

Maryland ZEV Collaboration Webinars

Eastern Shore and Southern Maryland Regional Webinar

Wednesday, October 7, 2020



Housekeeping

- This meeting is being recorded
- Please mute your microphone
- **Tech difficulties? Add comment in chat or text 206-979-8721**
- Discussion
 - Add questions and comments to the chat
 - Time: one minute per participant
 - Unmute yourself (via phone press *6)
 - Identify yourself and your county

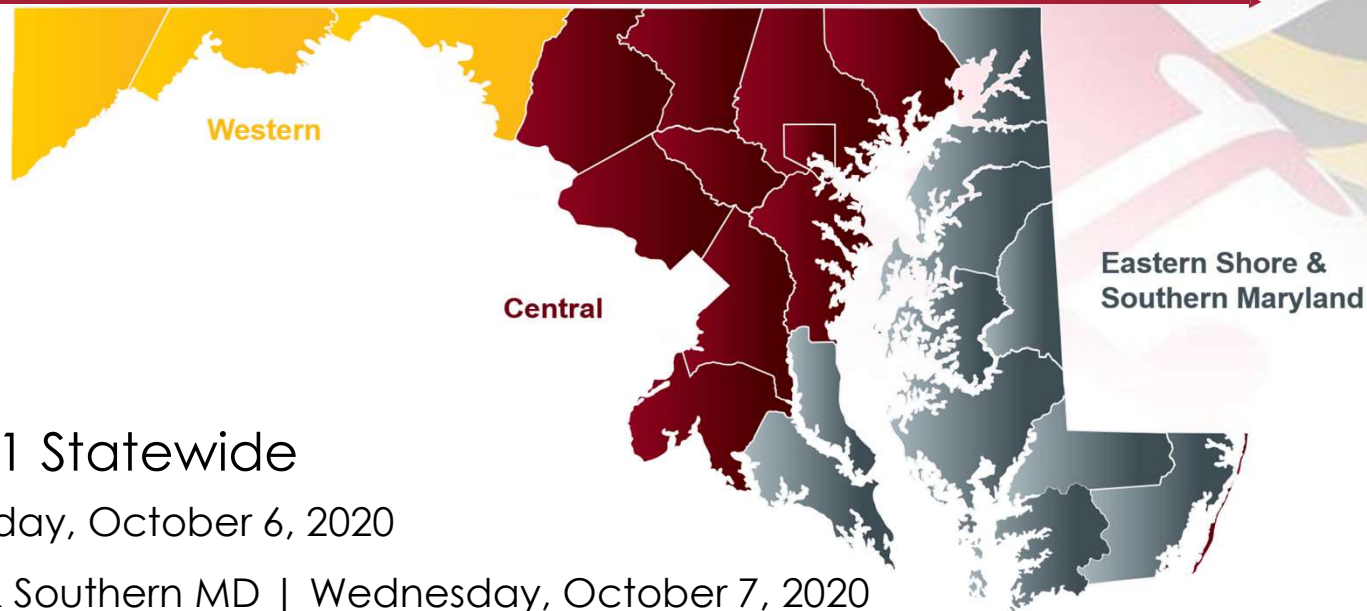
Mark your calendar:

Statewide Webinar: October 28th 2-3:30 PM

Agenda

- Goals & Overview
- Survey Results
 - Group Feedback / Discussion
- Zero Emission Vehicles (ZEV) in Maryland and Nationally
 - Tim Shepherd, MDE
 - Mike Jones, MEA
 - Colleen Turner, MDOT
 - Group Feedback / Discussion
- Recap & Next Steps

Maryland ZEV Collaboration Webinars



Forum

Webinars: 3 Regional + 1 Statewide

- » Regional: Western | Tuesday, October 6, 2020
- » Regional: Eastern Shore & Southern MD | Wednesday, October 7, 2020
- » Regional: Central | Thursday, October 8, 2020
- » **Statewide | Wednesday, October 28, 2020 | 2 – 3:30 PM**

Goals for Today



Share

Results from MDOT ZEV / Emerging Technologies Surveys.



