

DEPARTMENT OF HEALTH AND HUMAN SERVICES

STRATEGY

TO

IMPLEMENT EXECUTIVE ORDER 13149

GREENING THE GOVERNMENT THROUGH FEDERAL FLEET

AND TRANSPORTATION EFFICIENCY

## **Executive Summary**

### **Introduction**

The Department of Health and Human Services (HHS) is a diverse organization with missions ranging from basic medical research to the provisions of health insurance. Its various fleets reflect this diversity. The National Institutes of Health and the Centers for Disease Control have a variety of vehicles necessary to support research campuses (sedans and vans for administrative support, light trucks for maintenance, and heavy trucks for construction and moving supplies and equipment). The Indian Health Service maintains and operates community hospital and clinic (ambulances, sedans and vans for administrative use and for transporting medical staff and patients, medium and large trucks for maintenance and construction). The Food and Drug Administration regulates the nation's food, drugs and cosmetics supplies and uses sedans and vans for administrative support and to visit regulated industries. The remaining, very small fleets are made up a few medium and light trucks used for supply support and sedans and vans for staff transportation.

In recognition of the contribution the increased use of alternative fuels will bring to improving air quality and in recognition of the importance of reducing the nation's dependence on imported petroleum, HHS is committed to accomplishing the four major goals of Executive Order 13149, "Greening the Government Through Federal Fleet and Transportation Efficiency". Its strategy consists of acquiring additional alternative fueled vehicles (AFVs), increasing the use of alternative fuels in its vehicles, acquiring vehicles with increased miles per gallon, reducing the number of vehicles that get very low miles per gallon (downsizing vehicles) and eliminating vehicles through more efficient use of vehicles (downsizing fleets).

### **Implementation**

#### **Goal 1: Improving Miles Per Gallon**

HHS's miles per gallon baseline is 19.2 mpg for acquisitions of new light duty vehicles in FY 1999. The E.O. requires 1mpg improvement in FY02 and 3 mpg in FY05.

HHS's strategy to improve miles per gallon is to replace low miles per gallon vehicles with higher mileage vehicles (model downsizing) or AFVs (where ever AFVs will permit accomplishment of the operating divisions' missions and alternative fuel is available), and leasing from the General Services Administration more fuel efficient vehicles in the same vehicle class.

#### **Goal 2: Reduce the Use of Covered, Petroleum Fuel by 20%**

HHS's FY 1999 baseline, covered-fuel consumption was 4,623,795 gasoline gallon equivalents (gge). The required petroleum fuel reduction is 924,759 gallons.

Fuel exemptions were claimed for 12,851 gallons of fuel used off-road for generators and maintenance, construction, and landscape equipment and 354,660 gallons used for emergency and law enforcement vehicles by the HHS law enforcement, fire fighting, and emergency medical functions.

HHS strategy for attaining the 20% fuel reduction is to increase the use of alternative fuels, increased miles per gallon, downsizing vehicles and numbers of vehicles, without transferring mileage to remaining vehicles, increase the use of biodiesel fuel, and the use of electric vehicles.

**Goal 3: Acquisition of AFVs Equal to the 75% of New Light Duty Vehicles**

HHS's strategy to acquire AFVs equal 75% of new light duty vehicles is establish a program to monitor GSA replacement of vehicles and to request replacement of gasoline and diesel-fueled vehicles with AFVs. In addition, NIH has acquired biodiesel, which will be used in their diesel-fueled vehicles to earn AFV credits. The Indian Health Service and the Office of the Inspector General will replace vehicles exempt from the Energy Policy Act (EPAct) with AFVs to support this goal of the Executive Order.

**Goal 4: Use of Alternative Fuel in the Majority of Alternative Fueled Vehicles**

HHS's strategy to assure that alternative fuels are used in a majority of the operation of AFVs focuses on building alternative fuel infrastructure where necessary and practical and establishing partnerships with other Federal agencies, State and Local governments, and the private sector to establish additional infrastructure. Acquisition of AFVs will be monitored to assure that alternative fuel will be available to fuel the majority of the AFVs.

HHS fleets have committed to implementing the above goals to achieve an estimated 1,204,747 gge in petroleum savings. This represents an agency wide reduction of 25% which exceeds the minimum 20%. Table 7 provides a summary of petroleum reduction by strategy approach.

