

# Electric Vehicle Ecosystem



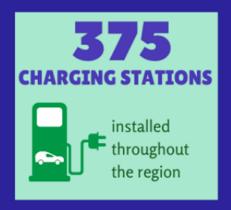
# **Mid-Atlantic Electrification Partnership**

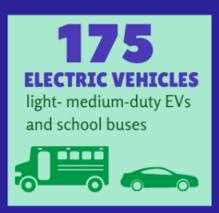
Virginia Clean Cities Alleyn Harned





### **Mid-Atlantic Electrification Partnership**















### PROJECT OVERVIEW



# Building the ecosystem VA –DC – MD - WV

- 1) Analysis
- 2) Education (Diverse and Frontline Communities)
- 3) Chargers
  BGE Rideshare, PEPCO Taxi, Greenspot Hub,
  Blink 19.2, Utility Programs, Solar Pilots, Everything
- 4) Vehicles 100 Rideshare Vehicles w/ BGE 72 spots for car share at hubs



# GETTING EVSMART: HOW UTILITIES LIKE BGE ARE DRIVING EQUITABLE ELECTRIC TRANSPORTATION

A free webinar for HBCU students, faculty and staff.



Baltimore Gas and Electric, founded in 1816, is driving Maryland forward to the future, laying groundwork for a transition to electric vehicles. Join BGE's CEO and its EVsmart team to learn about how BGE is supporting EVs and working to bring equitable access to this revolutionary new tech. BGE will be joined by executives from Volkswagen and Bay Area-startup WeaveGrid to discuss their own efforts to develop and market new EV products and technologies for consumers and businesses.

### JOIN US VIA ZOOM ON FRIDAY, MAY 7, From 10 a.m. to 12:30 p.m.

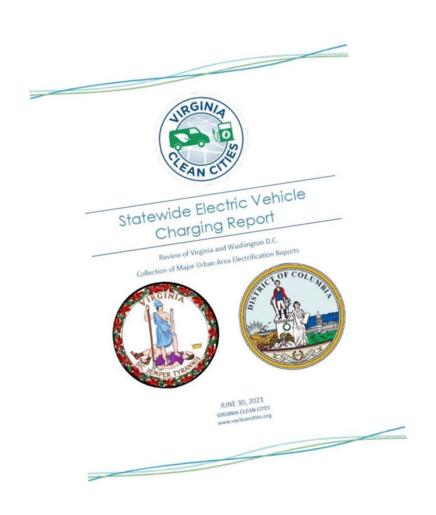
For more information please contact: EVsmart@bge.com

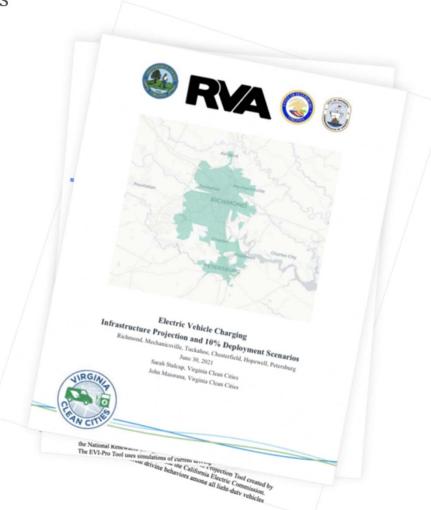


# Updates since June



Publication of statewides and locality reports





# Energy Zones Mapping Tool (https://ezmt.anl.gov)



 Produced and maintained by Argonne National Laboratory



- A free online tool for identifying areas within the United States that may be suitable for power generation and energy corridors
- Mapping data for visualization, query, and sharing
- Over 360+ overlays and continuously updated

