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Edina: Capital Improvement through Charging Stations

By Joe Cella, 2018-19 Minnesota GreenCorps Member



CITY

Edina, MN

TIMELINE

2019 and beyond

WHO WAS INVOLVED

The City of Edina

INVESTMENT

Up to \$25,000 per year for electric vehicle (EV) charging in the city

GREENSTEP CITY PRACTICE RELATED TO THE PROJECT

23.5 – Install, assist with and promote one or more public fueling stations for plug-in hybrid and full electric vehicles, flex-fuel ethanol vehicles, and compressed natural gas vehicles.

TECHNICAL SPECIFICATIONS/ EQUIPMENT USED

ChargePoint CT4013 6' Wall Mount Dual Charger, Networked, Level 2

Project Highlights

- In the 2019 capital improvement plan, the City of Edina planned \$25,000 per year to install public EV charging stations
- Edina is setting an example and supporting its community to go electric. The city installed charging stations in the 50th and France north parking ramp, and city hall is next!
- Edina is providing leadership on EVs by expanding infrastructure, such as installing charging stations in areas that do not have access to a public station. This included adding charging infrastructure at municipal buildings, which means more charging for Edina's fleet vehicles and visitors.



Background

When transportation became the number one source of greenhouse gas emissions in the United States, the City of Edina committed to exploring ways to reduce transportation emissions in the city. While working on the 2040 comprehensive plan, internal stakeholders in the city identified electric vehicles (EVs) as an important way to reduce transportation emissions. A Capital Improvement Project was proposed to put aside up to \$25,000 per year for charging stations to catalyze EV adoption, starting in 2019. Edina installed Level 2 charging stations, available for free, at the 50th and France north parking ramp and has plans to install more stations at city hall and other locations.

Lessons Learned

The City of Edina learned a lot about how to grow EV infrastructure that is accessible and adequately fills gaps in existing infrastructure left by private development. It also discovered that being realistic with the approach to securing decision maker support is crucial. Proponents of the project were honest: while the charging stations will likely not provide the city with a monetary return on investment, there is an array of good reasons to invest in charging. Meeting emissions reduction goals, supporting the community to transition to EVs, providing leadership for the private sector, and having a head start on new technology were all reasons the city provided to invest in EV infrastructure.

Where to Locate Charging

While deciding where to install charging stations, Edina developed a process using a few important criteria. First, it maps out

existing charging stations in the city, looking for gaps. After establishing a general area, the city looks for upcoming maintenance or construction projects since installation costs are lower when added at a time of new construction or renovation. Reconstruction is a significant reason why the 50th and France north parking ramp was chosen, as it was being rebuilt shortly after money was allocated to EV infrastructure.

“For Edina, we see the stacked benefits in supporting the conversion to zero emissions, converting our own fleet to EVs for lower maintenance costs, bettering air quality, and setting an example for developers and the rest of the community [as the reasons the city should install EV charging]”

- Tara Brown, City of Edina

In the absence of upcoming construction projects, Edina identifies locations that are open for many hours of the day and are good candidates for hosting charging year-round.

Finally, the city looks for locations that can provide stacked benefits to the community, like locations that serve the needs of city employees, fleet vehicles, the public, and visitors.

Advice for Other Cities

Be prepared to confront the question of “what is the city’s role in providing charging?” When making the case to decision makers, be upfront about your goals for the project. Be clear that adding charging stations is not like an LED retrofit with an expected return on investment. Instead, focus on the non-monetary value that charging stations will bring to the community. Additionally, look for

locations where the private sector will have difficulty adding charging stations, like a municipally-owned parking lot in the center of a business district or a municipal building.

It is an exciting time for EVs. Adding charging stations will help achieve transportation emission reduction goals, improve air quality, provide leadership, support the community to drive electric, and more. The city's role in building out charging

stations goes beyond simply providing power.

There is no one discrete factor that will inform where the best location for a charging station is in your city. Work within your community to find the solution that is best for you! Better yet, use Drive Electric Minnesota's tool to provide guidance, including a visual guide to help with site selection. Find it at

driveelectricmn.org/charging-guidance

RESOURCES FOR ADDITIONAL INFORMATION

Clean Energy Resource Teams, www.cleanenergyresourceteams.org

Drive Electric Minnesota, www.driveelectricmn.org

Great Plains Institute, www.betterenergy.org

CONTACT INFORMATION

Tara Brown
City of Edina, Sustainability Manager
TBrown@EdinaMN.gov, 952-826-1621