

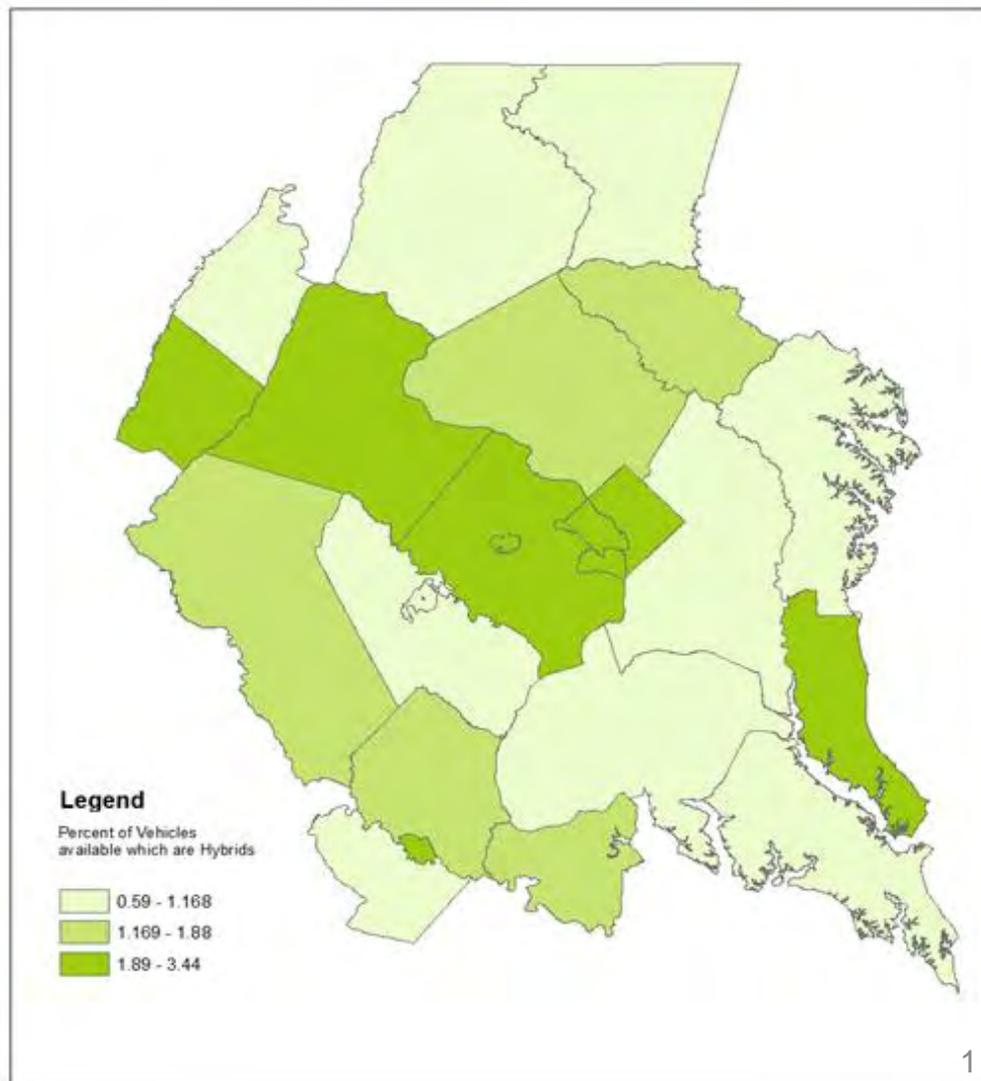
Future of EV Deployment, Metropolitan Washington Region

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Metropolitan Washington
Council of Governments



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.

Need for EV Planning, Coordination Washington, DC-MD-VA Region

- Local government interest in EV
 - Stimulus grants: Chargepoint America, Ecotality
 - EV's for sale in region in 2010
 - Questions about permitting, building codes, zoning and parking ordinances, location of charging stations
 - Need for regional coordination to facilitate consistency, interoperability, efficient use of public resources

