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 2018: Washington Department of Ecology School and Transit Bus Retrofit and Replacement Program

Under the Diesel Emission Reduction Act (DERA), the EPA awarded the Washington Department of Ecology a \$415,100 grant with Fiscal Year 2018 funding. The grant will fund a school and transit bus retrofit and replacement project to support reduced emissions and improved air quality in Washington communities. The project will be implemented with a cost share of \$574,629 from the project partners, \$276,733 in funds from the State of Washington, and \$45,467 in additional leveraged funds for a total project cost of \$1,311,929.

What is the Project?

The Washington Department of Ecology will work with project partners to transition from diesel-powered buses to all electric. As part of this project, Twin Transit will retrofit two diesel-powered transit buses with electric motors in Centralia, WA, and Sumner School District, in Pierce County, will purchase Washington's first all-electric zero-emission school bus to replace an older diesel-powered school bus. This program's effort to retrofit and replace old high-emitting diesel-powered buses will support reduced diesel emissions and improved air quality in Washington communities.

Why is this Project Important?

Research shows that there is no safe level of exposure to diesel particulate matter. Washington State's Clean Diesel Program strives to significantly reduce diesel particulate matter pollution by cleaning up emissions from the large number of diesel engines in operation within the state. The agency prioritizes projects that maximize health benefits by targeting areas with high population density and areas disproportionately impacted by air pollution from diesel fleets. This project is in line with these goals; this school and transit bus repowers will take place in two communities within the I-5 corridor, which is identified as Washington's transportation corridor most impacted by diesel emissions. This retrofit and replacement effort will reduce fuel consumption, energy costs, diesel emissions, and health risks related to diesel particulate matter.

What are the Estimated Environmental Benefits?

The transit bus retrofits and school bus replacement is projected to reduce annual diesel emissions of particulate matter 2.5 (PM $_{2.5}$) by 0.05 tons, nitrogen oxides (NOx) by 1 ton, hydrocarbons (HC) by 0.1, carbon monoxide (CO) by 0.33 tons, and carbon dioxide (CO $_2$) by 153.3 tons, as well as reduce annual fuel consumption by 13,622 gallons. This will result in estimated cumulative emission reductions of 0.4 tons of PM $_{2.5}$, 5.15 tons of NOx, 0.65 tons of HC, 1.79 tons of CO, and 843.3 tons of CO $_2$ over the lifetime of these vehicles.

How is this Project Funded?

The West Coast Collaborative is a partnership between leaders from federal, tribal, state, and local government, the private sector, and environmental groups committed to reducing diesel emissions along the West Coast and is part of the National Clean Diesel Campaign: www.epa.gov/cleandiesel.

Where can I find more information?

For more information on the West Coast Collaborative, please visit our website at: www.westcoastcollaborative.org. For more information about this project, please contact Sarah Frederick (Frederick.Sarah@epa.gov).

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