

Federal Fleet Compliance with Executive Order 13149

Fiscal Year 2001

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ACRONYMS USED IN FY 2001 FEDERAL FLEET REPORT

AFV	Alternative Fuel Vehicle
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
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
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
EPA	U.S. Environmental Protection Agency
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 <u>http://fastweb.inel.gov</u>)
FY	Fiscal year
GGE	Gasoline gallon equivalent
GGE GSA	Gasoline gallon equivalent General Services Administration
GSA	General Services Administration
GSA GVWR	General Services Administration Gross vehicle weight rating
GSA GVWR HHS	General Services Administration Gross vehicle weight rating U.S. Department of Health and Human Services
GSA GVWR HHS HUD	General Services Administration Gross vehicle weight rating U.S. Department of Health and Human Services U.S. Department of Housing and Urban Development
GSA GVWR HHS HUD LDV	General Services Administration Gross vehicle weight rating U.S. Department of Health and Human Services U.S. Department of Housing and Urban Development Light duty vehicle
GSA GVWR HHS HUD LDV MPG	General Services Administration Gross vehicle weight rating U.S. Department of Health and Human Services U.S. Department of Housing and Urban Development Light duty vehicle Miles per gallon
GSA GVWR HHS HUD LDV MPG MSA	General Services Administration Gross vehicle weight rating U.S. Department of Health and Human Services U.S. Department of Housing and Urban Development Light duty vehicle Miles per gallon Metropolitan Statistical Area
GSA GVWR HHS HUD LDV MPG MSA NASA	General Services Administration Gross vehicle weight rating U.S. Department of Health and Human Services U.S. Department of Housing and Urban Development Light duty vehicle Miles per gallon Metropolitan Statistical Area National Aeronautics and Space Administration
GSA GVWR HHS HUD LDV MPG MSA NASA U.S.	General Services Administration Gross vehicle weight rating U.S. Department of Health and Human Services U.S. Department of Housing and Urban Development Light duty vehicle Miles per gallon Metropolitan Statistical Area National Aeronautics and Space Administration United States
GSA GVWR HHS HUD LDV MPG MSA NASA U.S. USDA	General Services Administration Gross vehicle weight rating U.S. Department of Health and Human Services U.S. Department of Housing and Urban Development Light duty vehicle Miles per gallon Metropolitan Statistical Area National Aeronautics and Space Administration United States U.S. Department of Agriculture
GSA GVWR HHS HUD LDV MPG MSA NASA U.S. USDA USMC	General Services Administration Gross vehicle weight rating U.S. Department of Health and Human Services U.S. Department of Housing and Urban Development Light duty vehicle Miles per gallon Metropolitan Statistical Area National Aeronautics and Space Administration United States U.S. Department of Agriculture U.S. Marine Corps

EXECUTIVE SUMMARY

Section 301(b)(8) of Executive Order (E.O.) 13149, "Greening the Government through Federal Fleet and Transportation Efficiency," directs the U.S. Department of Energy (DOE) to prepare this report. This report assesses the performance of Federal agencies in fiscal year (FY) 2001 in meeting the goals and objectives of E.O. 13149 and the alternative fuel vehicle (AFV) requirements of the Energy Policy Act of 1992 (EPAct), Public Law No. 102-486 (1992).

The primary requirement of E.O. 13149 is that each Federal agency decrease its fleet's petroleum (i.e., gasoline and diesel) consumption by 20 percent by FY 2005 compared to FY 1999 petroleum consumption. Government-wide FY 1999 petroleum consumption was 274 million gasoline gallon equivalents (GGE). Therefore, a 20 percent reduction in petroleum use by the Federal fleets by FY 2005 equates to a reduction in petroleum fuel of approximately 55 million GGE per year. In energy terms this is about 1,300,000 barrels per year or 3,500 barrels per day. The 20 percent reduction in petroleum fuel is projected to lead to a reduction in greenhouse gas emissions of approximately 32,500 metric tons per year of carbon (about 120,000 tons/year CO₂-equivalent), assuming 2.5 percent of the reduction will be accomplished by efficiency improvements which reduce the carbon emissions 100 percent.

It is important to note that petroleum consumption in the Federal fleet represents a negligible portion of petroleum consumption in the U.S. transportation sector. In FY 2002, total petroleum consumption in transportation was 12.7 million barrels per day, of which the Federal fleet consumed far less than 1 percent (17,605 barrels per day).

