# U. S. DEPARTMENT OF AGRICULTURE ALTERNATIVE FUEL VEHICLE (AFV) PROGRAM REPORT FOR FISCAL YEAR 2003

The United States Department of Agriculture's (USDA) Fleet Alternative Fuel Vehicle (AFV) Program Report for Fiscal Year (FY) 2003 includes the Department's data on the number of AFVs acquired in FY 2003 and projected acquisitions for FYs 2004 and 2005. The report has been developed in accordance with the Energy Policy Act of 1992 (EPAct), 42 U.S.C. 13211-13219, as amended by the Energy Conservation Reauthorization Act of 1998 (Public Law 105-388 (ECRA), and Executive Order (E. O.) 13149, Greening the Government Through Federal Fleet and Transportation Efficiency.

#### Fleet Mission Requirements

The USDA fleet is comprised of owned vehicles, leased vehicles, and vehicles leased from the General Services Administration (GSA). These vehicles are used to support mission requirements; including the following:

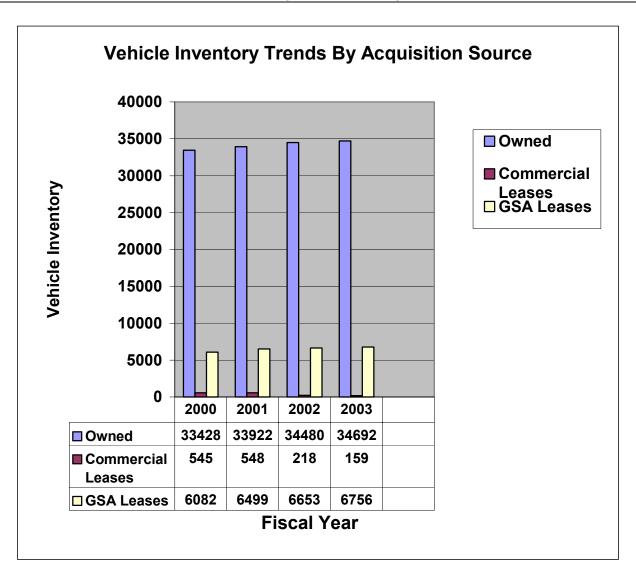
- National Forest System
- Community Natural Resource Conservation Programs
- > Animal, Plant, and Food Safety
- > Agriculture Science Research Programs

The Department has supported and participated in the federal government alternative fuels program since its inception in 1992 and has a policy promoting the acquisition of AFVs. USDA was one of the first federal agencies to use biodiesel under the provisions of ECRA.

## I. Vehicle Inventory Trends By Acquisition Source

**Table 1** provides detailed information from FY 2000 to FY 2003 pertaining to the USDA motor vehicle fleet inventory. The information contained in Table 1 portrays (as of FY 2003) the USDA fleet as a motor vehicle operation with purchased or owned vehicles as the major source of vehicle acquisition. Purchased or owned vehicles comprise 83% of the USDA fleet. The GSA leased and commercially leased vehicle acquisition sources comprise 16% and 1% of the fleet respectively. The table also shows increases in owned and GSA leased acquisitions over the years as the acquisition of commercially leased vehicles has decreased. The reason for the decrease in commercially leased vehicles as an acquisition source is due to the increasing availability of GSA leased vehicles and the reduction in the acquisition of short-term commercially leased vehicles (vehicles leased from 60 to 90 days).

