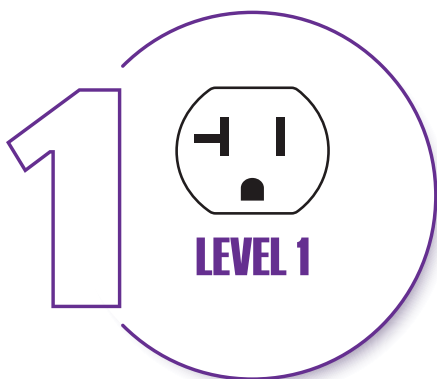




EV Readiness Toolkit for Retail Businesses

Resources for restaurants, stores, fitness centers, hotels, healthcare providers, and entertainment providers that want to provide EV charging stations in parking lots.





Charging Station Lingo

EVSE — Electric Vehicle Service Equipment; the charging station and all its components

Level 1 — A wall plug and the cord that comes with the car, or a portable charging station that plugs into a wall outlet. Level 1 gives 4-6 miles of range per hour of charging.

Level 2 — A charging station mounted on the wall or on a pedestal and connected to the electrical supply. Level 2 gives 12-24 miles of range per hour of charging.

DCFC — Direct Current Fast Charger is a charging station mounted on a pedestal and a high-voltage power supply. DCFC can fully charge an empty battery in an hour or less.

Smart Charging – An EVSE that is connected to a network and can communicate

Dwell Time — The length of time a car sits still before moving to a different destination

Ports — The number of handles or connectors on a charging station

Infrastructure — Includes all the equipment needed to bring electricity from the utility to the building's electrical panel and then to the charging station.

Survey Questions

Consider creating an online survey and posting a QR code with a link to the survey or emailing it to your frequent customer list.

Do you own a plug-in hybrid electric vehicle (PHEV) or battery-electric vehicle (EV)?

- No
- Yes What model? _____

If you answered no, are you considering buying or leasing a PHEV or EV? If so, when?

- This year or next year
- Within two years
- Longer than two years
- Not considering a PHEV or EV

How far did you drive from home or work to our business today?

- Less than 10 miles
- 10-25 miles
- 26-50 miles
- More than 50 miles

How often do you come to our business, or another business nearby?

- Almost every day
- 3 times a week or more
- Once or twice a week
- Less than once a week
- Every so often/just this one time

About how long is your average visit?

- 20 minutes or less
- Under an hour
- At least one hour
- Two hours or more

If we installed charging stations, would it change how often you come here?

- Yes
- No
- Not sure

If we installed charging stations, would you expect pay a fee to charge your car?