Federal agencies annually report conventional and AFV acquisition and inventory, alternative fuel consumption in AFVs, petroleum consumption, and vehicle operations data in the webbased Federal Automotive Statistical Tool (FAST) system. The data reported in FAST shows that in FY 2001, covered petroleum consumption by the Federal agencies increased by 1.0 percent compared to FY 1999 baseline levels. In FY 2001, most agencies began to implement measures to reduce petroleum consumption, including increased AFV acquisition, increased alternative fuel use, and increased fuel economy of new non-AFV light-duty vehicles. These initiatives, along with future activities, should decrease petroleum consumption over the next few years.

E.O. 13149 also emphasizes agency compliance with EPAct. EPAct requires that 75 percent of vehicle acquisitions each year in covered fleets be AFVs. In FY 2001, AFV acquisitions accounted for 45 percent of covered light-duty vehicle acquisitions, short of the 75 percent requirement. Ten of the 18 covered agencies met the 75 percent requirement: the Environmental Protection Agency (EPA), U.S. Postal Service (USPS), General Services Administration (GSA), Department of State (DOS), Department of Justice (DOJ), National Aeronautic and Space Administration (NASA), Department of Agriculture (USDA), DOE and the Department of Interior (DOI). The Department of Housing and Urban Development (HUD) took exemptions for all of its fleets but acquired three AFVs without having a requirement to obtain any under EPAct exemption rules. Although the Department of Defense (DOD) as a whole did not meet the 75 percent requirement, the U.S. Marine Corps (USMC) and several DOD agencies, which report together as "Other Defense", did meet this requirement individually.

In FY 2001, EPAct-covered agencies acquired 8,798 AFVs and independent agencies acquired eight AFVs for a Federal government total of 8,806 AFVs. This is an increase of 10 percent from the previous year acquisitions of 7,977 AFVs, bringing the total inventory of AFVs in the Federal fleet (including independent agencies) to 58,321. Agencies earn one AFV acquisition credit towards compliance for each AFV acquisition, regardless of geographic placement or exemption status. To maintain the emphasis on actual alternative fuel use, E.O. 13149 allocates additional EPAct 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). Beyond AFV acquisitions, additional EPAct credits are generated when fleets use biodiesel fuel (typically as B20, a blend of 20 percent biodiesel with 80 percent petroleum diesel). EPAct-covered agencies generated 938 additional credits in FY 2001 for a total of 9,736 EPAct credits.

E.O. 13149 requires agencies to use alternative fuel in their AFVs the majority of the time by the end of FY 2005. This means that at least 51 percent of the fuel used in the operation of AFVs must be alternative fuel by that date. Only the DOS, USMC, Corps of Engineers and "Other Defense" agencies reported using alternative fuels the majority of the time in FY 2001. Eight of the 18 covered agencies either did not report this data or reported figures that appear incorrect (greater than 100 percent). Even so, nearly 8.7 million GGE of alternative fuels were reported as consumed in FY 2001.

E.O. 13149 also requires agencies to increase the miles per gallon (mpg) rating of light duty vehicle (LDV) acquisitions, excluding AFVs. The first requirement is an increase of at least 1 mpg in the fuel economy ratings of light-duty vehicle acquisitions by FY 2002; the second is an increase of at least 3 mpg by FY 2005. These increases are measured relative to the fuel economy of the agencies' light-duty, non-AFV acquisitions in FY 1999. The Department of Transportation (DOT), EPA, and the Department of Army increased the fuel economy of covered vehicles by 1 mpg in FY 2001, thereby meeting the interim goal early. USDA, DOD (Departments of Navy and Air Force, Corps of Engineers and "Other Defense" agencies), DOE, DOJ, DOS, VA, GSA and NASA also met the FY 2002 goal, some exceeding the goal significantly. The Department of Health and Human Services (HHS) reported decreased fuel economy of its vehicle acquisitions.

In summary, in FY 2001 the Federal government was not successful, overall, in meeting the 75 percent AFV acquisition requirements of EPAct, achieving a compliance rate of only 45 percent, although ten agencies individually met the goal. In part, this is due to difficulties that agencies have had in obtaining AFVs. For example, several AFV models were delayed or cancelled. Also, the high incremental cost of some AFV models, such as those which operate on natural gas, plus the lack and cost of refueling infrastructure has made full compliance challenging. Agencies compliance plans indicate expanded acquisitions of AFVs in the coming years.

