

# Fuel Reduction Initiative Briefing Package



## **Fleet Background**

On April 20, 2000, Executive Order (E.O.) 13149, was issued to direct federal agencies to reduce petroleum fuel consumption by 20 percent by FY 2005 through improvements in fuel efficiency, and the use of alternative fuel vehicles (AFVs) and alternative fuels. E.O. 13149 mandates that the reduction in fuel consumption be 20 percent of the consumption amounts for FY 2000. In an effort to comply with this mandate, the National Office of Job Corps has designed and implemented a fleet management protocol, which has been in effect since 2002.

E.O. 13149 mandates that Job Corps must reduce its fuel consumption by 20 percent over the 5-year period, Job Corps has devised an approach to reduce fuel consumption by 5 percent each year beginning in FY 2001. Job Corps Program Instruction 01-29, dated May 3, 2002, delineated Job Corps' national strategy for accomplishing the task of a 20 percent reduction in petroleum fuel by FY 2005. Those strategies have since been expanded and include:

- Reducing the number of underutilized vehicles and the mileage that they accumulate
- Replacing high fuel consumption vehicles with fuel-efficient vehicles
- Reducing the number of leased vehicles utilized by the Outreach and Admissions/Career Transition Services (OA/CTS) providers
- Reducing the consumption of petroleum fuel to include the use of alternative fuel resources
- Increasing the number of AFVs

## **Alternative Fuel Vehicles and Alternative Fuels**

An alternative fuel vehicle (AFV) is designed and manufactured to operate in either dual-fuel, flexible-fuel, or dedicated modes on fuels other than gasoline or diesel. This does not include a conventional vehicle that is limited to operation on blended or reformulated gasoline fuels.

Alternative fuel sources most commonly used include the following:

**Liquefied Petroleum Gases (LPG):** Propane, propylene, normal butane, butylene, isobutane, and isobutylene produced at refineries or natural gas processing plants (includes plants that fractionate raw natural gas plant liquids).

**Compressed Natural Gas (CNG):** Natural gas compressed to a volume and density that is practical as a portable fuel supply (even when compressed, natural gas is not a liquid).

**Liquefied Natural Gas (LNG):** Natural gas that has been refrigerated to temperatures at which it exists in a liquid state.

**M85:** A fuel containing a mixture of 85 percent methanol and 15 percent gasoline.

**Ethanol:** Otherwise known as ethyl alcohol, alcohol, or grain-spirit. It is used in the United States as a gasoline octane enhanced and oxygenate (10 percent concentration). Ethanol can also be used in high concentration in vehicles optimized for its use.

**E85:** A fuel containing a mixture of 85 percent ethanol and 15 percent gasoline.

**Biodiesel:** Any liquid biofuel suitable as a diesel fuel substitute or diesel fuel additive or extender. A diesel substitute made from the conversion of oils of vegetables such as soybeans, rapeseed, or sunflowers (end product known as methyl ester) or from animal tallow (end product known as methyl tallowate). Biodiesel can also be made by the conversion of hydrocarbons produced by the Fisher-Tropsch process from agricultural by-products such as rice hulls.

**Electricity:** Energy arising from electric charge interaction. Electricity is usually provided by batteries, but can be provided by generators, fuel cells or electrical conductors. Voltages range from 48 to 480 volts, both Alternating Current (AC) and Direct Current (DC).

## **Rationale for Efficient Fuel Usage**

Managing the efficient use of fuel must remain paramount as fuel efficiency:

- a. Helps to break U.S. dependence on foreign oil;
- b. Decreases overall demand for petroleum, leading to lower prices;
- c. Decreases Job Corps center costs; and,
- d. Helps to eliminate harsh fumes in the environment.

## **Best Practices**

In addition to the objectives of the initiative, Job Corps centers have also identified efficient fuel usage alternatives and strategies. Listed below are some of the leading innovative strategies being used:

- Encouraging preventative maintenance servicing, which includes efficient driving practices as well as proper vehicle maintenance procedures.
- Placing vehicles on a rotational schedule by selectively removing vehicles from service on a temporary basis.

## Attachment B

- Evaluating and using the most direct and efficient routes, including eliminating inefficient routes and overlapping trips.
- Selecting the smallest vehicle needed to accommodate the size of the excursion.
- Loading vehicles to their **allowable** maximum capacity.
- Effectively coordinating trips based upon need, including organizing multipurpose group trips.
- Ending vehicle assignment by department.
- Implementing streamlined vehicle sign-out and vehicle-request procedures.
- Instituting foot patrolling policies and walking from building to building.
- Using electric golf carts as a means of moving around on center.
- Employing mass transit as much as possible, including purchasing city bus passes for students.
- Seeking to coordinate third-party vendors to deliver products and supplies, as opposed to Job Corps center staff traveling to make pick-ups.
- Coordinating with work-based learning (WBL) partners and other employers who provide employment to Job Corps students to provide transportation for the students to and from the work sites.

### **Additional Information**

For further assistance and background as it relates to the fuels reduction initiative, please review the information contained in the links provided below.

<http://knownet.hhs.gov/log/fleetDR/LAI/Module2/Phase1/alternat.htm>

<http://www.dol.gov/oasam/programs/boc/EPAAct2003.htm>

<http://www.epa.gov/otaq/consumer/fuels/altfuels/altfuels.htm>

<http://www.eere.energy.gov/>

<http://facultystaff.vwc.edu/~gnoe/avd.htm>

## **Technical Assistance**

In an effort to assist the centers with innovative practices to facilitate this reporting, we would appreciate hearing about any fleet inventory methods that are working well for your Job Corps center so that we may pass that information along to other Job Corps centers. Please feel free to send any best practices being employed by your Job Corps center to Sandra Darden at [arden.sandra@dol.gov](mailto:arden.sandra@dol.gov).

Technical assistance is provided upon request. Contact Latoya Jones at [ljones@exceedcorporation.com](mailto:ljones@exceedcorporation.com) or (301) 731-3790 ext. 218.