# Ford Escape Advanced Research Fleet

Number of vehicles:	21		
Reporting period:	October 2010		

U.S. DEPARTMENT OF

Date range of data received: 10/0 Number of vehicle days driven: 376

10/01/2010 to 10/31/2010

# All Trips Combined

•	
Overall gasoline fuel economy (mpg)	38
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	81
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	54
Total number of trips	1,830
Total distance traveled (mi)	22,888

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

Gasoline fuel economy (mpg)	58
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	175
Number of trips	946
Percent of trips city   highway	89%   11%
Distance traveled (mi)	4,419
Percent of total distance traveled	19%

#### Gasoline Fuel Economy By Trip Type



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

Gasoline fuel economy (mpg)	37
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	52
Number of trips	302
Percent of trips city   highway	39%   61%
Distance traveled (mi)	9,774
Percent of total distance traveled	43%

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

Gasoline fuel economy (mpg)	33
Number of trips	582
Percent of trips city   highway	70%   30%
Distance traveled (mi)	8,693
Percent of total distance traveled	38%

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)	54	67
DC electrical energy consumption (DC Wh/mi)	179	169
Percent of miles with internal combustion engine off	43%	17%
Average trip driving intensity (Wh/mi)	263	294
Average trip distance (mi)	3	17
Trips in Charge Depleting and Charge Sustaining (CD/CS) mode		
Gasoline fuel economy (mpg)	43	37
DC electrical energy consumption (DC Wh/mi)	62	51
Percent of miles with internal combustion engine off	28%	5%
Average trip driving intensity (Wh/mi)	280	324
Average trip distance (mi)	9	47
Trips in Charge Sustaining (CS) mode		
Gasoline fuel economy (mpg)	32	33
Percent of miles with internal combustion engine off	25%	4%
Average trip driving intensity (Wh/mi)	264	319
Average trip distance (mi)	3	42









Plug-in charging		
Average number of charging events per vehicle per month when driven	48	
Average number of charging events per vehicle per day when driven	2.7	
Average distance driven between charging events (mi)	22.9	
Average number of trips between charging events	1.8	
Average time plugged in per charging event (hr)	5.2	
Average time charging per charging event (hr)	1.3	
Average energy per charging event (AC kWh)	1.9	
Average charging energy per vehicle per month (AC kWh)	88.3	
Total number of charging events	998	
Total charging energy (AC kWh)	1,854	

#### Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In



