

Regional EV Planning

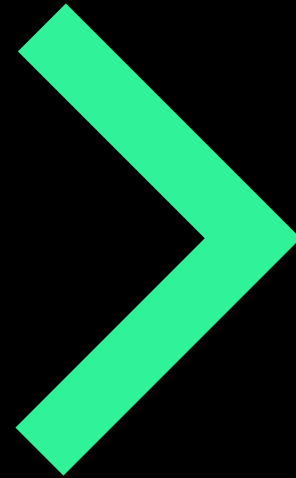


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Why does regional electric vehicle (EV) planning matter?



- Numerous competitive federal funds look to award programs at state or regional efforts, encouraging localities to work together
- EV charging station experiences matter
 - Siting, ease of use, accessibility, and more should be as uniform as possible
- EV charging station deployment and siting plans form the foundation of future funding applications and enhance community support
- Utility coordination is needed across the entire service territory
- Equity considerations must be included in the entire process

Federal Bipartisan Infrastructure Law Funding Timeline

- May 2022: EPA's [Clean School Bus Program](#) launched
- May 2022: DOT FHWA releases the 180 Day Minimum Standards and Requirements for the National Electric Vehicle Infrastructure (NEVI) Formula Program
- August 1, 2022: State NEVI plans due to the Joint Office of Energy and Transportation
 - See [DriveElectric.gov](#) or [afdc.energy.gov/NEVI](#) for state planning websites
- September 30, 2022: Joint Office approves plans or notifies state DOTs if changes are needed
- By November 15, 2022: Several additional competitive EV grant programs will be launched by DOE and DOT

Applicable New Electric Vehicle IJA Funding Programs of Local Government Interest.

Source: U.S. DOE AFDC [Laws and Incentives](#) Database

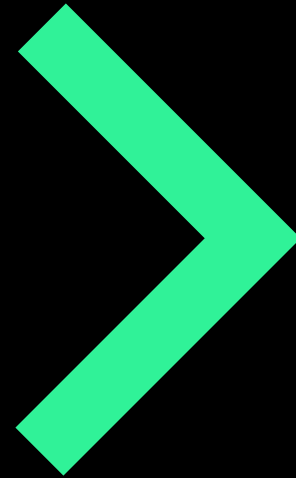
Entry Title	Link	Text
Alternative Fuel Corridor Grants	https://afdc.energy.gov/laws/12730	The U.S. Department of Transportation (DOT) must establish a competitive grant program to strategically deploy publicly accessible electric vehicle charging and hydrogen, propane, and natural gas fueling infrastructure along designated DOT Federal Highway Administration (FHWA) Alternative Fuel Corridors (AFCs). The grant will provide funding for designated Corridor-Pending AFCs to install infrastructure to convert to Corridor-Ready AFCs, and for Corridor-Ready AFCs to install alternative fuel infrastructure to provide station redundancy and meet higher demand. Propane fueling infrastructure is limited to use by medium- and heavy-duty vehicles. Eligible entities include states, metropolitan planning organizations, local governments , political subdivisions, and tribal governments. Additional funding eligibility and considerations will apply. The grant program must be established by November 15, 2022. (Reference Public Law 117-58 and 23 U.S. Code 151)
Community Alternative Fuel Infrastructure Grants	https://afdc.energy.gov/laws/12732	The U.S. Department of Transportation (DOT) shall establish a competitive grant program to fill gaps in publicly accessible electric vehicle charging and hydrogen, propane, and natural gas fueling infrastructure in community locations, such as a parking facilities, public schools, public parks, or along public roads . Funding of up to 80% of project costs will be available for both development phase planning activities and the acquisition and installation of charging or alternative fueling infrastructure. Five percent of the grant fund awarded may be used for educational and community engagement activities to develop and implement education programs through partnerships with schools, community organizations, and vehicle dealerships to support the use of zero-emission vehicles and associated infrastructure. DOT must prioritize projects that expand access to charging and alternative fueling infrastructure within rural areas, low- and moderate-income neighborhoods, and communities with limited parking space or a high ratio of multi-unit dwellings to single-family homes. Eligible entities include states, metropolitan planning organizations, local governments , political subdivisions, and tribal governments. Additional funding eligibility and considerations will apply. (Reference Public Law 117-58 and 23 U.S. Code 151)

Applicable New EV IJA Funding Programs of Local Government Interest, continued.

