



U.S. Housing and Urban Development

# HUD FLEET ALTERNATIVE FUEL REPORT

Report for Fiscal Year 2010

January 2011

An abstract graphic at the bottom of the page consists of several overlapping, semi-transparent geometric shapes in shades of blue and grey, creating a sense of depth and movement.

FY 2010

## Executive Summary

The U.S. Department of Housing and Urban Development (HUD) hereby submits its fiscal year (FY) 2010 annual report on the Agency's efforts in meeting the fleet requirements of the Energy Policy Act (EPA) of 1992 (Public Law 102-486), as amended by the Energy Conservation Reauthorization Act of 1998 (Public Law 105-388); and in meeting the goals of Executive Order (EO) 13149, "Greening the Government through Federal Fleet and Transportation Efficiency" (65 FR 24607), which was signed in April 2000. Section 705 of the EPA of 2005 (Public Law 109-58, enacted August 8, 2005), amended the due date of this report to February 15 of every year.

EPA of 1992 requires that 75% of all non-exempt vehicle acquisitions by Federal agencies be alternative fuel vehicles (AFVs). EO 13423 requires Federal agencies to increase alternative fuel consumption by 10% annually compared to the prior year's alternative fuel usage. The EO also sets goals for non-exempt Federal agencies to reduce petroleum consumption by 2% annually relative to a FY 2005 baseline. Table 1 summarizes the Agency's performance in meeting these requirements.

**Table 1. HUD FY 2010 Performance in Meeting EPA and E.O. 13423 Requirements**

Driver	Performance Measure	FY 2010 Goal/Requirement	HUD Performance in FY 2010
EPA	AFV Acquisitions	75 % of the 42 non-exempt light –duty vehicles acquired in FY 2010 (31 vehicles must be AFVs).	58 AFVs acquired; 13 are non-exempt; 2 additional Dedicated Light Duty credits received. 15 EPA credits or 36% of non-exempt acquisitions. (See Table 2 explanation below)
EO 13423	Petroleum Consumption	Reduce petroleum consumption by 2% annually.	Consumed 106, 545 GGE which is a 46% decrease from the baseline.
	Alternative Fuel Consumption	Increase AF by 10 % annually.	Consumed 6,805 GGE which is a <100% increase from the previous year's consumption (2,097 GGE) .

## Legislative and Executive Order Requirements

Section 303 of EPOA (42 U.S.C. 13212) requires that 75% of all non-exempt light-duty vehicles acquired by Federal fleets in FY 1999 and thereafter be AFVs. The EPOA requirement applies to agency fleets that meet the following criteria:

- Consist of 20 or more light-duty vehicles (vehicles less than or equal to 8,500 pounds gross vehicle weight rating)
- Centrally fueled or capable of being centrally fueled
- Primarily operated in Metropolitan Statistical Areas (MSAs) or Consolidated Metropolitan Statistical Area (CMSAs) with populations of more than 250, 000 according to 1980 census.

Emergency response and law enforcement vehicles that meet certain utilization criteria are exempt from this requirement.

EO 13423 requires each Federal agency that operates 20 or more vehicles within the United States to reduce its annual petroleum consumption by at least 2% each year through FY 2015, compared to FY 2005 consumption levels. Fleets may achieve the petroleum reductions in a number of ways, including AFV acquisitions, increased alternative fuel use in flexible-fuel AFVs, improved fuel efficiency of non-AFV acquisitions, reductions in non-AFV fleet sizes and vehicle miles traveled, and improvements in overall fleet operating efficiencies.

EO 13423 also requires subject Federal fleets increase annual consumption of alternative fuels by 10% annually relative to the previous year's alternative fuel usage target (i.e. compounded annually). If measured cumulatively from the FY 2005 baseline, the annual increases are 10% for FY 2006, 21% for FY2007, 33.1% for FY 2008 and so on.

