

Federal Fleet Files

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Highlighting the latest news and developments affecting Federal fleets.

Enhanced Fleet Management: Optimizing Federal Fleet Decisions

The National Renewable Energy Laboratory (NREL), in support of the U.S. Department of Energy (DOE) is developing a new fleet optimization tool that will provide fleet managers with dynamic analytical capabilities for fleet management. The tool will enhance efforts to minimize petroleum consumption, reduce greenhouse gas (GHG) emissions, and increase alternative fuel use by optimizing vehicle acquisition and allocation, efficient placement of alternative fuel vehicles (AFVs), and location of renewable fuel pumps at Federal fueling centers. In addition, the tool will enable fleet managers to maximize the use of alternative fuel in dual-fueled AFVs, which helps agencies meet fuel consumption goals and reduce Energy Policy Act (EPA) of 2005 Section 701 waiver requests.

The NREL optimization tool will go beyond fuel use to maximize the efficient use of constrained budgets while meeting all Federal statutory and executive order mandates for Federal fleets. These functionalities will be designed to provide fleet managers with various options to aid in efficient and appropriate decision-making practices. Optimized decision-making provides enhanced efficiency and capabilities to Federal agencies by allowing fleet managers and planners to analyze resources available to help meet Federal requirements. Using fleet data provided by Federal agencies, the optimization tool produces outputs and scenarios showing fleet managers an optimal solution for AFV acquisitions and infrastructure development sites.

In addition to this optimization tool, collecting comprehensive fleet inventory and location data will allow Federal fleet managers to utilize FleetAtlas, a Web-based tool that will allow fleet managers to upload fleet location data and display it on a Google maps interface. FleetAtlas will allow fleet managers to visualize the geographic distribution of their fleets and identify opportunities for petroleum displacement and greenhouse gas emissions reductions through the use of alternative fuels and advanced vehicle technologies.

The optimization tool is still in the early stages of development and will require detailed fleet data from Federal agencies similar to the data contained in the General Services Administration (GSA) database of vehicles leased to Federal agencies.

Alternative Fuels Success Story: Fort Hood, Texas

In 2005 the Fort Hood Directorate of Logistics and Directorate of Public Works began collaborating to establish infrastructure for E85 and biodiesel. A fuel optimization evaluation was conducted on the infrastructure of Fort Hood's automated fuel service station. "The evaluation determined the infrastructure lacked the needed equipment and distribution channels to support E85 and biodiesel," said Sally Jo Hahn, an environmental consultant.

To overcome this challenge, Fort Hood worked with the Defense Energy Support Center (DESC) to facilitate the required capital improvements to support alternative fuels. DESC established the infrastructure and the associated costs to help Fort Hood expand available fuels to include E85 and biodiesel. Fort Hood staff also benefitted from technical assistance from Stacy Neef of the Central Texas Clean Cities Coalition.

The automated fuel service station, located at Clark Road and Logistics Lane, now includes four E85 dispensers and four biodiesel dispensers available for the U.S. Army fleet at Fort Hood. Of the 1,320 GSA-leased vehicles fueled at Fort Hood, 668 can use alternative fuel. This represents 51 percent of the fleet. Fort Hood can now prioritize their fleet with alternative fuel, from which Fort Hood estimates a savings for the U.S. Army of approximately \$100,000 during the first year.

Greenhouse Gas Concentrations

Executive Order 13514 requires Federal agencies to report greenhouse gas emissions, including fossil fuel emissions from Federal fleets. To assist Federal agencies in compiling GHG inventories, the DOE Federal Energy Management Program (FEMP) is currently developing guidance for standardized accounting and reporting methodologies to be implemented across the Federal Government. The guidance is scheduled for release in April 2010. NREL actively supports FEMP in its Federal GHG management and abatement efforts.

More information is available online at <http://www.eere.energy.gov/femp/program/greenhousegases.html>.

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Biodiesel and E85 refueling infrastructure at Fort Hood, Texas
 Courtesy of Fort Hood (U.S. Army)

Alternative Fuel Finder

The National Renewable Energy Laboratory (NREL) maintains a database of alternative fuel stations nationwide through the DOE Alternative Fuels and Advanced Vehicles Data Center (AFDC). The list below shows new alternative fuel stations added to the database since last publication. **Only open, publicly accessible stations that accept Wright Express are included.** Check the AFDC Alternative Fuel Station Locator for the most up-to-date information: <http://www.afdc.energy.gov/afdc/locator/stations/>.

Station Name	Street Address	City	State	Waivers ¹	Agencies Affected ²
E85					
Gate Petroleum	2940 County Road 136	White Springs	FL	0	NA
Green Mount MotoMart	1790 Frank Scott Parkway E	Shiloh	IL	15	Army, Navy, USMC, USAF, GSA, Treasury, USDA, SSA
Catscale/Fast Stop Travel Center	Interstate 70 Frontage Road	Vandalia	IL	0	NA
Fast Stop	113 East Gate Drive	Washington	IL	3	USPS, USACE
FS Fast Stop - Blue Jay Junction	204 South Bluffs Street	Bluffs	IL	0	NA
Han Dee Mart	411 North Main Street	Caseyville	IL	13	Army, Navy, USMC, USAF, GSA, Treasury
USCO	235 Cole Street	Bushnell	IL	0	NA
USCO	12073 State Route 29	Pekin	IL	0	NA
USCO	509 South 5th Avenue	Canton	IL	1	Army
Speedy Q Market	120 East Sanilac Road	Sandusky	MI	1	USDA
Kwik Trip #330	104 Aspen Lane	Belle Plaine	MN	1	USDA
Broberg's Country Store	19162 U.S. Highway 169	Milaca	MN	0	NA
Get N Go #18	5304 East 57th Street	Sioux Falls	SD	19	USDA, VA

¹ Number of EPA 2005 Section 701 waived vehicles within five miles of the station; Information not applicable for biodiesel

² Federal agencies with EPA 2005 Section 701 waived vehicles within five miles of the station; Information not applicable for biodiesel