

North American PHEV Demonstration

Fleet Summary Report: Hymotion Prius (V2Green data logger)

Number of vehicles: 67

Reporting Period: September 2011

Vehicle Technologies Program

Date range of data received:

9/1/2011 to 9/30/2011

Number of days the vehicles were driven: 30

All Trips Combined

Overall gasoline fuel economy (mpg)	47
Overall AC electrical energy consumption (AC Wh/mi) ¹	37
Overall DC electrical energy consumption (DC Wh/mi) ²	25
Total number of trips	5,111
Total distance traveled (mi)	48,326

Trips in Charge Depleting (CD) mode ³

Gasoline fuel economy (mpg)	67
DC electrical energy consumption (DC Wh/mi) ⁴	149
Number of trips	1,715
Percent of trips city / highway	90% / 10%
Distance traveled (mi)	6,198
Percent of total distance traveled	13%

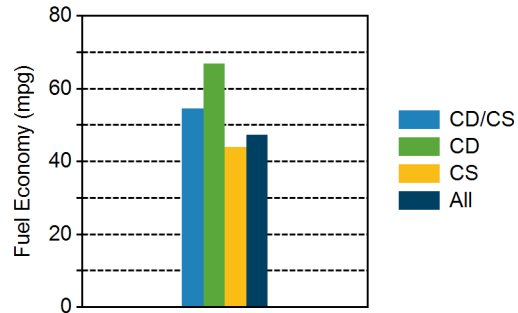
Trips in both Charge Depleting and Charge Sustaining (CD/CS) modes ⁵

Gasoline fuel economy (mpg)	54
DC electrical energy consumption (DC Wh/mi) ⁶	46
Number of trips	226
Percent of trips city / highway	50% / 50%
Distance traveled (mi)	6,246
Percent of total distance traveled	13%

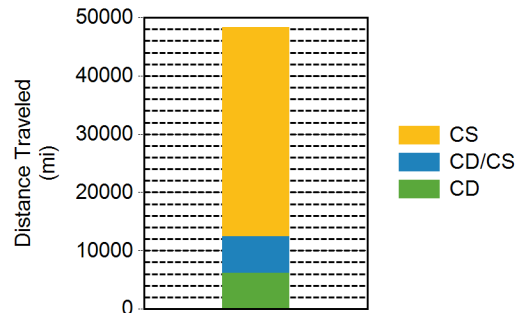
Trips in Charge Sustaining (CS) mode ⁷

Gasoline fuel economy (mpg)	44
Number of trips	3,170
Percent of trips city / highway	74% / 26%
Distance traveled (mi)	35,882
Percent of total distance traveled	74%
Number of trips when the plug-in battery pack was turned off by the vehicle operator ⁸	334
Distance traveled with plug-in battery pack turned off by the vehicle operator (mi) ⁹	6,467

Gasoline Fuel Economy By Trip Type



Distance Traveled By Trip Type



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

Trips in Charge Depleting (CD) mode

	City	Highway
Gasoline fuel economy (mpg)	65	70
DC electrical energy consumption (DC Wh/mi)	173	109
Percent of miles with internal combustion engine off	40%	22%
Average trip aggressiveness (on scale 0 - 10)	1.8	1.7
Average trip distance (mi)	2.5	13.7

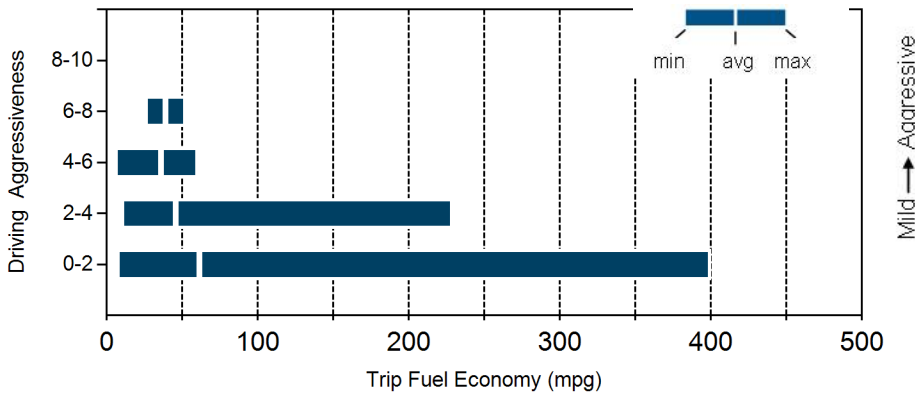
Trips in both Charge Depleting and Charge Sustaining (CD/CS) modes

