

U.S. Postal Service Fiscal Year 2020 Fleet Alternative Fuel Vehicle Program Report February 15, 2021

This report presents data on alternative fuel vehicles (AFVs) acquired by the United States Postal Service, alternative fuel use, and petroleum fuel savings in fiscal year 2020. The report complies with the Energy Policy Act of 2005.

FY 2020 AFV Acquisition Summary

| Actual EPO Act Acquisition Credits Summary | |
|----------------------------------------------------|------------|
| Base AFV Acquisition Credits: | 14 |
| 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 and Renewable Diesel Fuel Usage Credits: | 101 |
| Total EPO Act Credits: | 115 |
| Overall EPO Act Compliance Percentage: | 2% |

Energy Legislation and Executive Orders

On August 8, 2005, President Bush signed the Energy Policy Act of 2005 (EPO Act). EPO Act requires that 75% of all covered light-duty federal fleet vehicle acquisitions must be AFVs. Certain types of emergency, law enforcement, and national defense vehicles are exempt from these requirements.

EPO Act Section 701 requires federal fleets to use alternative fuels in dual-fuel vehicles acquired under the EPO Act 1992 programs unless the Secretary of Energy approves a waiver. Criteria for a waiver include: alternative fuel is not reasonably available to the fleet or the cost of alternative fuel is unreasonably more expensive than conventional fuel.

In addition, EPO Act allows one alternative fuel vehicle acquisition credit for every 450 gallons of neat biodiesel fuel consumed or 2,250 gallons of B20 (20% biodiesel and 80% regular diesel). Biodiesel credits may fulfill up to 50 percent of annual EPO Act requirements. The head of each Federal agency and independent establishment must also prepare and submit a report to Congress outlining its AFV acquisitions and future plans by February 15th each year.

In January 2008, the National Defense Authorization Act was signed into public law by President Bush. The Act amends the 2005 Energy Policy Act allowing the acquisition of a broader array of alternative fuel vehicles which includes hybrid and fuel-efficient motor vehicles.

The Postal Service is a self-supporting independent establishment of the Executive Branch that funds operations from the revenue generated by the sales of products and services, not taxpayer subsidies received through the Congressional appropriations process. To gain financial stability, the Postal Service is taking aggressive steps to increase efficiencies in our network.

U.S. Postal Service Approach

To achieve compliance with the legislative mandates of EPCa and the Energy Independence and Security Act 2007, the Postal Service's strategy for vehicle acquisitions is as follows:

- Mail hauling vehicle purchases will be AFVs, provided that mission-appropriate and cost-effective vehicles are made available by manufacturers. The Postal Service will continue to centrally purchase all delivery vehicles.
- Non-mail-hauling vehicles will be AFVs, provided that the AFV complies with operational requirements.
- The Postal Service will continue to use biodiesel in its diesel vehicles when it is cost comparable. In FY2020, 51,429 gasoline gallons equivalent (GGE) of neat biodiesel were used, earning the Postal Service a total of 114 EPCa credits. Biodiesel credits may fulfill up to 50 percent of annual EPCa requirements. The Postal Service had 101 biodiesel credits that were applied to its AFV acquisition requirement.

The Postal Service faces some challenges in reporting on its acquisitions as it does not purchase delivery vehicles on a regular schedule. Moreover, since the majority of delivery vehicles are purpose-built, right-hand-drive vehicles, the Postal Service purchases vehicles in large quantities to attain a favorable unit price, as shown in Table 1. The uneven stream of delivery vehicle purchases can cause large fluctuations in the absolute numbers of acquisitions that form the basis for EPCa percentage calculation.

