

NEVI & ZEEVIC

Transportation Planning Board

R. Earl Lewis, Jr. – Deputy Secretary

Maryland Department of Transportation

December 21, 2022

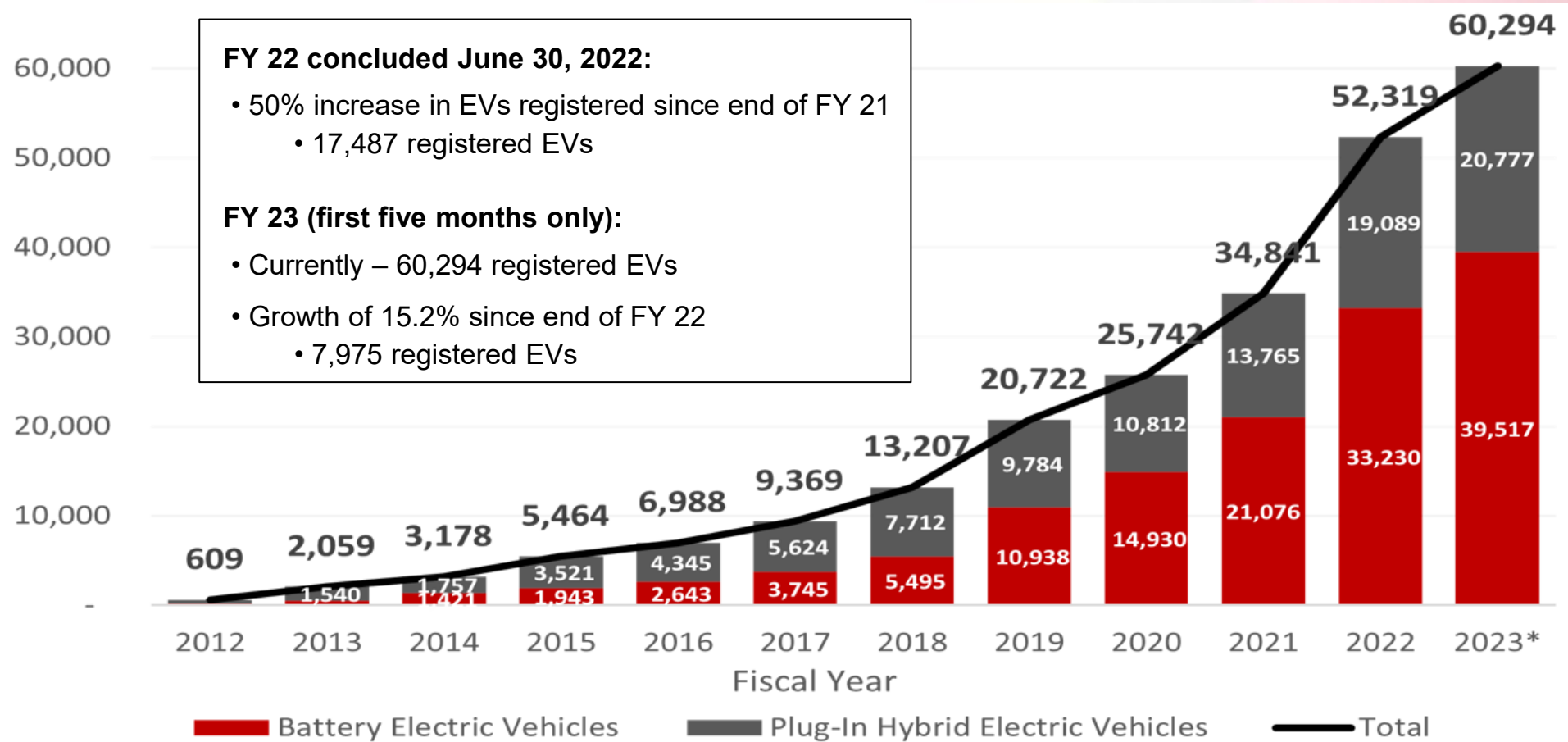


NEVI & ZEEVIC Update

- EV Registrations in Maryland
- IIJA & NEVI
- MDOT's NEVI Plan
- Other EV Charging Programs
- ZEVs
- Equity
- ZEEVIC
- Other Partnerships

