

North American PHEV Demonstration

Fleet Summary Report: Hymotion Prius (V2Green data logger)

Number of vehicles: 184

Reporting Period: Apr 08 - Sept 11

All Trips Combined

Overall gasoline fuel economy (mpg)	48
Overall AC electrical energy consumption (AC Wh/mi) ¹	52
Overall DC electrical energy consumption (DC Wh/mi) $^{\rm 2}$	38
Total number of trips	310,808
Total distance traveled (mi)	2,899,288

Trips in Charge Depleting (CD) mode 3

mps in onaige bepreaing (ob) mode	
Gasoline fuel economy (mpg)	62
DC electrical energy consumption (DC Wh/mi) ⁴	142
Number of trips	125,321
Percent of trips city / highway	87% / 13%
Distance traveled (mi)	569,686
Percent of total distance traveled	20%

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	22,078
Percent of trips city / highway	47% / 53%
Distance traveled (mi)	576,256
Percent of total distance traveled	20%

Trips in Charge Sustaining (CS) mode 7

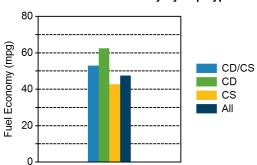
Gasoline fuel economy (mpg)	43
Number of trips	163,400
Percent of trips city / highway	77% / 23%
Distance traveled (mi)	1,756,775
Percent of total distance traveled	61%
Number of trips when the plug-in battery pack was turned off by the vehicle operator ⁸	13962
Distance traveled with plug-in battery pack turned off by the vehicle operator (mi) ⁹	299,452

Vehicle Technologies Program

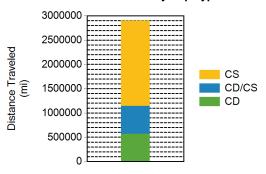
Date range of data received: 4/18/2008 to 9/30/2011

Number of days the vehicles were driven: 1254

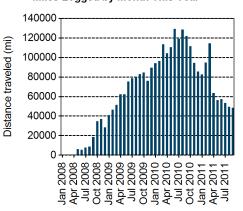
Gasoline Fuel Economy By Trip Type



Distance Traveled By Trip Type



Miles Logged by Month This Year

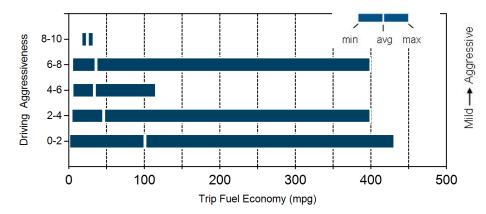


Notes: 1 - 9. Please see http://avt.inl.gov/pdf/phev/ReportNotes.pdf for an explanation of all PHEV Fleet Testing Report notes.

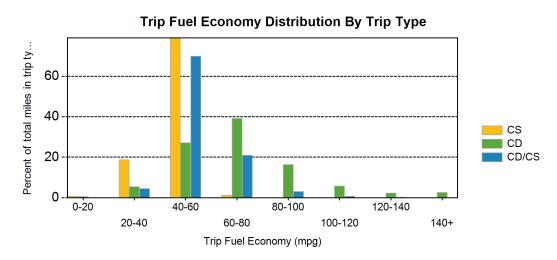
1

Trips in Charge Depleting (CD) mode	City	Highway
Gasoline fuel economy (mpg)	60	66
DC electrical energy consumption (DC Wh/mi)	166	109
Percent of miles with internal combustion engine off	33%	15%
Average trip aggressiveness (on scale 0 - 10)	1.8	1.8
Average trip distance (mi)	3.0	15.0
Trips in both Charge Depleting and Charge Sustaining (CD/CS) modes		
Gasoline fuel economy (mpg)	53	53
DC electrical energy consumption (DC Wh/mi)	79	44
Percent of miles with internal combustion engine off	27%	9%
Average trip aggressiveness (on scale 0 - 10)	1.9	1.6
Average trip distance (mi)	8.6	41.7
Trips in Charge Sustaining (CS) mode		
Gasoline fuel economy (mpg)	36	46
Percent of miles with internal combustion engine off	23%	8%
Average trip aggressiveness (on scale 0 - 10)	2.0	1.7
Average trip distance (mi)	3.5	35.2

Effect Of Driving Aggressiveness on Fuel Economy This Year



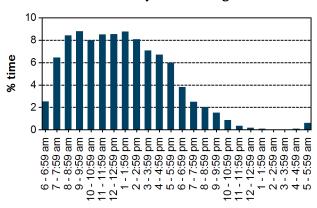
Aggressiveness factor is based on accelerator pedal position. The more time spent during a trip at higher accelerator pedal position, the higher the trip aggressiveness.



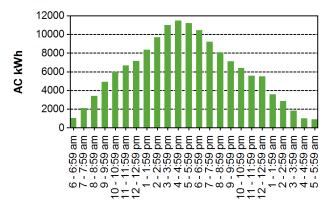
Plug-in charging

Average number of charging events per vehicle per month when driven	13	
Average number of charging events per vehicle per day when vehicle driven	0.9	
Average distance driven between charging events (mi)	51.7	
Average number of trips between charging events	5.5	
Average time plugged in per charging event (hr)	24.3	
Average time charging per charging event (hr)	2.7	
Average energy per charging event (AC kWh)	2.7	
Average charging energy per vehicle per month (AC kWh)	34.4	
Total number of charging events	56,037	
Total charging energy (AC kWh)	151,331	

Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In

