



Car chargers gain larger footprint in counties

By MARY ANN BARTON Feb. 16, 2018

Utilities pick up tab for electric vehicle chargers, including charging stations built in county facilities



Electric car sales were set to rise 30 percent last year in the United States, according to the Electric Drive Transportation Association. And sales are projected to rise to 1.2 million by 2025, representing 7 percent of all car sales, the Edison Foundation Institute for Electric Innovation said. The top metro areas for electric vehicles: Los Angeles, the Bay Area, Atlanta, New York/New Jersey/Connecticut, San Diego, Seattle and Chicago, according to IHS, Inc.

With an increase in electric cars comes the need for the infrastructure to support them — specifically, electric vehicle (EV) charging stations. Without them? It's the single biggest obstacle to increasing the adoption of electric vehicles in the United States, according to the Rocky Mountain Institute.

Currently, there are about 17,000 electric stations or 47,000 electric car charging outlets in the United States, according to the Department of Energy (DOE). The country will need about 100,000 to 200,000 charging stations to fulfill future demand, according to the DOE.

Some counties around the country are adding public electric car charging stations to county-owned properties. Montgomery County, Md. is being proactive. "About three years ago, we began putting electric car charging systems in our parking garages," said Al Roshdieh, director of Montgomery County's Department of Transportation.

The county charges residents what the county pays for the electricity, he said. Typically, drivers pay about \$2.50 to \$3 for a four-hour charge. A car-charging station typically costs the county about \$10,000.

Availability of public charge points and workplace charging is linked with electric vehicle market uptake, according to the International Council on Clean Transportation. The markets of Charlotte, Detroit, Kansas City, Minneapolis, Pittsburgh, Providence and Virginia Beach showed charging infrastructure growth of approximately 30 percent to 80 percent, corresponding with at least a doubling of their electric vehicle uptake from 2015 to 2016.

Range anxiety

Where EV chargers are scarce, EV owners experience "range anxiety" because they're not sure where they will be able to get their next charge. Last fall, the governors from seven Western states promised to work on a regional electric vehicle plan designed to make travel easier through a network of 5,000 miles of highway.

Some counties are also encouraging the build-out of charging stations. In Dutchess County, N.Y., electric car drivers are encouraged to contact DaSolar Energy for a free EV charger consultation for information on how to install a residential or commercial charger. In Fresno County, Calif., the county offers rebates of \$4,000 for single port EV charging stations and \$7,000 for dual port EV charging stations.

Sarasota County, Fla., offers rebates of 25 percent of the cost of purchasing and installing EV charging stations to businesses and 50 percent rebates to non-profits or government organizations.

"The program has been somewhat successful," said Lee Hayes Byron, sustainability manager for the county. A local college, a local government and a non-profit have all taken advantage of the program, she said, installing five chargers.

The county is getting the word out about the rebate program in news releases, presentations and emails sent to those who have expressed interest. Anyone who takes advantage of the program must make their chargers available for public use, and commit to owning and managing the chargers for three years and sending usage information to the county.

It fills gaps in the current network of charging stations by limiting rebates to the following locations:

tourism attractions
hotels
retail hubs
community centers
government properties with significant visitor numbers, and
major employers.

The program pays for itself through the county's pollution recovery trust fund, made up of fees and penalties paid from pollution violations in the past, Byron said. (See more about the rebate program here: http://bit.ly/2BfeuWT.)

The county itself owns 13 charging stations with 22 ports, mostly at libraries, parks and the county permitting center.

The site's host in Sarasota County typically selects a location and works with local officials to site and permit the installation. Once an electric car charging station is built, the site host is typically responsible but may contract with a charging station service provider to maintain maintenance and billing.

Zoning codes (including permitting), and parking ordinances are all regulatory tools at the disposal of state and local officials to further the EV readiness of communities. Sarasota County doesn't require electric vehicle charging stations but it encourages developers and builders to install charging stations through regulatory and financial incentives, Byron noted.

Electric car charging stations can also be co-located at gas stations.

The owner of the site is typically the owner of the unit. Owners span a wide range: municipalities, homeowners and apartment owners, parking garages, employers and commercial business owners. Whoever owns the charging site where a station is located usually contracts with a charging station hardware service provider to install it, according to the DOE.

Mapping your county's EV chargers

Finding out how many electric car chargers are in your area can be helpful if you're trying to decide where to add new ones. A website called PlugShare will show you a map of electric car chargers including whether the charger is public or not and whether it's in use. You can also plug in your address or ZIP code on this Department of Energy website: http://bit.ly/2Do9RfN

Chargepoint, a company that operates the world's largest network of electric car-charging stations, points out the benefits of having charging stations, including:

Driving more traffic to local businesses.

Boosting downtown economies.

Creating new jobs.

Meeting emerging government regulations, and
Establishing your local government as a green leader.

Costs for an electric car charger range from \$300 to more than \$40,000 depending on the power output. The most expensive are "fast charging" and are usually able to charge 50 to 70 miles of range in less than 20 minutes, according to the Department of Energy. This does not include the cost of installation, which can run anywhere from \$3,000 to \$51,000.

One way to pay for EV chargers? In California, Pacific Gas & Electric is footing the bill, launching its EV Charge Network pilot program last month. The program calls for 7,500 Level 2 chargers and a budget of \$130 million, with the utility picking up all infrastructure costs, according to Greentech Media.

Chargers will pop up across the utility's service area in northern and central California. So far, PG&E has fielded interest from more than 500 customers who would like to install chargers. Site hosts can choose to own and manage their chargers and choose from 15 vendors, which are expected to expand. Southern California Edison and San Diego Gas & Electric have already launched EV infrastructure pilots.

California has seen the number of electric cars grow by 53 percent between 2013 and 2017, and the state is projected to see more than 1.5 million electric cars on the road by 2025.

Gov. Jerry Brown (D) has laid out aggressive plans to spend \$2.5 billion from now until 2025 with some of that going to expand the number of car charging stations from 14,000 to 250,000. The program would be funded from a \$2 fee per car registration for clean air programs.

German automaker Volkswagen's emissions scandal is turning out to be good news for the U.S. electric car charging market. The company is paying out \$2 billion over 10 years as part of a federal settlement to build out new charging stations.

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Mary Ann Barton is a senior staff writer for County News and is returning to NACo after previously working at the association. She comes to NACo after covering local news for Patch.com in Northern Virginia.

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