# **Government/Industry Meeting**

**Technical Session Schedule** 

As of 02/01/2010 07:40 pm

#### Tuesday, January 26

# Welcome and Plenary Session -- Celebrating Progress and Potential for Safer Sustainable Vehicles

Session Code: G300

Room 143 ABC Session Time: 3:00 p.m.

Decades of progress in engineering and innovation have lead to landmark technologies like catalytic converters and air bags that are the foundation of the cleaner and safer vehicles on the market today. Tomorrows vehicles and the transportation system they use must expand on the record of success by meeting broader goals of sustainability and reducing greenhouse gas emissions while at the same time improving safety and environmental quality. As policymakers address future climate change and transportation policy, the opening plenary session will feature a brief look back at the early environmental and safety milestones and advances along with the role of government agencies. This diverse panel of stakeholders will explore the future vehicles, their safety systems, powertrain and fuel options.

Organizers - Allen R. Schaeffer, Diesel Technology Forum & 2010 Special Sessions Chair; Daniel Ryan, Mazda North American Operations & 2010 General Chair

Moderators - Daniel Ryan, Mazda North American Operations & 2010 General Chair

Panelists - Peter Basso, Director of Program Finance & Mgmt, AASHTO; Roland Hwang, Transportation Prog Dir, Natural Resources Defense Council; Joseph Kanianthra, President, Active Safety Engineering LLC & retired NHTSA; Thomas Kuhn, President, Edison Electric Institute; The Honorable Dave McCurdy, President & CEO, Alliance of Automobile Manufacturers Inc.;

**Keynote Speakers -** The Honorable Fred Upton, 6th U.S. Congressional District, Michigan; Andrew Brown, Jr., PhD, PE, NAE, 2010 SAE President; Brian P. Wynne, President, Electric Drive Transportation Assoc.

#### Wednesday, January 27

## **Crash Avoidance Technologies for Heavy Trucks**

Paper No.

**ORAL ONLY** 

Session Code: G201

**Time** 

11:30 a.m.

Room 140 B Session Time: 10:30 a.m.

**Title** 

Each year there are approximately 5,000 fatalities and 100,000 injuries in crashes involving heavy vehicles. These statistics have raised awareness for the need to integrate additional safety technologies for heavy vehicles. Current technologies such as collision/lane departure warning systems and ESC may help to reduce crashes. Also, there are some new technologies that may help mitigate crashes or monitor driver behavior. This session will focus on the research and deployment of these systems.

Organizers - Leigh S. Merino, Motor & Equipment Mfrs Association; George Reagle, George L Reagle & Assoc.;

Alrik L. Svenson, NHTSA

10:30 a.m. **ORAL ONLY** Safety Effectiveness of Stability Control Systems for Tractor Semitrailers Alan Korn, Meritor Wabco Crash Avoidance Technologies 10:45 a.m. ORAL ONLY Kevin Romanchok, Bendix Commercial Vehicle Systems 11:00 a.m. **ORAL ONLY** Effectiveness of On-Board Safety Systems Quon Y. Kwan, Federal Motor Carrier Safety Administration 11:15 a.m. **ORAL ONLY** Crash Avoidance Potential of Four Large Truck Technologies Jessica Jermakian, Insurance Institute for Highway Safety

Bruce A. Magladry, National Transportation Safety Board

Investigation of Motorcoach Crashes

**ORAL ONLY** Human Factors for the Integrated Vehicle Based Safety Systems (IVBSS) 11:45 a.m.

**Program** 

John L. Campbell, Battelle Human Factors Transportation Center

Consumer Information Program Feasibility Study for Heavy Trucks 12:00 p.m. **ORAL ONLY** 

James M. Funke, NHTSA

## Wednesday, January 27

**Enforcement: CARS and CAFE** 

Session Code: G204

Room 140 B Session Time: 2:30 p.m.

This session will review the lessons learned and the overall effectiveness of the \$3 billion CARS program. Government representatives will discuss the enforcement of the program and participating dealer representatives will share their insights. New CAFE regulations will also be covered, including discussions on the vehicle "footprint" upon which fuel economy standards are based. The expanded credit allocation program will also be covered, as well as other enforcement topics.

