



# U.S. Department of Energy Energy Efficiency and Renewable Energy

Bringing you a prosperous future where energy  
is clean, abundant, reliable, and affordable

## HICE Fleet Testing

## Vehicle Technologies Program

### Advanced Vehicle Testing Activity



**2005 Chevrolet  
Silverado  
1500HD  
Hydrogen ICE<sup>1</sup>  
Conversion**

**North American  
Fleet Testing  
Results to Date  
June, 2009**

#### A Strong Energy Portfolio for a Strong America

Energy efficiency and clean, renewable energy will mean a stronger economy, a cleaner environment, and greater energy independence for America. Working with a wide array of state, community, industry, and university partners, the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy invests in a diverse portfolio of energy technologies.

#### Fleet Performance

##### Operating Statistics<sup>2</sup>:

- Vehicles in Fleet: 12
- Total Miles: 55,255
- Total Number of Trips: 9271
- Average Trip Distance (miles): 6.0
- Percent Idle Time: 16%<sup>3</sup>
- Percent Air Conditioner Run Time: 8.5%<sup>3</sup>

##### Operating Performance<sup>2</sup>:

- Cumulative MPGE<sup>4</sup>: 13.2
- Total Fuel Consumed (kg H<sub>2</sub>): 4229
- Total Engine Run Time (hours): 2339
- Total Engine Idle Time (hours): 385

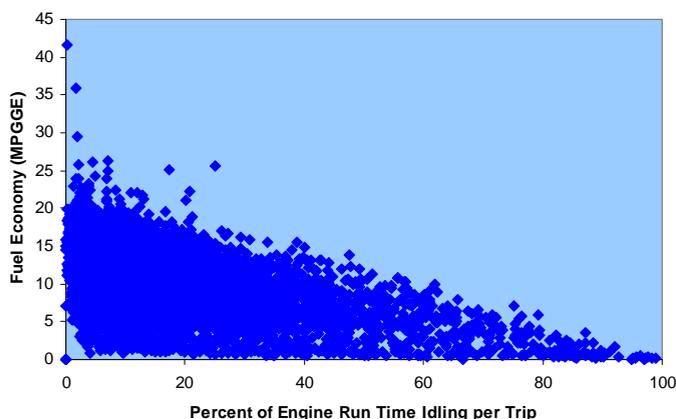
#### Vehicle Specifications

- Engine:** 6.0L V8
- Fuel Capacity:** 10.5 GGE
- Nominal Tank Pressure:** 5000 psi
- Seatbelt Positions:** Five
- Payload:** 2775 lbs
- Features:** 4 Speed Automatic Transmission

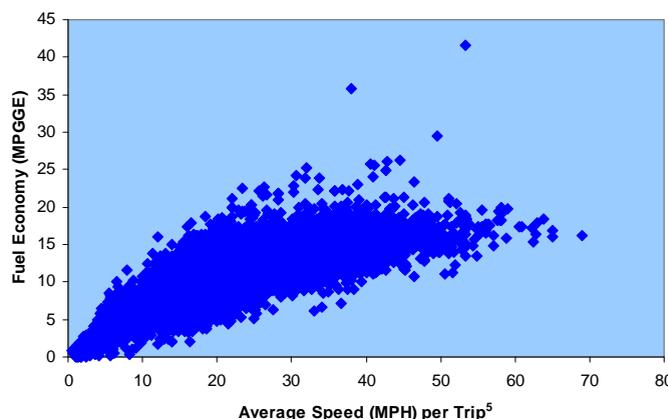
See HICEV America Baseline Performance Fact Sheet for more information.