- Yes
- No
- Not sure

Policies

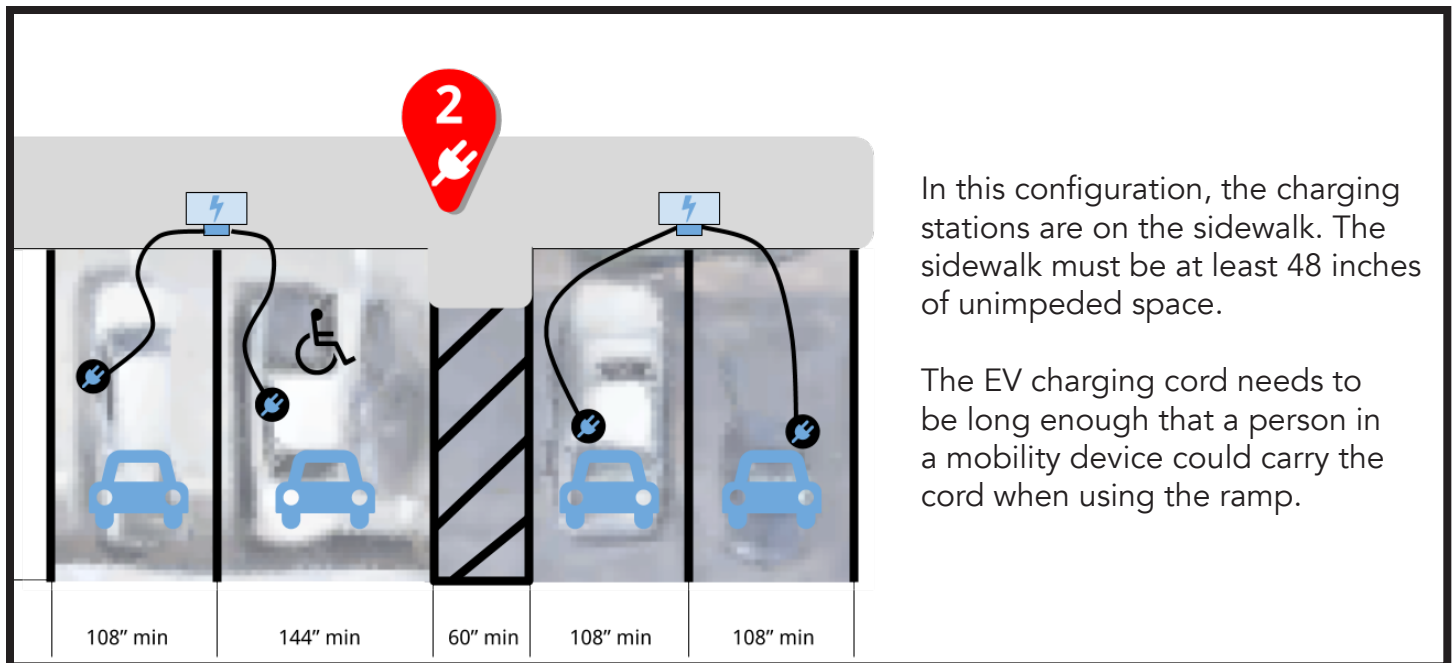
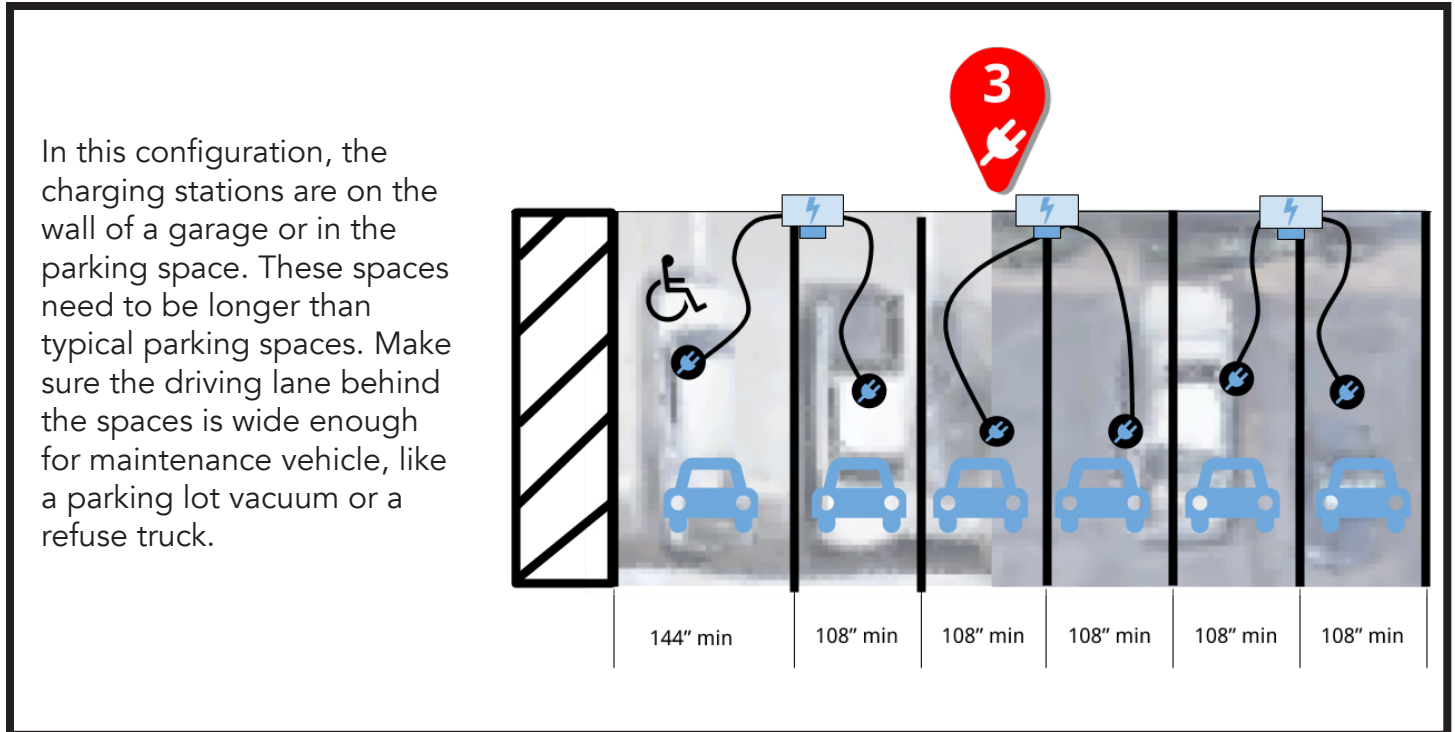
Written policies ensure that everyone has the same understanding about responsibilities and communication. You might not need all these policies. Choose which you'll address.