The Energy Conservation Reauthorization Act of 1998 amended EPOA to allow one AFV acquisition credit for every 450 gallons of pure biodiesel fuel or 2,250 gallons of B-20, a blend of 20% biodiesel with 80% petroleum diesel. These biodiesel credits may fulfill up to 50% of an agency's EPOA acquisition requirements and do not carry over into subsequent years.

Section 701 of EPOA 2005 requires that subject fleets of each Federal agency use alternative fuel at all times in flexible-fuel and dedicated AFVs. Agencies can request waivers from the Secretary of Energy, on an individual vehicle basis, if alternative fuel for that AFV is unavailable or unreasonably expensive based on specific criteria.

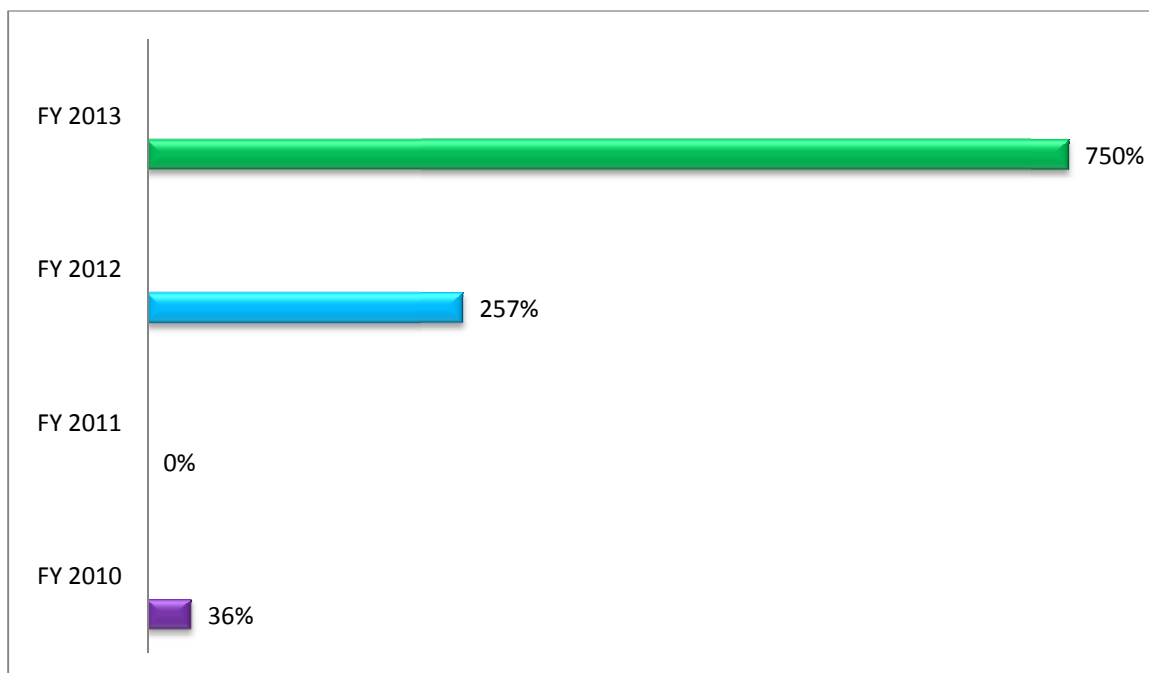
Section 310(b) of EPOA requires the head of each Federal agency to prepare and submit an annual report to Congress outlining the agency's AFV acquisitions and future acquisition plans,

beginning in FY 1999. Federal agencies submit compliance data using the web-based Federal Automotive Statistical Tool (FAST) database. Acquisition data submitted by HUD is included in this report as Appendix A, B, C, and D.

