

# Asilomar

August-September 2011

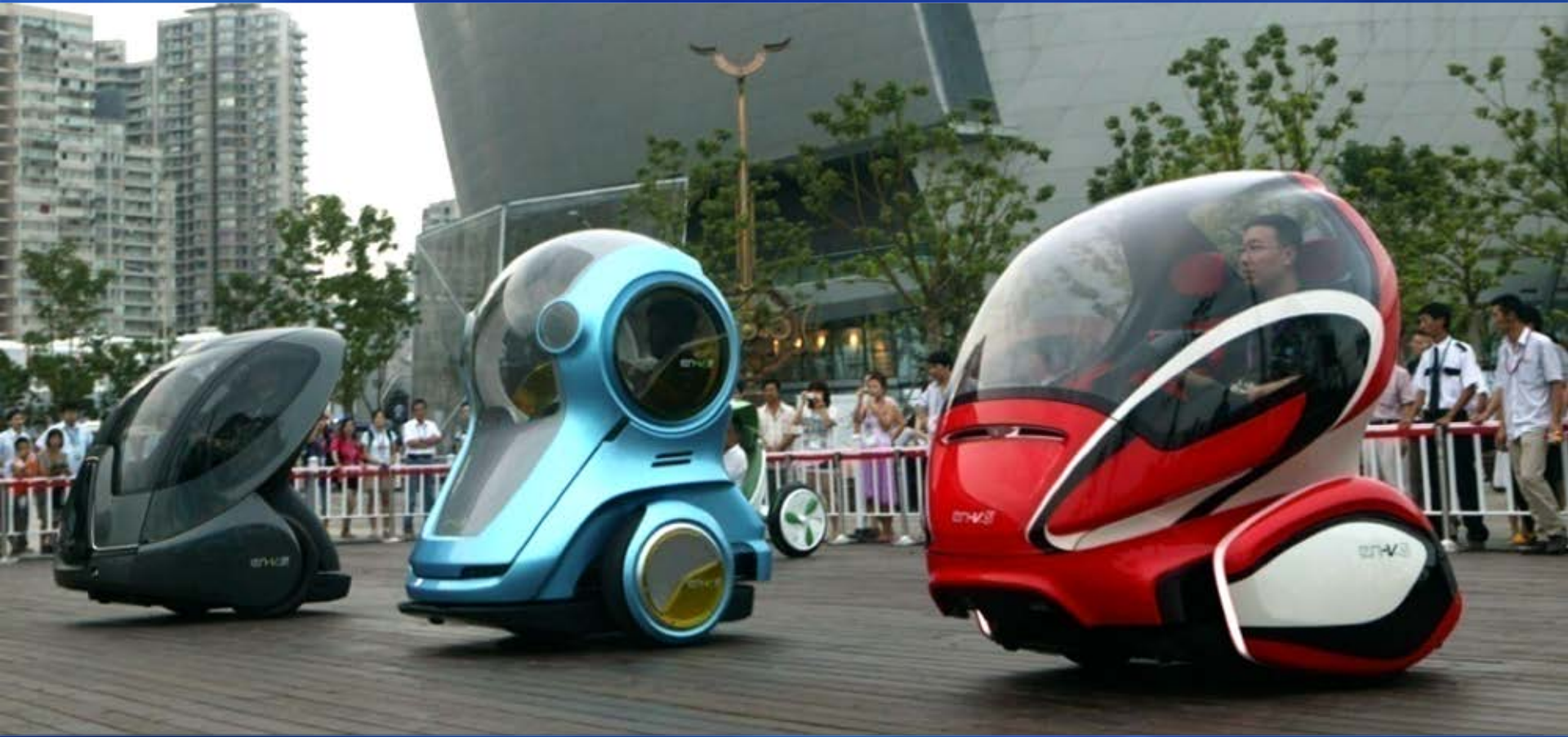
## Vehicle Electrification and Infrastructure

