

North American PHEV Demonstration

Fleet Summary Report - Hymotion Prius (Kvaser data logger)

Number of vehicles: 21
Reporting Period: Jan 10 - Dec 10

Vehicle Technologies Program

Date range of data received:
1/1/2010 to 12/31/2010
Number of days the vehicles were driven: 344

All Trips Combined

Overall gasoline fuel economy (mpg)	44
Overall DC electrical energy consumption (DC Wh/mi) ²	58
Total number of trips	17425
Total distance traveled (mi)	132065

Trips in Charge Depleting (CD) mode ³

Gasoline fuel economy (mpg)	54
DC electrical energy consumption (DC Wh/mi) ⁴	134
Number of trips	9650
Percent of trips city / highway	83% / 17%
Distance traveled (mi)	44854
Percent of total distance traveled	34%

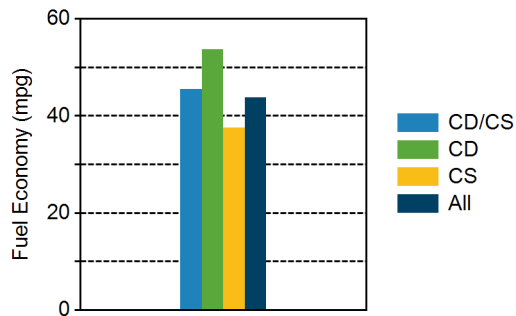
Trips in both Charge Depleting and Charge Sustaining (CD/CS) modes ⁵

Gasoline fuel economy (mpg)	45
DC electrical energy consumption (DC Wh/mi) ⁶	56
Number of trips	1895
Percent of trips city / highway	54% / 46%
Distance traveled (mi)	29731
Percent of total distance traveled	23%

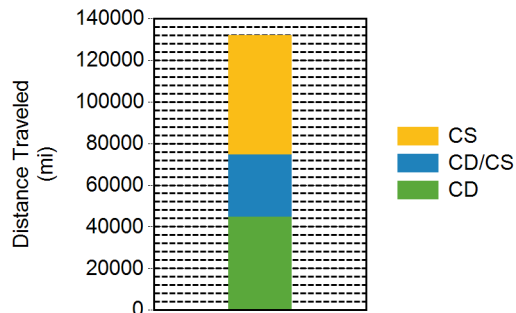
Trips in Charge Sustaining (CS) mode ⁷

Gasoline fuel economy (mpg)	38
Number of trips	5880
Percent of trips city / highway	73% / 27%
Distance traveled (mi)	57480
Percent of total distance traveled	44%
Number of trips when the plug-in battery pack was turned off by the vehicle operator ⁸	702
Distance traveled with plug-in battery pack turned off by vehicle operator(mi) ⁹	6278

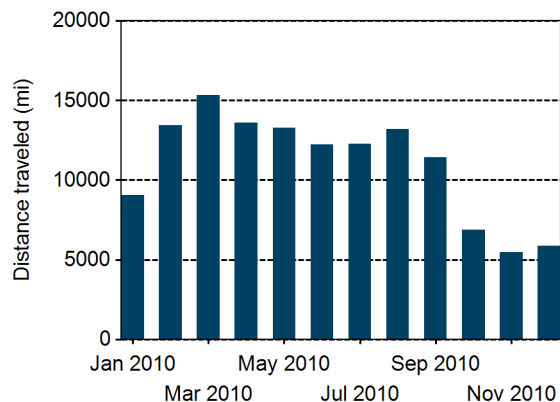
Gasoline Fuel Economy By Trip Type



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)	52	56
DC electrical energy consumption (DC Wh/mi)	156	110
Percent of miles with internal combustion engine off	36%	18%
Average trip aggressiveness (on scale 0 - 10)	2.5	2.2
Average trip distance (mi)	3.0	12.7

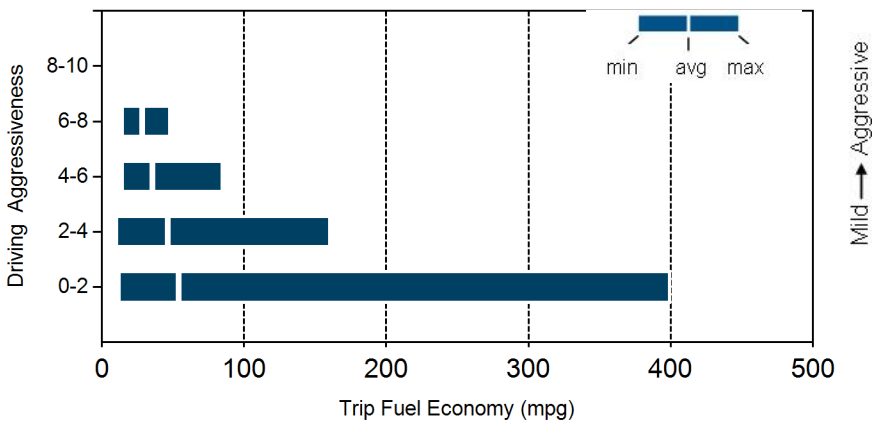
Trips in combined Charge Depleting and Charge Sustaining (CD/CS) modes

