

North American PHEV Demonstration

Fleet Summary Report: Hymotion Prius (V2Green data logger)

Number of vehicles: 158

Reporting Period: November 2009

All Trips Combined

Overall gasoline fuel economy (mpg)	47
Overall AC electrical energy consumption (AC Wh/mi) ¹	54
Overall DC electrical energy consumption (DC Wh/mi) ²	37
Total number of trips	8,056
Total distance traveled (mi)	75,381
Trips in Charge Depleting (CD) mode ³	
Gasoline fuel economy (mpg)	59
DC electrical energy consumption (DC Wh/mi) ⁴	141
Number of trips	3,384
Percent of trips city / highway	88% / 12%
Distance traveled (mi)	14,737
Percent of total distance traveled	20%
Trips in both Charge Depleting and Charge Sustaining (CD/CS) modes ⁵	
Gasoline fuel economy (mpg)	51
DC electrical energy consumption (DC Wh/mi) ⁶	42
Number of trips	544
Percent of trips city / highway	43% / 57%
Distance traveled (mi)	17,289
Percent of total distance traveled	23%
Trips in Charge Sustaining (CS) mode ⁷	
Gasoline fuel economy (mpg)	43
Number of trips	4,128
Percent of trips city / highway	75% / 25%
Distance traveled (mi)	43,355
Percent of total distance traveled	58%
Number of trips when the plug-in battery pack was turned off by the vehicle operator ⁸	765
Distance traveled with plug-in battery pack turned off by the vehicle operator (mi) ⁹	10,395

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

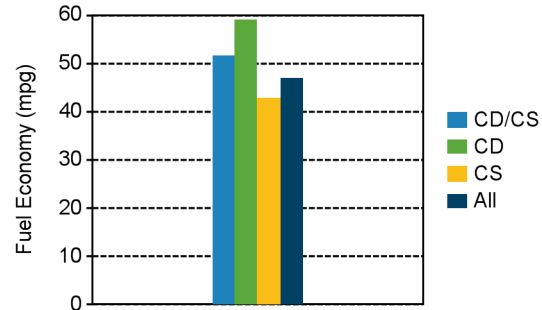
Vehicle Technologies Program

Date range of data received:

