

# EV CHARGING AT STATE FACILITIES

## OVERVIEW OF WSDOT'S EFFORTS



**Roger Millar**  
Acting Secretary of  
Transportation

**GT Summit & Expo**  
Tacoma, WA  
April 5, 2016

# WSDOT'S EV FLEET

- **Purchased 1<sup>st</sup> PEV in State government (Volt)**
- **1<sup>st</sup> State agency to lease EVs**
- **Current fleet has 21 EVs**
  - 14 Volts
  - 6 Leafs (1 owned, 5 Leased)
  - 1 Fusion Energi
- **14 Volts on order for delivery within the year**



# WSDOT CHARGING INFRASTRUCTURE



## L2 EVSE

- 8 Agency Facility Locations
- Olympia, Shoreline, Spokane, Union Gap, Tumwater, Vancouver
- Future: Lacey & Wenatchee



## DC Fast Charger

- 1 Facility location
- Olympia
- CHAdeMO



## Rest Area L2

- 2 I-5 Border Locations
- Custer (SB)
- Gee Creek (NB)
- West Coast Green Highway demonstration project



# WSDOT CHARGING LOCATIONS



# CHARGING AT WSDOT FACILITIES

- **WSDOT Policy Considerations**
  - Installed only at locations where agency EVs are located, or where they may travel to
  - Agency vehicles have priority access
  - Employees and visitors may use when available



# CHARGING AT WSDOT FACILITIES

- **WSDOT Policy Considerations**
  - RCW 43.01.250 Allows use of electricity at state facilities to charge EVs.
  - L1 (outlets) may be available to employees
    - Must have outlet and circuit approved by facilities
    - Must not pose a hazard (tripping, etc.)



# CHARGING AT WSDOT FACILITIES

- **Issues and Considerations**
  - Funding & Installation Costs
    - “Unfunded Mandates” vs. Priorities
    - WSDOT costs: \$3k – \$20k
  - Existing facilities are aged
    - Electrical infrastructure is aged & often lacks capacity
  - NEC requires continuous duty overcurrent protection rated at 125% of maximum load
  - ADA/Accessibility





# CHARGING AT WSDOT FACILITIES

- **Issues and Considerations**
  - Accommodating expanded use with minimal equipment
    - Siting criteria
    - Expectations (both ways)
    - Changing dynamic / demographic in personal use



- Political expectations





# EV CHARGING AT STATE FACILITIES

## OVERVIEW OF WSDOT'S EFFORTS

**Steve Holloway**  
**Washington State Dept of Transportation**  
**HQ Capital Facilities Office**  
**360.705.7893**

[steve.holloway@wsdot.wa.gov](mailto:steve.holloway@wsdot.wa.gov)

[www.wsdot.wa.gov](http://www.wsdot.wa.gov)

[www.westcoastgreenhighway.com](http://www.westcoastgreenhighway.com)

[www.wsdot.wa.gov/SustainableTransportation/fleet.htm](http://www.wsdot.wa.gov/SustainableTransportation/fleet.htm)