**Britta Gross**

Director, Global Energy Systems and Infrastructure Commercialization



# REINVENTING PERSONAL URBAN MOBILITY: EN-V (ELECTRIC, NETWORKED VEHICLE)

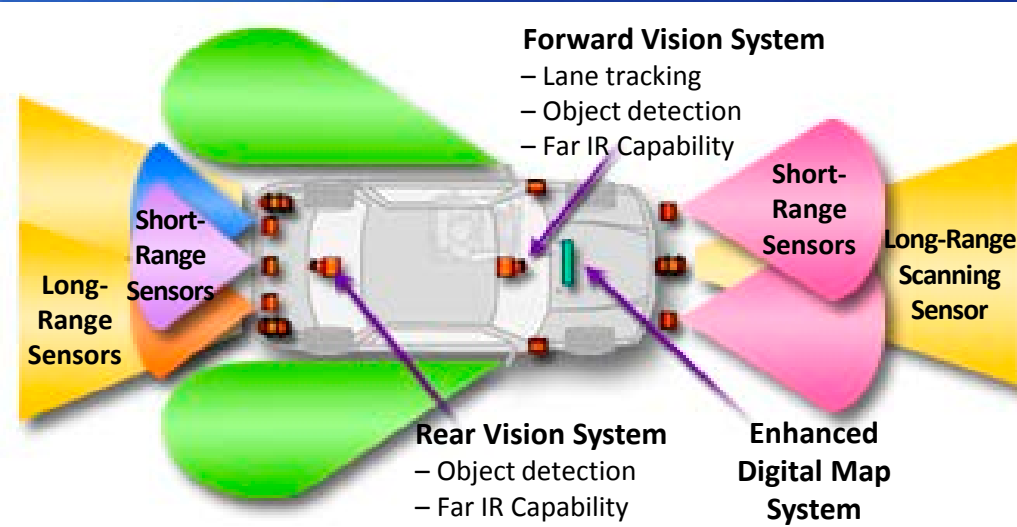


<http://www.youtube.com/user/generalmotorsenv>

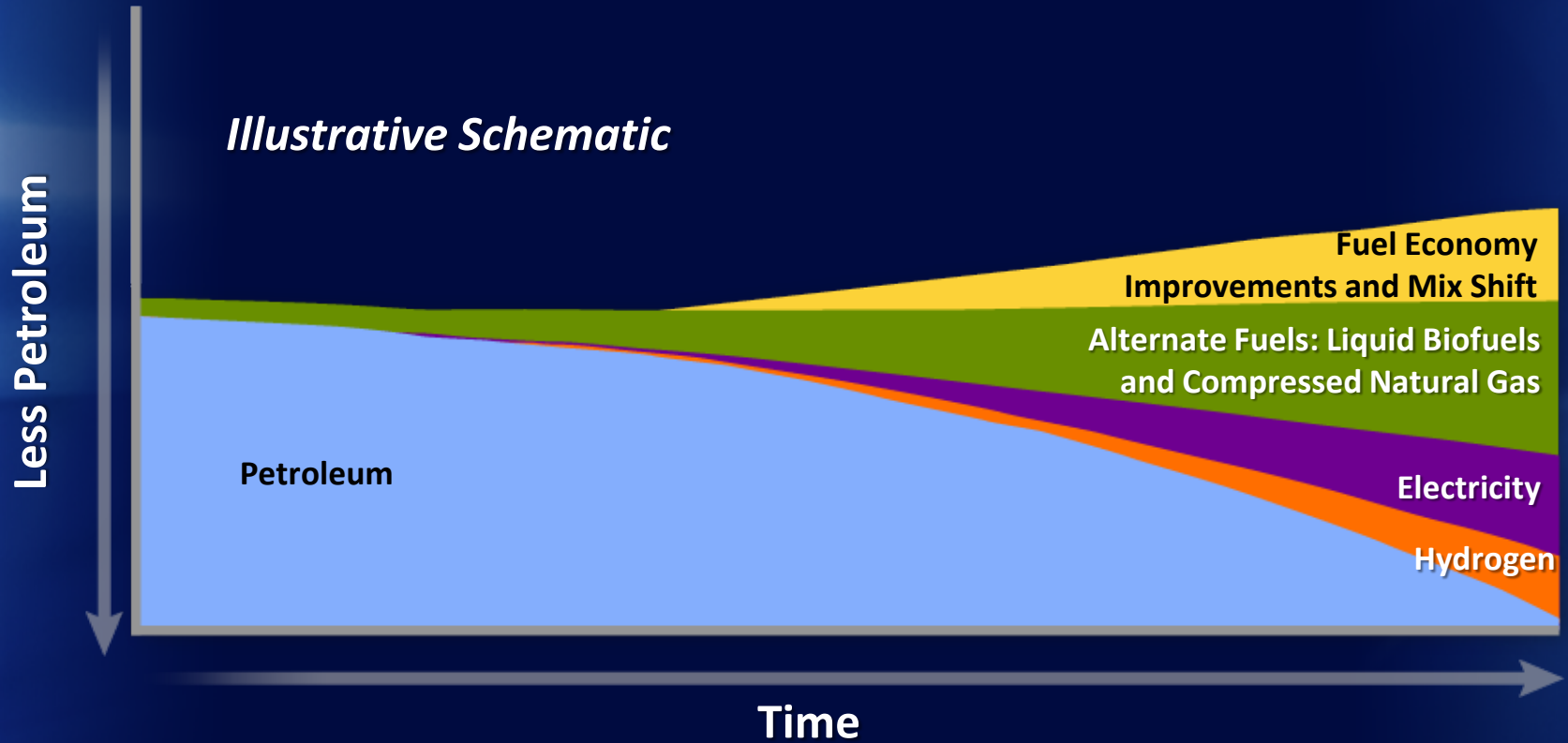