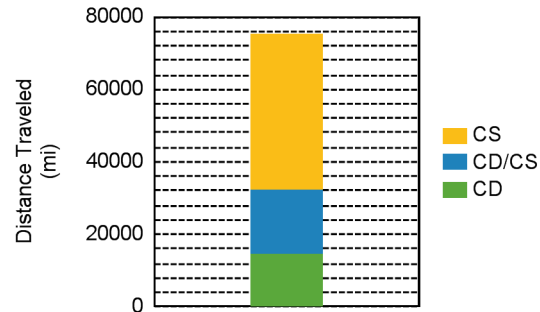
11/1/2009 to 11/30/2009

Number of days the vehicles were driven: 30

Gasoline Fuel Economy By Trip Type

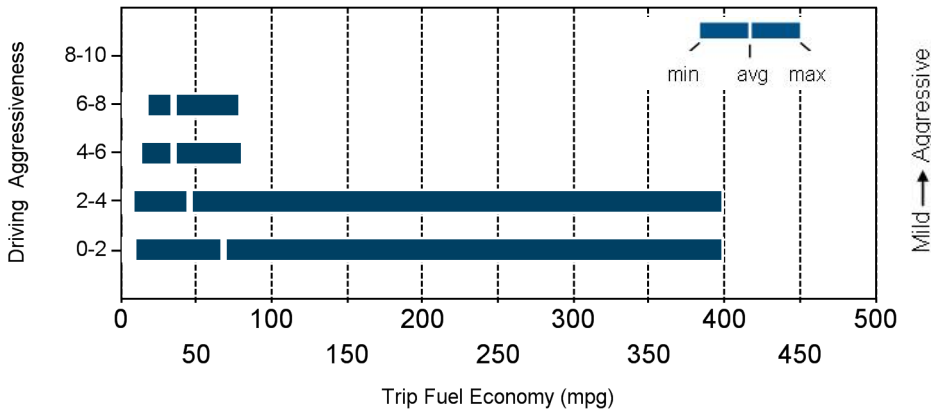


Distance Traveled By Trip Type



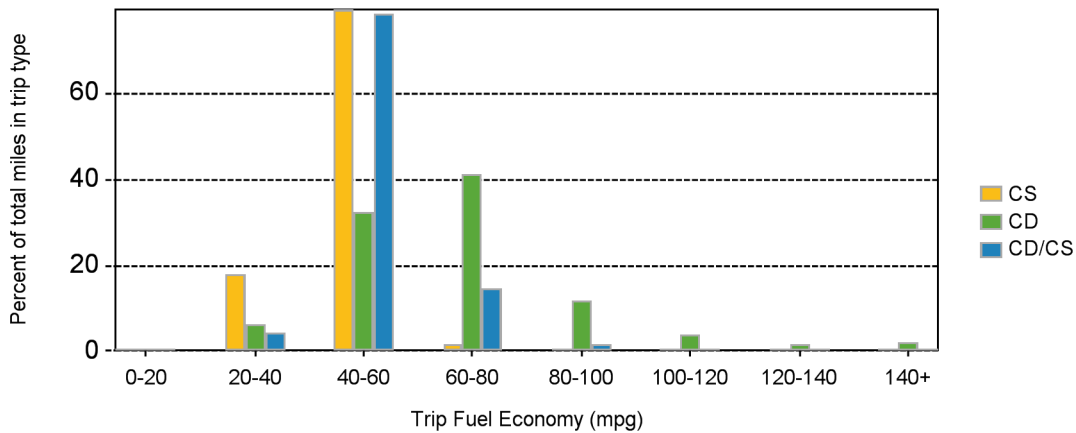
Trips in Charge Depleting (CD) mode		
	City	Highway
Gasoline fuel economy (mpg)	56	65
DC electrical energy consumption (DC Wh/mi)	162	110
Percent of miles with internal combustion engine off	24%	7%
Average trip aggressiveness (on scale 0 - 10)	1.8	1.9
Average trip distance (mi)	2.9	15.1
Trips in both Charge Depleting and Charge Sustaining (CD/CS) modes		
Gasoline fuel economy (mpg)	51	51
DC electrical energy consumption (DC Wh/mi)	67	38
Percent of miles with internal combustion engine off	20%	3%
Average trip aggressiveness (on scale 0 - 10)	1.9	1.7
Average trip distance (mi)	10.2	48.0
Trips in Charge Sustaining (CS) mode		
Gasoline fuel economy (mpg)	37	45
Percent of miles with internal combustion engine off	20%	4%
Average trip aggressiveness (on scale 0 - 10)	1.8	1.8
Average trip distance (mi)	3.5	31.3

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.

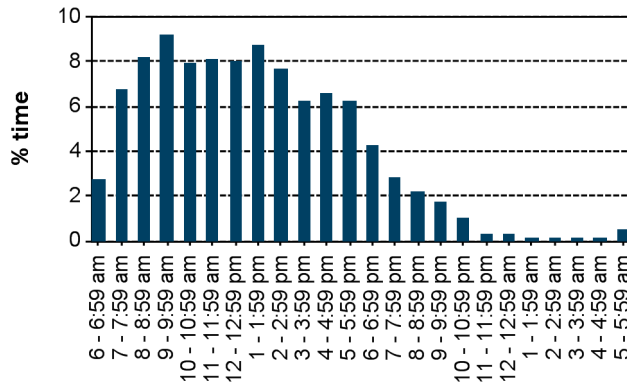
Trip Fuel Economy Distribution By Trip Type



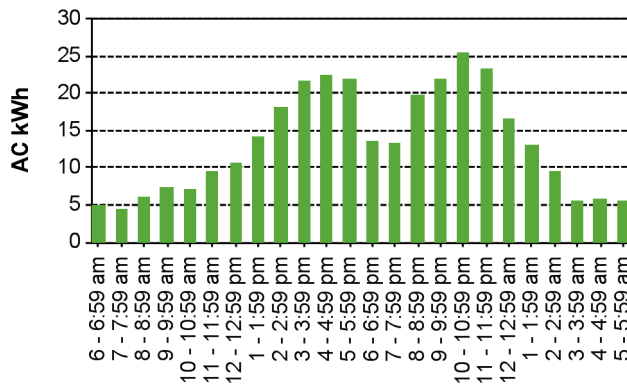
Plug-in charging

Average number of charging events per vehicle per month when driven	10
Average number of charging events per vehicle per day when vehicle driven	0.9
Average distance driven between charging events (mi)	47.5
Average number of trips between charging events	5.1
Average time plugged in per charging event (hr)	25.2
Average time charging per charging event (hr)	2.6
Average energy per charging event (AC kWh)	2.5
Average charging energy per vehicle per month (AC kWh)	26.4
Total number of charging events	1,588
Total charging energy (AC kWh)	4,036

Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In

