



Federal Fleet Compliance with Executive Order 13149

Fiscal Year 2003

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ACRONYMS

AFV(s)	Alternative Fuel Vehicle(s)
B20	Biodiesel-blended fuel that is 20 percent biodiesel with 80 percent petroleum diesel
B100	Neat biodiesel fuel
CMSA	Consolidated Metropolitan Statistical Area
CNG	Compressed Natural Gas
E85	Ethanol-blended fuel that is at least 85 percent ethanol and 15 percent petroleum gasoline
ECRA	Energy Conservation Reauthorization Act of 1998, Public Law 105-388
EPAct	Energy Policy Act of 1992, Public Law 102-486
E.O. 13149	Executive Order 13149, “Greening the Government through Federal Fleet and Transportation Efficiency,” 65 FR 24607
FAST	Federal Automotive Statistical Tool (the Federal fleet’s web-based data collection and reporting system, at http://fastweb.inel.gov)
FY	Fiscal year
GGE	Gasoline gallon equivalent
GVWR	Gross vehicle weight rating
LDV	Light-duty vehicle
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas
M85	Methanol-blended fuel that is at least 85 percent methanol and 15 percent petroleum gasoline
MPG	Miles per gallon
MSA	Metropolitan Statistical Area
NEV	Neighborhood Electric Vehicle

ACRONYMS OF FEDERAL AGENCIES

DCMA	Defense Contract Management Agency
DESC	Defense Energy Support Center
DLA	Defense Logistics Agency
DOC	U.S. Department of Commerce
DOD	U.S. Department of Defense
DOE	U.S. Department of Energy
DOI	U.S. Department of Interior
DOJ	U.S. Department of Justice
DOL	U.S. Department of Labor
DOS	U.S. Department of State
DOT	U.S. Department of Transportation
EOP	Executive Office of the President
EPA	U.S. Environmental Protection Agency
FCC	Federal Communications Commission
GSA	General Services Administration
HHS	U.S. Department of Health and Human Services
HUD	U.S. Department of Housing and Urban Development
NASA	National Aeronautics and Space Administration
NEX	Navy Exchange Service
NPS	National Parks Service
OMB	Office of Management and Budget
SBA	Small Business Administration
SI	Smithsonian Institution
SSA	Social Security Administration
Treasury	U.S. Department of the Treasury
TVA	Tennessee Valley Authority
USAF	U.S. Air Force
USDA	U.S. Department of Agriculture
USMC	U.S. Marine Corps
USPS	U.S. Postal Service
VA	U.S. Department of Veterans Affairs

EXECUTIVE SUMMARY

As directed in section 301(b)(8) of Executive Order (E.O.) 13149, “Greening the Government through Federal Fleet and Transportation Efficiency,” the U.S. Department of Energy (DOE) has prepared this report which assesses the performance of Federal agencies in meeting the goals and objectives of E.O. 13149 and the associated alternative fueled vehicle (AFV) requirements of the Energy Policy Act of 1992 (EPAAct) for fiscal year (FY) 2003.

It is important to note that petroleum consumption in the Federal fleet represents a negligible portion of petroleum consumption in the United States (U.S.) transportation sector. According to the latest available data, total petroleum consumption in U.S. highway transportation was 12.2 million barrels per day, of which the Federal fleet consumed far less than 1 percent (19,749 barrels per day)¹.

Federal agencies annually report conventional and AFV acquisitions and inventory, in addition to alternative fuel consumption, petroleum consumption, and vehicle operations data. In FY 2003, covered petroleum consumption by Federal agencies was reduced slightly (by about 81,000 gasoline gallon equivalent (GGE)) compared to the FY 1999 baseline levels. In FY 2003, most agencies implemented measures to reduce petroleum consumption, including acquiring AFVs, using alternative fuels, and increasing the fuel economy of non-AFV, light-duty vehicle acquisitions. Despite these efforts, overall petroleum fuel consumption in the Federal fleets did not decrease significantly. This was due to expanded mission requirements, a shift in acquisition patterns from light-duty to medium-duty vehicles, and insufficient usage of alternative fuels in AFVs.

E.O. 13149 also emphasizes agency compliance with EPAAct. EPAAct requires that 75 percent of vehicle acquisitions each year in covered fleets be AFVs. In FY 2003, AFV acquisitions across the Federal fleet accounted for 86 percent of covered light-duty vehicle acquisitions, which represents 115 percent compliance level with EPAAct. Thirteen of the 18 covered agencies met or exceeded the 75 percent EPAAct requirement: the Department of Agriculture (USDA), Department of Defense (DOD), DOE, Department of Health and Human Services (HHS), Department of Housing and Urban Development (HUD), Department of Interior (DOI), Department of Justice (DOJ), Department of State (DOS), Department of Treasury (Treasury), Environmental Protection Agency (EPA), General Services Administration (GSA), National Aeronautics and Space Administration (NASA), and U.S. Postal Service (USPS).

In FY 2003, EPAAct-covered agencies acquired a total of 20,846 AFVs. Independent agencies not covered by EPAAct (including the Federal Communications Commission (FCC), Small Business Administration (SBA), Smithsonian Institution (SI), Social Security Administration (SSA), and Tennessee Valley Authority (TVA)) acquired another 68 AFVs. Together, the Federal fleet acquired a total of 20,914 AFVs in FY 2003, and the total AFV inventory in the Federal fleet (including independent agencies) now stands at 80,951.

¹ Davis, Stacy and Susan Diegel, Oak Ridge National Laboratory, Transportation Energy Data Book: Edition 23, prepared for the U.S. Department of Energy, October 2003.

Agencies earn one AFV acquisition credit toward compliance with the EAct 75 percent acquisition requirement for each AFV acquisition, regardless of geographic placement or exemption status. E.O. 13149 allows additional EAct acquisition credits for vehicles of any size that operate only on alternative fuel (i.e., “dedicated” vehicles as compared to vehicles that are flex- or bi-fuel). EAct acquisition credits are allowed for the use of biodiesel fuel (typically as B20, a blend of 20 percent biodiesel with 80 percent petroleum diesel). EAct-covered agencies generated 2,036 additional credits in FY 2003, with biodiesel use accounting for 1,558 EAct credits and the remaining 478 credits attributable to the acquisition of dedicated light-duty, medium-duty, and heavy-duty AFVs. Two of the largest fleets, USPS and Department of Army (Army), together accounted for over half of the Federal AFV acquisition credits in FY 2003. The USPS and Army earned 7,861 and 4,718 AFV credits, respectively.

E.O. 13149 requires that, by the end of FY 2005, “a majority of the fuel” used in AFVs must be “alternative fuel.” This means that more than 50 percent of the fuel used in the operation of AFVs must be alternative fuel by that date. Several agencies reported meeting this requirement in FY 2003, and several other agencies demonstrated progress toward this goal.

