




Draft Sustainability Plan

Amend the City zoning code to require that EV charging stations be installed in all new single-family and multi-family housing developments of X units, new commercial enterprises including Y parking spaces, and any such pre-existing entity that incurs expansion or repair costs of at least 50 percent of its taxable value.

Charging levels

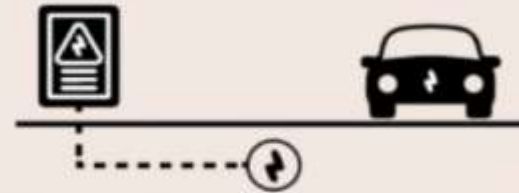
		
Level 1 Charger	Level 2 Charger	Level 3 Charger
This charger has a 120-volt cord that plugs into the wall.	This charger requires a 208/240-volt service.	This is charger is typically used for public charging.
It can provide around 40 miles of range after charging overnight. ¹	It can provide 30-80 miles of range for every hour of charging. ¹	It can provide up to 40 miles of range for every 10 minutes of charging. ¹
This charger may not require an electrician.	An electrician is required to set up electrical wiring for a new outlet or breaker and a service panel upgrade if necessary.	It typically requires 480-volt service.

¹ Range depends on vehicle, speed, cargo weight, and other factors.

Electric Vehicle Supply Equipment (EVSE) Terminology

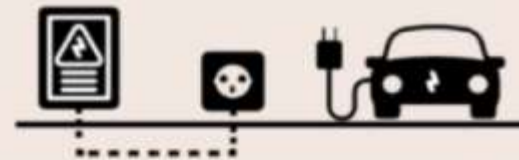
1. EV-Capable

Install electrical panel capacity with a dedicated branch circuit and a continuous raceway from the panel to the future EV parking spot.



2. EVSE-Ready Outlet

Install electrical panel capacity and raceway with conduit to terminate in a junction box or 240-volt charging outlet.



3. EVSE-Installed

Install a minimum number of Level 2 EV charging stations.



Proposal: Amend building code

- 1) EVSE at new expanded commercial construction.
- 2) EVSE at new residential construction.
- 3) EVSE at new and renovated City construction.

Example: EVSE Installed, EV-Ready Space and EV-Capable Space Requirements for New Commercial Buildings (2021 IECC)

Total Number of Parking Spaces	Minimum number of Spaces with EVSE Installed (a)	Minimum Number of EV Ready Spaces	Minimum Number of EV Capable Spaces
1	1	1	-
2-10	1	2	-
11-15	1	2	1
16-19	1	2	2
21-25	2	3	2
26+	5% of total parking spaces	10% of total parking spaces	10% of total parking spaces

Proposal format

- Outline of the proposal
- Background
 - EV
 - EV Charging and new construction
 - EV Charging and building codes
- Definitions
 - Level 2 charging
 - EVSE

Proposal format

- FAQs
 - Number of EVSE required
 - Benefits
 - Costs of installation
 - Incentives – monetary and otherwise
 - Importance to NC
 - EV fueling costs vs ICE
 - Existing HVL charging
 - EVSE management
 - Safety
- Appendix – IECC model language