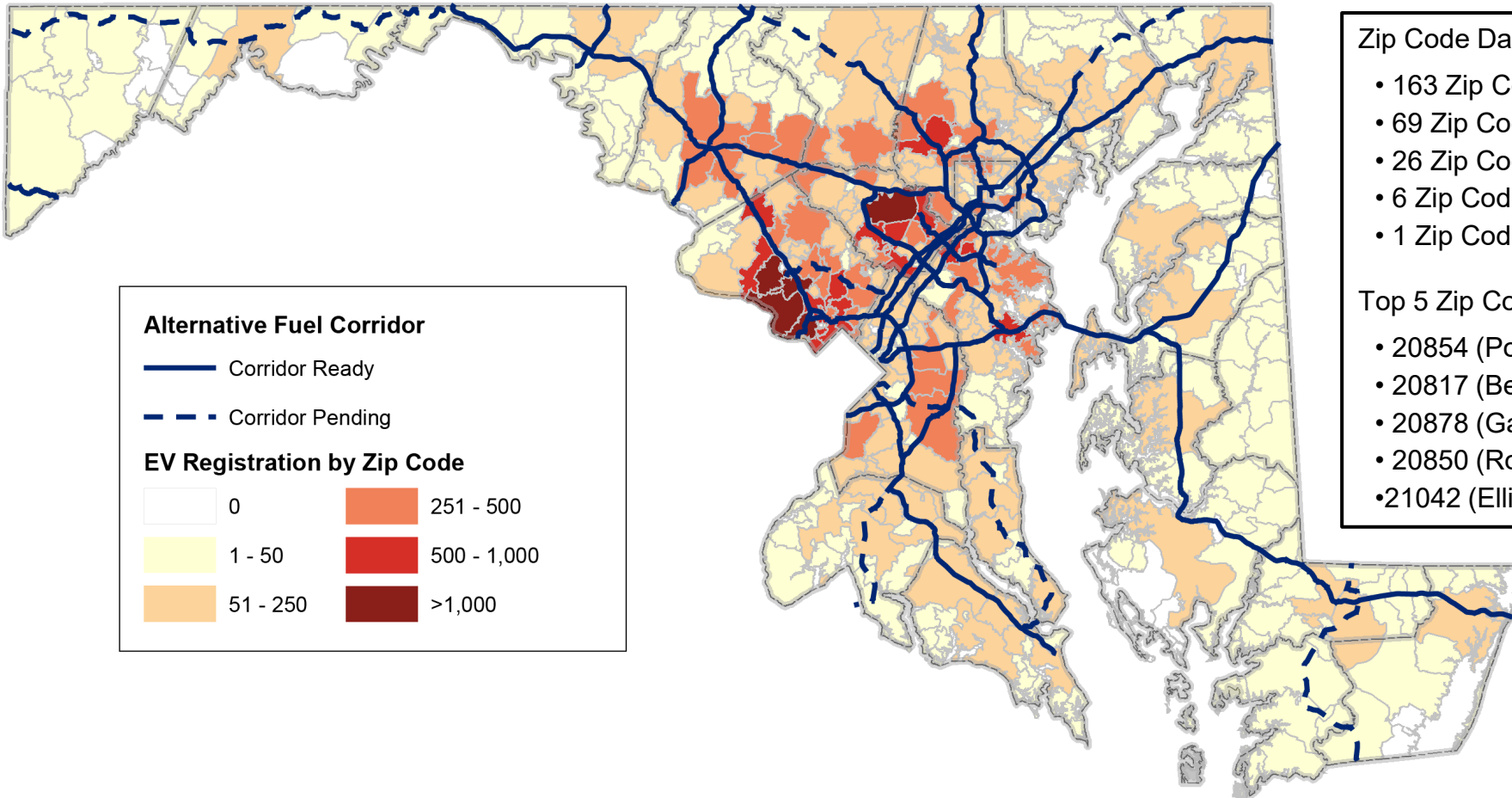


Registered EVs at the Close of Fiscal Year



*The end of FY is June 30th. FY 2023 total reflects EV registration as of November 30, 2022.

