

## Ford Escape Advanced Research Fleet

Number of vehicles: 21

Date range of data received: 11/01/2009 to 01/31/2012

Reporting period: Nov 09 - Jan 12

Number of vehicle days driven: 7,729

### All Trips Combined

Overall gasoline fuel economy (mpg)	38
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	99
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	67
Total number of trips	36,001
Total distance traveled (mi)	437,972

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

Gasoline fuel economy (mpg)	53
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	165
Number of trips	20,653
Percent of trips city   highway	83%   17%
Distance traveled (mi)	120,451
Percent of total distance traveled	28%

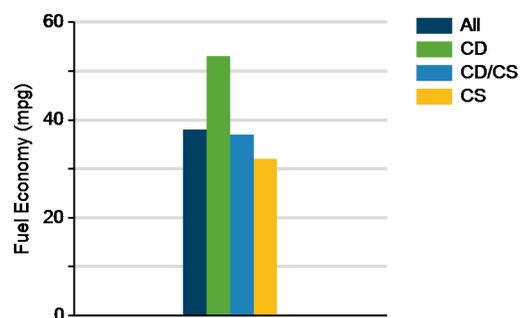
### Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes<sup>5</sup>

Gasoline fuel economy (mpg)	37
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	54
Number of trips	6,833
Percent of trips city   highway	38%   62%
Distance traveled (mi)	189,820
Percent of total distance traveled	43%

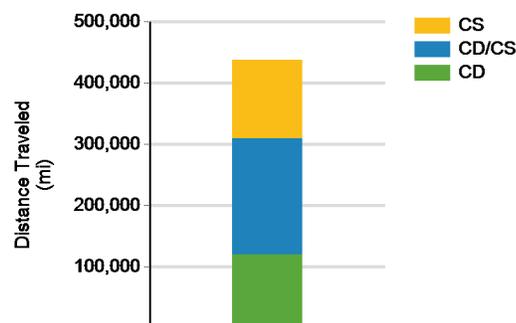
### Trips in Charge Sustaining (CS) mode<sup>7</sup>

Gasoline fuel economy (mpg)	32
Number of trips	8,506
Percent of trips city   highway	66%   34%
Distance traveled (mi)	127,701
Percent of total distance traveled	29%

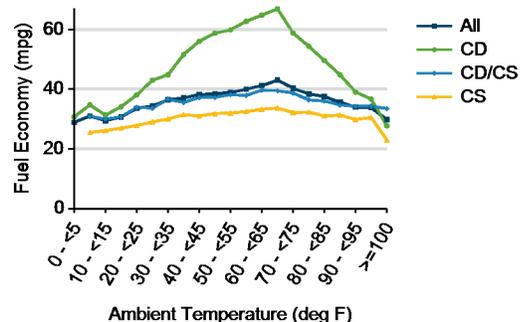
Gasoline Fuel Economy By Trip Type



Distance Traveled By Trip Type



Fuel Economy By Ambient Temperature



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	57
DC electrical energy consumption (DC Wh/mi)	165	164
Percent of miles with internal combustion engine off	37%	12%
Average trip driving intensity (Wh/mi)	271	308
Average trip distance (mi)	3	18

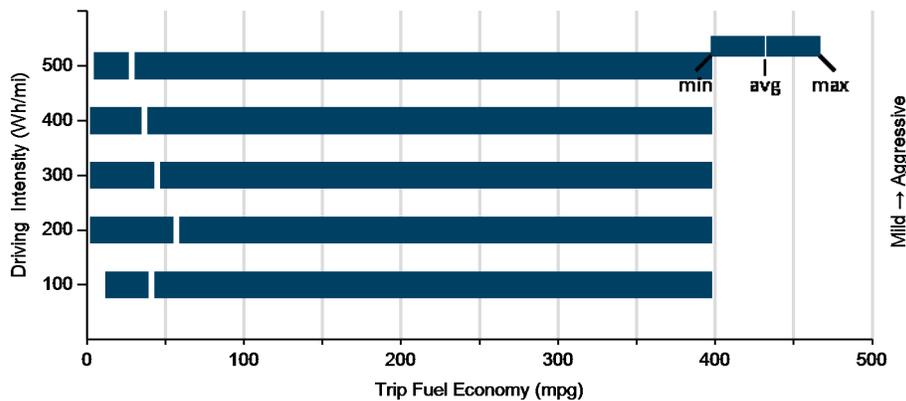
**Trips in Charge Depleting and Charge Sustaining (CD/CS) mode**

