



# Electric Vehicle (EV) Ready Parking



Land Use & Environment Committee  
April 27, 2023

# Olympia's Climate Commitments

- **Thurston Climate Mitigation Plan:** Reduce regional greenhouse gas emissions 45% below 2015 levels by 2030 and 85% below 2015 levels by 2040.
- **Olympia Climate Inheritance Resolution:** Achieve net-zero emissions by 2040.
- **Cities Race to Zero:** Achieve net-zero emissions by 2040 and set an interim 2030 science-based target, which reflects Olympia's fair share of a 50% global reduction in emissions by 2030.

# Where do we charge?

## At Home

More than 80% of charging is expected to occur at home, when available.

## At Work

Supports drivers without access to home charging, and long-distance commuters, and vehicles with limited range.

## At Destinations

A relatively small proportion of private vehicle charging occurs at public charging stations.



# EV Charging Levels

## AC Level 1

Does not require specialized equipment. Primarily used at home, sometimes at work.

## → AC Level 2

Requires additional charging equipment. Typically used at home, work, and for public charging.

## DC Fast Charging

Requires highly specialized high-powered equipment. Typically used for public charging stations, especially along heavy traffic corridors.

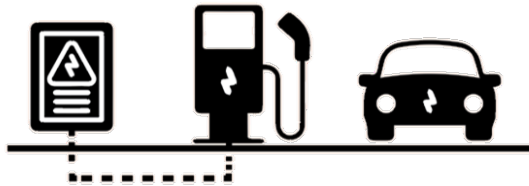


# What is EV Ready parking?

- EV Ready parking standards enable newly constructed and significantly renovated parking spaces to include, or be easily and affordably converted to, EV charging stations in the future.

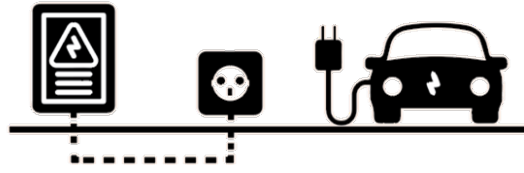
## EVSE\* Installed

Install a minimum number of Level 2 EV charging stations.



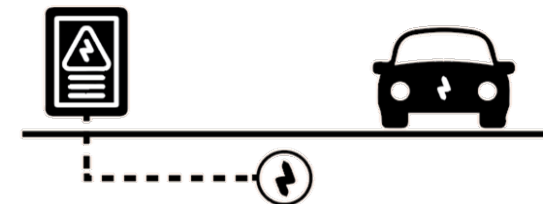
## EV Ready

Run wiring through conduit, with an outlet or terminal box.



## EV Capable

Install electrical panel capacity and run conduit to parking spaces.

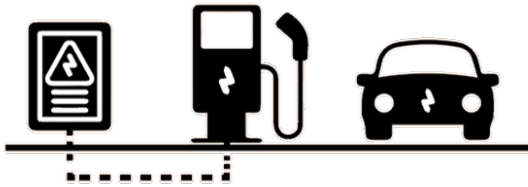


\*Electric Vehicle Supply Equipment

# Estimated Costs: Single Family and Duplexes

## EVSE Installed

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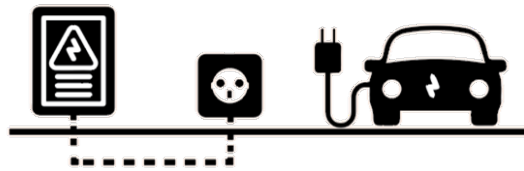


### Estimated cost:

\$380 - \$700 for a basic single-port residential charger

## EV Ready

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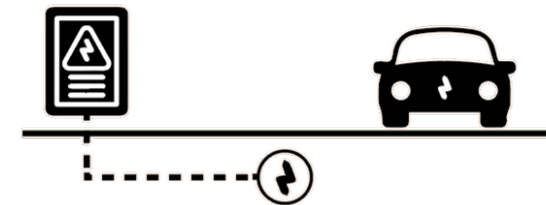


### Estimated cost:

\$150 - \$375 per space

## EV Capable

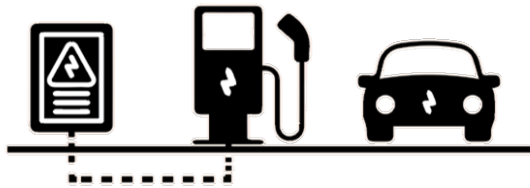
Install electrical panel capacity and run conduit to parking spaces.



