File No. 210146. Communication relating to potential mechanisms to support the installation of Electric Vehicle Charging Stations through the zoning code.



File No. 210146. Electric Vehicle Chargers.

Mandate:

- Research how EV chargers are handled in zoning codes
- Address potential principal use charging facilities
- Suggest changes to zoning code

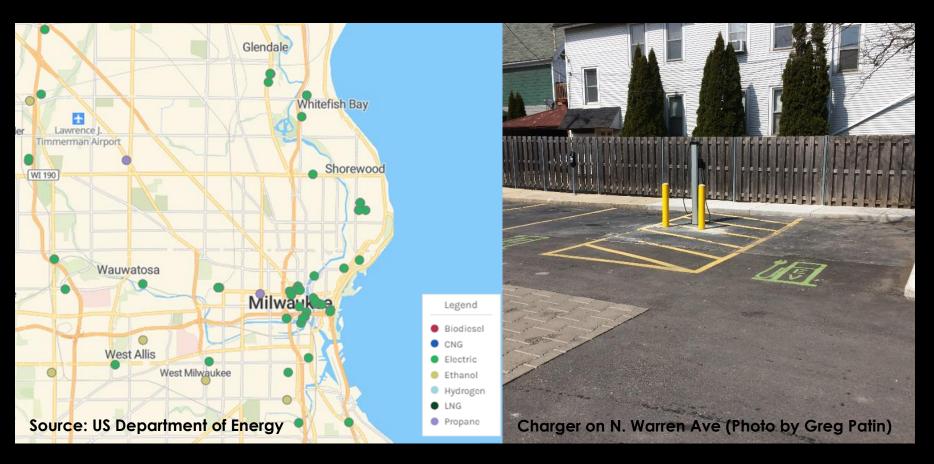
<u>Goals:</u>

- Support the creation of charging stations
- Simplicity and Flexibility
- Prepare for potential EV planning recommendation:
 - Transportation and Mobility work group for the Climate and Equity Task Force

File No. 210146. Electric Vehicle Chargers.

Background:

- Currently not considered by zoning code
- Clarification is necessary



File No. 210146. Electric Vehicle Chargers.

Background:

- Still a small portion of the new car market, but an increasing one
- Most charging occurs at home
- Range "anxiety"

KNOW YOUR EV CHARGING STATIONS







VOLTAGE

120v 1-Phase AC

AMPS

12-16 Amps

CHARGING LOADS

1.4 to 1.9 KW

CHARGE TIME FOR VEHICLE

3-5 Miles of Range Per Hour

VOLTAGE

208V or 240V 1-Phase AC

AMPS

12-80 Amps (Typ. 32 Amps)

CHARGING LOADS

2.5 to 19.2 kW (Typ. 7 kW)

CHARGE TIME FOR VEHICLE

10–20 Miles of Range Per Hour

VOLTAGE

208V or 480V 3-Phase AC

AMPS

<125 Amps (Typ. 60 Amps)

CHARGING LOADS

<90 kW (Typ. 50 kW)

CHARGE TIME FOR VEHICLE

80% Charge in 20-30 Minutes

Source: Kristi Brodd – Carolina Country

File No. 210146. Electric Vehicle Chargers.

Zoning Proposal:

- Insert language to allow charging stations ("Electric Vehicle Charging Stations") in all zoning districts
 - Site Standards subsection
 - Restricted to private use in Residential Districts?
- Create new use category for principal use charging stations "Electric Vehicle Charging Facility"
 - Zoned similarly to Filling Stations (Special Use in most districts)
 - Rare, but inevitable



File No. 210146. Electric Vehicle Chargers.

Next Conversations:

- City-wide EV policy
- Planning Policies
 - Planned Developments
 - Comprehensive planning
- On-street charging stations
- Lingering policy decisions
 - Public chargers in res. districts, EV charging facility zoning, future city policies