Organizers -	Vince Williams, Clau	ude H. Harris, NHTSA; Douglas I. Greenhaus, NADA
Time	Paper No.	Title
2:30 p.m.	ORAL ONLY	CARS: Car Allowance Rebate Systems (CARS) / Cash for Clunkers
		Frank S. Borris, NHTSA
2:55 p.m.	ORAL ONLY	CARS: Car Allowance Rebate Systems (CARS) / Cash for Clunkers/Cars: A Retrospective
		Michael Harrington, National Automobile Dealers Association
3:20 p.m.	ORAL ONLY	CAFE: Enforcement of Corporate Average Fuel Economy (CAFE) Footprint and Credit Tracking Programs
		Maurice E. Hicks, NHTSA
3:45 p.m.	ORAL ONLY	CAFE: CAFE Enforcement Issues: Manufacturers Perspective
		John M. Cabaniss, Association of International Automobile Manufacturers

## Wednesday, January 27

## Adding Up the Carbon of Renewable Fuels

Session Code: G102

Room 143 A Session Time: 10:30 a.m.

Several policy initiatives are encouraging a reduction in the carbon intensively of renewable fuels while controversy surrounds the methodologies in determining the true impacts. This session will explore the direct and indirect carbon impacts of first and second generation renewable fuels with a focus on California; s Low Carbon Fuels Standard as well as other legislative initiatives.

Mark Downing, Oak Ridge National Laboratory; Patrick Kelly, American Petroleum Institute; Aaron Organizers -

Levy, U.S. Environmental Protection Agency

Time	Paper No.	Title
10:30 a.m.	ORAL ONLY	Land use with Expanded Biofuels Industry
		John Reilly, Massachusetts Institute of Technology
10:50 a.m.	ORAL ONLY	Low Carbon Fuel Standard Policy
		Alfonse Mannato, American Petroleum Institute

#### 11:10 a.m. ORAL ONLY CARB Perspective with respect to LCFS

Stephen Kaffka, Univ. of California

## Wednesday, January 27

#### **Second Generation Biofuels**

Session Code: G103

Room 143 A Session Time: 2:30 p.m.

With the congressional mandate for advanced and cellulosic biofuels scheduled to grow exponentially over the next decade, the projected availability in the near term may impact future targets. This session will discuss the development of these fuels, from cellulosic ethanol to renewable hydrocarbons and their growth projections.

Organizers - Matthew J. Brusstar, U.S. EPA; Mark Downing, Oak Ridge National Laboratory; Patrick Kelly,

American Petroleum Institute

Time	Paper No.	Title
2:30 p.m.	ORAL ONLY	Butamax Biobutanol
		Adam J. Schubert, Butamax(TM) Advanced Biofuels LLC
2:50 p.m.	ORAL ONLY	Title TBD
		Stephen R. Brueckner, Lotus Engineering Inc.
3:10 p.m.	ORAL ONLY	Driving Towards Sustainable Mobility: An Automotive Perspective on Biofuels
		Candace Wheeler, General Motors
3:30 p.m.	ORAL ONLY	DOE Investment in the Integrated Biorefinery
		Mark Downing, Oak Ridge National Laboratory

#### Wednesday, January 27

## Front and Side Impact Crashworthiness

Session Code: G200

Room 143 BC Session Time: 10:30 a.m.

Front & side crashes are two of the most predominate crash types leading to fatality & serious injury. While the safety countermeasures for the two crash types are very different, there has been significant progress made in both fronts. This session will investigate the advances & current issues in frontal & side impact crash protection. The session includes discussion of offset, including small overlap crashes. Current issues will address field data, engrg. design solutions & injury research.

Organizers -	Sukhbir Bilkhu, Chrysler Group LLC; James Saunders, NHTSA	
Time	Paper No.	Title
10:30 a.m.	ORAL ONLY	Redefining Small Overlap Impacts Using NASS Data
		Frank A. Pintar, Medical College of Wisconsin
10:50 a.m.	ORAL ONLY	Analysis of NCAP and NASS Frontal Crash Data
		Dainius J. Dalmotas, Transport Canada
11:10 a.m.	ORAL ONLY	Evaluation of Small Overlap / Oblique Test Procedures
		James Saunders, NHTSA
11:30 a.m.	ORAL ONLY	An Estimate of Side Impact Air Bag Effectiveness in Fatality Reduction
		Robert C. Lange, Exponent Inc.
11:50 a.m.	ORAL ONLY	NHTSA's Rear Seat Safety Research
		Aloke Prasad, NHTSA

12:10 p.m. ORAL ONLY Mortality of Drivers and Right-Front Passengers: Certified Airbags and Sled-Certified Airbags

Elisa Braver, Insurance Institute for Highway Safety; Michelle Shardell, Univ. of Maryland School of Medicine; Eric R. Teoh, Insurance Institute for Highway Safety

#### Wednesday, January 27

#### **Vehicle Rollover and Occupant Containment**

Session Code: G203

Room 143 BC Session Time: 2:30 p.m.

