

Public EV Charging Station Site Selection Checklist

The Joint Office of Energy and Transportation (Joint Office) provides technical assistance on planning and implementation of a national network of electric vehicle (EV) chargers and zero-emission fueling infrastructure, as well as zero-emission transit and school buses. There are several considerations that should be addressed when selecting a site for EV charging stations. The following is a checklist to assist with site selection for publicly available EV charging stations.

For more technical assistance resources please review [DriveElectric.gov/technical-assistance](https://www.driveelectric.gov/technical-assistance). If you would like detailed help or assistance with charging station site selection, please contact the Technical Assistance team at [DriveElectric.gov/contact](https://www.driveelectric.gov/contact).

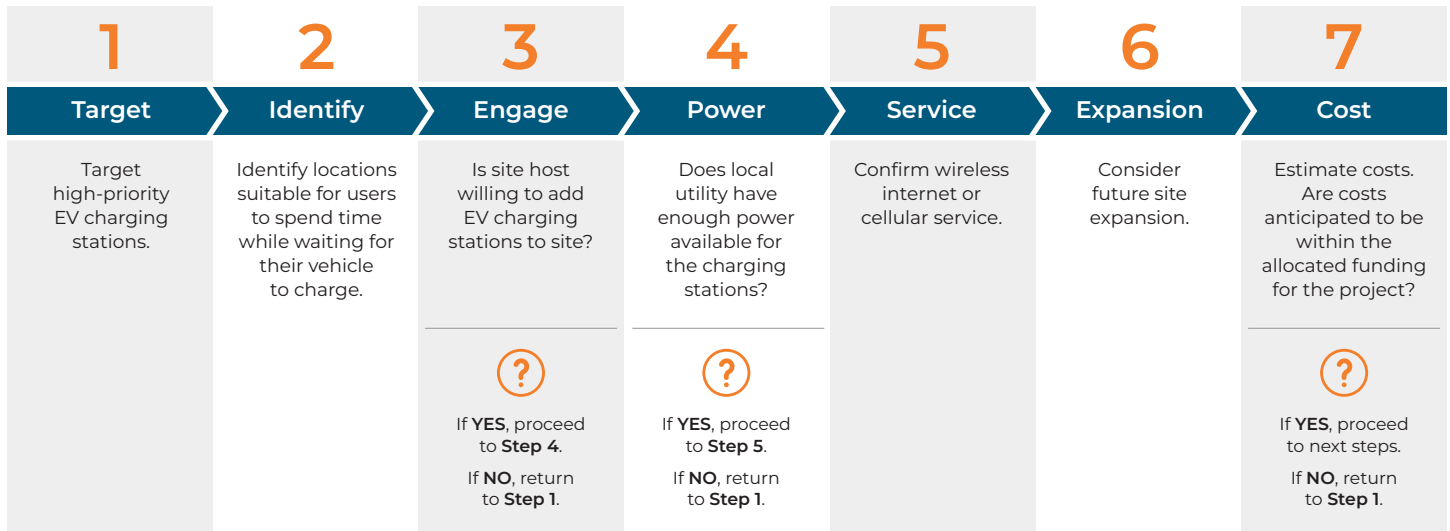
Background Research for EV Charging Station Site Selection

Below are supplemental resources that can help stakeholders during the EV charging station site selection process:

- Identify current laws and incentives for the project location. Consider whether the incentives and funding have site selection or location requirements.
 - Use the Alternative Fuels Data Center (AFDC) [Laws and Incentives database](#) to identify current incentives, laws, and regulations.
 - Use the [NEVI U-Finder tool](#) to locate utility partners and incentives by zip code.
 - Contact your city or local organizations (such as a [Clean Cities coalition](#)) for further help with determining if there are applicable local programs with incentives.
- Determine the location of existing EV charging stations in the target area using the AFDC [Alternative Fueling Station Locator map](#).
- Estimate the number of EV charging stations needed in the target area. Consider direct-current fast charging (DCFC), Level 2, and e-micromobility charging for e-bikes or e-scooters.
 - Refer to local, regional, and state [National Electric Vehicle Infrastructure \(NEVI\) Formula Program](#) EV charging plans (may be referred to as a master plan, roadmap, etc.) for information on planned EV charging station locations (if available).
 - [The Electric Vehicle Infrastructure Projection Tool Lite](#) can be used to help estimate future charging station needs for the entire state and metropolitan areas.
- If planning to use federal funds for the project, refer to the [NEVI Formula Program Standards and Requirements](#) for information such as minimum number of charging ports, connector type, power levels, availability, payment methods, equipment certifications, and uptime requirements.
- Review building, zoning, and parking codes for specific EV-related regulations that may impact the project. Search for applicable local and state codes that may apply.
 - Some local and/or state codes have minimum requirements for the number of EV charging stations and/or accessible EV charging stations. The AFDC Laws and Incentives database tracks [state requirements](#). While not an exhaustive list, the Southwest Energy Efficiency Project manages a [list of municipalities that have adopted EV infrastructure building codes and zoning ordinances](#).
- Identify if the site location is in an area likely to be flooded by reviewing U.S. Department of Homeland Security Federal Emergency Management Agency [flood maps](#).