Additionally, the Federal government as a whole and most individual agencies do not appear on track for achieving the E.O. 13149 goal of 20 percent petroleum reduction by FY 2005. Indeed, petroleum consumption increased in FY 2001. This is likely due to a number of factors, including fuel tracking difficulties and limited access to alternative fuels. It is important to recognize that the E.O. was signed in April 2000, and the petroleum reduction results from many measures planned for and executed subsequently have not yet been fully realized.

DOE provides guidance to agencies about fleet vehicle requirements, and continues to work with GSA to improve the FAST data collection and reporting system, and the process for ordering and using AFVs. Additionally, through an interagency working group chaired by DOE, DOE is facilitating the communication of alternative fuel infrastructure and vehicle issues among the Federal fleet community and industry.

BACKGROUND

Three authorities established requirements for Federal fleets to reduce petroleum consumption acquire alternative fuel vehicles (AFVs) and use alternative fuel: Title III of EPAct, Executive Order 13149, and the Energy Conservation Reauthorization Act (ECRA) of 1998, which amended EPAct.

Energy Policy Act of 1992

EPAct established annual AFV acquisition requirements 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 lbs. 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 met by AFV acquisition "credits," which are granted based on the number of AFVs acquired and the quantity of biodiesel fuel used. Agencies earn one AFV acquisition credit toward EPAct compliance 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 alternative fuel vehicles. Dedicated alternative fuel medium- and heavy-duty vehicles earn multiple credits because they displace more petroleum on a per-mile basis than LDVs. Fleets may also earn credits based on the quantity of biodiesel used in a fiscal year (1 credit per 450 gallons of neat [100 percent] biodiesel). 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 U.S. must reduce its annual 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 E.O.

The method by which Federal agencies achieve the 20 percent petroleum use reduction is not rigidly prescribed. However, according to EPAct, agencies must acquire a certain percentage of AFVs when replacing fleet vehicles (by purchase, lease from GSA, or commercial lease). Under E.O. 13149, by FY 2005, agencies must use alternative fuels in AFVs to meet a majority (at least 51 percent) of the fuel requirements of AFVs in operation. Agencies must also increase the average DOE/EPA Fleet Fuel Economy Guide rating of all light-duty, non-AFV acquisitions by at least 1 mile per gallon (mpg) by FY 2002 and 3 mpg by FY 2005 compared to FY 1999 fuel economy data.

Federal agencies may choose to use additional, creative approaches for complying 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 detailed 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 the on-line reporting system. Federal agencies must 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 is to be reported for the prior, current, and subsequent FYs.

Energy Conservation Reauthorization Act of 1998

ECRA amended EPAct to allow one AFV acquisition credit for every 450 gallons of pure biodiesel purchased for the use in diesel vehicles of more than 8,500 lbs. GVWR. To receive an AFV acquisition credit, the biodiesel must be neat (also known as B100) or in blends that contain at least 20 percent biodiesel (B20) by volume. Therefore, agency fleets are eligible to receive one EPAct credit for every 450 gallons of B100 or 2,250 gallons of B20 used.

Federal fleets are only allowed to use these credits to fulfill up to 50 percent of their EPAct 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.

Under this authority, Section 309(b) of EPAct, Federal agencies are also required to provide an annual compliance report to Congress by November 13 of the reporting year, starting in FY 1999 and continuing for the following 14 years. The report must address compliance with the requirements of EPAct and related executive orders and detail a plan for attaining compliance if the reporting agency has not met its requirements. This report must be placed on a publicly available Web site, and its availability must be published in the *Federal Register*, including the Web site address.

ANALYSIS AND REPORTING

As previously noted, ECRA requires each covered agency to provide Congress with an annual report on compliance activities. The written report must also include a discussion of agency petroleum and alternative fuel consumption data, and average fuel economy numbers for non-AFV LDV acquisitions. Each agency must submit a copy of its report to DOE. DOE then evaluates the reports and forwards a consolidated report, *Federal Fleet Compliance with E.O. 13149*, to the President.

