

**JUNE 2024** 

Electric vehicle support equipment installation using operating budget funding

**JULY 2023 — JUNE 2024** 

**Business Resources Division** 

Report to the Legislature

# **Agency Overview**

The Department of Enterprise Services (DES) provides centralized services to state government agencies; to other public entities such as cities, counties, and tribes; and to Washington residents.

DES' mission is to strengthen the business of government.

We do this by creating overall operating efficiencies so our state's government entities can focus on their core missions. Our buying power, economies of scale and years of experience help government get the best value for the products and services they need to support their missions.

### **Key Services**

- Capitol Campus management
- Construction & public works
- Contracts & procurement
- Employee Assistance Program
- Energy efficiency
- Engineering & architectural services
- Facilities management
- Fleet management & EVs

- Parking management
- Print & mail services
- Property management
- Real estate services
- Risk management
- Small agency support
- Surplus property
- Training & workforce development



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# **Executive Summary**

The Department of Enterprise Services (DES) was provided \$2.7M in the 2022 supplemental operating budget (ESSB 5693 Sec. 148 (12)) and an additional \$5.4M in the 2023-25 biennial operating budget (ESSB 5187 Sec. 153 (6)) to install electric vehicle supply equipment (EVSE) infrastructure.

The primary purpose of this report is to provide updates to projects that are underway using the funding provided in the 2023-25 biennial budget. Updates to projects that were funded by the 2022 supplemental operating budget and included in our August 2023 report, are also included (see pages 6 and 7).

DES solicited projects in coordination with the State Efficiency and Environmental Performance (SEEP) Office, the Zero-Emission Vehicle (ZEV) Workgroup, and with support from the Interagency Electric Vehicle Coordinating Council (IEVCC).

This funding was used to start projects for 124 new Level 2 charging ports and 17 Level 3 ports across the state. The chargers installed using the funding in 2022 supplemental operating budget had already supplied 39,755 kWh to state vehicles as of the data cutoff.

## Introduction

The 2022 supplemental budget (ESSB 5693 Sec. 148 (12)) provided DES with \$2,952,000 in fiscal year 2023 to install zero emission electric vehicle supply equipment (EVSE) infrastructure at state-owned facilities. The 2023-2025 operating budget (ESSB 5187 Sec. 153 (6)) provided DES with an additional \$5.3 million to install EVSE infrastructure. The equipment is needed to accommodate charging station installation and promote state fleet vehicle electrification. DES worked in collaboration with the State Efficiency and Environmental Performance (SEEP) Office to develop an application template for agencies as well as a process to select projects for funding.

As agencies received approval for projects, they conducted electrical assessments of the selected facilities to determine if the building had sufficient electrical capacity to support the EVSE or if building upgrades would be required. These assessments are a necessary step in the project and help to provide more accurate project estimates and to determine the project scope and timeline.

This report provides an update on the nine projects funded utilizing the \$2.95 million in supplemental budget funding from FY 23. Priority was given to projects in areas that have limited or no nearby public charging infrastructure available and to multi-tenant facilities that will support state fleet electrification. In total, this funding was used to install:

- 44 Level 2 chargers
- 8 Level 3 chargers
- 1 Solar Canopy (with two Level 2 chargers not included above)

These numbers are slightly different than the interim report due to scope modifications required by project constraints. This new charging infrastructure will improve the state's readiness to meet the fleet electrification targets outlined in <u>Executive Order 21-04</u>. These chargers contribute to the estimated projected need of 301 new level 2 chargers and 52 level 3 chargers in 2023, as identified in the <u>Zero-Emissions Vehicle Implementation Strategy Report</u>.

### **Statutory Directive**

#### **2023-25 Biennial Operating Budget- From** ESSB 5187:

"\$2,671,000 of the general fund—state appropriation for fiscal year 2024 and \$2,671,000 of the general fund—state appropriation for fiscal year 2025 are provided solely for zero emission electric vehicle supply equipment infrastructure at facilities to accommodate charging station installation. The electric vehicle charging equipment must allow for the collection of usage data and must be coordinated with the state efficiency and environmental performance program. The department must prioritize locations based on state efficiency and environmental performance location priorities, and at least where zero emission fleet vehicles are or are scheduled to be purchased. The department must report when and where the equipment was installed, usage data at each charging station, and the state agencies and facilities that benefit from the installation of the charging station to the fiscal committees of the legislature by June 30. The department shall collaborate with the interagency electric vehicle coordinating council to implement this subsection and must work to meet benchmarks established in chapter 182, Laws of 2022 (transportation resources)."

### **Background**

Governor Inslee signed <u>EO 21-04</u>, which directs electrification goals for the Washington State Cabinet Fleet. To support the change in fleet composition, the Legislature provided funding for the installation of EVSE and chargers around the state in the 2022 supplemental operating budget, the 2023-2025 operating budget, and the 2023-2025 transportation budget. Installing charging infrastructure at state-owned and state-leased buildings is a priority to support state fleet electrification.

## Methodology

In July 2023, in coordination with the SEEP office and the Interagency Electric Vehicle Coordinating Council (IEVCC), DES established EV project criteria and an application for agencies to submit project proposals for EVSE project funding.

Projects proposed by agencies were assessed using the following criteria:

- Readiness- What pre-work has been completed that could expedite the project.
- Project Location- Chargers were installed at both state-owned and state-leased facilities.
- Network Capabilities- The facility must have the ability to support a networked charger so that utilization data can be collected.
- Project Benefits- Does the project:

- o Positively impact economically disadvantaged communities.
- Positively impact communities with poor air quality.
- Provide charging infrastructure for multiple agencies or any state employee utilizing an EV while on official state business.
- Increase EV replacements for internal combustion engines that have reached the end of their useful life.
- o Install EVSE in areas with coverage gaps.

