



Project name: Ames Transit Agency Hybrid Buses

Transit agency: Ames Transit Agency (CyRide)

Location: Ames, Iowa

TIGGER goal: Energy and GHG emissions reduction

FTA region number: VII

Award amount: \$1,600,000

Congressional district: IA-4

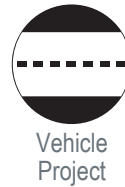
Funding mechanism:
Recovery Act (ARRA)

Ames Transit Agency Adds Hybrid Buses to its Fleet

When Ames Transit Agency, or CyRide, needed to replace 10 older diesel buses at the end of their service life, the transit agency looked to the TIGGER Program to cover the incremental cost of upgrading its new buses with hybrid electric propulsion systems. Thanks to \$1,600,000 in TIGGER funding, CyRide recently started operating its new hybrid buses in and around Ames, Iowa.

Manufactured by Gillig, the 40-ft buses feature hybrid drive systems made by Voith, a seasoned transmission producer new to the growing hybrid market. This marks the transit agency's first venture into hybrid technology and alternative fuels—the new buses run on biodiesel fuel blends, between B2 and B20, depending on seasonal requirements and pricing.

By replacing older, inefficient buses with new hybrid buses that run on biodiesel, CyRide is realizing significant fuel savings and greenhouse gas emission reductions while maintaining its high quality service. Fuel savings from each hybrid bus are estimated



Ames Transit Agency, or CyRide, is the public transit agency for the 59,000 residents of Ames, Iowa, and serves the greater Ames community and Iowa State University with its fleet of 70 large buses and eight small buses. At nearly 5.5 million rides a year, CyRide achieves 94 rides per capita, rivaling much larger urban communities. The transit agency operates 12 fixed routes—18 hours per day, seven days a week—and offers extended service (until 3 a.m.) on Friday and Saturday nights as well as dial-a-ride service for the elderly and disabled.

Courtesy of Ames Transit Agency



CyRide's ten new "CYBRID" buses use both hybrid technology and alternative fuel (biodiesel), a first for the transit agency.

at 1,489 gallons a year—a 20% reduction in fuel consumption—which corresponds to 14.4 tons fewer carbon dioxide emissions compared to other buses in the fleet. The new buses also reduce the average age of the CyRide fleet by four years, ensuring reliability as well as sustainability.

CyRide is paving the way for other transit agencies interested in adding such vehicles to their fleets. Based on its real-world operating experience, CyRide is compiling a how-to manual for other transit agencies and is also working with InTrans to monitor, analyze, and document its emissions reductions.

CyRide's unique three-party funding agreement—between the City of Ames and Iowa State University and its students—provides for a seamless community-wide transportation system. This intergovernmental agreement also allows for the advancement of sustainability initiatives, including this TIGGER project as well as biodiesel fuel use and numerous green building projects. In 2008, CyRide's administrative office building was the first public building in the state to receive LEED gold certification. The Ames Intermodal Transportation facility, scheduled to open in June 2012, is expected to achieve LEED gold status as well.

Impact:

Compared to other buses in the fleet, each hybrid bus consumes 20% less fuel and produces 14.4 fewer tons carbon dioxide emissions.

About TIGGER

The Transit Investment for Greenhouse Gas and Energy Reduction (TIGGER) Program was established in 2009 by the U.S. Department of Transportation's Federal Transit Administration (FTA). Designed to reduce energy use and greenhouse gas emissions in transit agencies around the country, the TIGGER Program made funds available for capital investments that would reduce greenhouse gas emissions or lower the energy use of public transportation systems. An initial \$100 million in American Recovery and Reinvestment Act grants funded 43 competitively-selected transit projects. In 2010, the FTA provided an additional \$75 million in grants to fund 27 new TIGGER projects. These 70 projects are employing a variety of technologies to meet the program goals, including solar installations, building efficiency improvements, wind technology, wayside energy storage for rail, and purchase of more efficient buses. In fiscal year 2011, FTA provided an additional \$49.9 million to continue the program.

For More Information

Ames Transit Agency:
www.cyride.com

FTA TIGGER:
www.fta.dot.gov/TIGGER



U.S. Department of Transportation
Federal Transit Administration
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