A total of 18 Federal agencies (see Table 1 and Table 4) are covered by these requirements. All agencies have provided a written report to DOE addressing FY 2001 E.O. 13149 activities and compliance with EPAct. Each covered agency has also made its annual report available on its respective agency website.

Agency Compliance with Executive Order 13149

Agency compliance with E.O. 13149 is summarized in Table 1. Each agency is required to provide its FY 1999 petroleum consumption in its fleet vehicles as its baseline value against which all future vehicle fleet petroleum-use data is measured. The value shown in Table 1 for petroleum consumption in FY 2001 is compared with the baseline figure to determine the percentage reduction (or increase) in petroleum use for this reporting cycle.

To fulfill these requirements, agencies must provide the types and quantities of alternative fuels used, in GGE, in its AFVs, and the average fuel economy in its non-AFV LDVs.

Table 1 includes agency data as it appears in the FAST database. The FY 2001 FAST data set was opened several times during 2002, including three days in June (26th through the 28th). During this time agencies could update and modify any of the FY2001 data as well as the FY1999 baseline data (petroleum consumption and fuel economy). The FY 2001 database was permanently closed on June 28, 2002 and no changes to it have subsequently been made.

When FAST opened for FY 2002 data on October 1, 2002, agencies were permitted to change baseline data. The FAST system remained open until December 31, 2002. Agencies had one final period in January 2003 (14th through 16th) to change their FY1999 baseline data (as well as update FY2002 data). Nonetheless, several agencies submitted data changes, with supporting explanations, subsequent to the FY 2001 data set lock down in June 2002. The revised data were included in Table 1.

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 all the provisions specified for FY 2001 in the E.O.

Petroleum Consumption: During FY 2001, all the Federal agencies together increased petroleum (gasoline and diesel) consumption from 274,584,018 gasoline gallon equivalent

(GGE) in FY 1999, to 277,295,547 GGE, a 1.0 percent increase (Table 1). Table 1 includes revisions to the data initially reported through FAST for FY 2001 petroleum consumption data, for the Departments of Justice and Treasury.

Petroleum reductions were achieved at the Executive Office of the President, DOT, GSA, DOL, NASA, DOS, and EPA. Every other agency reported increased consumption, in some cases substantial increases.

Agencies are working to develop better methods for tracking fuel use. In many cases however, agencies have submitted incomplete or incorrect data. DOE continues to work with agencies to verify data accuracy. Despite the setbacks, tracking this information is very useful to the agencies.

Alternative Fuel Use: Federal agencies consumed about 8.7 million GGE of alternative fuels in FY 2001, displacing gasoline and diesel fuel, as summarized in Table 1. Table 1 shows a significant increase in alternative fuel consumption compared to 1.37 million GGEs reported by the Federal fleets the previous year. This increase may be due to several factors. First, E.O. 13149 was signed in April 2000, more than half way through the fiscal year. It was at that point that each agency began to develop procedures for tracking and analyzing its fuel consumption more closely. Second, GSA allowed Federal fleets to use biodiesel in the GSA-leased diesel equipment in FY 2001. As a result, there has been a dramatic increase in biodiesel fuel use. Third, because of the difficulty with tracking alternative fuel use purchased with credit cards, agencies may have overestimated the amounts reported for E85, and to some degree for compressed natural gas (CNG).

The data shows that the largest consumers of alternative fuels are the DOD at 55 percent and the USPS at 12 percent of each agency's respective total. The most commonly used alternative fuels are E85 (85 percent ethanol, 15 percent gasoline), at 68 percent, CNG at 27 percent and biodiesel at 3 percent. The remaining 2 percent is mostly comprised of liquefied petroleum gas (LPG). Alternative fuel consumption by fuel type is reported for each agency in Table 2.

Seven of the agencies did not report the data necessary to calculate the percentage of alternative fuel use in AFVs. HHS and the Defense Logistics Agency (DLA) reported data that is most likely incorrect at 187 percent and 848 percent, respectively. Among those reporting, several agencies have made progress towards meeting the 51 percent target: GSA (47 percent), DOE (25 percent), Veterans Affairs (20 percent) and DOD (18 percent). DOS had initially reported over 91 percent alternative fuel use in its AFVs, but later submitted a modified estimate of 75 percent alternative fuel usage in its AFVs, which would make it the only fully compliant agency.

It appears however, that the majority of the agencies will have to make a significant effort in expanding alternative fuel use to meet the requirement of 51 percent alternative fuel use in AFVs by FY 2005.

