



Oregon Department of Transportation
Office of Innovative Partnerships
355 Capitol Street NE, Room 115
Salem, Oregon 97301-3871

REQUEST FOR INFORMATION (RFI)

Electric Vehicle Charging Stations

RFI Number: 04680

RFI Issue Date: December 18, 2009

Response Due Date: January 20, 2009

The Oregon Department of Transportation (ODOT) is seeking information from interested suppliers of Electric Vehicle (EV) Charging Stations. **This RFI is a preliminary step to help ODOT develop a draft functional specification.** ODOT anticipates soliciting additional input from interested suppliers on the draft functional specification after it is developed. Only interested suppliers who provide a response to this RFI will be invited to review ODOT's draft functional specification. When the specification is finalized, ODOT intends to conduct a competitive public procurement by issuing a formal Request for Proposal and selecting one or more suppliers for award of a Purchase Agreement.

Responses to this RFI are due no later than the date identified above. Please submit your response electronically as an Adobe Acrobat PDF file (email is acceptable) or in written hard copy form to:

ODOT Procurement Office
Attn: Gordon L. Shadle
455 Airport Rd SE, Bldg K
Salem, Oregon 97301-5348
Phone: (503) 986-6904
Email: gordon.l.shadle@odot.state.or.us

Reduction of Waste. In an effort to reduce waste please limit your response to a maximum of 10 double-sided or 20 single-sided pages using standard 8-1/2" X 11" paper with a minimum 11-point font size. If submitting a hardcopy, please refrain from using 3-ring binders, spiral bindings, and other non-recyclable binders and folders.

A. OVERVIEW & OBJECTIVES. ODOT expects a new generation of plug-in EVs to enter the marketplace by 2010. Demand for these vehicles is expected to grow quickly in Oregon, particularly when affordable, highway-speed vehicles come to the market. Currently, the biggest limitation for drivers thinking about making the transition to EVs is the absence of a reliable network of charging facilities to increase the range of these vehicles. ODOT intends to identify qualified suppliers that are capable of manufacturing and delivering EV Charging Stations to ODOT specifications.

ODOT is uniquely positioned to provide a network of commonly designed stations through the Oregon Innovative Partnerships Program as authorized in [ORS 367.800 to 367.826](#). Here is a web link that provides information on the program:

http://www.oregon.gov/ODOT/HWY/OIPP/inn_ev-charging.shtml

The objective of this RFI is to enable a Technical Advisory Group to draft a functional specification for EV Charging Stations that:

- o Details what the EV Charging Station will do.
- o Describes how a user will interact with the station.
- o Describes what the station will look like.

The specification will be incorporated into a Purchase Agreement that enables:

- o Authorized Purchasers (state agencies, counties, cities, districts, utilities, etc.) throughout the State of Oregon to have a cost-effective means to procure EV Charging Stations;
- o The deployment of EV Charging Stations throughout Oregon that are compatible with all vehicle manufacturers and that have consistent and uniform appearance, performance and safety standards; and
- o An EV charging infrastructure that is expandable and adaptable to changes in the EV marketplace.

B. CONTENT OF YOUR RESPONSE. Responses are voluntary and shall not bind either the interested supplier or ODOT in any way. ODOT is not responsible for any costs incurred by the interested supplier to develop a response to this RFI. This RFI does not constitute a solicitation for bids or proposals.

1. General Information- Interested suppliers should include the following general information in their response:

- o Legal name and address of the supplier;
- o Names, telephone numbers, and email addresses of key contact persons;
- o A short description of your general experience and qualifications to supply EV Charging Stations. A brief description or illustration of your supply chain is also desired.

2. Assumptions Table- Interested suppliers should respond to each of the following ODOT assumptions with information and recommendations that help ODOT write the functional specification. Include comments on whether the assumptions are overly broad or restrictive. Include any additional assumptions ODOT should consider.

