



The United States Postal Service Ethanol & Bio-Diesel Programs

**The Alternative Clean Transportation Conference
Long Beach, California
May 6, 2014**

One Day in the Life of the U.S. Postal Service...

\$ 222,000,000	• Revenue received
\$ 180,000,000	• Salaries and benefits paid to postal employees
523,000,000	• Mail pieces processed and delivered
727,167	• Packages picked up through Package Pickup
4,000,000	• Miles driven by letter carriers and truck drivers
3,600,000	• People who visit <i>usps.com</i>
157,000	• Click-N-Ship labels printed
3,200,000	• Customers served at more than 31,000 retail locations
\$ 0	• Tax dollars received for operating the Postal Service

Overview Of Fleet

Biodiesel

Ethanol

Future Plan



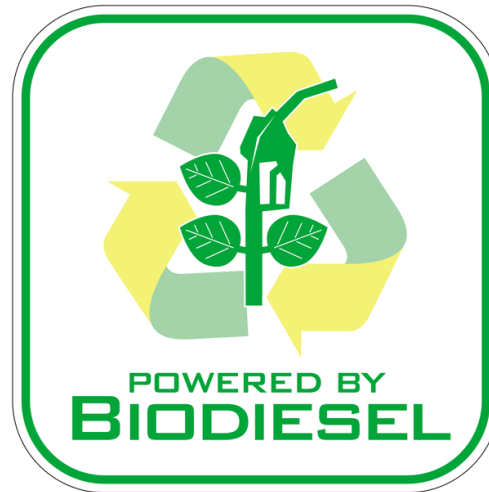
US Postal Service	211,684
Top 5 Vehicle Commercial Fleets	Vehicles
United Parcel Service:	89,414
AT & T	60,318
FedEx	47,500
Comcast	35,725
Verizon	30,445

	Vehicles
Truck Tractors	1,775
Spotter Tractors	375
Trailers (Postal Owned)	3,655
Cargo Vans (7, 9, 11-tons)	2,136
Mixed Delivery & Collection (1 & 2-tons)	6,749
Local Mail Delivery Vehicles	
Long Life Vehicles (LLVs)	141,715
Flexible Fuel Vehicles (FFVs)	21,188
Minivans	20,300
Other (Maintenance, Plant & Admin)	13,791

	Vehicles
Non-alternative Vehicles	169,115
E-85/Gas	40,979
CNG	593
Hybrid	922
Propane	31
Electric	43
Fuel Cell	1
Total	211,684

Postal Service fleet fuel use in GGE	
Ethanol	417,920
Biodiesel (B100)	311,066
CNG	63,670
Electric	2,973
Propane	18,084
Total alternative fuel use	813,713
From gasoline	126,053,965
From diesel	30,636,523
Total non-alternative fuel use	156,690,488
Total vehicle fuel use	157,504,201

Year	Consumption (GGEs)
2010	280,380
2011	247,469
2012	334,190
2013	311,066



Biodiesel is used to assist the USPS in meeting EPA's federal fleet requirements.

The Postal Service recognizes the benefits of biodiesel as a renewable, alternative fuel to diesel. We continue to use biodiesel in diesel vehicles when it is cost comparable

USPS Biodiesel usage started in 2000

Used in USPS heavy-duty vehicles such as cargo vans, spotter and tractors.



Biodiesel usage is voluntary in the field.

USPS Engineering issued Technical Guidelines to the field for biodiesel usage

In late 2007, fuel filter clogging on the Mack tractor has contributed to the discontinued use of biodiesel in Detroit and St. Louis due to increased field service calls.

The USPS had no problems with the cargo vans operating on biodiesel. Since then, with newer vehicles and more stringent ASTM fuel specifications, we have had very few problems with biodiesel utilization.

In 2005, USPS Engineering and DOE had the opportunity to analyze engines and fuel systems from decommissioned vehicles which had been operating on B20 in Miami, FL since 2001.

Results: All engines exhibited normal wear for their mileage, independent of fuel type.





Potential engine tear down analysis at end of life (2014)





The Postal Service has encouraged the field to increase the use of ethanol if the infrastructure is conveniently located and the fuel cost is competitively priced.

Annual Ethanol Consumption

Year	Consumption (GGEs)
2010	713,435
2011	496,311
2012	548,510
2013	417,920

USPS

Ethanol usage started in 1996

6 Ford Windstar converted to ethanol operation

**Major
acquisitions**

**21,275 Right-Hand Drive FFVs (Ford Explorer chassis)
between 1999-2001**

**9,231 Flex-fuel Minivans (Chrysler Caravans) between 2003-
2005**

5,856 Flex-fuel Minivans (Chevrolet Uplanders) in 2007

1352 Flex-fuel Minivans (Chrysler Caravans) in 2008



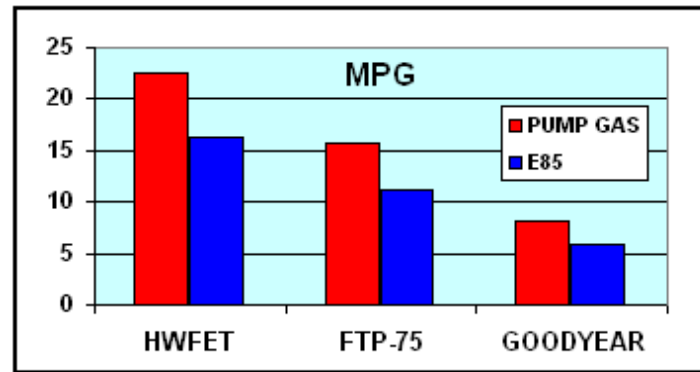
In 2013, the USPS launched an initiative in Minnesota to add distinctive yellow caps to our E-85 vehicles.

Deployed E-85 vehicles in the Midwest areas where ethanol infrastructure is available and fuel cost is reasonable.

Fuel Economy: reduced by 28% on highway driving and 29% in city driving.

Reason: due to the effect of lower energy (one-third less) content on E-85 per gallon equivalent.

MPG	Highway	City	Curbline
GASOLINE	22.45	15.71	8.14
E85	16.21	11.21	5.78



Continue to support ethanol and biodiesel vehicles by working with the field to resolve any technical issues and encourage the use of fuel whenever the infrastructure is ready and the cost is reasonable. Continue to work with vehicle industry and other private fleets as well as other agencies such as DOE, DoD,..

Explore and support effort to convert third-party vehicle fleets (USPS contractors) to alternative fuels mainly LNG and biodiesel.

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