



# PREVENTION *quarterly*



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## Ohio Buses are Using Soy Biodiesel

### OSU's Soy Biodiesel Pilot Program

The Ohio State University's Transportation and Parking Services unveiled the first soy biodiesel-fueled Campus Area Bus Service (CABS) transit coach this past Autumn Quarter. It was the beginning of a year-long pilot program to incorporate soy biodiesel into university transportation services.



CABS plans to use B20 (a blend of 80 percent diesel fuel and 20 percent soybean oil) in 20 percent of its fleet. Two other university service departments have also agreed to pilot the B20 fuel in their trucks and equipment. The decision to begin using soy biodiesel builds on Transportation and Parking Services' commitment to the university's Academic Plan by partnering university services with academics. For example, the use of the fuel on campus will facilitate learning and research opportunities in the College of Food, Agricultural, and Environmental Sciences and the Center for Automotive Research.

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Soy biodiesel is a cleaner-burning alternative to traditional petroleum diesel. It is made from renewable resources, such as soybean oil and animal fats, thus reducing the dependence on limited oil resources. The B20 blend doesn't require modifications to conventional diesel engines and provides the same payload capacity as traditional diesel. The B20 blend will reduce carbon dioxide vehicle emissions by 15 percent, and will also reduce carbon monoxide, particulate and sulfur dioxide emissions. CABS buses are expected to use about 42,000 gallons of B20 during the pilot project.

For more information, contact Robert Summerfield at [summerfield.3@osu.edu](mailto:summerfield.3@osu.edu) or (614) 292-7420.



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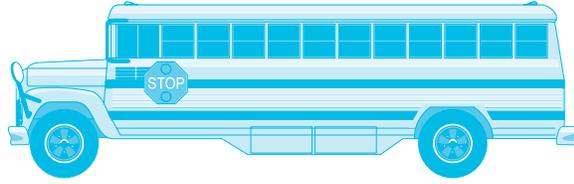
## Cincinnati's School Bus Clean Diesel Retrofit Program

The Hamilton County Department of Environmental Services', Air Quality Management Division, recently received a \$95,000 grant from the U.S. Environmental Protection Agency to retrofit 20 school buses with clean exhaust technology and to fuel 74 buses with biodiesel, a cleaner-burning alternative fuel. Local matching funds bring the project total to \$120,000.

The overall objectives for this grant are to:

- reduce school children's exposure to diesel exhaust emissions created by diesel-powered school buses;
- retrofit 20 school buses with oxidation catalysts operating in the urban Cincinnati Area, including two environmental justice areas;
- showcase the school bus retrofit program to the public and other school districts;
- incorporate an anti-idling policy for the entire fleet of school buses operating under contract with the Cincinnati Public School system encompassing 300 school buses, 120 mini buses, and 110 Metro buses;
- demonstrate the viability of using biodiesel (B20) as an alternative clean burning fuel in school buses with no trade-offs in performance or maintenance; and
- demonstrate to industrial representatives that school bus retrofit programs are viable options for Supplemental Environmental Project (SEP) funds from enforcement settlements.

For more information about this program, visit Hamilton County Department of Environmental Services' Web site at [www.hcdoes.org/airquality/vehicles/Grant.htm](http://www.hcdoes.org/airquality/vehicles/Grant.htm). For more information regarding U.S. Environmental Protection Agency's *Clean School Bus USA* program, visit their Web site at [www.epa.gov/cleanschoolbus/](http://www.epa.gov/cleanschoolbus/).



## Green Building Projects at The Ohio State University

The Ohio State University currently has two registered projects under the U.S. Green Building Council's LEED (Leadership in Energy and Environmental Design) Green Building Rating System™. LEED is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. The standard recognizes buildings that are environmentally responsible, profitable and healthy places to live and work. Case studies have shown that LEED can directly reduce building construction and operating costs through greater durability and enhanced occupant productivity. LEED emphasizes state-of-the-art strategies for sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. LEED standards are currently available for:

- new construction and major renovation projects (LEED-NC);
- existing building operations (LEED-EB, Pilot version);
- commercial interiors projects (LEED-CI, Pilot version); and
- core and shell projects (LEED-CS, Pilot version).

The projects are for renovations and additions to The Ohio State University Thompson Library and planning, design and construction of the Ohio 4-H Center located on campus.

Both projects will achieve LEED certification by earning points within the following project checklists: Sustainable Sites; Water Efficiency, Energy & Atmosphere; Materials, Resources, and Recycling; Indoor Environmental Quality; and Innovation & Design.

For more information and updates on these projects, visit U.S. Green Building Council's Web site at [www.usgbc.org](http://www.usgbc.org) (click on *Project Registration* for current registered projects).



Geauga County YMCA Project (October 2003)



## New Geauga County YMCA Includes Green Design Features

February 2004 is the projected opening date for the Geauga YMCA, a health and wellness center to be operated by the YMCA of Greater Cleveland. The \$12.3 million, 50,000-square-foot facility will be a state-of-the-art, comprehensive health and wellness center designed to serve the physical, mental and spiritual health of all people of all abilities. Located on the 150-acre campus of Heather Hill Hospital (part of University Hospitals Health System) in Chardon, Ohio, the facility will also house Heather Hill's outpatient rehabilitation program.

Doty & Miller Architects provide architectural services for this project. The building's green design approach used natural day lighting, indoor plants, nontoxic materials and finishes, and other environmentally responsible design elements to reinforce the goals of the new facility. The building has an open, inviting, non-institutional look with activity areas for individuals and families. Space is designed for recreational, physical fitness, education, wellness and fellowship activities. Private and public fund-raising efforts have made it possible for this vision to become a reality.

The building has been designed as a sustainable, high-performance, healthy green building. This building's sustainable design features include the following:

- natural day lighting;
- geothermal ground source heat pump & HVAC system;
- active solar hot water heating for pool water;
- high indoor air quality;
- electrical lighting controls with daylight and occupancy sensor controls;
- long-lasting durable natural materials;

- materials with recycled content or from rapidly renewable sources;
- low VOC finishes and products; and
- high performance insulation and glazing systems.

The new building will serve as a model for future recreational buildings that promote good health and ecological responsibility. For more information, visit [www.dotyandmiller.com/institutional/geaugaymcamain.htm](http://www.dotyandmiller.com/institutional/geaugaymcamain.htm).

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