Source: U.S. DOE AFDC [Laws and Incentives](#) Database

Entry Title	Link	Text
State Carbon Reduction Program	https://afdc.energy.gov/laws/12735	<p>The U.S. Department of Transportation (DOT) must establish a carbon reduction formula program for states to reduce transportation emissions. Eligible state funding activities include truck stop electrification, diesel engine retrofits, vehicle-to-infrastructure communications equipment, public transportation, port electrification, and deployment of alternative fuel vehicles, including charging or fueling infrastructure and the purchase or lease of zero-emission vehicles.</p> <p>Funding can also be used to support the development of state carbon reduction strategies, in consultation with designated metropolitan planning organizations, by November 15, 2023. At the request of a state, DOT must provide technical assistance in the development of the carbon reduction strategy. State projects will be treated as Federal-aid Highway Program projects. Additional funding eligibility and considerations will apply.</p> <p>(Reference Public Law 117-58 and 23 U.S. Code 1)</p>
Public School Energy Program	https://afdc.energy.gov/laws/12742	<p>The U.S. Department of Energy (DOE) must establish for local educational agencies competitive grant program for energy improvements upgrades, including installation of alternative fuel vehicle (AFV) fueling or charging infrastructure on school grounds and purchase or lease AFVs. AFV fueling or charging infrastructure can be exclusively for the school fleet or students, or open to the public. Eligible AFVs include school buses and school fleet vehicles. (Reference Public Law 117-58)</p>
National Electric Vehicle Formula Program	https://afdc.energy.gov/laws/12744	<p>In addition to the state NEVI corridor plans, due August 1 to the DOE and DOT Joint Office, DOT will establish a grant program by November 15, 2022, for states and localities requiring additional assistance to strategically deploy EVSE under this Program. Additional funding eligibility and considerations will apply.</p> <p>(Reference Public Law 117-58 and 23 U.S. Code 165)</p>

Regional EV Planning Needs



- Gap analysis to determine what EV plans, policies, programs, and funding existing across the region
- Centralized hub to capture all these activities, down to the local level
- Charging station siting analysis
 - Where are stations needed at the local, state, and/or regional level?
 - How are these station needs prioritized?
 - Can potential charging station site hosts be identified?
 - Will potential sites have enough power capacity as well as three phase power?

