## Ford Escape Advanced Research Fleet

Number of vehicles: 19
Reporting period: February 2011

Date range of data received: 02/01/2011 to 02/28/2011
Number of vehicle days driven: 244

## All Trips Combined

| Overall gasoline fuel economy (mpg) | 38 |
| :--- | ---: |
| Overall AC electrical energy consumption (AC Wh/mi) ${ }^{1}$ | 117 |
| Overall DC electrical energy consumption (DC Wh/mi) $^{2}$ | 74 |
| Total number of trips | 976 |
| Total distance traveled (mi) | 12,487 |
|  |  |
| Trips in Charge Depleting (CD) mode ${ }^{3}$ | 45 |
| Gasoline fuel economy (mpg) | 169 |
| DC electrical energy consumption (DC Wh/mi) ${ }^{4}$ | 533 |
| Number of trips | $81 \%$ |
| Percent of trips city \| highway | $39 \%$ |
| Distance traveled (mi) | 3,628 |
| Percent of total distance traveled | $29 \%$ |

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

| Gasoline fuel economy (mpg) | 38 |
| :--- | ---: |
| DC electrical energy consumption (DC Wh/mi) | 62 |
| Number of trips | 200 |
| Percent of trips city \| highway | $43 \%$ |
| Distance traveled (mi) | $57 \%$ |
| Percent of total distance traveled | 5,221 |
|  | $42 \%$ |
| Trips in Charge Sustaining (CS) mode7 |  |
| Gasoline fuel economy (mpg) | 32 |
| Number of trips | 243 |
| Percent of trips city \| highway | $64 \%$ |
| Distance traveled (mi) | $36 \%$ |
| Percent of total distance traveled | 3,637 |

Gasoline Fuel Economy By Trip Type


Distance Traveled By Trip Type


[^0]| Trips in Charge Depleting (CD) mode | City | Highway |
| :--- | ---: | ---: |
| Gasoline fuel economy (mpg) | 38 | 56 |
| DC electrical energy consumption (DC Wh/mi) | 157 | 180 |
| Percent of miles with internal combustion engine off | $30 \%$ | $7 \%$ |
| Average trip driving intensity (Wh/mi) | 268 | 316 |
| Average trip distance (mi) | 4 | 19 |

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

| Gasoline fuel economy (mpg) | 45 | 37 |
| :--- | ---: | ---: | :--- |
| DC electrical energy consumption (DC Wh/mi) | 90 | 54 |
| Percent of miles with internal combustion engine off | $37 \%$ | $4 \%$ |
| Average trip driving intensity (Wh/mi) | 282 | 324 |
| Average trip distance (mi) | 13 | 36 |
| Trips in Charge Sustaining (CS) mode |  |  |
| Gasoline fuel economy (mpg) | 30 | 33 |
| Percent of miles with internal combustion engine off | $25 \%$ | $7 \%$ |
| Average trip driving intensity (Wh/mi) | 271 | 319 |
| Average trip distance (mi) | 5 | 33 |

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 | 47 |
| :--- | ---: |
| Average number of charging events per vehicle per day when driven | 3.6 |
| Average distance driven between charging events (mi) | 14.0 |
| Average number of trips between charging events | 1.1 |
| Average time plugged in per charging event (hr) | 7.0 |
| Average time charging per charging event (hr) | 1.1 |
| Average energy per charging event (AC kWh) | 1.6 |
| Average charging energy per vehicle per month (AC kWh) | 76.9 |
| Total number of charging events | 889 |
| Total charging energy (AC kWh) | 1,462 |

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."

