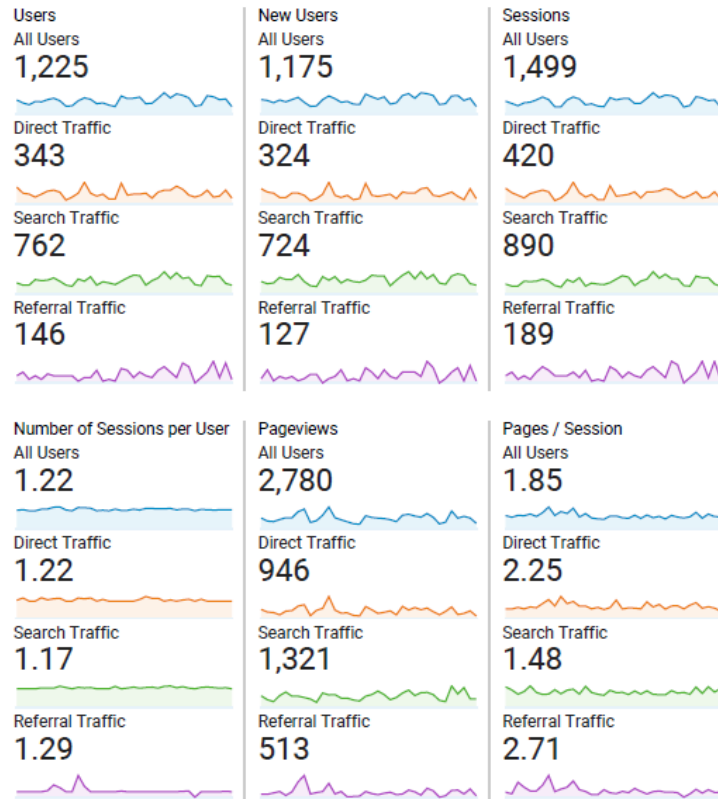
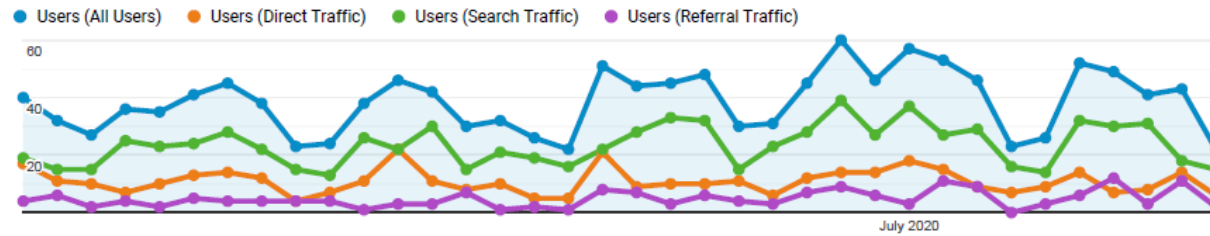
1. pepco: 24%
2. bge.com: 16%
3. surveymonkey.com: 14%
4. firstenergycorp.com: 7%
5. delmarva.com 4%
6. facebook.com 4%
7. npr.org 3%
8. clippercreek.com 2%

## **Top Pages Visited:**

1. Incentives: 1,323 (47%)
2. Homepage: 742 (26%)
3. Charging: 204 (7%)
4. ev-101: 159 (5%)
5. hydrogen-101: 71 (2%)
6. resources: 69 (2%)
7. resources/useful-links: 45 (1%)
8. resources/ev-calculators: 33 (1%)

