

Guidelines for future Electric Vehicle Charging-December 2021

Terms:

Electric Vehicle Supply Equipment (EVSE): Charging stations and associated immediate infrastructure (e.g. transformers, etc.) excluding building electrical infrastructure such as electrical panels, conduit/raceways, overprotection devices, wires and pull boxes.

Level 2: EVSE that operates on a 40-Amp 208 or 240-volt circuit and provides power between 3.3 and 7.2 kW.

Direct Current Fast Charger (DCFC):

EV Ready: Infrastructure to support the immediate and convenient installation of an EVSE, including electrical panels, conduit/raceways, overprotection devices, wires and pull boxes to designated parking locations. The goal of EV Readiness is to prepare for the immediate installation of EVSE at minimum cost.

EV Capable: Parking structure has the electrical panel capacity to provide EV charging but not necessarily the complete supporting infrastructure connecting the panels to the EV parking spot

EV Parking Spot Calculation:

Level 2- Require that all new parking structures be constructed with 5% of the total number of parking spaces be Level 2- EV Ready and an additional 10% of the total number of parking spaces be Level 2- EV Capable.

Direct Current Fast Charger (DCFC): Require that all new parking structures be constructed with 1% of the total number of parking spaces be DCFC- EV Ready

EV location:

EV Ready Spaces should be located within close proximity to vehicle entrances and or elevators. All efforts should be made to located EV charging stations close to Electrical room to help reduce the EV infrastructure . All EV ready parking spaces must meet MCDOT parking space design criteria, include MCDOT approved signage, EV Stencil, stripping and include wheel stops and bollards to protect the EV charging stations.

EV in County Climate Action Plan

Supports County Climate Action Plans T3, T4, T6

T3: Private Vehicle Electrification Incentives and Disincentives

T6: Electrify County and Public Agencies Fleet

T4: Congestion Pricing and Limiting Cars in Urban Areas

Supports Washington COG's and EDTA objective:

Electric Vehicles in to support local, regional charging options. Implementation to be aligned with:

- a. Washington COG's Metropolitan Washington options to expand their use expand infrastructure. [Http://mwcof.com](http://mwcof.com)
- b. EDTA's National EV Charging Initiative. [Http://www.evcharginginitiative.com](http://www.evcharginginitiative.com)

Parking Facility EV Backbone Infrastructure

Support the modular Electric Vehicle infrastructure that allows for

- a) Interchangeable power source supplying Electric Vehicle Infrastructure
- b) Transformers with Adjustable settings
- c) Anchorage structure for conduits and charging equipment that supports multiple vehicle configurations
- d) Communication infrastructure, wired and wireless, scalable and secure that allows for backend, vehicle and customer end transmission of data
- e) Configuration of charging equipment to enable non-electric vehicle use of EV parking space at designated times.