Communicate

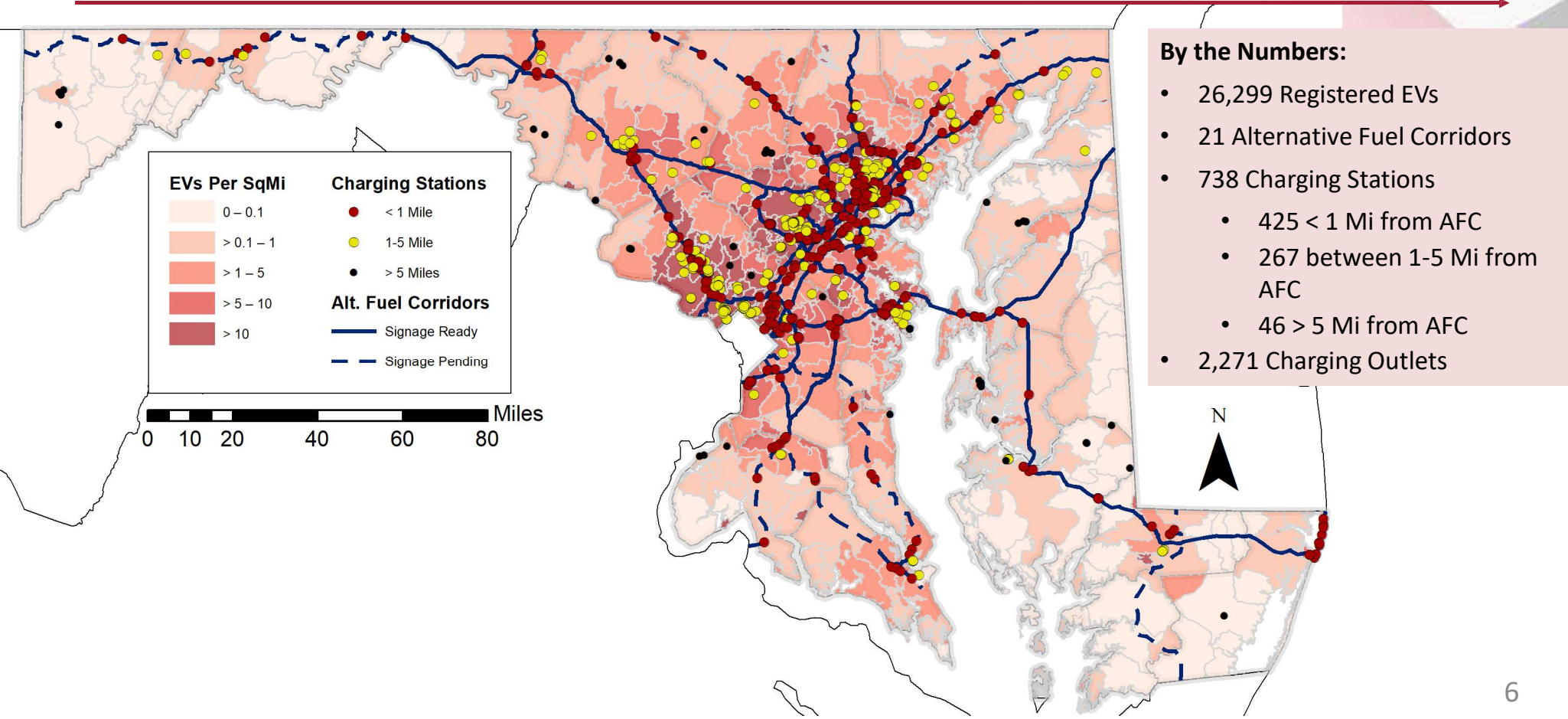
Maryland's progress and share opportunities to align activities and collaborate.



Learn

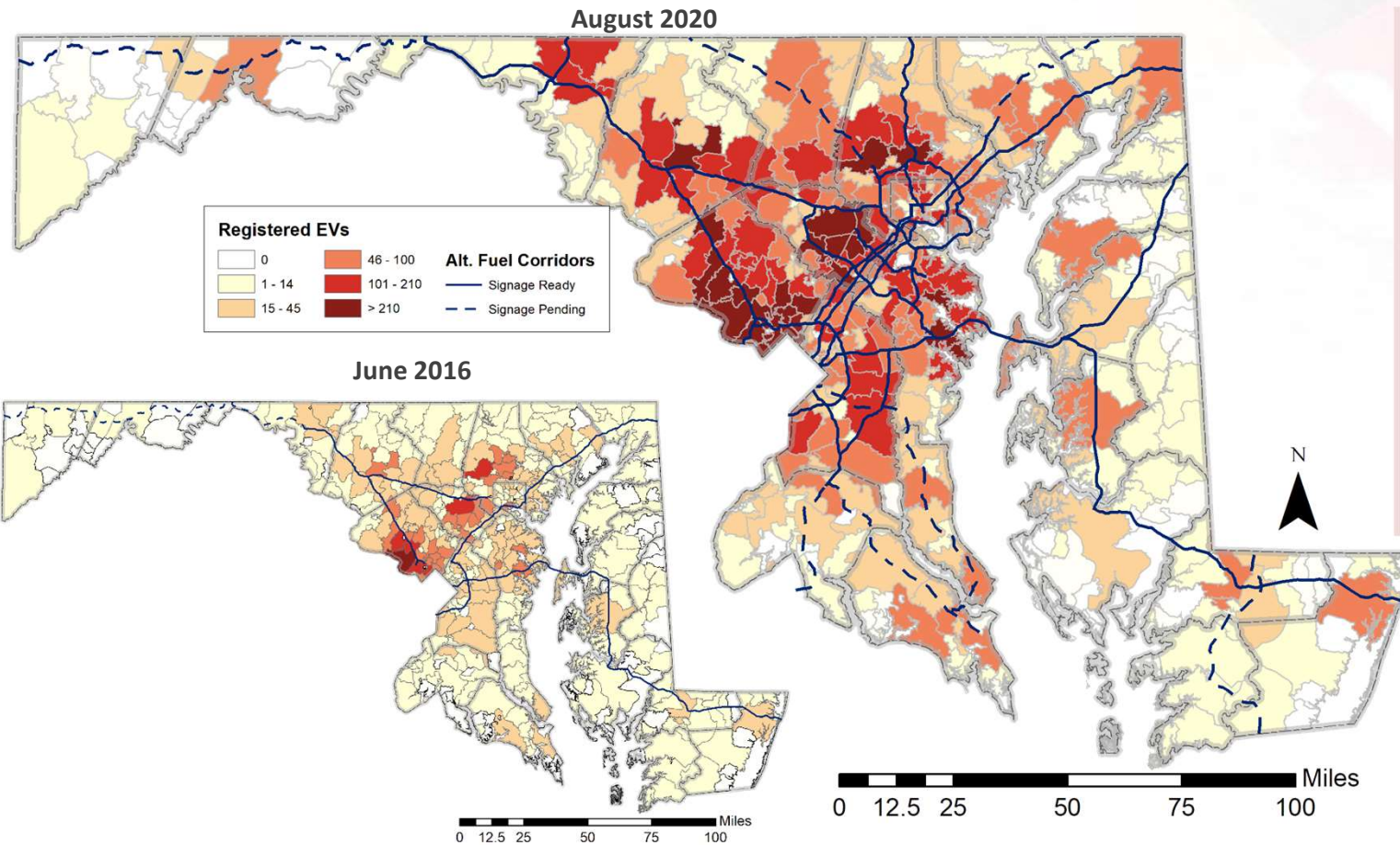
About local challenges and prospects in ZEV and related technologies.

