

Charging Station Site Selection Guidelines

General site preference

- **Install DC fast chargers (DCFC) near a busy road or highway corridor.**
 - A DCFC is the closest to a traditional gas station experience (>30 mins). This means that access from major roadways is more important than amenities, but EV drivers will still appreciate things to do while they charge.
 - People using DCFC are mostly stopping to recharge as quickly as possible while making a longer trip, usually along major roadways.
 - Locating a DCFC along major roadways in your community gives EV drivers the confidence to plan trips while encouraging them to spend dollars in your community.
- **Install Level 2 stations near amenities that provide things to do while charging. Think about areas in your community where people will spend two to four hours as these are perfect sites to locate a Level 2 station.**
 - Make sure the level 2 is somewhere an EV driver can stay for multiple hours. It's helpful if businesses in the area around your charging station are open during the hours traffic is busiest as it provides users with something to do while they charge.
 - Providing level 2 charging stations in your community encourages EV drivers to spend their dollars at local establishments while they wait.
 - There are a variety of locations that work very well for Level 2: parks, theaters, libraries, hotels, downtown parking lots/ramps, etc.

Proximity to power

- **Install DCFC near a transformer in your community to reduce costs**
 - Because the minimum power needed for a DCFC is 25 kW, an industrial line is required. Locating charging near a transformer is the best way to guarantee the infrastructure is in place to avoid a very expensive install.
 - The closer the transformer is located to the parking area, the more you will save on installation costs by reducing cable and trenching costs.
 - Most buildings do not have the industrial line required for DCFC. The cost of your project will be significantly increased if a transformer needs to be installed. It's much cheaper to find a lot with easy access to one!
- **Install your Level 2 station in a location that will minimize your installation costs**
 - Find a route to the power supply that does not require concrete to be displaced while trenching. In some cases, tunneling can be done under thin concrete, like a sidewalk.
 - Consider mounting on a wall—it doesn't require trenching, and conduit can be run above ground to the power supply.
 - Look for a building with 240V breaker slots available (two per charging head)—having unused breaker space means no additional electrical capacity work is required.



Look for new development/redevelopment of parking projects

- **Install charging stations in a parking structure (i.e. ramp or lot) during new construction or renovation. This will significantly reduce construction costs.**
 - Parking ramps usually have electrical infrastructure for lighting and other purposes already present. It will be significantly less work and cost to tie into existing circuitry than build the necessary electrical work from the ground up. If renovating a parking ramp, incorporate charging infrastructure into the design plan to reduce costs.
 - If a city owned parking lot is being redone soon, take the opportunity to install charging. City employees and visitors to the city can use the charging, and by installing when it is being reconstructed, the cost to install will be drastically reduced. City owned parking also simplifies the process: fewer parties involved means a more straightforward install!
 - Sometimes, in downtown business districts, the businesses themselves do not own the parking structure/lot. If a street/lot in an area like this is being redone, install charging stations there. The business owners in the area will benefit from increased traffic and may be willing to provide cost share for the stations or electricity (it doesn't hurt to ask!).

Workplace charging

- **Install charging stations at locations where EV drivers work.**
 - Consider surveying employees to discover who owns or would purchase an EV if charging was available.
 - Having visible charging at work often encourages more employees to make the switch to electric as it reduces range anxiety.
 - Locate charging stations in as large of a lot as possible. By doing this, you create EV infrastructure while preserving ample space for other employees.

Fleet charging

- **Install EV charging stations in a fenced in area or other restricted access lot**
 - It provides an area where your fleet vehicles can safely charge without having to worry about private EV owners occupying the stations.



Locations to look out for

- **There are a few miscellaneous locations that can significantly inform where a charging station may fit your community:**
 - Locations that frequently host events can draw high demand for charging and increase station utilization. Prioritize installing stations here but acknowledge that high demand may cause some EV drivers to be unable to charge due to the chargers being occupied.
 - City-owned mobility hubs make great charging sites. EV drivers can park their vehicle and charge them for multiple hours while they take the bus, train, etc.
 - In downtown business districts, parking lots may be municipally owned. In these cases, ask business owners in the area to provide cost share for a municipally owned charging project.

General best practices

- **Here are some best practices that can apply to almost any community charging project to ensure the process goes as smoothly as possible**
 - Install in a lot owned by your community when possible. Installing and maintaining a charging station becomes much simpler when responsibilities and jurisdiction are not split.
 - Install in larger lots. This way, the EV charging stations take up a smaller overall percentage of the parking spaces.
 - A covered area can provide many benefits: lighting helps EV owners feel safe while they charge,