DES received over 90 project proposals in fall 2023 from numerous state agencies. All submitted projects were scored by a seven-person panel of SEEP and DES staff. The scoring was based on project location, equipment, team qualifications, project implementation plans, and benefits, with bonus points given to projects if stations were accessible to other state agencies/public and showed high likelihood of vehicle conversion to Battery Electric Vehicles (BEV) once installed. The team used a rubric for scoring and results were individually reviewed if score variance was greater than 15% between two evaluators. The team also considered each agency's project prioritization.

Projects were ranked using the following criteria:

- 1) The number of anticipated vehicle conversions to battery electric vehicles for a proposed project scope
- 2) The distance the proposed project locations were from a nearby publicly available Direct Current Fast Charger (DCFC) utilizing Plugshare.com
- 3) The State's environmental justice priorities

The application process was distributed at the ZEV Workgroup meeting, through the SEEP newsletter, ZEV Workgroup newsletter, DES Real Estate Services, and through individual agency contacts.

# **Findings/Results**

The DES/SEEP selection panel identified 16 projects, that will be funded using the \$5.3M provided by the 2023-2025 operating budget. As of the time of this report, most projects have begun construction and some projects have already been completed. Projects frequently need building infrastructure upgrades which can lead to longer lead times on project completion. If a project needs a new transformer, the lead time for that equipment can be 40 weeks or longer, depending on the exact requirements.

Each project has agreed to a memorandum of understanding (MOU) with DES to establish project standards and expectations. The MOU approves funding up to a certain amount to complete the charging installation, so the number of chargers listed below is subject to change as project costs become more certain. The MOU also includes requirements for agencies to report utilization to DES on an annual basis.

#### FY24 Operating Budget projects approved include:

Agency	Location	Date Completed	Level 2 Ports	DCFC Ports	Total kWh Charged YTL (year to life of charging unit)
DES	Yakima	TBD	30	4	N/A
DES	Olympia	TBD	22	0	N/A
DFW	Ephrata	TBD	6	0	N/A
DFW	Montesano	Jan-24	4	0	184.1
DOC	Walla Walla	TBD	0	3	N/A
DSHS	Omak	TBD	4	0	N/A
DSHS	Wenatchee	TBD	12	2	N/A
DVA	Walla Walla	TBD	0	1	N/A

LNI	Moses Lake	TBD	4	1	N/A
LNI	Wenatchee	TBD	4	1	N/A
LNI	Mount Vernon	TBD	4	1	N/A
svc	Friday Harbor	TBD	2	0	N/A
WMD	Camp Murray	TBD	6	2	N/A
WMD	Spokane	TBD	10	2	N/A
WMD	Yakima	TBD	8	0	N/A
WMD	Bremerton	TBD	8	0	N/A
	Total		124	17	

The table below provides an update on projects awarded using Supplemental Budget funding received in FY23. Kilowatt usage data was collected from agencies on March 31, 2024. The number of chargers is different, by one, from the previous report for both level 3 and level 2: this is due to changes as a result of budget and infrastructure constraints.

#### **Supplemental Budget Funding FY 22-23**

Agency	Location	Date Completed	Level 2 Ports	DCFC Ports	Total kWh Charged YTL (year to life of charging unit)
DES	Olympia - Capitol Court	Mar-24	0	2	161.2
DES	Olympia - NRB Parking Lot	Jan-24	7	0	699.5
L&I- DSHS	Kelso	Apr-24	11	2	N/A <sup>(2)</sup>

DFW	Yakima	Jul-23	2 <sup>(3)</sup>	0	430.8
DOC	Shelton	Oct-23	10	0	18,984.92
DOC	Airway Heights	Jan-24	8 <sup>(4)</sup>	2 <sup>(4)</sup>	1591.42
WSDOT	Bellevue	Jan-23	2 <sup>(1)</sup>	0	1,642.3 <sup>(1)</sup>
DVA	Walla Walla	Sep-23	0	1	8,521.3
DVA	Port Orchard	Sep-23	4 <sup>(5)</sup>	1	6,522.0
	Total		44	8	39,754.9

- (1) As this is a solar charger, not a traditional charger, energy is not coming from the grid and this number represents the energy captured by the solar panel.
- (2) This project, due to a 40-week lead time on a specific piece of sub-panel equipment, completed after the usage data cutoff date.
- (3) This project was able to upgrade to a dual head while remaining under budget.
- (4) This project's budget came in much higher than expected and as such, the scope was changed to the listed charger numbers. Previous scope was 12 L2 chargers and 1 L3 charger.
- (5) Due to project underspend and available capacity, an opportunity was identified to add one additional dual-head charger at this location.

## Recommendations

Several agencies have begun to explore options for at-home charging as a way to mitigate costs of charging infrastructure as well as support take home vehicles. A recent pilot program identified that one of the biggest challenges with take home vehicles is the reimbursement rate structure. Not having the ability to reimburse drivers for at-home charging is a major barrier to EV adoption for agencies that rely on take home vehicles. It's anticipated to become a greater barrier in future years as agencies downsize their office space footprint. DES recommends studying options for at-home charging reimbursement to overcome this barrier.

## **Glossary**

Level 1 Charger – 120V charger, around 10-12 Amps available, a typical wall outlet.

Level 2 Charger – 240V charger, up to 22 kilowatts available, similar to a dryer outlet

Level 3 Charger (DCFC) – High-Volt DC chargers, fast charging option

