

Department of Veterans Affairs

Annual Vehicle Fleet Report on Alternative Fuel Vehicles

FY 2016

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I. Introduction

The Department of Veterans Affairs (VA) submits this report on progress towards achieving goals of the Energy Policy Act (EPAct) of 1992 and 2005.

VA met and exceeded the alternative fuel vehicles (AFV) acquisition and alternative fuel use requirements for the eleventh year in a row. VA continues to acquire AFVs and use alternative fuels in them where possible.

VA continues to use its Fleet Management Action Plan to address the ongoing challenge of acquisition and use of alternative fuel vehicles through education. Central Office fleet personnel conduct in-person and on-line training, and are working to develop a full complement of on-demand training. Vehicle acquisitions, operations and reporting are all part of this education and training.

These steps, together with other actions, will assist VA in achieving its primary goal of providing care for our Nation's Veterans and their families, while striving to achieve compliance with Federal mandates for efficient and effective use of the agency's fleet.

II. Compliance with AFV Acquisition Requirements

EPAct 1992 requires Federal agencies covered by this legislation to ensure that at least 75% of their relevant vehicle acquisitions are AFVs. The Department of Energy (DOE) is responsible for determining which Federal agencies are subject to this legislation based on the respective size of each agency's motor vehicle fleets and location of their vehicles relative to metropolitan statistical areas (MSAs). EPAct 1992 also directs agencies to publish information about their compliance with this acquisition requirement by the end of February each year.

In FY 2016, the total number of AFVs that VA acquired exceeded the 75% requirement in the EPAct 1992 (see Attachment A for details).

Specifically, VA:

- Acquired 2,912 light duty vehicles (LDVs), of which 2,318 were AFVs;
- Received 1,646 credits for these vehicles, after subtracting exempted vehicles,
- Received an additional 28 credits through the use of biodiesel, and
- Earned a total of 1,674 EPAct credits.

<u>Credits</u>. Federal fleets earn one credit for every bi- or flexible-fuel AFV acquired. Additional credits are earned for using neat (100 percent) biodiesel (B100) or B20 (20 percent biodiesel and 80 percent petroleum diesel), as well as for AFVs that operate exclusively on alternative fuel, or are zero emission vehicles.

<u>Vehicles</u>. Flexible-fuel vehicles (FFVs) with the capability to run on E85 or gasoline were the AFV of choice in FY 2016. Of the 2,318 AFVs that VA acquired in FY 2016, 1,813 were E85 FFVs. Most of the remaining vehicles were gasoline hybrids, although VA also acquired three compressed natural gas (CNG) vehicles, one plug-in hybrid, and 13 dedicated electric vehicles.

<u>Exemptions</u>. Of the 2,912 LDVs that VA acquired in FY 2016, 1,266 were considered exempt from compliance with EPAct. Exemptions are, in general, granted for fleet size, geographic location, use outside of an MSA, and use for law enforcement or as emergency/emergency response vehicles. The details of vehicle exemptions may be found in Attachment A, Table A1.

As a result of its AFV acquisitions in FY 2016, VA earned 1,646 AFV acquisition credits. With the additional credits for biodiesel use, this translates to 143 percent of its covered vehicle acquisitions. This is 68 percentage points higher than the EPAct acquisition requirement of 75 percent.

VA also anticipates meeting this requirement in future years. Attachments B and C to this report offer a detailed look at VA's FY 2017 planned acquisitions and FY 2018 projected acquisitions. Initial projections for FY 2017 and FY 2018 indicate that VA will exceed the alternative vehicle acquisition requirements for both years.

III. Compliance with Alternative Fuel Use in AFVs

EPAct 2005 Section 701 requires that Federal agencies with alternative fuel-capable vehicles must use alternative fuel when possible. Under Section 701, Federal agencies must request waivers from DOE and through the Federal Automotive Statistical Tool (FAST) for any alternative fuel-capable vehicles subject to EPAct 1992's acquisition requirements that do not have access to alternative fuels or for which such fuel is unreasonably expensive.

VA requested and received waivers for 2,589 vehicles due to E85 fuel not being available within a reasonable distance, determined by DOE as 5 miles or 15 minutes from the vehicle's garaged location.

