

North American PHEV Demonstration

Fleet Summary Report: Hymotion Prius (V2Green data logger)

Number of vehicles: 173

Reporting Period: Jan 10 - Dec 10

All Trips Combined

Overall gasoline fuel economy (mpg)	47
Overall AC electrical energy consumption (AC Wh/mi) ¹	49
Overall DC electrical energy consumption (DC Wh/mi) ²	35
Total number of trips	134,860
Total distance traveled (mi)	1,308,056

Trips in Charge Depleting (CD) mode ³

Gasoline fuel economy (mpg)	62
DC electrical energy consumption (DC Wh/mi) ⁴	142
Number of trips	51,490
Percent of trips city / highway	88% / 12%
Distance traveled (mi)	240,683
Percent of total distance traveled	18%

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

Gasoline fuel economy (mpg)	53
DC electrical energy consumption (DC Wh/mi) ⁶	49
Number of trips	8,916
Percent of trips city / highway	46% / 54%
Distance traveled (mi)	244,001
Percent of total distance traveled	19%

Trips in Charge Sustaining (CS) mode ⁷

Gasoline fuel economy (mpg)	43
Number of trips	74,452
Percent of trips city / highway	78% / 22%
Distance traveled (mi)	823,377
Percent of total distance traveled	63%
Number of trips when the plug-in battery pack was turned off by the vehicle operator ⁸	6939
Distance traveled with plug-in battery pack turned off by the vehicle operator (mi) ⁹	129,149

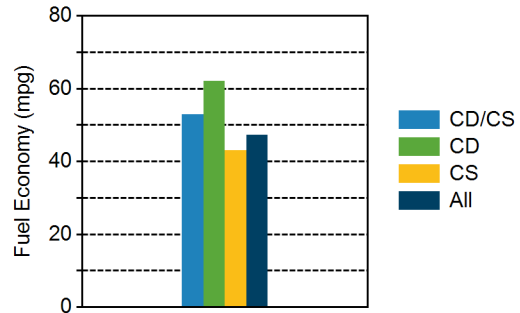
Vehicle Technologies Program

Date range of data received:

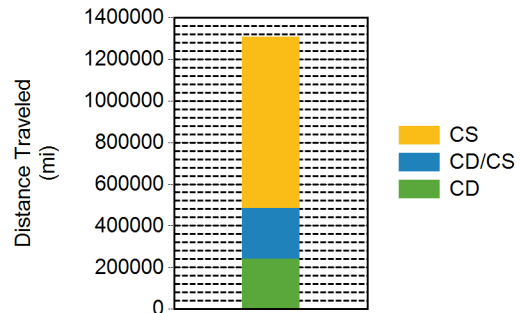
1/1/2010 to 12/31/2010

Number of days the vehicles were driven: 365

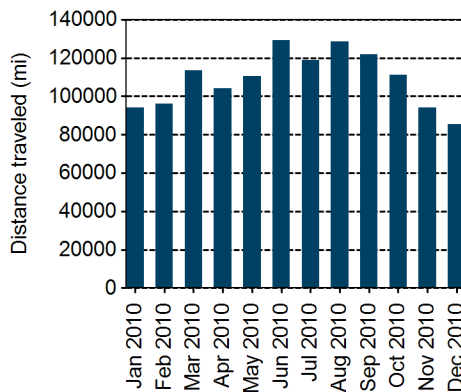
Gasoline Fuel Economy By Trip Type



Distance Traveled By Trip Type



Miles Logged by Month This Year



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)	60	65
DC electrical energy consumption (DC Wh/mi)	164	109
Percent of miles with internal combustion engine off	34%	20%
Average trip aggressiveness (on scale 0 - 10)	2.0	1.9
Average trip distance (mi)	3.2	15.6

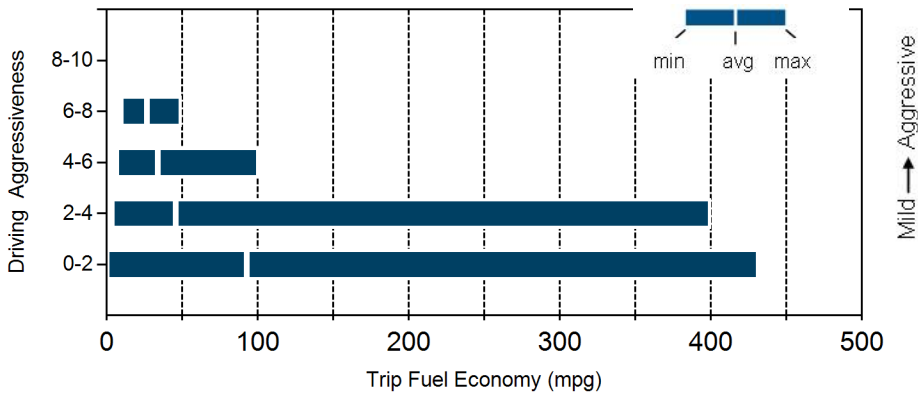
Trips in both Charge Depleting and Charge Sustaining (CD/CS) modes