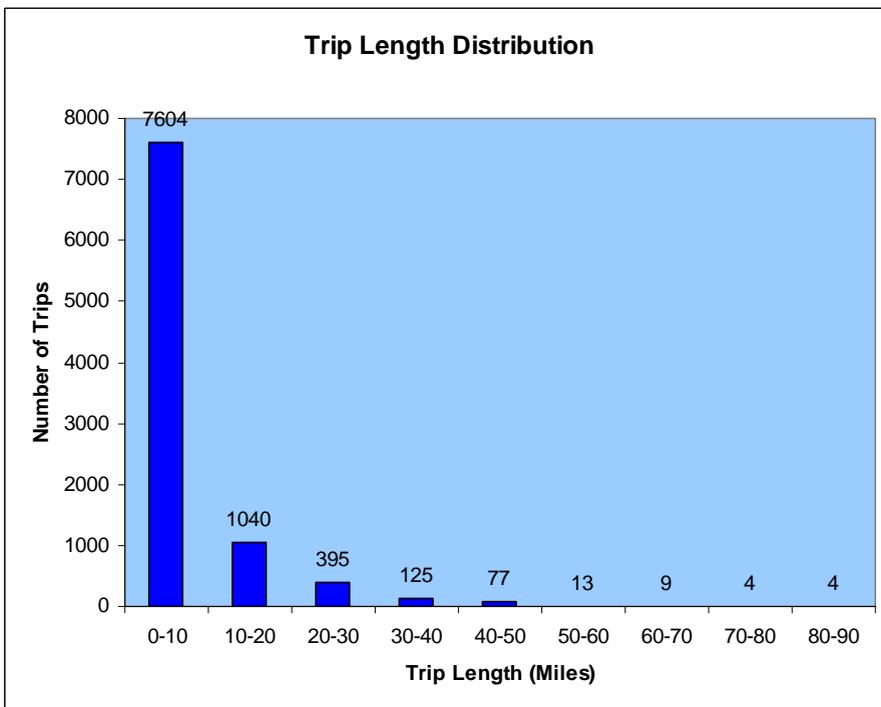
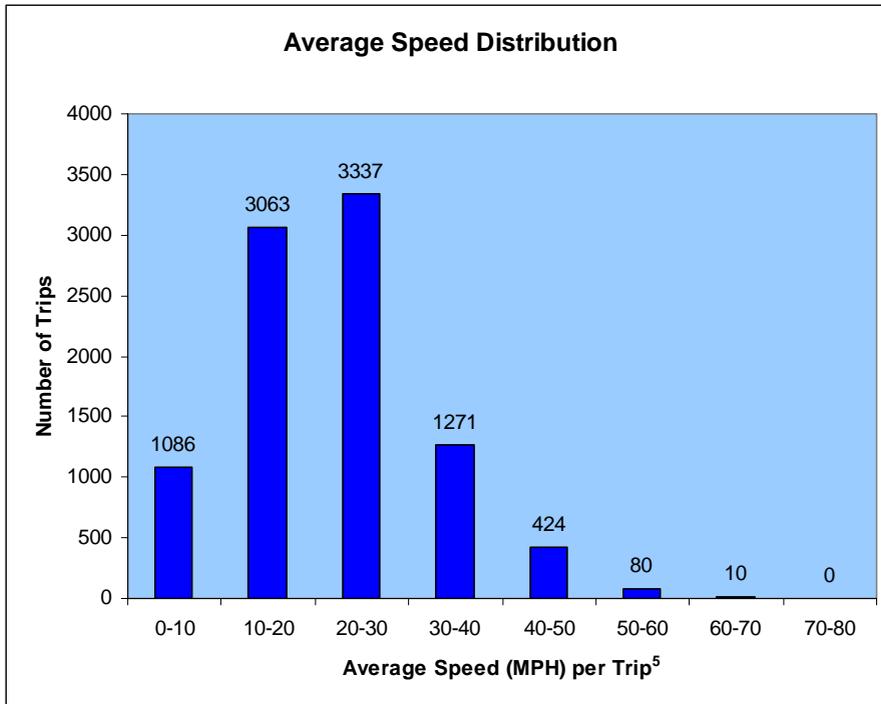
For more information contact:  
EERE Information Center  
1-877-EERE-INF (1-877-337-3463)  
[www.eere.energy.gov](http://www.eere.energy.gov)

Trip Fuel Economy vs Idle Time



Trip Fuel Economy vs Trip Average Speed





Notes:

1. Internal Combustion Engine
2. Data presented represents all electronically logged data, which is a subset of the overall fleet mileage
3. Percentage of total engine run hours
4. Miles per gallon gasoline equivalent (1 GGE = 1.012 kg H<sub>2</sub>)
5. Average speed of vehicle when moving, idle time not included in calculation

