



State contracts:

- [State Vehicle Contract](#)
- [State EV Supply Equipment \(EVSE\) Contract](#)

Planning EV supply equipment installation:

- [DES Real Estate Services Contact Information](#)
- [How Real Estate Services Can Help](#)
- [EV Charging Station Installation Request Form](#)
- [Electric Vehicle Charging Station Policy](#)
- [EVSE Planning Questions](#)
- [Pros and Cons of EV Charging Options](#)
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Managing EV charging equipment:

- [Fleet Management Best Practices](#)
- [State Vehicle Frequently Asked Questions](#)
- [Electric Vehicles](#)
- [Electric Vehicle Charging Locations](#)
- [Contact Fleet Operations](#)

Training drivers how to charge EVs:

- [How to Charge Your EV](#)
- [Fleet Vehicle User Orientation](#)



EVSE Planning Questions (with appreciation to George Carter, Asst. Director, DES Buildings & Grounds Division)

Who are the agency, site and stakeholder contacts for these projects?	Agency contact: Site contact: Stakeholder contacts:
Is your agency the sole tenant in the building?	Y/N
What type of facility is it? (circle all that apply)	<ul style="list-style-type: none">• Strip mall• Stand-alone building• Training facility• Regional facility
Who pays the electrical bills?	Circle one: tenant lessor
How many of the sedans assigned to this location remain there overnight?	Number of vehicles:
If vehicles go home with an employee, is the agency exploring in-home charging?	Y/N
What is the proximity/location of available parking stalls?	Please describe:
Is parking a surface lot or within a garage?	Circle one: surface lot garage
Does the parking facility have internet or Wi-Fi connectivity?	Y/N
Does your cell phone work in the parking lot or garage?	Y/N
Does the parking facility have a secured parking area?	Y/N
How many of the sedans assigned to this location could be transitioned to EV alternatives? (This assumes that existing vehicles can be replaced early)	Please describe:

Pros and Cons of EV Charging Options (with appreciation to George Carter, Asst. Director, DES Buildings & Grounds Division)

Options	Pros	Cons	Addl. Considerations
Level 2 Chargers located at state leased/owned facilities	<ul style="list-style-type: none"> • Lower cost • Available 24/7 • Convenient charging for drivers • Agency ownership and control • Support workplace charging needs • Ability to establish site that include Invers technology • Improved safety since installations are at state facility vs. public locations • Future incorporation of load management technology • VW Federal funding available • SEEP funding available • Single standard connection on all vehicles (J1772) 	<ul style="list-style-type: none"> • Project management resources to support multiple locations • Communication with multiple facilities and facility contacts • Multiple brands and vendors: difficult to manage consistency • Responsible for all maintenance • Requires FTE support for larger fleets • Larger audience to educate 	<ul style="list-style-type: none"> • May require a statewide policy/guidance to avoid confusion among agencies/drivers • If sites are prioritized correctly, the state can focus funds on sites that gain largest economies of scale • At a certain point, there may be adequate corridor and intercity DC fast chargers to support state vehicles. <p>Resources/funds:</p> <ul style="list-style-type: none"> ▪ VW Federal Settlement Fund ▪ SEEP ZEV Working Group Funding ▪ DES INVERS User Orientation
DC Fast Chargers Regionally placed "Hub/Depot Concept"	<ul style="list-style-type: none"> • Enables efficient intrastate travel • Opportunity to fill in gaps within Electrify America, WADOT, and others install corridor chargers • Focuses funding • Supports core areas of the state with higher vehicle counts • VW Federal funding available • Natural next step for state agencies • Many organizations are working in this space, partnership opportunities 	<ul style="list-style-type: none"> • Expensive • More complex installations • Typically requires payment or access cards to use (and limit use by public) • Facilities need to have available electrical capacity or will require service upgrade (new transformer(s), feeders, panels, etc.) • Higher repair costs • Requires redundancy to ensure adequate up-time for users • Technology may be new to most people • Many organizations working in this space 	<ul style="list-style-type: none"> • Include dual standard mandate for all stations (CHAdeMO and SAE Combo) • Recommend engagement with PSE/AVISTA/Local POU to address power needs <p>Resources/Funds (links if available):</p> <ul style="list-style-type: none"> ▪ VW Federal Settlement Fund ▪ SEEP ZEV Working Group Funding ▪ WADOT Electric Vehicle Infrastructure Pilot



EV Planning Resources from WA Dept. of Enterprise Services

Options	Pros	Cons	Addl. Considerations
Mobile Chargers	<ul style="list-style-type: none"> • Not limited to specific locations • Requires little to no infrastructure upgrades • Mobility to charge vehicles anywhere in a parking lot 	<ul style="list-style-type: none"> • Cost (\$30,000 to \$70,000/unit) • Can only “re-fuel” a limited number of vehicles per charge • Required staff trained to operate • New technology and rapidly advancing 	<ul style="list-style-type: none"> • Fleet experienced significant issue with first generation units. <p>Resources/funds:</p> <ul style="list-style-type: none"> ▪ Freewire (available on master contract)
Solar Chargers	<ul style="list-style-type: none"> • Good for remote locations • “Plug and Play” or “place” option 	<ul style="list-style-type: none"> • Cost (\$50,000+ per unit) • Limited number of vehicles per charge • Relatively untested and limited vendors • Limited DC Fast charging options • Requires good weather to be efficient 	<ul style="list-style-type: none"> • Parks is currently exploring the use of this technology. Opportunity to partner or view their results <p>Resources/funds:</p> <ul style="list-style-type: none"> ▪ TBD
Home Charging	<ul style="list-style-type: none"> • Significant opportunity across all agencies • LNI’s pilot successfully addressed concerns and developed process template for use by others • Can use home 110 V outlet for “top-off” charging 	<ul style="list-style-type: none"> • Even with LNI’s work, anticipate agencies will have their own concerns. • Requires FTE to evaluate users, visits homes, and monitor usage 	<p>Resources/funds:</p> <ul style="list-style-type: none"> ▪ TBD



EV Planning Resources from WA Dept. of Enterprise Services

EVSE Decision Tree (from George Carter, Asst. Director, DES Buildings & Grounds Division)

Agency to conduct pre-planning meeting to:

- Identify agency stakeholders
- Develop roles and responsibilities
- Evaluate current vehicle data
- Evaluate vehicle replacement plans
- Identify agency locations for EVSE placement
(If a multi-tenant facility, engage other tenants)
- Determine type of equipment to be purchased
- Agency to confirm funding availability of up to \$40,000 per charging port
- Determine if stations will be networked or not
- Develop a communications plan
- Develop a change management plan
- Develop policy
(Evaluate future infrastructure needs and incorporate into planning)