#### HUD's FY 2010 Fleet Compliance with EPAAct

**Table 2** shows AFV acquisitions for the Agency fleet from 2010-2013 and HUD's EPAAct compliance percentage for non-exempt AFV acquisitions. The figures show that HUD was not compliant for 2010 due to law enforcement exempt acquisitions that were made for the Office of the Inspector General and exempt vehicles that were acquired for locations outside of Metropolitan Statistical Areas (MSA). Even though HUD acquired 58 total AFVs, only 13 were applicable to the goal of 31 AFVs. FY 2011 planned acquisitions shows 0% percentage because all HUD acquisitions are exempt from reporting, planned for either law enforcement or locations outside the MSA. Despite acquisitions in FY 2011, all EPAAct credits earned from AFVs will not be applicable because HUD will not acquire vehicles covered under the EPAAct reporting guidelines. While the percentage for FY 2011 may show zero compliance, HUD effectively is not acquiring any covered vehicles and therefore remains in total compliance by not falling short of the 75% requirement. Despite this reporting anomaly, HUD will continue to ensure that AFVs are relocated among existing fleet vehicles to ensure that they are in locations that have sufficient alternative fueling infrastructure. FY 2012 and 2013 projected acquisitions show HUD will be compliant. These figures are contingent upon availability of vehicles and funding for AFVs for all types of use.

**Table 2- Summary of HUD's Non-exempt AFV Acquisitions**



### HUD's FY 2010 Compliance with EO 13423

**Table 3** summarizes HUD's performance toward the EO 13423 petroleum reduction goal. In FY 2010, HUD was required to reduce petroleum consumption by 10 % (177,816 GGE consumed) relative to a FY 2005 consumption baseline and had an actual reduction of 46% (106,545 GGE consumed) below FY 2005 baseline levels. HUD reduced petroleum consumption from target petroleum consumption by 40% (106,545 GGE).

**Table 3- Petroleum Consumption for FY 2010**

Petroleum Consumption	Totals
<b>FY 2005 Baseline</b>	<b>197,574 GGE</b>
<b>FY 2009 Target Petroleum Consumption</b>	<b>177,816 GGE (10% from baseline)</b>
<b>FY 2010 Actual Petroleum Consumption</b>	<b>106,545 GGE (46 % reduction from baseline) (40% reduction from target)</b>
<b>Compliant</b>	<b>YES</b>

**Table 4** summarizes HUD's performance towards the EO 13423 goal of alternative fuel. In FY 2010, HUD was required to increase alternative fuel consumption by 60% (88 GGE) relative to a FY 2005 consumption baseline and had an actual increase of <100% (6,805 GGE) above FY 2009 alternative fuel consumption . HUD increased alternative fuel consumption above the target by <100% (6,805 GGE).

**Table 4 – Alternative Fuel Consumption FY 2010**

Alternative Fuel Consumption	Total
<b>FY 2005 Baseline</b>	<b>55 GGE</b>
<b>FY 2010 Target Alt. Fuel Consumption</b>	<b>88 GGE (60 % increase from baseline)</b>
<b>FY 2010 Actual Alt. Fuel Consumption</b>	<b>6,805 GGE (&lt;100% increase from previous year) (&lt;100% increase from target)</b>
<b>Compliant</b>	<b>YES</b>

**HUD's Strategy to meet Fleet Requirements (EPA Act of 2005, EO 13423 and EO 13514)**

To meet the requirements of EPCA 2005, EO 13423 and 13514, HUD has implemented the following strategies:

- All new acquisitions (replacement or new purchases) first must be approved by the Departmental Fleet Manager
- Right- sizing the fleet
- Training of fleet personnel
- Adoption of Federal Energy Management Program's (FEMP) recommended petroleum reduction strategy.

### **New Acquisitions**

The Department requires that all HUD personnel follow standard operating procedures for new acquisitions. All new acquisitions (replacement or new purchases) first must be approved by the Departmental Fleet Manager. This allows the Departmental Fleet Manager to validate the need for the vehicle, assess the location where the vehicle will be garaged and determine if an alternative fuel vehicle is applicable in that area. The Departmental Fleet Manager also provides the locations of alternative fueling stations that are in the area, providing awareness of the availability of alternative fuel opportunities and mandating alternative fuel use.

