# Ford Escape Advanced Research Fleet

**Number of vehicles:** 21  
**Date range of data received:** 02/01/2010 to 02/28/2010  
**Reporting period:** February 2010  
**Number of vehicle days driven:** 248

## All Trips Combined

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall gasoline fuel economy (mpg)</td>
<td>37</td>
</tr>
<tr>
<td>Overall AC electrical energy consumption (AC Wh/mi)¹</td>
<td>112</td>
</tr>
<tr>
<td>Overall DC electrical energy consumption (DC Wh/mi)²</td>
<td>72</td>
</tr>
<tr>
<td>Total number of trips</td>
<td>973</td>
</tr>
<tr>
<td>Total distance traveled (mi)</td>
<td>12,099</td>
</tr>
</tbody>
</table>

## Trips in Charge Depleting (CD) mode³

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline fuel economy (mpg)</td>
<td>46</td>
</tr>
<tr>
<td>DC electrical energy consumption (DC Wh/mi)⁴</td>
<td>174</td>
</tr>
<tr>
<td>Number of trips</td>
<td>555</td>
</tr>
<tr>
<td>Percent of trips city</td>
<td>highway</td>
</tr>
<tr>
<td>Distance traveled (mi)</td>
<td>3,016</td>
</tr>
<tr>
<td>Percent of total distance traveled</td>
<td>25%</td>
</tr>
</tbody>
</table>

## Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes⁵

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline fuel economy (mpg)</td>
<td>38</td>
</tr>
<tr>
<td>DC electrical energy consumption (DC Wh/mi)⁶</td>
<td>69</td>
</tr>
<tr>
<td>Number of trips</td>
<td>162</td>
</tr>
<tr>
<td>Percent of trips city</td>
<td>highway</td>
</tr>
<tr>
<td>Distance traveled (mi)</td>
<td>5,051</td>
</tr>
<tr>
<td>Percent of total distance traveled</td>
<td>42%</td>
</tr>
</tbody>
</table>

## Trips in Charge Sustaining (CS) mode⁷

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline fuel economy (mpg)</td>
<td>31</td>
</tr>
<tr>
<td>Number of trips</td>
<td>256</td>
</tr>
<tr>
<td>Percent of trips city</td>
<td>highway</td>
</tr>
<tr>
<td>Distance traveled (mi)</td>
<td>4,032</td>
</tr>
<tr>
<td>Percent of total distance traveled</td>
<td>33%</td>
</tr>
</tbody>
</table>

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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

<table>
<thead>
<tr>
<th></th>
<th>City</th>
<th>Highway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline fuel economy (mpg)</td>
<td>41</td>
<td>58</td>
</tr>
<tr>
<td>DC electrical energy consumption (DC Wh/mi)</td>
<td>175</td>
<td>174</td>
</tr>
<tr>
<td>Percent of miles with internal combustion engine off</td>
<td>32%</td>
<td>13%</td>
</tr>
<tr>
<td>Average trip driving intensity (Wh/mi)</td>
<td>252</td>
<td>293</td>
</tr>
<tr>
<td>Average trip distance (mi)</td>
<td>4</td>
<td>15</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th></th>
<th>City</th>
<th>Highway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline fuel economy (mpg)</td>
<td>44</td>
<td>37</td>
</tr>
<tr>
<td>DC electrical energy consumption (DC Wh/mi)</td>
<td>112</td>
<td>63</td>
</tr>
<tr>
<td>Percent of miles with internal combustion engine off</td>
<td>26%</td>
<td>5%</td>
</tr>
<tr>
<td>Average trip driving intensity (Wh/mi)</td>
<td>272</td>
<td>315</td>
</tr>
<tr>
<td>Average trip distance (mi)</td>
<td>10</td>
<td>46</td>
</tr>
</tbody>
</table>

### Trips in Charge Sustaining (CS) mode

<table>
<thead>
<tr>
<th></th>
<th>City</th>
<th>Highway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline fuel economy (mpg)</td>
<td>29</td>
<td>32</td>
</tr>
<tr>
<td>Percent of miles with internal combustion engine off</td>
<td>25%</td>
<td>5%</td>
</tr>
<tr>
<td>Average trip driving intensity (Wh/mi)</td>
<td>252</td>
<td>298</td>
</tr>
<tr>
<td>Average trip distance (mi)</td>
<td>4</td>
<td>38</td>
</tr>
</tbody>
</table>

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

**Trip Fuel Economy Distribution By Trip Type**
Plug-in charging

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average number of charging events per vehicle per month</td>
<td>39</td>
</tr>
<tr>
<td>Average number of charging events per vehicle per day</td>
<td>3.3</td>
</tr>
<tr>
<td>Average distance driven between charging events (mi)</td>
<td>14.9</td>
</tr>
<tr>
<td>Average number of trips between charging events</td>
<td>1.2</td>
</tr>
<tr>
<td>Average time plugged in per charging event (hr)</td>
<td>5.9</td>
</tr>
<tr>
<td>Average time charging per charging event (hr)</td>
<td>1.1</td>
</tr>
<tr>
<td>Average energy per charging event (AC kWh)</td>
<td>1.7</td>
</tr>
<tr>
<td>Average charging energy per vehicle per month (AC kWh)</td>
<td>64.4</td>
</tr>
<tr>
<td>Total number of charging events</td>
<td>813</td>
</tr>
<tr>
<td>Total charging energy (AC kWh)</td>
<td>1,352</td>
</tr>
</tbody>
</table>