## Ford Escape Advanced Research Fleet

Number of vehicles: 21
Reporting period: April 2010

Date range of data received: 04/01/2010 to 04/30/2010
Number of vehicle days driven: 325

## All Trips Combined

| Overall gasoline fuel economy (mpg) | 39 |
| :--- | ---: |
| Overall AC electrical energy consumption (AC Wh/mi) ${ }^{1}$ | 112 |
| Overall DC electrical energy consumption (DC Wh/mi) $^{2}$ | 75 |
| Total number of trips | 1,394 |
| Total distance traveled (mi) | 18,639 |
|  |  |
| Trips in Charge Depleting (CD) mode ${ }^{3}$ | 65 |
| Gasoline fuel economy (mpg) | 190 |
| DC electrical energy consumption (DC Wh/mi) ${ }^{4}$ | 801 |
| Number of trips | $82 \%$ |
| Percent of trips city \| highway | 4,551 |
| Distance traveled (mi) | $24 \%$ |
| Percent of total distance traveled |  |

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

| Gasoline fuel economy (mpg) | 38 |
| :--- | ---: |
| DC electrical energy consumption (DC Wh/mi) | 63 |
| Number of trips | 688 |
| Percent of trips city \| highway | $39 \% / 61 \%$ |
| Distance traveled (mi) | 8,564 |
| Percent of total distance traveled | $46 \%$ |
|  |  |
| Trips in Charge Sustaining (CS) mode ${ }^{7}$ |  |
| Gasoline fuel economy (mpg) | 31 |
| Number of trips | 305 |
| Percent of trips city \| highway | $63 \% \mid 37 \%$ |
| Distance traveled (mi) | 5,522 |
| Percent of total distance traveled | $30 \%$ |

Gasoline Fuel Economy By Trip Type



[^0]| Trips in Charge Depleting (CD) mode | City | Highway |
| :--- | ---: | ---: |
| Gasoline fuel economy (mpg) | 70 | 63 |
| DC electrical energy consumption (DC Wh/mi) | 205 | 177 |
| Percent of miles with internal combustion engine off | $48 \%$ | $15 \%$ |
| Average trip driving intensity (Wh/mi) | 258 | 298 |
| Average trip distance (mi) | 3 | 16 |

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

| Gasoline fuel economy (mpg) | 48 | 37 |
| :--- | ---: | ---: | :--- |
| DC electrical energy consumption (DC Wh/mi) | 85 | 60 |
| Percent of miles with internal combustion engine off | $28 \%$ | $6 \%$ |
| Average trip driving intensity (Wh/mi) | 279 | 327 |
| Average trip distance (mi) | 9 | 43 |
| Trips in Charge Sustaining (CS) mode |  |  |
| Gasoline fuel economy (mpg) | 29 | 32 |
| Percent of miles with internal combustion engine off | $31 \%$ | $3 \%$ |
| Average trip driving intensity (Wh/mi) | 252 | 324 |
| Average trip distance (mi) | 4 | 42 |

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 | 69 |
| :--- | :---: |
| Average number of charging events per vehicle per day when driven | 4.5 |
| Average distance driven between charging events (mi) | 12.8 |
| Average number of trips between charging events | 1.0 |
| Average time plugged in per charging event (hr) | 4.7 |
| Average time charging per charging event (hr) | 1.0 |
| Average energy per charging event (AC kWh) | 1.4 |
| Average charging energy per vehicle per month (AC kWh) | 99.5 |
| Total number of charging events | 1,457 |
| Total charging energy (AC kWh) | 2,090 |

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."