This session focuses on the overall rollover safety problem including crash avoidance and crashworthiness safety measures. Special consideration will be given to injury mitigation concerns. The session will also emphasize restraint systems for both front and rear occupants and explore technologies to address safety issues and countermeasures associated with active and passive restraint performance.

Organizers -	David R. Houston, Ir	nterRegs, Ltd.; Donald Willke, NHTSA
Time	Paper No.	Title
2:30 p.m.	ORAL ONLY	A Study of Occupant Ejection Mitigation During Rollovers
2:50 p.m.	ORAL ONLY	Jeff Dix, Nissan Motor Co., Ltd.  An Update on Ford's Rollover Crashworthiness Research
3:10 p.m.	ORAL ONLY	Michael J. Leigh, Ford Motor Co.  Roll Over, an Accident (Fatality) of the Past
		Douglas Campbell, Automotive Occupant Restraints Council
3:30 p.m.	ORAL ONLY	An Update on Rollover Crash Data
		Jeya Padmanaban, JP Research Inc.
3:50 p.m.	ORAL ONLY	Design of a Dynamic Rollover Test Procedure: A Multi-Faceted Approach
		Jason R. Kerrigan, Jeff R. Crandall, Univ. of Virginia Center for Applied Biomechanics
4:10 p.m.	ORAL ONLY	NHTSA Research on Restraint Performance in Dynamic Rollover
		Allison E. Louden, NHTSA

## Wednesday, January 27

#### **New Innovations in Advanced Safety Technology**

Session Code: G202

Room 144 BC Session Time: 10:30 a.m.

This session is devoted to advanced vehicle technologies that will provide a stream of safety features during the sequence of a crash. These features are integrated to work in four stages: (1) preventing crashes from occurring; (2) reducing the impact severity when a crash occurs; (3) protecting occupants in the event of a crash; and (4) providing post-crash alerts of injured occupants. Advances in integrated safety, including sensor fusion, and pre-crash sensing technologies will be explored.

Organizers - John J. Ference, NHTSA; Philip M. Headley, Continental Automotive Systems NA

Time Paper No. Title

10:30 a.m. ORAL ONLY The Mercedes-Benz Experimental Safety Vehicle ESF

Michael Fehring, Karl-Heinz Baumann, Rodolfo Schoeneburg, Daimler AG

10:50 a.m.	ORAL ONLY	ContiGuard Innovations in Crash Prevention, Occupant Protection and Post Crash Notification
		Dean L. McConnell, Continental Automotive Systems NA
11:10 a.m.	ORAL ONLY	PEBS: A Predictive Emergency Braking System Approach and Estimation of its Benefits
		Kay Stepper, Robert Bosch LLC
11:30 a.m.	ORAL ONLY	Integrated Radar-Camera Sensors: The Next Generation of Sensor Fusion
		William A. Bauson, Delphi Electronics & Safety
11:50 a.m.	ORAL ONLY	Government-Industry Cooperation to Develop Performance Requirements, Objective Test Procedures and Benefits Estimation for Crash Imminent Braking Systems and Advanced Restraint Systems
		Michael G. Carpenter, General Motors LLC
12:10 p.m.	ORAL ONLY	Estimation of Target Crashes and Safety Benefits for Different Phases of Countermeasure Intervention
		Wassim G. Najm, Volpe Natl Transportation Systems Center

## **Thursday, January 28**

#### Crash Avoidance and Crash Causation, Part 1

Paper No.

Session Code: G206

**Time** 

Room 140 B Session Time: 10:30 a.m.

This session will discuss relevant research in accident causation and review current and future equipment such as electronic stability control. Government and industry cooperative efforts related to crash avoidance will be presented.

Organizers - W. Riley Garrott, NHTSA; Ralph Hitchcock, American Honda Motor Co. Inc.

Title

	- -	
10:30 a.m.	ORAL ONLY	Motorcycle Antilock Brake Systems and Combined Braking Systems
		Paul Rau, NHTSA
10:50 a.m.	ORAL ONLY	Summary of NHTSA Tire Aging Test Development Research
		James D. MacIsaac, Jr., NHTSA
11:10 a.m.	ORAL ONLY	A Preliminary Examination of Lane Keeping Support Systems
		Garrick J. Forkenbrock, NHTSA
11:30 a.m.	ORAL ONLY	Injury Control Technology Insertion Patterns During 1998 and 2009
		Robert Lange, Exponent Inc.

## **Thursday, January 28**

#### Crash Avoidance and Crash Causation, Part 2

Session Code: G208

Room 140 B Session Time: 2:30 p.m.