# Website Analytics

June 5 – July 10, 2020



# Social Media Analytics

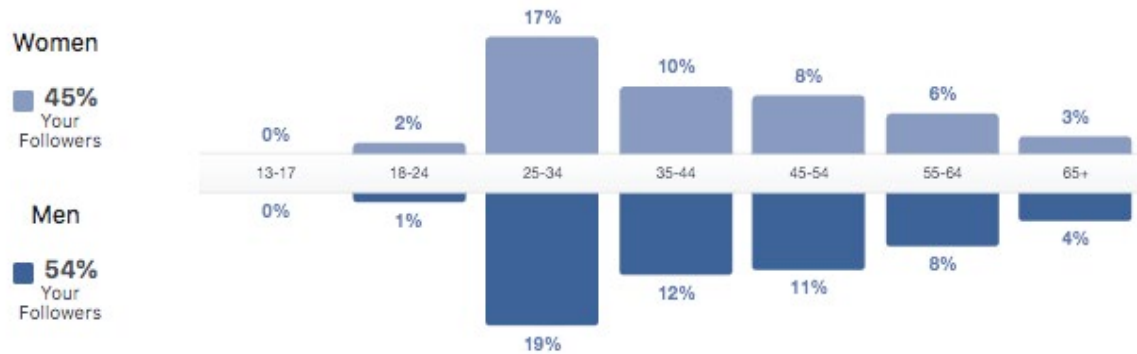
---

## Facebook Highlights:

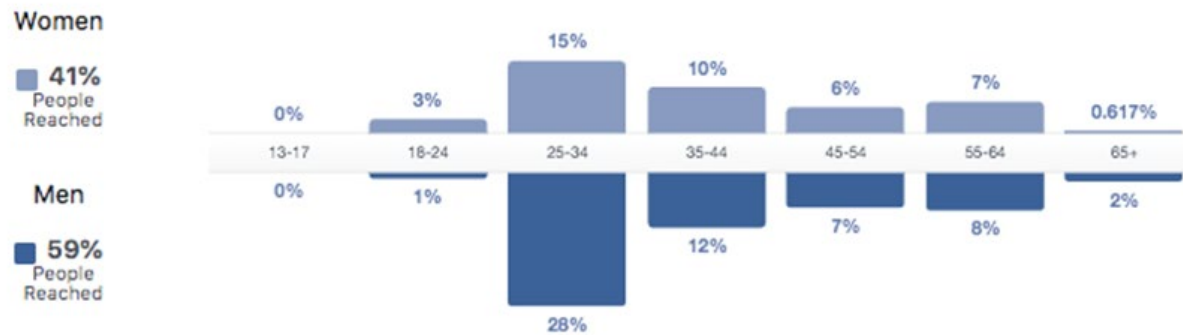
- Total Posts in 28 Day Period: 16
- Post Engagements: 79
- Post Reach: 167

# Facebook Audience Demographics

The people who follow your Page. This number is an estimate.



The number of people who had any content from your Page or about your Page enter their screen screen, grouped by age and gender. This number is an estimate.






# Social Media Post Examples

## Facebook and Instagram

**Maryland Electric Vehicle**  
Published by Sharp & Company [?] · June 8 at 11:37 AM · 🌐

Lower maintenance and fuel costs are just a few reasons **Forbes** recommends EVs. We agree! Check out our EV101 page on our MarylandEV website to learn more! #MarylandEV #EV  
[https://www.forbes.com/.../electric-cars-for-beginners-5-si.../...](https://www.forbes.com/.../electric-cars-for-beginners-5-si.../)




FORBES.COM  
Electric Cars For Beginners: 5 Silly Reasons To Buy A Tesla Model 3, Chevy Bolt Or Any Electric Vehicle

107 People Reached    9 Engagements    [Boost Post](#)

**Maryland Electric Vehicle**  
Published by Crowdfire [?] · 3 mins · 🌐

Exelon, the parent company for BGE, Pepco, and Delmarva Power plans to electrify 30% of its fleet by 2025 and increase to 50% by 2030. Once realized, this change has the potential to annually eliminate 15 million pounds of greenhouse gas emissions. Learn more about how electric vehicles reduce emissions and save you money at our website. #MarylandEV #EV  
<https://www.greencarcongress.com/2020/.../20200608-exelon.html>




ComEd  
An Exelon Company  
Electric Vehicle

[Like](#)    [Comment](#)    [Share](#)    [Boost Post](#)

**Maryland Electric Vehicle**  
Published by Crowdfire [?] · June 11 at 11:24 AM · 🌐


Oil prices go up and down and are very sensitive to a myriad of factors. A sharp decrease in price often leads to an equally dramatic increase. The current global pandemic has lead many to begin making the switch to cleaner fuels. Visit our MarylandEV website to learn how you can get charged about Electric Vehicles! #MarylandEV #EV  
<https://www.reuters.com/.../past-its-peak-battered-oil-demand...>



58 People Reached    8 Engagements    [Boost Post](#)

**Maryland Electric Vehicle**  
Published by Crowdfire [?] · June 15 at 12:28 PM · 🌐

This blog post from our friends at the Electric Vehicle Association of Greater Washington, DC highlights how renewable energy sources have begun to eclipse coal. As coal power declines, grid power will continue to get cleaner. #MarylandEV #EV  
<https://evadc.wildapricot.org/Blog/8974137>



72 People Reached    12 Engagements    [Boost Post](#)

# Legislative Discussion

Deputy Secretary Lewis, MDOT



A stylized graphic in the top right corner shows two hands, one in red and one in white, cupping a globe. The globe is composed of yellow, grey, and red segments. The hands are rendered in a simple, rounded style.

# Emerging Technologies Outreach

Colleen Turner, MDOT

# Local Outreach Survey - Overall Results

---

**68** respondents (~15% response rate)

Significant portion of respondents were cities/towns

Counties & MPOs had 1 representative responding for entire agency

~ **1/3** of respondents requested follow up

Representation **missing** from:

**Counties:** Anne Arundel, Caroline, Dorchester, Garrett, Harford, Kent, Somerset, St Mary's, Talbot & Wicomico

**Major Cities:** Rockville, Gaithersburg, Bowie, College Park, Laurel, Greenbelt, & Cumberland

Above jurisdictions were prompted specifically in second round of reminders through MDP

# Ranked Priorities – Local Outreach

---

1. **Top priority:** Having a better understanding of how your jurisdictions fits within an automated, connected, electric and shared statewide ecosystem **(score: 8/10)**
2. Having established planning tools, strategies, and state policy to help start the planning process **(score: 7/10)**
3. Participating in ongoing statewide conversations on the potential implications of Emerging Technologies on the transportation system & the economy **(score: 6/10)**
4. **Lowest priority:** Managing public perception with the introduction of Emerging Technologies to a jurisdiction, such as the fear of automated ride-hailing vehicles **(score: 4/10)**

# General Comments – Local Outreach

---

## **Representative comments repeated across multiple respondents**

*“It is hard for smaller rural counties to keep up with all of the different emerging technologies. More exposure on how they apply to rural areas and a better understanding on the role of a rural jurisdiction would be helpful.”*

*“At this level (i.e. small, rural county) we have zero resources to apply to this issue and will be looking to the state for guidance.”*

