

Department of Veterans Affairs

Fleet Alternative Fuel Vehicles Program Report for Fiscal Year 2003

This Department of Veterans Affairs (VA) Fleet Alternative Fuel Vehicles (AFVs) Program Report for Fiscal Year (FY) 2003 presents the Department's data on the number of alternative fuel vehicles acquired in FY 2003, and its planned acquisitions and projections for FY 2004 and FY 2005. The report has been developed in accordance with the Energy Policy Act of 1992 (EPAAct) (42 U.S.C. 13211-13219) as amended by the Energy Conservation Reauthorization Act of 1998 (ECRA) (Public Law 105-388), and Executive Order (E.O.) 13149 (signed by the President in April 2000). Detailed vehicle acquisition tables are shown in the appendices to this report.

Legislative Requirements

The EPAAct requires that 75 percent of all covered light-duty vehicles acquired for Federal fleets in FY 1999 and beyond must be AFVs (where the fleets have 20 or more vehicles, are capable of being centrally fueled, and are operated in a Metropolitan Statistical Area (MSA) with a population of more than 250,000 based on the 1980 census). Certain emergency, law enforcement, and national defense vehicles are exempt from these requirements. The EPAAct also sets a goal of using replacement fuels to displace at least 30 percent of the projected consumption of motor fuel in the United States by the year 2010. The ECRA of 1998 amended the EPAAct to allow one alternative fuel vehicle acquisition credit for every 450 gallons of pure biodiesel fuel consumed in vehicles over 8,500 pounds gross vehicle weight rating. "Biodiesel credits" may fulfill up to 50 percent of an agency's EPAAct requirements.

The head of each Federal agency must also prepare and submit a report to Congress outlining the agency's AFV acquisitions and future plans by November 13th each year. Executive Order 13149 directs Federal agencies operating a fleet of 20 or more vehicles within the United States to reduce their annual petroleum consumption by at least 20 percent by the end of FY 2005 (compared to FY 1999 levels) by using alternative fuels in AFVs more than 50 percent of the time, improving the average fuel economy of new light-duty petroleum-fueled vehicle (LDV) acquisitions by 1 mile per gallon (mpg) by FY 2002 and 3 mpg by FY 2005, and using other fleet efficiency measures.

The Department of Energy and the General Services Administration (GSA) designed and recently updated the electronic database used in this data collection.

VA's Approach to Compliance with EPAct and E.O. 13149

To achieve compliance with the legislative mandates of EPAct and E.O. 13149, VA will endeavor to replace light-duty vehicles with AFVs and use alternative fuel in these vehicles a majority of the time. In addition, VA will consider taking advantage of a new GSA payment option, the AFV Rate Option. The AFV Rate Option is designed to amortize the cost of an AFV over the life of the vehicle by accounting for these costs in the vehicles' monthly lease payments. This option is more acceptable, as it does not place a surcharge on the entire fleet as would a previous program that adds approximately \$5 monthly to the cost of every vehicle leased through GSA. GSA payment options are to help cover the higher incremental cost of many AFV models (compared to conventional vehicles). VA will also acquire light-duty vehicles with a higher fuel economy of 1 mpg by FY 2004 and total of 3 mpg by FY 2005, and further reduce petroleum consumption by using biodiesel fuel in all diesel vehicles.

VA's Fleet Compliance for FY 2003

Figure 1 is a graphical depiction of AFV acquisitions by VA's fleet in FY 2003 and projections for FY 2004 and FY 2005. The following charts depict VA's efforts to comply with the directives of EPAct, ECRA and E.O. 13149. VA acquired 1,469 covered light-duty vehicles in FY 2003, of which 237 were AFVs. Appendix A provides detailed information on the number and types of light-duty vehicles leased or purchased by VA's fleets in FY 2003.