## THE DEPARTMENT OF HEALTH AND HUMAN SERVICES STRATEGY

TO

IMPLEMENT EXECUTIVE ORDER 13149

### **INTRODUCTION: Health and Human Services' Commitment**

As the Federal government's primarily health agency, the Department's strategy to implement Executive Order 13149 reflect its commitment to achieving a cleaner environment through the use of alternative fuels as well as its support of energy independence through alternative fuels. This commitment is exemplified in several ways. The Assistant Secretary for Management and Budget assumed the responsibility to be the senior official responsible for implementing the Executive Order. In announcing this initiative and his responsibility, he asked each of the operating division heads (1) to lead by example by obtaining an alternative fueled vehicle (AFVs) and by using alternative fuels in the vehicle, (2) to designate a senior official to be responsible for this initiative in his/her division, and (3) to assure that adequate human and financial resources are made available to carry out the Executive Order. In complying with the Energy Policy Act, the National Institutes of Health's Office of Logistics Management (NIH-OLM) had converted vehicles to run on compressed natural gas (CNG) and, in anticipation of the Executive Order, had explored the purchased of biodiesel and ethanol (E- 85) fuel for its refueling station. The Office of Inspector General (OIG), even though the vast majority if its vehicles are exempt, has pledged to obtain AFVs and use alternative fuel whenever it does not compromise its law enforcement mission. Reflecting Native Americans culture respect for the earth, the Indian Health Service (IHS), which operates most of its vehicles on Indian Reservations and Alaskan villages and is exempt under the Energy Policy Act, plans to acquire AFVs and use alternative fuels wherever possible and to invest in alternative fuel infrastructure where alternative fuels cab be made available and where is has sufficient numbers of vehicles in one location to justify the expense of building infrastructure.

The Department of Health and Human Services (HHS) is a diverse Federal agency. Its missions range from basic research into causes of human illness to providing direct health care and from oversight and regulation of the nation's food, medicine, and cosmetics supplies to funding medical insurance and family support. The Department's various fleets contain 3968 vehicles (3424 are leased from GSA because most operating division do not have legal authority to purchase or commercially lease passenger vehicles, 539 are owned, and 5 are commercially leased. Vehicle models range from compact sedans to heavy cargo trucks. Two thousand two hundred thirty-seven (2237) vehicles are light duty. Vehicles are used in environments ranging from urban, college-like campuses (NIH and the Centers for Disease Control [CDC]) to remote, small town medical facilities (IHS). Other components have vehicles in very small clusters in urban areas and single vehicles in rural areas. Vehicles are used for law and regulatory enforcement, construction and maintenance, patient transportation, supply distribution and general administration.

**Table 1. Selected Fleet Location For HHS Strategy**

OPDIV	HHS Fleet Location	FY 1999 Total Petroleum Use (GGE)	FY 1999 Covered Petroleum Use (GGE)+	FY 1999 Fleet Inventory		
				LDV	MDV	HDV
ACF	Nationwide	5052	5,317	11	0	0
CDC	Nationwide	64715	64,715	178	24	19
FDA	Nationwide	176,112	162,401	853	2	0
HCFA	Nationwide	15,740	15,740	28	0	0
HRSA	Nationwide	9,581	9,581	18	1	2
IHS	Nationwide	3,783,527	3,783,527	583	1,505	124
NCI-FCRC	Frederick, MD	36,695	36,505	79	2	0
NIEHS	Research Triangle Park, NC	11,467	11,467	51	6	3
NIH-OLM	Bethesda, Maryland	85,029	72,722	186	14	20
OIG	OIG Fleet Nationwide	115,323	2,005	206	0	0
PSC	Rockville, Maryland	10,438	9,471	35	2	7
SW	Washington, DC	5,025	3,552	9	0	0
		<b>4,318,703</b>	<b>4,176,739</b>	<b>2,237</b>	<b>1,556</b>	<b>175</b>

Geographically the HHS fleets are located throughout the United States. The majority of the NIH vehicles are located in Bethesda and Frederick, MD and Research Triangle Park, NC. The Indian Health Service (IHS) maintains approximately 38% of the HHS fleet inventory which are located primarily on or near Indian tribal sites in the central and western United States and in Native American sites in Alaska. A significant number of the latter vehicles are scattered throughout the nation in metropolitan statistical areas (MSAs) with populations less than 250,000. CDC's fleet is primarily in Atlanta, GA and Pittsburgh, PA with the remainder scattered around the United States. Similarly, FDA maintains 35% of the Department's vehicles in many coastal cities. At the same time, a significant number are scattered throughout the nation in metropolitan statistical areas (MSAs) with populations less than 250,000. This is an important matter because of many border states involved in enforcement missions. Accordingly, a significant number of HHS vehicles around the the country are 'exempt' from EPact criteria. The remainder of the HHS fleet is located in Washington/Baltimore corridor, in ten regional HHS locations and 21 district offices. Many vehicles are assigned to an office but are garaged at other sites. Overall, HHS has vehicles that are managed at more than 500 different locations.

Only NIH, with 212 vehicles on its Bethesda campus, has an existing fueling station that can be converted or expanded to provide alternative fuel. CDC (Atlanta, GA and Pittsburgh, PA) and National Institute of Environmental Sciences (NIEHS) (Research Triangle Park, NC) have clusters of at least 50 vehicles and plan to partner with nearby organizations to develop facilities to refuel CNG vehicles.