Current Infrastructure Statewide



- By the Numbers:**
- 26,299 Registered EVs
 - 21 Alternative Fuel Corridors
 - 738 Charging Stations
 - 425 < 1 Mi from AFC
 - 267 between 1-5 Mi from AFC
 - 46 > 5 Mi from AFC
 - 2,271 Charging Outlets

EV Growth




Top 5 Zip Codes August 2020:

- 21601 (Easton) – 86
- 20650 (Leonardtown) – 68
- 21921 (Elkton) – 64
- 20639 (Huntingtown) - 59
- 21801 (Salisbury) - 59

Top 5 Zip Codes June 2016:

- 21601 (Easton) - 19
- 21801 (Salisbury) - 19
- 21666 (Stevensville) - 17
- 21811 (Berlin) - 16
- 20657 (Lusby) - 15



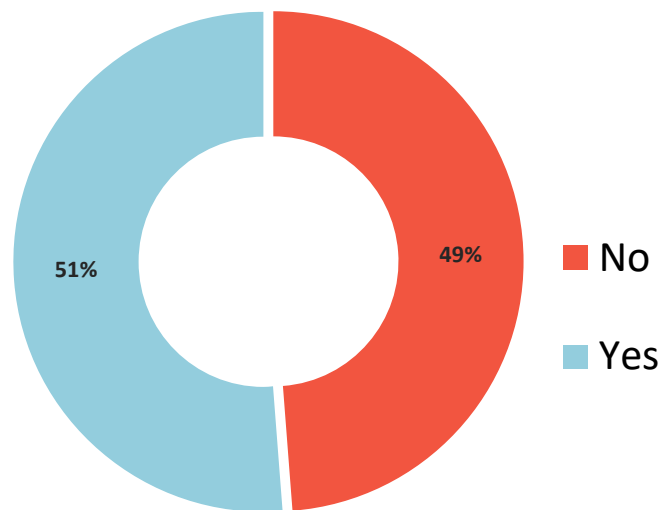
Local Government Outreach Survey

Colleen Turner, MDOT TSO

MetroQuest EV Charging Survey

51 Respondents

Have you received calls/emails about the need for more EV charging locations?



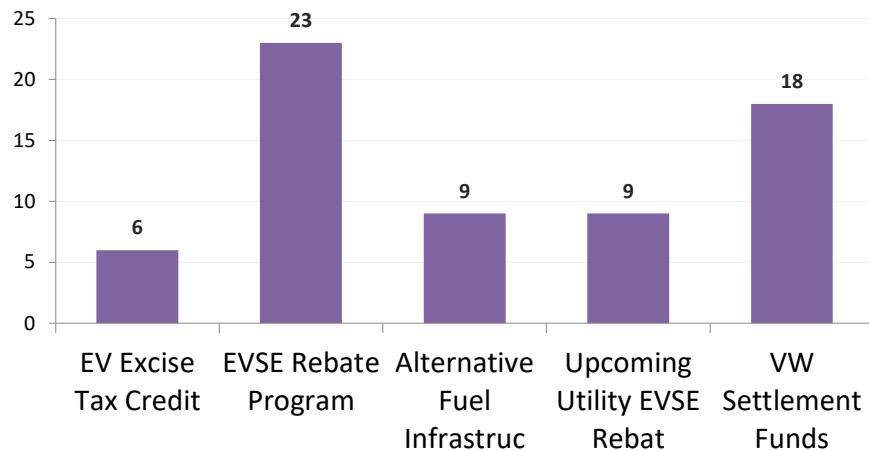
If so, who has contacted you?



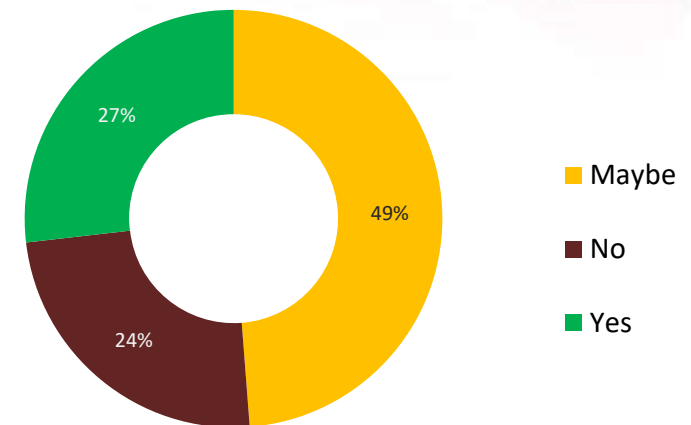
MetroQuest EV Charging Survey

Awareness & Planning Efforts

Select all of the Maryland funding programs for EVs or EVSEs that you are aware of and/or have been communicating to your community:



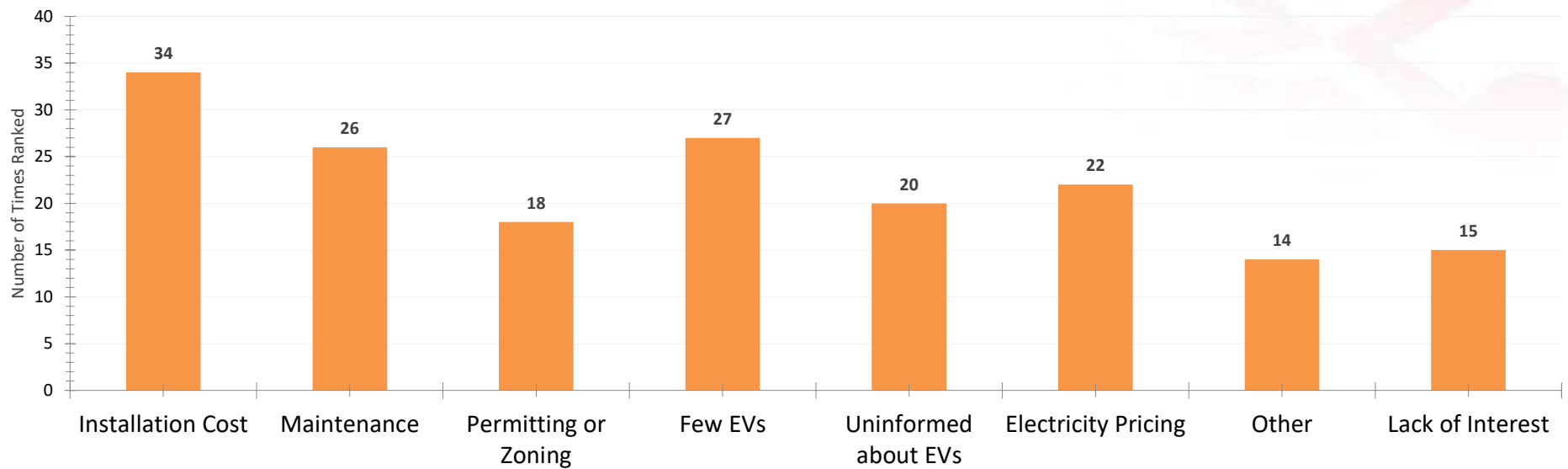
Are you planning on completing an EV infrastructure or EVSE plan in the future?



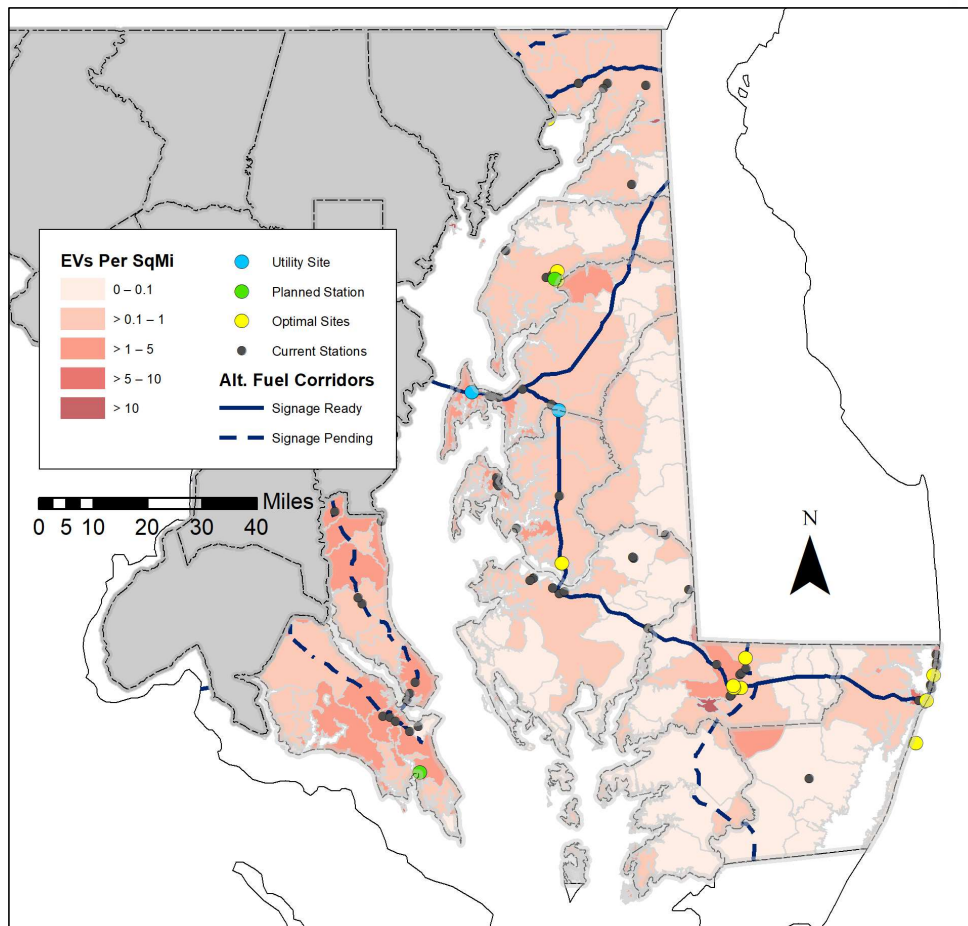
MetroQuest EV Charging Survey

Local Government Outreach Survey

Challenges to EV Implementation Ranked



Current Infrastructure & Opportunities- Eastern



Current Infrastructure:

- 70 Charging Stations
 - 42 < 1 Mi from AFC
 - 10 between 1-5 Mi from AFC
 - 18 > 5 Mi from AFC
- 203 Charging Outlets

Infrastructure Opportunities:

- 2 Utility Sites
- 2 Planned Stations (MetroQuest)
 - 1 Workplace
 - 1 Destination
- 11 Optimal Sites (MetroQuest)
 - 2 Corridor
 - 5 Destination
 - 3 Workplace
 - 1 No Response

Maryland ZEV Collaboration Webinars

Local Government Outreach Survey

KEY THEMES

Overall funding and installation costs

Planning for rural areas

Locations for EV charging stations

Codes/regulations

Partnerships with the state and private entities

Coordination among stakeholders



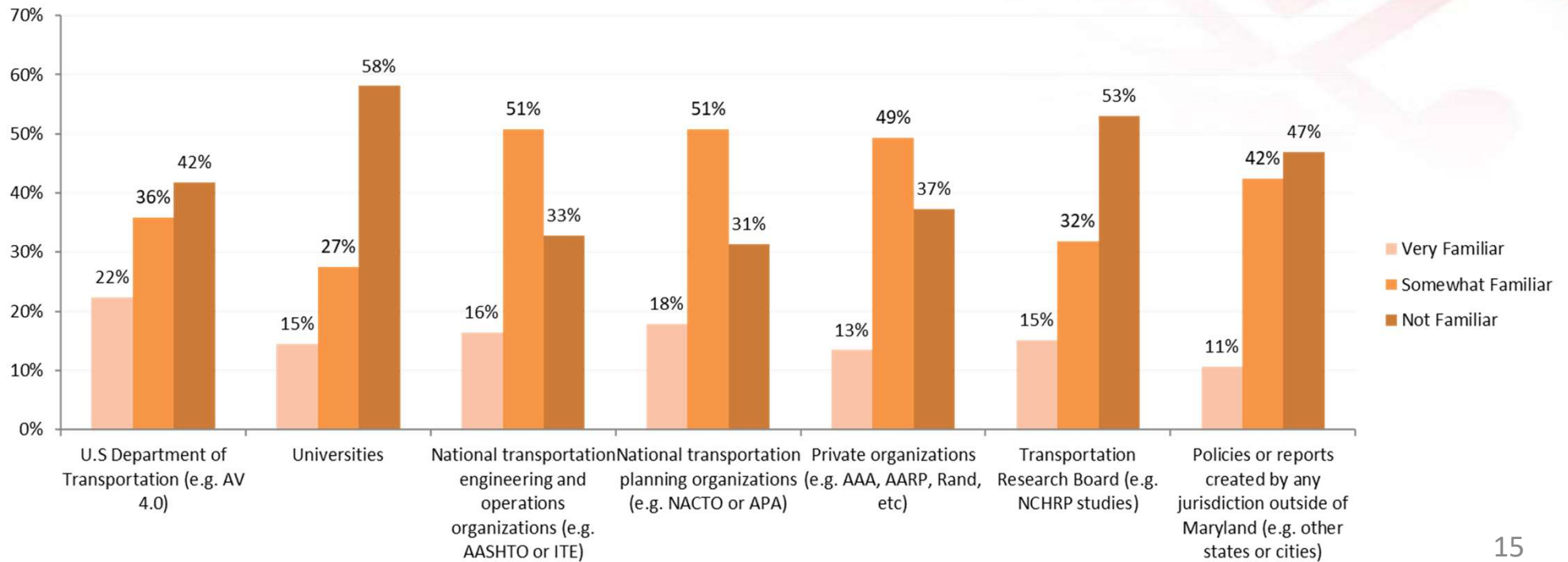
Emerging Technology Survey

Colleen Turner, MDOT TSO

Emerging Tech. [Survey Monkey]

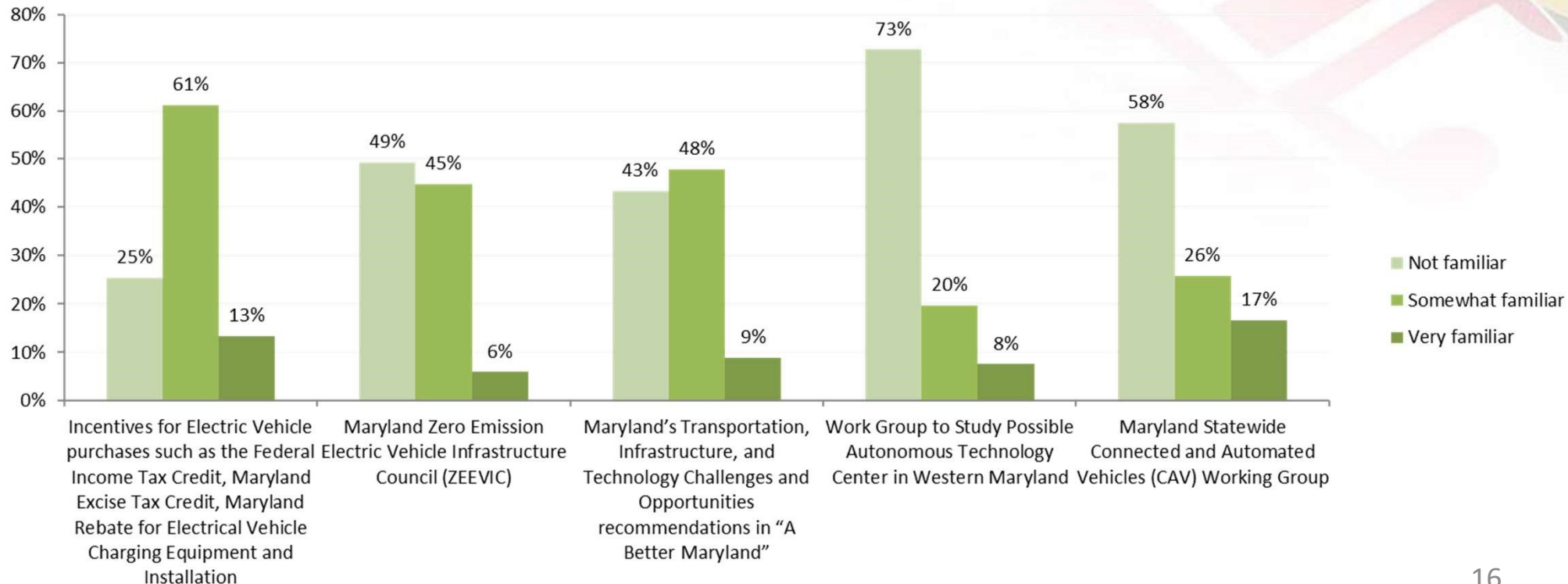
68 Respondents (~15% response rate)