This session focuses on real-time communications-based crash avoidance systems. Topics will include the technical aspects of the US DOT IntelliDrive(SM) initiative and vehicle-to-vehicle communications research, as well as a new focus on how best to facilitate deployment, including issues related to policy, security, and public-private partnerships.

Organizers - Arthur Carter, NHTSA; Barbara Wendling, Mercedes Benz R&D North America

Time Paper No. Title

2:30 p.m.	ORAL ONLY	Driving Connected: Cars that Don't Crash and Devices that Don't Distract
		John M. Waraniak, Specialty Equipment Market Association (SEMA)
2:50 p.m.	ORAL ONLY	Vehicle-to-Vehicle and Vehicle-to-Infrastructure Communications- Based Safety Applications Current Status and Future Developments
		Michael Maile, Mercedes Benz REDNA
3:10 p.m.	ORAL ONLY	IntelliDrive (SM) Connectivity and the Future of Surface Transportation
		Michael C. Schagrin, U.S. Department of Transportation
3:30 p.m.	ORAL ONLY	What's Happening Overseas? International Perspective on Safety Applications for Connected Vehicles
		Richard Bishop, Bishop Consulting
3:50 p.m.	ORAL ONLY	Public Private Partnership Options
		Stephen Beatty, KPMG LLP
4:10 p.m.	ORAL ONLY	VII Consortium Overview of Policy Development Activities
		Barbara Wendling, Mercedes Benz R&D North America

## Thursday, January 28

## **Electricity -- The Fuel of the Future....Today?**

Session Code: G104

Session Time: Room 143 A 10:30 a.m.

OEMs are developing and will soon market a variety of plug-in electric vehicles. Speakers from the utility industry, NGOs and government agencies will explore topics "upstream" of the plug. These include "smart grids", off-peak charging, potential capacity limitations and vehicle to grid. The session will also investigate how policies and legislation, such as cap & trade, ZEV and low carbon fuel standards may encourage and/or complicate the use, marketing and benefits of plug-in vehicles.

Robert C. DeVault, Oak Ridge National Laboratory; Zoltan Jung, EPA Office of Transportation & Air Organizers -Quality; Eladio Knipping, Electric Power Research Institute

Time	Paper No.	Title
10:30 a.m.	ORAL ONLY	Getting Plug-In Ready: A Utility Perspective
		Robert L. Graham, Southern California Edison
10:50 a.m.	ORAL ONLY	PEV Impact on Utility Distribution Systems
		Arindam Maitra, Electric Power Research Institute
11:10 a.m.	ORAL ONLY	Plug-In Policy
		Elise Keddie, California Air Resources Board
11:30 a.m.	ORAL ONLY	Title TBD
		Saul Zambrano, Pacific Gas & Electric Co.
11:50 a.m.	ORAL ONLY	Plug-In Electric Vehicles: Driving Change through Clean Energy Policies
		Luke Tonachel, Natural Resources Defense Council
12:10 p.m.	ORAL ONLY	How Smart Grid can Enable Electricity to be the Fuel of the Future
		Eric Lightner, U.S. Dept. of Energy

## Thursday, January 28

Session Code: G105 2:30 p.m.

Room 143 A Session Time:

A decade ago all major OEMs were developing battery-electric vehicles. For various reasons these vehicles did not succeed in the marketplace. Is the next generation of plug-in vehicles different from their predecessors? This session will examine the evolution of plug-in vehicles, battery technology and the consumer. Speakers from the OEMs, battery manufactures and DOE will explore these issues as well as some of the new business models being considered, such as battery leasing.

Organizers - Robert C. DeVault, Oak Ridge National Laboratory; Aaron Hula, U.S. Environmental Protection

Agency; Bill Reinert, Toyota Motor Corporation

Time	Paper No.	Title
2:30 p.m.	ORAL ONLY	Do More Batteries Make a Plug-in Vehicle Better? Life Cycle Economic and Environmental Implications of Plug-in Hybrid Vehicles
		Jeremy J. Michalek, Carnegie Mellon Univ.
2:50 p.m.	ORAL ONLY	PHEV Adoption: How Far Will Current Federal Policies Take Us?
		Kathryn Clay, Alliance of Automobile Manufacturers Inc.
3:10 p.m.	ORAL ONLY	Plug-ins are Here, is There Infrastructure?
		Terry R. Penney, National Renewable Energy Laboratory
3:30 p.m.	ORAL ONLY	Unplugging the Hype around Electric Vehicles
		Jacob Grose, LUX Research

## Thursday, January 28

## **Marketing Safety**

Session Code: G205

Room 143 BC Session Time: 10:30 a.m.