Each operating division (OPDIV) manages its vehicles independently. In many cases, this decentralization extends to outlying offices using vehicles. The Office of the Secretary Logistics Policy Staff (LPS) develops and executes policy and provides technical assistance function. The Department Fleet Manager works through an Executive Committee for Logistics (ECL) to carry out this function. The Fleet Manager has advised the ECL of each step in the creation of the Executive Order from its inception to its issuance in April of 2000. Notes from the various interagency discussions of the Executive Order and the Department of Energy (DOE) guidance have been provided to them (ECL) as well as the final E.O. and DOE guidance. Representatives from DOE have addressed the ECL and the operating divisions' senior vehicle managers. Most components of the Department sent representatives to FedFleet 2000 to attend the workshops on the E.O.

Since the issuance of the guidance, the Department Fleet Manager held conference calls with the ECL and vehicle managers to address strategy development as well as maintaining continuous contact with the vehicle managers as they developed their respective strategies. Department level guidance has focused on assuring that all components carry out the intent of the E.O. and develop strategies that will support the long-range goals and objectives.

Reflecting on a decentralized approach to vehicle management, the Department has promoted a "bottom up" approach to implementing the E.O. With such decentralized fleets, the Department's vehicle managers concluded, early on, that the local vehicle managers were in the best position to identify local alternative fuel sources and to identify opportunities to partner with other organization, such as other Federal agencies, State and Local governments, and fuel providers, that would be using alternative vehicles. In addition, the Department's vehicle managers believe that allowing local managers to select their own strategy will promote greater commitment to this initiative. We are convinced that the only way success can be achieved is having local fleet managers and vehicle users take a proactive approach to implementing this initiative.

One drawback to this approach is that it takes more time. Information and guidance has to be disseminated through many layers in the Department and strategies surfaced upward through the components. Local managers have to be convinced that this requirement has to be given equal importance with their other responsibilities. Resources must be employed to discover local AFV initiatives and to find opportunities to partner with other local Federal agencies, State and Local governments and fuel providers. Because of this approach, IHS and FDA conduct continuous re-evaluation of fleet resources in tandem with events, such as emergency conditions like 9/11 and having to comply with new legislation and regulations each congressional period. Accordingly, individual vehicles will be replaced with AFVs, downsized, or eliminated.

Through this approach, HHS believes that it will be successful in achieving the goals of this initiative that will lead to a healthier environment as well as less dependence on imported petroleum.

### **Basic Assumptions**

In developing this strategy HHS made the following basic assumptions:

Biodiesel will continue to be available and E- 85 will become available from our own facilities and other fleet facilities or from commercial vendors.

NIH, NIEHS, CDC, and IHS will develop infrastructure to provide alternative fuels.

The HHS operating divisions will be able to partner with other Federal agencies, State and Local governments or fuel providers to obtain alternative fuels.

GSA Fleet will offer vehicles with higher MPG so that the Department's operating divisions will be able to acquire vehicles in the same class that get better MPG and reduce fuel consumption.

The operating divisions will be able to downsize their vehicles to achieve the 3-mpg improvement and to reduce petroleum fuel use.

Operating divisions will be able to reduce petroleum usage by downsizing their fleets and by more efficient use of existing fleet resources.

AFVs will be obtained at least at the rate of 75% of new light, covered vehicles and will use alternative fuels for the majority of their fuel.

### FY 1999 Fuel Consumption Baseline

Based on our estimates of fuel used in GSA leased vehicles and operating division records, HHS used 4,176,739 gallons of gasoline and 447,056 gallons of gasoline equivalent diesel fuel. HHS excluded non-road gge and exempt gge in calculating its 20% fuel reduction of 924,759 gallons (gge).

Table 2

OPDIV	Fleet location or indicate if Agency-wide	PETROLEUM USE BASELINE								
		Total gasoline use (gal)	Total diesel use (gge) <sup>1</sup>	Non-road gasoline use (gal)	Non-road diesel use (gge) <sup>1</sup>	Exempt gasoline use (gal)	Exempt diesel use (gge) <sup>1</sup>	Covered gasoline use (gal) <sup>2</sup>	Covered diesel use (gge) <sup>1,3</sup>	TOTAL COVERED PETROLEUM USE (GGE) <sup>4</sup>
ACF	Nation-wide	5,052	-	-	-	-	-	5,052	-	5,052
CDC	Nation-wide	64,715	1,482	-	-	-	-	64,715	1,482	66,198
FDA	Nation-wide	176,112	-	-	-	13,711	-	162,401	-	162,401
HCFA	Nation-wide	15,740	-	-	-	-	-	15,740	-	15,740
HRSA	Nation-wide	9,581	400	-	-	-	-	9,581	400	9,981
IHS	Nation-wide	3,783,527	620,302	-	-	-	196,529	3,783,527	423,774	4,207,301
NCI-FCRC	Frederick,	36,695	6,101	-	6,101	190	-	36,505	-	36,505
NIEHS	RTP, NC	11,467	2,626	-	-	-	-	11,467	2,626	14,094
NIH-OLM	Bethesda, MD	85,029	17,286	3,162	2,948	9,145	1,672	72,722	12,666	85,388
OIG	Nation-wide	115,323	-	-	-	113,318	-	2,005	-	2,005
PSC	Rockville, MD	10,436	6,107	-	-	965	-	9,471	6,107	15,578
SW-Pool	Wash., DC	5,025	-	-	-	1,473	-	3,552	-	3,552
		<b>4,318,703</b>	<b>654,306</b>	<b>3,162</b>	<b>9,049</b>	<b>138,802</b>	<b>198,201</b>	<b>4,176,739</b>	<b>447,056</b>	<b>4,623,795</b>

