

## SCAQMD Quantum Escape PHEV Report

Number of vehicles: 17

Date range of data received:

### All Vehicles

04/01/2012 to 04/30/2012

Reporting period: April 2012

Number of vehicle days driven: 250

### All Trips Combined

|  |        |
|--|--------|
| Overall gasoline fuel economy (mpg)                              | 32     |
| Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup> | 45     |
| Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup> | 22     |
| Total number of trips  | 1,585  |
| Total distance traveled (mi)                                     | 14,910 |

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

|  |           |
|--|-----------|
| Gasoline fuel economy (mpg)                              | 34        |
| DC electrical energy consumption (DC Wh/mi) <sup>4</sup> | 49        |
| Number of trips  | 883       |
| Percent of trips city   highway                          | 81%   19% |
| Distance traveled (mi)                                   | 4,778     |
| Percent of total distance traveled                       | 32%       |

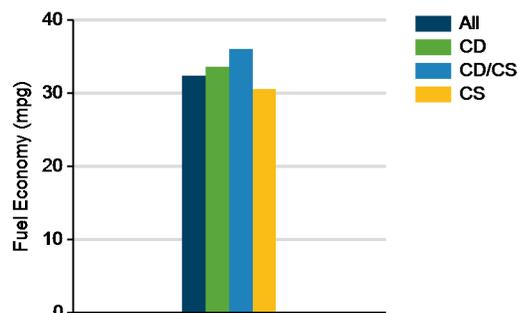
### Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes<sup>5</sup>

|  |           |
|--|-----------|
| Gasoline fuel economy (mpg)                              | 36        |
| DC electrical energy consumption (DC Wh/mi) <sup>6</sup> | 43        |
| Number of trips  | 79        |
| Percent of trips city   highway                          | 38%   62% |
| Distance traveled (mi)                                   | 2,592     |
| Percent of total distance traveled                       | 17%       |

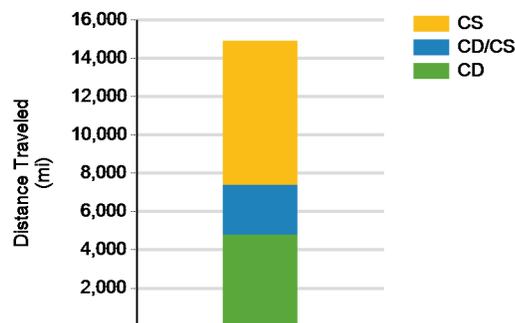
### Trips in Charge Sustaining (CS) mode<sup>7</sup>

|                                    |           |
|------------------------------------|-----------|
| Gasoline fuel economy (mpg)        | 31        |
| Number of trips                    | 623       |
| Percent of trips city   highway    | 75%   25% |
| Distance traveled (mi)             | 7,540     |
| Percent of total distance traveled | 51%       |

Gasoline Fuel Economy By Trip Type



Distance Traveled By Trip Type



Notes: 1 - 8. Please see <http://avt.inl.gov/pdf/phev/SCAQMDreportnotes.pdf> for an explanation of all PHEV Fleet Testing Report notes.