*“Strategies should address our needs” [paraphrased]*

*“Should focus on the whole ecosystem of connected, automated, shared and electric initiatives” [paraphrased]*

# Zero Emission Vehicles

- Zero Emission Electric Vehicle Infrastructure Council (ZEEVIC)
- Alternative Fuel Corridors
- Signage Plan
- Fleet Innovations
- Infrastructure Deployment
- Local Outreach & Education



**2019 Annual Report**

**December 2019**

Chaired and Staffed by the



*Presented to  
Governor Lawrence J Hogan, Jr.  
and the  
Maryland General Assembly*

*Presented by the  
Zero Emission Electric Vehicle  
Infrastructure Council  
(SB 714, Chapter 378, Acts of 2015)*

# CAV Strategic Plan in Leadership Review





# Overview of Vision

*Maryland's Vision for Connected and Automated Vehicles (CAV) is to uphold and enhance a **Safe, Efficient, and Equitable** transportation future by delivering collaborative and leading-edge CAV solutions. Maryland is open for business and eager to realize the life-saving and economic benefits of CAV technology, while ensuring safety for all. We are embracing CAV technology and innovation through continuing collaboration with partners interested in researching, testing, and implementing CAVs in Maryland.*



implementing CAVs in Maryland.  
interested in researching, testing, and  
continuing

# CAV Strategies

---

- 1. Prioritize safety in all CAV activities**
- 2. Communicate CAV progress and opportunities broadly and openly**
- 3. Ensure transportation policies and regulations reflect the MD CAV Vision**
- 4. Continue CAV pilot development and deployment activities**
- 5. Make CAV a part of near- and long-term planning efforts**
- 6. Ensure CAV plans and actions are coordinated and transparent**
- 7. Maintain strong and clear mechanisms for CAV partnerships**
- 8. Support CAV research activities**
- 9. Strengthen MDOT knowledge and capabilities in CAV**

# Local Outreach – Tentative Schedule

Milestones	Target Dates (Option Two – Post)
Distribute Outreach Plan to CAV Coordination Team	July 21
CAV Coordination Team Review/Discussion of Plan	July 28
Finalized Outreach Plan w/ Dates for Webinars	August 4
Share Webinar Dates and Invitations with CAV Working Group	August 11
Invitations for All Webinars	August 18
Finalized Webinar Presentation	2 weeks before each webinar
Practice Session	1 week before first webinar
Regional Webinar #1**	Sept 15
Regional Webinar #2**	Sept 16
Regional Webinar #3**	Sept 17
Statewide Webinar**	Oct 15
Follow up e-mail request for additional comments	Nov 1
Draft Outreach Summary Report	Nov 15
Final Outreach Summary Report	Nov 30
Share Outreach Summary Report w/ Webinar Participants	Dec 15

*\*\*Dates approximate – have not yet been reviewed for conflicts.*

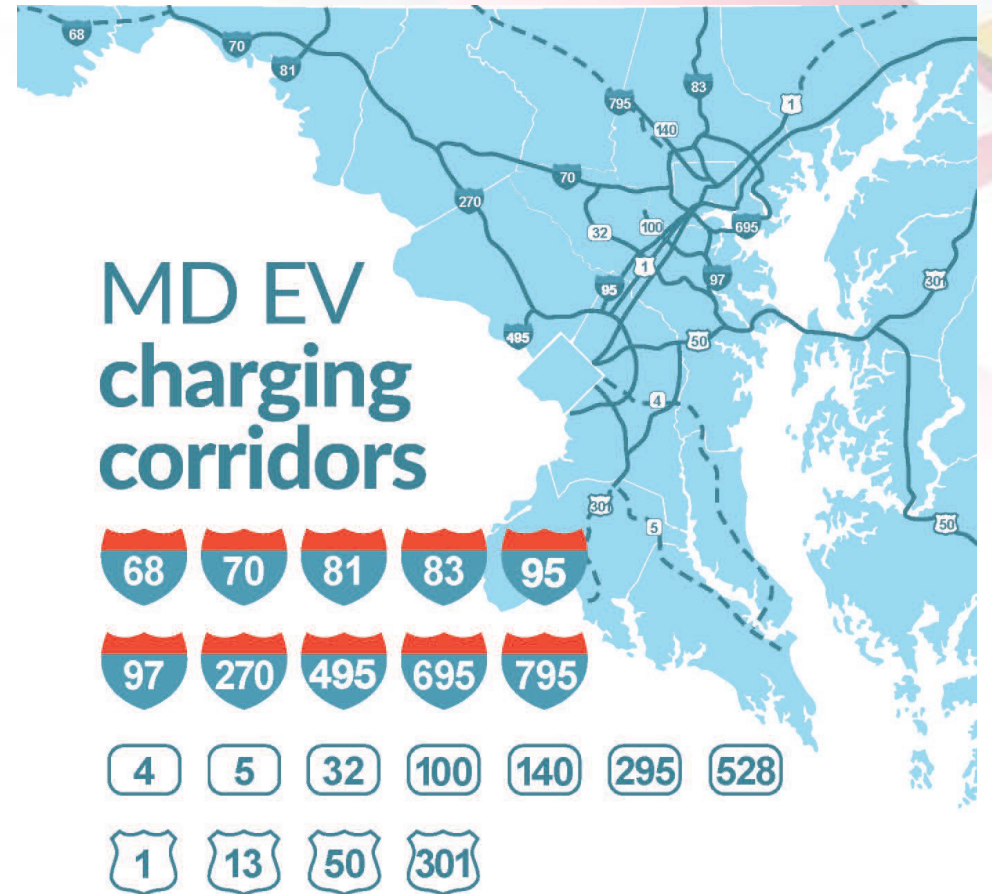


# State Agency Updates

MDOT – Alternative Fuels Corridor Report, Fleet Innovation

# Maryland's EV Charging Corridors

- 21 Corridors
- MD 295 Newly Designated
- I-70 to PA Line Corridor Ready
- Maryland Featured in AFC National Report:
- <http://altfueltoolkit.org/materials/alternative-fuel-corridor-convenings-final-summary-report/>