In total, 3.1 million GGE of alternative fuels were reported consumed in FY 2003. Note that this total is lower than the nearly 7 million GGE reported in FY 2002. This is due in part to a change in the method used by GSA to estimate the amount of alternative fuel used in AFVs. Estimation is necessary due to continued difficulties in accurately tracking alternative fuel use because alternative fuels have not been assigned unique product codes by industry. Without product codes, credit card companies cannot correctly identify fuel types. GSA has been actively pursuing a resolution to this issue with industry. Regardless, most agencies will have to make a significant effort in expanding alternative fuel use to meet the FY 2005 requirement.

E.O. 13149 also requires agencies to increase the miles-per-gallon (mpg) rating of conventional light-duty vehicle (LDV) acquisitions by 3 mpg by FY 2005. This increase is measured relative to the average fuel economy of the agencies’ light-duty, non-AFV acquisitions in FY 1999. Fourteen agencies reported progress toward this FY 2005 goal, and six have met or exceeded it. Only the Department of Labor (DOL) and USPS reported decreased fuel economy for vehicle acquisitions. Three agencies – HUD, HHS and Executive Office of the President (EOP) – reported that the fuel economy of their vehicle acquisitions had remained constant or improved only slightly over their baseline.

In summary, covered Federal agencies overall achieved a compliance level of 115 percent in FY 2003, exceeding the 75 percent AFV acquisition requirements of EAct by earning EAct credits for 86 percent of its covered vehicles. Agency projections indicate continued expansion of AFV acquisitions in the coming years.

Achieving the E.O. 13149 goal of reducing petroleum by 20 percent between FY 1999 and FY 2005 has proven difficult for the Federal fleet. This is demonstrated by the fact that covered petroleum consumption has essentially remained unchanged in FY 2003 compared to the baseline, likely due to expanded mission or growth patterns within some organizations, alternative fuel tracking difficulties, and limited access to alternative fuels.

BACKGROUND

Three authorities establish requirements or goals for Federal fleets to reduce petroleum consumption, acquire alternative fueled vehicles, and use alternative fuel: Title III of EPAct, E.O. 13149, and the Energy Conservation Reauthorization Act (ECRA) of 1998, which amended EPAct.

Energy Policy Act of 1992

EPAct established annual AFV acquisition targets for Federal agencies. In FY 1999 and thereafter, 75 percent of a Federal fleet's covered vehicle acquisitions must be AFVs. These requirements apply to fleets with 20 or more LDVs operating primarily in a Metropolitan Statistical Area (MSA) or Consolidated Metropolitan Statistical Area (CMSA) with a population of 250,000 or more, according to 1980 census data. Vehicles heavier than 8,500 lb gross vehicle weight rating (GVWR) or not located or operated primarily in a covered MSA or CMSA are exempt from the requirements of EPAct. Law enforcement, emergency, and military tactical as well as off-road vehicles are also exempt from this requirement.

Compliance with EPAct is measured by AFV acquisition "credits," which are granted based on the number and type of AFVs acquired and the quantity of biodiesel fuel used. Agencies earn one credit for each AFV acquisition, regardless of geographic placement or exemption status. To maintain the emphasis on actual alternative fuel use, E.O. 13149 allows fleets to receive additional credits for acquiring dedicated light-, medium-, and heavy-duty AFVs. Fleets may also earn credits based on the quantity of biodiesel used in a fiscal year (one credit per 450 gallons of neat [100 percent] biodiesel, but only up to 50 percent of the annual requirement). Credits accrued by the Federal fleets do not carry over from one fiscal year to the next, nor can these credits be traded among Federal fleets.

Executive Order 13149

The purpose of E.O. 13149 (65 FR 24607, April 21, 2000), "Greening the Government through Federal Fleet and Transportation Efficiency," is to ensure that the Federal Government exercises leadership in reducing petroleum consumption through fleet fuel efficiency improvements and the use of alternative fuels and AFVs.

Under E.O. 13149, each Federal agency with 20 or more vehicles in the United States must reduce its annual vehicular petroleum use by at least 20 percent by FY 2005 compared to the agency's FY 1999 baseline petroleum consumption. Independent agencies and agencies with fewer than 20 vehicles are exempted from coverage, but are encouraged to comply with the provisions of this Executive order.

Although the method by which Federal agencies achieve the 20 percent petroleum use reduction is not rigidly prescribed, agencies must acquire a certain percentage of AFVs when replacing fleet vehicles (by purchase, lease from the GSA, or commercial lease) in accordance with EPAct. Under E.O. 13149, agencies must use alternative fuels in AFVs for a majority of the total fuel use of those vehicles, and increase the average DOE/EPA Fleet Fuel Economy Guide rating of

all light-duty, non-AFV acquisitions by at least 3 mpg by FY 2005 compared to FY 1999 baseline fuel economy data.

Federal agencies may choose to use additional, creative approaches to comply with E.O. 13149. Possible approaches include reductions in fleet size and vehicle miles traveled, or improved efficiency of fleet management and vehicle use.

In the summer of 2000, DOE issued guidance to agencies on complying with the requirements of E.O. 13149. This guidance described preparing compliance strategies, designating responsible senior level officials, and reporting compliance data. In the fall of 2000, DOE and GSA unveiled the Federal Automotive Statistical Tool (FAST), available at <http://fastweb.inel.gov/>, which is an on-line reporting system. Federal agencies use FAST to collect and compile data concerning petroleum consumption, conventional and alternative fuel vehicle acquisition and inventory, alternative fuel consumption in AFVs, fuel efficiency of vehicle acquisitions, and vehicle operations. Agencies' vehicle acquisition data are reported for the prior, current, and subsequent FYs. Starting in FY 2003, agencies also report data required for the Motor Vehicle Exhibit (A-11) to the Office of Management and Budget (OMB) using the FAST system. At the close of each fiscal year, agencies are given a period of time to enter data into FAST. The system does not accept any new information after this period, which is determined in the early stages of the annual reporting cycle.

Since its introduction, DOE and GSA have worked together to develop and implement enhancements to the FAST system. These ongoing efforts make the FAST system easier to use for fleet managers, agency administrators and DOE staff. DOE continues to provide guidance to agencies in meeting these requirements, including efforts to improve the collected data by training agency personnel responsible for submitting this information. DOE will continue to facilitate communication of alternative fuel infrastructure and vehicle issues among the Federal fleet community and industry through various channels, and through its active participation as chair of an interagency working group.

Energy Conservation Reauthorization Act of 1998

ECRA, Public Law 105-388, amended EPAct to allow one AFV acquisition credit for every 450 gallons of biodiesel purchased for the use in diesel vehicles of more than 8,500 lb GVWR. To receive credit for an AFV acquisition, agencies must use pure biodiesel (also known as B100) or in blends that contain at least 20 percent biodiesel (B20) by volume.