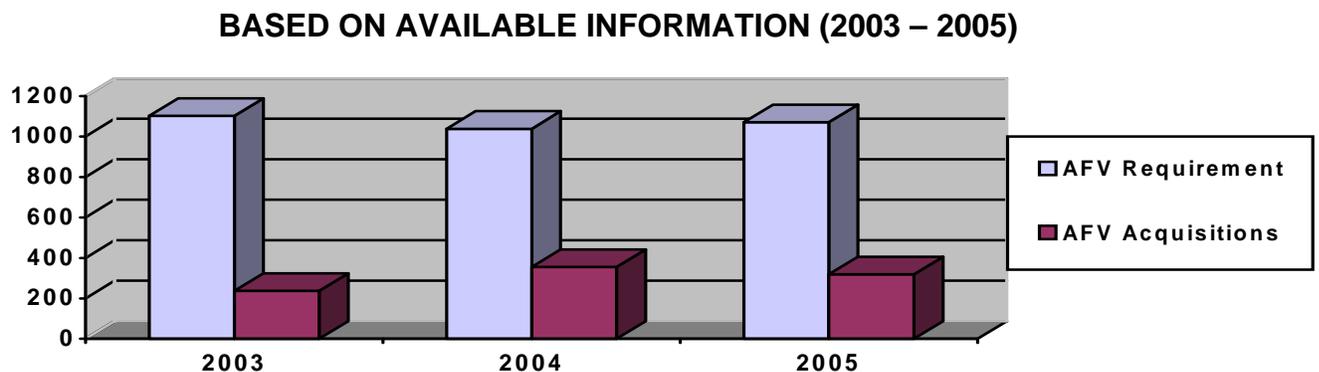


Figure 1. Summary of VA FY 2003 AFV Acquisitions

VA leased and purchased additional vehicles in FY 2003 that were not “covered” vehicles. Of the total of 1,680 light-duty vehicles acquired, 211 of these vehicles were not counted for compliance due to the following reasons:

- 43 fleet size
- 64 geographic
- 50 exempt as law enforcement vehicles
- 54 were used in non-MSA operations

Alternative Fuel Use by VA’s Fleets in FY 2003

Table 1 presents alternative fuel use data for VA’s fleets in FY 2003. The majority of vehicles acquired by VA and other Federal fleets are leased from GSA, and the leasing contract includes the maintenance and fuel costs for the vehicles. This is accomplished by the use of a GSA credit card that the fleets use to purchase alternative fuel. However, since product code standards are not uniform among suppliers of alternative fuels (e.g., ethanol or E-85), it is not possible for credit vendors to accurately track the purchase of alternative fuels with this credit card, at the present time. The exception may be natural gas, which is usually purchased at a local utility refueling site, allowing the fleets to contact the utility for an accurate accounting of purchased fuel.

Table 1. VA Fuel Use in FY 2003

Fuel Type	Quantity	Unit
Biodiesel – B100	0	Gallons
CNG (Compress natural gas)	8,876	Gallons @ 2,400 psi, 70°F
CNG	0	Hundred cu. ft.
Diesel	1,168,094	Gallons
E-85	14,737	Gallons
Gasoline	6,143,473	Gallons
Methanol	290	Gallons
Propane	0	Gallons

VA’s Fleet AFV Acquisitions for FY 2004 and FY 2005

Appendices B and C provide detailed information on projected vehicle acquisitions and inventory for VA’s fleets for FY 2004 and FY 2005. In FY 2004, VA’s fleets plan to acquire a cumulative total of 1,384 (minus exemptions) light-duty vehicles, of which 355 (including 13 AFV credits) will be AFVs. Projected light-duty acquisitions in FY 2005 total 1,427 (minus exemptions). Of this amount, 319 (including credits) are anticipated to be AFVs.

Petroleum Savings (Appendix D)

Since it is difficult, if not impossible, to project petroleum savings for FY 2004 and FY 2005 based upon the estimated AFV acquisitions, improvements in fuel economy, and fleet efficiency, petroleum savings are reported for only FY 2003 based on actual data on hand for FY 1999 and FY 2003.

In FY 1999, VA's baseline petroleum consumption was 6,277,134-gasoline gallon equivalent (GGE) and FY 2003 petroleum consumption was 7,312,376 gallons. A negative difference (increase) of 1,035,242 GGE is reflected in FY 2003 as compared to FY 1999 baseline numbers. An additional 262 light-duty vehicles (mostly DAV donated); along with an increase in the number of medium and heavy-duty vehicles, add to the amount of petroleum used in 2003 (7,312,376) vs. 2002 (5,274,712). Although overall miles per gallon (mpg) appear very low, approximately 13 mpg (95,744,712 miles traveled/7,312,376 fuel used), it is a total vehicle fleet average which includes medium and heavy-duty vehicles, like pickup trucks, dump trucks, buses, cherry-pickers, and the like, vehicles that do not travel far but use a relative number of gallons of fuel.