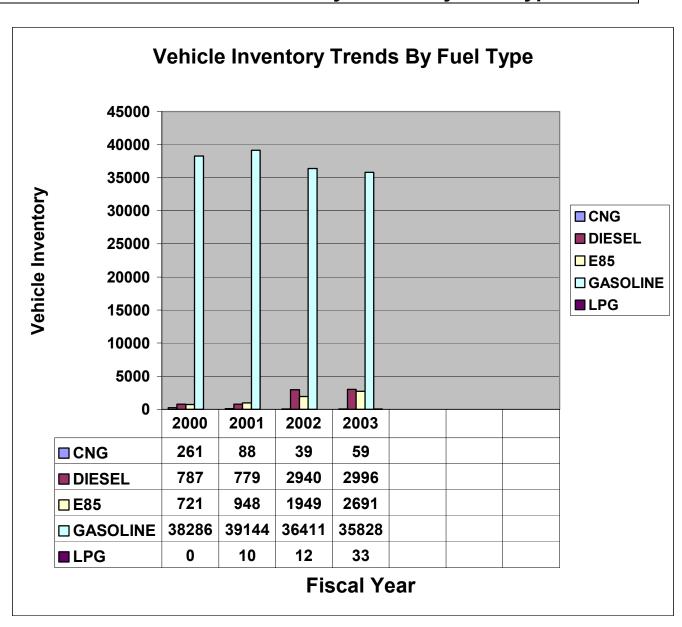
Table 1. Vehicle Inventory Trends By Acquisition Source



#### II. Vehicle Inventory Trends By Fuel Type

**Table 2** categorizes the USDA fleet by fuel type. As of FY 2003, approximately 7% of the total USDA motor vehicle fleet was comprised of AFVs. This is a major increase from FY 2000 when AFVs were only 2% of the USDA motor vehicle fleet. Taking into consideration that USDA has one of the largest civilian agency fleets in the federal government, its total 2,783 AFVs is more vehicles (alternative fuel and/or petroleum) than a significant number of federal agencies have as their total motor vehicle fleet.

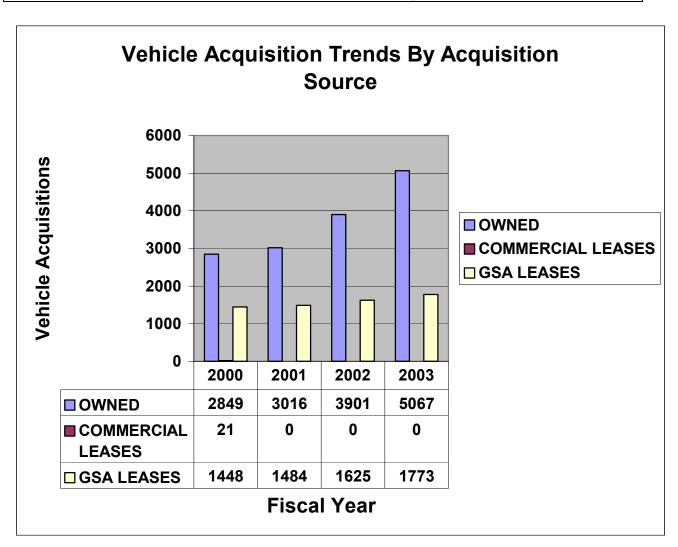
Table 2. Vehicle Inventory Trends By Fuel Type



#### III. Vehicle Acquisition Trends By Acquisition Source

The USDA vehicle acquisition (owned, commercially leased, GSA leased) rate is quite variable, and has been increasing each year since FY 2000. This trend is detailed in Table 3, USDA Vehicle Acquisition Trends by Acquisition Source. The fluctuation of USDA fleet acquisitions is due primarily to the varying replacement cycles used by USDA agencies. For example, GSA leased vehicle replacement cycles are generally every three to four years, however, USDA owned vehicles are held longer and replaced anywhere from six to 10 years. The motor vehicle acquisition trends indicate that replacements over the next several fiscal years should decrease. Although the total acquisitions may decrease, AFV acquisitions are projected to increase. Also, the use of B20 is projected to increase substantially in FYs 2004 and 2005.