This session examines the effectiveness of safety marketing, and how vehicle safety is driven by marketplace. Presenters will examine the relationship between crash safety ratings and sales, and the roles played by IIHS and other safety groups in the marketplace. Other topics will explore how innovative crash avoidance technologies "trickle down" from high price vehicles and how aggressive marketing of innovative safety technologies by suppliers creates market demand.

Organizers -	Stephen M. Summer	s, NHTSA; William H. Walsh, Consultant
Time	Paper No.	Title
10:30 a.m.	ORAL ONLY	Media and Public Attention to IIHS Safety Ratings
		David S. Zuby, Insurance Institute for Highway Safety
10:50 a.m.	ORAL ONLY	Affordable Active Safety for Everyone the Marketing Challenge = Educating the Consumer
		Dean L. McConnell, Continental Automotive Systems NA
11:10 a.m.	ORAL ONLY	Hyundai's Customer Feedback on NCAP Label Data
		Julia Rege, Hyundai & Kia Corp.
11:30 a.m.	ORAL ONLY	The Consumer View of Auto Safety
		David Champion, Consumer Reports
11:50 a.m.	ORAL ONLY	Safety Beyond [the] Stars
		Adam Kopstein, Volvo Cars of North America LLC

#### Thursday, January 28

#### **Safety Data**

Session Code: G207

#### Room 143 BC Session Time: 2:30 p.m.

This session will focus on NHTSA's safety data collection & analysis programs & their role in supporting vehicle safety research and rulemakings. The discussion will include the following databases: Fatality Analysis Reporting System (FARS), National Automotive Sampling System (NASS), National Motor Vehicle Crash Causation Study (NMVCCS), Large Truck Crash Causation Study (LTCCS), Special Crash Investigations (SCI), Not-in-Traffic System (NiTS) & National Occupant Protection Use Survey (NOPUS).

Organizers -	Mark Gielow, Mercedes-Benz R&D NA Inc.; Dennis Utter, NHTSA	
Time	Paper No.	Title
2:30 p.m.	ORAL ONLY	Overview of NHTSA's Directly Investigated Databases: NASS CDS, SCI, NMVCCS, LTCCS
		Augustus "Chip" Chidester, NHTSA
2:50 p.m.	ORAL ONLY	Overview of NHTSA's PAR Based Databases: FARS and NAS GES
		Marietta Bowen, Barbara Rhea, NHTSA
3:10 p.m.	ORAL ONLY	Use of NASS CDS Data in Oblique Pole Side Impact Rulemaking
		Thomas Kang, NHTSA
3:30 p.m.	ORAL ONLY	The Contribution of Medical Conditions to Passenger Vehicle Crashes - Using NMVCCS Data
		Refaat Hanna, NHTSA
3:50 p.m.	ORAL ONLY	A Better Understanding of the Spatial Extent of Motor Vehicle Traffic Fatalities Occuring in Rural Areas
		Rajesh Subramanian, NHTSA
4:10 p.m.	ORAL ONLY	Use of LTCCS Data in Large Truck Underride Study
		Anne T. McCartt, Matthew L. Brumbelow, Laura A. Blanar, Insurance Institute for Highway Safety

#### Thursday, January 28

## Heavy-Duty Technologies and Solutions to Improve Efficiency and Emissions (Part 1)

Session Code: G106

Room 144 A Session Time: 10:30 a.m.

What's Next for Heavy-Duty Vehicles? This two-part session will review Technologies, Policy, Regulations, and Market Forces today and beyond 2010 for commercial vehicles to achieve lower GHG emissions, increased efficiency and performance. This series will review current status of the industry and progressing technologies to improve efficiency and emissions for medium and heavy duty trucks. This first session will concentrate on near term and future technologies.

**Organizers -** Ronald L. Graves, Oak Ridge National Laboratory; Hugh Harris, U.S. Environmental Protection Agency; Michael Prince, U.S. EPA; Allen R. Schaeffer, Diesel Technology Forum

**Moderators -** Roland M. Gravel, U.S. Dept. of Energy

Time	Paper No.	Title
10:30 a.m.	ORAL ONLY	Manufacturer Perspective for Improving Efficiency and Reducing Greenhouse Gas Emissions from Heavy-Duty Vehicles
		Bradford Hicks, ArvinMeritor Inc.
10:50 a.m.	ORAL ONLY	Improving Efficiency and Reducing Greenhouse Gas Emissions from Heavy-Duty Vehicles
		Alexander Freitag, Robert Bosch LLC
11:10 a.m.	ORAL ONLY	Engine Manufacturer Perspective for Improving Efficiency and Reducing Greenhouse Gas Emissions from Heavy-Duty Vehicles

Wayne A. Eckerle, Cummins Inc.