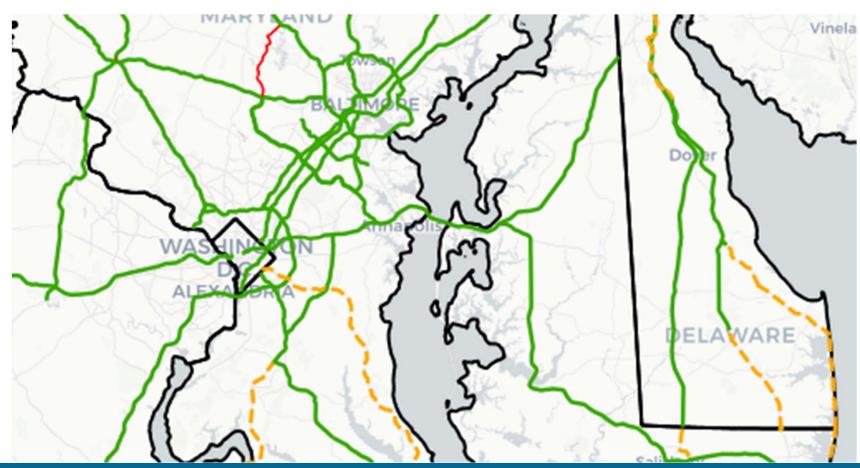


# Designated Alternative Fuel Corridors



#### Designated Alternative Fuels Corridor (Round 5)

- EV Signage Pending
- ✓ EV Signage Ready
- EV Signage Unspecified



# Roads with Average Annual Daily Vehicle Traffic



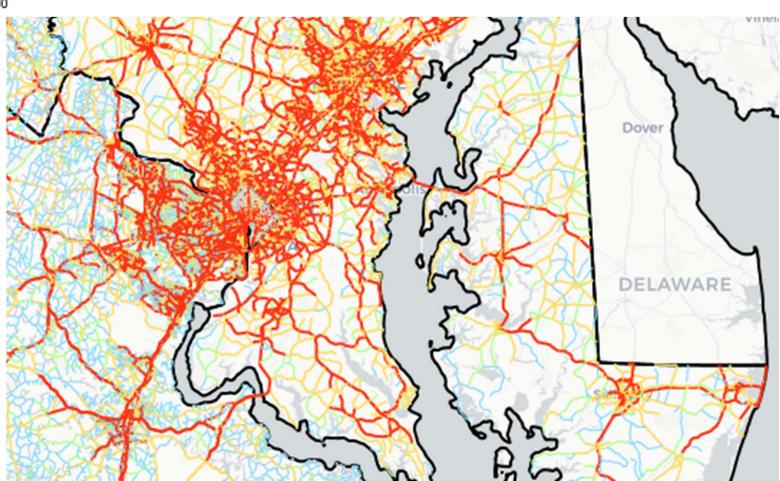
#### Roads, with Average Annual Daily Vehicle Traffic