Each agency is allowed one AFV acquisition credit for every 2,250 gallons of B20 used, but only up to 50 percent of its EPAct AFV acquisition requirements. These credits can only be claimed in the year in which the fuel is purchased for use, and they cannot be traded among fleets.

ANALYSIS AND REPORTING

ECRA requires each agency covered by EPAct to submit an annual report to Congress. The written report includes a discussion of agency petroleum and alternative fuel consumption data, and the average fuel economy of non-AFV LDV acquisitions. Each agency submits a copy of its report to DOE, to be evaluated and consolidated into the annual report, *Federal Fleet Compliance with E.O. 13149*.

A total of 18 Federal agencies (Table 1) are covered by these requirements. All but a few of the covered agencies have provided a written report to DOE addressing FY 2003 E.O. 13149 activities and compliance with EPAct. Each covered agency is required to make its annual report available on that agency's website. Links to these websites are given on the Federal Fleet Program website at <http://www.eere.energy.gov/vehiclesandfuels/epact/federal>.

Agencies enter data on vehicle acquisitions, petroleum and alternative fuel use, and other information into FAST, a web-based database application. FAST was opened for reporting of FY 2003 data on October 1, 2003, and remained open until January 2004 to accommodate requests from agencies for additional time for data entry and review. During this period, agencies could enter FY 2003 data, modify this data, and change FY 1999 baseline data (petroleum consumption and fuel economy data), if justified.

The FY 2003 data set was permanently closed on January 15, 2004, and no changes in FAST have subsequently been made. One agency (Army) submitted data changes, with a supporting explanation, after the FAST system lockdown on January 15, 2004. Although these additional data are not reflected in FAST, the data is included and highlighted in bold italics in Table 1 of this report. Data that is not in bold italics is as it appears in FAST.

Agency Compliance with Executive Order 13149

Agency compliance with E.O. 13149 is summarized in Table 1, which addresses the three main areas of the Executive order: Petroleum Consumption, Alternative Fuel Use, and Fuel Economy. Since the objective of E.O. 13149 is to reduce petroleum consumption in Federal vehicles by 20 percent by 2005, all agencies are currently considered to be compliant with the petroleum consumption reduction and alternative fuel use provisions specified for FY 2003.

Petroleum Consumption: Each agency provided its FY 1999 petroleum consumption as the baseline value against which future petroleum-use data are measured. Petroleum consumption in FY 2003 is contrasted with the baseline value to calculate the percentage reduction (or increase) in petroleum use for this fiscal year. Note that the FY 1999 baseline data was initially collected in FY 2000, after E.O. 13149 was signed. Since it was the first data set of this kind collected by the Federal fleets, appropriate mechanisms often were not in place for accurate data collection. In some cases, agencies have re-evaluated and updated baseline numbers, which are reflected in the table.

Table 1. EXECUTIVE ORDER 13149 COMPLIANCE, FY 2003
(Includes revised data submitted after FAST database closed in January 2004)*

Agency	Petroleum Consumption			Alternative Fuel Use		Fuel Economy		
	FY 1999 Covered Petroleum Consumption Baseline (GGE) ¹	FY 2003 Covered Petroleum Consumption (GGE) ¹	Consumption Reduction (%) <i>Increases shown in parentheses</i>	FY 2003 Alternative Consumption ² (GGE)	Alt Fuel Use in AFVs ³ (%)	FY 1999 Fuel Economy Baseline ⁴ (mpg)	FY 2003 Fuel Economy ⁴ (mpg)	Increased Fuel Economy (mpg) <i>Decreases shown in parentheses</i>
USDA	17,712,621	18,030,009	(1.8)	121,926	1.3	17	20	3.0
DOC	1,132,791	959,834	15.3	1,092	0.6	17	18	1.0
DOD	77,586,922	77,986,895	(0.5)	882,633	6.0	18.6	21.5	2.9
USAF	13,016,001	12,987,350	0.2	206,484	3.1	17	24	7.0
Army	31,728,666	35,951,839	(13.3)	37,167	0.2	20	22	2.0
Corps of Engineers	4,416,061	4,777,066	(8.2)	5,982		18		
DCMA		267,257		48,432				
DLA	1,648,285	1,519,651	7.8	2,005		19		
USMC	10,527,804	7,677,021	27.1	245,760	4.9	17	19.7	2.7
Navy	15,435,613	14,036,506	9.1	334,085	20.4	18	20	2.0
Other Defense ⁵	814,492	770,206	5.4	2,719	9.0	18	26	8.0
DOE	6,837,150	6,417,840	6.1	432,530	30.4	17	19.7	2.7
HHS	4,914,505	4,037,460	17.8	39,930	4.7	19.2	20	0.8
HUD	210,122	250,375	(19.2)	942	2.5	23	23.2	0.2
DOI	21,221,692	22,941,301	(8.1)	118,025		16		
DOJ ⁶	741,491	459,060	38.1	18,684	7.2	19	22.5	3.5
DOL	3,027,793	3,099,814	(2.4)	79,571	88.3	21	15.6	(5.4)
DOS	179,411	176,184	1.8	23,436	43.9	15.7	18	2.3
DOT	6,872,948	6,202,289	9.8	325,991	28.9	24	25	1.0
Treasury	870,705	710,429	18.4	100,025	728.9	18	20.2	2.2
VA	6,277,134	7,312,376	(16.5)	24,058	6.0	18	21.5	3.5
EPA	622,645	525,658	15.6	110,973	37.0	17	20	3.0
GSA	677,681	601,766	11.2	40,404	12.4	18	21	3.0
NASA	1,478,081	1,271,461	14.0	50,367	9.4	18	21.1	3.1
USPS ⁷	125,547,125	124,885,166	0.5	712,052	3.2	18.5	18	(0.5)
EOP ⁸	51,300	13,594	73.5	10,575	75.6	18	18	0.0
TOTAL	275,962,117	275,881,601	0.0	3,093,214				

* Note: Data included in this report are taken from the FAST database as input by agency sources on or before January 15, 2004. Data revisions submitted by agency sources after April 2004 are not reflected in this report. Revisions received prior to that date are highlighted in bold italics. Shaded areas indicate that data were not submitted, not credible or that data are insufficient to calculate meaningful totals.

1. In E.O. 13149, "covered" vehicles are all on-road vehicles that are not law enforcement, emergency, or military tactical.
2. Combination of all types of alternative fuels (natural gas, E85, electricity, biodiesel, M85, and LPG). Biodiesel blend (B20) figures entered into FAST have been converted to pure biodiesel (B100) to accurately calculate alternative fuel usage for the Federal fleets. The 80 percent diesel portion of the B20 fuel blends used in on-road vehicles has been included in the agency's petroleum consumption.
3. Excludes biodiesel because it is not used in AFVs.
4. Fuel economy of covered LDV acquisitions excluding AFVs.
5. Includes data entered by smaller DOD organizations, listed in FAST as "Defense Agencies."
6. The DOJ has redefined a significant number of vehicles as law enforcement vehicles.
7. USPS data represents a calculated 12-month period for FY 2003 to synchronize its fiscal year with other Federal agencies.
8. The EOP's use of ground transportation has diminished from prior years due to security reasons.