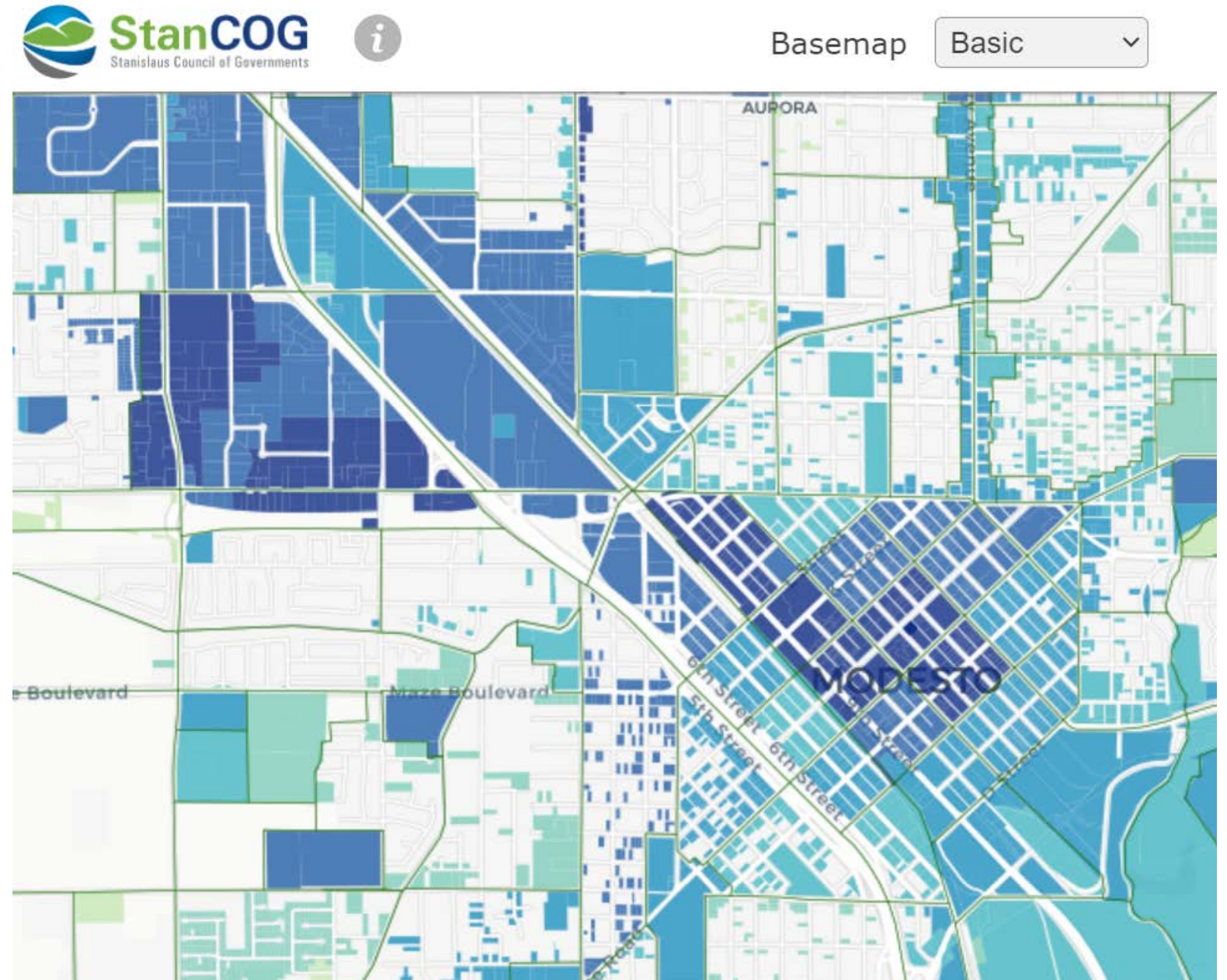
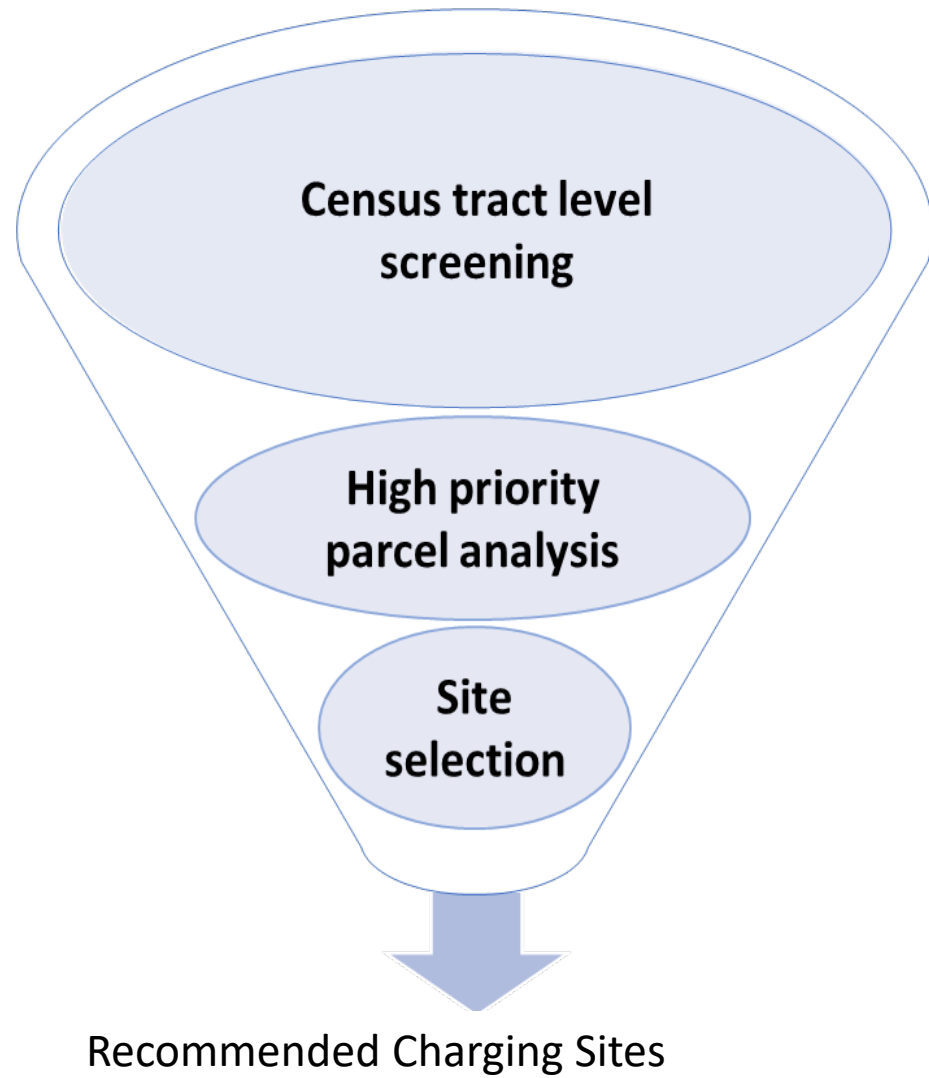
Local EV LDV Plan Status