Table 1. E.O. 1.	3149 COMPL	IANCE, FY	2001 ^a						
							Fuel Economy		
									Increased Fuel Economy (mpg) Decreases in parentheses
Agriculture	17,712,621	19,371,061	(9.4)	26,709	30,185		17	19	2
Commerce	1,132,791	1,934,497	(70.8)	2,204	121,418		17		
DOD	76,587,164	77,442,833	(1.1)	259,055	4,774,924	17.78			4
Navy	14,435,855	12,991,730	10.0	106,555	331,119	0	18	20	2
Marine Corps	10,527,804	8,850,882	15.9	96,129	846,271	59.75	17		0
Army	31,728,666	36,886,200	(16.3)	13,034	2,543,865	9.49	20	27	1
Air Force	13,016,001	12,744,155	2.1	39,054	255,589	5.73	17	22	5
DLA	1,648,285	1,165,889	29.3	3,178	559,334	847.66	19	19	0
Corps Engineers	4,416,061	4,067,936	7.9	59	223,133	65.10	18	20	2
Other Defense 5	814,492	736,041	9.6	1,045	15,613	65.05	18	22	4
DOE	6,837,150	6,937,659	(1.5)	76,735	298,161	24.67	17	20	3
HHS	4,623,795	4,914,504	(6.3)	101,363	660,985	186.88	21	20	(1)
HUD	210,122	218,890	(4.2)	3,358	609	7.60	23	23	0
Interior	21,221,692	21,246,854	(0.1)	41,993	740,409		16		
Justice	741,491	710,148 ⁶	4.2	5,120	15,325	6.12	19	22	3
Labor	3,027,793	2,624,834	13.3	715	239,726		21		
State	91,780	83,902	8.6	831	22,195	75.00	16	18	2
Transportation	6,872,948	5,635,961	18.0	873	263,481	4.07	24	25	1
Treasury	870,705	810,623 ⁶	6.9	791	65,953		18		
Veteran Affairs	6,277,134	5,538,450	(11.8)	2,864	91,870	19.98	18	22	4
EPA	622,645	588,018	5.6	1,736	59,756	10.16	17	18	1
GSA	677,681	565,717	16.5		190,823	46.77	18	20	2
NASA	1,478,081	1,328,073	10.1	22,399	81,626		18		9
USPS	125,547,125	127,305,744	(1.4)	826,546	1,030,210	5.89	19		
Executive Office of the President	51,300	37,779	26.4		2,365		18		
TOTAL	274,584,018	277,295,547	(1.0)	1,373,292	8,690,019				

^a Note: The data included in this report is taken from the FAST database, input from agency sources. Data revisions submitted by agency sources after September 2002 are not reflected in this report. Shaded areas indicate that data were not submitted 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. Note that FY 1999, data actually collected in FY 2000, was the first set of data of this kind collected by the Federal fleet and appropriate mechanisms often were not in place for accurate data collection. Therefore, some uncertainty is inherent in the FY 1999 numbers, and they may be modified at a later date.
- 2. Combination of all types of alternative fuels (natural gas, E-85, electricity, biodiesel, M-85, 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.
- 3. Excludes biodiesel, which is not used in AFVs.
- 4. LDV acquisitions excluding AFVs.
- 5. "Other Defense" includes data listed in FAST under "Defense Agencies".
- 6. Reflects revised data submitted after the final closing of the FAST database system in June 2002.

Fuel Economy: E.O. 13149 requires that agencies increase the average fuel economy of non-AFV LDV acquisitions by at least 1 mpg by FY 2002 and at least 3 mpg by 2005 compared to FY 1999 acquisitions. The average fleet fuel economy for LDV acquisitions, for the FY 1999 baseline and the FY 2001 reporting cycle, was calculated by agencies based on the DOE/EPA Fleet Fuel Economy Guide (<u>www.fueleconomy.gov</u>). Although miles-per-gallon increases in LDVs were not required in FY 2001, the information is intended to help agencies track their progress toward meeting the FY 2002 and FY 2005 fuel economy goals of E.O. 13149.

