

North American PHEV Demonstration

Fleet Summary Report: Hymotion Prius (V2Green data logger)

Number of vehicles: 163

Reporting Period: September 2010

Vehicle Technologies Program

Date range of data received:

9/1/2010 to 9/30/2010

Number of days the vehicles were driven: 30

All Trips Combined

Overall gasoline fuel economy (mpg)	48
Overall AC electrical energy consumption (AC Wh/mi) ¹	41
Overall DC electrical energy consumption (DC Wh/mi) ²	29
Total number of trips	11,259
Total distance traveled (mi)	121,966

Trips in Charge Depleting (CD) mode ³

Gasoline fuel economy (mpg)	66
DC electrical energy consumption (DC Wh/mi) ⁴	145
Number of trips	3,970
Percent of trips city / highway	89% / 11%
Distance traveled (mi)	18,021
Percent of total distance traveled	15%

Trips in both Charge Depleting and Charge Sustaining (CD/CS) modes ⁵

Gasoline fuel economy (mpg)	54
DC electrical energy consumption (DC Wh/mi) ⁶	46
Number of trips	696
Percent of trips city / highway	47% / 53%
Distance traveled (mi)	20,687
Percent of total distance traveled	17%

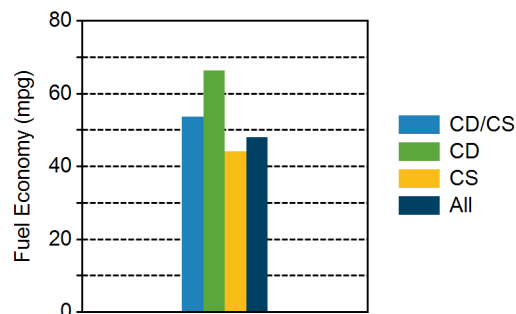
Trips in Charge Sustaining (CS) mode ⁷

Gasoline fuel economy (mpg)	44
Number of trips	6,593
Percent of trips city / highway	76% / 25%
Distance traveled (mi)	83,258
Percent of total distance traveled	68%

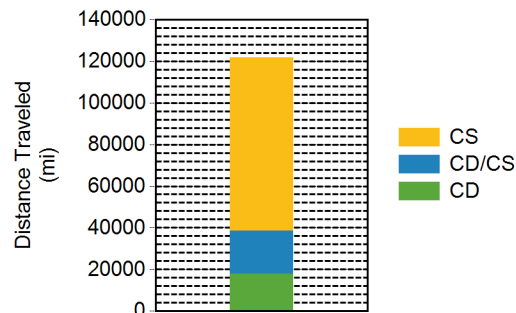
Number of trips when the plug-in battery pack was turned off by the vehicle operator ⁸ 707

Distance traveled with plug-in battery pack turned off by the vehicle operator (mi) ⁹ 13,166

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)	65	68
DC electrical energy consumption (DC Wh/mi)	168	111
Percent of miles with internal combustion engine off	40%	22%
Average trip aggressiveness (on scale 0 - 10)	2.0	1.9
Average trip distance (mi)	3.1	16.1

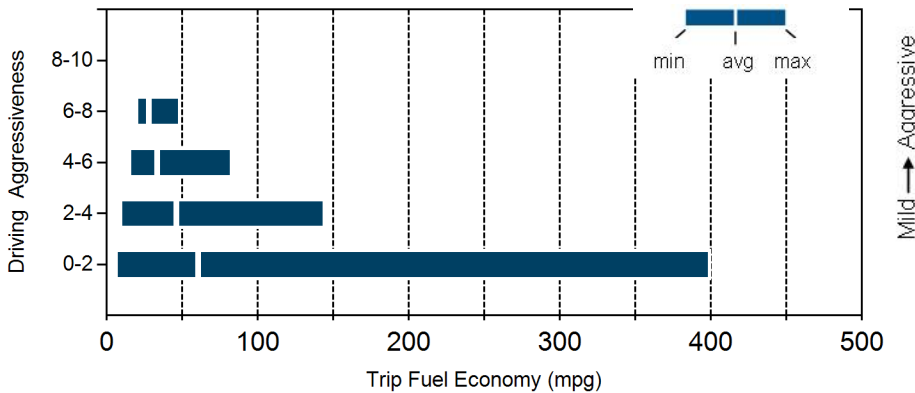
Trips in both Charge Depleting and Charge Sustaining (CD/CS) modes

