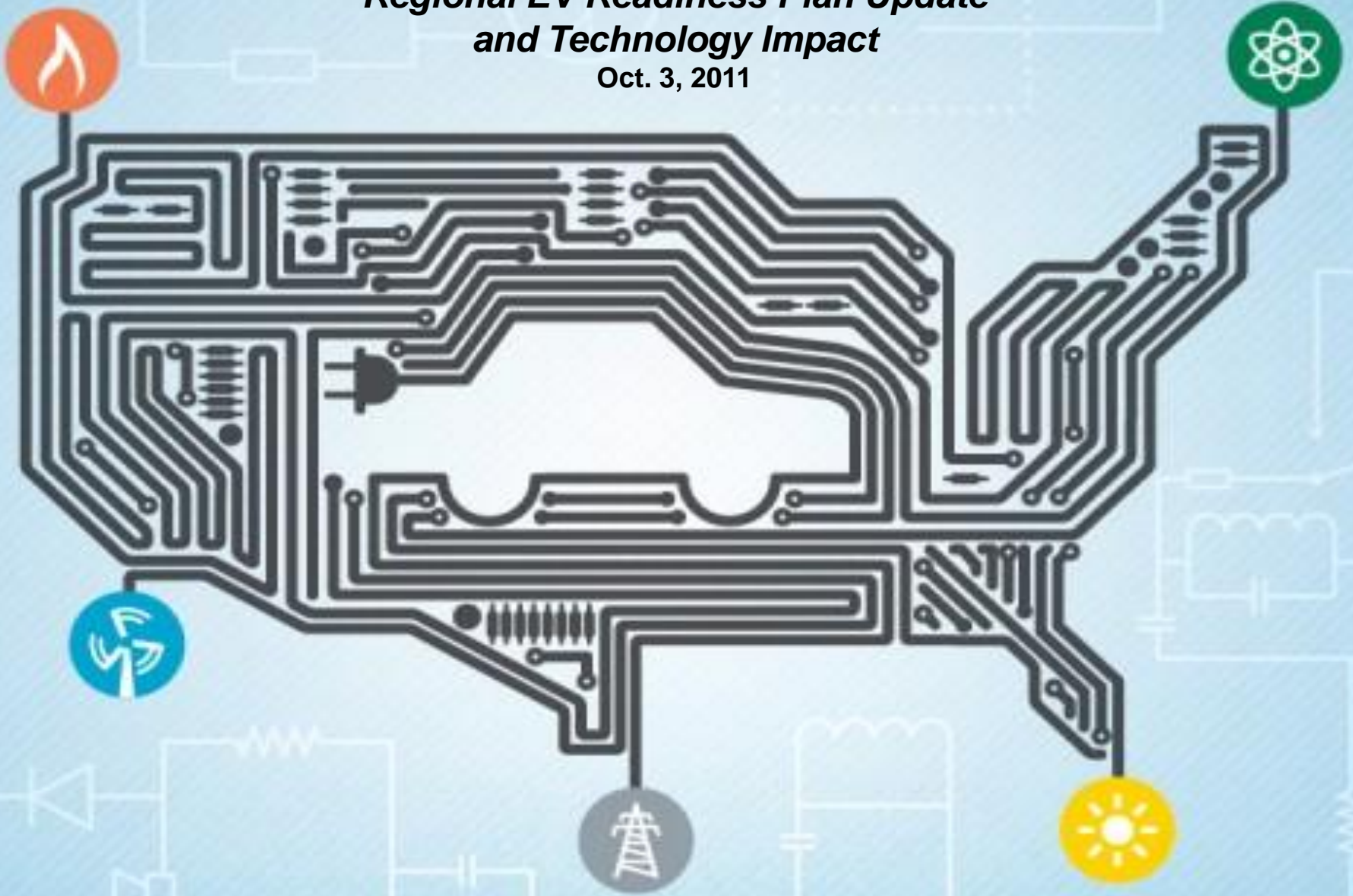


Regional EV Readiness Plan Update and Technology Impact

Oct. 3, 2011



Metropolitan Washington
Council of Governments

Joan Rohlf

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MWCOG

Metropolitan Washington Council of Governments (“COG”)



Region Forward is our vision. It's a commitment by COG and its 21 member governments, who together seek to create a more accessible, sustainable, prosperous, and livable National Capital Region.