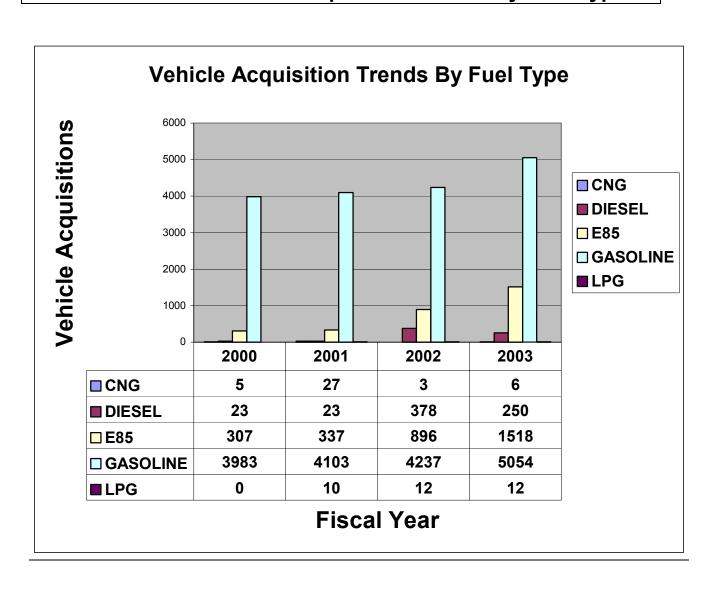
Table 3. Vehicle Acquisition Trends By Acquisition Source



### IV. USDA Vehicle Acquisition Trends By Fuel Type

**Table 4** illustrates trends relating to the acquisition of petroleum and alternative fueled vehicles. The data in this table indicates that 22% of the total USDA FY 2003 motor vehicle acquisitions were AFVs. This is noteworthy with respect to the 7% USDA AFV acquisition rate for FY 2000. Also, approximately 99% of the FY 2003 USDA AFV acquisitions were E-85 flex fuel vehicles.

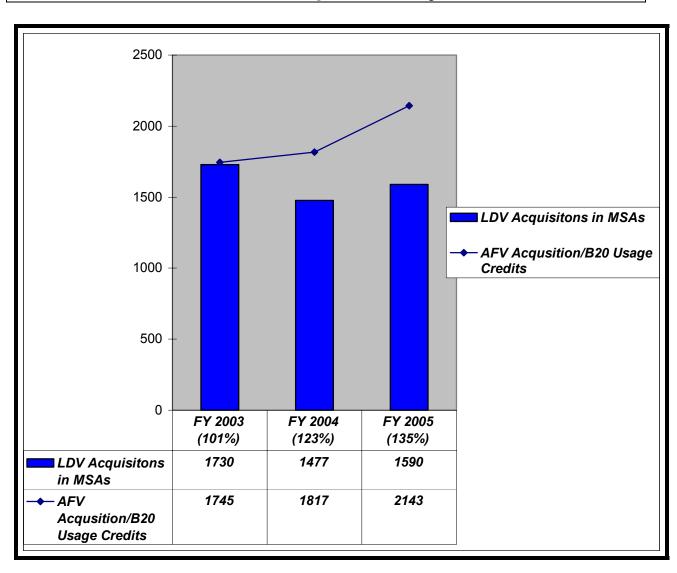
Table 4. USDA Vehicle Acquisition Trends By Fuel Type



#### V. LDV/AFV Acquisitions by Fiscal Year

Since FY 2001 USDA has achieved and surpassed the EPAct AFV acquisition goal of 75%. USDA agencies achieved an outstanding acquisition rate of 101% in FY 2003 as illustrated in Table 5. The use of B20 biodiesel played an integral role in USDA's success. USDA used 471,452 actual gallons of B20, which equals 209 AFV credits when converted. For FYs 2004 and 2005, USDA projects increases in AFV acquisition rates of 123% and 135% respectively, including biodiesel fuel use credits. The Department has made extraordinary progress since its FY 1996 4% AFV acquisition rate.

Table 5. LDV/AFV Acquisitions by Fiscal Year



#### VI. AFV Acquisition Breakdown

Table 6 provides the actual categories of AFV acquisition used to achieve the FY 2003 EPAct AFV acquisition rate shown in Table 5 and projections for FYs 2004 and 2005.

