

## North American PHEV Demonstration

Fleet Summary Report: Hymotion Prius (V2Green data logger)

Number of vehicles: 164

Reporting Period: February 2010

### All Trips Combined

Overall gasoline fuel economy (mpg)	47
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	56
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	41
Total number of trips	10,148
Total distance traveled (mi)	96,085
Trips in Charge Depleting (CD) mode <sup>3</sup>	
Gasoline fuel economy (mpg)	57
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	138
Number of trips	4,566
Percent of trips city / highway	87% / 13%
Distance traveled (mi)	20,532
Percent of total distance traveled	21%
Trips in both Charge Depleting and Charge Sustaining (CD/CS) modes <sup>5</sup>	
Gasoline fuel economy (mpg)	52
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	50
Number of trips	739
Percent of trips city / highway	39% / 61%
Distance traveled (mi)	21,685
Percent of total distance traveled	23%
Trips in Charge Sustaining (CS) mode <sup>7</sup>	
Gasoline fuel economy (mpg)	42
Number of trips	4,843
Percent of trips city / highway	76% / 24%
Distance traveled (mi)	53,868
Percent of total distance traveled	56%
Number of trips when the plug-in battery pack was turned off by the vehicle operator <sup>8</sup>	303
Distance traveled with plug-in battery pack turned off by the vehicle operator (mi) <sup>9</sup>	4,246

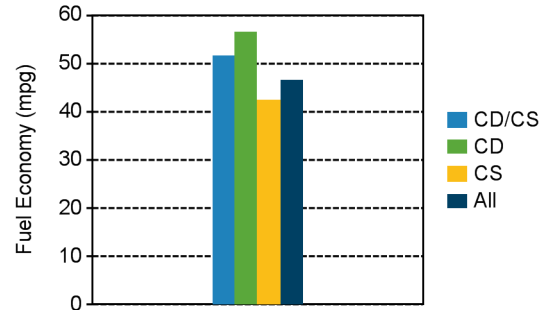
## Vehicle Technologies Program

Date range of data received:

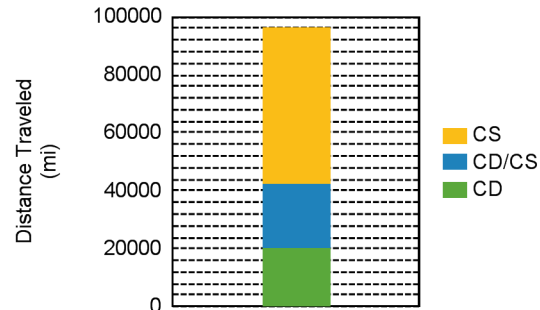
2/1/2010 to 2/28/2010

Number of days the vehicles were driven: 28

### Gasoline Fuel Economy By Trip Type



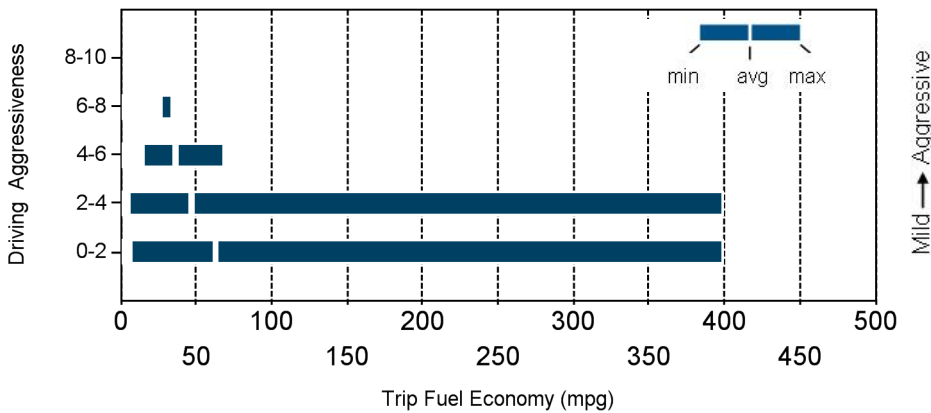
### Distance Traveled By Trip Type



Notes: 1 - 9. Please see <http://avt.inel.gov/phev/reportnotes> for an explanation of all PHEV Fleet Testing Report notes.