Kick Start from Stimulus-funding

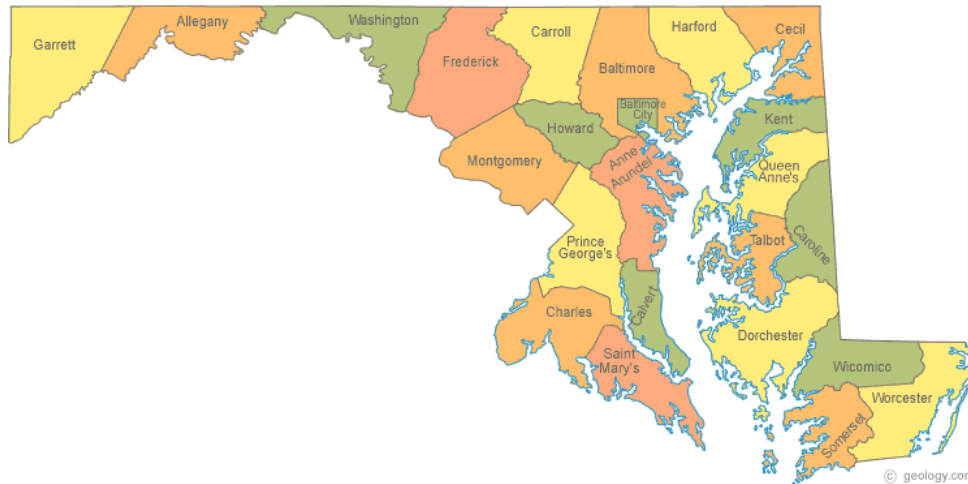
- ChargePoint America Program , 2009
 - Coulomb Technologies - \$30 mill from DOE ARRA
 - Partners - GM, Ford, and SMART
 - 5,000 Level II chargers at no cost to 9 metropolitan areas
 - Washington Region: DC, Prince George's Co,
 - Frederick, Montgomery County; in VA: Alexandria, Manassas and Vienna

- The EV Project, 2009
 - ECotality North America –DOE award
 - Initially \$99.8 mill; additional \$15 mill
 - Partners – Nissan and GM
 - Install 14,000 Level II charges in 18 cities and the District
 - No cost *residential* charger to qualifying participants of the program
 - Majority of installation paid for by project