The DOT, EPA, and the Department of Army increased the fuel economy of covered vehicles by 1 mpg in FY 2001. Eight agencies -- USDA, DOD (the Departments of Navy, Air Force, Corps of Engineers and "Other Defense" agencies), DOE, DOJ, DOS, VA, GSA and NASA achieved increases of 2 mpg or greater. In fact, NASA reported an increase of 9 mpg above LDV acquisitions in FY1999. HHS reported decreased fuel economy of 1 mpg for FY 2001 acquisitions. This information was not submitted by six of the agencies (Departments of Commerce, Interior, Labor and Treasury, USPS, and Executive Office of the President).

Additional Requirements: Aside from the information on petroleum consumption, alternative fuel use, and fuel economy (Table 1), E.O. 13149 requires each agency to submit the following information to DOE:

- Designation of a Senior Agency Official responsible for leading the agency's AFV and fleet fuel efficiency programs and meeting the requirements of E.O. 13149;
- Strategy outlining the agency's approach to complying with E.O. 13149; and
- FY 2001 annual agency AFV acquisition and fuel use report.

All agencies have a designated Senior Agency Official, selected by the head of each of the respective agencies and have provided the necessary information to DOE and OMB as required.

All of the covered Federal agencies have submitted a strategy in at least draft form, describing their approach to meeting the requirements of E.O. 13149. DOE has reviewed each strategy (including all revisions) and has provided each agency with a detail evaluation for its plans. Once a strategy is determined acceptable by DOE, it will then be forwarded to the Office of Management and Budget (OMB), for final approval.

Each of the covered agencies has provided DOE with a copy of their agency's compliance report for FY 2001. The written report allows agencies to include a discussion of the agency's compliance, future endeavors, and other relevant information. This report, unlike the agency's strategy, is based on the agency's annual performance.

Table 2. ALTERNATIVE FUEL CONSUMPTION (in GGE), FY 2001 ^a								
								TOTAL
Agriculture	77	0	0	4,834	51	0	25,223	30,184
Commerce	4,732	0	0	116,686	0	0	0	121,418
DOD	1,433,752	0	52,280	3,262,060	17,029	2,568	7,235	4,774,924
Navy	318,099	0	3,063	9,957	0	0	0	331,119
Marine Corps	554,425	0	16,032	260,772	15,042	0	0	846,271
Army	218,016	0	23,800	2,300,963	0	1,086	0	2,543,865
Air Force	195,319	0	7,069	42,497	1,987	1,482	7,235	255,589
DLA	147,319	0	677	411,338	0	0	0	559,334
Corps Engineers	0	0	936	222,197	0	0	0	223,133
Other Defense ²	574	0	703	14,336	0	0	0	15,613
DOE	51,786	34,103	482	120,047	11,672	0	80,071	298,161
HHS	2,726	0	0	644,560	0	1,535	12,164	160,985
HUD	609	0	0	0	0	0	0	609
Interior	260,559	17,821	24,034	433,650	20	375	3,950	740,409
Justice	6,168	0	1,190	7,967	0	0	0	15,325
Labor	3,048	0	1,730	234,948	0	0	0	239,726
State	6,709	0	0	15,486	0	0	0	22,195
Transportation	33,661	0	1,076	228,744	0	0	0	263,481
Treasury	1,951	0	250	63,752	0	0	0	65,953
Veteran Affairs	20,561	0	423	70,886	0	0	0	91,870
EPA	3,571	0	0	56,041	144	0	0	59,756
GSA	9,338	0	0	181,292	0	193	0	190,823
NASA	21,166	0	908	59,552	0	0	0	81,626
USPS	474,245	0	20,051	395,997	5,656	0	134,261	1,030,210
Exec. Office of President								2,365
TOTAL	2,334,765	51,924	102,424	5,898,761	34,572	4,671	262,902	8,690,019

^a Note: The data included in this report is taken from the FAST database, input from agency sources. Data revisions submitted by agency sources after September 2002 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.

2. "Other Defense" includes data listed in FAST under "Defense Agencies".

Agency Compliance with EPAct

In FY 2001, EPAct required covered Federal fleets to acquire 75 percent of their covered acquisitions as AFVs and Table 3 summarizes EPAct compliance among the fleets. Data presented are for the number of covered acquisitions by each agency, as well as the number of AFVs and the number of AFVs with credits, for dedicated light-, medium-, and heavy-duty AFVs and biodiesel fuel use. An agency's compliance with EPAct is based on the value that includes credits. The data also include agency AFV acquisitions as a percentage of the total number of covered LDVs acquired.