Table 1 shows that the Federal petroleum consumption in covered fleets overall decreased slightly (about 81,000 GGE), but on a percentage basis essentially remained unchanged compared to the FY 1999 baseline. Petroleum reductions were achieved at all but six agencies: USDA, DOD, HUD, DOI, DOL, and the Department of Veterans Affairs (VA).

Agencies are attempting to develop better methods for tracking fuel use, but in some cases have submitted incomplete or incorrect estimates. DOE continues to work with agencies to improve data collection mechanisms. For example, in FY 2003, DOS discovered a fleet that had not previously been reported in FAST. DOE and DOS worked together to create a new FY 1999 baseline and to ensure that this new fleet was correctly incorporated into the reporting system.

It is expected that a great deal of effort will be required in FY 2004 to adjust to the creation of the Department of Homeland Security (DHS). This department did not exist in FY 1999, and is largely composed of fleets that were part of other organizations.

Alternative Fuel Use: To fulfill E.O. 13149 requirements, agencies must provide data on the types and quantities of alternative fuels used in agency AFVs. By the end of FY 2005, a majority of the fuel used by agencies in their AFVs must be alternative fuel. Alternative fuel consumption is summarized in Table 1 and reported by fuel type for each agency in Table 2.

Federal agencies consumed 3.1 million GGE of alternative fuels in FY 2003, displacing gasoline and diesel fuel. This represents a significant decrease from the approximately 7 million GGE of alternative fuels reported in FY 2002. Indications are that alternative fuel use in AFVs leased from GSA was significantly over-reported in FY 2002. In 2003, GSA changed the method for estimating the amount of alternative fuel used in AFVs that agencies leased from GSA. Estimation is necessary due to the absence of a unique product code for alternative fuels, which makes it difficult to accurately track alternative fuel use. Without product codes, credit card companies cannot correctly identify the fuel types. As a result, these numbers should be regarded with caution. GSA has taken the lead in resolving this issue, but nonetheless, it appears that most agencies will have to make a significant effort in expanding alternative fuel use to meet the FY 2005 requirement.

In FY 2003, all agencies except the DOI reported the data necessary to calculate alternative fuel use in AFVs. DOL and Treasury, on the other hand, appear to have miscalculated the alternative fuel usage in its AFVs. Several agencies have made progress toward meeting the majority fuel use target: DOE, DOS, DOT, EPA, and EOP.

Fuel Economy: The average fleet fuel economy for light-duty, non-AFV acquisitions, for the FY 1999 baseline and the FY 2003 reporting cycle, was calculated by agencies based on the DOE/EPA Fleet Fuel Economy Guide (www.fueleconomy.gov). E.O. 13149 requires that agencies increase the average fuel economy of non-AFV, light-duty vehicle acquisitions by 3 mpg by FY 2005.

Table 2. ALTERNATIVE FUEL CONSUMPTION (GGE), FY 2003 (Includes revised data submitted after FAST database closed in January 2004)*								
Agency	CNG	LPG	LNG	E85	Electric	M85	Biodiesel (B100)¹	TOTAL
USDA	1,218	2,840	0	12,189	0	0	105,680	121,926
DOC	10	127	0	941	0	14	0	1,092
DOD	286,742	13,855	0	248,274	2,040	1,128	330,594	882,633
USAF	32,819	107	0	28,586	1,958	0	143,014	206,484
Army	4,732	3,772	0	11,323	0	0	17,340	37,167
Corps of Engineers	974	1,048	0	2,892	0	1,068	0	5,982
DCMA	4,080	0	0	44,352	0	0	0	48,432
DLA	524	449	0	1,032	0	0	0	2,005
USMC	69,878	3,897	0	3,154	0	3	168,828	245,760
Navy	171,245	4,582	0	156,706	82	57	1,413	334,085
Other Defense ²	2,490	0	0	229	0	0	0	2,719
DOE	89,545	7,196	17,739	258,530	1,770	0	57,750	432,530
HHS	21,457	1,942	0	11,511	0	129	4,891	39,930
HUD	0	11	0	931	0	0	0	942
DOI	14,178	53,625	5,104	12,296	666	1,410	30,746	118,025
DOJ	9,419	37	0	8,720	0	0	508	18,684
DOL	24,696	0	0	54,875	0	0	0	79,571
DOS	19,649	0	0	3,787	0	0	0	23,436
DOT	23,749	1,073	0	301,169	0	0	0	325,991
Treasury	2,282	0	0	97,743	0	0	0	100,025
VA	8,876	243	0	14,737	0	0	203	24,058
EPA	10,092	34	0	100,847	0	0	0	110,973
GSA	9,924	0	0	30,480	0	0	0	40,404
NASA	17,314	2,576	0	860	0	0	29,618	50,367
USPS	34,808	20,526	0	419,134	14,390	0	223,194	712,052
EOP	508	0	0	10,067	0	0	0	10,575
TOTAL	574,467	104,085	22,843	1,587,091	18,866	2,681	783,184	3,093,214

* Note: Data included in this report are taken from the FAST database as input by agency sources on or before January 15, 2004. Data revisions submitted by agency sources after April 2004 are not reflected in this report.

1. For the purpose of this report, the biodiesel blend (B20) figures entered in the FAST system by the Federal agencies have been converted to pure biodiesel (B100) to accurately calculate alternative fuel usage in Federal fleets. Biodiesel EPA credits calculations however, are based on natural gallons.
2. Includes data entered by smaller DOD organizations, listed in FAST as "Defense Agencies."

Fourteen of the covered agencies reported progress toward the FY 2005 fuel economy goal, with six of these meeting or exceeding the goal, while HHS, HUD and EOP had only small gains. As shown in Table 1, only DOL and USPS reported decreased fuel economy for vehicle acquisitions. DOI did not report its fleet average fuel economy for covered vehicles in FY 2003.

Agency Compliance with EPOct

In FY 2003, EPOct required Federal fleets to acquire 75 percent of their covered acquisitions as AFVs. Table 3 summarizes EPOct compliance among the covered fleets. Data are presented for the number of covered acquisitions by each agency, as well as the number of AFVs acquired and additional credits earned for acquiring dedicated light-, medium-, and heavy-duty AFVs and for biodiesel fuel use. An agency's compliance with EPOct is based on this total number of credits earned, including AFV acquisitions and additional credits.

