

## VEHICLE TECHNOLOGIES PROGRAM

# **Chrysler RAM PHEV Fleet**

Number of vehicles: 97 Date range of data received: 12/1/2011 to 12/31/2011

Reporting period: December 2011 Number of vehicle days driven: 1558

#### All Trips Combined

Overall gasoline fuel economy (mpg)	19
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	101
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	65
Overall DC electrical energy captured from regenerative braking (DC Wh/mi)	45
Total number of trips	10,555
Total distance traveled (mi)	91,711

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

Gasoline fuel economy (mpg)			22
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>			215
Number of trips			4,176
Percent of trips city   highway	96%	1	4%
Distance traveled (mi)			20,198
Percent of total distance traveled			22%

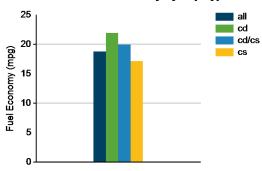
## Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes<sup>5</sup>

20
66
1,482
79%   21%
9,373   17,098
10%   19%

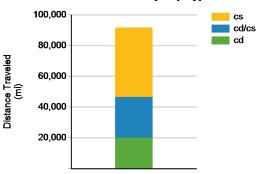
## Trips in Charge Sustaining (CS) mode<sup>7</sup>

Gasoline fuel economy (mpg)	17
Number of trips	4,897
Percent of trips city   highway	91%   9%
Distance traveled (mi)	45,070
Percent of total distance traveled	49%

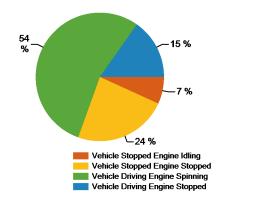
#### **Gasoline Fuel Economy By Trip Type**



#### **Distance Traveled By Trip Type**



#### 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.

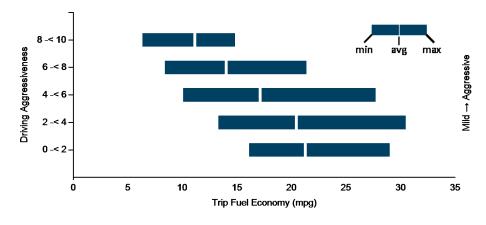
Vehicle fuel economy is based on customer usage and may not be representative of maximum potential fuel economy.

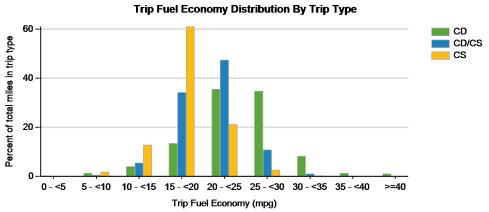


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Trips in Charge Depleting (CD) mode	City	Highway	
Gasoline fuel economy (mpg)	21	25	
DC electrical energy consumption (DC Wh/mi)	227	168	
Percent of miles with internal combustion engine off	15%	3%	
Average trip Agressiveness	6.2	3.7	
Percent of miles with air conditioning selected	76%	89%	
Average trip distance (mi)	4	21	
Trips in Charge Depleting and Charge Sustaining (CD/CS) mode			
Gasoline fuel economy (mpg)	19	21	
DC electrical energy consumption (DC Wh/mi)	74	58	
Percent of miles with internal combustion engine off	11%	2%	
Average trip Agressiveness	5.2	2.7	
Percent of miles with air conditioning selected	84%	95%	
Average trip distance (mi)	11	43	
Trips in Charge Sustaining (CS) mode			
Gasoline fuel economy (mpg)	16	19	
Percent of miles with internal combustion engine off	11%	2%	
Average trip Agressiveness	5.6	2.7	
Percent of miles with air conditioning selected	83%	92%	
Average trip distance (mi)	6	40	

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



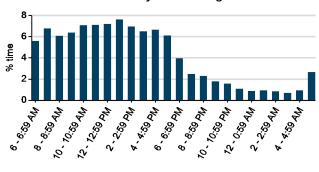




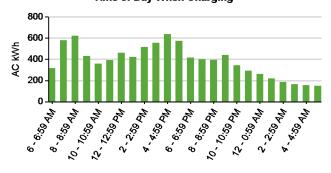
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Average number of charging events per vehicle per month when driven	14.31
Average number of charging events per vehicle per day when driven	0.89
Average distance driven between charging events (mi)	66.07
Average number of trips between charging events	7.60
Average time charging per charging event (hr)	2.45
Average energy per charging event (AC kWh)	6.71
Average charging energy per vehicle per month (AC kWh)	95.97
Total number of charging events	1,388
Number of charging events at Level 1   Level 2	336   1034
Total charging energy consumed (AC kWh)	9,309
Charging energy consumed at Level 1   Level 2 (AC kWh)	2,956   6,352
Percent of total charging energy from Level 1   Level 2	32%   68%
Average time to charge from 20% to 100% SOC (hrs) Level 1   Level 29	12.05   2.81

## **Time of Day When Driving**



## **Time of Day When Charging**



#### Time of Day When Plugging In