Registration by Zip Code



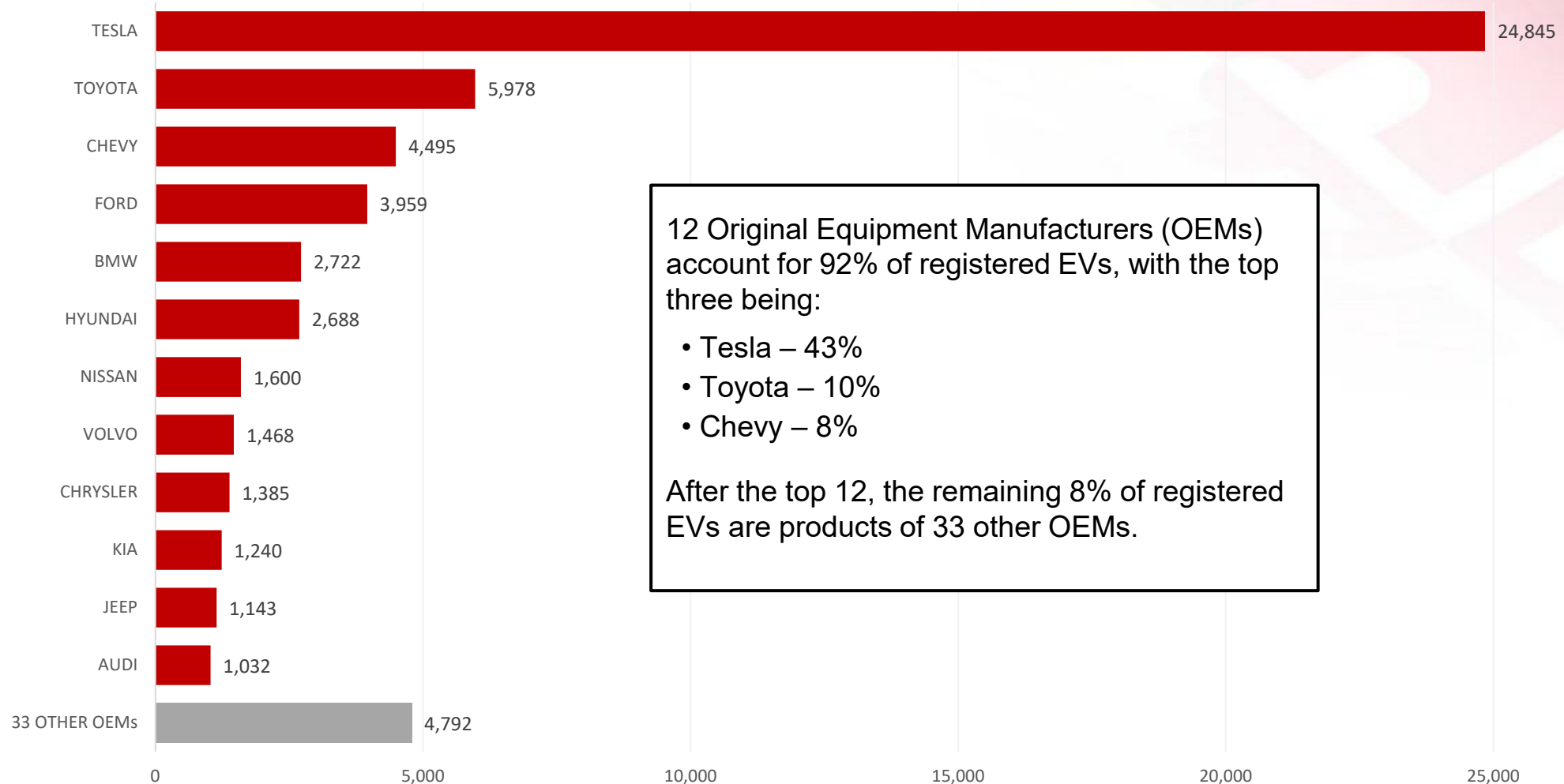
Zip Code Data:

- 163 Zip Codes > 100 EVs
- 69 Zip Codes > 250 EVs
- 26 Zip Codes > 500 EVs
- 6 Zip Codes > 1,000 EVs
- 1 Zip Codes > 2,000 EVs

Top 5 Zip Codes:

- 20854 (Potomac) – 2,097 EVs
- 20817 (Bethesda) – 1,581 EVs
- 20878 (Gaithersburg) – 1,518 EVs
- 20850 (Rockville) – 1,505 EVs
- 21042 (Ellicott City) – 1,125 EVs

Makes Registered



12 Original Equipment Manufacturers (OEMs) account for 92% of registered EVs, with the top three being:

- Tesla – 43%
- Toyota – 10%
- Chevy – 8%

After the top 12, the remaining 8% of registered EVs are products of 33 other OEMs.

NEVI Program

- Goal of **500,000** charging stations nationwide
 - **4 fast chargers** every **50 miles** and within **1 mile** of corridors
- **\$60 million** for Maryland over five years
- Also available is **\$2.5 billion** in discretionary grants through other programs:
 - Corridor Charging grants = **\$1.25 billion**
 - Community Charging grants = **\$1.25 billion**

