

U.S. Department of Housing and Urban Development Fleet AFV Program Report for Fiscal Year 2003

This report presents the Department's data on the number of alternative fuel vehicles (AFVs) acquired in Fiscal Year (FY) 2003, and its planned and projected acquisitions for FY 2004 and FY 2005. The report has been developed in accordance with the Energy Policy Act of 1992 (42 U.S.C. 13211-13219), as amended by the Energy Conservation Reauthorization Act of 1998 (Public Law 105-388) (ECRA), and with Executive Order 13149 (signed by the President in April 2000). As shown in Figure 1, HUD exceeded the 75 percent AFV-acquisition requirement for 4 vehicles by acquiring 13 total credits in FY 2003. Detailed vehicle acquisition tables are shown in Appendix A.

The one-mile per gallon (mpg) fleet acquisition average fuel economy increase was not achieved in FY 2003. It should be noted that HUD started out with a favorably high FY1999 23 mpg baseline. With few available vehicle acquisition options greater than 23 mpg, it will be difficult to achieve this fuel economy increase. However, HUD will make every effort possible to increase its fleet mpg in future years.

Legislative Requirements

The Energy Policy Act of 1992 (EPAct) 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 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 EPAct also sets a goal of using replacement fuels to displace at least 30 percent of each year's projected consumption of motor fuel in the United States by the year 2010. The **Energy Conservation and Reauthorization Act of 1998** amended the EPAct to allow one alternative fuel vehicle acquisition credit for every 450 gallons of pure biodiesel fuel consumed in vehicles with a gross vehicle weight rating greater than 8,500 pounds. "Biodiesel credits" may fulfill up to 50 percent of an agency's EPAct requirements. The head of each federal agency must also prepare and submit annually a report to Congress outlining the agency's AFV acquisitions and future plans. **Executive Order 13149 (E.O. 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 acquisitions by 1 mpg by FY 2002 and 3 mpg by FY 2005, and using other fleet efficiency measures.

HUD Approach to Compliance with EPC Act and E.O. 13149

To achieve compliance with the legislative mandates of the EPC Act and E.O. 13149, HUD has developed a compliance strategy consisting of three primary elements: (1) AFV acquisition and alternative fuel use; (2) higher fuel economy vehicles; and (3) fleet efficiency improvements.

The first strategy element is the acquisition of AFVs and use of alternative fuels. AFVs are the most effective means of reducing petroleum fuel use as long as they operate on alternative fuels. Therefore, key factors in assigning AFVs to fleet locations are the availability of on-site or public AFV refueling stations and use of alternative fuels in these vehicles the majority of the time. There are additional costs associated with using AFVs compared with conventional vehicles, so careful consideration must be given for placing these vehicles in appropriate fleets.

The second element of the strategy, acquisition of higher fuel economy vehicles, is another practical means of reducing fleet fuel consumption. It is also a necessary part of the strategy, since E.O. 13149 requires improvements in federal fleet fuel economy as one of its performance measurements for compliance. Specifically, the Executive Order requires a 1.0 mpg fuel economy increase by FY 2002 and a 3.0 mpg fuel economy increase by FY 2005 for light duty petroleum-fueled vehicles acquired as compared with the FY 1999 baseline. Individual fleet locations must achieve these fuel economy increases by acquiring smaller vehicles, vehicles with smaller engines, and vehicles that are most appropriate for mission requirements. For example, a four wheel-drive pickup may not be necessary for local routine city travel.

The final element of the HUD strategy, fleet efficiency improvements, relates to how the fleet is managed, how vehicle trips are made, and what routes are taken, among other factors. Senior agency fleet managers continue to assess their fleets' efficiency in accomplishing their missions. Significant fuel savings can be achieved by making such practices fleet policy.

HUD Fleet Compliance for FY 2003

Figure 1 is a graphical depiction of AFV acquisitions by HUD's fleet in FY 2003 and projections for FYs 2004 and 2005. HUD acquired 3 covered light-duty vehicles (LDVs) in FY 2003, all of which were AFVs. Additionally, HUD acquired 10 non-covered AFVs. Appendix A provides detailed information on the number and types of LDVs leased or purchased by HUD fleets in FY 2003, and projections for FY 2004 and FY 2005 acquisitions.