# Electrify America Cycle 3



- \$2 Billion investment 2017-2027
- Four 30-month Investment Cycles
- July 31 due date - Cycle 3 information
- 7 categories of information requested
- Cycle 3: January 2022-June 2024

[ElectrifyAmerica.com](https://www.ElectrifyAmerica.com)



# Electrify America Approach – 3 Focus Areas

We are seeking the following seven types of input

**1** Suggestions and Data Relevant to Cycle 3 Investments

**2** Information regarding ZEV Policy in your Community

Education & Access Suggestions

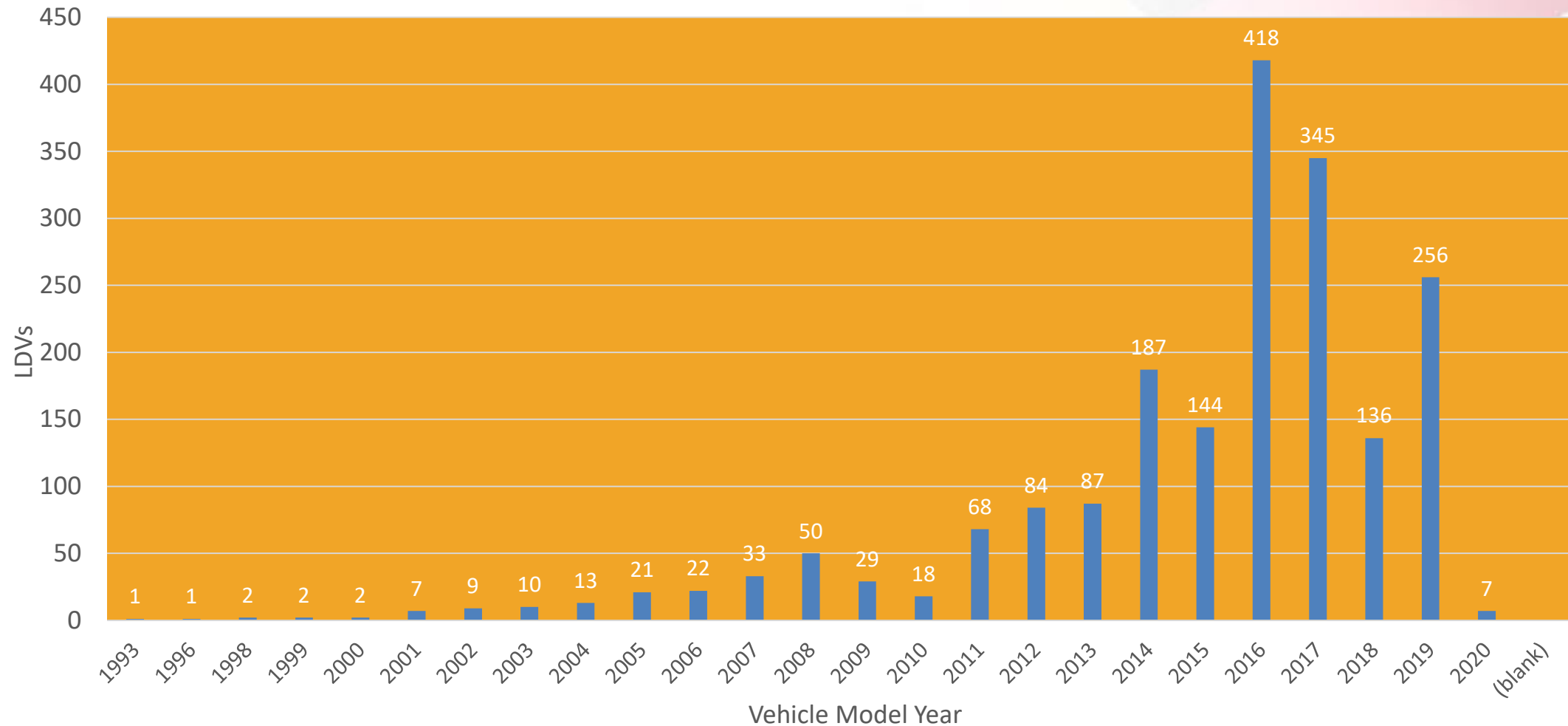
Specific site locations

Cycle 1 and 2 Comments and Feedback

Vendor interest

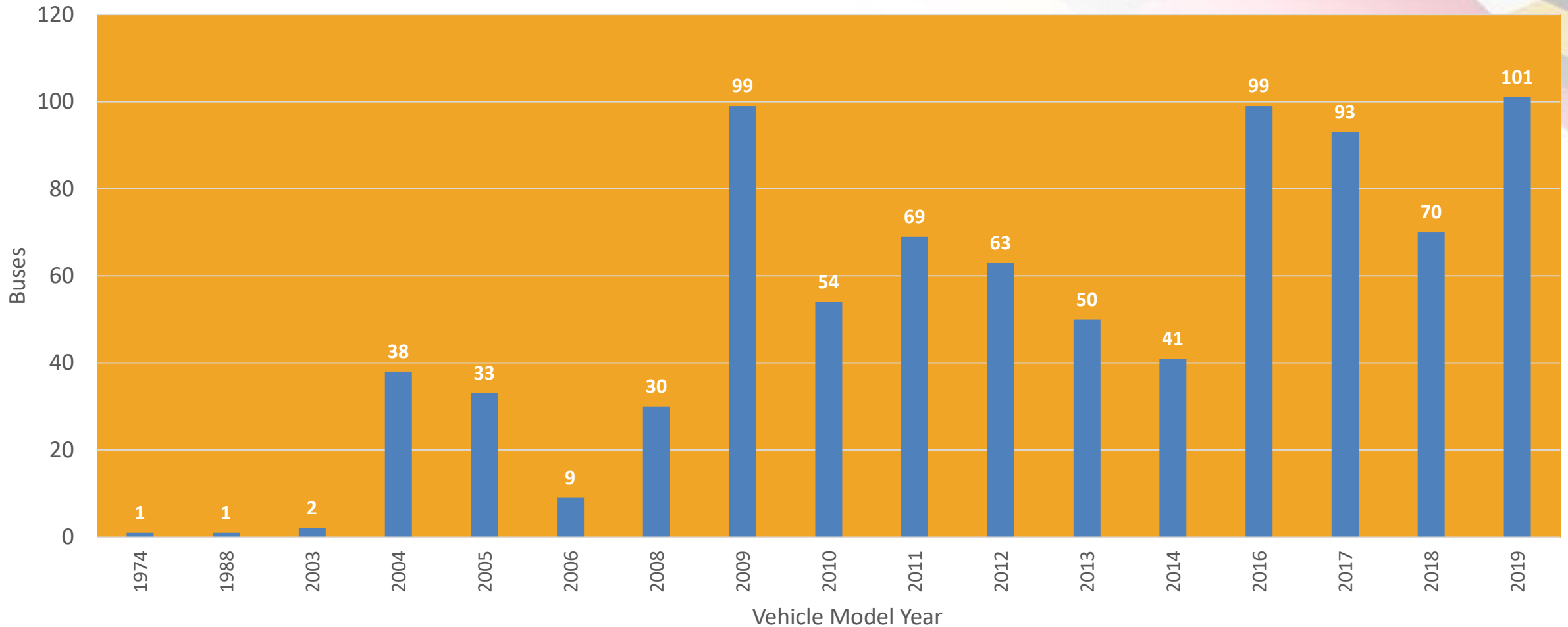
**3** Event invitations

# MDOT LDVs by Model Year





# MDOT Buses by Model Year





# State Agency Updates

DGS – Initial MetroQuest Survey Results

# MetroQuest – Workplace Charging Survey

EV Workplace Charging Progress

**Introduction**


**WELCOME**

**EV Workplace Charging Survey**

Maryland is a **national leader** in the deployment of Electric Vehicles (EVs) and EV infrastructure and is committed to a goal of 300,000 EVs registered by 2030 in order to achieve the Greenhouse Gas Reduction Act's (GGRA) goal of reducing greenhouse gas emissions (GHG) by 30 percent from 2006 levels by 2030. To meet the ambitious EV registration and infrastructure deployment goals, Maryland is working to develop strategies and partnerships that will promote and facilitate the integration of EVs into State-owned or -leased facilities. Your input will better inform Maryland's decisions for future EV charging infrastructure at State facilities.

[Begin](#)

Maryland is committed to a **goal of 300,000 Zero Emission Vehicles** registered by 2030.



**2 SURVEY QUESTIONS**

**3 RANKINGS**

**4 WORKPLACE LOCATION**

**5 WRAP UP**

[Help](#) [Privacy](#) [About MetroQuest](#)

