# Ford Escape Advanced Research Fleet

Number of v	ehicles:	21
Reporting pe	eriod:	April 2010

U.S. DEPARTMENT OF

Date range of data received: 04/0 Number of vehicle days driven: 325

04/01/2010 to 04/30/2010

### All Trips Combined

Overall gasoline fuel economy (mpg)	39
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	112
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	75
Total number of trips	1,394
Total distance traveled (mi)	18,639

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

Gasoline fuel economy (mpg)	65
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	190
Number of trips	801
Percent of trips city   highway	82%   19%
Distance traveled (mi)	4,551
Percent of total distance traveled	24%



## 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>	63
Number of trips	288
Percent of trips city   highway	39%   61%
Distance traveled (mi)	8,564
Percent of total distance traveled	46%

#### Trips in Charge Sustaining (CS) mode7

Gasoline fuel economy (mpg)	31
Number of trips	305
Percent of trips city   highway	63%   37%
Distance traveled (mi)	5,522
Percent of total distance traveled	30%

Distance Traveled By Trip Type



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."



# VEHICLE TECHNOLOGIES PROGRAM

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

4

42

Average trip distance (mi)











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