Is your jurisdiction familiar with any of the following national entities' policy guidance documents and/or technical resources for emerging transportation technology?



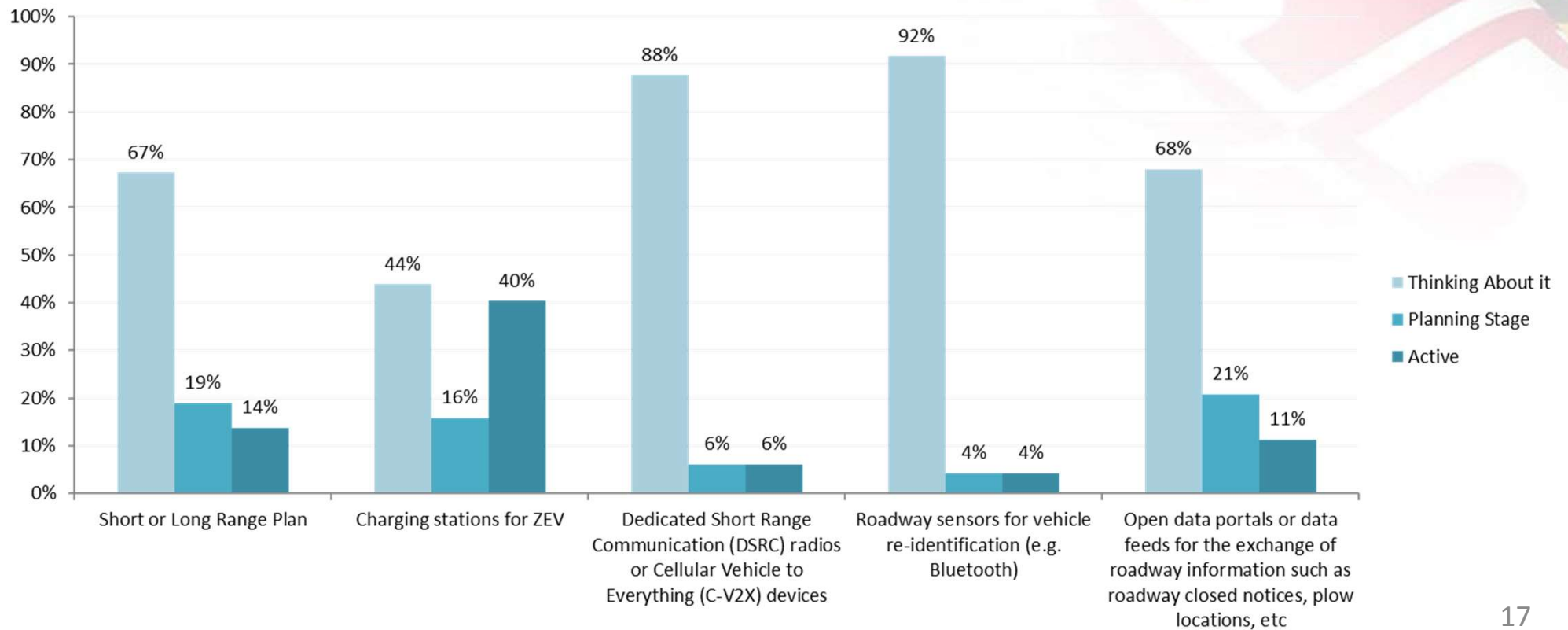
Familiarity with Existing Resources

Is your jurisdiction familiar with any of the following Maryland Emerging Technology Resources?



Planned & Deployed Technologies

Has your jurisdiction planned and/or deployed emerging transportation technologies



Emerging Technology Priorities

Emerging Technology Survey

- **Top priority:** Having a better understanding of how jurisdictions fit within a shared statewide ecosystem (score: 8/10)
- Having established planning tools, strategies, and state policy to help start the planning process (score: 7/10)
- Statewide conversations on the transportation system & the economy (score: 6/10)
- **Lowest priority:** Managing public perception ... such as the fear of automated ride-hailing vehicles (score: 4/10)

Discussion

Identifying Challenges and Opportunities

- What challenges are specific to this region?
- What successes have local agencies had that can be grown/replicated?