Average Annual Traffic Volume

0 - 100 / 2001 - 10000

/ 101 - 1000 / 10,000 - 420,000

/ 1001 - 2000



# Major Roadways with Electrical Substations



#### Major Road

Type

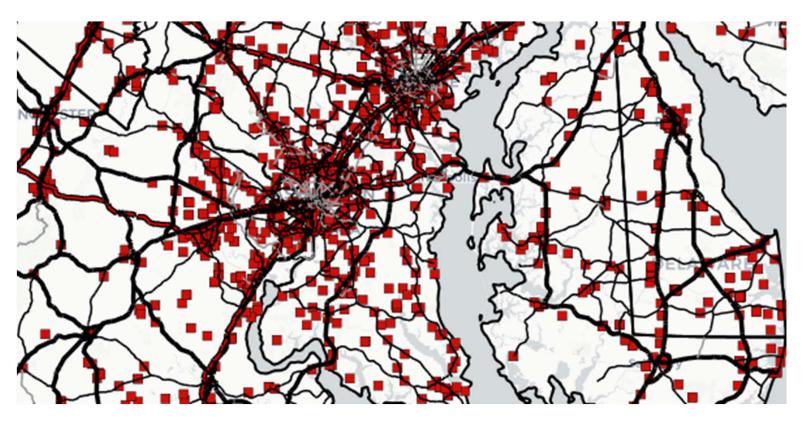
🥒 Interstate

**Electrical Substation** 

U.S. Route

State Route

/ Other Major Road



### Alternative Fuel Stations

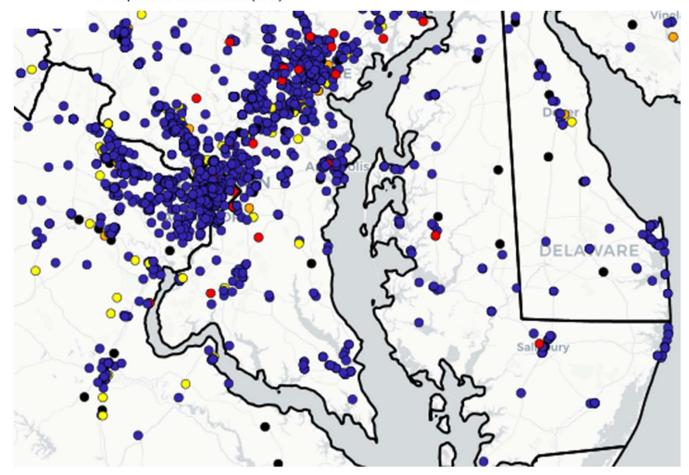


#### Alternative Fuel Station

#### Fuel Type

- Biodiesel (BD)
- Compressed Natural Gas (CNG)
- Ethanol (E85)
- Electric (ELEC)

- Hydrogen (HY)
- Liquefied Natural Gas (LNG)
- Liquefied Petroleum Gas (LPG)



# EVSE Tesla L2, DCFC & non-tesla L2 and DCFC & planned stations



Electric Vehicle Charging Stations (Planned)

0

Electric Vehicle Charging Stations (Tesla DC Fast)

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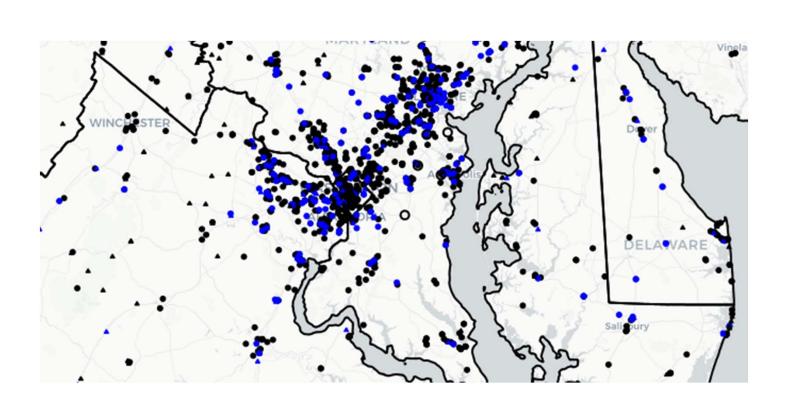
Electric Vehicle Charging Stations (Tesla Level 2)

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Electric Vehicle Charging Stations (Non-Tesla DC Fast)

•

Electric Vehicle Charging Stations (Non-Tesla Level 2)