Wherever possible, VA vehicles are using local fueling stations that offer alternative fuels. To that end, VA has pursued installation of E85 stations and now has approximately 60 operating E85 fueling stations at VA medical centers. Additional E85 stations are currently under construction to make E85 fuel available. VA is now focusing on locating electric vehicles (including plug-in hybrids) where other alternative fuels are not available.

In addition to traditional alternative fuel vehicles, VA has also acquired compressed natural gas (CNG), electric, gasoline hybrid and lean burn vehicles. The latter two types of these vehicles use gasoline rather than a special alternative fuel.

The table below presents fuel type details on FY 2015 and FY 2016 fuel data.

VA FY 2015 and FY 2016 Fuel Use Data

	FY 2015	FY 2016
	Gasoline Gallon	Equivalent (GGE)
Total Alternative Fuel Use	1,535,859	1,503,062
Total Covered Petroleum Use*	9,333,069	9,250,408
Total Fuel Use	10,868,928	10,753,470
% Alternative Fuel Use	14.1%	14.0%

^{*}Limited to domestic vehicles, less law enforcement, emergency/emergency response and armored vehicles

VA alternative fuel use in VA is down slightly due to the increased use of alternative fuel vehicles that use gasoline, such as gasoline hybrids and lean burn vehicles. VA continues to maintain a high percentage of alternative fuel use across its fleet. In FY 2016, alternative fuel comprised 14.0% of total VA vehicle fuel use. VA has also reduced its covered petroleum usage by 0.9% from FY 2015.

IV. Summary and Conclusions

In FY 2016, VA satisfied the alternative fuel vehicle acquisition and alternative fuel use requirements of the Energy Policy Acts of 1992 and 2005.

<u>Future Performance</u>. VA continues to implement its Fleet Management Action Plan. This provides a blueprint to improve the management and performance of the VA vehicle fleet, including alternative fuel use and petroleum reduction. The plan features construction of electric vehicle supply equipment, expansion of training for fleet managers, and use of annual utilization reports to right size the fleet while meeting agency mission and goals.

VA will continue to acquire all types of AFVs in an attempt to meet requirements. VA plans to increase the numbers of electric vehicles in its fleet, as well as CNG powered vehicles.

ATTACHMENT A

FY 2016 Actual VA Vehicle Acquisitions

Attachment A includes the following tables:

A1. 2016 Actual Light-Duty Vehicle Acquisitions and Exemptions

A2. 2016 Actual Alternative Fuel Vehicle Acquisition Detail

A3. 2016 Actual EPAct Acquisition Credits Summary

Table A1. Actual Light-Duty Vehicle Acquisitions and Exemptions

		Acquisitions		
	Leased	Purchased	Total	
Total Light-Duty Vehicle Acquisitions	2,806	106	2,912	
Fleet Exemptions: Fleet Size	0	0	0	
Fleet Exemptions: Foreign	0	0	0	
Fleet Exemptions: Geographic	254	24	278	
Fleet Exemptions: Non-MSA Operation	58	0	58	
Vehicle Exemptions: LE Vehicle	143	0	143	
Vehicle Exemptions: Non-covered Vehicle	0	2	2	
Vehicle Exemptions: Non-MSA Operation	779	6	785	
Total EPAct-Covered Vehicles	1,572	74	1,646	

Abbreviations/terminology used in tables:

4x2 = Two-wheel drive

4x4 = Four-wheel drive

AF = Alternative Fuel: Non-traditional vehicle fuel such as natural gas, bio-fuels, and electricity

AFV = Alternative Fuel Vehicle: Vehicle that operates on an alternative fuel BI = Bi-fuel: Two separate, but parallel, fuel systems; these fuels never mix CNG = Compressed Natural Gas: Natural gas compressed for storage in a tank

DE = Dedicated: Single fuel type

DSL = Diesel

E85 = E85 fuel: Fuel that is 85% ethanol and 15% gasoline

ELE = Electric: Powered by electricity

EPAct = Energy Policy Act

FF = Flex fuel: Two fuel types used by the same system. These fuels mix in the vehicle tank.

GAS = Gasoline: Gasoline containing less than 85% ethanol.