Gasoline fuel economy (mpg)	45	46
DC electrical energy consumption (DC Kw/mi)	77	51
Percent of miles with internal combustion engine off	32%	13%
Average trip aggressiveness (on scale 0 - 10)	2.4	1.9
Average trip distance (mi)	5.6	27.7

Trips in Charge Sustaining (CS) mode

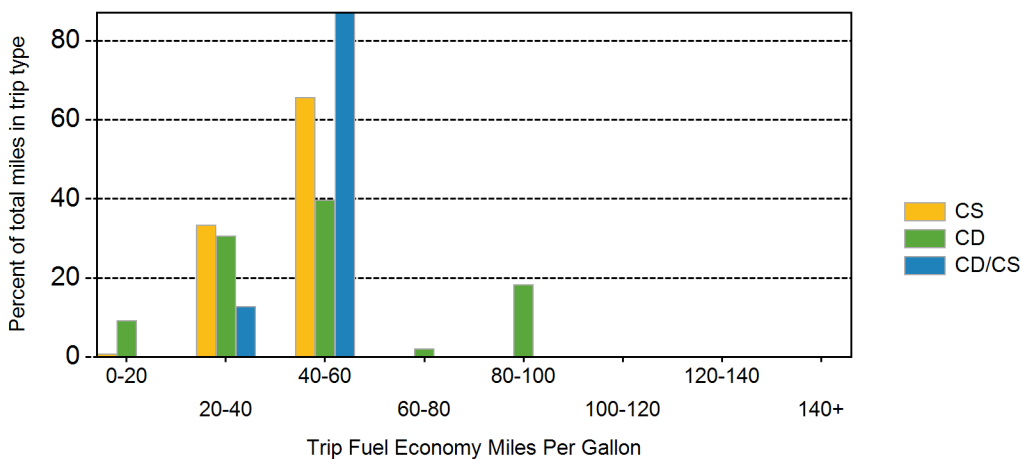
Gasoline fuel economy (mpg)	34	39
Percent of miles with internal combustion engine off	26%	10%
Average trip aggressiveness (on scale 0 - 10)	2.1	1.7
Average trip distance (mi)	3.9	25.4

Effect Of Driving Aggressiveness on Fuel Economy



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.

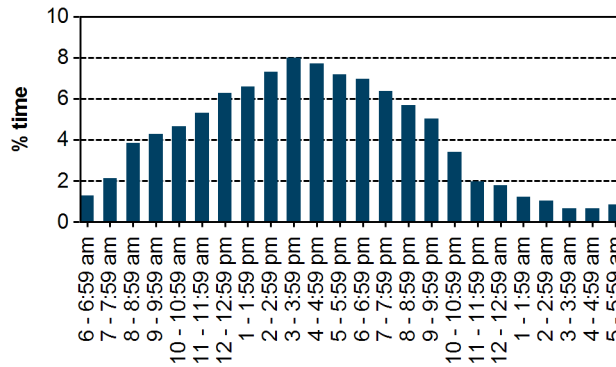
Trip Fuel Economy Distribution By Trip Type



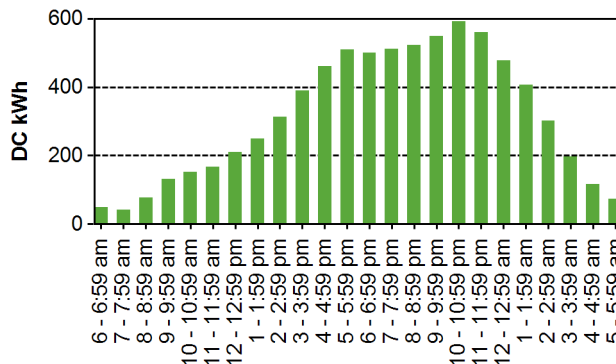
Plug-in charging

Average number of charging events per vehicle per month when driven	26
Average number of charging events per vehicle per day when vehicle driven	1.4
Average distance driven between charging events (mi)	33.2
Average number of trips between charging events	4.4
Average time charging per charging event (hr)*	2.2
Average energy per charging event (DC kWh)	1.9
Average charging energy per vehicle per month (DC kWh)	48.8
Total number of charging events	3977
Total charging energy (DC kWh)	7564

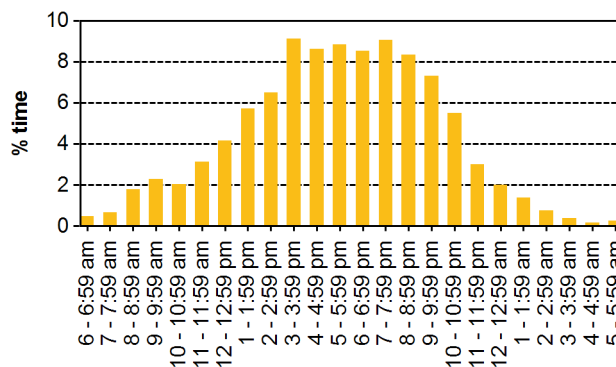
Time of Day When Driving



Time of Day When Charging



Time at the Start of Charging Events



* Time charging per charging event is the average length of time per charging event when the vehicle was drawing power from the electrical grid. It does not necessarily represent the total duration when the vehicle was plugged in per charging event.