- Identify who is responsible for inspecting charging stations to ensure they are in working order and the frequency of inspection.
- Communicate how can drivers report a charging station that is damaged or not working, and who is responsible for resolving the problem.
- Identify someone to monitor the charging stations apps for comments about your charging stations and how to respond to complaints.
- If your parking lot charges by the hour, decide if you will offer a discount for EV drivers:
 - During the peak hours for parking lot use
 - During off-peak hours for parking lot use
 - During special events
- If your parking lot uses monthly paid passes, will you ask EV drivers to register their cars? Describe how drivers will register and with whom.
- Are drivers limited to certain amount of time at the charging station (usually four hours for Level 2 and one hour for DC Fast Charging)? How will you handle cars that overstay the limits?
- Set and communicate clear rules for sharing charging stations, which may include:
 - Requiring that EVs be charging when parked at a charging station and then moved
 - Stating if people are permitted to unplug each other's cars
- Will staff use the charging stations, too? If so, do their job duties allow them to move their cars from the EV space when charging is done?
- Create a grievance process: how do charging station users file a complaint? Who is the arbitrator of disputes? What are the consequences for drivers who abuse the policies?



What you need to know about ADA

In parking lots with shared parking (spaces are not assigned to a person or a unit), one charging port must be adjacent to a van-accessible ADA parking spot. The images below show two options that are ADA compliant. Your project designer will make sure your charging stations meet the requirements, which include an accessible route from the charging station to the building.



Charging Station Planning Checklist

Your project designer will help you identify a location that is close to the electrical supply and meets all state and local design requirements. This checklist prepares you to help the designer with charging station placement.

- If you are a property manager, do you have permission from the property owner?
- If you have a third-party operator or concessionaire, have you talked about requirements for insurance and limits on liability?
- Do city codes affect the placement of the charging station?
- Do you have different areas for customer and staff parking? Are any parking spaces assigned to a person or "employees only"?
- How will a driver walk from an EV parking space to your establishment?
- Does your electric panel have space to add a breaker? (If all the spaces are filled, an electrician can add a second panel.)
- Are the parking spaces somewhat close to the panel or an electrical supply?
- To run the electric wires from the panel to the charging station, will the electrician need to trench through concrete or walls?
- Will at least one charging port be adjacent to an ADA parking space?
- If charging stations are on a pedestal, is the driving lane wide enough for maneuvering? Can maintenance vehicles navigate around the charging stations and EVs?
- When a car is charging, will the cord extend over a walkway and create a tripping hazard?
- Are the parking spaces in the line of sight of a building, the street, or a parking lot attendant?
- Are the parking spaces level and well-drained, or will drivers stand in a puddle after a storm?
- Would the screen of the charging station be in the direct path of the afternoon sun?

**Ready to power up your property?
[Click here to start.](#)**

