

# Chrysler RAM PHEV Fleet - Phase 2

Number of vehicles: 23

Reporting period: January 2014

#### **All Fleets**

Date range of data received: 1/1/2014 to 1/31/2014

5,000

Number of vehicle days driven: 462

## All Trips Combined

| Overall gasoline fuel economy (mpg)  | 19     |
|--|--------|
| Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>           | 81     |
| Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>           | 61     |
| Overall DC electrical energy captured from regenerative braking (DC Wh/mi) | 34     |
| Total number of trips  | 2,181  |
| Total distance traveled (mi)   | 26,426 |
|  |        |

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

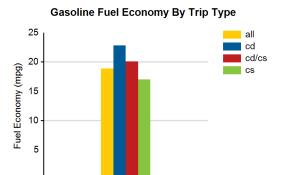
| Gasoline fuel economy (mpg)                              |     |   | 23    |
|--|-----|---|-------|
| DC electrical energy consumption (DC Wh/mi) <sup>4</sup> |     |   | 197   |
| Number of trips  |     |   | 724   |
| Percent of trips city   highway                          | 88% | - | 11%   |
| Distance traveled (mi)                                   |     |   | 5,794 |
| Percent of total distance traveled                       |     |   | 22%   |

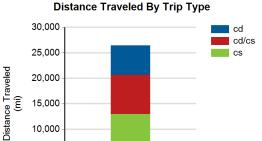
## Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes<sup>5</sup>

| Gasoline fuel economy (mpg)                              |       |   | 20    |
|--|-------|---|-------|
| DC electrical energy consumption (DC Wh/mi) <sup>6</sup> |       |   | 67    |
| Number of trips  |       |   | 382   |
| Percent of trips city   highway                          | 77%   | 1 | 22%   |
| Distance traveled CD   CS (mi)                           | 2,642 | 1 | 5,024 |
| Percent of total distance traveled CD   CS               | 10%   | 1 | 19%   |

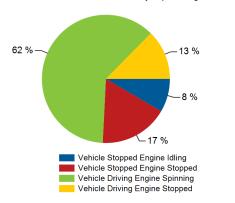
## Trips in Charge Sustaining (CS) mode7

| Gasoline fuel economy (mpg)        | 17        |
|------------------------------------|-----------|
| Number of trips                    | 1,075     |
| Percent of trips city   highway    | 87%   12% |
| Distance traveled (mi)             | 12,967    |
| Percent of total distance traveled | 49%       |





Percent of Drive Time by Operating Mode



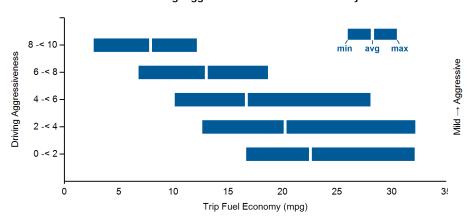
Notes: 1 - 9. Please see http://avt.inl.gov/pdf/phev/chryslerreportnotes.pdf for an explanation of all PHEV Fleet Testing Report notes. This document also includes all report changes to date.

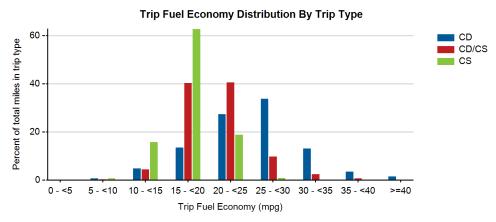
The Chrysler RAM PHEV Fleet was designed as a demonstration program of customer duty cycles related to plug-in electric vehicles and may not necessarily demonstrate optimized fuel economy.

Vehicle fuel economy is based on customer usage and may not be representative of maximum potential fuel economy.

| Trips in Charge Depleting (CD) mode                          | City | Highway |
|--|------|---------|
| Gasoline fuel economy (mpg)                                  | 22   | 26      |
| DC electrical energy consumption (DC Wh/mi)                  | 200  | 187     |
| Percent of miles with internal combustion engine off         | 9%   | 3%      |
| Average trip Aggressiveness                                  | 5.3  | 3.6     |
| Average trip distance (mi)                                   | 7    | 15      |
| Trips in Charge Depleting and Charge Sustaining (CD/CS) mode |      |         |
| Gasoline fuel economy (mpg)                                  | 19   | 21      |
| DC electrical energy consumption (DC Wh/mi)                  | 66   | 68      |
| Percent of miles with internal combustion engine off         | 8%   | 2%      |
| Average trip Aggressiveness                                  | 4.7  | 3.1     |
| Average trip distance (mi)                                   | 15   | 36      |
| Trips in Charge Sustaining (CS) mode                         |      |         |
| Gasoline fuel economy (mpg)                                  | 16   | 19      |
| Percent of miles with internal combustion engine off         | 8%   | 1%      |
| Average trip Aggressiveness                                  | 5.5  | 3.1     |
| Average trip distance (mi)                                   | 9    | 31      |

#### Effect of Driving Aggressiveness on Fuel Economy<sup>8</sup>



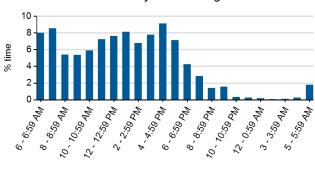


# VEHICLE TECHNOLOGIES PROGRAM

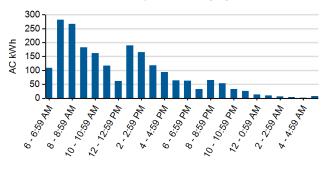
## Plug-in charging

| Average number of charging events per vehicle per month when driven  |       |   | 17.91 |  |
|--|-------|---|-------|--|
| Average number of charging events per vehicle per day when driven    |       |   | 0.89  |  |
| Average distance driven between charging events (mi)                 |       |   | 64.14 |  |
| Average number of trips between charging events                      |       |   | 5.29  |  |
| Average time charging per charging event (hr)                        |       |   | 1.54  |  |
| Average energy per charging event (AC kWh)                           |       |   | 5.17  |  |
| Average charging energy per vehicle per month (AC kWh)               |       |   | 92.63 |  |
| Total number of charging events                                      |       |   | 412   |  |
| Number of charging events at Level 1   Level 2                       | 83    |   | 329   |  |
| Total charging energy consumed (AC kWh)                              |       |   | 2,130 |  |
| Charging energy consumed at Level 1   Level 2 (AC kWh)               | 329   | 1 | 1,801 |  |
| Percent of total charging energy from Level 1   Level 2              | 15%   | 1 | 85%   |  |
| Average time to charge from 20% to 100% SOC (hrs) Level 1   Level 29 | 12.42 |   | 2.13  |  |

#### **Time of Day When Driving**



#### **Time of Day When Charging**



# Time of Day When Plugging In