In FY 2003, 13 of the 18 agencies required to comply with EPOct met the requirement to acquire 75 percent of their covered LDV acquisitions as AFVs. However, several agencies' FY 2003 performance was particularly notable. EPOct acquisition for the following agencies equaled or exceeded 99 percent: USDA, DOD, DOE, HUD, DOJ, DOS, Treasury, and GSA. Six out of the eight DOD reporting organizations individually exceeded the 75 percent EPOct requirement. These six DOD organizations generated a total of 8,606 EPOct credits in FY 2003.

Several agencies acquired large numbers of AFVs in FY 2003, including DOD (8,310), USPS (7,391), USDA (1,536), DOT (862), DOI (593), and DOE (498). USPS has the largest AFV fleet in the Federal Government, with 37,573 vehicles, accounting for about 46 percent of the 80,852 AFVs in the Federal fleets covered by EPOct. DOD fleets combined operate more than 26,969 AFVs, or about 33 percent of the total Federal fleet AFVs.

In addition to AFV acquisitions, Table 3 also shows a total of 2,036 additional credits were generated in FY 2003. Of these additional credits, 1,558 (nearly 77 percent) were from biodiesel use and the rest from dedicated light-, medium-, and heavy-duty AFVs.

Furthermore, many fleets such as NASA and U.S. Marine Corps (USMC), have been acquiring Neighborhood Electric Vehicles (NEVs) for light hauling and administrative purposes. These vehicles do not count toward EPOct compliance because they are not licensed for use on all roads and highways in order to be categorized as light-duty vehicles, yet by replacing conventional LDVs they contribute to reducing petroleum consumption.

In FY 2003, covered Federal agencies overall, acquired 20,846 AFVs. Independent agencies, not covered by EPOct, reported 68 AFVs acquired, for a combined total of 20,914 AFVs. This is a significant increase from 9,399 AFVs acquisitions reported in FY 2002.

Five independent agencies reported AFV acquisitions for this reporting year. These agencies, FCC, SBA, SI, SSA, and TVA, have acquired 68 new AFVs in FY 2003. Independent agencies overall have reported a total of 99 AFVs in inventory.

The total inventory of AFVs in the domestic Federal fleet for FY 2003 was reported to be 80,951 vehicles (i.e., 80,852 AFVs for EPOct-covered agencies and 99 AFVs for independent agencies).

Table 3. EPACT COMPLIANCE, FY 2003						
<i>(Includes revised data submitted after FAST database closed in January 2004)*</i>						
Agency	Covered Acquisitions ¹ (#)	AFV Acquisitions (#)		AFVs as % of Covered Acquisitions (Including Credits)	Met Requirement? ³	Total AFV Inventory
		Number of AFVs	With Credits ²			
USDA	1,730	1,536	1,745	101	Yes	2,783
DOC	173	46	65	38	No	287
DOD	9,372	8,310	9,286	99	Yes	26,969
USAF	1,213	845	1,174	97	Yes	4,351
Army ⁴	4,139	4,679	4,718	114	Yes	12,365
Corps of Engineers	448	221	224	50	No	1,110
DCMA	159	159	159	100	Yes	534
DLA	742	456	456	61	No	1,442
USMC	1,254	764	1,277	102	Yes	1,939
Navy	1,383	1,102	1,192	86	Yes	5,042
Other Defense ⁵	34	84	84	247	Yes	186
DOE	620	498	650	105	Yes	3,265
HHS	177	147	158	89	Yes	634
HUD	3	13	13	433	Yes	85
DOI	889	593	683	77	Yes	2,334
DOJ	200	228	242	121	Yes	520
DOL	281	68	71	25	No	385
DOS	26	31	33	127	Yes	151
DOT	1,643	862	867	53	No	2,166
Treasury	3	249	250	8,333	Yes	357
VA	1,469	237	237	16	No	1,377
EPA	142	114	114	80	Yes	365
GSA	198	285	287	145	Yes	884
NASA	307	204	286	93	Yes	682
USPS	9,197	7,391	7,861	85	Yes	37,573
EOP	59	34	34	58	No	35
TOTAL	26,489	20,846	22,882	86	Yes	80,852

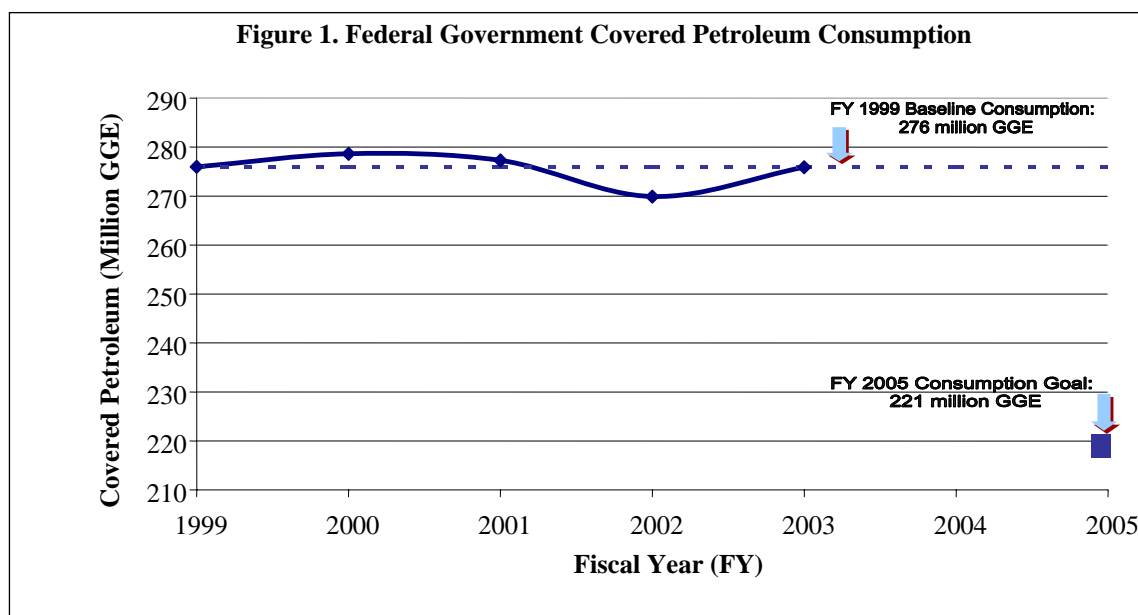
* Note: Data included in this report are taken from the FAST database as input by agency sources on or before January 15, 2004. Data revisions submitted by agency sources after April 2004 are not reflected in this report.

1. Excludes exempt vehicles. (Exemptions based on geographic location; size of fleet; non-MSA or CMSA operation; and use as law enforcement, emergency or military tactical vehicles.)
2. Includes credits for acquisition of bi- or flex-fuel AFVs, plus additional credits for dedicated light-, medium-, and heavy-duty AFVs; and biodiesel usage.
3. In FY 2003, EPAct required that AFVs represent 75 percent of all covered light-duty vehicle acquisitions.
4. Department of Army under-reported 34 biodiesel credits in FAST; credits are included here.
5. Includes data entered by smaller DOD organizations, listed in FAST as "Defense Agencies".

