

Host Site Specifications for TIGER 2 Project Electric Vehicle Fast Charging Stations

Purpose

Oregon received funding from US DOT to deploy 22 electric vehicle (EV) fast-charging stations at key locations in Northwest Oregon. Proposed charging stations will be along major transportation corridors and destinations outside of urban areas where EV drivers are likely to want to go. EV owners will expect charging stations to be safe, convenient, reliable, easily identified, simple to use, and any fees collected for the service fairly priced. Also, consumers will expect consistency in their EV charging experience from station to station, regardless of governmental jurisdiction.

ODOT has developed the following criteria to be used in selecting host sites for grant funded EV charging stations. Host sites are locations at existing commercial enterprises that are interested in partnering with ODOT for the installation and operation of EV charging equipment on their property. The criteria below describe the minimum qualifications of potential host site locations based on physical characteristics and services offered on the property. Additional criteria related to the qualifications of the prospective business partner (such as financial viability, ownership, etc.) will be contained in specific host site agreements.

Part I: Minimum Eligibility Requirements (pass/fail criteria)

1.0 Host Site Eligibility

All prospective host sites, whether public or privately owned, must:

1. Comply with all laws, state and federal, that prohibit the discrimination of persons on the basis of race, religion, color, age, sex, national origin, or disability;
2. Be fully licensed and approved to provide all services offered.

1.1 Location Relative to the Interstate/Interurban Highway

Host sites shall be located within a quarter mile from a highway interchange or along a State Highway.

1.2 Site Accessibility

Host sites must be easily accessible via a route that can safely and conveniently accommodate EVs of the types, sizes and weights that would be traveling to the facility, entering and leaving the facility, returning to the highway and continuing in the original direction of travel.

1.3 Site Layout

Host sites must have physical geometry, including parking areas and ingress/egress points, that can safely and efficiently accommodate movements into and out of the site, onsite circulation, and parking by passenger vehicles and light duty trucks.

1.4 Site Facilities

Host sites must have restrooms available to the public at all times of operation. Restrooms must be modern, sanitary and have drinking water. The site must have internet connectivity capabilities to facilitate communications between the EVSE, EV, and to serve as the medium for the EVSE to be integrated with utility smart grid systems.

1.5 Site Hours of Operation and Staffing

Host sites must be open for operations at least 17 consecutive hours (e.g., 6 a.m. to 11 p.m.), each day of the week. Host sites must be staffed by at least one person on duty, with EVSE available 24 hours a day.

1.6 Site Parking

The host site must have adequate paved parking spaces available to render EV charging services. These spaces (or charge stations) must be adequately lit, and in a location safe from traffic circulation and ingress/egress points.

1.7 Site Shelter

The host site must provide a location offering shelter from inclement weather for drivers to wait while their EV is charging.

1.8 Signage

A host site must comply with the state's and the local jurisdiction's policies, procedures and project-related rules concerning signage, including signage for the EV charging station, directional signage, project or funding source logos, etc.

1.9 Combination or Cooperative Sites

In cases where no single host site meets all of these eligibility criteria, the criteria may be met by a combination of two or more businesses located in close proximity to each other and easily accessible on foot from each other's parking lots via pedestrian walkways compliant with the ADA and that do not require crossing a public highway.

Part II: Desirable Features for Host Sites

2.0 Availability and Capacity of Electric Power Supply

Host sites must have 208V or 480V 3-phase power available nearby, and the transformer must have adequate capacity to serve DC Fast Charger(s). The comparative ease of extending power to the preferred charging site, or the willingness of the host to share in the cost may be a decisive factor in siting Fast-Charge stations.

2.1 Public Amenities

Host sites that offer products and ancillary services to the public while charging will be preferred. Examples of such services would include vending, snacks, fast food and/or full service restaurants, traveler information (tourist, hotels, and maps), retail shopping, etc. Access to public telephone and extended hours open to the public per day beyond the 17 hour requirement will also be considered as desirable features.

2.2 Preference

Where two or more sites meet all of the pass/fail criteria, the least cost option to the grant funding will receive preference, through cost sharing or realizing efficiencies through power availability and project readiness. If a targeted host site proves difficult to accommodate the installation an EVSE, whether that is due to power availability issues or any other reason, the agency and contractor will take action to explore an alternate site. This new site will be expedited through the same formal approval process as the initial targeted sites.