



## WEST COAST COLLABORATIVE

A public-private partnership to reduce diesel emissions

The goal of the West Coast 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 2019: California Air Resources Board School Bus Zero-Emission Electric Replacement Project

The West Coast Collaborative (WCC) is pleased to announce the California Air Resources Board's (CARB's) receipt of a United States Environmental Protection Agency (US EPA) Diesel Emissions Reduction Act (DERA) State grant to replace heavy-duty school buses with zero-emission electric buses. This project will be implemented using \$556,361 in DERA grant funding combined with \$505,457 in matching funds from CARB, and \$1,182,500 in cost-share funds from participating fleets.

### What is the Project?

This project will be implemented through a partnership between CARB, the North Coast Unified Air Quality Management District (NCUAQMD), and participating fleets to replace 5 heavy-duty school buses with all-electric alternatives throughout rural areas of California.

### Why is this project important?

This project's primary objective is to improve the environmental health of children by partnering with local school bus owners to replace old, higher emitting diesel school buses with zero-emission battery-electric vehicles. 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. Expected unquantifiable benefits of the project include increased awareness of the need to improve air quality, particularly

among parents, school officials and others concerned with child health and welfare.

### What are the Environmental Benefits?

Over the remaining lifetime of the 5 affected engines, these upgrades are estimated to reduce emissions of oxides of nitrogen (NO<sub>x</sub>) by 1 ton, fine particulate matter (PM<sub>2.5</sub>) by 0.1 tons, hydrocarbons (HC) by 0.1 tons, carbon monoxide (CO) by 0.5 tons, and carbon dioxide (CO<sub>2</sub>) by 153 tons. Additionally, the reduction of PM<sub>2.5</sub> 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.

### Who are the Partners on this project?

The project will be led by CARB, a state agency tasked with protecting air quality in the State of California, in partnership with the NCUAQMD and participating school bus fleets. CARB received the DERA grant award through the WCC, will distribute the grant funds to NCUAQMD, which will then distribute funds to participating eligible school bus owners. CARB will be responsible for data monitoring and reporting for the project.

### What is the Collaborative?

The WCC is an ambitious partnership between leaders from federal, state, local, and tribal government, the private sector, 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, Canada and Mexico and the Pacific Islands. The WCC is part of the U.S. EPA National Clean Diesel Campaign

[www.epa.gov/cleandiesel](http://www.epa.gov/cleandiesel)

### How can I find out more information?

For more information on this project, please contact Dana Mayfield at US EPA ([mayfield.dana@epa.gov](mailto:mayfield.dana@epa.gov) / 415-972-3008). For more information on the WCC, please visit our website.

[www.westcoastcollaborative.org](http://www.westcoastcollaborative.org)