Site Selection Process for EV Charging Stations

Below are high-level steps to guide stakeholders through selecting an EV charging station site. The figure provides an overview of the process flow, with the following steps providing more details.



1. Target high-priority EV charging locations that have been identified in local, regional, and state NEVI Formula Program plans.

2. Identify potential charging station locations that are:

- Available and safe for public access including [Americans with Disabilities Act](#) accessibility, signage, lighting, and vandalism prevention.
- In a location that is a highly visible and trafficked area.
- Appropriately distanced from other [charging stations](#) considering vehicle range and routes.
- In an area with amenities such as public access restrooms, drinking fountains, or Wi-Fi hot spots.
- Conducive for customers to spend 2 or more hours for Level 2 charging stations and around 30 minutes for DCFC stations.
- In an area with sufficient space to accommodate the typical vehicle uses and types, such as a pull-through station for a vehicle with a trailer.
- In a location less likely to be inundated by [floodwaters](#).

3. Engage with the site host to determine if they are willing to add EV charging stations to their site (if request is not coming from the site host).

 If site host is not willing, **return to Step 1**.

4. Engage with the area power utility partner to understand site limitations and costs related to electricity supply at the potential site location, including grid-level constraints. Confirm that the utility can support the full power of the electricity required by the charging stations.

 If there is not sufficient electrical capacity at the location, **return to Step 1**.

5. Confirm availability and suitability of wireless internet connection or cellular service for EV charging stations. Engage with the EV service provider to understand the charging station model connection speed and signal strength requirements.

6. Consider opportunities for future site expansion, such as increased electrical capacity and sufficient space to accommodate additional EV charging stations as demand increases.

7. Estimate costs, including available incentives, project costs, ongoing expenses/fees, construction costs, and electrical upgrade costs.

- Consider whether the costs are prohibitive in building EV infrastructure at this location.

 If costs are prohibitive, **return to Step 1**.



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Resources for Next Steps

- [Charging Forward: A Toolkit for Planning and Funding Rural Electric Mobility Infrastructure](#) and [Charging Forward: A Toolkit for Planning and Funding Urban Electric Mobility Infrastructure](#) – Resources from the U.S. Department of Transportation to assist rural and urban stakeholders with planning for EV charging infrastructure.
- [U.S. Access Board Design Recommendations for Accessible EV Charging Stations](#) – Technical assistance document from the U.S. Access Board to assist in the design and construction of EV charging stations that are accessible to and usable by people with disabilities.
- [Joint Office Webinar: State of the Practice in EV Charging Station Site Design](#) – During this webinar, national experts discussed key considerations in the design of EV charging stations, such as accessibility, security, parking, operations, and maintenance.
- [AFDC Developing Infrastructure to Charge Electric Vehicles](#) – Includes resources and educational material to support next steps for procuring, installing, operating, and maintaining EV charging stations.
- Resources to identify potential funding opportunities:
 - [AFDC State Electrification Planning and Funding](#) – Summarizes major Bipartisan Infrastructure Law programs that assist states in their electrification efforts.
 - [NEVI U-Finder](#) – A networking tool for EV charging infrastructure installation that helps states, communities, and fleets by providing lists of local utility partners and incentives.
- [EV Mobility Hubs](#) – EV mobility hubs allow for charging multiple vehicles and other electrified transport modes such as electric buses or e-bikes. Funded projects develop strong local and regional partnerships to support increased use of EVs. Strong partnerships can efficiently cut through regulatory and market barriers to technology introduction.