Total Agency Wide Petroleum use (baseline) (gge) <sup>5</sup> :	4,623,795
Required 20% reduction in petroleum use (gge) <sup>6</sup> :	924,759
Net Petroleum Use	3,699,036

## **Excluded Petroleum Fuel**

The NIH and National Cancer Institute, Frederick Cancer Research and Development Center (FCRDC) used HHS non-road fuel in generators, landscape equipment and construction equipment.

Exempt fuel is claimed on the following vehicles:

OIG - 202 vehicles used by the deputy U.S. marshals in the Office of Criminal Investigations. At the present time several of OIGs vehicles do not meet the norm for police vehicles in terms of size or mechanical upgrades. Some are undercover vehicles. Also, during a period of expansion, the OIG accepted any vehicles GSA could furnish. As soon as possible, the OIG will replace these vehicles with sedans equipped as police cars. All of these vehicles are equipped with police lights and sirens.

IHS – 42 ambulances

FDA – 10 undercover surveillance vehicles used by the Office of Criminal Investigations

NIH - 7 fire department vehicles and 14 police vehicles that are equipped with emergency lights and sirens or are unmarked vehicles equipped with police packages.

Office of Emergency Preparedness - trucks used to provide medical responses to natural disaster, CBN threats, and other events requiring emergency medical responses

## Improving Fuel Economy

HHS baseline fuel economy for new, covered light duty vehicles was 19.2 miles per gallon (mpg) in FY 1999 as shown in the table below.

