

### VEHICLE TECHNOLOGIES PROGRAM

# Ford Escape Advanced Research Fleet

Number of vehicles: 20 Date range of data received: 04/01/2011 to 04/30/2011

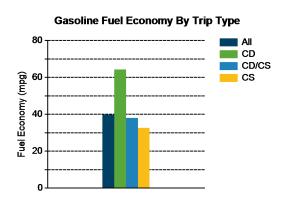
Reporting period: April 2011 Number of vehicle days driven: 336

### All Trips Combined

Overall gasoline fuel economy (mpg)	40
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	99
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	65
Total number of trips	1,440
Total distance traveled (mi)	17,617

### Trips in Charge Depleting (CD) mode<sup>3</sup>

Gasoline fuel economy (mpg)	64
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	181
Number of trips	741
Percent of trips city   highway	88%   12%
Distance traveled (mi)	4,367
Percent of total distance traveled	25%

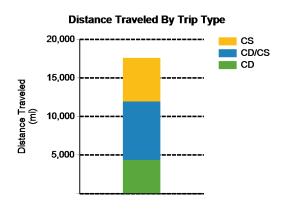


# Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes<sup>5</sup>

Gasoline fuel economy (mpg)	38
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	50
Number of trips	314
Percent of trips city   highway	46%   54%
Distance traveled (mi)	7,550
Percent of total distance traveled	43%



33
385
6%   34%
5,698
32%



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

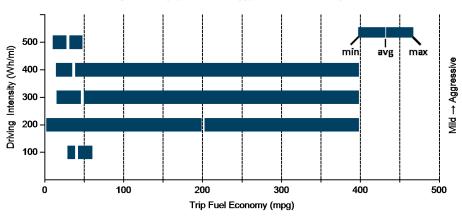
"The Ford Escape Advanced Research Fleet was designed as a demonstration of customer duty cycles related to plug-in electric vehicles. The vehicles used in this demonstration have not been optimized to provide the maximum potential fuel economy."

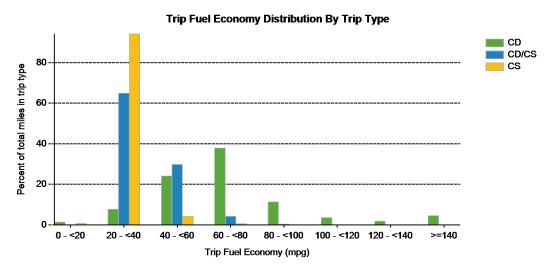
Average trip distance (mi)

Trips in Charge Depleting (CD) mode	City	Highway
Gasoline fuel economy (mpg)	64	65
DC electrical energy consumption (DC Wh/mi)	180	184
Percent of miles with internal combustion engine off	45%	15%
Average trip driving intensity (Wh/mi)	264	301
Average trip distance (mi)	4	16
Trips in Charge Depleting and Charge Sustaining (CD/CS) mode		
Gasoline fuel economy (mpg)	46	37
DC electrical energy consumption (DC Wh/mi)	59	48
Percent of miles with internal combustion engine off	31%	6%
Average trip driving intensity (Wh/mi)	286	328
Average trip distance (mi)	8	38
Trips in Charge Sustaining (CS) mode		
Gasoline fuel economy (mpg)	32	33
Percent of miles with internal combustion engine off	20%	4%
Average trip driving intensity (Wh/mi)	280	320

35

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

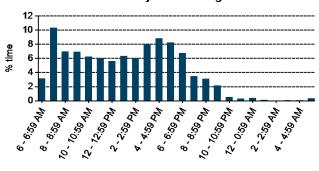




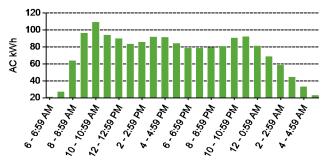
## Plug-in charging

Average number of charging events per vehicle per month when driven	29	
Average number of charging events per vehicle per day when driven	1.7	
Average distance driven between charging events (mi)	30.8	
Average number of trips between charging events	2.5	
Average time plugged in per charging event (hr)	10.1	
Average time charging per charging event (hr)	2.2	
Average energy per charging event (AC kWh)	3.0	
Average charging energy per vehicle per month (AC kWh)	87.1	
Total number of charging events	572	
Total charging energy (AC kWh)	1,742	

#### **Time of Day When Driving**



#### **Time of Day When Charging**



#### Time of Day When Plugging In