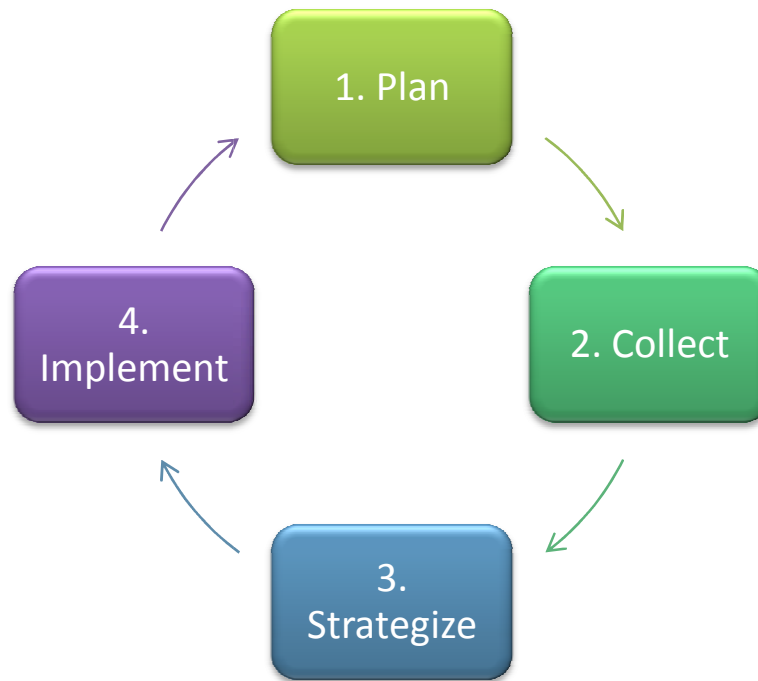
### **Right-sizing HUD Fleet**

HUD has begun its effort to right-size its fleet and ensure that AFVs are in locations where they may take advantage of alternative fueling infrastructure. This effort will create two avenues by which HUD may decrease its petroleum based fuel use. The Departmental Right Sizing of HUD fleet will occur in four phases:

- Phase I –Identify underutilized vehicles
- Phase II-Notify the locations; allow for appeal/waiver; coordinate with GSA in returning the vehicles.
- Phase III-Begin move process.
- Phase IV-Complete the move process and realize a 30% reduction in HUD's overall fleet size.

### **Training**

The Department will continue to train fleet personnel on the requirement to use alternative fuels when available, the alternative fuel tools, the importance of proper tracking of data, and holding FAST training on data input. The Department feels that through proper training employees will increase use of alternative fuel and fully comprehend the benefits it has to meeting the Department's fuel consumption goals.

**Adoption of FEMP Petroleum Reduction Strategy**

1. **Plan:** Develop agency-wide fleet sustainability plan.
2. **Collect:** Gather fleet data; create fleet profile, Right-size fleet to agency mission.
3. **Strategize:** Select petroleum reduction strategies for fleet.
4. **Implement:** Acquire and locate vehicles appropriately.

**Summary**

HUD will continue to reduce petroleum consumption through following the guidelines that have been suggested in the Comprehensive Federal Fleet Management Handbook. The reduction in petroleum consumption will be achieved through training that provides awareness to fleet drivers as, training on the Federal Automation System Tool (FAST,) and the importance of proper data entry. This will also increase the usage of alternative fuel, as well as eliminate data upload errors. HUD had a substantial decrease in petroleum consumption due to the increase in alternative fuel awareness. HUD will continue providing information regarding alternative fueling stations and the benefits of alternative fuel usage through training. To improve Energy Policy Act compliance in acquiring alternative fuel vehicles, HUD has changed its acquisition purchasing policy, and has developed standard operating procedures, which include preferred vehicles, as well as analysis of vehicle acquisitions in alternative fueling areas.

The implementation of HUD's internal fleet website, currently in development, will increase overall awareness about fleet issues including but not limited to alternative fuel use, right sizing the fleet, training opportunities, and updates to current fuel reduction mandates.