**Trips in Charge Depleting (CD) mode**

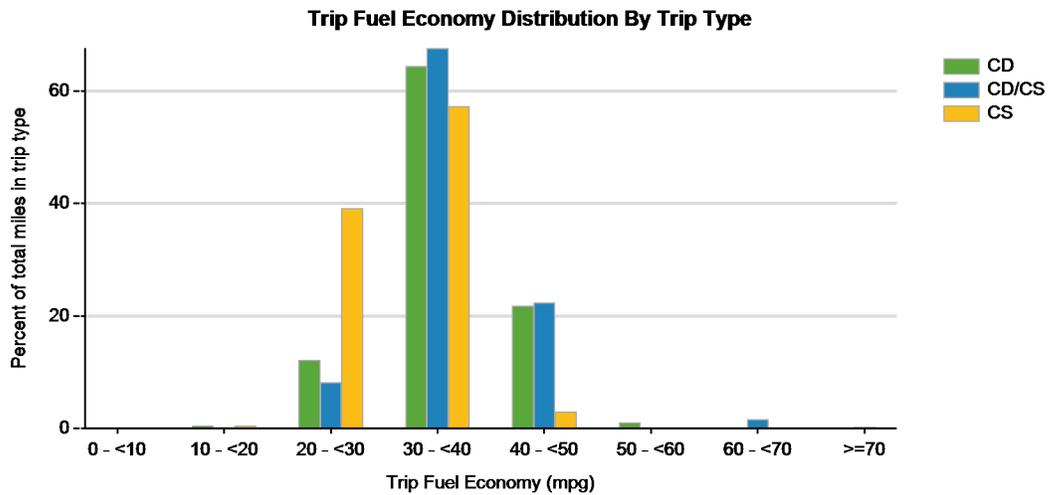
|  | City | Highway |
|--|------|---------|
| Gasoline fuel economy (mpg)                          | 30   | 35      |
| DC electrical energy consumption (DC Wh/mi)          | 42   | 52      |
| Percent of miles with internal combustion engine off | 3%   | 1%      |
| Average trip driving intensity <sup>8</sup>          | 5    | 3       |
| Average trip distance (mi)                           | 2.3  | 18.6    |

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

|  |     |      |
|--|-----|------|
| Gasoline fuel economy (mpg)                          | 37  | 36   |
| DC electrical energy consumption (DC Wh/mi)          | 46  | 43   |
| Percent of miles with internal combustion engine off | 14% | 1%   |
| Average trip driving intensity <sup>8</sup>          | 4   | 2    |
| Average trip distance (mi)                           | 8.6 | 47.6 |

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

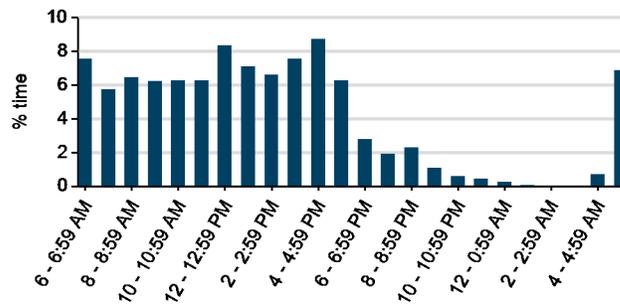
|  |     |      |
|--|-----|------|
| Gasoline fuel economy (mpg)                          | 29  | 31   |
| Percent of miles with internal combustion engine off | 4%  | 1%   |
| Average trip driving intensity <sup>8</sup>          | 5   | 2    |
| Average trip distance (mi)                           | 2.3 | 41.4 |



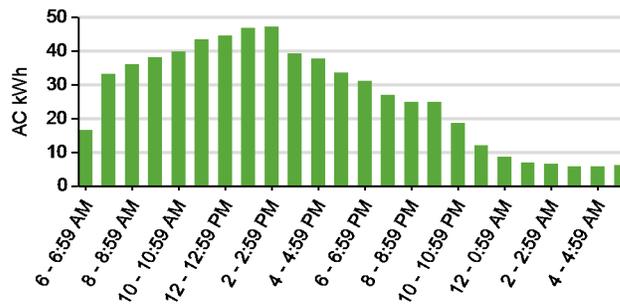
Plug-in charging

|   |      |
|---|------|
| Average number of charging events per vehicle per month when driven | 12   |
| Average number of charging events per vehicle per day when driven   | 0.8  |
| Average distance driven between charging events (mi)                | 76.1 |
| Average number of trips between charging events                     | 8.1  |
| Average time plugged in per charging event (hr)                     | 16.6 |
| Average time plugged in and drawing power (hr)                      | 16.6 |
| Average time charging per charging event (power > 200 w) (hr)       | 3.9  |
| Average energy per charging event (AC kWh)                          | 3.5  |
| Average charging energy per vehicle per month (AC kWh)              | 39.8 |
| Total number of charging events                                     | 196  |
| Total charging energy (AC kWh)                                      | 677  |

Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In