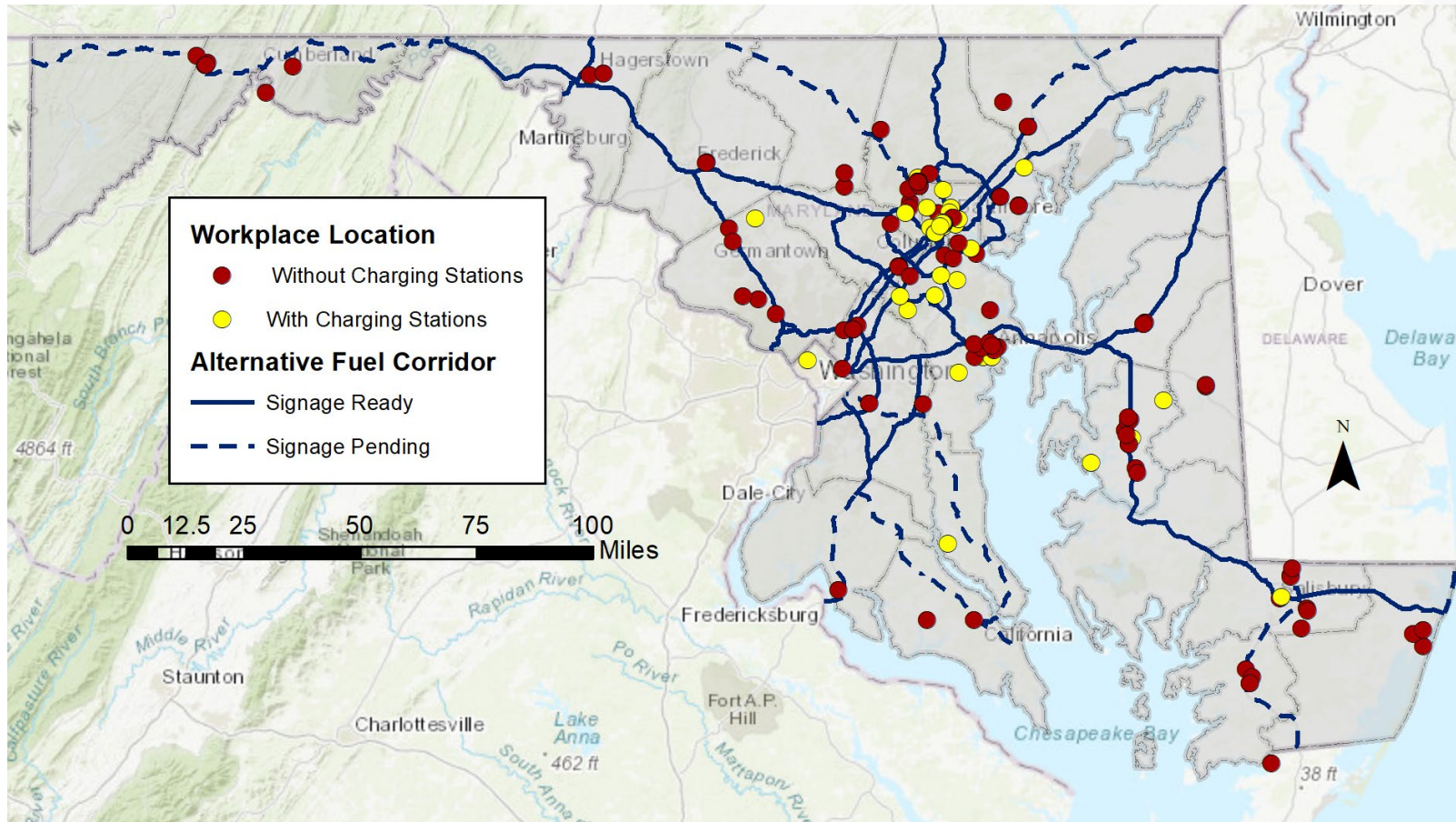
Sent Out: May 20, 2020  
Ends: August 31, 2020

480 Participants

15 Government Agencies

- MD State Police – 104
- MD Department of the Environment – 84
- Department of General Services – 53
- Public Service Commission – 13
- MD Stadium Authority - 12

