

Portland Public School Children Move with Propane

Portland, located in northwest Oregon, is a city of over 500,000 people in a 130 square mile area. In December of 2001, Money magazine rated Portland as one of the best cities in America to live, due partly to “avoiding urban sprawl and overcrowding,” and “placing a premium on green space, culture and an accessible city center.” Freightliner LLC, a maker of medium and heavy trucks, has agreed with this assessment and makes its corporate home here and has also located its styling and test centers in Portland.



Portland is located in northern Oregon

Portland residents value green space and a clean environment. The nation’s largest urban wilderness and the world’s smallest dedicated park are found within Portland city limits - the nearly 5,000-acre Forest Park and 24-inch Mill Ends Park. One of the tools that Portland is using to keep their city green is the use of alternative fuels, and the Portland Public Schools is a key player in that regard.

Alternative Fuel School Bus Activities in Portland

Portland Public Schools has an enrollment of about 55,000 students attending about 100 schools and 50 special-needs sites within the city. In 1983, in response

to concerns about increasing fuel prices and increasingly stringent air quality regulations, the school district turned to propane as a fuel source for its fleet of buses and the fleet of contractor-owned buses that provided transportation services.

Portland Public Schools began converting its bus fleet to propane in 1983, and stipulated that its bus contractor was to do the same. Since that time, the propane bus fleet has continued to grow. At present, the school district has a total of 325 buses (85 district-owned and 240 contractor-owned), all of which operate on propane. The district-owned buses are smaller Type A school buses on cutaway van chassis. These vehicles are converted to run on propane, and the conversions are currently costing the school district \$3,000 to \$4,000 per bus.

These propane buses travel 3.5 million miles per year and use 1.4 million gallons of fuel per year. The buses are refueled by means of a fuel truck that refuels the buses on school property: the fuel truck takes its supply from fuel tanks on the school bus contractor’s site, avoiding costly underground fuel storage. The schools also use propane in some of the fleet support vehicles where appropriate.

Portland Public Schools emphasizes safety in its operation, and conducts vigorous safety training for its employees to educate them on propane safety. The safety of the buses was tested when a propane bus was struck directly on the propane tank in a collision with another vehicle. The impact sheared the fuel line from the tank, but valves on the tank sealed immediately to contain the fuel. The tank was not ruptured, due to its sturdy steel construction, and no fire or explosion occurred.



For More Information

For more information on Portland's alternative fuel school bus activities, please contact:

Larry Medearis
Clean Cities Coordinator
Columbia-Willamette Clean Cities Coalition
Port of Portland
7000 Northeast Airport Way, Third Floor
Portland, OR 97218
(503) 460-4080 (phone)
(503) 460-4124 (fax)
medeal@portptld.com

Or contact the Portland Public Schools at:

John Banton
Portland Public Schools
716 NE Marine Drive
Portland, OR 97211
(503) 916-6116
jbastian@pps.k12.or.us
<http://www.pps.k12.or.us>

The propane buses have received nothing but positive feedback from drivers and parents. The buses are perceived to be much cleaner than diesel buses due to the lack of visible smoke (especially when the buses are idling when loading and unloading students), and have exhibited no driveability concerns. The school system is working on some positive press coverage, since local residents are largely unaware of the propane project even though it has been in place for the last twenty years.

Portland Public Schools plans to continue using propane for its bus operations, as they believe propane is a good fuel choice especially if public perception is a consideration. They feel that propane is also a good choice economically, even when the lower fuel economy (on a per gallon basis) and the cost of conversions are balanced against the reduced fuel cost and reduced maintenance costs.

Sponsored by the U.S. Department of Energy
Energy Efficiency and Renewable Energy
Office of Weatherization and Intergovernmental Programs

A Strong Energy Portfolio for a Strong America

Energy efficiency and clean, renewable energy will mean a stronger economy, a cleaner environment, and greater energy independence for America. Working with a wide array of state, community, industry, and university partners, the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy invests in a diverse portfolio of energy technologies.

DOE/GO-102004-1875
April 2004

Neither the United States government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States government or any agency thereof.

Printed with a renewable-source ink on paper containing at least 50% wastepaper, including 20% postconsumer waste