ASSUMPTION		IS NOT
1	ODOT will award one or more Purchase Agreements for the manufacture and delivery of EV Charging Stations. Incidentals and fee-based services such as mounting hardware, documentation, training, maintenance & repair, installation support services such as programming and station setup, and engineering services will be included as optional line items in the agreement.	The Purchase Agreement will not include locating, permitting, installing, and operating the station. These will be the responsibility of the Authorized Purchaser.
2	Two basic types of EV Charging Stations will be available for purchase by Authorized Purchasers: (1) free-standing pedestal for curbside or parking structure; and (2) wall-mount. Both types of stations should be dual mode 120/220 and contain multiple outlets.	The scope of this procurement does not cover research and development of new products or technologies.
3	Self-service, "destination" type of stations with the following services: <ul style="list-style-type: none"> • Level I: 120 VAC with NEMA 5-20 receptacles • Level II: 240 VAC with J1772 plugs 	<ul style="list-style-type: none"> • "In-transit" type of stations with Level III, 480 VAC or "quick charge" technology. • "Residential" stations for home use. • Proprietary connectors.
4	Conductive charge ports	Inductive charge ports
5	Capable of being used by the general public in multiple locations (both public and private) and weather conditions.	<ul style="list-style-type: none"> • A unit requiring a technician or special skills to operate in a controlled environment. • Intended to be used by idling commercial trucks.
6	Communicates an Oregon "brand" for EV infrastructure throughout the state.	Marketing a particular private brand of EV Charging Station.
7	Complies with ADA Standards for Accessible Design	

3. Questions and Requests- Interested suppliers should respond to each of the following questions and requests. ODOT

welcomes additional input; however, interested suppliers should refrain from submitting general marketing information that does not help ODOT draft a functional specification.

General

- Identify areas ODOT needs to address in its specification to achieve its objectives and maximize the likelihood of success in this procurement.
- Identify any barriers to implementation that ODOT should consider in the specification.
- Identify codes, standards, and industry practices ODOT should incorporate into the specification.
- Describe the control systems and features ODOT should consider including in the specification, e.g. interfaces, access control, smart charging, etc. What should ODOT include for integrated communications and remote data acquisition (usage history and charging profiles), e.g., vehicle-to-station; station-to-grid; malfunction notifications and alerts? What is the best technology for enabling an integrated payment capability?
- Describe the event tracking capability ODOT should include in the specification where the station collects data on charges and discharges and other information associated with the use of the station (vehicle ID, customer ID, vehicle information, etc.).
- How can the State of Oregon best brand itself on the EV Charging Station?
- How can ODOT accommodate changing EV technology and the need for expansion in the specification?
- How much extra space inside the station should ODOT specify to accommodate additional components and technology?
- What industry standard or best practice should ODOT adopt for equipment warranty, documentation, training, maintenance & repair, installation support services, engineering services, and outage response?

Safety

- What safety features should ODOT specify to provide the least risk to the user of the EV Charging Station, e.g., GFCI reset, self testing, automatic reclosure retractable charging cord, etc.?
- What lab testing certifications are industry standard?
- What are the biggest risks ODOT faces in regards to safety of the station? Collision? Vandalism?
- Describe how ODOT should include lighting requirements in the specification.

Appearance

- Describe the best size, materials, and aesthetic features ODOT should specify. Include information on the most effective means for accessing the station.
- What is the optimum footprint ODOT should specify for each of the three types of stations assumed?
- Describe the best user interface ODOT should specify.

Durability

- What specifications should ODOT identify for durability, e.g. stainless steel for coastal locations and exposure to salt, coatings, operational environment?

C. PUBLIC RECORDS. This RFI and the response received from an interested supplier shall be kept by ODOT and made a part of the public record. ODOT REQUESTS THAT INTERESTED SUPPLIERS NOT SUBMIT INFORMATION IN THEIR RESPONSE THAT THE INTERESTED SUPPLIER CONSIDERS PROPRIETARY OR CONFIDENTIAL. However, if an interested supplier chooses to submit information they consider exempt from public disclosure as specified in Oregon Public Records Law [ORS 192.410 to 192.505](#), or under the grounds set forth in [ORS 367.800 to 367.826](#), then the interested supplier must clearly designate the portion of its response that it considers exempt and provide a justification consistent with the statutes identified. ODOT will not accept or consider responses from interested suppliers that attempt to exempt the response in whole from disclosure.