# Ford Escape Advanced Research Fleet

Number of vehicles: 21
Reporting period: 2010
Date range of data received: 01/01/2010 to 12/31/2010
Number of vehicle days driven: 3,778

## All Trips Combined

| | |
|---|---|
| Overall gasoline fuel economy (mpg) | 38 |
| Overall AC electrical energy consumption (AC Wh/mi)[1] | 100 |
| Overall DC electrical energy consumption (DC Wh/mi)[2] | 66 |
| Total number of trips | 16,757 |
| Total distance traveled (mi) | 215,587 |

## Trips in Charge Depleting (CD) mode[3]

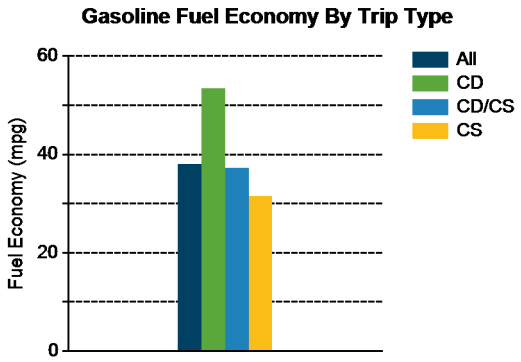
| | |
|---|---|
| Gasoline fuel economy (mpg) | 53 |
| DC electrical energy consumption (DC Wh/mi)[4] | 170 |
| Number of trips | 9,544 |
| Percent of trips city \| highway | 84% \| 16% |
| Distance traveled (mi) | 53,427 |
| Percent of total distance traveled | 25% |

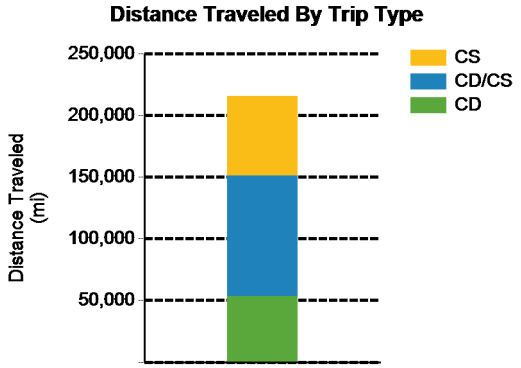
## Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes[5]

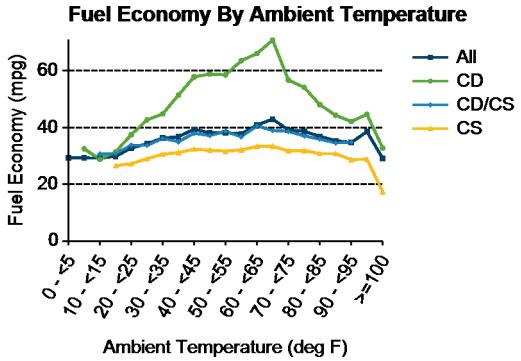
| | |
|---|---|
| Gasoline fuel economy (mpg) | 37 |
| DC electrical energy consumption (DC Wh/mi)[6] | 55 |
| Number of trips | 3,166 |
| Percent of trips city \| highway | 36% \| 64% |
| Distance traveled (mi) | 97,949 |
| Percent of total distance traveled | 45% |

## Trips in Charge Sustaining (CS) mode[7]

| | |
|---|---|
| Gasoline fuel economy (mpg) | 32 |
| Number of trips | 4,041 |
| Percent of trips city \| highway | 65% \| 35% |
| Distance traveled (mi) | 64,211 |
| Percent of total distance traveled | 30% |




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."