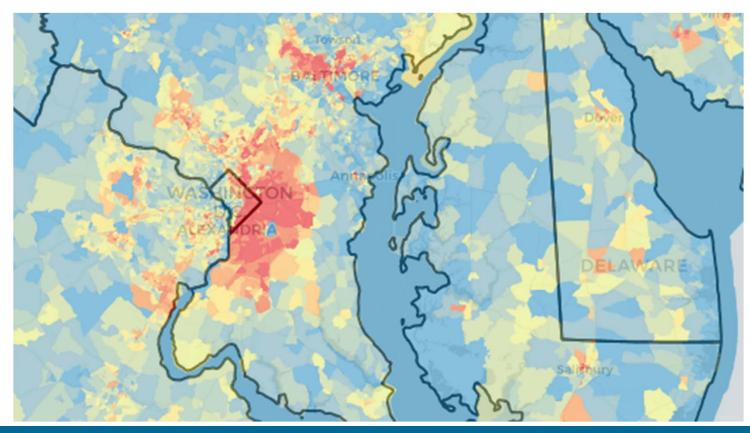
# Block Groups: Total Minority



#### Block Groups: Total Minority

#### Total Minority Percentage



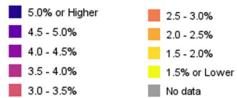


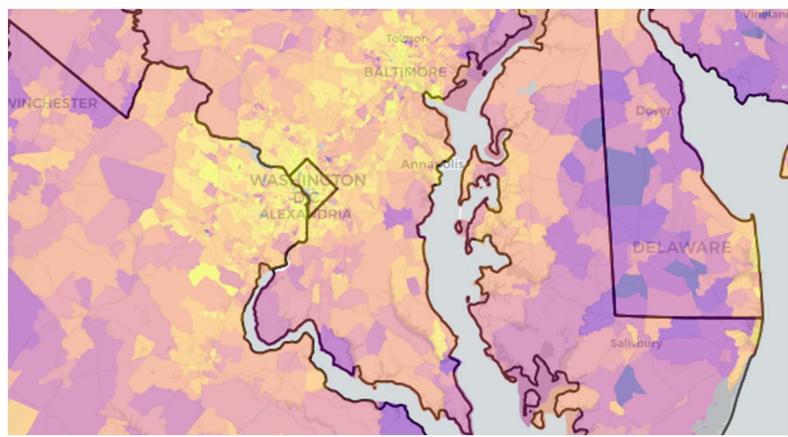
# Household Transportation Energy Burden



#### Household Transportation Energy Burden

Burden (Percent of Income)