Gasoline fuel economy (mpg)	42	36
DC electrical energy consumption (DC Wh/mi)	71	51
Percent of miles with internal combustion engine off	29%	5%
Average trip driving intensity (Wh/mi)	281	326
Average trip distance (mi)	9	39

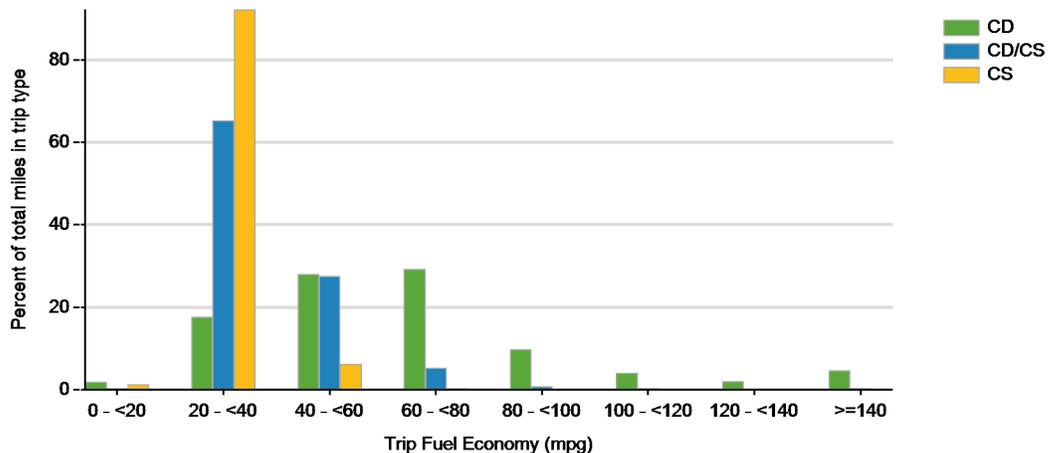
**Trips in Charge Sustaining (CS) mode**

Gasoline fuel economy (mpg)	30	32
Percent of miles with internal combustion engine off	23%	4%
Average trip driving intensity (Wh/mi)	270	322
Average trip distance (mi)	4	37

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



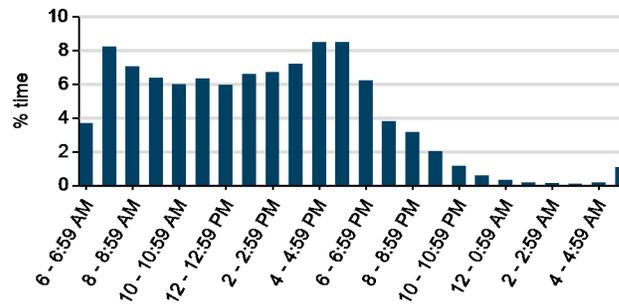
**Trip Fuel Economy Distribution By Trip Type**



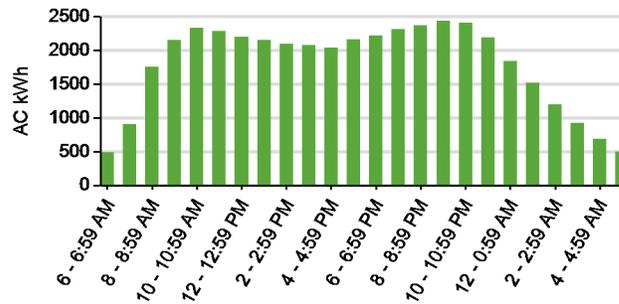
Plug-in charging

Average number of charging events per vehicle per month when driven	26
Average number of charging events per vehicle per day when driven	1.8
Average distance driven between charging events (mi)	31.5
Average number of trips between charging events	2.6
Average time plugged in per charging event (hr)	7.9
Average time charging per charging event (hr)	2.3
Average energy per charging event (AC kWh)	3.1
Average charging energy per vehicle per month (AC kWh)	82.4
Total number of charging events	13,887
Total charging energy (AC kWh)	43,266

Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In