HD = Heavy duty

HY = Hybrid: Vehicle that uses an electric engine for operation under certain conditions, such as low speeds or to supplement a fuel powered engine

LD = Light duty

LE = Law Enforcement

MD = Medium Duty

MSA = Metropolitan Statistical Area: Areas defined by EPA

PH = Plug-in Hybrid: Hybrid vehicle that can be plugged in to external electric charging system.

SUV = Sport Utility Vehicle: Combination truck and passenger vehicle

ATTACHMENT A – continued

Table A2. Actual Alternative Fuel Vehicle Acquisition Detail

V.11.1		Τ	Δ	cquisitions		EPAct
Vehicle Type	Fuel	LE	Lease	Purchase	Total	Credits
Light Duty Vehicles						
Sedan/St Wgn Compact	E85 FF	No	439	1	440	440
Sedan/St Wgn Compact	E85 FF	Yes	10	0	10	0
Sedan/St Wgn Compact	GAS HY	No	259	0	259	259
Sedan/St Wgn Compact	GAS HY	Yes	2	0	2	0
Sedan/St Wgn Compact	GAS PH	No	1	0	1	1
Sedan/St Wgn Large	E85 FF	Yes	1	0	1	0
Sedan/St Wgn Midsize	E85 FF	No	14	2	16	16
Sedan/St Wgn Midsize	E85 FF	Yes	22	0	22	0
Sedan/St Wgn Midsize	GAS HY	No	0	1	1	1
Sedan/St Wgn Subcompact	E85 FF	No	436	0	436	436
Sedan/St Wgn Subcompact	E85 FF	Yes	9	0	9	0
Sedan/St Wgn Subcompact	ELE DE	No	11	0	11	11
Sedan/St Wgn Subcompact	GAS HY	No	197	0	197	197
Low-speed Vehicle	ELE DE	No	0	2	2	0
LD Minivan 4x2 (Cargo)	E85 FF	No	12	0	12	12
LD Minivan 4x2 (Passenger)	E85 FF	No	417	13	430	430
LD Minivan 4x2 (Passenger)	E85 FF	Yes	1	0	1	0
LD Other 4x2	CNG DE	No	0	3	3	3
LD Pickup 4x2	E85 FF	No	37	1	38	38
LD SUV 4x2	E85 FF	No	40	4	44	44
LD SUV 4x2	E85 FF	Yes	6	0	6	0
LD Van 4x2 (Cargo)	E85 FF	No	9	0	9	9
LD Van 4x2 (Passenger)	E85 FF	No	31	11	42	42
LD Minivan 4x4 (Passenger)	E85 FF	No	1	0	1	1
LD Pickup 4x4	E85 FF	No	17	1	18	18
LD Pickup 4x4	E85 FF	Yes	1	0	1	0
LD SUV 4x4	E85 FF	No	215	7	222	222
LD SUV 4x4	E85 FF	Yes	53	0	53	0
LD SUV 4x4	GAS HY	No	2	0	2	2
LD Van 4x4 (Passenger)	E85 FF	No	2	0	2	2
Medium Duty Vehicles						
MD Bus	E85 FF	No	4	4	8	8
MD Other	E85 FF	No	14	0	14	14
MD Pickup	CNG BI	No	1	0	1	1
MD Pickup	E85 FF	No	31	0	31	31
MD SUV	E85 FF	No	0	1	1	1
MD Van (Cargo)	E85 FF	No	17	0	17	17
MD Van (Passenger)	E85 FF	No	58	2	60	60
Heavy Duty Vehicles	•		•	•	l l	
HD Bus	CNG BI	No	1	0	1	1
HD Bus	DSL HY	No	1	0	1	1
Totals:	-	•	2,372	53	2,425	2,318

ATTACHMENT A – continued

Table A3. Actual EPAct Acquisition Credits Summary

Base AFV Acquisition Credits:	2,318
Zero Emission Vehicle (ZEV) Credits:	0
DEDICATED Light Duty AFV Credits:	0
DEDICATED Medium Duty AFV Credits:	0
DEDICATED Heavy Duty AFV Credits:	0
Biodiesel Fuel Usage Credits:	28
Total EPAct Credits:	2346
Overall EPAct Compliance Percentage:	143 %