Table 1. U.S. Postal Service Vehicle Acquisition Summary

| Year | Vehicle Total | *Vehicle Type | Fuel Type | | | | | |
|------|---------------|---------------|------------|-------|-----|----------|--------|-----|
| | | | Gas/Diesel | E85 | CNG | Electric | Hybrid | LPG |
| 2015 | 5,347 | LD | 112 | 3,723 | | | 19 | |
| | | MD | 190 | 679 | | | | |
| | | HD | 624 | | | | | |
| 2016 | 15,875 | LD | 1,425 | 172 | | | 2 | |
| | | MD | 11,381 | 2,109 | | | | |
| | | HD | 786 | | | | | |
| 2017 | 9,618 | LD | 879 | 113 | | 5 | 958 | |
| | | MD | 6,181 | 247 | | | | |
| | | HD | 1,235 | | | | | |
| 2018 | 8,509 | LD | 171 | 142 | | | 14 | |
| | | MD | 7,126 | 21 | | 1 | 35 | |
| | | HD | 988 | | 1 | | 10 | |
| 2019 | 4,061 | LD | 125 | 129 | | | 5 | |
| | | MD | 1,361 | 14 | | 16 | | |
| | | HD | 2,411 | | | | | |
| 2020 | 10,339 | LD | 7,081 | 38 | | | 1 | |
| | | MD | 1,519 | 1 | 1 | | | |
| | | HD | 1,694 | | | 4 | | |

*LD – Light Duty
 MD – Medium Duty
 HD – Heavy Duty

FY2020 U.S. Postal Service Fleet Compliance

The Postal Service leases and purchases both covered and non-covered light duty vehicles. In FY2020 7,120 light duty vehicles were acquired and 175 of those vehicles were exempted because they are law enforcement vehicles, and none were exempted because they were operated primarily outside of a covered Metropolitan Statistical Area (MSA). The 6,945 were covered vehicles under EAct or the National Defense Authorization Act. The Postal Service also gained 101 credits for biodiesel fuel use and credit of 14 for base AFV acquisitions. The combination of AFV acquisitions and biodiesel use earned the Postal Service a grand total of 115 AFV credits in FY2020. As a result, the Postal Service earned an EAct percentage of 2%, as shown in Table 2.

Table 2. U.S. Postal Service’s Acquisition of AFVs in FY2020

| EAct-Covered Acquisitions | Total AFV Acquisitions (including credits) | EAct Percentage |
|---------------------------|--------------------------------------------|-----------------|
| 6,945 | 115 | 2% |

FY2020 U.S. Postal Service Fleet Fuel Use

Table 3 presents FY2020 fuel consumption data by fuel type for the Postal Service's vehicle fleet. It includes fuel consumption for the 229,633 Postal Service vehicles.

Table 3. U.S. Postal Service Fuel Use in FY2020

| Fuel Type | GGE |
|---------------------------------------|--------------------|
| From Biodiesel (B100) | 51,429 |
| From CNG | 5,175 |
| From E-85 | 303,800 |
| From Electric | 858 |
| From Propane | 34,300 |
| Total Alternative Fuel Use | 395,561 |
| From Gasoline | 170,146,420 |
| From Diesel | 34,002,355 |
| Total Non-Alternative Fuel Use | 204,148,775 |
| Total Vehicle Fuel Use | 204,544,336 |

Petroleum Savings

The Postal Service is unique among Federal entities covered by EPCa. The mandate for providing universal delivery service requires that mail distribution and delivery network constantly adapt to meet the needs of millions of new households and businesses across the country. As a business entity that operates within a highly competitive environment, the Postal Service must also remain acutely sensitive to its customers' needs for affordable service.

The Postal Service's mandate to serve the daily mail delivery needs of growing communities across the country is met largely through its delivery vehicle fleet. The vast majority of fuel used for daily mail delivery is purchased from local merchants using the Voyager Fleet Credit Card. Letter carriers refuel their vehicles at locations along their routes when possible to minimize work hours and added fuel consumption associated with traveling to more distant fueling points.

The Postal Service continues to increase the efficiency of its delivery network by regularly reviewing transportation networks and consolidating or eliminating trips where appropriate. These transportation efficiency actions reduce fuel consumption, consistent with Federal goals. In addition, mail automation and management initiatives have reduced the absolute number of delivery routes, avoided the creation of routes to support new delivery growth, and increased the average number of deliveries served by individual carriers.

