



## 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 2016: Reducing School Bus Emissions in California

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 Clean Diesel Program grant to retrofit and replace heavy-duty diesel school buses. This project will be implemented using \$539,412 in DERA grant funding combined with \$371,168 in CARB matching funds.

### What is the Project?

This project will be implemented through a partnership between CARB, the San Joaquin Valley Air Pollution Control District (SJVAPCD) and participating fleets. Throughout California, the project will install Diesel Particulate Filter (DPF) retrofits on 31 heavy-duty school buses, and will also replace 4 old, high-emitting heavy-duty school buses with school buses that meet or exceed the emission standards of 0.20 gram per brake horsepower hour (g/bhp-hr) oxides of nitrogen (NOx) and 0.01 g/bhp-hr particulate matter (PM).

### 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 install diesel exhaust retrofits on eligible buses. 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 35 affected engines, these upgrades are estimated to reduce emissions of fine particulate matter (PM<sub>2.5</sub>) by 1.40 tons, hydrocarbons (HC) by 3.30 tons, carbon monoxide (CO) by 7.45 tons, and NO<sub>x</sub> by 4.30 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 SJVAPCD and participating school bus fleets. CARB received the DERA grant award through the WCC, will distribute the grant funds to SJVAPCD, 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, the Pacific Islands, Canada and Mexico. 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)). For more information on the WCC, please visit our website. [www.westcoastcollaborative.org](http://www.westcoastcollaborative.org)