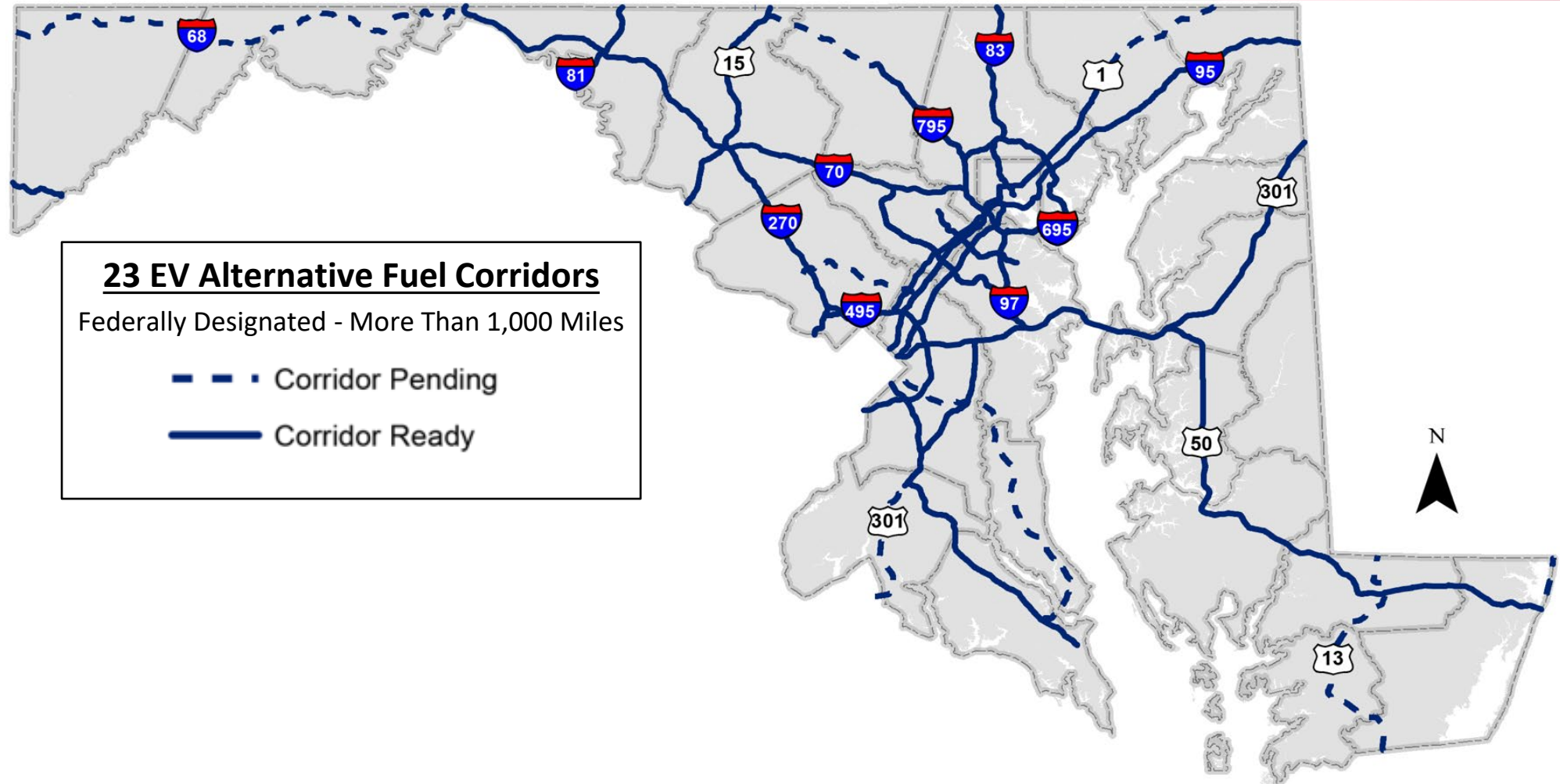


MDOT's NEVI Program

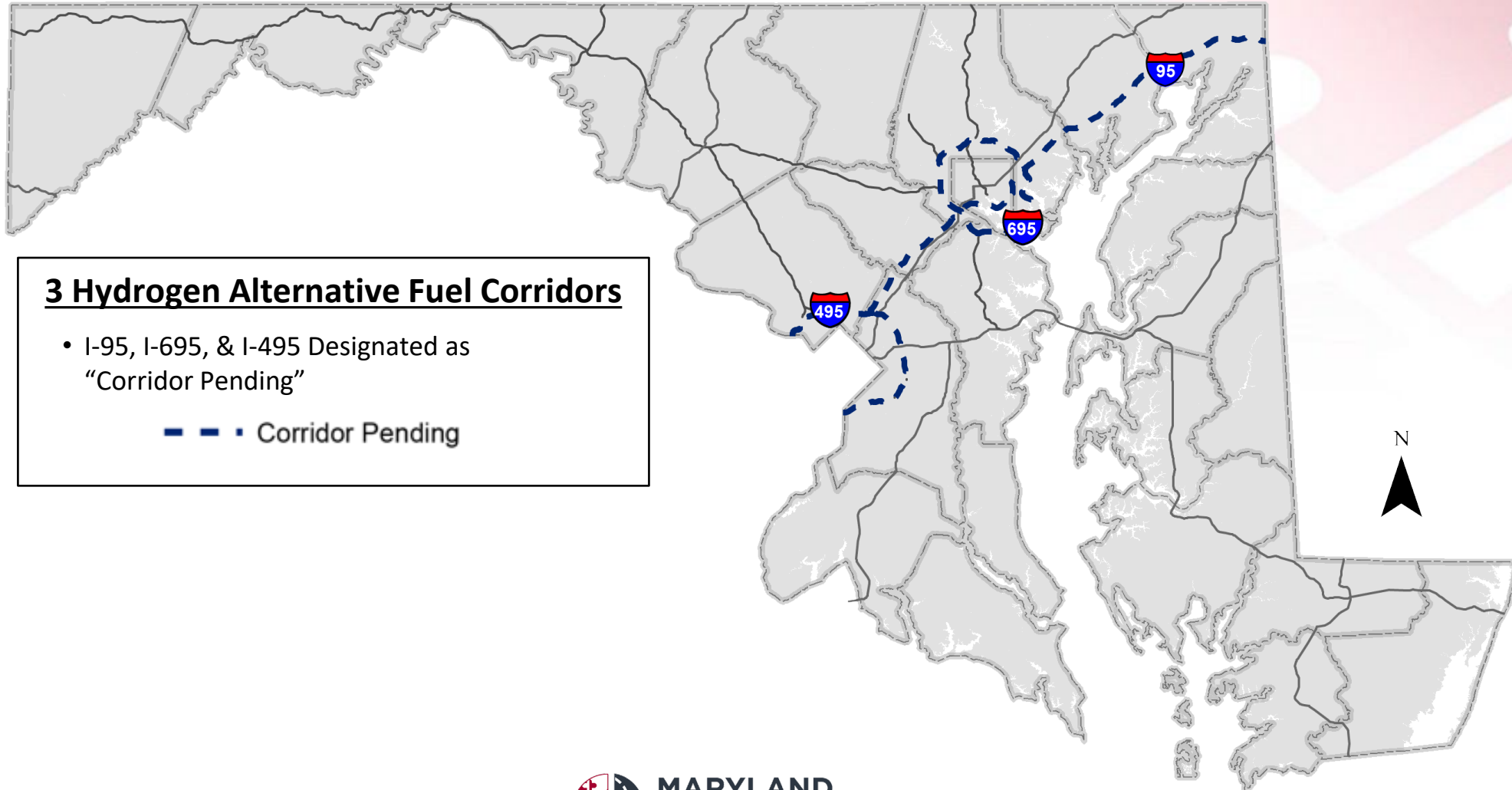
- MDOT one of the first to submit plan on **July 15**
- Among first group of states approved **September 14**
- **23 Alternative Fuel Corridors**
 - Including **3 designated as pending hydrogen fuel corridors**