# “BOSS” WINS DARPA URBAN CHALLENGE (Nov 2007)!

A self-driving Chevrolet Tahoe wins the 6 hour, 60 mile race

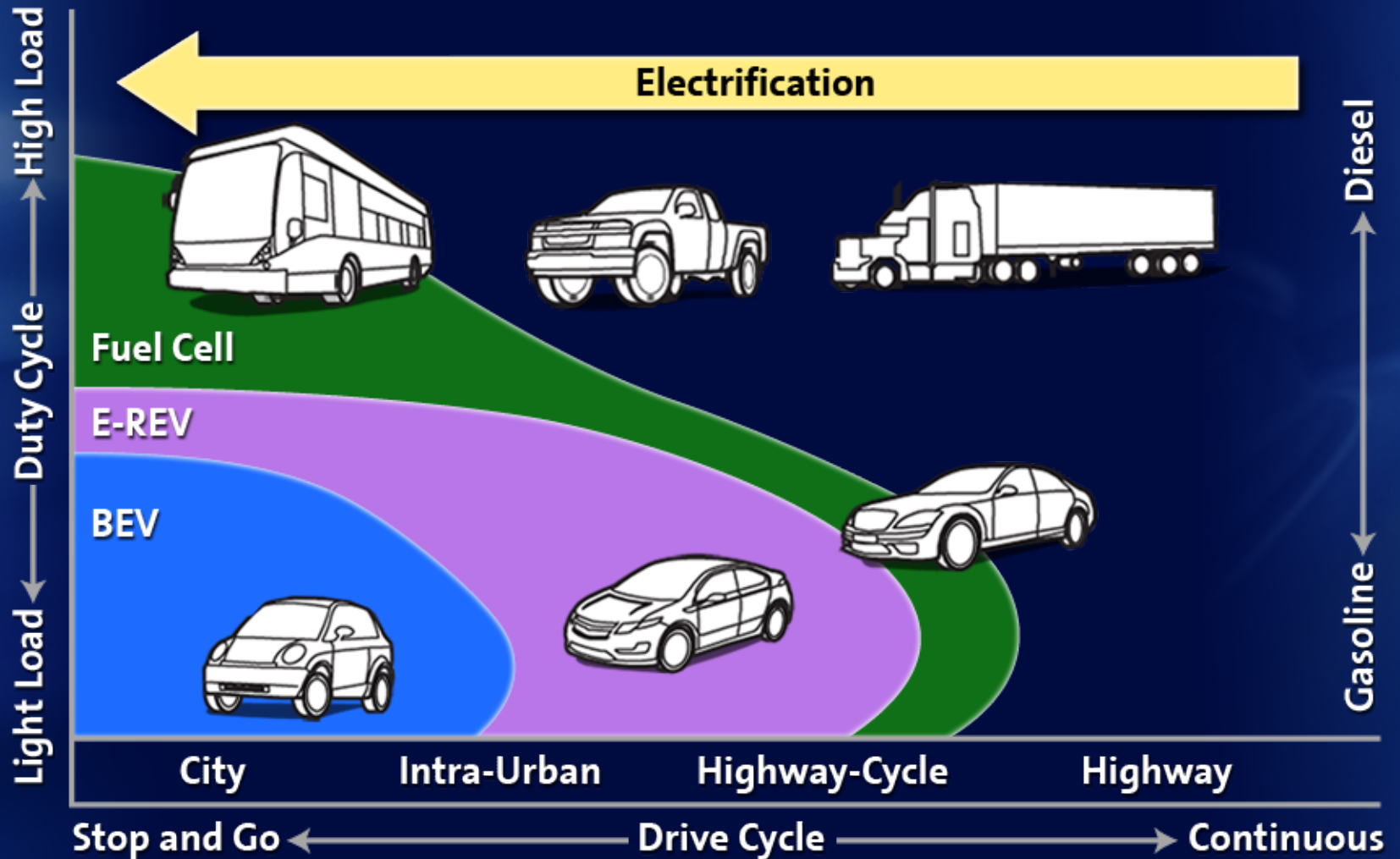


# PETROLEUM DISPLACEMENT “AND” SCENARIO



Start soon with early options; finish with strongest long-term portfolio

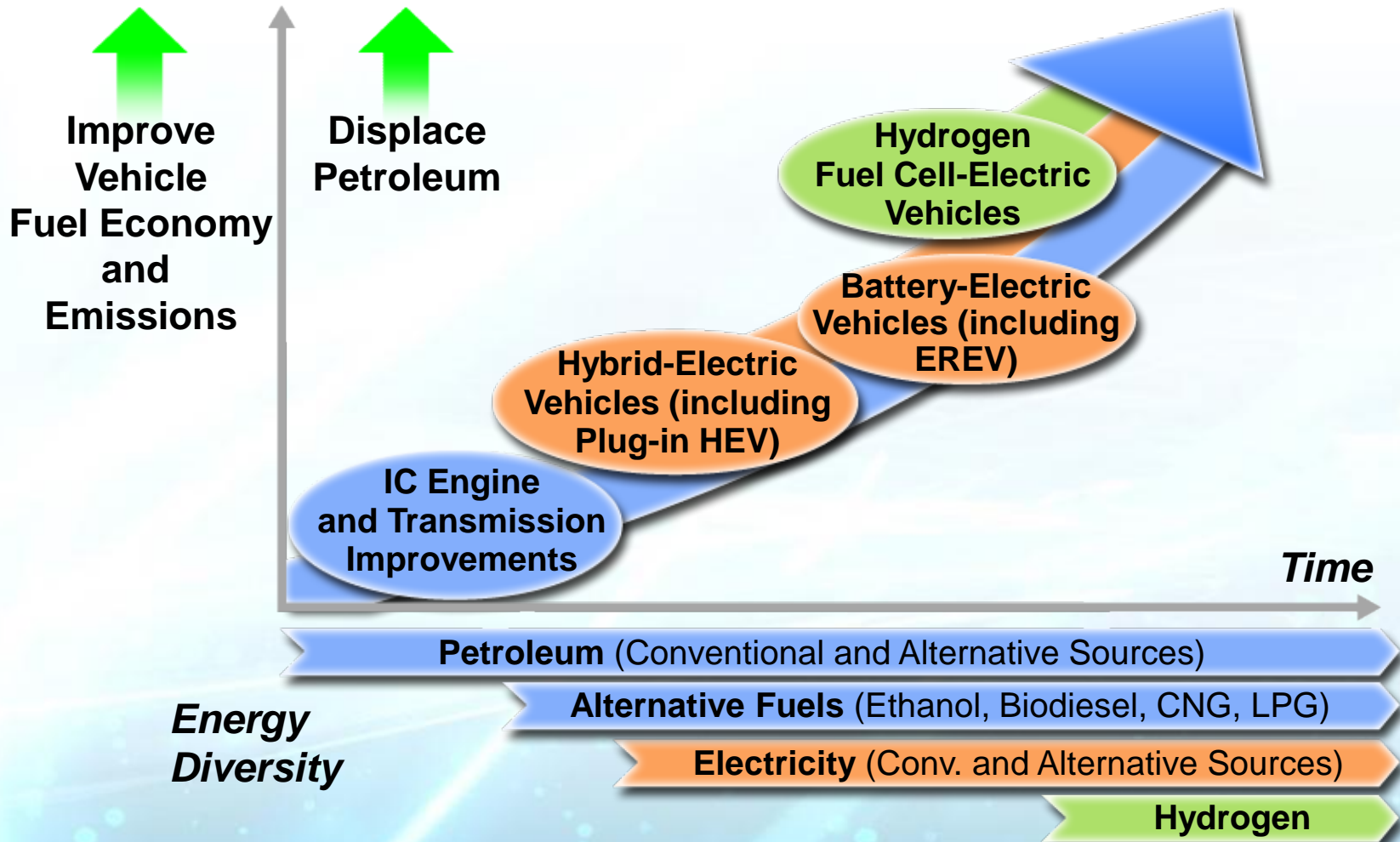
# VEHICLE APPLICATION MAP





# GM Advanced Propulsion Technology Strategy

No silver bullets (pending a surprising technology “miracle”)









# Chevrolet Volt

*An Electric Vehicle (with an extended range capability)*



Designed for **40** miles  
**BATTERY**  
Electric Drive  
*(typically 25-50 mile EV range)*



