

EV Charging Infrastructure Needs are Growing in Western PA – Will We Be Ready?

In the first quarter of 2021, electric vehicles (EVs) accounted for 15% of U.S. passenger vehicle sales. All indicators point to vehicle electrification gaining even more ground through 2030, meaning EVs will play a significant role in Pennsylvania's transportation future. As the premier mode of emissions-free transportation – an increasingly important consideration for Western Pennsylvania's climate-conscious citizens – EV benefits also include lower total operating and maintenance costs, which should make EV adoption a no-brainer. Yet the lack of access to public EV charging amenities remains a major barrier to adoption, particularly for those who cannot charge at home. Convenient, affordable, publicly-available charging stations improve the feasibility of EVs by allowing drivers to recharge or 'top-off' their cars' batteries while away from home.

In the International Council on Clean Transportation's 2015 U.S. City Electric Vehicle Profile Project, which analyzed the 25 most-populous U.S. metro areas, Pittsburgh ranked 22nd for most extensive public electric charging infrastructure. Gas stations outnumber EV charging stations by about 7:1 in the region, underscoring the need for further investment in charging stations to encourage rapid, widespread EV adoption in the Pittsburgh area.

Across PA, more than 4,300 DC Fast Charging stations and nearly 50,000 public and workplace Level 2 charging stations are needed by 2035 to support the growing number of electric vehicles.

Charging for All

While most EV drivers do the majority of their charging at home, not everyone has the ability to charge at home, such as those living in multi-unit dwellings or with on-street parking only. Drivers across all EV applications must be supported with adequate access to charging infrastructure for transportation electrification to be successful. Convenience and accessibility of public EV charging infrastructure will be a limiting factor to more widespread EV adoption. Additional charging is needed in these locations:



At Workplaces

Employees with access to workplace charging are six times more likely to consider driving an EV.



In Public

Helps EV drivers that need a moderate amount of charging while on the go, especially for those without home charging.



Along Transit Corridors

Installing DC Fast Charging stations allows EV drivers to plan and complete long road trips with ease.

Additionally, charging infrastructure needs to be deployed equitably to include disadvantaged communities. The public needs ongoing education about the features, advantages, and benefits of driving and fueling an electric vehicle and all must have opportunities to experience electric mobility.

Highlighting Success

Eastside Bond

In 2019, Mosites Development Company added eight Level 2 charging station ports to the Eastside Bond Garage in the East Liberty neighborhood of Pittsburgh. Conveniently located in a transit-oriented development next to the MLK Jr. East Busway, this project was supported by Duquesne Light Company.



Giant Eagle's GetGo

Based in Pittsburgh, Giant Eagle's GetGo opened its first public charging station in Washington, PA in 2019 and plans to soon launch its own proprietary, universal charging station to place at GetGo locations across its markets, including western Pennsylvania.



Pennsylvania State Parks

In 2018, the Pennsylvania Department of Conservation and Natural Resources began installing 40 charging stations at state parks throughout the Commonwealth, including Raccoon Creek, Moraine, Presque Isle, Ohiopyle, McConnells Mill, Oil Creek, Cooks Forest, Pymatuning and Keystone state parks in western Pennsylvania to help reduce greenhouse gases, lessen smog, and improve air quality statewide.



Funding Opportunities

<p>Alternative Fuel Infrastructure Tax Credit</p>	<p>Those installing EVSE may be eligible for a federal tax credit of 30% of the cost, not to exceed \$30,000. Consumers who purchase qualified EVSE may receive a tax credit of up to \$1,000. For more info, see: https://afdc.energy.gov/laws/10513.</p>
<p>Alternative Fuels Incentive Grant Program</p>	<p>A competitive state grant program that provides reimbursement toward EV charging station installation costs for PA municipal authorities, political subdivisions, non-profits, corporations, and limited liability companies or partnerships incorporated or registered in the Commonwealth. Grant amounts and calls for applications vary annually. For more info, see: https://www.dep.pa.gov/Citizens/GrantsLoansRebates/Alternative-Fuels-Incentive-Grant/Pages/default.aspx.</p>
<p>Driving PA Forward Electric Vehicle Supply Equipment (EVSE) Rebate</p>	<p>A non-competitive state rebate for the acquisition, installation, operation, and maintenance of Level 2 EVSE. Eligible projects must be on publicly accessible government-owned or non-government-owned property, at workplaces, or at multi-unit dwellings. For more info, see: https://gis.dep.pa.gov/DrivingPAForward.</p>
<p>Driving PA Forward Electric Vehicle Supply Equipment (EVSE) Infrastructure Grants</p>	<p>A competitive state grant program for the acquisition, installation, operation, and maintenance of publicly available DCFC infrastructure. Eligible project locations are transportation corridors, destination locations, and locations that serve as community charging or fueling hubs. For more info, see: https://gis.dep.pa.gov/DrivingPAForward.</p>