23 EV Alternative Fuel Corridors






Hydrogen Alternative Fuel Corridor

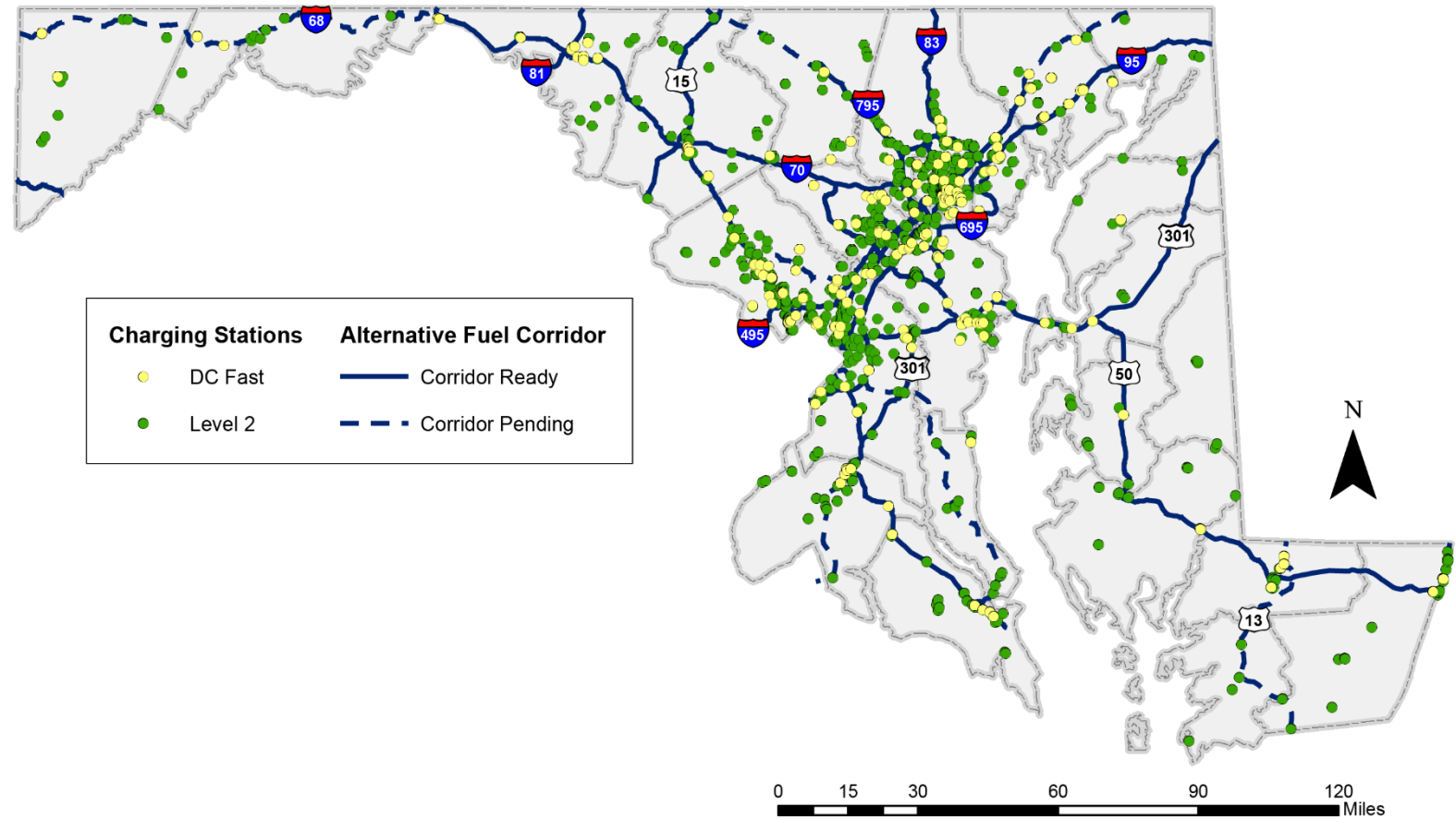


Charging Station Locations in Maryland

Maryland by the Numbers*:

-  **60,294**
Registered EVs
-  **1,188**
Charging Stations
3,398
Outlets
-  **23**
Alt. Fuel Corridors

*As of November 30, 2022



Other EV Charging Programs

Maryland Public Service Commission

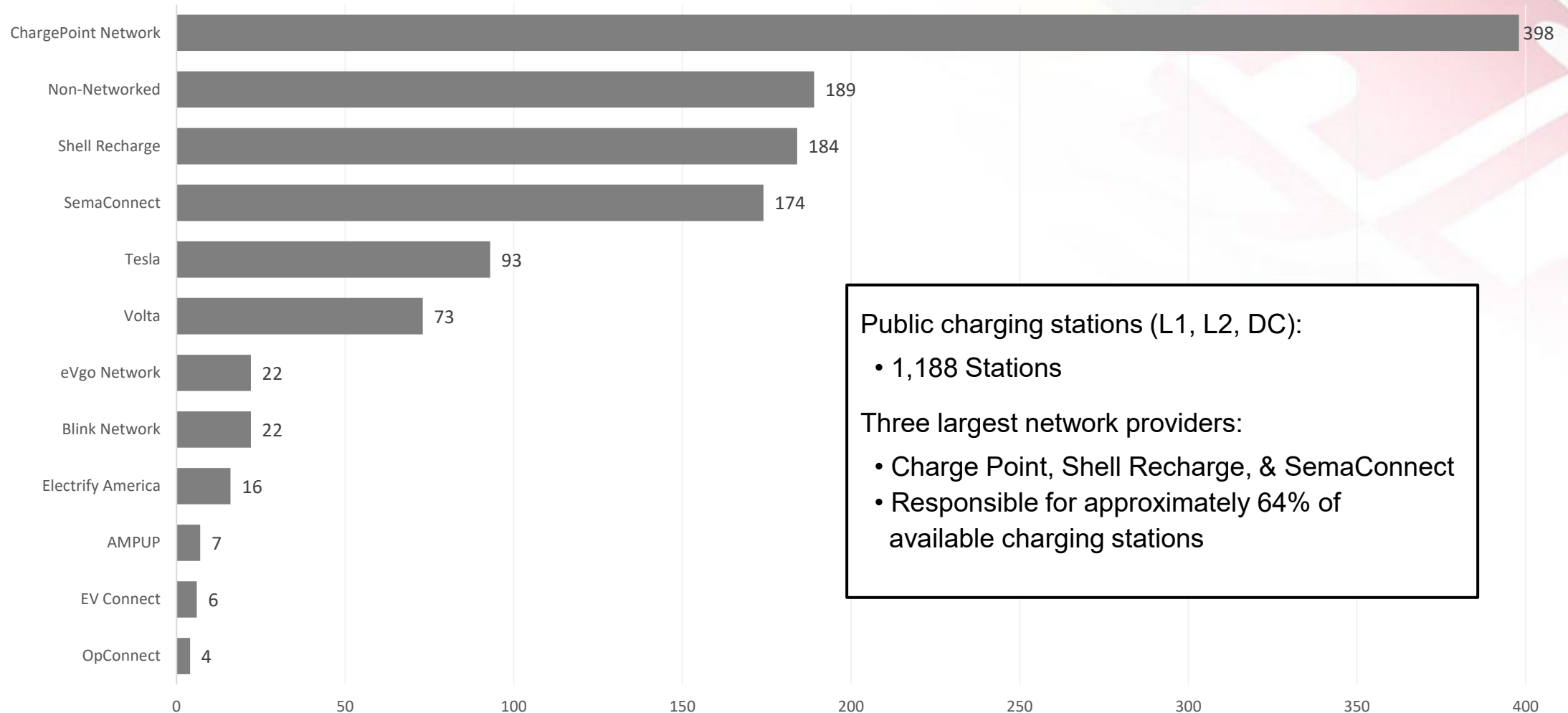
- 900 public charging stations
- Subsidies for at-home charging equipment
- Public chargers at state park and ride locations