Ten of the 18 agencies and two DOD services have complied with the EPAct requirement for acquiring 75 percent of their covered LDV acquisitions as AFVs. This includes HUD, which chose to acquire three AFVs although the agency took fleet size exemptions for all its acquisitions and thus had no requirement to obtain AFVs under the EPAct exemption rules. Several agencies performance in FY 2001 was particularly notable. The DOE achieved 110 percent compliance, EPA 87 percent, USPS 85 percent and GSA 84 percent. It is possible for an agency to achieve greater than 100 percent acquisition of AFVs by, for example, placing AFVs in geographically exempt areas, where there is no requirement to do so.

[Total AEV
						Total AFV Inventory (#) (excluding credits)
			With Credits ²			
Agriculture	564	374	426	76	Yes	1,040
Commerce	163	42	42	26	No	11
Defense (Total)	12,987	4,299	4,543	35	No	16,078
Navy	1,718	729	860	50	No	2,86
Marine Corps	433	280	341	79	Yes	1,58
Army	8,450	2,423	2,431	28	No	7,01
Air Force	1,311	572	606	46	No	3,67
DLA	184	62	66	36	No	17.
Corps Engineers	591	113	115	19	No	34
DCMA	165	83	85	52	No	29
Other Defense ⁴	45	37	39	87	Yes	11
DOE	817	721	895	110	Yes	2,52
HHS	297	120	162	55	No	57
HUD	0	3	5		Yes	4
Interior	671	497	511	76	Yes	1,83
Justice	232	164	181	78	Yes	41
Labor	504	141	141	28	No	65:
State	14	11	11	79	Yes	6.
Transportation	1,577	742	767	49	No	1,00
Treasury	530	46	82	15	No	42
Veteran Affairs	1,284	347	355	28	No	97
EPA	107	88	93	87	Yes	29
GSA	236	198	198	84	Yes	70
NASA ⁵	137	104	106	77	Yes	23
USPS	1,405	873	1,189	85	Yes	31,21
Exec. Office of President	44	28	29	66	No	2
TOTAL	21,569	8,798	9,736	45	No	58,242

^a Note: The data included in this report is taken from the FAST database, input from agency sources. Data revisions submitted by agency sources after September 2002 are not reflected in this report.

1. Excludes exempt vehicles. EPAct allows exemptions based on geographic location; size of fleet; non-MSA operation; and use as law enforcement, emergency and national defense vehicles.

2. Includes extra credits for zero emission vehicles; dedicated light-, medium-, and heavy-duty AFVs; and biodiesel usage allowed under E.O. 13149.

- 3. In FY 2001, EPAct required that AFVs represent 75 percent of all covered LDV acquisitions.
- 4. "Other Defense" includes data listed in FAST under "Defense Agencies".
- 5. Subsequent to the closing of the FAST dataset, NASA re-evaluated its data and realized that the agency-owned contractor operated vehicles were inadvertently excluded. NASA's revisions reflect its EPAct compliance at 45 percent in FY01.

Overall DOD acquisitions of AFVs account for only 35 percent of its covered acquisitions in FY 2001, yet two DOD services exceeded their EPAct requirements: the USMC (79 percent) and the group of "Other Defense" agencies (87 percent).

Overall, the Federal fleet acquired 8,806 AFVs in FY 2001, including 8,798 AFVs acquired by executive agencies and 8 AFVs acquired by independent agencies, as summarized in Table 4. Several agencies acquired large numbers of AFVs (at least 500) in FY 2001: DOD (4,299), USPS (873), Transportation (742) and DOE (721). The USPS has the largest AFV fleet in the Federal government, with 31,216 vehicles, accounting for about 54 percent of the 58,242 AFVs in EPAct-covered agencies' fleets. The DOD fleets combined operate more than 16,000 AFVs, or about 28 percent of all Federal AFVs.

