



## WEST COAST COLLABORATIVE

A public-private partnership to reduce diesel emissions

The goal of the Collaborative is to leverage federal funds to strategically reduce emissions from the most polluting diesel sources in impacted communities. The Collaborative seeks to improve air quality and public health by targeting the highest polluting engines with the most cost effective control strategies.

# DERA 2020: Electric School Bus Replacements in Nevada

The West Coast Collaborative (WCC) is pleased to announce the Nevada Division of Environmental Protection's (NDEP's) receipt of a United States Environmental Protection Agency (US EPA) Diesel Emissions Reduction Act (DERA) State Grant to replace heavy-duty diesel school buses operating throughout Nevada. This project will be implemented using \$501,554 in DERA grant funding combined with \$334,369 in matching funds from NDEP's Volkswagen Environmental Mitigation Trust allocation, and \$1,288,934 in cost-share funds from participating school bus fleets.

### What is the project?

This project will replace 5 legacy diesel school buses with 5 zero tailpipe emission battery-electric buses. Project vehicles will be selected from the Clark and Washoe County School District fleets.

### Why is this project important?

This project's primary objective is to improve the environmental health of children by partnering with local school districts to replace legacy heavy-duty diesel school bus buses with zero emission battery-electric buses. The project will reduce emissions in communities disproportionately affected by diesel exhaust and poor air quality. Exposure to diesel exhaust has been associated with decreased lung function and retarded lung development and can also exacerbate the symptoms of asthma, bronchitis and pneumonia. This project will reduce children's exposure to diesel emissions as well as the negative health effects associated with exposure.

### What are the environmental benefits?

Over the remaining lifetime of the 5 affected engines, these upgrades are estimated to reduce emissions of nitrogen oxides (NOx) by 2.4 tons, fine particulate matter (PM2.5) by 0.2 tons, hydrocarbons (HC) by 0.5 tons, carbon monoxide (CO) by 1.1 tons, and carbon dioxide (CO<sub>2</sub>) by 306 tons. Additionally, the reduction of PM2.5 emissions will also reduce black carbon (BC), which influences climate by directly absorbing light, reducing the reflectivity ("albedo") of snow and ice through deposition, and interacting with clouds. The project will also conserve over 27,000 gallons of diesel fuel.

### Who are the partners on this project?

The project will be led by NDEP, a state agency whose mission is to preserve and enhance the environment of Nevada to protect public health, sustain healthy ecosystems, and contribute to a vibrant economy. NDEP received the DERA grant award through the WCC and will distribute grant funds to Clark County School District and Washoe County School District. NV Energy will assist the schools with electric vehicle charging infrastructure planning and installation. NDEP is responsible for managing and reporting results for the project to US EPA.

### What is the Collaborative?

The WCC is an ambitious partnership between leaders from federal, state, local and tribal government, the private sector, academia, and environmental groups committed to reducing diesel emissions along the West Coast. Partners come from all over Western North America, including Alaska, Arizona, California, Hawaii, Idaho, Nevada, Oregon, Washington, the Pacific Islands, Canada and Mexico. The WCC is facilitated by the US EPA DERA Program. <https://www.epa.gov/dera>

### How can I find out more information?

For more information on this project, please contact John Mikulin at US EPA ([mikulin.john@epa.gov](mailto:mikulin.john@epa.gov) / 415-972-3956).

For more information on the WCC, please visit our website. [www.westcoastcollaborative.org](http://www.westcoastcollaborative.org)