11:30 a.m.	ORAL ONLY	Total Vehicle Perspective for Improving Efficiency and Reducing Greenhouse Gas Emissions from Heavy-Duty Vehicles
		Mihai (Mike) Dorobantu, Eaton Corporation
11:50 a.m.	ORAL ONLY	Total Vehicle Perspective for Improving Efficiency and Reducing Greenhouse Gas Emissions from Heavy-Duty Vehicles
		Daniel R. Kieffer, PACCAR
12:10 p.m.	ORAL ONLY	DOE Perspective for Improving Efficiency and Reducing Greenhouse Gas Emissions from Heavy-Duty Vehicles
		Kenneth Howden, U.S. Dept. of Energy

## Thursday, January 28

## Heavy-Duty Technologies and Solutions to Improve Efficiency and Emissions (Part 2)

Session Code: G107

Room 144 A Session Time: 2:30 p.m.

What's Next for Heavy-Duty Vehicles? This two-part session will review Technologies, Policy, Regulations, and Market Forces today and beyond 2010 for commercial vehicles to achieve lower GHG emissions, increased efficiency and performance. This series will review current status of the industry and progressing technologies to improve efficiency and emissions for medium and heavy duty trucks. This second session will concentrate on policy, regulation and operational items.

Organizers - Ronald L. Graves, Oak Ridge National Laboratory; Hugh Harris, Michael Prince, U.S. Environmental

Protection Agency; Allen R. Schaeffer, Diesel Technology Forum

Time	Paper No.	Title
2:30 p.m.	ORAL ONLY	NGO Perspective for Improving Efficiency and Reducing Greenhouse Gas Emissions from Heavy-Duty Vehicles
		Drew Kodjak, International Council On Clean Transportation
2:50 p.m.	ORAL ONLY	NHTSA Perspective for Improving Fuel Efficiency in Medium- and Heavy-Duty Commercial Vehicles and Work Trucks
		Peter Prout, NHTSA
3:10 p.m.	ORAL ONLY	EPA Heavy-Duty Greenhouse Gas Emissions Approaches
		Cheryl L. Bynum, U.S. Environmental Protection Agency
3:30 p.m.	ORAL ONLY	Challenges, Opportunities and Possible Framework for Regulation of GHGs from Commercial Vehicles
		Sean C. Milloy, Cummins Inc.
3:50 p.m.	ORAL ONLY	Manufacturer Perspective for Improving Efficiency and Reducing Greenhouse Gas Emissions from Heavy-Duty Vehicles
		Anthony Greszler, Volvo Powertrain North America

## Thursday, January 28

**Child Safety** 

Session Code: G213

Room 144 BC Session Time: 10:30 a.m.

This session will explore the research, regulation, and strategies for enhancing child occupant protection in motor vehicles. Presentations will include topics such as booster seat belt fit, ongoing research for the development of advanced biofidelic pediatric dummies, and child side impact protection.

Organizers - Cristina G. Echemendia, NHTSA; Stephen G. Gehring, General Motors Company

Time Paper No. Title

10:30 a.m.	ORAL ONLY	Static Evaluations of Belt Fit for Boosters - Updated Protocol and Ratings
		Christopher P. Sherwood, Insurance Institute for Highway Safety
10:50 a.m.	ORAL ONLY	Kinematic Comparison of Human and ATD Responses for Children in Low Speed Frontal Crash Conditions
		Thomas Seacrist, Sriram Balasubramanian, Matthew R. Maltese, Kristy B. Arbogast, Children's Hospital of Philadelphia; Terry Hopely, Eric Constans, Rowan Univ.
11:10 a.m.	ORAL ONLY	Side Impact Testing (with intrusion) of Child Seats Using a Deceleration Sled
		Janet M. Brelin-Fornari, Paul Ribai, Kettering Univ.
11:30 a.m.	ORAL ONLY	NHTSA's Child Side Impact Protection Research Program Status Update
		Allison E. Louden, Lisa K. Sullivan, Dan Rhule, NHTSA
11:50 a.m.	ORAL ONLY	Consideration of Head/Face Trauma, Intruding Door Velocity, and Spine Flexibility for Children in Side Impact
		Richard M. Morgan, Lilly Nix, Pradeep Mohan, Vinay Nagabhushana, Leyu Wang, Vishal Devidas Sangade, Kennerly H. Digges, Cing-Dao Kan,

Wang, Vishal Devidas Sangade, Kennerly H. Digges, Cing-Dao Kan, George Washington Univ.; Tony M. Lamb, Johnson Controls Inc.

# Thursday, January 28

# **Pedestrian Safety**

Session Code: G209

Room 144 BC Session Time: 2:30 p.m.