Table 4. INDEPENDENT AGENCY AFVs, FY 2001							
	Acq	uisition	Inventory				
Agency	AFVs	Total LDVs	AFV	Total LDVs			
Equal Employment Opportunity Commission	1	24	6	75			
Federal Election Commission	0	0	1	4			
Government Printing Office	0	0	2	27			
National Science Foundation	2	10	14	85			
Office of Personnel Management	1	4	8	34			
Small Business Administration	2	47	4	168			
Smithsonian Institution	2	7	5	132			
Social Security Administration	0	0	27	45			
Tennessee Valley Authority	0	452	12	1,506			
Total	8	544	79	2,076			

CONCLUSION AND RECOMMENDATIONS

In FY 2001, the Federal government as a whole did not make progress toward fulfilling the petroleum consumption reduction requirements of E.O. 13149 that must be met by FY 2005, although several agencies did make individual progress (see Figure 1). In general, agencies will have difficulty reducing petroleum consumption by 20 percent and increasing alternative fuel use in AFVs by FY 2005 if they do not put appropriate internal policies and procedures into effect quickly, and place sufficient emphasis on implementation.

Incorporating the late data, submitted submission by several agencies, the Federal government showed an increase of one percent in petroleum consumption in FY 2001 compared to FY 1999 consumption levels. Many agencies are not accustomed to tracking this data, and the data may be difficult to obtain, in either case may cast doubts on the accuracy of these figures. Despite these issues, however, without a significant increase of AFV acquisitions and use of alternative fuels in those vehicles, it will be difficult for agencies to meet this goal. When acquiring AFVs, agencies should be cognizant of alternative fuel infrastructure locations and try to place those AFVs strategically in areas with refueling capabilities.

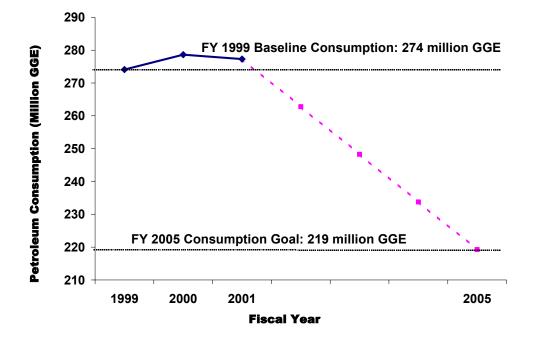
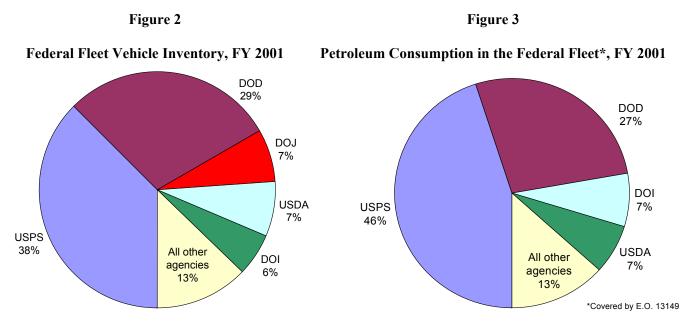


Figure 1. Federal Government Petroleum Consumption, Actual Versus E.O. 13149 Goal

It is also important to note the impact that the agencies with the largest fleets have on the overall performance of the Federal government in meeting the objectives of E.O. 13149. As shown in Figure 2, 87 percent of the vehicles in the Federal fleet are concentrated in 5 agencies: USPS, DOD, DOJ, USDA, and DOI. Similarly, 87 percent of the covered petroleum consumption, with the exception of DOJ, is concentrated in these agencies (Figure 3). The majority of the vehicles in the DOJ inventory are law enforcement and therefore the fuel used in those vehicles is not covered by the E.O.



The performance of these few agencies will have the greatest impact on the success of the Federal fleets in achieving the Federal-wide objectives of E.O. 13149 and EPAct. The experiences of these agencies can be helpful to the remaining 13 agencies in implementing the acquisition and use requirements for AFVs and alternative fuels, and in petroleum use reduction efforts. Federal agencies have made significant progress in the acquisition of AFVs. Currently more than 58,000 AFVs are in service in the Federal fleets.

DOE recommends the following actions:

Department of Energy

- Develop and implement fleet manager and vehicle operator training programs.
- Increase coordination among GSA, DOE and other agencies to identify and resolve fuel use tracking problems.
- Assist agencies in coordinating fleet use of AFVs with expansion of infrastructure.

All Agencies

- Coordinate AFV planning and acquisition needs with GSA.
- Participate in the GSA surcharge program to spread incremental cost of AFV acquisitions across all agency fleets.

DOE will continue to provide guidance to the 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.