## USPS eLLV Conversion Fleet

Fleet Location: Washington D.C Metro Area
Reporting period: June 2011

Number of Vehicles: 5
Number of vehicle days driven: 27
USPS eLLV Energy Consumption

| All Trips Combined |  |
| :--- | ---: |
| Overall DC electrical energy consumption (DC Wh/mi) | 452 |
| Overall AC electrical energy consumption (AC Wh/mi) | 646 |
| Average operating electricity cost (cents per mile) $)^{2}$ | 7.2 |
| Total number of trips | 639 |
| Total distance traveled (mi) | 394 |
| Average Trip Distance (mi) | 0.6 |

Stop \& Go Trips ( $>5$ stops/mile)

| DC electrical energy consumption (DC Wh/mi) | 505 |
| :--- | ---: |
| Number of trips | 601 |
| Distance traveled (mi) | 245 |
| Percent of total distance traveled (\%) | $62 \%$ |
| Average Trip Distance (mi) | 0.4 |
| Average Driving Speed (mph) | 5.4 |
| Average Stops per mile | 34.8 |
| Percent of Regen Braking Energy Recovery (\%) | $15 \%$ |

City Trips ( $\leq 5$ stops/mile \& < 37 mph avg)

| DC electrical energy consumption (DC Wh/mi) | 373 |
| :--- | ---: |
| Number of trips | 35 |
| Distance traveled (mi) | 124 |
| Percent of total distance traveled (\%) | $31 \%$ |
| Average Trip Distance (mi) | 3.5 |
| Average Driving Speed (mph) | 23.0 |
| Average Stops per mile | 3.7 |
| Percent of Regen Braking Energy Recovery (\%) | $13 \%$ |

Highway Trips ( $\leq 5$ stops/mile \& $\geq 37 \mathrm{mph}$ avg)

| DC electrical energy consumption (DC Wh/mi) | 319 |
| :--- | ---: |
| Number of trips | 3 |
| Distance traveled (mi) | 25 |
| Percent of total distance traveled (\%) | $6 \%$ |
| Average Trip Distance (mi) | 8.5 |
| Average Driving Speed (mph) | 39.5 |
| Average Stops per mile | 3.3 |
| Percent of Regen Braking Energy Recovery (\%) | $10 \%$ |



Stop \& Go Trips Energy (kWh)


City Trips Energy (kWh)


Highway Trips Energy (kWh)



1. Calculation based upon average of the vehicles' roundtrip charging efficiency ( $70 \%$ )
2. From www.eia.gov, the national average cost of electricity is $\$ 0.112$ per AC kWhr. The gasoline powered LLV fleet averages 10 mpg .

NOTE: A trip is defined as all vehicle operation between key on and key off