CONCLUSIONS AND RECOMMENDATIONS

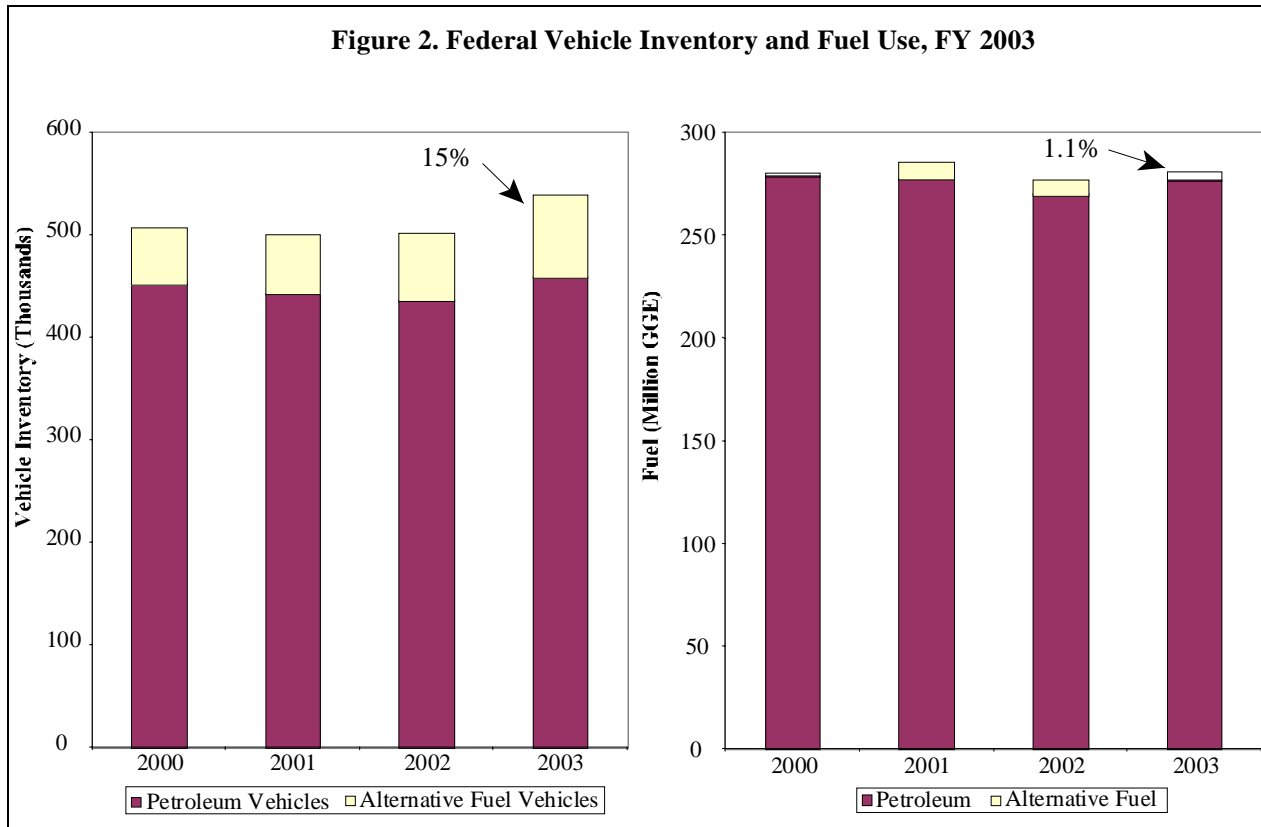
As demonstrated in Figure 1, Federal agency fleets as a whole need to make more effort toward fulfilling the petroleum reduction goals of E.O. 13149. Agencies need to put appropriate internal policies and procedures into place that emphasize implementation, to increase alternative fuel consumption in agency AFVs. Displacing petroleum fuel through alternative fuel use is the quickest and most effective method for achieving the 20 percent petroleum consumption reduction goal. Without additional efforts, agencies will find the goal difficult to achieve.

In FY 2003, Federal agencies reported a slight decrease in petroleum consumption compared to FY 1999 consumption levels. Most agencies are having difficulty tracking fuel data due to fuel product code issues, which casts doubt on the accuracy of the amount of fuel (both conventional and alternative) reported.



Federal agencies are acquiring more alternative fuel vehicles, but are not using alternative fuels in proportionate amounts. Figure 2 shows that AFVs made up 15 percent of the Federal fleet in FY 2003, but the use of alternative fuel amounted to only 1.1 percent of total Federal fleet fuel use. This indicates that Federal fleets are using gasoline in their flex- and bi-fuel AFVs.

The limited use of alternative fuels in AFVs can be attributed to two primary factors. The first is under-use of existing alternative fuel refueling infrastructure by some fleets and the second is a lack of available alternative fuel refueling infrastructure for other fleets.



Increasing the use of existing infrastructure available to fleets requires changes in internal policies, management commitment, and enforcement down to the fleet level. The establishment of new infrastructure requires high-level management and funding support, as well as fleet commitment to using the new refueling infrastructure.

As an example, DOE recognized that the lack of available alternative fuel refueling was inhibiting the use of alternative fuels in its AFV fleet. Funding was secured for establishing several new alternative fuel refueling stations in FY 2004 to serve DOE fleets. To ensure maximum utilization of the new stations, an official DOE internal directive was established in support of all E.O. 13149 related activities. DOE recommends that other agencies consider this approach in relation to improving alternative fuels utilization in their AFV fleets. DOE recommends that each agency adopt specific actions for achieving the E.O. 13149 goals:

- ❑ Review current progress toward achieving E.O. 13149 petroleum reduction goals and revise and accelerate specific fleet operational elements for ensuring compliance by FY 2005.
- ❑ Assist fleets in coordinating use of AFVs with existing and planned infrastructure.
- ❑ Implement a high-level recognition program for highlighting individual fleet successes.
- ❑ Develop and implement fleet manager and vehicle operator training programs.
- ❑ Implement an AFV and alternative fuel use measure with the fleet manager performance evaluation.

- ❑ Expand vehicle operators' and fleet managers' involvement in data reporting, as well as AFV acquisition planning.
- ❑ Increase coordination among GSA, DOE and other agencies to identify and resolve alternative fuel tracking problems and to expand AFV acquisitions and alternative fuel use.

DOE will continue to provide guidance and assistance to Federal agencies to achieve the objectives of E.O. 13149, with assistance from OMB as appropriate. However, the participation and leadership of each agency will be the ultimate determinant of success.