HUD will continue to ensure that the implementation of the various strategies to meet the mandates is completed. HUD staff continuously attends training sessions and various fleet management seminars that FEMP conducts, meeting with other agencies to discuss strategies in reducing the petroleum consumption and increase alternative fuel.



## Appendix A

### 2010 AFV Report: Actual Data (FY2010)

1. Actual Light-Duty Vehicle Acquisitions and Exemptions						
	Acquisitions			Total		
	Leased	Purchased				
Total Light-Duty Vehicle Acquisitions	115	0		115		
Fleet Exemptions: Fleet Size	0	0		0		
Fleet Exemptions: Foreign	0	0		0		
Fleet Exemptions: Geographic	0	0		0		
Fleet Exemptions: Non-MSA Operation	0	0		0		
Vehicle Exemptions: LE Vehicle	73	0		73		
Vehicle Exemptions: Non-covered Vehicle	0	0		0		
Vehicle Exemptions: Non-MSA Operation	0	0		0		
Total EPA-Act-Covered Vehicles	42	0		42		
2. Actual Alternative Fuel Vehicle Acquisition Detail						
Vehicle Type	Fuel	LE	Acquisitions		Total	EPA-Act Credits
			Lease	Purchase		
Light Duty Vehicles						
Sedan/St Wgn Compact	CNG DE	No	2	0	2	2
Sedan/St Wgn Compact	E85 FF	Yes	13	0	13	0
Sedan/St Wgn Compact	GAS HY	Yes	3	0	3	0
Sedan/St Wgn Midsize	E85 FF	No	5	0	5	5
Sedan/St Wgn Midsize	E85 FF	Yes	27	0	27	0
LD Minivan 4x2 (Passenger)	E85 FF	No	1	0	1	1
LD Minivan 4x2 (Passenger)	E85 FF	Yes	2	0	2	0
LD Van 4x2 (Passenger)	E85 FF	No	3	0	3	3
LD Van 4x4 (Passenger)	E85 FF	No	2	0	2	2
Totals:			58	0	58	13
3. Actual EPA-Act Acquisition Credits Summary						
Base AFV Acquisition Credits:					13	
Zero Emission Vehicle (ZEV) Credits:					0	
Dedicated Light Duty AFV Credits:					2	
Dedicated Medium Duty AFV Credits:					0	
Biodiesel Fuel Usage Credits:					0	
Total EPA-Act Credits:					15	
Overall EPA-Act Compliance Percentage:					36 %	

## Appendix B

### 2010 AFV Report: Planned Data (FY2011)

1. Planned Light-Duty Vehicle Acquisitions and Exemptions			
	Acquisitions		
	Leased	Purchased	Total
Total Light-Duty Vehicle Acquisitions	113	0	113
Fleet Exemptions: Fleet Size	0	0	0
Fleet Exemptions: Foreign	0	0	0
Fleet Exemptions: Geographic	0	0	0
Fleet Exemptions: Non-MSA Operation	0	0	0
Vehicle Exemptions: LE Vehicle	64	0	64
Vehicle Exemptions: Non-covered Vehicle	0	0	0
Vehicle Exemptions: Non-MSA Operation	49	0	49
Total EPCa-Covered Vehicles	0	0	0

2. Planned Alternative Fuel Vehicle Acquisition Detail						
Vehicle Type	Fuel	LE	Acquisitions		Total	EPAct Credits
			Lease	Purchase		
Light Duty Vehicles						
Sedan/St Wgn Compact	E85 FF No	5		0	5	5
Sedan/St Wgn Compact	E85 FF Yes	6		0	6	0
Sedan/St Wgn Midsize	E85 FF No	19		0	19	19
Sedan/St Wgn Midsize	E85 FF Yes	48		0	48	0
LD Minivan 4x2 (Passenger)	E85 FF No	3		0	3	3
Totals:		81		0	81	27

3. Planned EPCa Acquisition Credits Summary	
Base AFV Acquisition Credits:	27
Zero Emission Vehicle (ZEV) Credits:	0
Dedicated Light Duty AFV Credits:	0
Biodiesel Fuel Usage Credits:	0
Total EPCa Credits:	27
Overall EPCa Compliance Percentage:	0 %