Kick Start from Stimulus-funding

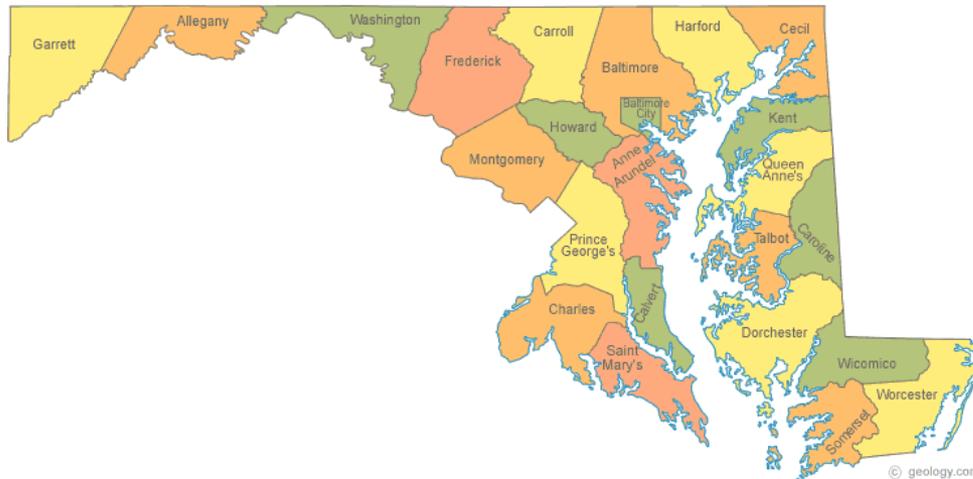
- ChargePoint America Program , 2009
 - Coulomb Technologies - \$30 mill from DOE ARRA
 - Partners - GM, Ford, and SMART
 - 5,000 Level II chargers at no cost to 9 metropolitan areas
 - Washington Region: DC, Prince George's Co, Frederick, Montgomery County; in VA: Alexandria, Manassas and Vienna

- 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 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
- Cleaner fuel benefits health, environment and sustainability of the region
- Managed impact on the transmission grid as EV important as numbers increase



Transportation & Climate Initiative

TCI EV Project

- Northeast Regional EV Network Planning
 - In response to Clean Cities Solicitation
- Partners
 - Transportation & Climate Initiative (TCI)
 - 10 states
 - 15 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
- EV Planning Workgroups/Stakeholders
 - Planning & Policy (permits, zoning, building codes, rates)
 - Infrastructure Planning (demand, location of charging stations, private/public investment)
- Stakeholders provide direction, feedback and data-sharing on EV deployment issues