Maryland State Agencies Overview



MSEC/CFIP/CFTA

Install EVSE

ZEV MOUs

EV/EVSE
(Incentives/Rebates)

Chair/Staff ZEEVIC

Maryland Clean Cars
Program

Maryland Clean Cities
Coalition

Track ZEV Registrations

VW Settlement

AFC Corridors

Chair/Staff MCCC

Maryland Department of Environment

Environmental Issues

- NAAQS (National Ambient Air Quality Standards)
 - Non-attainment for Ozone
 - NOx greatest contributor to ozone
 - On road Mobile Sources are largest contributor to NOx in Maryland
- Climate Change
 - Due to geographic location, Maryland very vulnerable to effects of Climate Change
 - 2015 Maryland updated to the Maryland GGRA (Greenhouse Gas Reduction Act), requires 40% reduction by 2030
 - On-road mobile sources account for over a third of all GHG emissions

MDE – Environmental Actions

Maryland Clean Car Program

- Adopted in 2008 and implemented in 2011
- Adopts California's low emission vehicle program
- Includes ZEV mandate requiring manufacturers to make larger share of new vehicles for sale in Maryland ZEVs

Light Duty ZEV MOU

- Signed in 2013 and updated in 2018, includes 9 states
- Developed an Action Plan to increase the use of light duty ZEVs
- Set a goal of 300,000 plug-in vehicles in Maryland by 2025

MHD ZEV MOU

- Signed by 15 states and the District of Columbia in July 2020
- Will develop an Action Plan to support the implementation of MHD ZEVs
- Sets a 30% sales goal for MHD ZEVs by 2030

MDE – VW Settlement

Volkswagen Settlement Funds

Maryland Volkswagen Settlement Agreement (\$75.7 million)

- Targets NOx reductions, replaces older heavy-duty diesel engines (class 4-8) with new cleaner options and funds light duty charging infrastructure
- Projects must be completed by October 2027

Heavy –Duty Vehicle Replacement Program (approx. \$64 million)

- Proposals were due to MDE by May 6th, 2019; MDE received approx. 44 proposals
- MDE completed its review of proposals and is in process of finalizing funding and contracts

Light Duty Charging Infrastructure (approx. \$11.3 million)

- [Comments until Oct. 12th](#) and will begin to accept proposal late October. Three funding rounds
- Focus on workplace charging, state owned properties and corridor/Hub location

Maryland Energy Administration

MEA – Mike Jones, Transportation PM

- Maryland Clean Cities Coalition
 - Part of [US DOE Clean Cities program](#) to reduce reliance on foreign petroleum in transportation
 - National network, expertise and resources available
- Maryland Smart Energy Communities [\(MSEC\) Program](#)
 - Local governments can receive project funding in exchange for adopting sustainability policies (EE/RE/TR)
 - Light-duty EVs and fleet charging infrastructure
 - Less than 200 miles of all electric range: 100% of vehicle incremental cost up to \$3,750/vehicle
 - 200 miles +: 100% up to \$7,500/vehicle
 - 60% (charger + install) up to \$6,000/charger
 - Applications due 11/13/2020

MEA – Clean Fuels Incentive Program

Clean Fuels Incentive Program (CFIP)

- 2 AOI: public infrastructure (DCFC/hydrogen) and fleet vehicles (PHEV/BEV/FCEV)
- Reporting requirement (vehicles- 3 years, infrastructure- 5 years)
- Applications due 12/15/2020

Alternative Fuel Type	Vehicle Class	AER (for EV's only)	% of Incremental Cost Eligible for Grant Request	Maximum Grant Award (per new vehicle)
Electric (PHEV/BEV)	Class 3-8	0-99 miles	Up to 100%	\$25,000
		100+ miles	Up to 100%	\$50,000
Hydrogen (FCEV)	Class 1-2		Up to 100%	\$7,500
	Class 3-8		Up to 100%	\$50,000

MEA – Additional Incentive Programs

Electric Vehicle Supply Equipment [\(EVSE\) Rebate Program](#)

- First-come, first-served. Application submitted in arrears, no pre-approval.
- All charger deployments eligible, but geared at non-fleet L2 (workplace and/or publicly available chargers)
- Fall back option for fleet L2 (in case MSEC funding isn't secured)
- 40% up to \$4,000/charger

Clean Fuels Technical Assistance (CFTA) Program

- Not a grant program- local governments can receive TA to develop fleet electrification strategies
- First-come, first-served pilot/test-of-concept
- Anticipate 4-8 projects
- More details/opening coming by mid-October

Maryland Department of Transportation

Zero Emission Electric Vehicle Infrastructure Council (ZEEVIC)

- Created in 2011 Through Legislation
- Meets every other month
- Working Groups meet in off-months
- Annual Report Due in December
- [GIS StoryMap](#) Illustrating Goals & Progress



Maximize the use of grant and alternative funding opportunities for EV / EVSE in MD.



Develop an approach to address the Right to Charge and EV Parking / Anti-icing.



Ensure EV readiness through strategic infrastructure planning that focuses on corridors, workplaces, and communities.



Continue education and outreach coordination with a focus on diversity and equity.