# MetroQuest – Workplace Locations

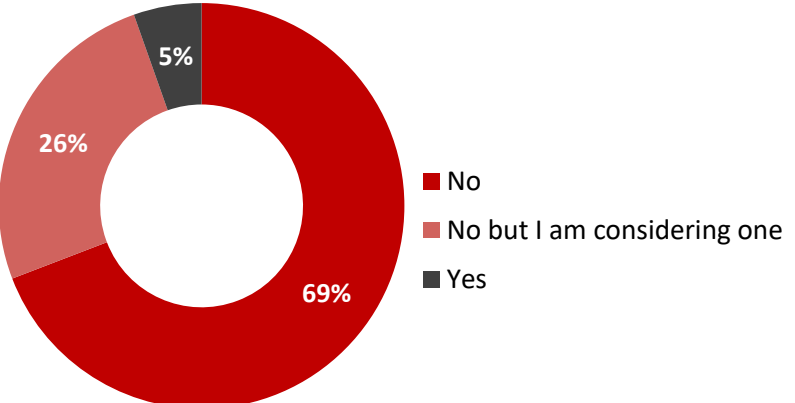


## Workplaces:

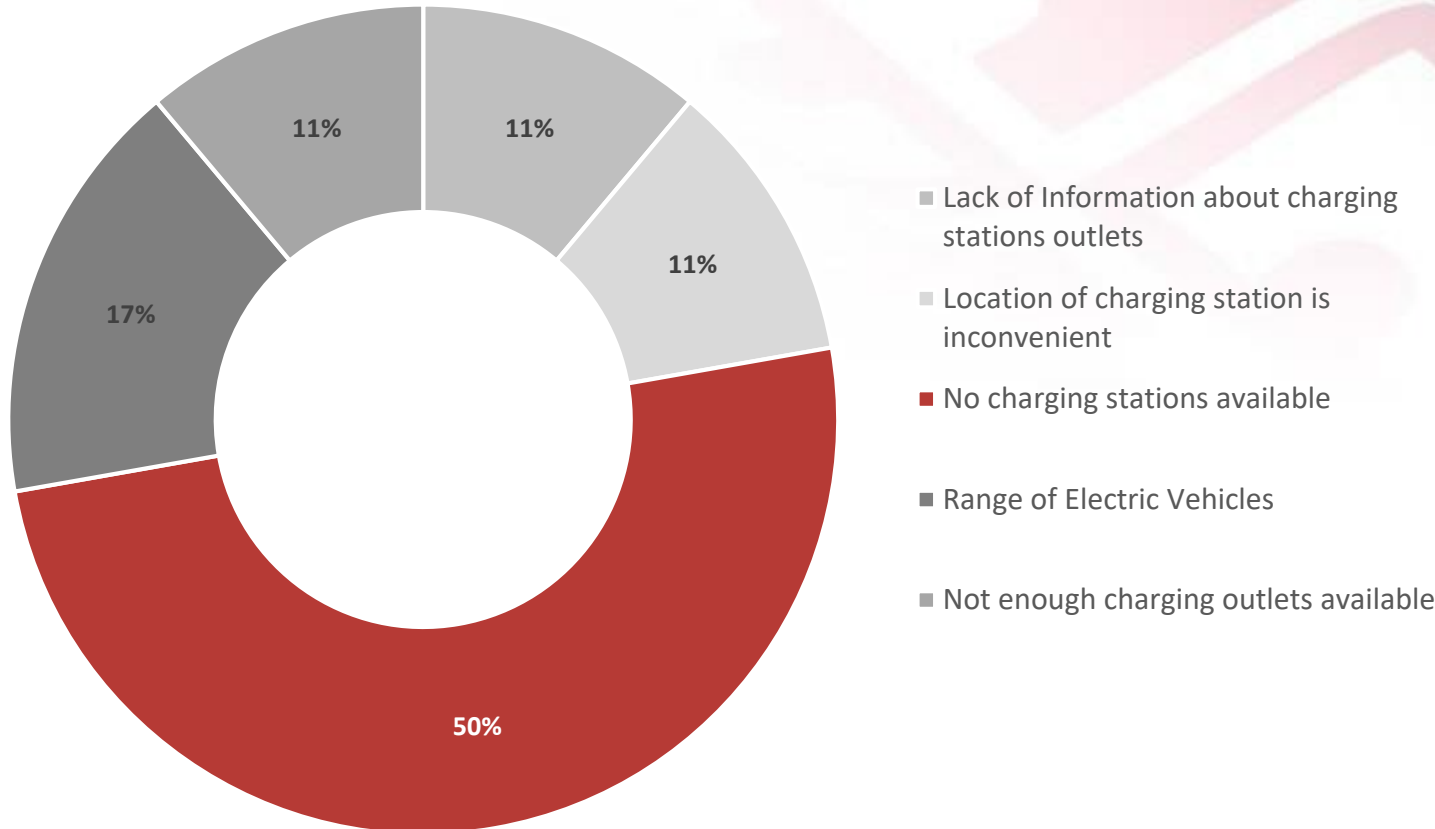
- 160 without Charging Stations
- 130 with Charging Stations

# MetroQuest – Electric Vehicle

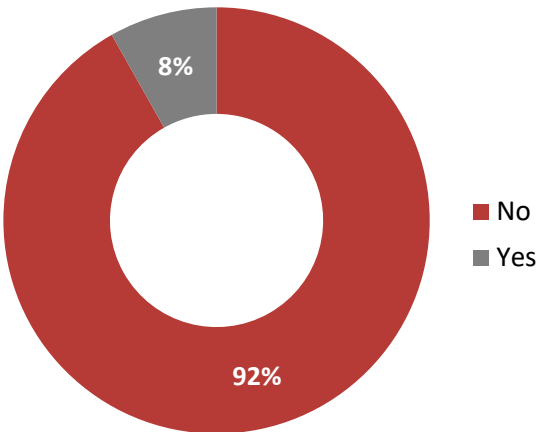
Do you own an EV?



Why don't you drive your EV to work?

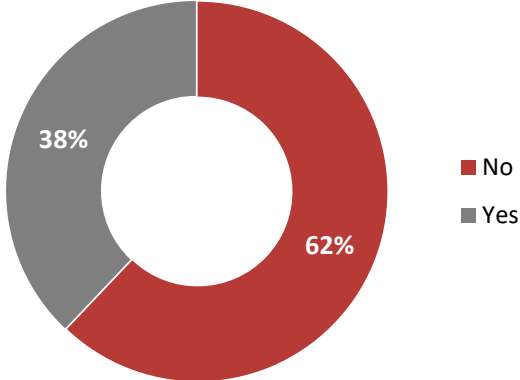


Do you drive your EV to Work?