Gasoline fuel economy (mpg)	52	53
DC electrical energy consumption (DC Wh/mi)	78	44
Percent of miles with internal combustion engine off	29%	12%
Average trip aggressiveness (on scale 0 - 10)	2.0	1.6
Average trip distance (mi)	9.2	43.0

Trips in Charge Sustaining (CS) mode

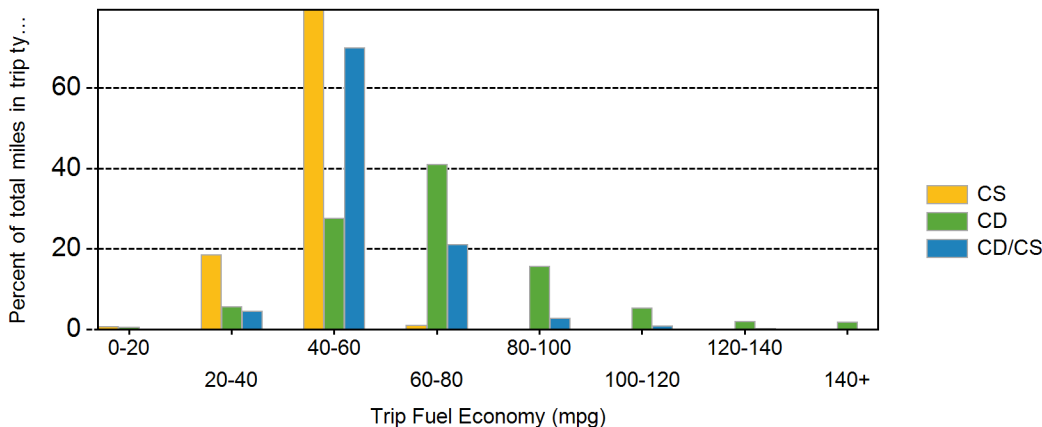
Gasoline fuel economy (mpg)	36	46
Percent of miles with internal combustion engine off	23%	9%
Average trip aggressiveness (on scale 0 - 10)	2.1	1.7
Average trip distance (mi)	3.4	37.7

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.

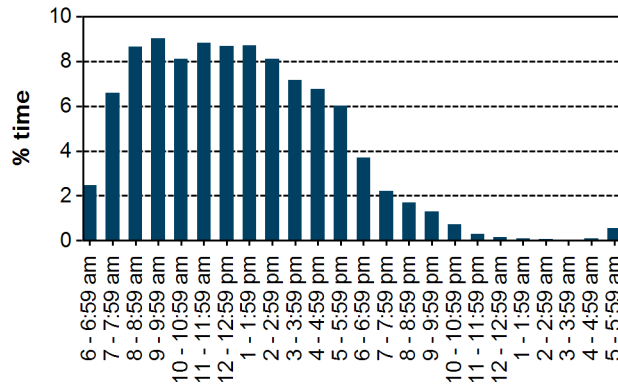
Trip Fuel Economy Distribution By Trip Type



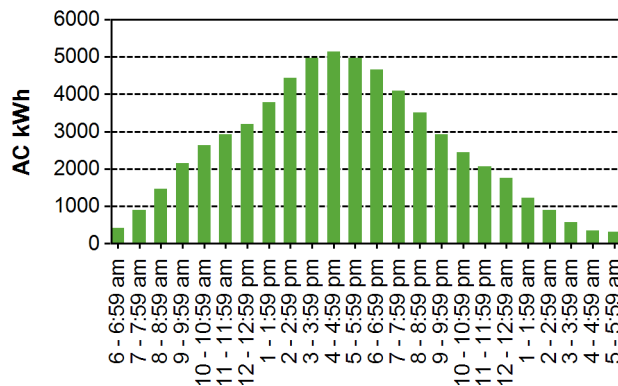
Plug-in charging

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)	57.0
Average number of trips between charging events	5.9
Average time plugged in per charging event (hr)	26.5
Average time charging per charging event (hr)	2.6
Average energy per charging event (AC kWh)	2.8
Average charging energy per vehicle per month (AC kWh)	33.1
Total number of charging events	22,965
Total charging energy (AC kWh)	64,670

Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In