Summary

The lack of infrastructure to support AFVs continues to be a constant concern throughout the Department, especially when patients are being transported. This, along with the lack of funds to acquire the number of vehicles required in meeting the mandates of EPAAct and the E.O., has slowed progress in this area.

As detailed in this report, its appendices, and information currently available, VA shows an increase in AFV acquisitions for FYs 2004 and 2005. Participation in the GSA Surcharge Lease Program will reflect a marked increase in AFV acquisitions in future fiscal years. VA will continue to implement its strategy for complying with the requirements of E.O. 13149, which is projected to result in at least a 20 percent reduction in the fleet's annual petroleum consumption in FY 2005.

Office of the Deputy Under Secretary for Health
for Operations and Management (10N)

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Complex-Wide AFV Report 2003 – Actuals; Appendix A**

Actuals Department of Veterans Affairs FY 2003 Vehicle Acquisitions					
Actuals FY 2003 Light-Duty Vehicle Acquisitions					Total Vehicle Inventory
		Leased	Purchased	Total	
Total number of Light-Duty (8,500 GVWR) - Vehicle Acquisitions		1,503	177	1,680	7,120
Exemptions	Fleet Size	22	21	43	309
	Geographic	47	17	64	1,293
	Law Enforcement	48	2	50	226
	Non-MSA Operation (fleet)	35	16	51	235
	Non-MSA Operation (vehicles)			3	
EPACT Covered Acquisitions		1,351	121	1,469	5,057
Actual FY 2003 AFV Acquisitions					Total Vehicle Inventory
Vehicle		Leased	Purchased	Total	
Sedan	CNG Bi-Fuel Subcompact	0	0	0	20
Sedan	CNG Bi-Fuel Compact	0	0	0	33
Sedan	E-85 Flex-Fuel Compact	155	0	155	234
Sedan	E-85 Flex-Fuel Midsize	15	0	15	216
Sedan	CNG Dedicated Large	0	0	0	3
Pickup 4x2	CNG Bi-Fuel	1	0	1	12
Pickup 4x2	E-85 Flex-Fuel	12	0	12	89
Pickup 4x4	E-85 Flex-Fuel	0	0	0	8
SUV 4x2	E-85 Flex-Fuel	0	0	0	2
SUV 4x4	E-85 Flex-Fuel	5	0	5	14
Van 4x2	CNG Dedicated	0	0	0	7
Van 4x2	E-85 Flex-Fuel	41	6	47	731
Other 4x2	CNG Bi-Fuel	0	0	0	1
Ambulance	CNG Bi-Fuel	0	0	0	1
Van MD	CNG Bi-Fuel	2	0	2	6
Total Number of AFV Acquisitions		231	6	237	1,377
Zero Emission Vehicle Credits		0	0	0	
Dedicated Light-Duty AFV Credits		0	0	0	
Dedicated Medium-Duty AFV Credits		0	0	0	
Dedicated Heavy-Duty AFV Credits		0	0	0	
Biodiesel Fuel Usage Credits - Actuals				0	
Total AFV Acquisitions with Credits		231	6	237	
AFV Percentage of Covered Light-Duty Vehicle Acquisition				16 %	

**Department of Veterans Affairs
Complex-Wide AFV Report 2004 – Planned; Appendix B**

Planned Department of Veterans Affairs FY 2004 Vehicle Acquisitions				
Planned FY 2004 Light-Duty Vehicle Acquisitions				
		Leased	Purchased	Total
Total number of Light-Duty (8,500 GVWR) - Vehicle Acquisitions		1,480	80	1,560
Exemptions	Fleet Size	17	12	29
	Geographic	16	11	27
	Law Enforcement	88	0	88
	Non-MSA Operation (fleet)	23	9	32
	Non-MSA Operation (vehicles)			0
EPACT Covered Acquisitions		1,336	48	1,384
Planned FY 2004 AFV Acquisitions				
Vehicle		Leased	Purchased	Total
Sedan	CNG Bi-Fuel Subcompact	6	0	6
Sedan	CNG Bi-Fuel Compact	33	0	33
Sedan	E-85 Flex-Fuel Compact	50	0	50
Sedan	E-85 Flex-Fuel Midsize	97	0	97
Pickup 4x2	CNG Bi-Fuel	2	0	2
Pickup 4x2	E-85 Flex-Fuel	2	0	2
Van 4x2	E-85 Flex-Fuel	147	2	149
Emergency & Special Purpose MD 8,501-16,000 GVWR	LPG Bi-Fuel	2	0	2
Emergency & Special Purpose HD 16,001 + GVWR	LPG Bi-Fuel	1	0	1
Total Number of AFV Acquisitions		340	2	342
Zero Emission Vehicle Credits		0	0	0
Dedicated Light-Duty AFV Credits		0	0	0
Dedicated Medium-Duty AFV Credits		0	0	0
Dedicated Heavy-Duty AFV Credits		0	0	0
Biodiesel Fuel Usage Credits - Planned				13
Total AFV Acquisitions with Credits		340	2	355
AFV Percentage of Covered Light-Duty Vehicle Acquisition				26 %