APPENDIX

SELECTED AGENCY HIGHLIGHTS

SELECTED AGENCY HIGHLIGHTS

Agencies with the largest fleets have a significant impact on the overall performance of the Federal Government in meeting the objectives of E.O. 13149. As shown in Figure A1, most (86 percent) of the vehicles in the Federal fleet are concentrated in five agencies: USPS, DOD, DOJ, USDA and DOI. Similarly, 91 percent of the covered petroleum consumption is concentrated in four of these agencies, as shown in Figure A2. In fact, the agencies with the two largest fleets, USPS and DOD, represent 65 percent of all Federal vehicles and 73 percent of all petroleum consumption in the Federal fleet. The success or failure of the Federal fleet overall in achieving the objectives of E.O. 13149 and EPAct will hinge largely on the performance of these few agencies.

Figure A1. Federal Agency Vehicles (Percent of Total Vehicles by Agency)

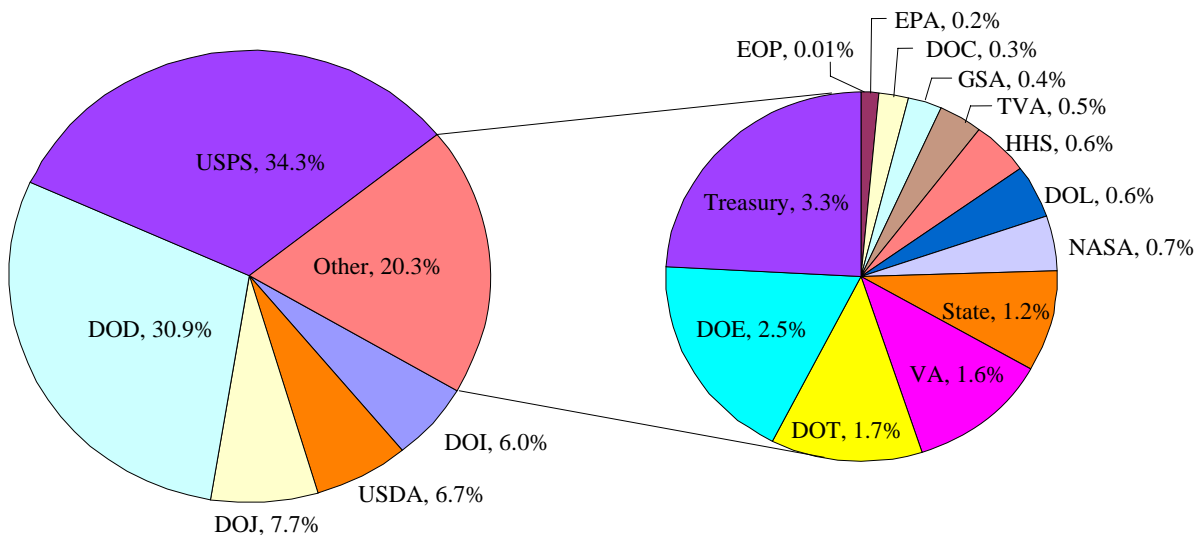
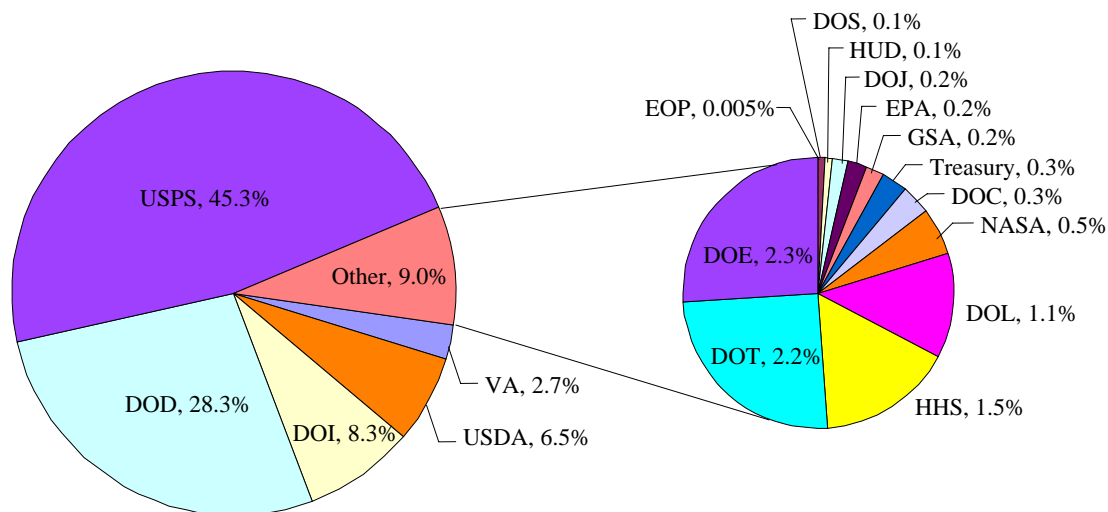


Figure A2. Federal Agency Vehicular Petroleum Consumption (Percent of Total Consumption by Agency)



The following summarizes the EPO and E.O. 13149 compliance activities for four of the largest agencies: USPS, DOD, USDA, and DOI.

U.S. Postal Service

USPS was successful in meeting the EPO AFV acquisition requirements in FY 2003, as it did in FY 1998-2002. USPS has achieved this success through the following practices:

- USPS acquired all of its delivery (mail hauling) vehicle purchases as AFVs, where available from the manufacturers. All delivery vehicles, which make up 90 percent of the USPS fleet, are centrally purchased by USPS headquarters. Vehicle leasing has also been centralized.
- In FY 2003, USPS acquired 6,240 flexible fuel vehicles capable of operating on E85.
- USPS continues to increase its use of the biodiesel blend B20. It used 1,115,968 GGE in FY 2003, an increase of 48 percent over FY 2002 levels. This earned the USPS 442 EPO credits.

U.S. Department of Defense

DOD fleets combined represent the second-largest fleet in the Federal Government. Each military service operates its fleet separately. Highlights of the alternative fuel programs of the Army, USMC, USAF and Navy are discussed below. On the whole in FY 2003, DOD exceeded the overall EPO goal of 75 percent of covered acquisitions, achieving 99 percent. In terms of AFV acquisitions alone, DOD exceeded the goal by 1,281 vehicles, bringing its total to 8,310. DOD's current inventory includes 26,969 AFVs.

Army: Army's acquisition of 4,679 AFVs greatly assisted the Federal Government as a whole in achieving and exceeding the EPO requirements in FY 2003. This acquisition brought Army's total inventory of AFVs to 12,365.