# Estimated Costs: Multifamily and Commercial

## EVSE Installed

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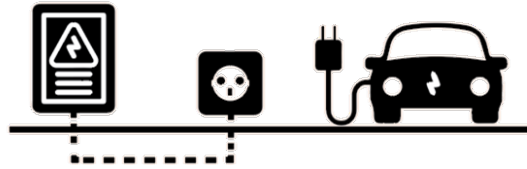


### Estimated cost:

\$1,500 for a single-port multifamily charger, \$3,000 per port for a “smart” charger

## EV Ready

Run wiring through conduit, with an outlet or terminal box.

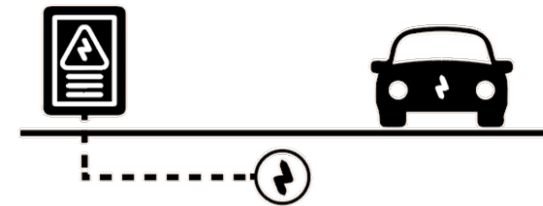


### Estimated cost:

\$1,330 - \$1,380 per space

## EV Capable

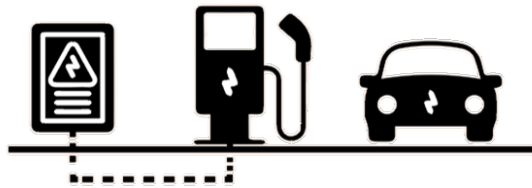
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# Estimated Costs: Multifamily and Commercial

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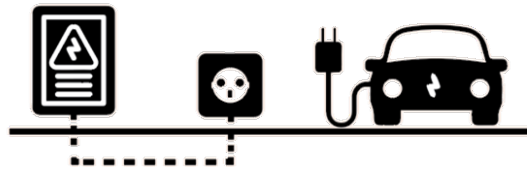


### Estimated cost:

\$1,500 for a single-port multifamily charger, \$3,000 per port for a “smart” charger

## EV Ready

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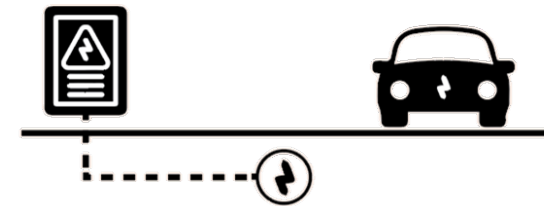
### Estimated cost:

\$1,330 - \$1,380 per space

**Retrofits: \$900 - \$5,000 more expensive per space**

## EV Capable

Install electrical panel capacity and run conduit to parking spaces.





# Guiding Principles

- **EV ownership will grow significantly over the next decade.**

On March 25, 2022, Washington State Governor Jay Inslee signed into law SB 5974, also known as Move Ahead Washington, which requires that by 2030, all new cars registered in the state be powered by electricity.


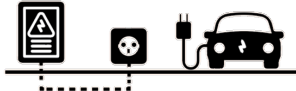

- **Most EV charging occurs at home.**

70-80% of drivers charge at home, and EV ownership is higher among those with home charging. Residents of multifamily buildings are typically unable to install home charging on their own.

- **Multifamily & workplace charging helps fill the EV-charging equity gap.**

Employees with workplace charging are 6x more likely than the average worker to drive an EV.

# Olympia's Proposal

Building Code Occupancy	Number of EVSE Parking Spaces (Level 2 Charging) 	Number of EV-Ready Parking Spaces 	Number of EV-Capable Parking Spaces 
Group A, B, E, F, H, I, M, and S occupancies (nonresidential buildings)			
	10% of total parking spaces	10% of total parking spaces	10% of total parking spaces
Group R occupancies (all residential buildings)			
Buildings that do not contain more than two dwelling units	Not required	One for each dwelling	Not required
Dwelling units with private garages	Not required	One for each dwelling	Not required
All other Group R occupancies	10% of total parking spaces	25% of total parking spaces	65% of total parking spaces

# Proposed Reductions Summary

- When changes would be required on the utility provider side of point of service
- Apartments when 50% or more of the units are Affordable Housing
- Assembly and Educational building occupancies when these requirements would increase costs by more than 10%
- Retrofits that are not substantial improvements or do not modify parking areas

# Thank you!

[olympiawa.gov/climate](http://olympiawa.gov/climate)