## Trips in Charge Depleting (CD) mode

| | City | Highway |
|---|---|---|
| Gasoline fuel economy (mpg) | 49 | 59 |
| DC electrical energy consumption (DC Wh/mi) | 170 | 170 |
| Percent of miles with internal combustion engine off | 37% | 14% |
| Average trip driving intensity (Wh/mi) | 266 | 303 |
| Average trip distance (mi) | 3 | 17 |

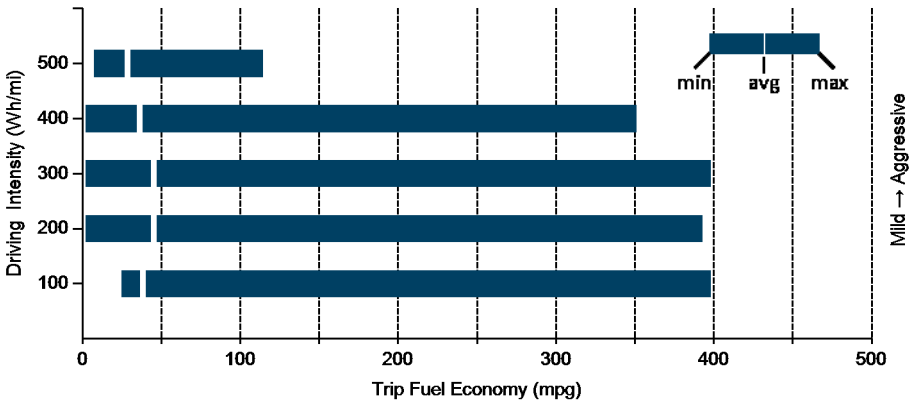
## Trips in Charge Depleting and Charge Sustaining (CD/CS) mode

| | | |
|---|---|---|
| Gasoline fuel economy (mpg) | 44 | 36 |
| DC electrical energy consumption (DC Wh/mi) | 81 | 52 |
| Percent of miles with internal combustion engine off | 30% | 5% |
| Average trip driving intensity (Wh/mi) | 277 | 325 |
| Average trip distance (mi) | 10 | 43 |

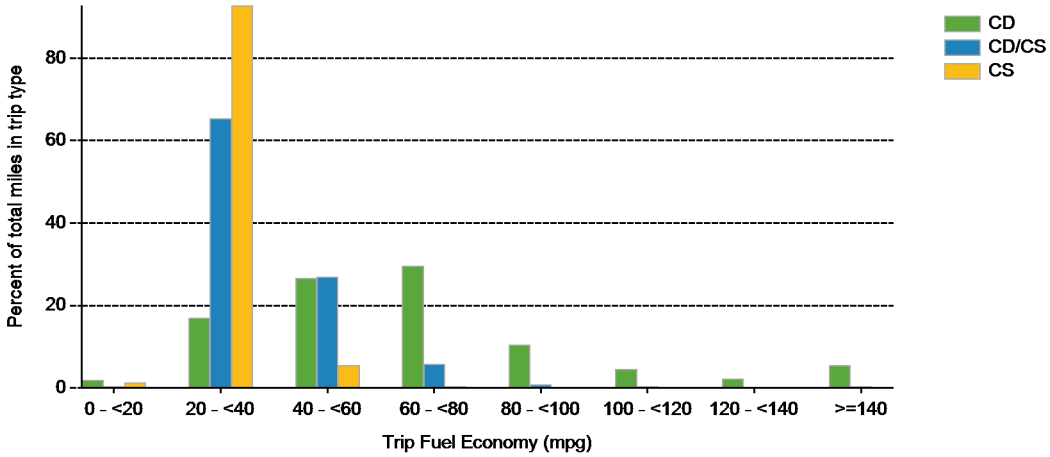
## Trips in Charge Sustaining (CS) mode

| | | |
|---|---|---|
| Gasoline fuel economy (mpg) | 30 | 32 |
| Percent of miles with internal combustion engine off | 24% | 4% |
| Average trip driving intensity (Wh/mi) | 263 | 322 |
| Average trip distance (mi) | 4 | 39 |

**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 | 54 |
| Average number of charging events per vehicle per day when driven | 3.5 |
| Average distance driven between charging events (mi) | 16.2 |
| Average number of trips between charging events | 1.3 |
| Average time plugged in per charging event (hr) | 5.6 |
| 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) | 87.6 |
| Total number of charging events | 13,343 |
| Total charging energy (AC kWh) | 21,648 |