

North American PHEV Demonstration

Fleet Summary Report - Hymotion Prius (Kvaser data logger)

Number of vehicles: 44
Reporting Period: Jan 08 - Dec 10

Vehicle Technologies Program

Date range of data received:

1/1/2008 to 12/31/2010

Number of days the vehicles were driven: 366

All Trips Combined

Overall gasoline fuel economy (mpg)	45
Overall DC electrical energy consumption (DC Wh/mi) ²	55
Total number of trips	53478
Total distance traveled (mi)	439699

Trips in Charge Depleting (CD) mode ³

Gasoline fuel economy (mpg)	58
DC electrical energy consumption (DC Wh/mi) ⁴	134
Number of trips	29767
Percent of trips city / highway	84% / 16%
Distance traveled (mi)	142124
Percent of total distance traveled	32%

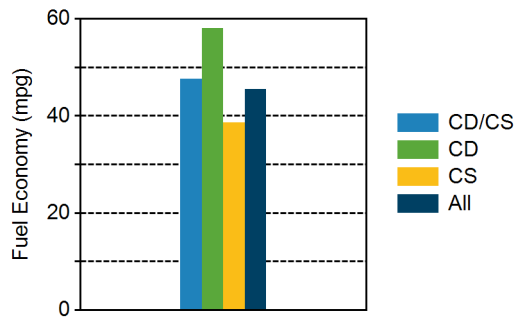
Trips in both Charge Depleting and Charge Sustaining (CD/CS) modes ⁵

Gasoline fuel economy (mpg)	48
DC electrical energy consumption (DC Wh/mi) ⁶	53
Number of trips	5116
Percent of trips city / highway	51% / 49%
Distance traveled (mi)	97993
Percent of total distance traveled	22%

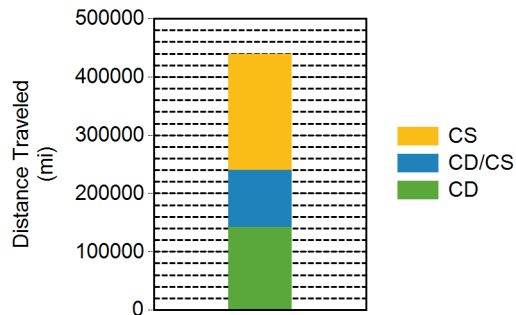
Trips in Charge Sustaining (CS) mode ⁷

Gasoline fuel economy (mpg)	39
Number of trips	18595
Percent of trips city / highway	71% / 29%
Distance traveled (mi)	199583
Percent of total distance traveled	45%
Number of trips when the plug-in battery pack was turned off by the vehicle operator ⁸	2621
Distance traveled with plug-in battery pack turned off by vehicle operator(mi) ⁹	41200

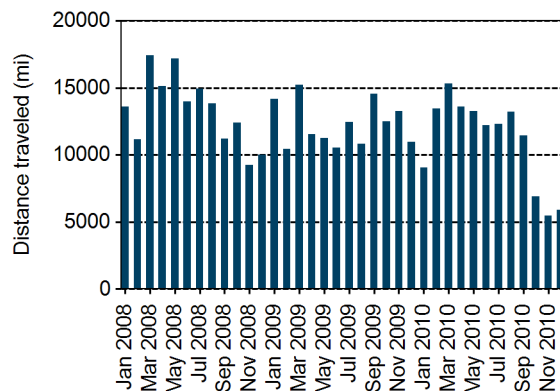
Gasoline Fuel Economy By Trip Type



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)	56	61
DC electrical energy consumption (DC Wh/mi)	157	109
Percent of miles with internal combustion engine off	34%	12%
Average trip aggressiveness (on scale 0 - 10)	2.1	2.0
Average trip distance (mi)	3.0	13.8

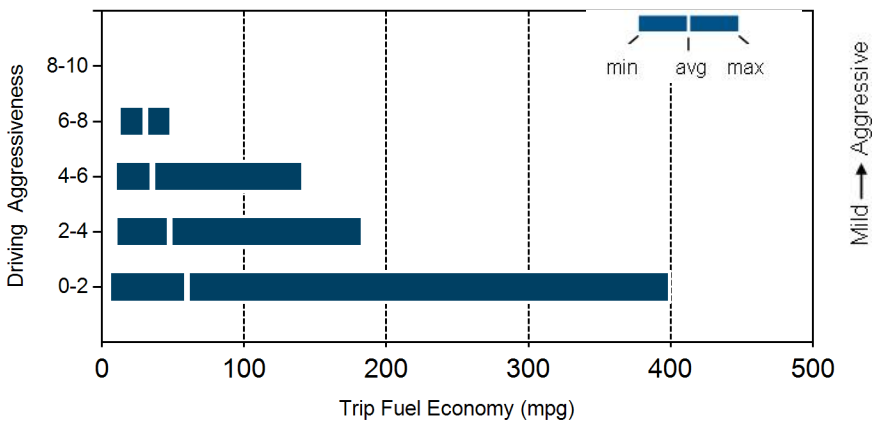
Trips in combined Charge Depleting and Charge Sustaining (CD/CS) modes