DEPARTMENT OF HEALTH AND HUMAN SERVICES																						
Vehicle Type	GSA Std. Item No.	Model	Cylinders	Drive	RHH	NIHS	HNSA	IHS	HCFA	CDC	SW	PSC2	ACF	OIG	NCI	IDA	Total Number of Vehicles	FUEL ECONOMY INFORMATION				
																		City/FC	Hwy/FC	Combined FC		
Ford	24	Club Wagon	6														0	0	14	18	16.8	
Ford	24	Club Wagon	6						8								0	0	13	17	15.8	
Ford	9C	Contour	4				4		4			1		2			0	62	23	31	27.8	
Ford	9C	Contour	6					61						1			0	0	20	29	24.5	
Ford	11B	Crown Victoria	8					3						5			0	0	17	24	28.5	
Ford	32	E290	8	4x2													0	0	13	18	15.5	
Ford	8C	Escort	4														0	0	25	34	29.5	
Ford	11B	Escort Wagon	4														0	0	25	34	29.5	
Ford	955B	Expedition	8	4x4					8					1			0	1	12	16	14.8	
Ford	985	Explorer	6	4x4													0	0	19	19	17.8	
Ford	985	Explorer	8	4x4													0	0	14	18	16.5	
Ford	42	F-150	8	4x2													0	0	14	18	16.8	
Ford	47/57C	F-150	8	4x4		2											0	2	14	17	15.5	
Ford	45/49C	F-250	8	4x4				10		2							0	12	13	16	14.5	
Ford	6T	Ranger	6	4x2		2		3									0	5	16	21	18.5	
Ford	66C	Ranger Extended Cab	6	4x4													0	0	16	20	18.8	
Ford	10B	Taurus	6			6		11			8						1	88	19	27	23.8	
Ford	14C	Taurus Wagon	6														0	0	18	27	22.5	
Ford	30	Windstar	6	4x2									1				0	1	18	23	20.5	
GM	28/30	Astra/Venture	6														4	4	18	25	21.5	
GM	25	Astra/Venture	6	AWD				26									0	26	16	20	18.8	
GM	28/30	Astra/Venture	8														0	0	16	21	18.5	
GM	7/95/103	Blazer	6	4x4													0	0	16	20	18.8	
GM	41	C1500	6	4x2													0	0	16	20	18.8	
GM	41	C1500	8	4x2													1	0	1	16	21	19.5
GM	49	C2500	8	4x2		10											0	10	15	19	17.8	
GM	44	C2500	8	4x2													0	0	12	16	14.8	
GM	80	Camaro - Police	8														0	0	17	24	20.5	
GM	21/31	G1500	6														0	0	15	19	17.8	
GM	21/31	G1500	8							1							0	2	14	18	16.8	
GM	32	G2500	8	4x2				16									0	16	14	18	16.8	
GM	46/56C	K1500	6	4x4													0	0	16	20	18.8	
GM	46/56C	K1500	8	4x4													0	0	15	18	16.5	
GM	10B	Lumina	6														19	6	25	20	24.5	
GM	5C	Malibu	4														20	20	22	20	26.8	
GM	9C	Malibu	6														7	7	20	29	24.5	
GM	61C	S10	6	4x2													0	0	19	26	22.5	
GM	66C	S10	6	4x4				7									0	7	16	21	18.5	
GM	61C	S10	6	4x2													0	0	17	22	19.5	
GM	102	Suburban	8	4x2				8									0	0	14	18	16.8	
GM	106/108	Suburban	8	4x4													0	0	12	16	14.8	
GM	1000	Tahoe	8	4x2				10									0	10	14	18	16.8	
Chrysler	41/41C	1500	6	4x2													0	0	15	21	18.8	
Chrysler	41/41C	1500	8	4x2				24									0	24	13	18	15.5	
Chrysler	46/56C	1500	8	4x4						1							0	1	12	16	14.8	
Chrysler	21/31	D1500	6														2	0	2	15	16	15.5
Chrysler	21/31	D1500	8														0	0	13	18	16.8	
Chrysler	9	Breeze	4														0	198	20	28	24.8	
Chrysler	20	Caravan/Voyager	4											1			0	1	20	26	23.8	
Chrysler	20	Caravan/Voyager	6														2	2	18	24	21.8	
Chrysler	100	Cherokee	4	4x2													0	0	18	22	20.8	
Chrysler	100	Cherokee	6	4x2													0	28	16	22	19.8	
Chrysler	6	Cherokee	6	4x4													6	6	18	20	19.8	
Chrysler	105	Cherokee-Grand Cherokee	8	4x4													0	0	16	21	18.5	
Chrysler	105	Cherokee-Grand Cherokee	8	4x4													0	0	15	19	17.8	
Chrysler	9C	Cirrus/Stratus	6					2									0	2	19	27	23.8	
Chrysler	66/66C	Dakota	6	4x4						3							0	3	14	18	16.8	
Chrysler	66/66C	Dakota	8	4x4													0	0	13	16	14.5	
Chrysler	90/90	Dodge	6	4x4													0	20	14	18	16.8	
Chrysler	90/90	Dodge	8	4x4													2	0	0	13	17	15.8
Chrysler	10B	Intrepid	6														0	0	21	30	25.5	
Chrysler	10C	Intrepid	4	4x2													0	0	23	32	27.5	
Chrysler	6	Wrangler	4	4x4													0	0	16	18	17.8	
Chrysler	6	Wrangler	6	4x4													0	0	15	18	16.5	
GM	24	G2500	8	4x2		1					1	1					0	3	14	18	16.8	
Chrysler	20	Aerostar	6														1	1	16	23	19.5	
Chrysler	9c	Cameo	4														20	20	25	32	28.5	
Chrysler	9c	Stratus	4														1	1	21	29	25.8	
						11	11	8	620	7	28	1	3	1	38	5	62	664	1122	1484	19.2	

Agency Fleet Fuel Economy for 1999

HHS expects to achieve a significant portion of its fuel reduction goal through the acquisition of vehicles with higher fuel efficiency. Fuel savings due to increases in average fuel economy were estimated based on the projected number of petroleum-fueled light-duty vehicles leased from FY 2001 through FY 2005 and on the annual per-vehicle fuel consumption rates of these vehicles.

HHS intends that its fleets comply with E.O. 13149's requirement that the average fleet fuel economy of its new acquisitions increase by 1.0 mpg in FY 2002 and 3.0 mpg in FY 2005 compared with the FY 1999 baseline.

In 1999, the new LD vehicle acquisitions for nonexempt fleet averaged an estimated 19.2 mpg, based on the best available data. HHS intends to pursue the following schedule for fleet fuel economy increases via new acquisitions between 2001 and 2005:

- 0.5 mpg increase in FY 2001
- 1.0 mpg increase in FY 2002
- 2.0 mpg increase in FY 2003
- 2.5 mpg increase in FY 2004
- 3.0 mpg increase in FY 2005

The schedule for achieving minimum fuel economy increases from 2001 to 2005 will be met in a variety of ways, e.g., by acquiring: smaller vehicles, vehicles with smaller engine sizes, and gasoline hybrid vehicles.