**MARYLAND
ZERO EMISSION**
Electric Vehicle Infrastructure Council



Received 2019 Visionary Award Greater Washington Region Clean Cities Coalition (GWRCCC)

MDOT – ZEV Public Outreach Efforts

Table 4: 2019 Public Outreach

Date	Outreach Event	Individuals/ Touchpoints	Outreach Languages
07/20/2019	World Heritage Festival	141	English
08/05/2019	Festival Latino de Maryland	251	English, Spanish
08/11/2019	Latin Heritage Festival	754	English, Spanish
09/07/2019	Caribbean Food and Wine Festival	351	English
09/15/2019	Hagerstown Hispanic 13 th Annual Festival	375	English, Spanish
09/21/2019	42 nd Annual Korean Festival	1,027	English, Korean
10/20/2019	Howard County Diwali Festival	201	English



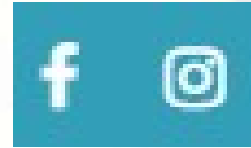
Statewide
25 Events
7,370
Touchpoints

- St. Mary's U.S. Oyster Festival, 2017
- Ocean City SpringFest, 2018

Eastern
2 Events
431
Touchpoints

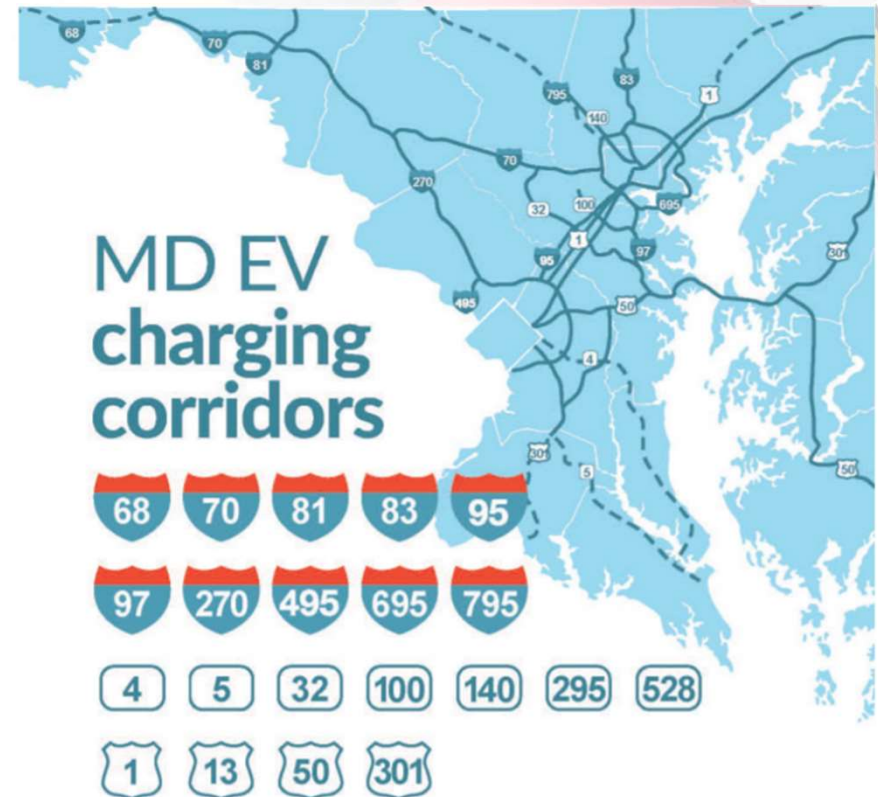


MDOT – #MarylandEV



MDOT – Alternative Fuel Corridors

- Electric Vehicle Charging Corridors
 - 21 Corridors in MD
 - Maryland featured in [Alternative Fuel Corridor National Report](#)
- I-70 through WV
- I-81 VA-PA
- Interest from PA in US 15
- Signage Plan Pending



Additional Resources for Your Region

- [Delmarva EVsmart Program](#) – Installing public charging stations
- SMECO – [partnering with Greenlots](#) to install up to 60 public charging stations.
- Easton Town Council approves [EV charging Stations](#) in partnership between Town and Easton Utilities.



Weston Young, Rural Representative
Assistant Chief Administrative Officers, Worcester County

Liam Davis, Urban Representative
Baltimore City Department of Transportation



David Edmondson, Urban Representative
Planner, City of Frederick

Nina Forsythe, Rural Representative
Commissioner, City of Frostburg

Discussion

Moving Forward

- Where are the opportunities for local agencies to advance ZEV within the region?
- How can state agencies and others support advancement of ZEV?
- What is the best way to reach the public?

Recap & Next Steps

➤ Available State Incentives

- MDE / VW
- MEA Incentives
- Utility EV Charging Stations

➤ Other Public-Private Partnerships

- Strategic Planning
- Attend ZEEVIC / Work with Local Representatives / Clean Cities Coalitions
- Social Media and Websites
- Opportunities for Continuing this Conversation and / or Facilitating Local Discussions

➤ Attend Statewide Webinar - Wednesday, October 28 | 2 – 3:30 PM

<https://attendee.gotowebinar.com/register/6822216073273313296>

State Agency Contact Information



Colleen Turner

Maryland Department of Transportation

Email: cturner@mdot.maryland.gov



Mike Jones

Maryland Energy Administration

Email: michael.jones1@maryland.gov



Tim Shepherd

Maryland Department of the Environment

Email: tim.shepherd@maryland.gov

Resources

- MDE VW Information: mde.vw@maryland.gov
- Maryland EV: <https://marylandev.org/>
- ZERO Emission Electric Vehicle Council (ZEEVIC):
• [http://www.mdot.maryland.gov/newMDOT/Planning/Electric_Vehicle/About the Council.html](http://www.mdot.maryland.gov/newMDOT/Planning/Electric_Vehicle/About_the_Council.html)
- MDE EV Incentives:
• [https://mde.maryland.gov/MarylandGreen/Documents/EV_dealershipflyer online.pdf](https://mde.maryland.gov/MarylandGreen/Documents/EV_dealershipflyer_online.pdf)
- US DOE Alternative Fuels Data Center: <https://afdc.energy.gov/>