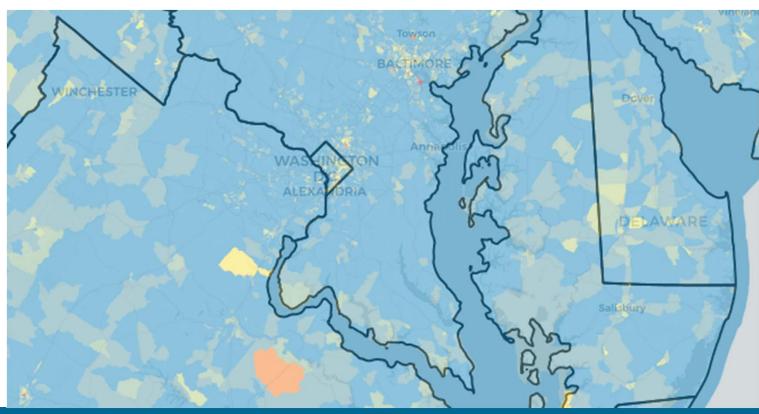
# Block Groups: Low-Income



#### **Block Groups: Low Income**

Low Income Percentage



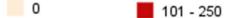


# Public Transit Stop Density



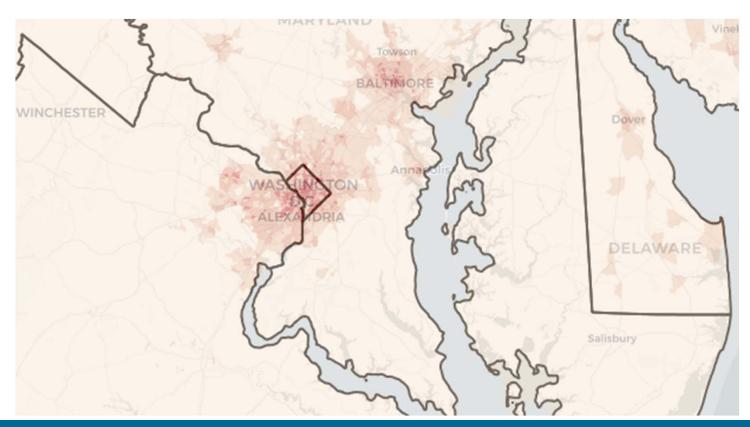
#### **Public Transit Stop Density**







- 11 50 No data
- 51 100



# Households without vehicles



#### **Households without Vehicles**

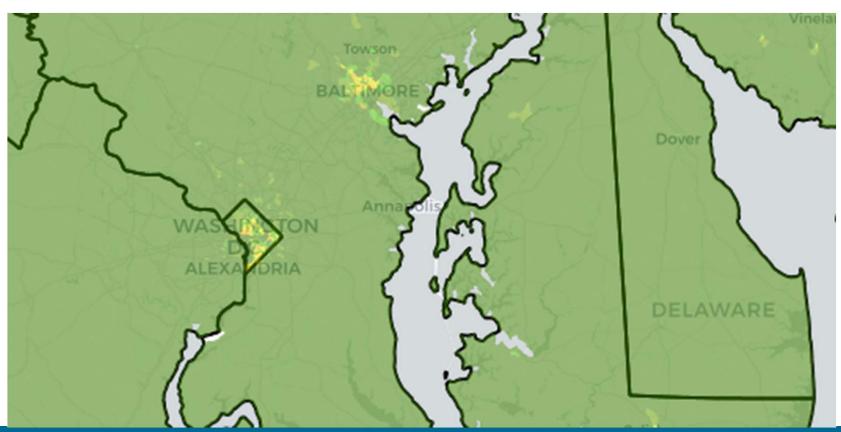
Percent of Households Lacking a Vehicle

90 - 100%

0 - 20% 60 - 70% 20 - 30% 70 - 80% 30 - 40% 80 - 90%

50 - 60%

40 - 50%



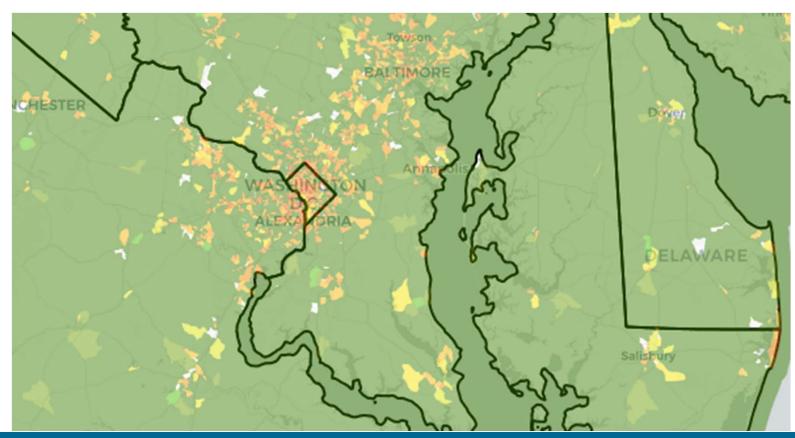
# Housing – Units in Large Multi-Unit Structures/sq. mil



#### Housing - Units in Large Multi-unit Structures/sq. mi

Units in Large Multi-unit Structures (per Sq. Mi)





# HUD Opportunity Zones w/ County Borders

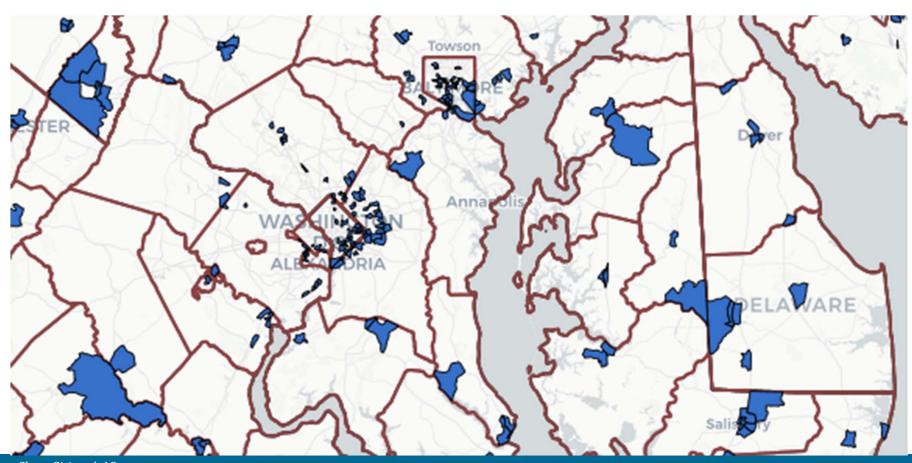


**HUD Opportunity Zones** 



**County Boundary** 





# Energy Zone Mapping Tool Overview



- 1. Go to https://ezmt.anl.gov/ and register for an account. You will receive confirmation and be cleared to use the tool usually in 24 hours\*
- 2. Once verified, login!
- 3. The tool will open to a map of the United States with a side bar on the left.
- 4. Click "library" to open a menu of overlays. Click the small left-most box on any layer to "add this layer to the map". It will immediately be added to your map!
- 5. Right click the overlay to access its properties such as to increase transparency.