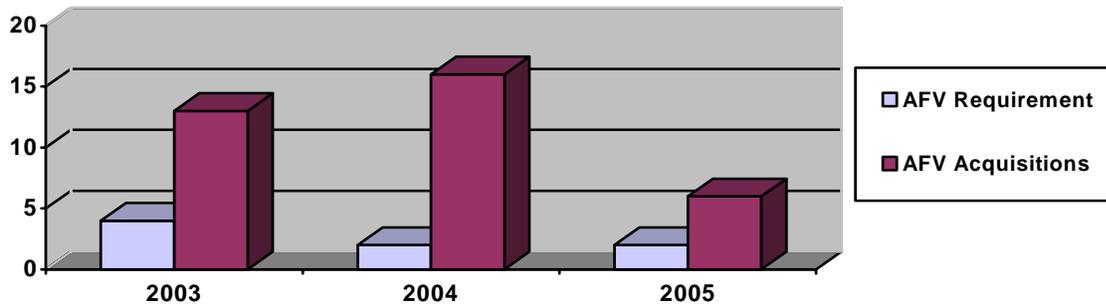


Figure 1. Summary of HUD's Actual and Projected AFV Acquisitions

A number of vehicles leased and purchased by HUD were “non-covered” vehicles. Of the total of 165 LDVs acquired in FY 2003, the following were not counted for compliance:

- 144 were exempt because they were in fleets of fewer than 20 vehicles; and
- 18 were exempt as law enforcement vehicles.

HUD Fleet	EPAct-Covered Acquisitions	AFV Acquisition Requirements for FY 2003	Total AFV Acquisitions (including credits)
165	3	3	13

Table 1. HUD Fleets Exhibiting Required Acquisition of AFVs in FY 2003

Improved Fuel Economy

Baseline fleet average fuel economy for covered, conventional petroleum LDVs was 23 mpg in FY 1999. In FY 2003, HUD achieved a fleet average fuel economy of 23.2 mpg. As stated earlier, HUD started out with a favorably high fuel economy baseline. With very few available vehicle acquisition options greater than 23 mpg, it will be difficult to achieve a fuel economy increase of 1 mpg per year. However, HUD will continue to make every effort possible to increase its fleet mpg.

HUD Fleet AFV Acquisitions for FY 2004 and FY 2005

Appendix A provides detailed information on projected vehicle acquisitions and inventory for HUD fleets for FY 2004 and FY 2005. In FY 2004, the HUD fleets are planning to acquire a total of 86 LDVs, of which 0 will be alternative fuel vehicles, thus not meeting the EPAct requirement of 1 AFV.

In FY 2005, the HUD fleets are planning to acquire a total of 123 LDVs, of which 6 will be alternative fuel vehicles, exceeding the EPAct requirements of 3 AFVs by 100 percent.

Petroleum Savings

In FY 1999, HUD's baseline petroleum consumption was 210,122 Gasoline Gallon Equivalents (GGE), and FY 2003 petroleum consumption was 250,375 GGE. This increase of 40,253 GGE (19.2 percent) is due to a rise in vehicle acquisitions by approximately 150. Additionally, HUD is investigating the FY 1999 baseline petroleum consumption data; which may not be accurate. It is difficult to project petroleum savings for FY 2004 and FY 2005 based on estimated AFV acquisitions, improvements in fuel economy, and fleet efficiency.

Alternative Fuel Use by HUD Fleets in FY 2003

Table 2 presents alternative fuel use data for HUD's fleets in FY 2003. The majority of vehicles acquired by HUD and other federal fleets are leased from GSA, and the leasing contract folds in 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 difficult for credit vendors to accurately track the purchase of alternative fuels with this credit card. Instead, HUD approximates alternative fuel use utilizing GSA data and internal records.

In FY 2003, HUD's alternative fuel consumption was 942 GGE compared to 37,908 GGE of all fuels used in AFVs (including petroleum used in AFVs and excluding biodiesel, which is not used in HUD's AFVs). Thus, AFVs operated on alternative fuels two percent of the time in FY 2003. There are very few refueling stations for HUD's fleet to utilize and there are currently no plans for the development of on-site infrastructure at any of HUD's locations. However, HUD will explore possibilities for partnering with other agencies for sharing usage of alternative fuel infrastructure from both private and public vendors.