Maryland EV Grants, 2010

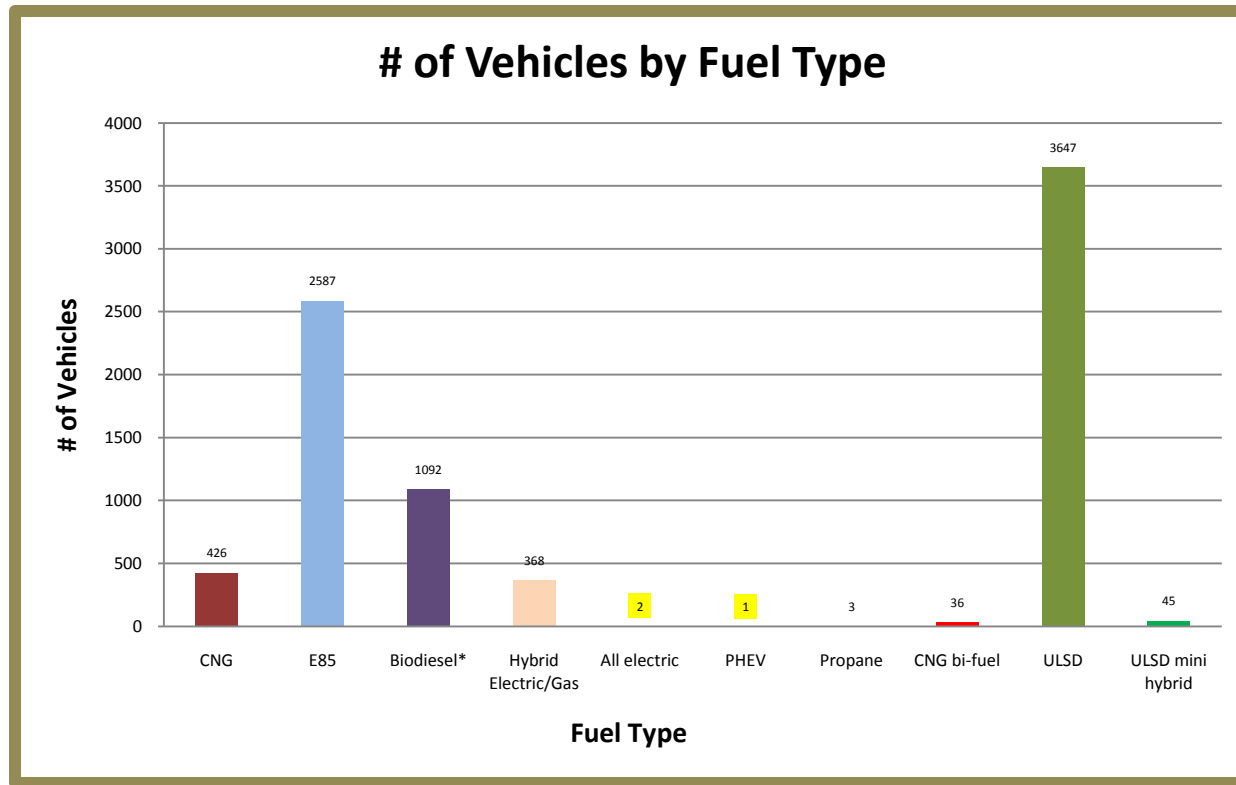
- MD Electric Vehicle Infrastructure Program (EVIP)
 - ARRA stimulus funds, \$1,000,000 awarded to MEA
 - Electric Re-Charging Infrastructure (ECI): 65 charging station awards
 - Baltimore Electric Vehicle Initiative (BEVI), Montgomery County, Prince Georges' County, Frederick
 - Truck Stop Electrification (TSE) - grants for the installation of Truck Stop Electrification units at facilities throughout the State, I-95 Corridor