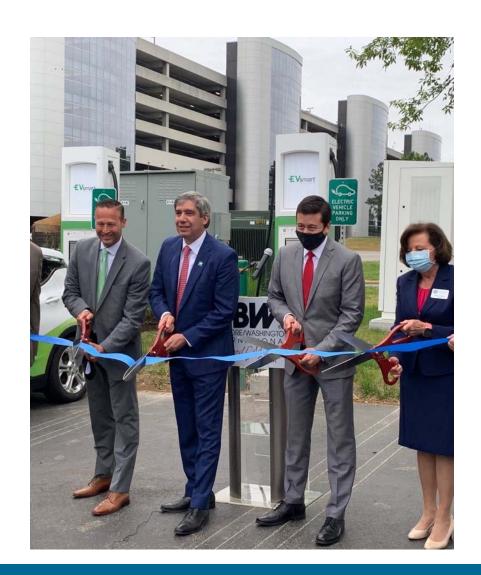
# Chargers



BGE Rideshare 20 DCFC PEPCO Taxi 12 DCFC

Greenspot Hub 6 chargers publicly accessible Blink 19.2 kwh L2 chargers

Other: Utility Programs, Solar Pilots, Everything



### 200 BLINK







# The Mid-Atlantic Electrification Program and Blink are covering 100% of the cost to install electric vehicle chargers at your location!

In partnership with MAEP, Blink will provide EV charging equipment to regional hosts for the deployment of Blink Level 2 EV charging stations to build-out the EV charging infrastructure.

- Blink provides the fastest Level 2 EV chargers at no cost
- Blink coordinates site preparation and charger installation
- Blink applies for grant funds
- · Blink reimburses for the cost of electricity
- · Host location receives 50% net revenue
- Blink will provide EV charger operations and maintenance

#### **Qualifying States**









Sales@BlinkCharging.com or (888) 998.2546.

BlinkCharging.com

#### **Program Details**

The charging stations must be connected to the Blink network with network fees deducted from charging station revenue. An executed contract with Blink who owns and operates the EV charging equipment is required.



# Greenspot

#### 24 Hubs - 6 EVSE

#### **NETWORKED CHARGING HUB**







#### Who Are We?

Greenspot was founded in 2014 in Jersey City, NJ to ameliorate growing transportation inefficiencies in densely populated environments.

Seven years later, Greenspot continues to work with both the private and public sectors, providing targeted services and solutions that address mobility challenges and environmental threats.

Greenspot Does All This With \$0 Taxpayer Dollars Spent.

# Want Your City <u>To</u> Join The Electric Mobility Future?

Reach out to us

Yaron@joingreenspot.com

+1.201.284.8208

155 2nd Street Jersey City, NJ 07302

#### What Do We Do?

Greenspot is committed to revolutionizing modern mobility by facilitating electric vehicle adoption. Greenspot takes strategically located curbside parking spots, installs EV charging stations, and then adds a layer of shared electric mobility to those spots. All at no cost to cities.

#### Department of Energy Program

With a federal award from the Department of Energy, Greenspot plans to install 24 e-Mobility hubs consisting of 6 L2 chargers in Virginia, DC, Maryland, and West Virginia as a part a three-year ecosystem program. Greenspot will install an initial set of 24 e-Mobility hubs which includes 72 dual chargers and a total of 144 EV ports.

Our program brings equitable transportation options for all municipal residents, including environmental justice communities.

Greenspot is dedicated to reducing traffic, alleviating congestion, and decreasing harmful emissions in cities throughout the country. Electric vehicle infrastructure coupled with shared mobility significantly reduces pollution and congestion, makes cities safer, and places them on track to achieve sustainability goals.

Greenspot wants to help you achieve your goals!