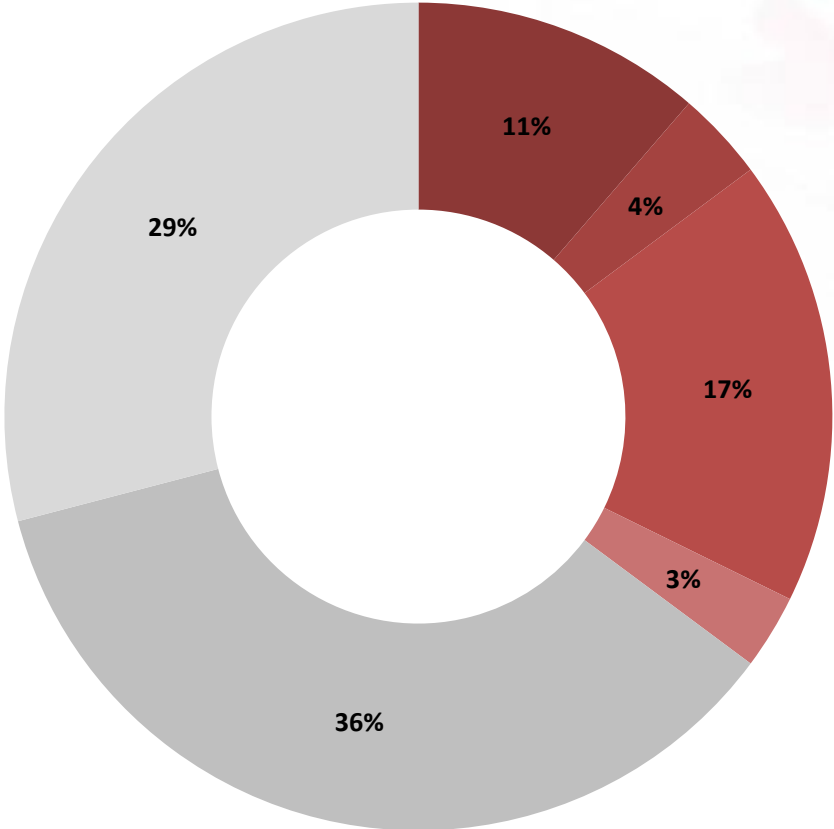


# MetroQuest – Charging Infrastructure

Are charging stations available?

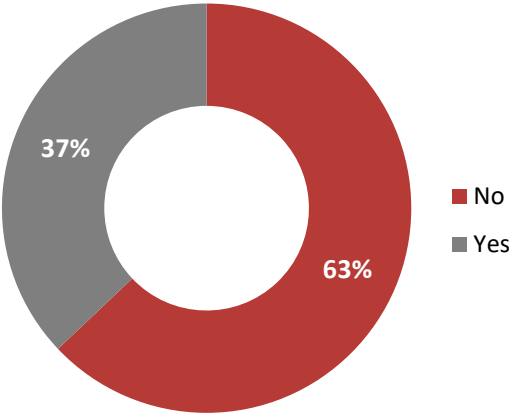


What would you be willing to pay per charge?



35% would pay to charge their EV at their workplace.

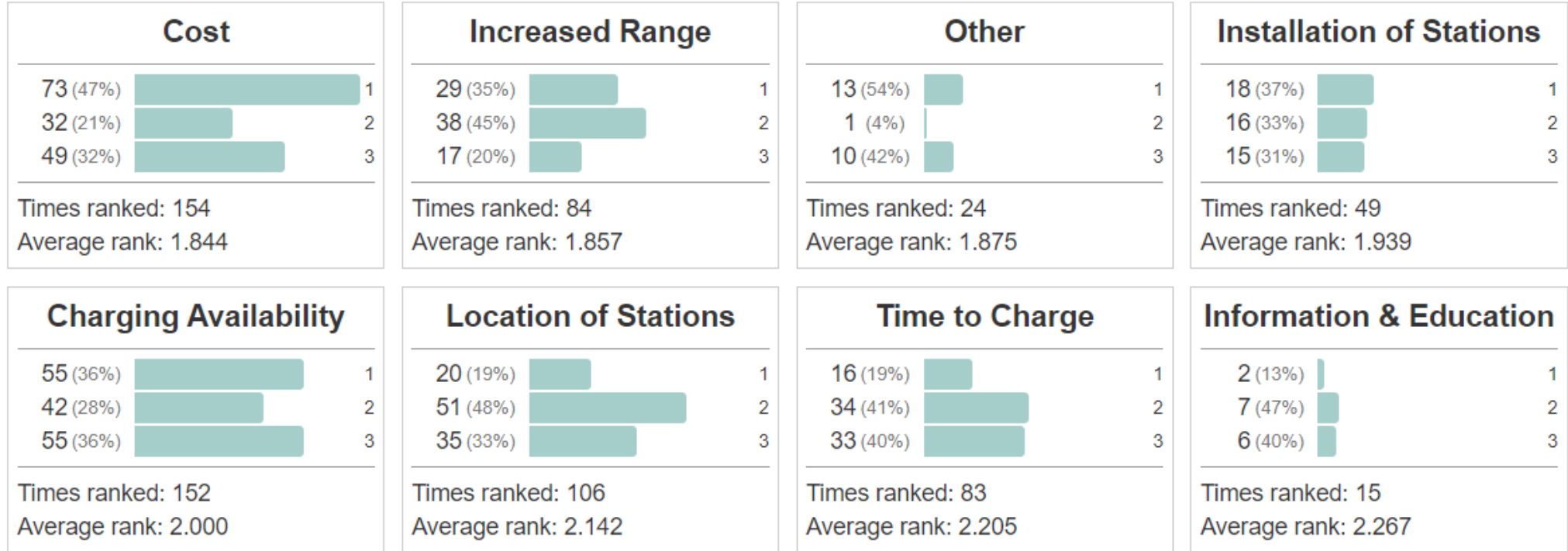
Would you utilize the charging stations?



- Between 2 and 4 per charging session
- Between 4 and 6 per charging session
- Less than 2 per charging session
- More than 6 per charging session
- NA I will not use the charging station
- Nothing Charging should be free

# MetroQuest – Encourage EV Use

↓ Below: Each ranking item, showing how often each item was ranked in each position, ordered by average. Note that 1 is the highest rank.



**Other Comments:** Environmental Concerns, Cost to Own & Maintain, Vehicle Preference



# State Agency Updates

MDE - VW Settlement Progress, NESCAUM EV Work





# State Agency Updates

PSC - PC 44 and EV Work Group Updates

# State Agency Updates

MDP





# State Agency Updates

Other - DBM, DGS, Additional MEA Thoughts

# Utilities Updates



# Closing Remarks – Deputy Secretary Lewis

---

- Next Meeting September 2020