EV Planning in Washington, DC-MD-VA Region

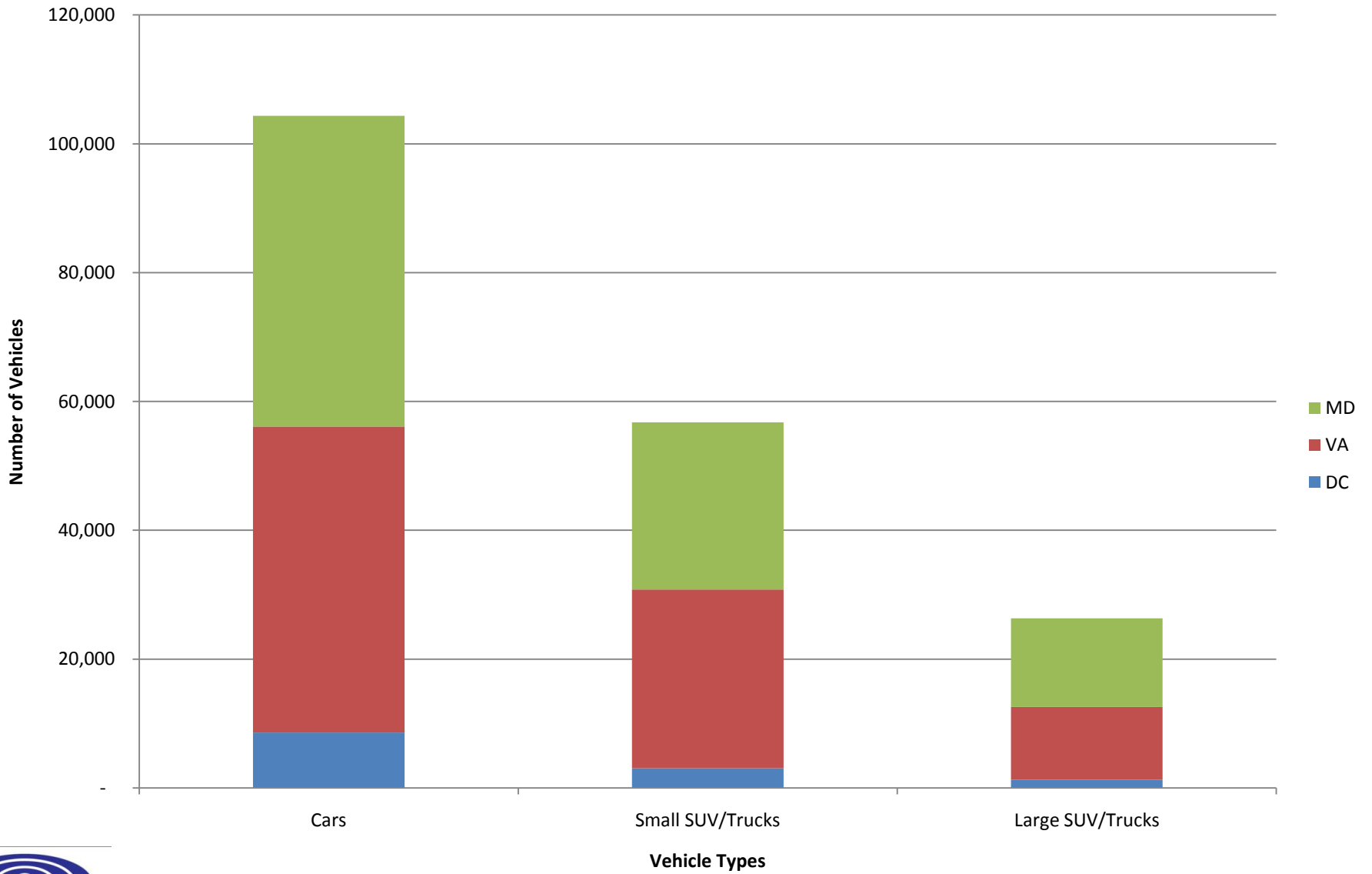
- Local government interest in EV
 - EVSE and OEMs introducing EV's to region
 - Stimulus grants: Chargepoint America, Ecotality
 - Questions about permitting, infrastructure, location of charging stations
 - Request for Regional Coordination

Fleet Survey Results, Jan.2011



FUELS: CNG: Compressed Natural Gas, E85: Ethanol, Biofuels, Hybrid electric, All-electric, PHEV: Plug-in hybrid Electric Vehicle, Propane, ULSD: Ultra low sulfur diesel

Potential Vehicle Annual Turnover



EV Workshop

April 29, 2011



– Purpose

- To examine successful local and regional EV readiness strategies
- To begin the conversation on a regional level on how to effectively and collectively transition to EV transportation technology

– Content and Participants

- Role of area utilities
- National and regional perspectives by DOE and industry experts
- Vehicle showcase of EV technology

– Expected Outcome

- A draft framework to establish a regional EV readiness network



Why We Need a Regional Network and Strategy

- Coordinated approach will smooth way for EV deployment & adoption
- Success of effort benefits the entire region
- Manage impact on the transmission grid as EV adoption grows



NYSERDA Proposal

- Northeast Regional EV Network Planning
 - In response to Clean Cities Solicitation
- Partners
 - TCI
 - Northeast & Mid Atlantic Clean Cities
 - Georgetown Climate Center
 - NASEO
- Deliverables
 - Establish stakeholder advisory group
 - Literature review of market barriers, electric grid impacts and existing plans
 - Data analysis of locations
 - Guidance and training documents for local building and , electrical code officials
 - List of recommended training courses for EV installers, permitters and inspectors



EV Planning, Washington Region

- COG and GWRCC partners in EV Planning
- Washington Regional EV Coalition
- EV Planning Workgroups formed, 9/27/11
 - Planning & Policy (permits, zoning, building codes, rates)
 - Infrastructure Planning (demand, location of charging stations, private/public investment)
- Membership:
 - Local govts, utilities, EVSE manufacturers, Wal-mart, Zip Car, etc.