ATTACHMENT B

FY 2017 Planned VA Vehicle Acquisitions

Attachment B includes the following tables:

- B1. Planned Light-Duty Vehicle Acquisitions and Exemptions (2017)
- B2. Planned Alternative Fuel Vehicle Acquisition Detail (2017)
- B3. Planned EPAct Acquisition Credits Summary (2017)

Table B1. Planned Light-Duty Vehicle Acquisitions and Exemptions (2017)

		Acquisitions			
	Leased	Purchased	Total		
Total Light-Duty Vehicle Acquisitions	1,888	103	1,991		
Fleet Exemptions: Fleet Size	0	0	0		
Fleet Exemptions: Foreign	0	0	0		
Fleet Exemptions: Geographic	153	4	157		
Fleet Exemptions: Non-MSA Operation	11	0	11		
Vehicle Exemptions: LE Vehicle	70	3	73		
Vehicle Exemptions: Non-covered Vehicle	0	1	1		
Vehicle Exemptions: Non-MSA Operation	522	13	535		
Total EPAct-Covered Vehicles	1,132	82	1,214		

Abbreviations/terminology used in tables:

4x2 = Two-wheel drive

4x4 = Four-wheel drive

AF = Alternative Fuel: Non-traditional vehicle fuel such as natural gas, bio-fuels, and electricity

AFV = Alternative Fuel Vehicle: Vehicle that operates on an alternative fuel BI = Bi-fuel: Two separate, but parallel, fuel systems; these fuels never mix CNG = Compressed Natural Gas: Natural gas compressed for storage in a tank

DE = Dedicated: Single fuel type

DSL = Diesel

E85 = E85 fuel: Fuel that is 85% ethanol and 15% gasoline

ELE = Electric: Powered by electricity

EPAct = Energy Policy Act

FF = Flex fuel: Two fuel types used by the same system. These fuels mix in the vehicle tank.

GAS = Gasoline: Gasoline containing less than 85% ethanol.

HD = Heavy duty

HY = Hybrid: Vehicle that uses an electric engine for operation under certain conditions, such as low speeds or to supplement a fuel powered engine

LD = Light duty

LE = Law Enforcement

MD = Medium Duty

MSA = Metropolitan Statistical Area: Areas defined by EPA

PH = Plug-in Hybrid: Hybrid vehicle that can be plugged in to external electric charging system.

SUV = Sport Utility Vehicle: Combination truck and passenger vehicle

ATTACHMENT B - continued

Table B2. Planned Alternative Fuel Vehicle Acquisition Detail (2017)