Local EV LDV Plans by Jurisdiction by Type

(as of 6/2/22)

Govt Operations	Community-wide
	City of Alexandria
	City of Frederick
Prince George's County	Prince George's County (under development)
Frederick County (under development)	Frederick County (under development)
	Arlington County (under development)
	Fairfax County (under development)
	District of Columbia (under development)
Loudoun County (under development)	

Methodology for Identifying Recommended Charging Station Locations

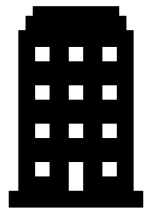


Three Types of Demand Sources



Residential

Identify the residential locations for the most likely EV adopters based on income, EV ownership, and dwelling type



Workplace

Make use of data from the travel model for home-based work trips



Opportunity

Covers a wide range of situations where an EV driver could potentially charge when away from home or work

Parcel Prioritization

Based on proximity to the following:



Existing charging locations (-)



Multi-unit dwellings (+)



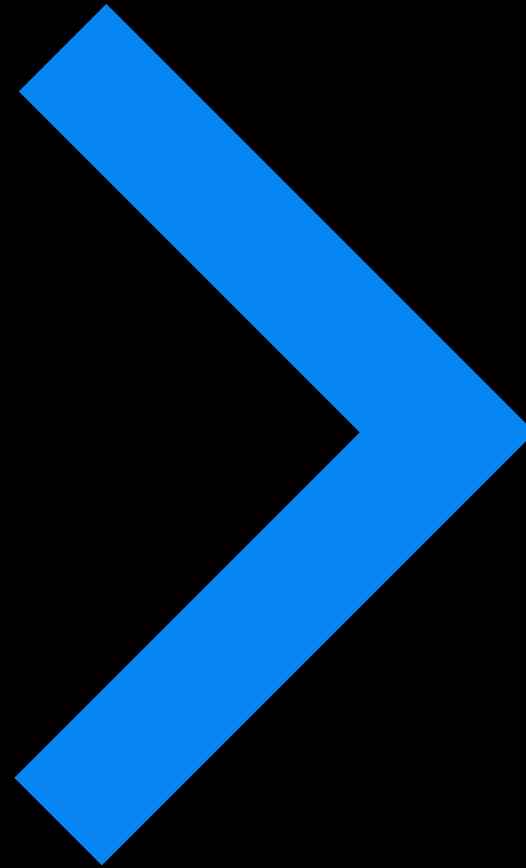
Highway ramps (+)



Disadvantaged Communities (+)



Public Transportation Stops (+)



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