

## North American PHEV Demonstration

Fleet Summary Report: Hymotion Prius (V2Green data logger)

Number of vehicles: 114

Reporting Period: October 2009

### All Trips Combined

Overall gasoline fuel economy (mpg)	48
Overall AC electrical energy consumption (AC Wh/mi)	51
Overall DC electrical energy consumption (DC Wh/mi)	38
Total number of trips	9,328
Total distance traveled (mi)	85,070
Trips in Charge Depleting (CD) mode *	
Gasoline fuel economy (mpg)	63
DC electrical energy consumption (DC Wh/mi)	140
Number of trips	3,732
Percent of trips city / highway	87% / 13%
Distance traveled (mi)	16,889
Percent of total distance traveled	20%
Trips in both Charge Depleting and Charge Sustaining (CD/CS) modes**	
Gasoline fuel economy (mpg)	52
DC electrical energy consumption (DC Wh/mi)	48
Number of trips	664
Percent of trips city / highway	47% / 54%
Distance traveled (mi)	18,175
Percent of total distance traveled	21%
Trips in Charge Sustaining (CS) mode***	
Gasoline fuel economy (mpg)	43
Number of trips	4,932
Percent of trips city / highway	79% / 21%
Distance traveled (mi)	50,005
Percent of total distance traveled	59%
Number of trips when the plug-in battery pack was turned off by the vehicle operator <sup>^</sup>	731
Distance traveled with plug-in battery pack turned off by the vehicle operator (mi) <sup>^^</sup>	8,289

\* Trips when the plug-in battery pack charge is depleted to propel the vehicle throughout entire trip

\*\* Trips when the plug-in battery pack is depleted to propel the vehicle for a portion of the trip, but is fully depleted prior to the end of the trip

\*\*\* Trips when the plug-in battery pack is not used to propel the vehicle - either the plug-in battery is fully depleted before the beginning of the trip, or the plug-in battery pack is turned off

<sup>^</sup> "Number of trips with plug-in battery pack turned off by the vehicle operator" is a subset of number of trips in combined CD/CS and CS mode

<sup>^^</sup> "Distance traveled with plug-in battery pack turned off by the vehicle operator" is a subset of distance traveled in combined CD/CS and CS modes

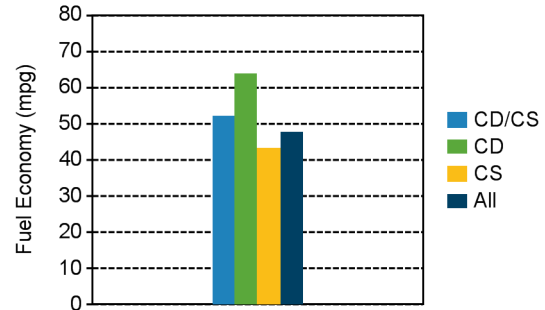
## Vehicle Technologies Program

Date range of data received:

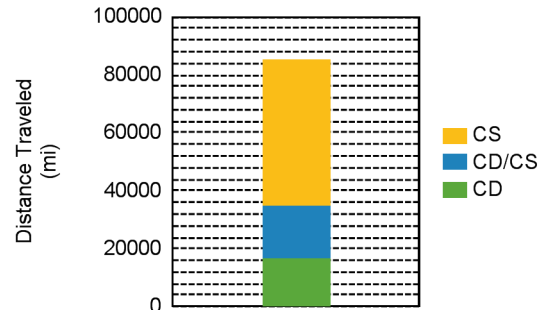
10/1/2009 to 10/31/2009

Number of days the vehicles were driven: 31

### Gasoline Fuel Economy By Trip Type

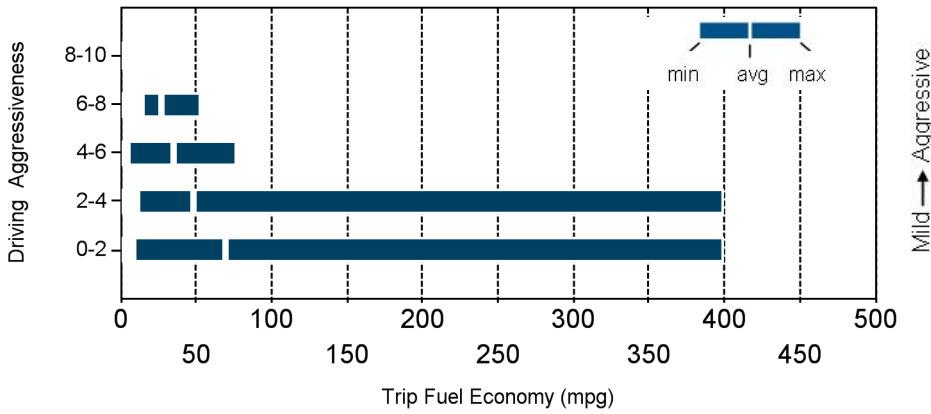


### Distance Traveled By Trip Type



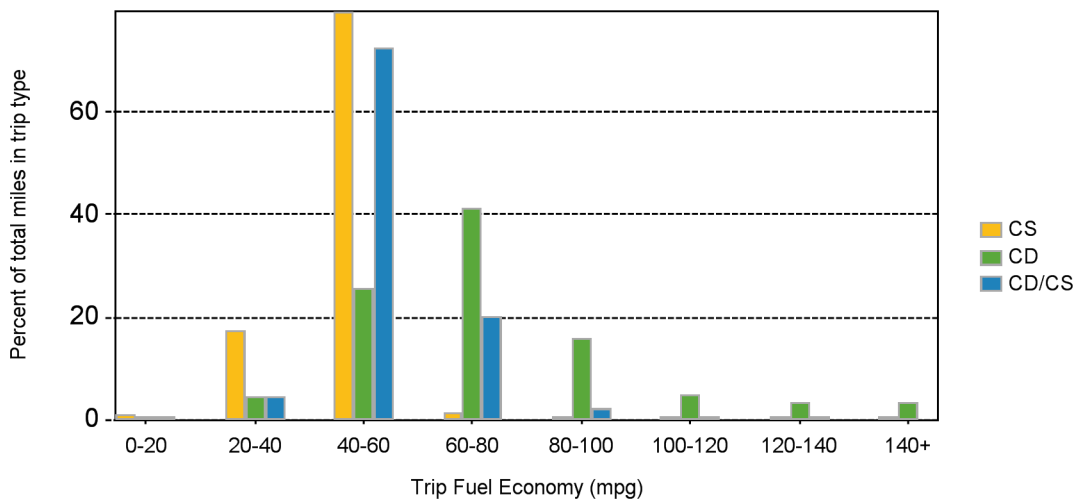
Trips in Charge Depleting (CD) mode		
	City	Highway
Gasoline fuel economy (mpg)	62	66
DC electrical energy consumption (DC Wh/mi)	160	107
Percent of miles with internal combustion engine off	27%	8%
Average trip aggressiveness (on scale 0 - 10)	1.9	2.1
Average trip distance (mi)	3.2	13.4
Trips in both Charge Depleting and Charge Sustaining (CD/CS) modes		
Gasoline fuel economy (mpg)	54	52
DC electrical energy consumption (DC Wh/mi)	74	42
Percent of miles with internal combustion engine off	22%	4%
Average trip aggressiveness (on scale 0 - 10)	1.8	1.6
Average trip distance (mi)	9.8	42.7
Trips in Charge Sustaining (CS) mode		
Gasoline fuel economy (mpg)	37	46
Percent of miles with internal combustion engine off	23%	4%
Average trip aggressiveness (on scale 0 - 10)	1.9	1.8
Average trip distance (mi)	3.6	34.2

### 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.

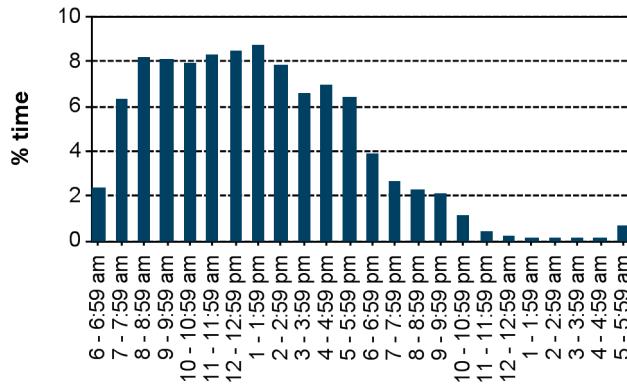
### Trip Fuel Economy Distribution By Trip Type



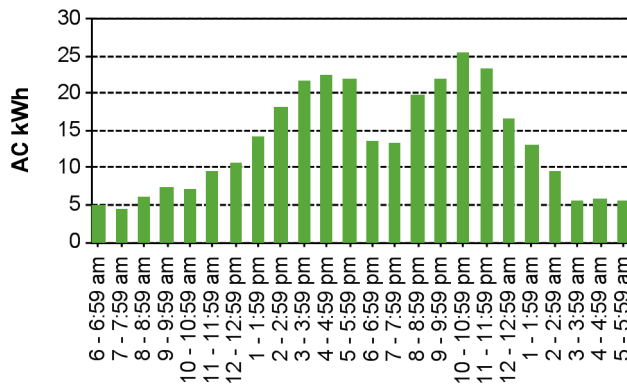
Plug-in charging

Average number of charging events per vehicle per month when driven	16
Average number of charging events per vehicle per day when vehicle driven	1.0
Average distance driven between charging events (mi)	48.0
Average number of trips between charging events	5.3
Average time plugged in per charging event (hr)	21.9
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)	39.5
Total number of charging events	1,771
Total charging energy (AC kWh)	4,342

Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In