Gasoline fuel economy (mpg)	47	48
DC electrical energy consumption (DC Kw/mi)	78	48
Percent of miles with internal combustion engine off	28%	7%
Average trip aggressiveness (on scale 0 - 10)	2.2	1.7
Average trip distance (mi)	6.1	32.7

Trips in Charge Sustaining (CS) mode

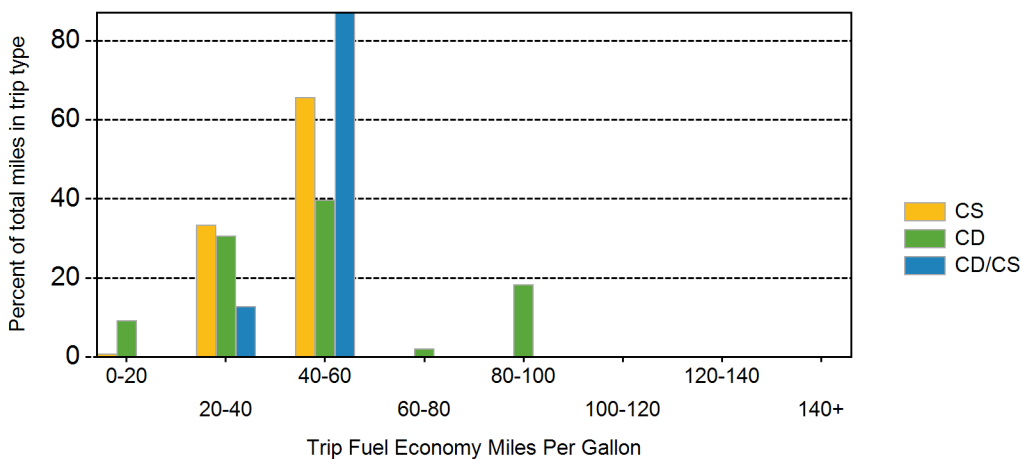
Gasoline fuel economy (mpg)	34	40
Percent of miles with internal combustion engine off	24%	6%
Average trip aggressiveness (on scale 0 - 10)	1.8	1.5
Average trip distance (mi)	3.6	28.6

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.

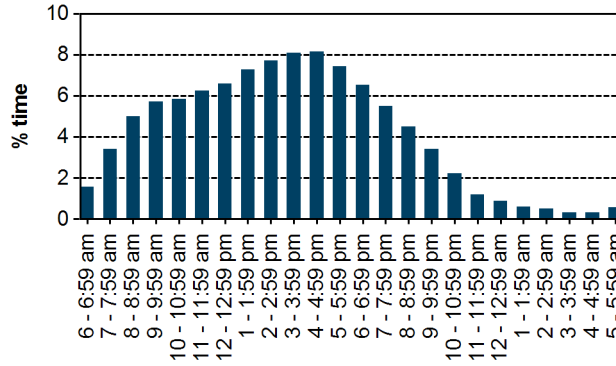
Trip Fuel Economy Distribution By Trip Type



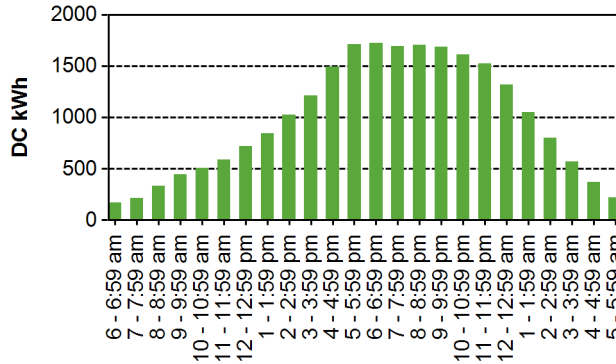
Plug-in charging

Average number of charging events per vehicle per month when driven	22
Average number of charging events per vehicle per day when vehicle driven	1.5
Average distance driven between charging events (mi)	30.2
Average number of trips between charging events	3.7
Average time charging per charging event (hr)*	2.0
Average energy per charging event (DC kWh)	1.6
Average charging energy per vehicle per month (DC kWh)	35.3
Total number of charging events	14564
Total charging energy (DC kWh)	23579

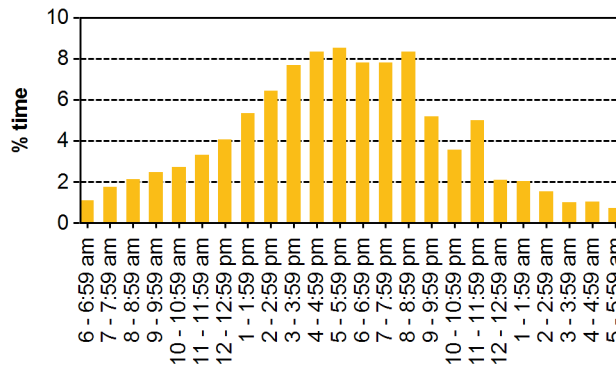
Time of Day When Driving



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.