



Redmond and Bellevue Electric Fire Engines and Charging Infrastructure

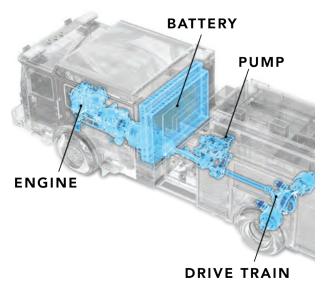
FY 2024 CPF Award: \$1 million (\$500,000 to each city)

Purchase and deploy the first electric fire engines in the state of Washington and install electrical charging infrastructure to support the new fire engines. Retiring diesel engines will reduce emissions by 18 metric tons of carbon dioxide (CO2) and 0.13 metric tons of nitrogen oxides (NOx) per year per engine.

NEED

- Transportation is the largest source of carbon pollution in Washington state, contributing 22% of total air pollution and 39% of greenhouse gas emissions.
- Redmond and Bellevue are aggressively working to reduce municipal fleet emissions by transitioning light duty fleets from gas to electric or hybrid models as part of our Sustainable Action Plans. The next step is transitioning heavy-duty vehicles.
- Until there is wider market adoption for electric fire engines and costs to come down, early adopters of this technology are faced with significant cost burdens.
- Electric fire engines are more than twice the cost of traditional diesel fire engines and require substantial investment in electrical infrastructure to support rapid charging requirements of emergency vehicles.
- Having these flagship iconic engines will pave the way for other cities to follow.





FUNDING AT WORK

This \$1 million grant will be divided equally between the City of Redmond and the City of Bellevue to help offset a combined total project cost of \$5,271,269. The engines will serve areas with populuations deemed highly vulnerable to diesel exhaust (Fire Station 12 in Overlake; Fire Station 1 in Beaux Arts).

PROJECT MILESTONES AND BUDGET

The new fire engines were ordered in early 2023. The first fire engine is expected to arrive in Redmond in December 2024. The respective fire stations are in early stages of finalizing contracts for installation of the electrical charging infrastructure.

REDMOND SCHEDULE:

- October 2024: EV Charging infrastructure installation completed
- December 2024: Volterra fire engine arrives (full HUD grant for \$500,000 expended here)
- February 2024: Decommission a diesel fire engine in accordance with the WA Dept of Ecology grant requirements

TOTAL PROJECT BUDGET: \$5,271,269

City of Redmond Total: \$2,328,619

• Electric Engine: \$2,078,619 (CPF award: \$500,000)

Charging Infrastructure/Installation: \$250,000

City of Bellevue Total: \$2,942,650

• Electric Engine: \$2,792,650 (CPF award: \$500,000)

• Charging Infrastructure/Installation: \$150,000

ADDITIONAL SOURCES OF FUNDING:

State of Washington Department of Ecology Electric Fire Apparatus Grant Program reimburses 25% of eligible costs - \$1,235,733 (Bellevue: \$648,579; City of Redmond: \$587,155); \$250,000 State CCA appropriation.

BENEFITS

This project will reduce community air and noise pollution, demonstrate the effectiveness of this technology for heavy vehicles, and encourage broader adoption across the region in support of city, state, and federal emissions reduction goals. As we share lessons learned both locally and nationally, the reputation of Washington state as a leader in fire engine electrification will be solidified.

- Protecting residents health and the environment
- Protecting our firefighters
- Moving the electric engine market

Contact: June 2024