**Table 4 - Projected Fuel Savings from the Acquisition of Higher Fuel Economy Vehicles FY 2003 to FY 2005**

Item	FY 1999	FY 2003	FY 2004	FY 2005
New covered LD vehicles		33	30	30
Average Annual Fuel Usage for new LD vehicles (GGE)	1666	1509	1474	1441
Fuel usage for LD vehicles at baseline fuel economy (GGE)	--	54,978	49,980	49,980
Fuel usage for LD vehicles at higher fuel economy (GGE)	--	49,747	44,220	43,230
Fuel saved (GGE)	--	5,231	5,760	6,750
Total fuel saved in FY 2005 (GGE)		17,741		

The annual per vehicle fuel consumption rates for the new LD vehicles were calculated from the original per-vehicle fuel consumption rate for FY 1999 (1666 GGE for the nonexempt fleet), the increased fleet average fuel economy for the given fiscal year (e.g., 21.2 mpg in FY 2003), and the original FY 1999 fleet average fuel economy (19.2 mpg), as follows:

- Avg Annual Fuel Usage for new LD vehicles FY 2003 =  $1666 \times 19.2 / 21.2 = 1509$  GGE
- Avg Annual Fuel Usage for new LD vehicles FY 2004 =  $1666 \times 19.2 / 21.7 = 1474$  GGE
- Avg Annual Fuel Usage for new LD vehicles FY 2005 =  $1666 \times 19.2 / 22.2 = 1441$  GGE

According to the typical replacement schedule, vehicles that are acquired by the fleets after FY 2003, are likely to still be in operation in FY 2005. So, fuel savings from those vehicles will continue through FY 2005. Thus, esti-

mated fuel savings with higher fuel economy vehicles is 17,741 GGE.

HHS’s strategy for achieving the miles per gallon improvement for its petroleum-fueled light vehicles is to acquire more fuel efficient vehicles with in vehicle classes such as compact sedans or compact trucks, to investigating hybrid vehicles and to downsize individual vehicles, such as going from a one-ton 4X4 to a half-ton 4X4 or compact 4X4. The amount of improvement in MPGs is interdependent with the other goals of the E.O. The actual number of petroleum-fueled light duty vehicles affected by the requirement to improve MPG is dependent on operating divisions’ ability to replace higher fuel consuming vehicles with AFVs, the feasibility of establishing alternative fuel stations and the availability of other alternative fuel sources to permit the acquisition of these AFVs.

Since the majority of HHS vehicles are leased from GSA, HHS’s approach is also dependent on GSA acquiring more fuel-efficient vehicles. The Department Fleet Manager will monitor the operating divisions while they review their vehicles for opportunities to downsize their vehicles.

Projections for the amount of petroleum reduction achieved by other fleet efficiency measures are not presented in this document; however, HHS’s operating divisions have committed to achieving the reductions shown in the concluding table, Table 7. In addition, fleets are encourages to use environmentally preferable products such as re-refined oil whenever possible.

**Table 5. Projected AFV Refueling Infrastructure Costs**

OPDIV	HHS Fleet Location	Available On-Site or Public AFV Refueling?	AFV Refueling Infrastructure Cost (\$)		
			E85	CNG	Bio-diesel
IHS	Nationwide	Public/On Site	350,000	500,000	300,000
NIEHS	Research Triangle Park, NC	On-Site	\$20,000		
NIH-OLM	Bethesda Maryland	Public/yes	40,000		3,000
<b>Totals</b>			<b>\$410,000</b>	<b>\$500,000</b>	<b>\$303,000</b>

Reflecting the diverse nature of the Department’s fleets, the components of HHS have taken different approach to reducing the use of petroleum fuel. NIH has elected to convert a fuel tank to dispense E- 85 (E-85), to purchase biodiesel and to acquire E-85 vehicles to supplement its bifuel compressed natural gas (CNG) vehicles. NIEHS plans to partner with the Environmental Protection Agency to acquire alternative fuel. FCRDC will conduct a comprehensive review of its fleet to identify those areas where substitution of more petroleum-fuel efficient vehicles can be made such as electric vehicles and vehicles with smaller engines.

**Twenty Percent Fuel Reduction**

IHS believes that it can attain the 20% fuel reduction solely through fleet downsizing but can not project this savings until it finishes a detailed analysis of its fleets. In support of the other goals of the Executive Order, IHS will investigate obtaining its own alternative fueling stations, will partner with other agencies to obtain alternative fuels, will acquire AFVs, and will downsize individual vehicles. It will also replace gasoline vehicles with AFVs wherever alternative fuel is available or can be made available. IHS will also investigate building infrastructure where alternative fuel is available such as natural gas lines running through the reservations.

CDC plans to partner with a neighboring institution to develop CNG infrastructure for its Atlanta vehicles and will seek alternative fuel opportunities through partnering with other Federal agencies, State and Local governments and fuel providers for its other vehicles.

