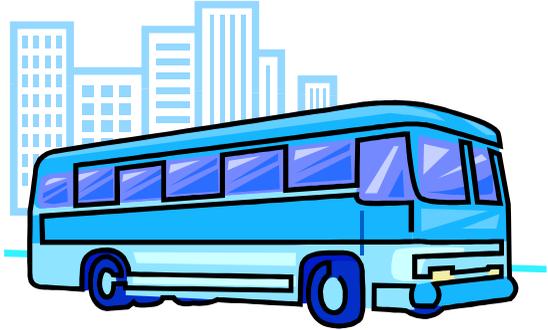


Washington State Ferries' clean fuel initiatives will substantially decrease emissions of particulate matter—as much as eliminating 107,000,000 miles traveled by a diesel city bus!



Want more information?

Washington State Ferries:
www.wsdot.wa.gov/ferries/environment/fuel
or call Tina Stotz, Environmental Manager, at
(206) 515-3827

American Lung Association of Washington
www.alaw.org

Environmental Protection Agency Region 10
www.epa.gov/region10

Puget Sound Clean Air Agency
www.pscleanair.org

Seattle City Light
www.cityofseattle.net/light

The steps described in this brochure contribute to key goals of Washington State Ferries' strategic plan:

- **To reduce costs by 5 percent**
- **To identify new sources of funding and generate non-farebox revenue**
- **To continually improve and refine our business processes, including our environmental program**



Created on June 1, 1951, Washington State Ferries (WSF) is the largest ferry system in the United States and the largest ferry system in the world based on vehicles carried annually (11+ million). Over 24 million people a year ride on Washington state ferries. WSF has a fleet of 28 vessels and operates 20 terminals throughout Puget Sound, from Point Defiance in the south, to Sidney, B.C., in the north. Thousands of commuters, employers, students and commercial shippers depend on WSF every day for safe, reliable transportation across Puget Sound.

Photos by Steven J. Brown, courtesy
Washington State Ferries

Prepared by
Corporate Communications Department
Washington State Ferries
May 2004

For Washington State Ferries, it's

Clear Sailing Ahead

*Washington State Ferries
is reducing air pollution
by switching to cleaner
fuel—and using
less of it*



 **Washington State
Department of Transportation**

Washington State Ferries is taking steps towards cleaner, healthier air

Because clean air is so important to our health and our environment, Washington State Ferries is taking major steps to reduce air pollution from its fleet.

In the Puget Sound area, diesel exhaust is a major source of air pollution. Diesel exhaust contains fine particles and toxic compounds that can cause health problems. Diesel emissions also contribute to environmental problems, such as decreased visibility and global warming.

To reduce harmful diesel emissions, Washington State Ferries—part of the Washington State Department of Transportation—has launched the initiatives described here.

The entire ferry fleet is switching to cleaner fuel

Historically the Washington State Ferries (WSF) fleet burned high-sulfur diesel fuel. In 2004, WSF will convert its entire fleet to low-sulfur diesel. Compared to the high-sulfur fuel, low-sulfur diesel produces less of the fine particles and sulfur dioxide that pollute the air and cause health problems. By switching to low-sulfur diesel, WSF will reduce sulfur dioxide emissions by 412 tons (a 90 percent reduction) and particulate matter by 75 tons (a 30 percent reduction).

The cost of changing fuel? Less than a penny more per gallon than the diesel fuel used in the past, or about \$150,000 a year for the entire fleet.

Ferries are using less fuel—cutting pollution and costs

For several years, the ferry system has been buying increasingly fuel-efficient, cleaner-burning engines and equipment for ferries. The ferry system also has changed some schedules and operations, including the elimination of passenger-only ferry service to Bremerton. As a result of these changes, in 2003 the fleet used three-quarters of a million fewer gallons of diesel fuel than it did the year before. WSF saved approximately

As a result of fuel conservation, WSF saved \$750,000 in fuel costs and emitted 8,500 fewer tons of pollutants into the air in 2003.

\$750,000 in fuel costs and ferries emitted 8,500 fewer tons of pollutants into the air.

Because fuel conservation makes good business sense and is good for the environment, WSF will continue to look for ways to conserve fuel.

The ferry system is testing ultra-low-sulfur diesel fuel

With funding from the Environmental Protection Agency Region 10 and the Puget Sound Clean Air Agency, the ferry system will conduct a year-long test of ultra-low-sulfur diesel on the M.V. Elwha, which sails from Anacortes through the San Juan Islands.

Ultra-low-sulfur diesel fuel has much less sulfur than the diesel fuel that the ferries used in the past. The sulfur content ranges from 15 to 30 parts per million, compared to 3,500 parts per million in the old fuel.

The test will help the ferry system determine if it is feasible to use this cleaner-burning fuel in WSF vessels.

Biodiesel, a renewable fuel, also will be tested

Beginning in the summer of 2004, the ferry system will test biodiesel, another cleaner-burning fuel, on the “Triangle Route” between Fauntleroy, Southworth and Vashon Island.

Biodiesel is a renewable fuel that can be made from virgin or recycled vegetable oils, animal fats, or recycled restaurant grease. Although it emits more nitrogen oxide than petroleum diesel, it contains almost no sulfur and significantly reduces greenhouse-gas emissions. Biodiesel is more expensive than regular diesel, so for the pilot

program WSF will blend 20 percent biodiesel with 80 percent low-sulfur petroleum fuel to form a mix called B20. This mix will reduce emissions of particles and toxic compounds, and also is less expensive than burning 100 percent biodiesel.

Seattle City Light is funding this pilot test as part of its Greenhouse Gas Mitigation Program. The City of Seattle is committed to climate protection, and City Light’s goal is to become greenhouse-gas neutral. The utility is measuring its greenhouse gas emissions and identifying ways to reduce or offset them by helping local diesel fleets begin using biodiesel. City Light will receive the greenhouse-gas credits resulting from the use of B20.

The test will determine whether B20 is compatible with ferry diesel engines over the long term.

