



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 2013: Alternative Fuel School Bus Replacements in Arizona

The West Coast Collaborative (WCC) is pleased to announce the Pima Association of Government's (PAG's) completion of a United States Environmental Protection Agency (US EPA) Diesel Emissions Reduction Act (DERA) National Clean Diesel Funding Assistance Program grant project to replace heavy-duty diesel school buses. This project was implemented using \$150,000 in DERA grant funding combined with \$805,118 in matching funds from participating school districts.

What is the Project?

This project was implemented through a partnership between PAG, the Amphitheater Public School District, the Marana Unified School District, and the Chandler Unified School District to replace 6 heavy-duty diesel school buses with 4 compressed natural gas (CNG) and 2 propane (LPG) model year 2015 buses.

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 newer, lower emitting alternative fuel 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 6 affected engines, these upgrades are estimated to reduce emissions of nitrogen oxides (NOx) by 17 tons, fine particulate matter (PM2.5) by 0.6 tons, hydrocarbons (HC) by 0.8 tons, carbon monoxide (CO) by 3.6 tons, and carbon dioxide (CO₂) by 226 tons. The project will also conserve over 126,000 gallons of diesel fuel. 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.

Who are the Partners on this project?

The project was led by PAG, a nonprofit metropolitan planning organization (MPO) focused on regional cross-jurisdiction issues including transportation and air quality; in partnership with the participating school districts. PAG received the DERA grant award through the WCC, and distributed funds to participating school districts. PAG was 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 US EPA National Clean Diesel Campaign (www.epa.gov/cleandiesel).

How can I find out more Information?

For more information on this project, please contact John Mikulin at US EPA (mikulin.john@epa.gov / 415-972-3956). For more information on the WCC, please visit our website. www.westcoastcollaborative.org