

# NHTSA Fuel Economy, GHG Emissions and Alternative Fuels Consumer Education Campaign Research

# Agenda

- How did we get here
- Research Conducted
- Upcoming Proposals

# How did we get here

# Energy Policy and Conservation Act of 1975 (EPCA)

- Created the Corporate Average Fuel Economy Program (CAFE)
- Resulted in the First Fuel Economy Regulations - Late '70's

# Energy Independence Security Act of 2007 (EISA)

- Amended EPCA
- Included Consumer Information Components:
  - Develop Ratings that are easy to compare for:
    - Fuel Economy
    - GHG Emissions
    - Smog Forming Emissions
    - Resulted in the Joint NHTSA/EPA MY13 Fuel Economy Label Revision
  - Alternative Fuels Badges, Owners Information and Fuel Compartment Labeling
  - Consumer Education Program
    - Requires NHTSA to develop and implement a consumer information and education program to improve consumer understanding of automobile fuel economy, GHG and other pollutant emissions, alternative fuels, and thermal management technologies

# Research Conducted

# Research Overview

- In 2010, NHTSA contracted to conduct consumer research in support of developing a consumer education program.
- NHTSA engaged focus groups (qualitative research) to *better understand*:
  - what consumers know
  - what they need to know
  - what issues they care most about with regard to fuel economy-related content
- The findings from this research were applied to developing an on-line survey (quantitative research) to confirm focus group findings and test potential advertising related to this initiative.

# Research Objectives

- Test consumer comprehension of existing information regarding:
  - fuel economy
  - alternative fuels
  - greenhouse gas emissions
  - thermal management technology
- Test proposed consumer-facing messages related to NHTSA's consumer education campaign
  - Do proposed marketing messages effectively encourage consumers to seek fuel-economy related content?
  - What are the best methods (i.e., channels of communication) for reaching consumers with the proposed messages?



# Focus Group Methodology

- Participant Screening
  - Must be 18 years or older
  - Must currently possess a valid driver's license
  - Must currently own or lease a vehicle
  - Must be the primary or a shared decision maker for vehicle purchases in their household
- Administration
  - Respondents in each city were split into one of two groups: Females and Males.
  - Each focus group lasted approximately two hours and included eight to 10 participants
  - Trends heard throughout various conversations will inform the consumer education plan and were tested quantitatively
- Discussion guide is available in Docket: [NHTSA-2010-0123](#)

# Focus Group Locations

- Northern New Jersey (New York City metro area)
  - High-congestion market in the northeast
- Minneapolis, Minnesota
  - Highest concentration of alternative fuel stations in the U.S.
- Atlanta, Georgia
  - High-congestion market in the southeast
- Phoenix, Arizona
  - Hot climate market where thermal management technologies may provide significant benefit

# Key Findings So Far - Focus Groups

- Consumers have a general sense of how to improve their fuel economy but they often seem to be misinformed or under-informed.
  - There seems to be a good deal of misinformation regarding some behaviors and actions they can take to achieve better fuel economy.
  - There was the occasional disagreement and outdated information that no longer applies to modern vehicles
- There is a desire to learn more about fuel economy, but there appear to be a number of barriers to actual behavior change.
  - Some seem to be personal (“I drive with a lead foot and am hard on the brake, and I know it, but I don’t care”),
  - Some seem to be about cost (“But I wouldn’t buy [lower rolling resistance tires] because of the fact that if you are going to use that car in the wintertime, you almost have to replace the tires. With me it’s a \$700 or \$800 deal to go out and buy good winter tires”)
  - Some are regional (“[In Phoenix] you have to have air conditioning in the summertime”)

# Key Findings So Far - Focus Groups

- Personal, environmental and national benefits all seem to resonate with consumers, but personal benefits, specifically costs may be more likely to capture attention and encourage potential behavior change.
  - Consumers appear to want to consider the 'big picture', but ultimately they seem to see the tangible impact of their small behavior changes or alternative fuel use
  - Potentially considering the dollars they are saving over reducing their emissions or easing political tensions
- The main source of fuel economy information is currently word-of-mouth through family, friends, mechanics, web searches or sources like Consumer Reports, Edmunds.com.
- More detailed findings are available in the docketed reports

# On-Line Survey (Quantitative)

- Survey Administration
  - Participant Screening
    - 18 years and Older
    - US Residents holding a valid driver's license
    - Statistics
  - Sample Size was approximately 1,500 participants
    - Margin of Error was +/- 2.53%
    - Data Collection: February 29, 2012 - March 7, 2012
  - The Survey executed is located in Docket: NHTSA-2011-0126

# Key Findings So Far - Online Survey

- The online survey confirmed the focus group discussions, that consumers seem to have an understanding of the connection between driving habits and vehicle fuel economy, but potentially are misinformed or under-informed on what they can be doing to improve their gas mileage.
- There is general awareness of alternative fuels, but not particular familiarity or could be receiving conflicting information on the benefits and drawbacks of these fuels.

# Key Findings So Far - Online Survey

- Consumers appear to be motivated most by money to improve their fuel economy or consider purchasing a vehicle with alternative fuel capabilities.
  - Environmental and national benefits are important supporting points that resonate with certain demographic groups, but across all groups, money is the key motivating factor
- Consumers seem to use web searches or look to sources like Consumer Reports and their family and friends for information about vehicles and fuel economy.
- More detailed findings are available in the docketed reports

# Upcoming Proposals



# Upcoming Proposed Rulemakings (NPRM)

- Alternative Fuels Badges, Owners Information and Fuel Compartment Labeling
- Consumer Education Campaign

# Alternative Fuels Badges, Owners Information and Fuel Compartment Labeling

- Docket IDs and Regulatory Identification Number
  - Docket: NHTSA-2010-0134
  - Regulatory Identification Number: 2127-AK75
- Proposal (NPRM) 2012
  - A 60 to 90 day comment period is likely
  - Final Rulemaking will consider all comments received

# Consumer Education Campaign

- Docket IDs and Regulatory Identification Number
  - Dockets
    - Focus Groups: NHTSA-2010-0123
    - Online Survey: NHTSA-2011-0126
  - Regulatory Identification Number: 2127-AL12
- Proposal (NPRM) 2013
  - A 60 to 90 day comment period is likely
  - Final Rulemaking will consider all comments received

# Contact Information

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Thank you for your time