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Complex-Wide AFV Report 2005 – Projected; Appendix C**

Projected Department of Veterans Affairs FY 2005 Vehicle Acquisitions				
Projected FY 2005 Light-Duty Vehicle Acquisitions				
		Leased	Purchased	Total
Total number of Light-Duty (8,500 GVWR) - Vehicle Acquisitions		1,473	62	1,535
Exemptions	Fleet Size	14	10	24
	Geographic	7	4	11
	Law Enforcement	55	0	55
	Non-MSA Operation (fleet)	17	1	18
	Non-MSA Operation (vehicles)			0
EPACT Covered Acquisitions		1,380	47	1,427
Projected FY 2005 AFV Acquisitions				
Vehicle		Leased	Purchased	Total
Sedan	CNG Bi-Fuel Subcompact	4	0	4
Sedan	E-85 Flex-Fuel Compact	125	0	125
Sedan	E-85 Flex-Fuel Midsize	43	0	43
Pickup 4x2	E-85 Flex-Fuel	7	0	7
Pickup 4x2	LPG Bi-Fuel	1	0	1
Pickup 4x4	E-85 Flex-Fuel	1	0	1
SUV 4x4	E-85 Flex-Fuel	15	0	15
Van 4x2	E-85 Flex-Fuel	108	0	108
Van MD	CNG Bi-Fuel	1	0	1
Van MD	LPG Bi-Fuel	1	0	1
Total Number of AFV Acquisitions		306	0	306
Zero Emission Vehicle Credits		0	0	0
Dedicated Light-Duty AFV Credits		0	0	0
Dedicated Medium-Duty AFV Credits		0	0	0
Dedicated Heavy-Duty AFV Credits		0	0	0
Biodiesel Fuel Usage Credits - Projected				13
Total AFV Acquisitions with Credits		306	0	319
AFV Percentage of Covered Light-Duty Vehicle Acquisition				22 %

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Petroleum Consumption Report (Appendix D)

EO 13149 Covered Petroleum Consumption in GGE							
	FY 1999 Baseline	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
Gasoline	5,023,247	4,392,778	4,527,902	4,233,383	6,143,473		
Diesel	1,253,887	2,238,811	1,010,548	1,040,837	1,168,094		
Diesel component from biodiesel		0	0	492	809		
TOTAL	6,277,134	6,631,589	5,538,450	5,274,712	7,312,376		
Reduction*	N/A	-5.6 %	11.8 %	16.0 %	-16.5 %		

* Reduction is the % reduction compared to the FY 1999 Baseline Total

Alternative Fuel Consumption (in GGE)							
	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	
CNG	2,864	20,561	6,910	8,876			
LNG	0	0	0	0			
LPG	0	423	794	243			
E-85	80,452	70,886	117,169	14,737			
Electric	0	0	0	0			
M-85	0	0	0	290			
Biodiesel (B100)*	0	0	123	203			
TOTAL	83,316	91,870	124,873	24,349			
Estimated Total Fuel Used in AFVs	536,348	459,858	781,128	398,329			
% of Alt Fuel Use in AFVs w/o biodiesel¹	15.533	19.977	15.986	6.0618			

*Biodiesel is calculated at 20% of the reported B20 and 100% of the reported B100 fuel used in the Section III Actual Fuel Cost/Consumption by Fuel Type data input screen. Biodiesel is **not** included in the calculation of total fuels used in AFVs because biodiesel itself is not burned in *Alternatively Fueled Vehicles*.

Average Fuel Economy of non-AFV Light Duty Vehicle Acquisitions (in mpg)							
	FY 1999 Baseline	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
Fuel Economy	18.0	21.0	22.0	24	21.5		
Change Compared to Baseline		3.0	4.0	6.0	3.5		