## Appendix C

### 2010 AFV Report: Projected Data (FY2012)

1. Projected Light-Duty Vehicle Acquisitions and Exemptions			
	Acquisitions		
	Leased	Purchased	Total
Total Light-Duty Vehicle Acquisitions	113	0	113
Fleet Exemptions: Fleet Size	0	0	0
Fleet Exemptions: Foreign	0	0	0
Fleet Exemptions: Geographic	0	0	0
Fleet Exemptions: Non-MSA Operation	0	0	0
Vehicle Exemptions: LE Vehicle	71	0	71
Vehicle Exemptions: Non-covered Vehicle	0	0	0
Vehicle Exemptions: Non-MSA Operation	35	0	35
Total EPAAct-Covered Vehicles	7	0	7

2. Projected Alternative Fuel Vehicle Acquisition Detail						
Vehicle Type	Fuel	LE	Acquisitions		Total	EPA Credits
			Lease	Purchase		
Light Duty Vehicles						
Sedan/St Wgn Compact	E85 FF	No	2	0	2	2
Sedan/St Wgn Compact	E85 FF	Yes	15	0	15	0
Sedan/St Wgn Midsize	E85 FF	No	10	0	10	10
Sedan/St Wgn Midsize	E85 FF	Yes	46	0	46	0
LD Minivan 4x2 (Passenger)	E85 FF	No	2	0	2	2
LD Minivan 4x2 (Passenger)	E85 FF	Yes	1	0	1	0
LD SUV 4x4	E85 FF	No	4	0	4	4
Totals:			80	0	80	18

3. Projected EPAAct Acquisition Credits Summary	
Base AFV Acquisition Credits:	18
Zero Emission Vehicle (ZEV) Credits:	0
Dedicated Light Duty AFV Credits:	0
Biodiesel Fuel Usage Credits:	0
Total EPAAct Credits:	18
Overall EPAAct Compliance Percentage:	257 %

## Appendix D

### 2010 AFV Report: Forecast Data (FY2013)

1. Forecast Light-Duty Vehicle Acquisitions and Exemptions			
	Acquisitions		
	Leased	Purchased	Total
Total Light-Duty Vehicle Acquisitions	68	0	68
Fleet Exemptions: Fleet Size	0	0	0
Fleet Exemptions: Foreign	0	0	0
Fleet Exemptions: Geographic	0	0	0
Fleet Exemptions: Non-MSA Operation	0	0	0
Vehicle Exemptions: LE Vehicle	35	0	35
Vehicle Exemptions: Non-covered Vehicle	0	0	0
Vehicle Exemptions: Non-MSA Operation	31	0	31
Total EPCa-Covered Vehicles	2	0	2

2. Forecast Alternative Fuel Vehicle Acquisition Detail						
Vehicle Type	Fuel	LE	Acquisitions		Total	EPAct Credits
			Lease	Purchase		
Light Duty Vehicles						
Sedan/St Wgn Compact	E85 FF No	2		0	2	2
Sedan/St Wgn Compact	E85 FF Yes	7		0	7	0
Sedan/St Wgn Midsize	E85 FF No	6		0	6	6
Sedan/St Wgn Midsize	E85 FF Yes	18		0	18	0
LD Minivan 4x2 (Passenger)	E85 FF No	5		0	5	5
LD Minivan 4x2 (Passenger)	E85 FF Yes	3		0	3	0
LD Pickup 4x2	E85 FF Yes	1		0	1	0
LD SUV 4x2	E85 FF No	2		0	2	2
Totals:			44	0	44	15

3. Forecast EPCa Acquisition Credits Summary	
Base AFV Acquisition Credits:	15
Zero Emission Vehicle (ZEV) Credits:	0
Dedicated Light Duty AFV Credits:	0
Biodiesel Fuel Usage Credits:	0
Total EPCa Credits:	15
Overall EPCa Compliance Percentage:	750 %