

Electric Vehicles Toolkit

A community guide to EV-Ready policies in Wisconsin



Identify areas to increase access to electric vehicle charging stations

A major priority should be increasing the number of public fast chargers that are available to combat “range anxiety,” or the fear that an electric vehicle will run out of power.

Policy: Work to identify areas that are priorities for charging stations. A priority should be given to areas with a high influx of people spending extended periods of time (City parks, downtown areas, etc.). Other factors should include places that have limited public charging infrastructure, have a high amount of multi-family housing or garage-free homes, and potentially have limited access to transit and bike routes. Places with large businesses should also be considered.

Explore EV-Ready requirements for multi-family and commercial buildings

The majority of electric vehicle owners will be charging their vehicles at home. This has created a problem for those who rent their homes, use on-street parking, or live in a multi-family building. Explore an EV-ready requirement so that electric vehicle parking and charging infrastructure is required in new multi-family and commercial developments. Work with construction companies, developers, and architects to build understanding around these requirements.

Draft Language:

- “Multiple-Family Residential Land Uses: all new, expanded and reconstructed parking areas shall provide the electrical capacity necessary to accommodate the future hardwire installation of Level 2 EVCSs for a minimum of 10% of required parking spaces.” (St. Louis Park, MN)
- “Non-Residential Land Uses: all new, expanded and reconstructed parking areas shall provide the electrical capacity necessary to accommodate the future hardwire installation of Level 2 or DC 8 EVCSs for a minimum of 10% of required parking spaces.” (St. Louis Park, MN)

Explore EV-ready requirements and retrofits for city-owned parking facilities

Consider a requirement that a certain percentage of future city-owned parking spaces must be dedicated or have the infrastructure to support EVs. Retrofitting parking facilities for EVs can be extremely expensive.

Policy: Develop a strategy to retrofit existing parking facilities with charging infrastructure and explore electric vehicle parking and charging infrastructure requirements in existing public parking facilities. Consider making a requirement for EV-ready spaces.

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4 Restrict the type of vehicles that can park in EV-charging parking spaces

Often EV-charging spaces are improperly used by either non-electric vehicles or electric vehicles that are not charging. A restriction on who can use EV-charging spaces can minimize this issue.

Draft Language: *"Public electric vehicle charging stations must be reserved for parking and charging electric vehicles only. Electric vehicles may be parked in any space designated for public parking, subject to the restrictions that apply to any other vehicle."*
(Kansas City, MO)

5 Allow electric vehicle charging infrastructure as a permitted land use

Adding a definition for charging infrastructure into the zoning code will insure that chargers are a use by right. This will clarify whether charging infrastructure is a permitted land use. All levels of charging infrastructure should be allowed in all districts to ensure electric vehicle infrastructure is wide-spread.

Policy: *Define electric vehicle charging Infrastructure and its permitted uses.*

Draft language: *"The standardized indicators of electrical force or voltage, at which an electric vehicle's battery is recharged. The terms 1,2, and 3 are the most common charging levels, and include the following specifications:*

- *Level 1 definition: "Level-1 is considered slow charging. Voltage including the range from 0 through 120."*

- *Level 2 definition: "Level-2 is considered medium charging. Voltage is greater than 120 and includes 240."*

- *Level 3 definition: "Level-3 is considered fast or rapid charging. Voltage is greater than 240."*
(Auburn Hills, MI)

- *"Levels 1, 2, and 3 electric vehicle charging stations are allowed in all zoning designations."*

6 Reduce government vehicles emissions by transitioning to hybrid or electric vehicles

Hybrid and electric vehicles have significant advantages over traditional internal combustion engines (ICE) and diesel vehicles. Transitioning local fleets, including passenger vehicles, transit buses, and other maintenance vehicles to hybrid or especially electric vehicles will help governments greatly reduce emissions. In Wisconsin, Madison, Milwaukee, and Racine have started making the transition to electric buses. Electric vehicles often have a higher upfront cost, but deliver cost savings over the life of the vehicle.

Policy: *Establish "Electric first" guidelines directing city departments to purchase all-electric vehicles when the vehicle usage is compatible with electric vehicles. Develop a strategy to retrofit strategic city-owned buildings/facilities with EV chargers. Explore electric vehicle parking and charging infrastructure requirements for new city-owned buildings.*

Draft Language: *"City Council directs the City Administrator to review the city's upcoming fleet purchases for possible additions of electric vehicles to the city fleet."*

7 Develop a strategic partnership with local utilities to further EV adoption.

Local utilities will play a crucial role in the electrification of the transportation sector. Utilities are a unique partner who can help by providing technical assistance with charger installation, can educate builders and architects with design and implementation, and can meet with community partners and individuals to further electric vehicle education and adoption.

Policy: *Conduct outreach to local utility regarding electric vehicles. Perhaps create a task force with community partners, the utility, and local government with the express purpose of educating builders, architects, developers, car dealerships, and any other group that may be heavily impacted by the transition to electric vehicles.*