BGE & Lyft Partnership

- Public chargers at BWI Thurgood Marshall Airport



Charging Networks – All Stations



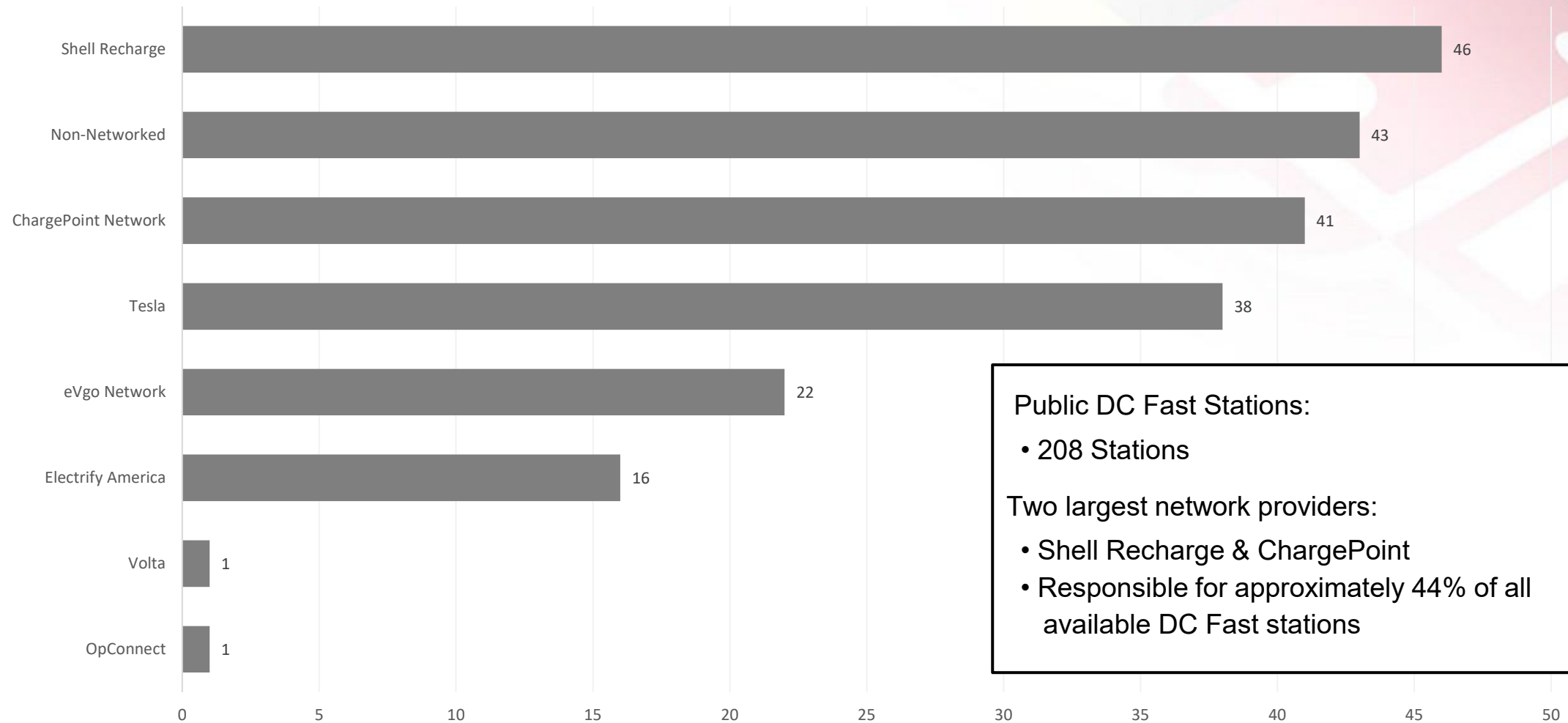
Public charging stations (L1, L2, DC):