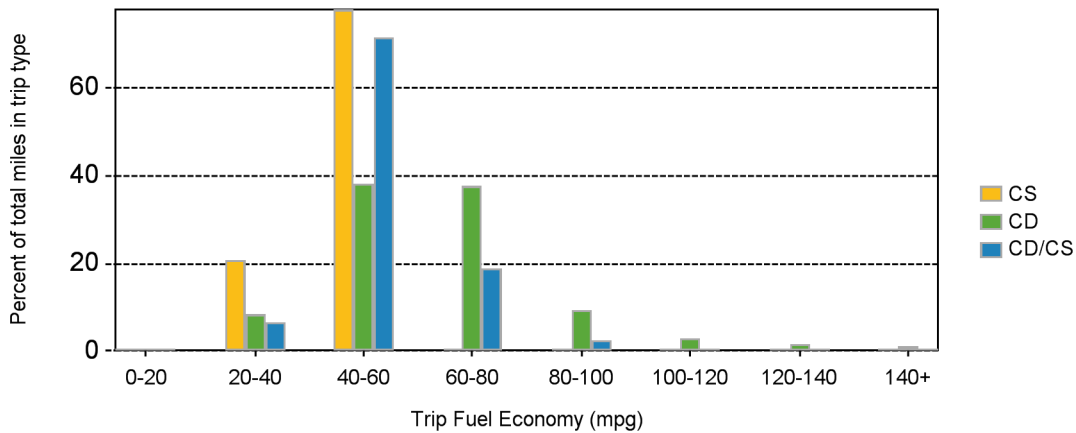
Trips in Charge Depleting (CD) mode		
	City	Highway
Gasoline fuel economy (mpg)	54	62
DC electrical energy consumption (DC Wh/mi)	157	108
Percent of miles with internal combustion engine off	26%	16%
Average trip aggressiveness (on scale 0 - 10)	2.1	1.8
Average trip distance (mi)	3.2	13.5
Trips in both Charge Depleting and Charge Sustaining (CD/CS) modes		
Gasoline fuel economy (mpg)	51	52
DC electrical energy consumption (DC Wh/mi)	78	46
Percent of miles with internal combustion engine off	25%	10%
Average trip aggressiveness (on scale 0 - 10)	2.0	1.7
Average trip distance (mi)	9.2	42.1
Trips in Charge Sustaining (CS) mode		
Gasoline fuel economy (mpg)	36	45
Percent of miles with internal combustion engine off	21%	8%
Average trip aggressiveness (on scale 0 - 10)	2.0	1.7
Average trip distance (mi)	3.4	35.9

### Effect Of Driving Aggressiveness on Fuel Economy This Year



Aggressiveness factor is based on accelerator pedal position. The more time spent during a trip at higher accelerator pedal position, the higher the trip aggressiveness.

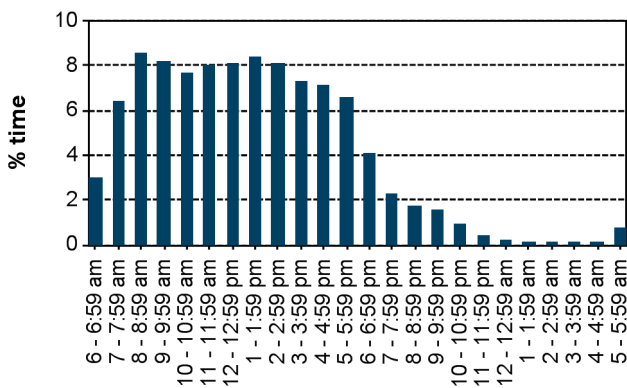
### Trip Fuel Economy Distribution By Trip Type



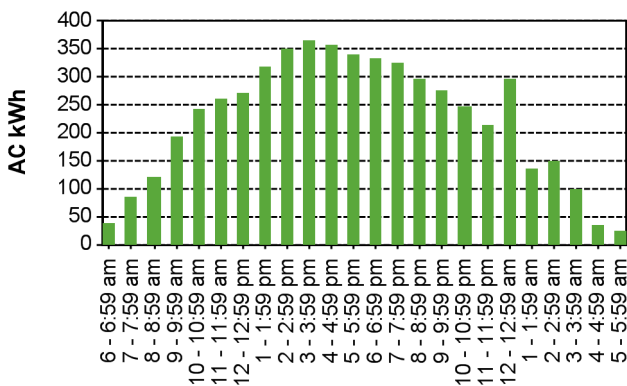
Plug-in charging

Average number of charging events per vehicle per month when driven	12
Average number of charging events per vehicle per day when vehicle driven	0.9
Average distance driven between charging events (mi)	50.4
Average number of trips between charging events	5.3
Average time plugged in per charging event (hr)	22.5
Average time charging per charging event (hr)	2.7
Average energy per charging event (AC kWh)	2.8
Average charging energy per vehicle per month (AC kWh)	33.0
Total number of charging events	1,908
Total charging energy (AC kWh)	5,352

Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In