The OIG, although the majority of its vehicles are not covered by EPACT and exempt from the Executive Order, will support this initiative by obtaining AFVs and alternative fuels whenever doing so does not interfere with their mission.

FDA and the operating divisions with very small fleets plan to acquire AFVs and, working through local Federal executive groups, partner with other organizations to acquire alternative fuel. Vehicles operated in the SouthWest area of Washington, DC will obtain alternative fueled vehicles and obtain alternative fuels from the Park Services and the alternative fuel station at the Pentagon.

The Department Fleet Manager will research and provide information on opportunities for partnering to the operating divisions.

### **Obtaining Alternate Alternative Fueled Vehicles**

Each of the HHS's operating divisions has committed to meeting the goal of obtaining AFVs equal to 75% of new, covered light vehicles. At the present time, they have not determined specific numbers of AFVs to be acquired. This determination depends on models offered by the manufacturers and leased by GSA fleet as well as the availability of alternative fuel. In addition, their efforts to increase mpg and reduce petroleum-fuel usage will change the make up of their fleets and affect the number and types of AFVs that can be acquired.

Subject to the uncertainty above, the operating divisions have committed to the following:

The NIH-OLM has will obtain E- 85 vehicles when it replaces covered sedans and vans at a ratio of one for one. In addition the NIH-OLM will earn AFV credits by using biodiesel in its diesel trucks.

The NIEHS, FCRDC and CDC, Atlanta, will acquire bifuel, CNG vehicles.

FDA will determine the availability or potential availability of alternative fuels in the locations where it has covered vehicles and obtain appropriate AFVs at the 75% rate.

IHS will determine the availability of alternative fuels for the vehicles that it garages and operates in metropolitan areas and obtain AFVs at the rate of, at least, 75% of light duty vehicles. The remainder of IHS's

fleet, which is not covered by EPA Act, will determine the existence of alternative fueled infrastructure or determine the feasibility of establishing its own infrastructure and will acquire AFVs.

Seventy-five percent (3) of the OIG administrative vehicles will be replaced with E-85 vehicles. In addition, the OIG will obtain E-85 Ford Tarasuses for some of its law enforcement vehicles and use E-85 when it does not jeopardize its mission.

The Program Support Center (PSC), the motor pool supporting the Office of the Secretary in SW Washington, and the Administration on Children and Families will obtain, at a ratio of one to one, (E-85) vehicles in the Washington area. The PSC will also earn AFV credits by refueling their diesel trucks with NIH biodiesel fuel.

Figure 1 on page 16 provides a graphical representation of the plan to reduce acquisition of petroleum conventional light duty vehicles and increase acquisitions of AFVs. The Department Fleet Manager will assist the operating divisions in obtaining information on the availability of alternative fuels and will monitor their determinations of which vehicles will be replaced with AFVs. For example, the Department Fleet Manager will disseminate the web address for the Alternative Fuels Data Center at <http://www.afdc.doe.gov>.

### **Use of Alternative Fuels in the Majority of the AFVs**

Each of the operating division has committed to obtaining alternative fuels for the majority of their AFVs.

The NIH-OLM has obtained biodiesel for its diesel trucks and is converting a gasoline fueling system to pump E-85.

The FDA, the Health Care Financing Administration and the Indian Health Service in metropolitan areas will obtain alternative fuels from other Federal agencies, State and Local governments or commercial sources after they have determined what infrastructure exists and have obtained appropriate AFVs.

The IHS will also develop its own alternative fuel infrastructure or will partner with other organization to obtain alternative fuels for its AFVs.

The Department Fleet Manager will provide the operating divisions with information to help locate alternative fuels and will establish procedures to monitor the operating divisions efforts to obtain alternative fuels.

- **Greater Use of Alternate Fuels in AFV Resources:**

- Reduce fuel consumption through displacement of petroleum fuel by increasing the use of alternate fuel in each AFV<sup>1</sup> unit placed into service. See Table below

**Table 6 - HHS AFV Petroleum Displacement Strategy**

Fleet Gasoline Usage in 1999 for Light Duty Vehicles	<b>3,722,130</b>
Number of Light Duty vehicles in FY1999	<b>2,234</b>
Average Annual Light Duty Gasoline Vehicle Fuel Rate (gge)	<b>1,666</b>
Projected numbers of New AFVs In Service in FY2005	<b>617</b>
Percentage of ALF Use Used by AFVs	<b>51%</b>
Total Petroleum Fuel Displaced by AFVs in FY2005	<b>524,281</b>

Each operating Division has committed to the use of alternative fuels as shown in Table 7, which would exceed 75% use of alternative fuels in AFVs and which is very aggressive. Since E.O. 13149 requires greater than 50% use of alternative fuels in AFVs, Table 6 represents the minimum that must be achieved to meet the goal agency-wide, while the operating divisions work to achieve their own goals.

