## Ford Escape Advanced Research Fleet

Number of vehicles: 19
Reporting period: June 2012

## Date range of data received: 06/01/2012 to 06/30/2012 <br> Number of vehicle days driven: 240

## All Trips Combined

| Overall gasoline fuel economy (mpg) | 36 |
| :---: | :---: |
| Overall $A C$ electrical energy consumption (AC Wh/mi) ${ }^{1}$ | 97 |
| Overall DC electrical energy consumption (DC Wh/mi) ${ }^{2}$ | 67 |
| Total number of trips | 1,429 |
| Total distance traveled (mi) | 14,676 |

Trips in Charge Depleting (CD) mode ${ }^{3}$

| Gasoline fuel economy (mpg) | 46 |
| :--- | ---: |
| DC electrical energy consumption (DC Wh/mi) | 4 |
| Number of trips | 148 |
| Percent of trips city \| highway | 844 |
| Distance traveled (mi) | $79 \% \mid 21 \%$ |
| Percent of total distance traveled | 5,119 |

Trips in both Charge Depleting \& Charge Sustaining (CD/CS) modes ${ }^{5}$

| Gasoline fuel economy (mpg) | 34 |
| :--- | ---: |
| DC electrical energy consumption (DC Wh/mi) |  |
| Number of trips | 41 |
| Percent of trips city \| highway | 280 |
| Distance traveled (mi) | $31 \% / 69 \%$ |
| Percent of total distance traveled | 6,469 |
|  | $44 \%$ |
| Trips in Charge Sustaining (CS) mode ${ }^{7}$ |  |
| Gasoline fuel economy (mpg) | 29 |
| Number of trips | 305 |
| Percent of trips city \| highway | $67 \% \mid 33 \%$ |
| Distance traveled (mi) | 3,088 |
| Percent of total distance traveled | $21 \%$ |



[^0]| Trips in Charge Depleting (CD) mode | City | Highway |
| :--- | ---: | ---: |
| Gasoline fuel economy (mpg) | 40 | 52 |
| DC electrical energy consumption (DC Wh/mi) | 134 | 159 |
| Percent of miles with internal combustion engine off | $26 \%$ | $7 \%$ |
| Average trip driving intensity (Wh/mi) | 286 | 341 |
| Average trip distance (mi) | 3 | 16 |

Trips in Charge Depleting and Charge Sustaining (CD/CS) mode

| Gasoline fuel economy (mpg) | 34 | 34 |
| :--- | ---: | ---: |
| DC electrical energy consumption (DC Wh/mi) | 66 | 39 |
| Percent of miles with internal combustion engine off | $26 \%$ | $5 \%$ |
| Average trip driving intensity (Wh/mi) | 315 | 363 |
| Average trip distance (mi) | 7 | 30 |

Trips in Charge Sustaining (CS) mode

| Gasoline fuel economy (mpg) | 27 | 30 |
| :--- | ---: | ---: |
| Percent of miles with internal combustion engine off | $19 \%$ | $4 \%$ |
| Average trip driving intensity $(\mathrm{Wh} / \mathrm{mi})$ | 282 | 351 |
| Average trip distance $(\mathrm{mi})$ | 4 | 24 |

Effect Of Driving Intensity (Wheel Energy) on Fuel Economy This Month


Trip Fuel Economy Distribution By Trip Type


Plug-in charging

| Average number of charging events per vehicle per month when driven | 30 |
| :--- | ---: |
| Average number of charging events per vehicle per day when driven | 2.3 |
| Average distance driven between charging events (mi) | 26.2 |
| Average number of trips between charging events | 2.5 |
| Average time plugged in per charging event (hr) | 4.6 |
| Average time charging per charging event (hr) | 1.8 |
| Average energy per charging event (AC kWh) | 2.5 |
| Average charging energy per vehicle per month (AC kWh) | 74.9 |
| Total number of charging events | 561 |
| Total charging energy (AC kWh) | 1,423 |

Time of Day When Driving


Time of Day When Charging


Time of Day When Plugging In



[^0]:    Notes: 1-7. Please see http://avt.inl.gov/pdf/phev/fordreportnotes.pdf for an explanation of all PHEV Fleet Testing Report notes.
    Since these vehicles are flex-fuel capable, some driving events are conducted with E-85, which may decrease fuel economy results
    "The Ford Escape Advanced Research Fleet was designed as a demonstration of customer duty cycles related to plug-in electric vehicles. The vehicles used in this demonstration have not been optimized to provide the maximum potential fuel economy."