Gasoline fuel economy (mpg)	52	55
DC electrical energy consumption (DC Wh/mi)	71	42
Percent of miles with internal combustion engine off	29%	12%
Average trip aggressiveness (on scale 0 - 10)	1.8	1.6
Average trip distance (mi)	7.2	48.1

Trips in Charge Sustaining (CS) mode

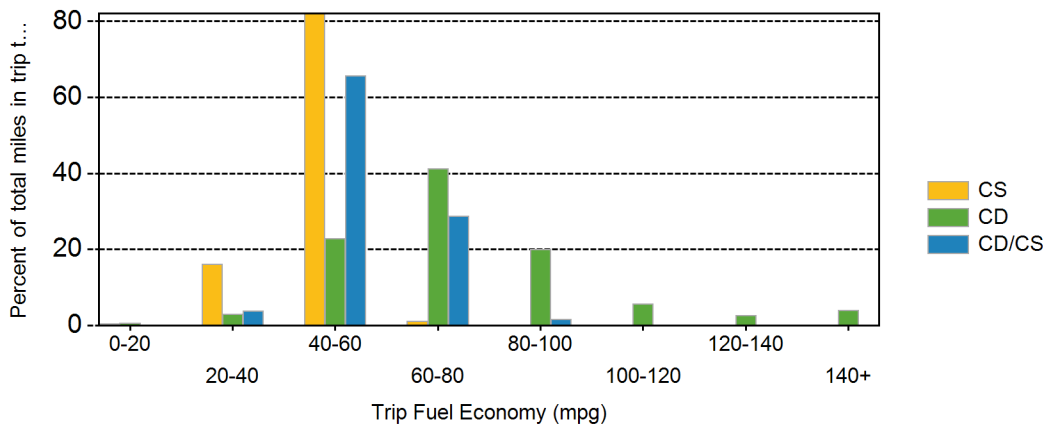
Gasoline fuel economy (mpg)	36	46
Percent of miles with internal combustion engine off	25%	9%
Average trip aggressiveness (on scale 0 - 10)	1.8	1.6
Average trip distance (mi)	3.1	35.3

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.

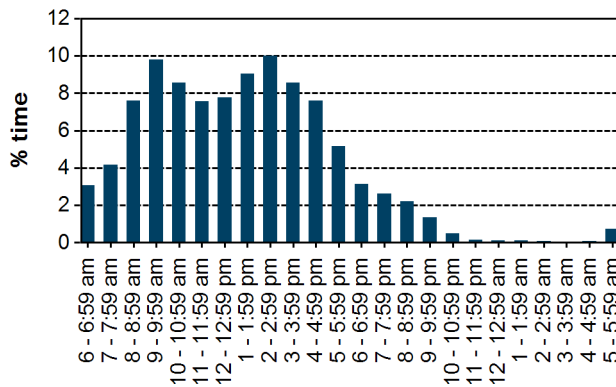
Trip Fuel Economy Distribution By Trip Type



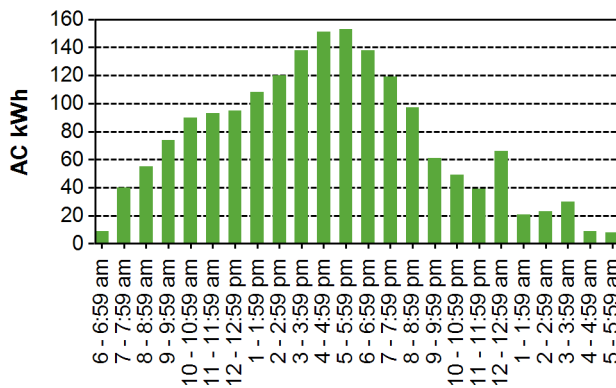
Plug-in charging

Average number of charging events per vehicle per month when driven	12
Average number of charging events per vehicle per day when vehicle driven	0.8
Average distance driven between charging events (mi)	62.3
Average number of trips between charging events	6.6
Average time plugged in per charging event (hr)	29.6
Average time charging per charging event (hr)	2.1
Average energy per charging event (AC kWh)	2.3
Average charging energy per vehicle per month (AC kWh)	27.2
Total number of charging events	776
Total charging energy (AC kWh)	1,798

Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In