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<sup>1</sup> HHS light duty vehicles, on average, will travel greater distances than a typical urban/suburban driving experience, e.g., range 5.0-8.0K miles annually. Instead, a typical HHS light duty vehicle will be used in the United States, and, in some cases at sites in foreign countries, in driving conditions over wide area, e.g., in the Indian Health Service environment. Similarly, FDA Consumer safety officer routes in central and the mid west parts of the US may handle three states. Therefore the average driving distances are on the order of 1.3-2.8K miles in an operating period.

The Program Support Center (PSC), the motor pool supporting the Office of the Secretary in SW Washington, the OIG for its administrative vehicles and the Administration on Children and Families in the Washington area will obtain E-85 from other Federal agency facilities (at the present time, NIH, Park Service and the Pentagon).

**Conclusion:**

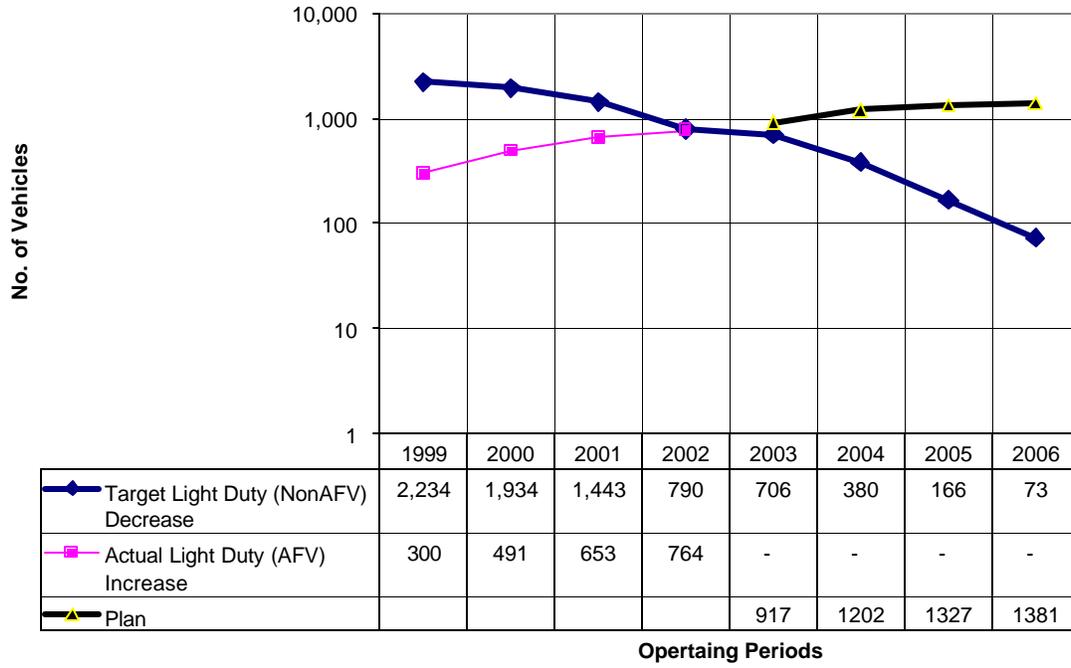
The Department has established aggressive goals leading to an effective attainment of the EPA Act and E.O. 13149 criteria for alternate fuel vehicles, increased use of alternate fuel in the AFVs in service, greater miles per gallon performance in the non-AFV units in service to achieve and exceed the 20% petroleum reduction goal leading to a healthier environment as well as less dependence on imported petroleum.

**Table 7- Estimate FY 2005 Petroleum Reduction by Strategy Approach**

Opdiv	Reduction by Strategy Approach			Total Petroleum Reduction in FY 2005	
	Use of Bio-diesel	Use of Alternative Fuels	Fuel Economy/ Fleet Efficiency Improvement	GGE	% Reduction
<b>ACF</b>		532	532	5,317	20%
CDC	0	14,194	12,014	26,208	38.0%
FDA	0	34,282	0	34,282	20.0%
HCFA	0	2,373	940	3,313	20.0%
HRSA	0	0	2,170	2,170	21.0%
IHS	109,350	796,353	177,555	1,083,258	25.0%
NCI-FCRC		8,531	4,970	13,501	35.0%
NIEHS	0	2,150	1,038	3,188	22.0%
NIH-OLM	18,330	7,050	5,990	31,370	35.0%
OIG	0	1,583	0	1,583	75.0%
PSC	1,286	997	1,000	3,283	26.0%
SW	0	2,591	0	2,591	N/A

HHS Total    **128,966**            **870,636**            **206,209**            **1,204,747**

**Alternate Fuel - Light Duty - Vehicle Acquisitions  
Target, Actual and Plan  
FY99 Through FY06**



**Figure 1**