Pedestrian injuries and fatalities continue to be a focus of a variety of research programs and international discussions. This session will include information such as the current status of the Global Technical Regulation (GTR) related to pedestrian safety, enhanced vehicle designs and modifications intended to help improve pedestrian safety, current research related to the "Quieter Cars" research program, and potential testing options including use of the Flex-PLI.

Organizers -	Susan Meyerson, N	HTSA; Robert Pheiffer, InterRegs, Ltd.
Time	Paper No.	Title
2:30 p.m.	ORAL ONLY	The Nationwide Inpatient Sample (NIS) as a Source of Data on Pedestrian and Cyclist Injuries
		Robert Lange, Michelle Heller, Michael Prang, Johan Ivarsson, Kevin L. Ong, Heather Watson, Madhu Iyer, Jacob L. Fisher, Exponent Inc.
2:50 p.m.	ORAL ONLY	Pedestrian Protection Global Technical Regulation Challenges
		Michelle Chaka, Mary Wroten, Ford Motor Co.
3:10 p.m.	ORAL ONLY	Lower Leg Energy Absorber Compatibility with Hood Activation Sensors
		Dan Ralston, Netshape International LLC
3:30 p.m.	ORAL ONLY	NHTSA Pedestrian Testing with TRL and Flex-GTR Legforms and the Status of the GTR
		Jason Stammen, NHTSA
3:50 p.m.	ORAL ONLY	Overview of NHTSA's Research on "Quieter Cars"
		Stephen Beretzky, NHTSA
4:10 p.m.	ORAL ONLY	Update on the SAE Vehicle Sound for Pedestrians Committee
		Daniel J. Selke, Mercedes-Benz USA LLC; Jay Joseph, American Honda

Motor Co. Inc.

#### Friday, January 29

#### **Alternative Fuel Vehicle Safety**

Session Code: G211

Room 140 B Session Time: 10:30 a.m.

This session will explore safety topics related to alternative fuel vehicles. Interest in plug-in hybrid and pure electric vehicles has raised safety concerns. Shock prevention is an issue for fuel cell and battery powered vehicles. Real world and test data relating to high pressure gas refueling, crash, and fire exposure for hydrogen fuel cell and compressed natural gas (CNG) vehicles supports the development of improved safety criteria for compressed and liquefied gas storage systems.

Organizers -	Deborah Bakker, Hy	rundai Kia America Technical Center; Barbara C. Hennessey, NHTSA
Time	Paper No.	Title
10:30 a.m.	ORAL ONLY	Hydrogen Safety Study of Hyundai and Kia Fuel Cell Vehicles
		Todd Suckow, Hyundai-Kia America Technical Center Inc.
10:50 a.m.	ORAL ONLY	Safety Considerations for Advanced Powertrains
		Justin Ward, Toyota Motor Engineering & Manufacturing
11:10 a.m.	ORAL ONLY	Large EV Battery Market, Challenges and Standards
		Priya Tabaddor, Underwriters Laboratories Inc.
11:30 a.m.	ORAL ONLY	NHTSA's Hydrogen Fuel Cell Vehicle Safety Research Program
		Denny R. Stephens, Battelle Memorial Institute

#### Friday, January 29

## Light-Duty Powertrain Strategies -- Are IC Engines Taking a Back Seat?

Session Code: G101

Room 143 A Session Time: 10:30 a.m.

This session will examine the different applications for advanced powertrains providing an overview of the latest designs in high-efficiency internal combustion and electric drive solutions, cost/benefit of all technologies and explore the remaining barriers to commercial reality. This session will bring together vehicle manufacturers, technology developers, fleet operators, and policymakers to discuss the role of IC engines in the light-duty vehicle market and predict a long range forecast.

Organizers -	John W. Juriga, Hyundai-Kia America Technical Center Inc.; Joseph F. McDonald, U.S. EPA;
Organizers -	Jonn W. Juriga, Hyundai-Kia America Technical Center Inc.; Joseph F. McDonald, U.S. EP.

Gurpreet Singh, U.S. Dept. of Energy; David Smith, Oak Ridge National Laboratory

Time	Paper No.	Title
10:30 a.m.	ORAL ONLY	Update on Project SABRE A Downsized High BMEP Direct Injection Engine and Project RESET A Different Approach to Maximum Efficiency in a Range Extended Engine
		Stephen R. Brueckner, Lotus Engineering Inc.; J. W. G. Turner, Lotus Engineering, Ltd.; Andrew Balding, Lotus Engineering Inc.
10:50 a.m.	ORAL ONLY	IC Engines - for GHG Reduction in the Driver Seat
		Johannes Joerg Rueger, Robert Bosch LLC
11:10 a.m.	ORAL ONLY	ICE Bridging Strategies
		John W. Juriga, Hyundai-Kia America Technical Center Inc.
11:30 a.m.	ORAL ONLY	Electrified Propulsion: A Perspective on HEV Technology and Market Acceptance for Automotive Powertrains
		Michael Crane, Continental Automotive Systems

Friday, January 29

Session Code: G210 10:30 a.m.