## Table 6. AFV Acquisition Breakdown

FISCAL YEAR	2003	2004	2005
ACTUAL AFV ACQUISITIONS	1,536	1,585	1,872
DEDICATED CREDIT	0	0	0
BIODIESEL CREDIT	209	231	271
AFV TOTALS/ EPAct PERCENTAGE	1,745 (101%)	1,817 (123%)	2,143 (135%)

# VII. FY 2003 USDA Petroleum Strategy Projected Data Vs. Actual Acquisition Data

The USDA Petroleum Reduction Strategy projected that the FY 2003 total AFV acquisition percentage (actual AFV acquisitions and dedicated/biodiesel credits) would be 84%. The actual AFV acquisition percentage was 101%, significantly exceeding strategy projections. Data estimates for the USDA Petroleum Reduction Strategy were projected from the best information available at the time. Recent advances in the AFV industry and GSA's efforts to acquire more AFVs have proven successful and USDA is taking advantage of these opportunities. Tables 7 and 8 compare the FY 2003 strategy projected acquisitions to the USDA FY 2003 actual acquisitions.

Table 7. FY 2003 USDA Petroleum Strategy Projected Data Vs. Actual Acquisition Data

FISCAL YEAR 2003	LDV ACQUISI- TIONS	LDV ACQUISI- TIONS IN NON-MSAS (or exempt: law enforcement or emergency vehicles)	LDV ACQUISITIONS IN MSAs	ACTUAL AFV ACQUISITIONS	DEDICATED AFV AND BIODIESEL CREDITS	TOTAL	EPAct %
STRATEGY PROJECTION	4,482	3,647	835	587	117: B20 1 DED	705	84%
ACTUAL ACQUISITIONS	5,800	4,070	1,730	1,536	209: B20	1,745	101%

## VIII. Strategy Projection Vs. FY 2003 Actual Acquisition

The information contained in Table 8 analyzes Table 7 and offers reasons for the differences between the USDA Petroleum Reduction Strategy and the actual USDA acquisitions for FY 2003.

Table 8. Strategy Projection Vs. FY 2003 Actual Acquisition

FISCAL YEAR 2003	LDV ACQUISITION	LDV ACQUISITION IN NON-MSAs	LDV ACQUISITION IN MSAs	ACTUAL AFV ACQUISITION	DEDICATED AFV AND BIODIESEL CREDITS
STRATEGY PROJECTION vs. ACTUAL ACQUISITION	Actual acquisitions exceeded the strategy projected acquisitions	USDA agencies acquired more LDVs in Non- MSAs than predicted in the strategy	USDA acquired more LDVs in MSAs than projected in the strategy	USDA agencies actual AFV acquisition is significantly more than projected in the strategy	USDA agencies dedicated and biodiesel credits are more than strategy projections
RATIONALE FOR AFV DATA DIFFERENCE	Due to significant increase of owned vehicle replacements	Due to significant increase of owned vehicle replacements	Due to significant increase of owned vehicle replacements	USDA and GSA have been directly working together instructing agencies to replace regular gasoline vehicles with AFVs	USDA is significantly increasing the use of B20 each year

#### **Summary**

The progress that USDA has made towards achieving the goals of EPAct and E. O. 13149 is truly notable. Since FY 1996, USDA EPAct percentages have skyrocketed because of increased AFV acquisitions and the use of B20. The trends described in this report not only detail USDA's accomplishments but also illustrate the Department's undaunted willingness to accept new challenges in the alternative fuels arena. USDA will take full advantage of any strategies and opportunities to ensure the Department continues to meet and exceed regulatory requirements. USDA strongly supports the initiatives set forth in EPAct, E. O. 13149, and ECRA.

The total of the inventory and composition of the USDA motor vehicle fleet will be affected by some vehicle transfers to the Department of Homeland Security (DHS). The USDA agencies that will loose vehicles to DHS are currently in the process of a reexamination of current motor vehicle strategies to ensure the continuation of regulatory goal achievements.