Designed for over **300** miles  
**EXTENDED RANGE**  
Driving on Gasoline

New EPA label: EV @ 93mpg (35 miles) + Gas @ 37mpg comb (344 miles) = Overall 60mpg (379 miles)



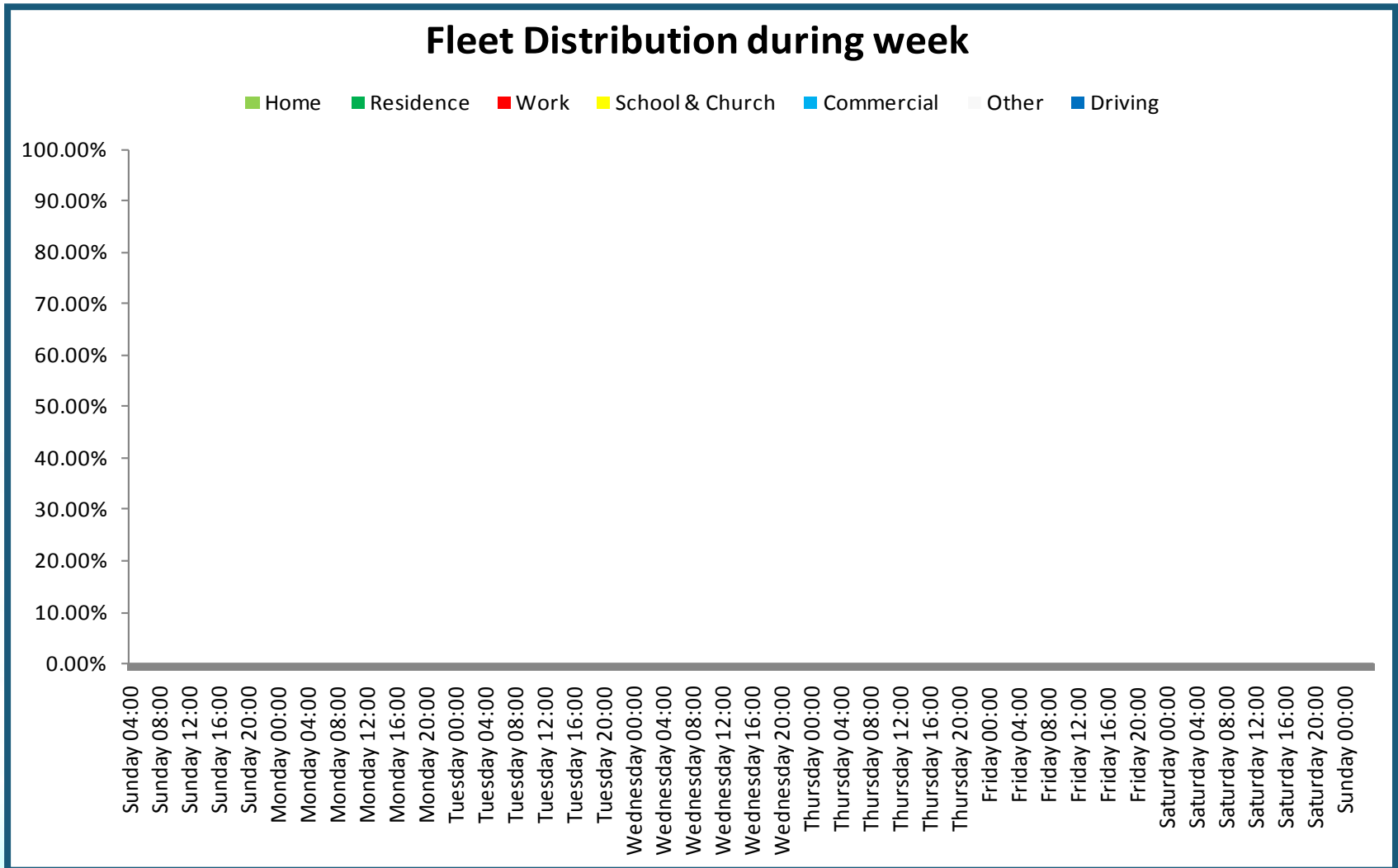
# Chevrolet Volt EREV

## *Consumer Results*

~80% of Volt customers are participating in OnStar's vehicle data collection program . . .

- Median Volt driver is achieving 66% electric miles
- Median Volt driver is getting almost 1,000 miles per tank of gasoline (9 gallon tank)

# Cars are parked at Home. Or at Work.



Source of Data - 2001 National Household Travel Survey ; GM Data Analysis (Tate/Savagian) - SAE paper 2009-01-1311