Vohiola Time	Fuel	, =	Acquisitions			EPAct
Vehicle Type	Fuel	LE	Lease	Purchase	Total	Credits
Light Duty Vehicles						
Sedan/St Wgn Compact	E85 FF	No	267	0	267	267
Sedan/St Wgn Compact	E85 FF	Yes	17	0	17	0
Sedan/St Wgn Compact	GAS HY	No	113	7	120	120
Sedan/St Wgn Compact	GAS HY	Yes	1	0	1	0
Sedan/St Wgn Large	E85 FF	Yes	1	0	1	0
Sedan/St Wgn Midsize	E85 FF	No	57	1	58	58
Sedan/St Wgn Midsize	E85 FF	Yes	8	1	9	0
Sedan/St Wgn Midsize	GAS HY	No	7	0	7	7
Sedan/St Wgn Subcompact	E85 FF	No	218	0	218	218
Sedan/St Wgn Subcompact	GAS HY	No	54	0	54	54
Sedan/St Wgn Subcompact	GAS PH	No	2	0	2	2
Low-speed Vehicle	ELE DE	No	0	1	1	0
LD Minivan 4x2 (Cargo)	E85 FF	No	11	0	11	11
LD Minivan 4x2 (Passenger)	E85 FF	No	276	4	280	280
LD Minivan 4x2 (Passenger)	E85 FF	Yes	4	0	4	0
LD Minivan 4x2 (Passenger)	GAS AF	No	1	0	1	1
LD Other 4x2	CNG DE	No	5	0	5	5
LD Pickup 4x2	E85 FF	No	16	0	16	16
LD Pickup 4x2	E85 FF	Yes	5	0	5	0
LD Pickup 4x2	GAS HY	No	1	0	1	1
LD SUV 4x2	E85 FF	No	47	12	59	59
LD SUV 4x2	E85 FF	Yes	20	0	20	0
LD SUV 4x2	GAS HY	No	4	6	10	10
LD Van 4x2 (Cargo)	E85 FF	No	4	0	4	4
LD Van 4x2 (Passenger)	E85 FF	No	27	7	34	34
LD Minivan 4x4 (Passenger)	E85 FF	No	5	0	5	5
LD Pickup 4x4	CNG BI	No	5	0	5	5
LD Pickup 4x4	E85 FF	No	12	0	12	12
LD SUV 4x4	E85 FF	No	120	1	121	121
LD SUV 4x4	E85 FF	Yes	14	0	14	0
LD SUV 4x4	GAS HY	No	9	0	9	9
LD Van 4x4 (Cargo)	E85 FF	No	3	0	3	3
LD Van 4x4 (Passenger)	E85 FF	No	9	2	11	11
Medium Duty Vehicles						
MD Bus	E85 FF	No	2	3	5	5
MD Other	E85 FF	No	2	0	2	2
MD Pickup	E85 FF	No	5	0	5	5
MD Pickup	E85 FF	Yes	0	1	1	0
MD SUV	E85 FF	No	7	0	7	7
MD SUV	E85 FF	Yes	1	0	1	0
MD Van (Cargo)	E85 FF	No	11	0	11	11
MD Van (Passenger)	E85 FF	No	62	4	66	66
MD Van (Passenger)	GAS HY	No	1	1	2	2

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ATTACHMENT B – continued

Heavy Duty Vehicles						
HD Bus	CNG DE	No	1	0	1	1
HD	DSL HY	No	1	0	1	1
Totals:			1,436	51	1,487	1,413

Table B3. Planned EPAct Acquisition Credits Summary (2017)

Base AFV Acquisition Credits:	1,413
Zero Emission Vehicle (ZEV) Credits:	0
DEDICATED Light Duty AFV Credits:	0
DEDICATED Medium Duty AFV Credits:	0
DEDICATED Heavy Duty AFV Credits:	0
Biodiesel Fuel Usage Credits:	72
Total EPAct Credits:	1,485
Overall EPAct Compliance Percentage:	122 %

ATTACHMENT C

FY 2018 PROJECTED VA VEHICLE ACQUISITIONS

Attachment C includes the following tables:

- C1. Projected Light-Duty Vehicle Acquisitions and Exemptions (2018)
- C2. Projected Alternative Fuel Vehicle Acquisition Detail (2018)
- C3. Projected EPAct Acquisition Credits Summary (2018)

C1. Projected Light-Duty Vehicle Acquisitions and Exemptions (2018)

	Acquisitions		
	Leased	Purchased	Total
Total Light-Duty Vehicle Acquisitions	2,490	117	2,607
Fleet Exemptions: Fleet Size	0	0	0
Fleet Exemptions: Foreign	0	0	0
Fleet Exemptions: Geographic	254	3	257
Fleet Exemptions: Non-MSA Operation	23	0	23
Vehicle Exemptions: LE Vehicle	100	4	104
Vehicle Exemptions: Non-covered Vehicle	0	0	0
Vehicle Exemptions: Non-MSA Operation	710	16	726
Total EPAct-Covered Vehicles	1,403	94	1,497

Abbreviations/terminology used in tables:

4x2 = Two-wheel drive

4x4 = Four-wheel drive

AF = Alternative Fuel: Non-traditional vehicle fuel such as natural gas, bio-fuels, and electricity

AFV = Alternative Fuel Vehicle: Vehicle that operates on an alternative fuel BI = Bi-fuel: Two separate, but parallel, fuel systems; these fuels never mix CNG = Compressed Natural Gas: Natural gas compressed for storage in a tank

DE = Dedicated: Single fuel type

DSL = Diesel

E85 = E85 fuel: Fuel that is 85% ethanol and 15% gasoline

ELE = Electric: Powered by electricity

EPAct = Energy Policy Act

FF = Flex fuel: Two fuel types used by the same system. These fuels mix in the vehicle tank.