EV Planning Workgroup Participants



Participants

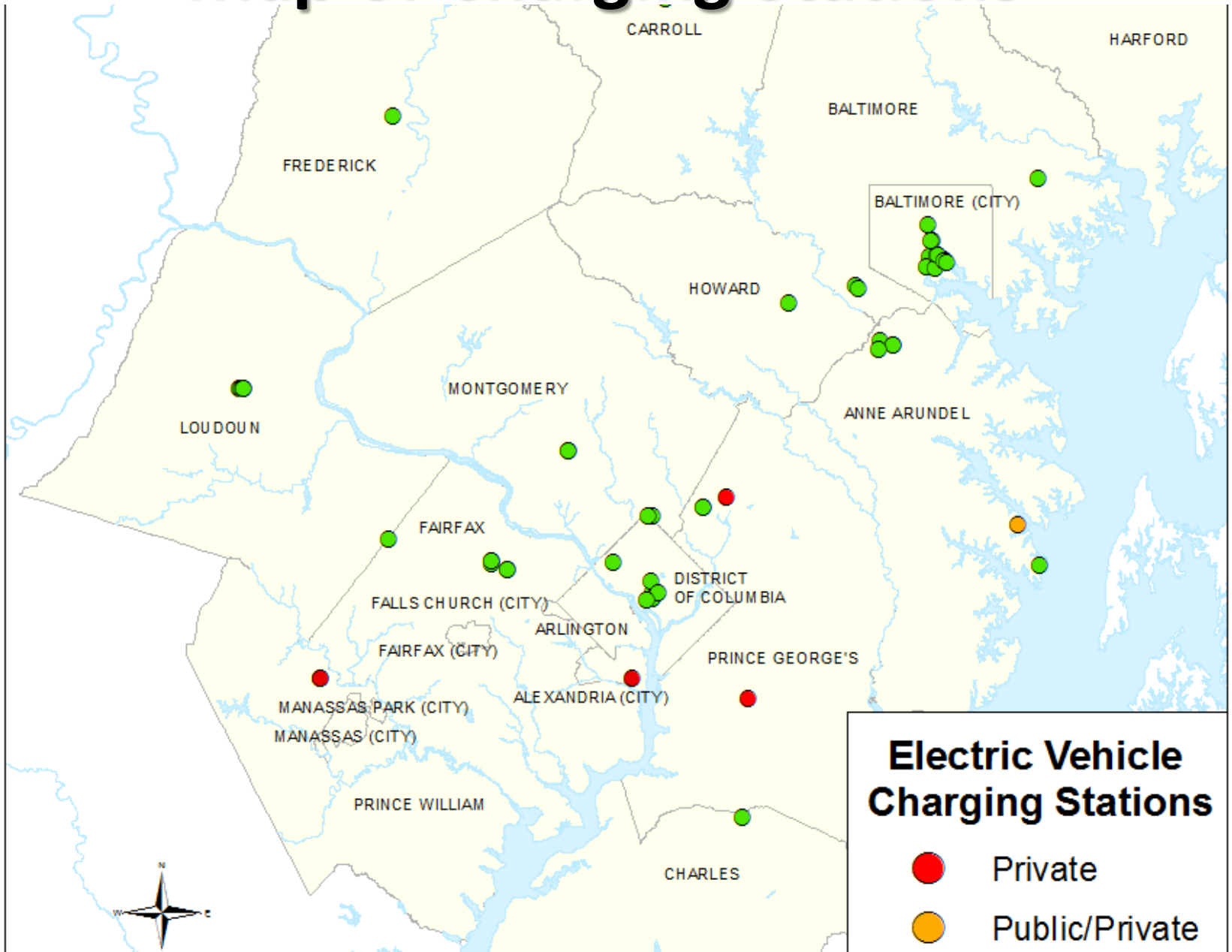
- Local government transportation and energy planners
- EVSE manufacturers
- Georgetown Climate Center
- Electric Drive Transportation Association
- Electric Vehicle Association of Greater Washington DC
- **Kick-off Meeting: Sept. 27th**
- **Next Meeting: Oct. 18th**

COG In-house Data

- Travel Demand Model
- Household Survey
 - Both used to depict intensity of vehicle usage patterns
- Potential Vehicle Turnover Rate
 - Provides potential # of replacements by vehicle classification



Map of Charging Stations



COG EV Planning Team

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