- 1,188 Stations

Three largest network providers:

- Charge Point, Shell Recharge, & SemaConnect
- Responsible for approximately 64% of available charging stations

Charging Networks – DC Fast



Public DC Fast Stations:

- 208 Stations

Two largest network providers:

- Shell Recharge & ChargePoint
- Responsible for approximately 44% of all available DC Fast stations

Addressing Equity



ACCESSIBILITY

Ensuring all Marylanders and Visitors Have Access to Reliable EV Charging

Geographic Diversity

Rural/Urban

Corridors/Communities

Multi-Lingual Graphic User Interfaces

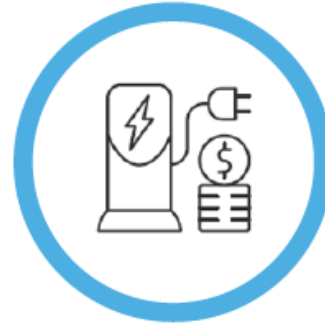
ADA Compliance

Multi-Unit Dwellings

Employment Centers

Safety While Charging

Grid Reliability



AFFORDABILITY

Creating Incentives, Innovations, and Systems that Increase Affordability of EV Ownership and Charging

Leveraging state, local, federal, and private funding

Cost of Vehicles

Cost of Charging

Mobility Hubs

Carshare

Rideshare

ZEV Transit



COMMUNICATION

Meeting People where they are, Listening, and Educating

Multi-Lingual Materials

Events

Webinars

Surveys and Polls

Geofencing

Website

Social Media

Calculators

ZEEVIC

2011

Electric Vehicle Infrastructure Council (EVIC)
established by MD State Legislature

2019

Membership, responsibilities and reporting requirement expanded:

- Zero emission vehicles (ZEVs)
- Fuel cell electric vehicles (FCEVs)

Renamed Zero Emission Electric Vehicle Infrastructure Council

2020

Membership expanded further
Sunset date extended to 2026



EVs & ZEVs

- 25% of passenger vehicle purchases for state fleet must now be ZEVs
- MTA aggressively transitioning towards zero-emission bus fleet
 - Investing more than \$436 million
 - First buses expected to arrive mid-2023
- MTA will convert 50% of its transit bus fleet to ZEVs by 2030
 - That's 350 buses out of a 700-bus fleet
- MAA planning to replace parking lot shuttle buses at BWI Airport with electric models



IRA Tax Incentives

EV & Solar Infrastructure

EXTENDED & EXPANDED TAX CREDITS FOR EV CHARGERS & CLEAN ENERGY

- IRA restores expired tax credits for installing EV chargers in homes and businesses

ALTERNATIVE REFUELING PROPERTY

- Targets accelerated installation of EV charging infrastructure

INVESTMENT TAX CREDIT

- Provides a tax credit based on capital investment in a variety of renewable and conventional energy technologies

ENERGY INVESTMENT CREDIT

- Tax credit for capital investment to deploy a variety of qualified clean energy technologies

CLEAN ELECTRICITY INVESTMENT CREDIT

- A technology neutral tax credit for capital investment to deploy clean energy facilities and storage technologies

ENERGY EFFICIENT COMMERCIAL BUILDINGS DEDUCTION

- A deduction for building energy efficient commercial buildings or to retrofit commercial buildings to become energy efficient

Multi-State Agreements

- **Mid-Atlantic Electrification Partnership**
 - D.C., West Virginia, and Virginia
- **Multi-State ZEV Action Plan**
 - California, Connecticut, Maryland, Massachusetts, New York, Oregon, Rhode Island and Vermont
- **Multi-State ZEV Task Force**
 - California, Colorado, Connecticut, Hawaii, Maine, Maryland, Massachusetts, Nevada, New Jersey, New York, North Carolina, Oregon, Pennsylvania, Rhode Island, Vermont, Virginia, Washington and Washington, D.C.
- **Mid-Atlantic Electric School Bus Experience (MEEP)**
 - Maryland, New Jersey, Pennsylvania, Virginia and Washington, D.C.



Thank You!



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