The nature of postal operations, including the unavoidable "stop-and-go" duty cycle of the routes, makes it difficult to obtain significant fuel savings with conventional vehicles. However new technologies such as hybrid electric and dedicated electric vehicles have emerged which may provide improved gas mileage, especially in stop-and-go situations. The Postal Service continues to partner with manufacturers to test this technology.

The United States Postal Service has an extensive fleet of vehicles which at the end of fiscal year 2020 included approximately 226,000 purchased and leased vehicles, including approximately 141,000 older right-hand drive (RHD) vehicles, as well as multiple sized and alternative fuel vehicles. Our goal is to

obtain and operate vehicles that will help us provide reliable and efficient delivery service for customers while meeting the needs of our employees to best do their jobs safely.

The Postal Service is currently preparing an Environmental Impact Statement under the National Environmental Policy Act (NEPA) to award a 10-year contract to Oshkosh Defense, based in Oshkosh, Wisconsin, to manufacture a new generation of U.S.-built delivery vehicles that will drive the most dramatic modernization of the USPS fleet in three decades.

Contingent on the Postal Service's satisfaction with the award upon completion of the NEPA process, Oshkosh Defense will finalize the production design of the next-generation delivery vehicle (NGDV), 50,000 to 165,000 purpose-built, right-hand-drive vehicles for mail and package delivery will be assembled in the United States over 10 years. The vehicles will be equipped with either fuel-efficient internal combustion engines or battery electric powertrains and can be retrofitted to keep pace with advances in electric vehicle technologies.

If approved, the final contract would be the first part of a multi-billion-dollar 10-year effort to replace the Postal Service's delivery vehicle fleet, one of the world's largest.

Alternative Fuel Use

The consumption of 303,800 GGE of E85 led alternative fuel usage in FY2020. The fleet also consumed:

- 51,429 GGE Neat biodiesel
- 5,175 GGE CNG
- 34,300 GGE LPG
- 858 GGE Electricity

In total, the fleet consumed 395,561 GGEs of alternative fuel.

The Postal Service has made a concerted effort to increase alternative fuel usage without compromising our mission by educating employees on EPA's Act.

The Postal Service partnered with the Department of Energy (DOE) Federal Energy Management Program (FEMP) to populate the Fleet Sustainability Dashboard (FleetDASH) with Postal Service vehicle and fuel use information. The purpose of this partnership is to drive purchases of renewable fuels when available, at the same cost or less than the cost of conventional fuel, to ensure the Postal Service is in compliance with federal laws requiring the use of sustainable fuels.

FleetDASH tracks vehicle fueling information, based on a feed of Voyager credit card data, identifying where Postal Service vehicles are refueled, then analyzes the purchases to see if alternative fuel is available within a designated radius of the original purchase. This tool helps to identify "Missed Opportunities." Missed Opportunities are instances where conventional fuel was purchased by a driver using an alternative fuel capable vehicle at a location where the alternative fuel is available and could have been purchased.

The Missed Opportunities Report is distributed quarterly to Area leadership with the goal of increasing purchases of alternative fuels.

The potential to utilize E-85 and other alternative fuels is limited by their commercial availability. Like the general public, the Postal Service relies on local commercial infrastructure to supply convenient and competitively-priced fuel for its delivery fleet. If alternative fuel locations are not conveniently located and competitively priced, the Postal Service cannot access and utilize them in its delivery fleet. While the Postal Service provides information on AFV deployment to interested suppliers and industry advocates to assist in development of fuel infrastructure, the Postal Service fleet depends on public alternative fuel infrastructure to purchase alternative fuels using fleet cards. These card systems are excellent at recording the financial aspects of the fuel transactions but fall short of accurately recording the quantity

and type of fuel purchased. This impacts the Postal Service's ability to report all alternative fuel usage accurately.

