



## Vehicle Technologies Program

### North American PHEV Demonstration

Fleet Summary Report - Hymotion Prius (V2Green data logger)

Number of vehicles: 116

Reporting Period: Apr 08 - Sept 09

Date range of data received:

4/18/2008 to 9/30/2009

Number of days the vehicles were driven: 524

#### All Trips Combined

Overall gasoline fuel economy (mpg)	50
Total number of trips	77501
Total distance traveled (mi)	711830

#### Trips in Charge Depleting (CD) mode \*

Gasoline fuel economy (mpg)	65
Number of trips	36929
Percent of trips city / highway	85.5% / 14.5%
Distance traveled (mi)	168493
Percent of total distance traveled	23.7%

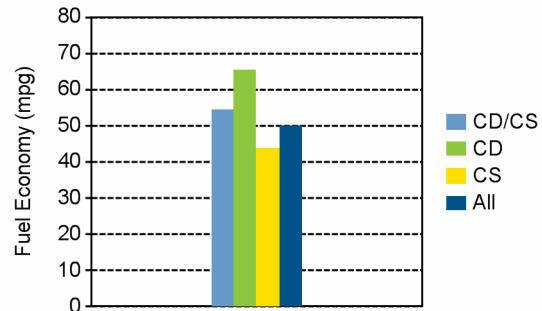
#### Trips in combined Charge Depleting and Charge Sustaining (CD/CS) modes\*\*

Gasoline fuel economy (mpg)	54
Number of trips	7299
Percent of trips city / highway	48.5% / 51.5%
Distance traveled (mi)	178863
Percent of total distance traveled	25.1%

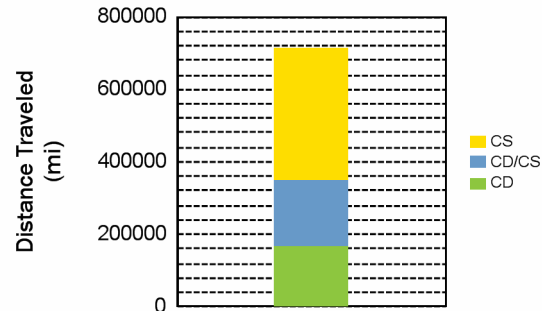
#### Trips in Charge Sustaining (CS) mode\*\*\*

Gasoline fuel economy (mpg)	44
Number of trips	33273
Percent of trips city / highway	72.9% / 27.1%
Distance traveled (mi)	367864
Percent of total distance traveled	51.7%

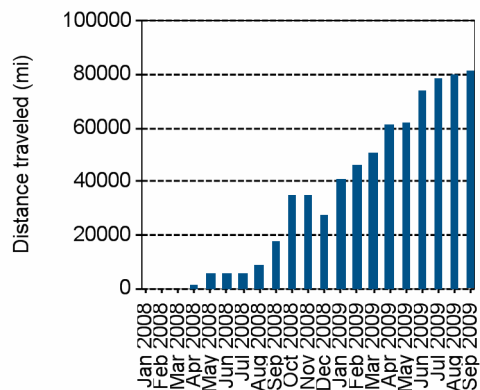
#### Gasoline Fuel Economy By Trip Type



#### Distance Traveled By Trip Type



#### Miles Logged by Month This Year



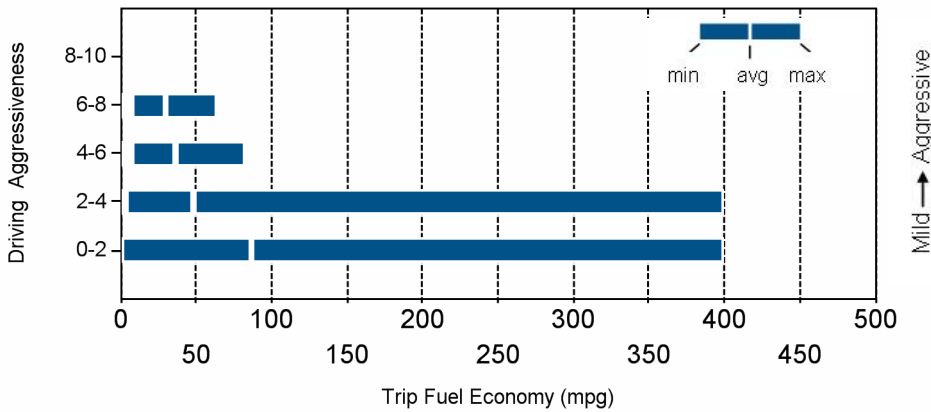
\* Trips when the plug-in battery pack charge is depleted to propel the vehicle throughout entire trip