Room 143 BC Session Time:

This session will cover recent advances in the study of biomechanics and injury trauma. Presentations will focus on brain and thoracic injury research, human modeling, and dummy development. Studies based on recent CIREN data will also be presented. Special consideration will be given to occupant safety for the elderly population.

Organizers -	John J. Combest, Nissan Technical Center NA Inc.; Rodney W. Rudd, NHTSA	
Time	Paper No.	Title
10:30 a.m.	ORAL ONLY	A Method to Study the Invariability in Reducing Whiplash Injury Indicator Values Using BioRID II and HBM
		Tomosaburo Okabe, Daisuke Murakami, Chinmoy Pal, Nissan Motor Co., Ltd.
10:50 a.m.	ORAL ONLY	Status of the GHBMC Recent Progress and Next Steps
		Duane T. Detwiler, Honda R&D Americas Inc.
11:10 a.m.	ORAL ONLY	CIREN Improved Injury Causation Coding Methods: An Initial Review
		Mark Scarboro, NHTSA
11:30 a.m.	ORAL ONLY	Injury Type and Distribution of Belted Non-Ejected Occupants in Rollover Crashes
		Stephen Ridella, NHTSA; Ana Maria Eigen, FHWA; Jason R. Kerrigan, Jeff R. Crandall, Univ. of Virginia
11:50 a.m.	ORAL ONLY	Detailed Characterization of Thoracic Anatomic Changes with Aging
		Stewart Wang, Univ. of Michigan Health Systems
12:10 p.m.	ORAL ONLY	Circumstances of Crashes Involving Older Drivers
		Richard W. Kent, Univ. of Virginia

## Friday, January 29

## Who Pays for the High-Fuel Economy Vehicles of the Future?

Session Code: G100

Room 144 A Session Time: 10:30 a.m.

This session will investigate who will pay for the low-GHG, high-fuel economy vehicles of the future, costs of new fuels, cost/benefit of regulations and other pertinent issues such as gasoline taxes, gasoline price floors, consumer tax credits, feebates, consumer surveys, marketing plans, etc. To be presented from the view of consumers, academia, industry and government.

Organizers -	Jeffrey Alson, U.S. E	nvironmental Protection Agency; Philip D. Patterson, U.S. Dept. of Energy
Time	Paper No.	Title
10:30 a.m.	ORAL ONLY	Closing the Loop: Policies to Engage Consumers in GHG and Fuel Economy Choices
		Kathryn Clay, Alliance of Automobile Manufacturers Inc.
10:50 a.m.	ORAL ONLY	A Policy Framework for Transportation's Energy Transition
		David L. Greene, Oak Ridge National Laboratory
11:10 a.m.	ORAL ONLY	Who Benefits from the High-Fuel Economy Vehicles of the Future
		John German, International Council On Clean Transportation
11:30 a.m.	ORAL ONLY	Exploring the Future of Fuel Consumption Choices: Interviews from the UC Davis PHEV and BMW MINI E Houshold Trials

Thomas Turrentine, Univ. of California-Davis

# Friday, January 29

## **Distraction**

Session Code: G212

Room 144 BC Session Time: 10:30 a.m.

Leveraging the DOT's Distracted Driving Summit, this session will provide additional information to share the latest developments in driver distraction. Researchers from government and industry will share their latest research findings.

Organizers -	Stephanie C. Binder	r, NHTSA; Stephane A. Thiriez, Mitsubishi Motors R&D of America Inc.
Time	Paper No.	Title
10:30 a.m.	ORAL ONLY	Do Bans on Driver Cell-Phone use Make Safer Drivers?
		Adrian Lund, Insurance Institute for Highway Safety
10:50 a.m.	ORAL ONLY	Cognitive vs. Visual Distraction and Real-World Driving Safety: How Different Research Methdologies May Yield Different Results
		Louis Tijerina, Ford Motor Company
11:10 a.m.	ORAL ONLY	Driver Distraction in Commercial Vehicle Operations
		Martin Walker, Federal Motor Carrier Safety Administration
11:30 a.m.	ORAL ONLY	Distracted Driving The FCC's Role
		Ira Keltz, Federal Communications Commission