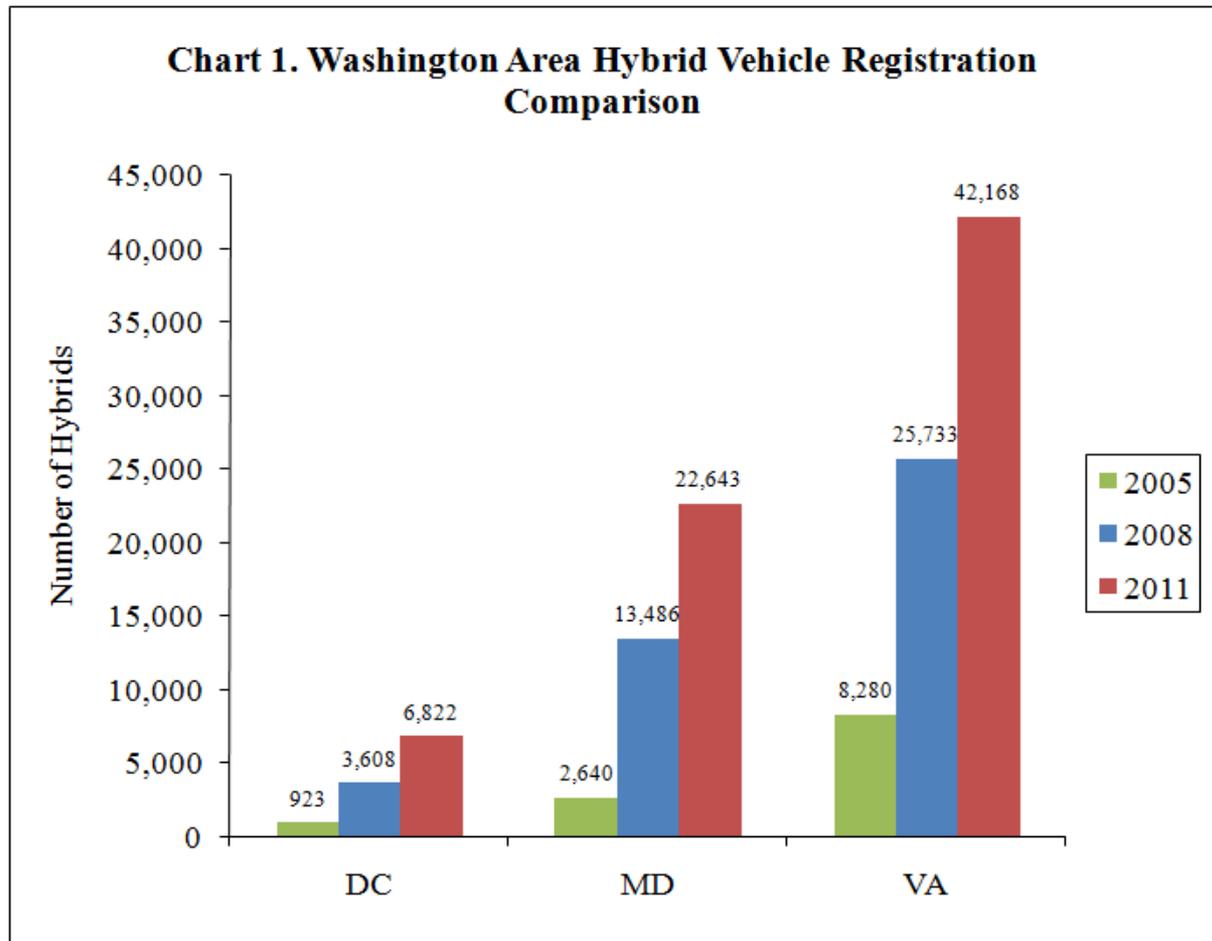


COG In-house Data

- Travel Demand Model
- Household Survey
 - Both used to depict intensity of vehicle usage patterns
- Vehicle registration data and Vin decoder software



Growth in Hybrids, 2005-2010



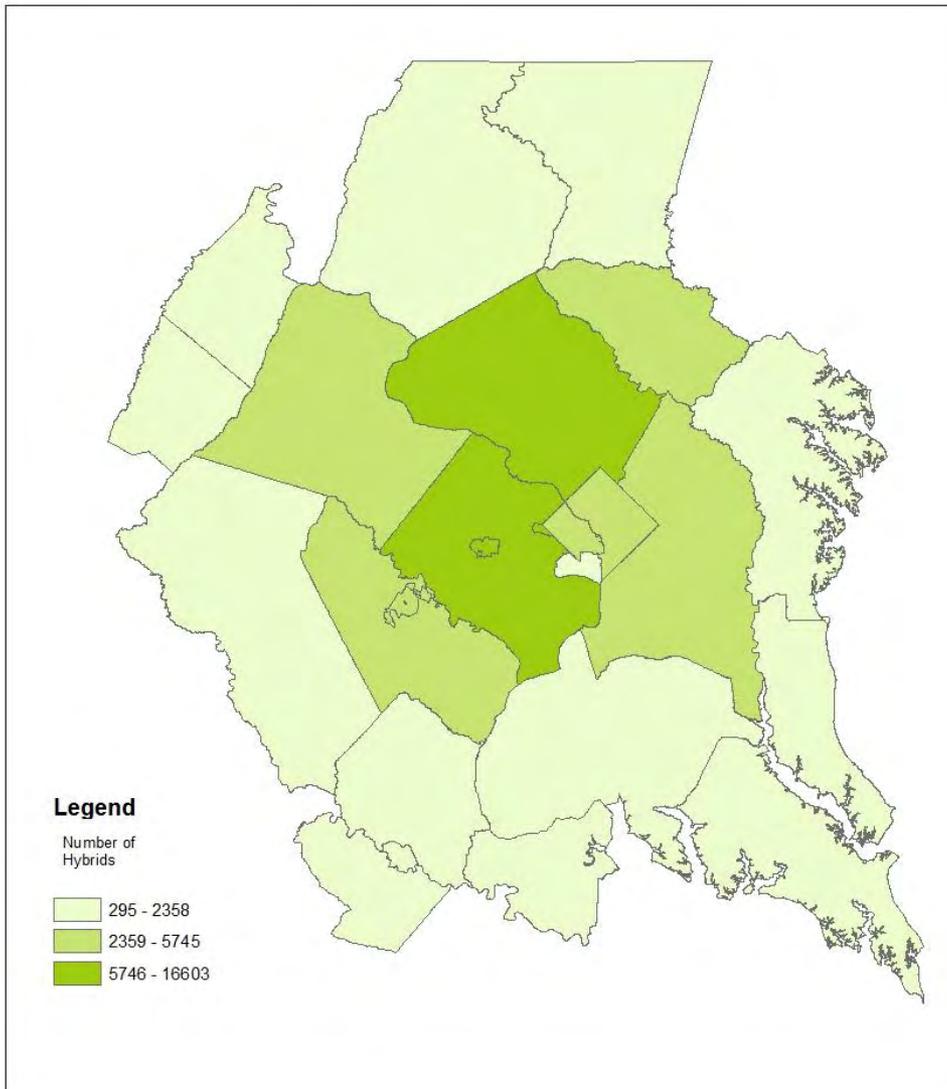
Number of Hybrids in Region

Registration, 2011:

MD: 22,643

VA: 42,168

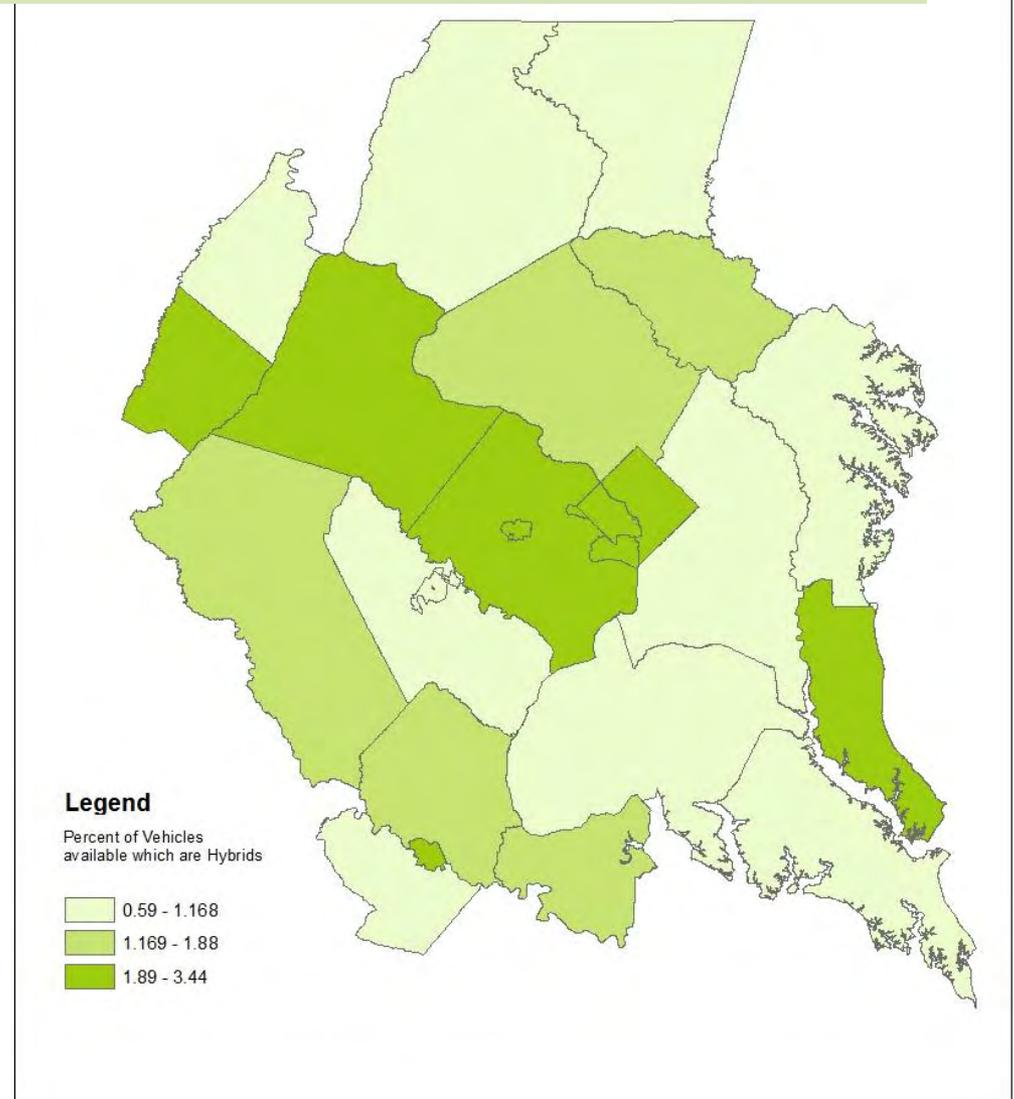
DC: 6,822

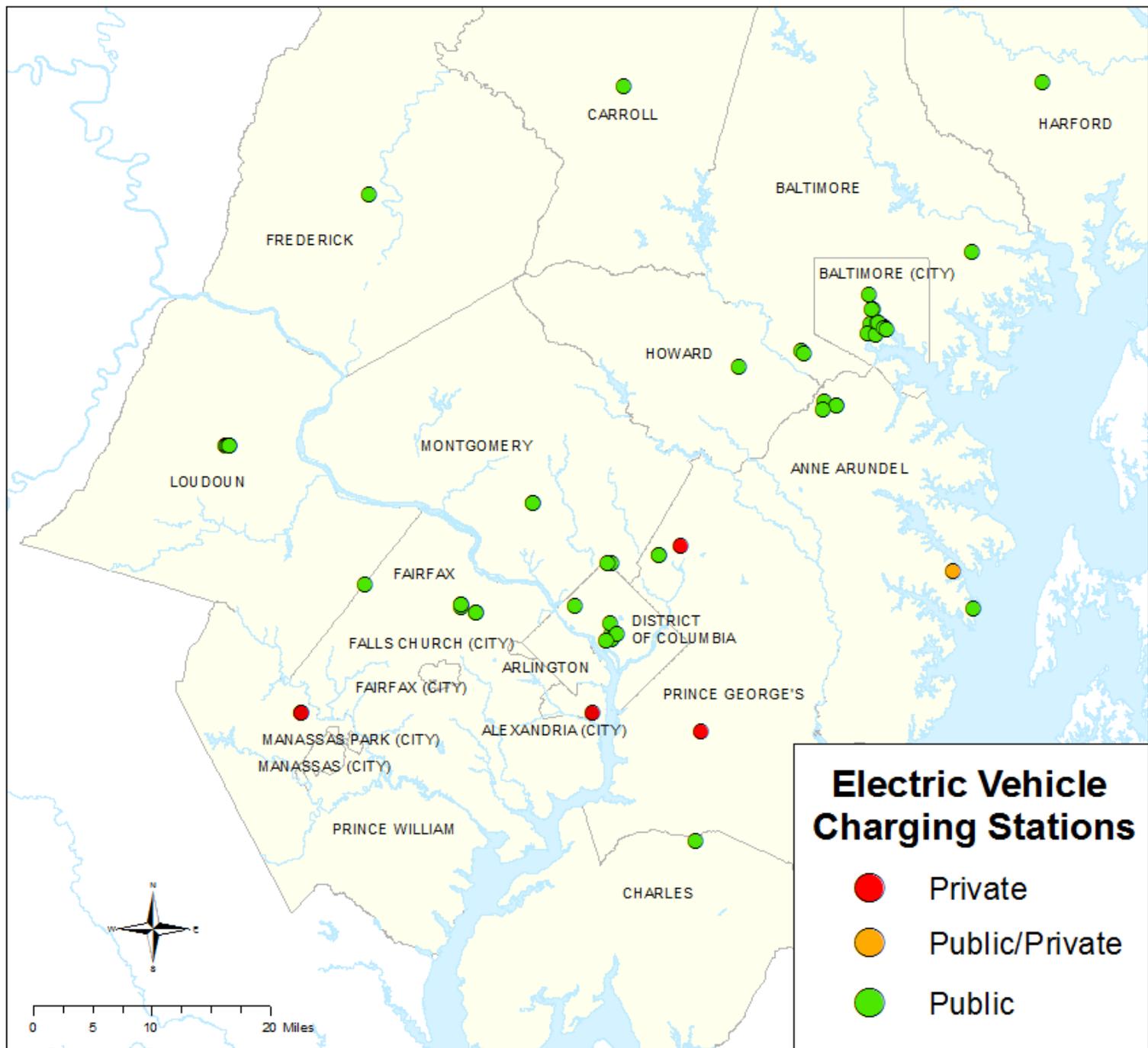


Hybrid Percent of Household Vehicles by Jurisdiction

Hybrids account for 1.5% of household vehicles in region

Heavy concentration in Virginia outer suburbs due to HOV exemption allowed on hybrid vehicles





EV Planning Workgroup

Stakeholders

Purpose: Provide direction, feedback and data-sharing



- Local government transportation and energy planners
 - EVSE manufacturers
 - Georgetown Climate Center
 - Electric Drive Transportation Association
 - Electric Vehicle Association of Greater Washington DC
 - Fleet owners
- **Next Meeting: Jan. 17, 2012**



COG EV Planning Team

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