\*\* 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

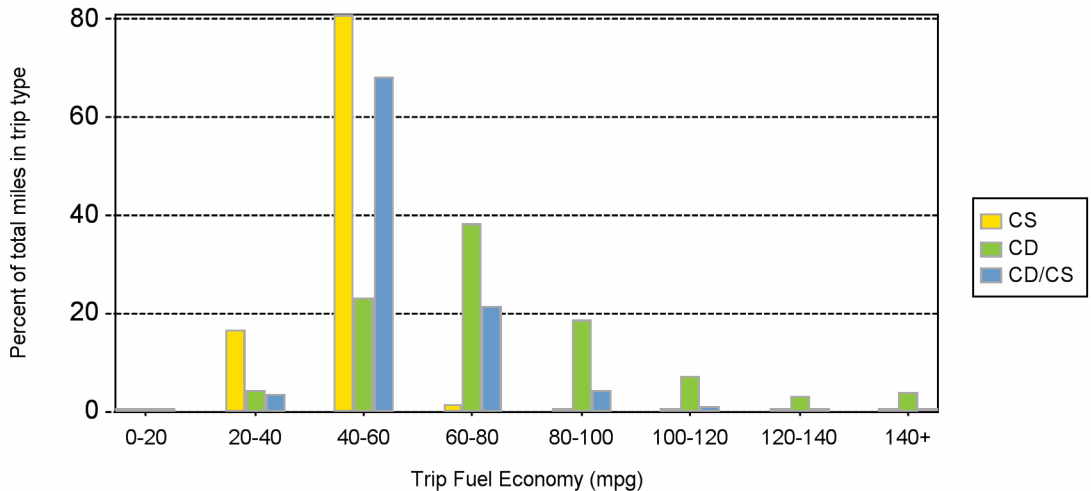
Trips in Charge Depleting (CD) mode		City	Highway
Gasoline fuel economy (mpg)		64	67
Percent of miles in electric-only mode		32.0%	9.0%
Average trip aggressiveness (on scale 0 - 10)		1.6	1.6
Average trip distance (mi)		2.9	14.3
Trips in combined Charge Depleting and Charge Sustaining (CD/CS) modes			
Gasoline fuel economy (mpg)		57	54
Percent of miles in electric-only mode		25.0%	5.0%
Average trip aggressiveness (on scale 0 - 10)		1.8	1.5
Average trip distance (mi)		8.3	39.5
Trips in Charge Sustaining (CS) mode			
Gasoline fuel economy (mpg)		38	46
Percent of miles in electric-only mode		22.0%	5.0%
Average trip aggressiveness (on scale 0 - 10)		1.8	1.6
Average trip distance (mi)		3.7	30.7

**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.

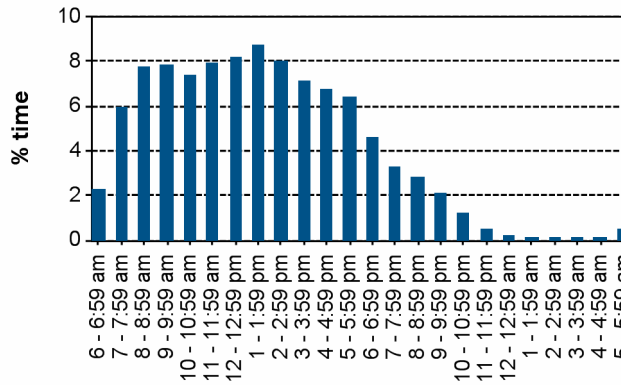
**Trip Fuel Economy Distribution By Trip Type**



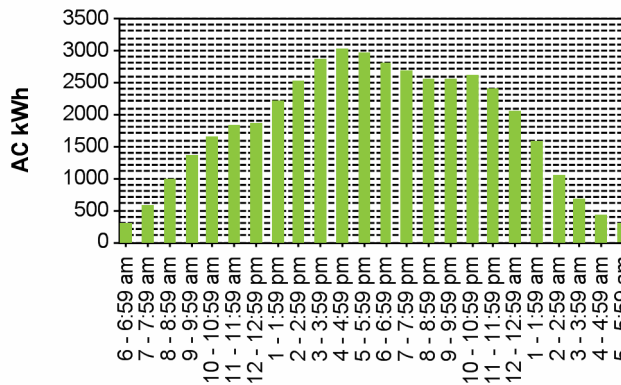
## Plug-in charging

Average number of charging events per vehicle per month when driven	16
Average number of charging events per vehicle per day when vehicle driven	1.1
Average distance between charging events	42.3
Average number of trips between charging events	4.6
Average duration of charging event (hr) *	19.5
Average energy per charging event (AC kWh)	2.6
Average charging energy per vehicle per month (AC kWh)	41.8
Total number of charging events	16830
Total charging energy (AC kWh)	43822

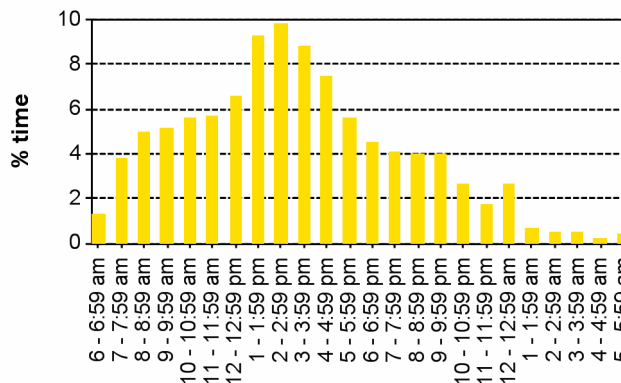
**Time of Day When Driving**



**Time of Day When Charging**



**Time at the Start of Charging Events**



\*Average duration of charging event is the average length of time per charging event when the vehicle was plugged into the electrical grid. Electrical energy was not necessarily drawn during the entire period when the vehicle was plugged in.