

EV Charging FAQs

Mercer Public Library – October 13, 2022 - mercerpubliclibrary.org/faq-ev-charging

Why EV charging stations in Mercer?

- Electric Vehicles (EVs) are expected to comprise over half of all passenger vehicles sold in the United States by 2040¹
- New EVs offer significantly improved range. Many 2022 models can travel more than 350 miles on a single charge, putting Mercer within the normal range of EVs from Madison, Milwaukee, the Twin Cities, Kenosha, and more.² We should expect more and more visitors to Mercer using electric vehicles in the coming years.
- Highway 51 is a designated Wisconsin EV Corridor, and Mercer is located in a big gap between stations in Wausau, planned stations in Minocqua, and Ironwood.

Why EV Charging Stations at the Library and Community Center?

- Ample parking space & 3-phase power conveniently located across the street
- Library and local businesses available for those using the stations
- Full-time staff at the library to answer questions
- The library has been a community leader in demonstrating sustainable practices, especially with our solar panels.
- Support from the Friends of the Library

Questions

- Why at the library and not at a business on Highway 51?
 - If a business or other location on highway 51 wanted to take on this project, we would support it 100%. However, since these stations are not currently significantly profitable, we don't foresee any businesses taking this on right now.
 - "On the corridor" locations do not have to be directly on the highway in question; the designation means no more than 1 mile from interstate exits or highway intersections along the corridor³
- How much will this cost the town?
 - We hope to leverage state and federal programs, project support from Xcel for power installation, and support from the Friends of the Library or other donors to fund the installation of EV Chargers. EV drivers using the charging stations pay for the power they use.

¹ <https://wisconsin.gov/Pages/projects/multimodal/electrification.aspx>

² <https://www.caranddriver.com/shopping-advice/g32634624/ev-longest-driving-range/>

³ https://www.fhwa.dot.gov/environment/alternative_fuel_corridors/nominations/2022_request_for_nominations_r6.pdf




Resources

[Developing Infrastructure to Charge Electric Vehicles](#) – U.S. Department of Energy Alternative Fuels Data Center

[Public EV Readiness Planning](#) – DOE Alternative Fuels Data Center guide for communities that want to plan for the arrival of EVs or who want to encourage EV adoption in their communities.

[Wisconsin Electrification Initiative \(WIEV\)](#) – includes information about EV Charging in Wisconsin and a link to the approved Wisconsin EV Charging Infrastructure Plan.

[Wisconsin Alternative Fuel Corridors](#) – includes a map of Wisconsin’s Alternative Fuel Corridors (AFC)

KNOW YOUR EV CHARGING STATIONS		
 <p>AC Level One</p>	 <p>AC Level Two</p>	 <p>DC Fast Charge</p>
VOLTAGE 120V 1-Phase AC	VOLTAGE 208V or 240V 1-Phase AC	VOLTAGE 208V or 480V 3-Phase AC
AMPS 12–16 Amps	AMPS 12–80 Amps (Typ. 32 Amps)	AMPS >100 Amps
CHARGING LOAD 1.4–1.9 kW	CHARGING LOAD 2.5–19.2 kW (Typ. 6.6 kW)	CHARGING LOAD 50–350 kW
CHARGING TIME 3–5 Miles per Hour	CHARGING TIME 12–60 Miles per Hour	CHARGING TIME 60–80 Miles in 20 Minutes

Source: <https://www.carolinacountry.com/your-energy/energytech/know-charging-options-to-keep-your-ev-rolling>

Note: Tesla Superchargers are even faster than the data shown here, providing 200 miles of charge in 15 minutes.