Unlike other parts of the federal government, the Postal Service does not receive Congressional appropriations for its fuel costs. Instead, our fuel costs are funded by sales of postage and services, and we rely on local commercial infrastructure to supply convenient and competitively-priced fuel. As a self-funded entity operating within a highly competitive business environment, the price of alternative fuel on a GGE basis is particularly significant to the Postal Service. Controlled testing of our flexible fuel delivery vehicles has documented a 27% reduction in fuel efficiency when operated on E-85 fuel due to its reduced energy content relative to gasoline. From the standpoint of our business and ratepayer concerns, alternative fuel must be both very conveniently located in order to avoid undue carrier work-hour expense associated with refueling, and competitively priced on a GGE basis.

Appendix A

2020 AFV Report

| 1. Actual Light-Duty Vehicle Acquisitions and Exemptions | | | | | | |
|----------------------------------------------------------|---------------------|--------------|--------------|----------|-------|--------------|
| | Acquisitions | | | | | |
| | Leased | Purchased | Total | | | |
| Total Light-Duty Vehicle Acquisitions | 100 | 7,020 | 7,120 | | | |
| Exemption: Fleet Size | 0 | 0 | 0 | | | |
| Exemption: Foreign | 0 | 0 | 0 | | | |
| Exemption: Geographic | 0 | 0 | 0 | | | |
| Exemption: LE Vehicle | 0 | 175 | 175 | | | |
| Exemption: Non-covered Vehicle | 0 | 0 | 0 | | | |
| Exemption: Non-MSA Operation | 0 | 0 | 0 | | | |
| Total EAct-Covered Vehicles | 100 | 6,845 | 6,945 | | | |
| 2. Actual Alternative Fuel Vehicle Acquisition Detail | | | | | | |
| Vehicle Type | Fuel | LE | Acquisitions | | | EAct Credits |
| | | | Lease | Purchase | Total | |
| <i>Light Duty Vehicles</i> | | | | | | |
| Sedan/St Wgn Midsize | GAS/E85 FF | Yes | 0 | 2 | 2 | 0 |
| LD Minivan 4x2 (Cargo) | GAS/E85 FF | No | 0 | 1 | 1 | 1 |
| LD Minivan 4x2 (Cargo) | GAS/E85 FF | Yes | 0 | 1 | 1 | 0 |
| LD Minivan 4x2 (Passenger) | GAS/E85 FF | No | 2 | 0 | 2 | 2 |
| LD Pickup 4x2 | GAS/E85 FF | No | 2 | 2 | 4 | 4 |
| LD Pickup 4x2 | GAS/E85 FF | Yes | 0 | 12 | 12 | 0 |
| LD SUV 4x2 | GAS HY ³ | Yes | 0 | 1 | 1 | 0 |
| LD SUV 4x2 | GAS/E85 FF | Yes | 0 | 2 | 2 | 0 |
| LD Van 4x2 (Passenger) | GAS/E85 FF | Yes | 0 | 1 | 1 | 0 |
| LD Pickup 4x4 | GAS/E85 FF | Yes | 0 | 3 | 3 | 0 |
| LD SUV 4x4 | GAS/E85 FF | No | 0 | 1 | 1 | 1 |
| LD SUV 4x4 | GAS/E85 FF | Yes | 0 | 9 | 9 | 0 |
| <i>Medium Duty Vehicles</i> | | | | | | |
| MD Other | GAS/E85 FF | No | 1 | 0 | 1 | 1 |
| MD Van (Cargo) | CNG DE | No | 1 | 0 | 1 | 1 |
| <i>Heavy Duty Vehicles</i> | | | | | | |

| | | | | | | |
|-----------------------------------------------------------------|--------|----|----------|-----------|-----------|------------|
| HD | ELE DE | No | 0 | 4 | 4 | 4 |
| Totals: | | | 6 | 39 | 45 | 14 |
| 3. Actual EPA Act Acquisition Credits Summary | | | | | | |
| Base AFV Acquisition Credits: | | | | | | 14 |
| 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 and Renewable Diesel Fuel Usage Credits: ⁴ | | | | | | 101 |
| Total EPA Act Credits: | | | | | | 115 |
| Overall EPA Act Compliance Percentage: | | | | | | 2 % |