GAS = Gasoline: Gasoline containing less than 85% ethanol.

HD = Heavy duty

HY = Hybrid: Vehicle that uses an electric engine for operation under certain conditions, such as low speeds or to supplement a fuel powered engine

LD = Light duty

LE = Law Enforcement

MD = Medium Duty

MSA = Metropolitan Statistical Area: Areas defined by EPA

PH = Plug-in Hybrid: Hybrid vehicle that can be plugged in to external electric charging system.

SUV = Sport Utility Vehicle: Combination truck and passenger vehicle

ATTACHMENT C – continued

Table C2. Projected Alternative Fuel Vehicle Acquisition Detail (2018)

-	Ι	Τ	-	cquisition	s	EPAct
Vehicle Type	Fuel	LE	Lease	Purchase	Total	Credits
Light Duty Vehicles				<u></u>		
Sedan/St Wgn Compact	E85 FF	No	137	0	137	137
Sedan/St Wgn Compact	E85 FF	Yes	15	0	15	0
Sedan/St Wgn Compact	GAS HY	No	326	0	326	326
Sedan/St Wgn Midsize	E85 FF	No	65	2	67	67
Sedan/St Wgn Midsize	E85 FF	Yes	23	1	24	0
Sedan/St Wgn Midsize	GAS HY	No	9	0	9	9
Sedan/St Wgn Subcompact	E85 FF	No	371	1	372	372
Sedan/St Wgn Subcompact	GAS HY	No	18	0	18	18
LD Minivan 4x2 (Cargo)	E85 FF	No	13	0	13	13
LD Minivan 4x2 (Passenger)	CNG DE	No	5	0	5	5
LD Minivan 4x2 (Passenger)	E85 FF	No	428	5	433	433
LD Minivan 4x2 (Passenger)	E85 FF	Yes	4	0	4	0
LD Pickup 4x2	E85 FF	No	40	1	41	41
LD Pickup 4x2	E85 FF	Yes	4	0	4	0
LD Pickup 4x2	GAS HY	No	2	0	2	2
LD SUV 4x2	E85 FF	No	56	7	63	63
LD SUV 4x2	E85 FF	Yes	21	0	21	0
LD SUV 4x2	GAS HY	No	14	10	24	24
LD Van 4x2 (Cargo)	E85 FF	No	10	0	10	10
LD Van 4x2 (Passenger)	E85 FF	No	27	13	40	40
LD Pickup 4x4	E85 FF	No	18	1	19	19
LD SUV 4x4	E85 FF	No	101	3	104	104
LD SUV 4x4	E85 FF	Yes	26	0	26	0
LD SUV 4x4	GAS AF	No	1	0	1	1
LD SUV 4x4	GAS HY	No	41	0	41	41
LD Van 4x4 (Cargo)	E85 FF	No	1	0	1	1
LD Van 4x4 (Passenger)	E85 FF	No	8	0	8	8
Medium Duty Vehicles	-	•	-			
MD Bus	E85 FF	No	0	3	3	3
MD Other	E85 FF	No	14	0	14	14
MD Pickup	CNG BI	No	1	0	1	1
MD Pickup	E85 FF	No	23	0	23	23
MD Pickup	E85 FF	Yes	0	1	1	0
MD SUV	E85 FF	No	1	0	1	1
MD Van (Cargo)	E85 FF	No	23	0	23	23
MD Van (Passenger)	E85 FF	No	70	20	90	90
Totals:			1,916	68	1,984	1,889

ATTACHMENT C – continued

Table C3. Projected EPAct Acquisition Credits Summary (2017)

Base AFV Acquisition Credits:	1,889
Zero Emission Vehicle (ZEV) Credits:	0
DEDICATED Light Duty AFV Credits:	0
DEDICATED Medium Duty AFV Credits:	0
DEDICATED Heavy Duty AFV Credits:	0
Biodiesel Fuel Usage Credits:	72
Total EPAct Credits:	1,961
Overall EPAct Compliance Percentage:	131 %