As in past years, the availability of fuel data used to measure progress toward the use of alternative fuels and the reduction of petroleum fuels from available sources is incomplete and unreliable. This is a major concern to USDA but not within our power to resolve independently. The issues of tertiary fleet card data correctly identifying fuel type purchased at the pump and the inability to obtain full and accurate accounting of fuel use for GSA leased vehicles must be resolved. USDA will do all it can to provide the most reliable and accurate data possible when reporting to Federal regulatory agencies and Congress. The aforementioned issues, however, must be resolved to provide a full picture of fleet and fuel use in the coming years.

## Department of Agriculture Complex-Wide AFV Report 2003 - Actuals

Actuals:	Department of Agricultu	re FY	2003 Vel	hicle	Acquisitions	
Actuals: FY 2003 Light-Duty Vehicle Acquisitions					Total Vehicle	
		Leased	ased Purchased Total		Inventory	
Total number of Light-Duty (8,500 GVWR) - Vehicle Acquisitions		1,621	4,179	5,800	32,513	
	Fleet Size	0	0	0	0	
	Geographic	663	3,406	4,069	25,954	
Exemptions	Law Enforcement	0	1	1	7	
LXCITIPUONS	Non-MSA Operation (fleet)	0	0	0	0	
1	Non-MSA Operation (vehicles)	(n/a)	(n/a)	0	(n/a)	
<b>EPACT Covere</b>	d Acquisitions	958	772	1,730	6,552	
	Actuals: FY 2003 AFV Acq	uisitior	าร		Total Vehicle	
	Vehicle	Leased	Purchased	Total	Inventory	
Sedan	CNG Bi-Fuel Subcompact	0	0	0	20	
Sedan	CNG Bi-Fuel Compact	0	0	0	4	
Sedan	E-85 Flex-Fuel Compact	84	38	122	241	
Sedan	E-85 Flex-Fuel Midsize	55	215	270	558	
Sedan	CNG Dedicated Large	0	0	0	2	
Pickup 4x2	CNG Bi-Fuel	2	4	6	31	
Pickup 4x2	E-85 Flex-Fuel	6	482	488	620	
Pickup 4x2	LPG Bi-Fuel	0	1	1	6	
Pickup 4x4	E-85 Flex-Fuel	2	378	380	488	
Pickup 4x4	LPG Bi-Fuel	0	11	11	27	
SUV 4x2	E-85 Flex-Fuel	0	16	16	38	
SUV 4x4	E-85 Flex-Fuel	16	172	188	369	
Van 4x2	CNG Dedicated	0	0	0	1	
Van 4x2	E-85 Flex-Fuel	22	32	54	377	
Pickup MD	CNG Bi-Fuel	0	0	0	1	
	of AFV Acquisitions	187	1,349	1,536	2,783	
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				209		
	uisitions with Credits	187	· ·			
AFV Percentag	e of Covered Light-Duty Vehicle A	cquisiti	on	101 %		