Gasoline fuel economy (mpg)	55	53
DC electrical energy consumption (DC Wh/mi)	77	40
Percent of miles with internal combustion engine off	32%	12%
Average trip aggressiveness (on scale 0 - 10)	2.1	1.6
Average trip distance (mi)	9.5	47.5

Trips in Charge Sustaining (CS) mode

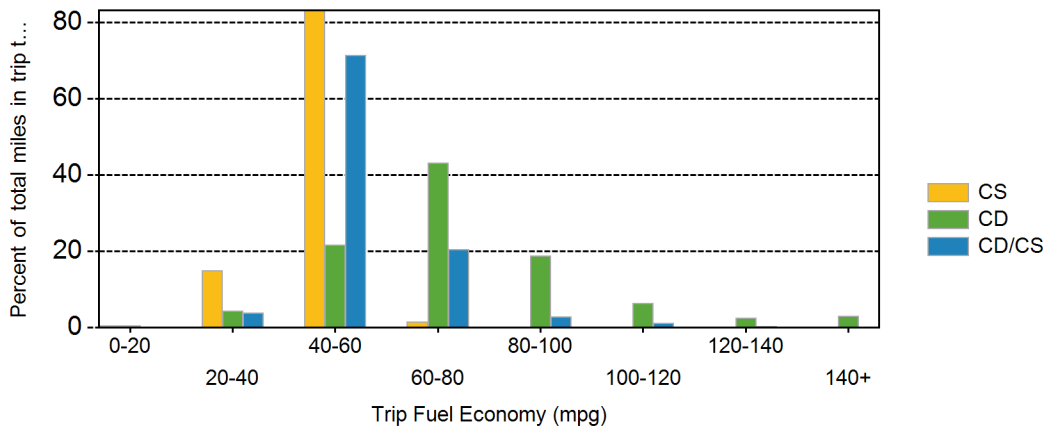
Gasoline fuel economy (mpg)	37	46
Percent of miles with internal combustion engine off	25%	9%
Average trip aggressiveness (on scale 0 - 10)	2.1	1.7
Average trip distance (mi)	3.6	40.3

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.

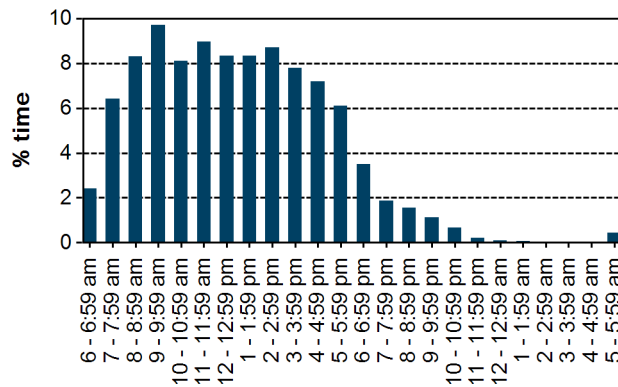
Trip Fuel Economy Distribution By Trip Type



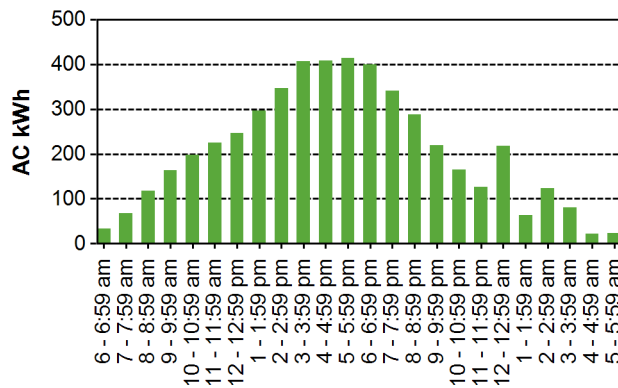
Plug-in charging

Average number of charging events per vehicle per month when driven	11
Average number of charging events per vehicle per day when vehicle driven	0.8
Average distance driven between charging events (mi)	70.3
Average number of trips between charging events	6.5
Average time plugged in per charging event (hr)	28.2
Average time charging per charging event (hr)	2.8
Average energy per charging event (AC kWh)	2.9
Average charging energy per vehicle per month (AC kWh)	30.7
Total number of charging events	1,735
Total charging energy (AC kWh)	5,004

Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In