In addition, Army has:

- Installed two 10,000-gallon fuel tanks at Fort Leonard Wood, Missouri, for dispensing E85 and B20. B20 use at Fort Leonard Wood generated 34 EPO credits in FY 2003.
- Refurbished existing fuel storage facilities at Fort McPherson, Georgia, to begin dispensing B20. Fort Sill, Oklahoma, and Fort Leavenworth, Kansas, also began using B20.
- Started the use of E85 at Fort Bliss, Texas.
- Increased the fuel economy of conventional light-duty vehicle acquisitions to 22 mpg.

Army continues to look for opportunities to use alternative fuels and alternative fueled vehicles as part of its operations.

USMC: USMC is the only fleet covered by E.O. 13149 that has already reached the 20 percent petroleum reduction goal. USMC's total fuel reduction at the end of FY 2003 is 2,850,783 GGE or 27 percent of the FY 1999 baseline. In addition, USMC continues to meet its EPO goals. Several factors have contributed to USMC's success:

- CNG vehicles are concentrated where existing CNG infrastructure is already established.
- Exceeding the 75 percent acquisition goal in most years has resulted in a fleet inventory in which AFVs represent 86 percent of covered vehicles.
- NEVs have been successfully used at several locations for light hauling and administrative purposes. All USMC installations are finding unique ways to use NEVs and reduce the number of gasoline-fueled vehicles. In FY 2003, USMC increased its fleet of NEVs by 132.
- Plans indicate that in FY 2004, several installations will be provided with above-ground E85 tanks. This infrastructure will allow USMC to increase its E85 usage within the fleet. USMC base at Camp LeJeune, North Carolina, has been selected to receive a DOD grant through the National Ethanol Vehicle Coalition for \$25,000 to place an E85 station there.
- During FY 2003, several USMC installations established biodiesel contracts. In FY 2003, USMC earned 334 credits for biodiesel use.

USAF: USAF has the third-largest fleet of AFVs in the DOD, after Army and Navy, and as such provides a significant contribution to achieving the goals of EPAct and E.O.13149 for the Federal fleet. In FY 2003, USAF acquired 845 AFVs and earned a total of 1,174 credits, achieving a 97 percent AFV acquisition rate and thereby exceeding the 75 percent EPAct requirement by 29 percent. This success is largely due to USAF major commands and local commanders placing special emphasis on obtaining AFVs within its agency-owned and GSA-leased fleets. To ensure USAF maintains focus on purchasing AFVs, detailed language has been added to the Annual Planning and Programming Guidance for FY 2004 and subsequent years.

Tracking of alternative fuel use remains an issue. USAF hopes to add additional data fields for multiple fuels to its current vehicle management system by June 2004 to allow accurate tracking of multiple fuels in bi-fuel AFVs. USAF is also seeking to replace the entire vehicle management system by FY 2006.

USAF has greatly increased its use of biodiesel, and projects use of over one million GGE of biodiesel in FY 2004. Also, USAF has submitted funding requests for 276 alternative fuel projects. USAF has had difficulty in obtaining the one million GGE of E85 from Defense Energy Supply Center (DESC) needed to meet its requirements. In addition to DESC, USAF is working with the Army/Air Force Exchange Service and Navy Exchange Service to acquire alternative fuel.

Several significant projects are underway within USAF, including:

- Requiring lease and purchase of AFVs as administrative light-duty vehicles, and expanded use of E85-capable vehicles and biodiesel use.
- Designating biodiesel as primary for vehicle diesel fuel for all fleets in the continental United States, when practical.
- Maintaining existing CNG infrastructure and vehicles, and expanding where practical.

When available, USAF also plans to purchase hybrid electric vehicles in larger vehicle classes to assist in achieving a fuel reduction.

Navy: Navy's fleet is one of the fastest-growing biodiesel fuel users in the Federal Government. In response to this growth, the Naval Base Ventura County in Port Hueneme, California, is partnering with Biodiesel Industries to produce biodiesel on-site from used cooking grease. The plant was commissioned in October 2003 and has a capacity of one million gallons annually. Navy used 20,000 gallons of biodiesel in FY 2003. The plant will also supply both Ventura County and the Channel Islands National Park with 20,000 gallons annually. The project resulted from the positive field experience with the fuel and its potential logistical advantages.

With the use of biodiesel, increase in conventional vehicle fuel economy, and other efforts, Navy has reduced its covered petroleum consumption from a baseline of 15,435,613 GGE to 14,036,506 GGE in FY 2003, a decrease of about nine percent. Part of this decrease is due to the fact that alternative fuel is used in Navy AFVs for 20 percent of their operation.

U.S. Department of Agriculture

USDA's fleet inventory is medium-sized, representing about seven percent of the Federal vehicles and about seven percent of Federal covered petroleum consumption. USDA has been active in many projects to reduce petroleum consumption, including the acquisition of AFVs. In fact, USDA's current light-duty vehicle inventory is 42 percent AFVs.

USDA has converted some locations that operate diesel vehicles to biodiesel blend use. A good example is the Beltsville Biodiesel Demonstration project in Beltsville, Maryland, which began as a one-year demonstration using a B20 biodiesel blend. The project was successful and has become a permanent fuel program. All 150 diesel-powered vehicles, including pickup trucks, tractors, dump trucks, ride-on mowers, the compost turner, and the Agricultural Research Service tour bus run on B20. The facility is also using a B5 blend in the boiler plants and B20 in the facility's back-up generators. This success has led to efforts to implement B20 use in all 140 USDA diesel storage tanks around the country, serving approximately 800 vehicles, where it is practical and cost-effective.

U.S. Department of the Interior

DOI's fleet inventory is another medium-sized fleet, representing about six percent of Federal vehicles and about eight percent of Federal covered petroleum consumption. Overall, DOI has reported a disappointing increase in petroleum consumption since FY 1999. However, the National Parks Service (NPS) within DOI has been active in many projects to reduce petroleum consumption. Projects include the use of alternative energy sources, the "New Red Bus" program, and maintenance of a website called "Greening the National Park Service" at <http://www.nps.gov/renew/>.

The "New Red Bus" program is a joint venture among the NPS, DOE's Idaho National Engineering and Energy Laboratory, the Greater Yellowstone/Teton Clean Cities Coalition, and several other organizations. The objective is to design a shuttle bus based on current conventional designs, but restyled to look similar to the original, 1930s-era White Motor Co. buses. The buses will use alternative fuels with Ford's Hydraulic Launch Assist system to

provide regenerative braking, resulting in approximately 30 percent better fuel economy and much lower emissions. The buses will be able to be configured to run on a variety of alternative fuels including CNG, LNG, LPG, and biodiesel.

For the isolated Channel Islands National Park, getting energy is challenging. Solar and wind power have drastically reduced diesel fuel use for electricity production. Biodiesel is used for power generation, boats and vehicles. Fifty-four percent of the park's mainland vehicle fleet are AFVs (EV, CNG, E85). Plans for the park are to convert all diesel equipment to B100 or B20, with the ultimate goal of being petroleum-free.