## Department of Agriculture Complex-Wide AFV Report 2004 – Planned

Planned: Department of Agriculture FY 2004 Vehicle Acquisitions							
Planned: FY 2004 Light-Duty Vehicle Acquisitions							
		Leased	Purchased	Total			
Total number of Acquisitions	Light-Duty (8,500 GVWR) - Vehicle	1,460	4,016	5,476			
	Fleet Size	0	0	0			
	Geographic	772	3,227	3,999			
Exemptions	Law Enforcement	0	0	0			
Exemplions	Non-MSA Operation (fleet)	0	0	0			
	Non-MSA Operation (vehicles)	(n/a)	(n/a)	0			
<b>EPACT Covere</b>	d Acquisitions	688	789	1,477			
	Planned: FY 2004 AFV	Acquisitions					
	Vehicle	Leased	Purchased	Total			
Sedan	CNG Bi-Fuel Subcompact	1	0	1			
Sedan	CNG Bi-Fuel Compact	10	0	10			
Sedan	E-85 Flex-Fuel Compact	23	45	68			
Sedan	E-85 Flex-Fuel Midsize	65	238	303			
Pickup 4x2	CNG Dedicated	0	1	1			
Pickup 4x2	E-85 Flex-Fuel	2	500	502			
Pickup 4x4	E-85 Flex-Fuel	2	421	423			
Pickup 4x4	LPG Bi-Fuel	0	10	10			
SUV 4x2	E-85 Flex-Fuel	0	16	16			
SUV 4x4	E-85 Flex-Fuel	0	171	171			
Van 4x2	E-85 Flex-Fuel	47	33	80			
Total Number of	f AFV Acquisitions	150	1,435	1,585			
Zero Emission V	ehicle Credits	0	0	0			
Dedicated Light-Duty AFV Credits		0	1	1			
Dedicated Medium-Duty AFV Credits		0	0	0			
Dedicated Heavy-Duty AFV Credits		0	0	0			
Biodiesel Fuel Usage Credits - Planned				231			
Total AFV Acqu	uisitions with Credits	150	1,436	1,817			
AFV Percentage of Covered Light-Duty Vehicle Acquisition				123 %			

## Department of Agriculture Complex-Wide AFV Report 2005 – Projected

<b>Projected</b>	: Department of Agriculture I	FY 2005 Vel	nicle Acquis	sitions
	Projected: FY 2005 Light-Duty	Vehicle Acqui	isitions	
		Leased	Purchased	Total
Total number of Acquisitions	f Light-Duty (8,500 GVWR) - Vehicle	1,623	4,055	5,678
	Fleet Size	0	0	0
	Geographic	853	3,235	4,088
Exemptions	Law Enforcement	0	0	0
ZXGIIIPUGIIG	Non-MSA Operation (fleet)	0	0	0
	Non-MSA Operation (vehicles)	(n/a)	(n/a)	0
<b>EPACT</b> Cover	ed Acquisitions	770	820	1,590
	Projected: FY 2005 AFV	Acquisitions		
	Vehicle	Leased	Purchased	Total
Sedan	CNG Bi-Fuel Subcompact	2	0	2
Sedan	E-85 Flex-Fuel Compact	72	64	136
Sedan	E-85 Flex-Fuel Midsize	58	220	278
Pickup 4x2	CNG Bi-Fuel	1	30	31
Pickup 4x2	E-85 Flex-Fuel	8	714	722
Pickup 4x4	E-85 Flex-Fuel	6	389	395
Pickup 4x4	LPG Bi-Fuel	0	10	10
SUV 4x2	E-85 Flex-Fuel	0	23	23
SUV 4x4	E-85 Flex-Fuel	27	181	208
Van 4x2	E-85 Flex-Fuel	28	39	67
<b>Total Number</b>	of AFV Acquisitions	202	1,670	1,872
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				271
Total AFV Acc	uisitions with Credits	202	1,670	2,143
AFV Percenta	ge of Covered Light-Duty Vehicle Acqui	sition		135 %

## PETROLEUM CONSUMPTION REPORT

PETROLEUM CONSUMPTION	FY 1999 Baseline	FY2003	FY2004	FY2005
Gasoline	19,827,893	17,243,422		
Diesel	1,454,034	1,209,304		
TOTAL	21,281,927	18,452,726		
Reduction *	N/A	13%		
ALTERNATIVE FUEL CONSUMPTION				
CNG		1,218		
LNG		0		
LPG		2,840		
E-85		12,189		
Electric		0		
M-85		0		
Biodiesel (B100)		105,680		
TOTAL		121,927		
	FY 1999			
FUEL ECONOMY COMPARISON	Baseline	FY2003	FY2004	FY2005
Fuel Economy	17.0	20		
Change Compared to Baseline		3.0		

<sup>\*</sup> GSA stated that they are unable to provide **alternative fuel use** data with any reasonable accuracy.