Fuel Type	Quantity	Unit
Biodiesel – B100	0	Gallons

CNG	11	Gallons @ 2,400 psi, 70°F
CNG	0	Hundred cu. ft.
Diesel	433	Gallons
E-85	931	Gallons*
Gasoline	249,942	Gallons
Methanol	0	Gallons
Propane	0	Gallons

* Estimate based on incomplete data

Table 2. HUD Fuel Use in FY 2003

Summary

As detailed in this report and Appendix A, HUD exceeded the AFV acquisition requirements of EPAct in FY 2003. HUD will continue to implement its strategy for complying with the requirements of E.O. 13149, striving towards meeting the goal of a 20 percent reduction in the fleet's annual petroleum consumption by FY 2005.

**Department of Housing and Urban Development
Complex-Wide AFV Report 2003 - Actual**

Actual Department of Housing and Urban Development FY 2003 Vehicle Acquisitions					
Actual FY 2003 Light-Duty Vehicle Acquisitions					Total Vehicle Inventory
	Lease d	Purchase d	Total		
Total number of Light-Duty (8,500 GVWR) - Vehicle Acquisitions		165	0	165	528
Exemptions	Fleet Size	144	0	144	483
	Geographic	0	0	0	0
	Law Enforcement	18	0	18	35
	Non-MSA Operation (fleet)	0	0	0	0
	Non-MSA Operation (vehicles) (From Section I[b])	(n/a)	(n/a)	0	(n/a)
EPAct Covered Acquisitions		3	0	3	10
Actual FY 2003 AFV Acquisitions					Total Vehicle Inventory
Vehicle	Lease d	Purchase d	Total		
Sedan	CNG Bi-Fuel Subcompact	0	0	0	4
Sedan	E-85 Flex-Fuel Compact	7	0	7	21
Sedan	E-85 Flex-Fuel Midsize	4	0	4	35
Sedan	CNG Dedicated Large	0	0	0	1
Pickup 4x2	E-85 Flex-Fuel	0	0	0	4
SUV 4x2	E-85 Flex-Fuel	0	0	0	4
Minivan 4x2 (Passenger)	E-85 Flex-Fuel	2	0	2	16
Total Number of AFV Acquisitions		13	0	13	85
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 - Actual				0	
Total AFV Acquisitions with Credits		13	0	13	
AFV Percentage of Covered Light-Duty Vehicle Acquisition				433%	

**Department of Housing and Urban Development
Complex-Wide AFV Report 2004 – Planned**

Planned Department of Housing and Urban Development FY 2004 Vehicle Acquisitions			
<i>Planned FY 2004 Light-Duty Vehicle Acquisitions</i>			
	Leased	Purchased	Total
Total number of Light-Duty (8,500 GVWR) - Vehicle Acquisitions	86	0	86
Exemptions	Fleet Size	79	0
	Geographic	0	0
	Law Enforcement	6	0
	Non-MSA Operation (fleet)	0	0
	Non-MSA Operation (vehicles) <small>(From Section I[b])</small>	<i>(n/a)</i>	<i>(n/a)</i>
EPAct Covered Acquisitions	1	0	1
<i>Planned FY 2004 AFV Acquisitions</i>			
Vehicle	Leased	Purchased	Total
Total Number of AFV Acquisitions	0	0	0
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			0
Total AFV Acquisitions with Credits	0	0	0
AFV Percentage of Covered Light-Duty Vehicle Acquisition			0%

**Department of Housing and Urban Development
Complex-Wide AFV Report 2005 – Projected**

Projected Department of Housing and Urban Development FY 2005 Vehicle Acquisitions				
<i>Projected FY 2005 Light-Duty Vehicle Acquisitions</i>				
		Leased	Purchased	Total
Total number of Light-Duty (8,500 GVWR) - Vehicle Acquisitions		122	1	123
Exemptions	Fleet Size	112	1	113
	Geographic	0	0	0
	Law Enforcement	7	0	7
	Non-MSA Operation (fleet)	0	0	0
	Non-MSA Operation (vehicles) <small>(From Section I[b])</small>	<i>(n/a)</i>	<i>(n/a)</i>	0
EPAct Covered Acquisitions		3	0	3
<i>Projected FY 2005 AFV Acquisitions</i>				
Vehicle		Leased	Purchased	Total
Sedan	CNG Bi-Fuel Compact	1	0	1
Sedan	E-85 Flex-Fuel Compact	1	0	1
Sedan	E-85 Flex-Fuel Midsize	2	0	2
Pickup 4x2	E-85 Flex-Fuel	2	0	2
Total Number of AFV Acquisitions		6	0	6
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				0
Total AFV Acquisitions with Credits		6	0	6
AFV Percentage of Covered Light-Duty Vehicle Acquisition				200%