Automotive Safety: Where Have We Been and Where Are We Going?

“Focus on the Future”
UM Automotive Research Conferences

WELCOME!

Presentations available at:
www.umtri.umich.edu/ aad

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# Affiliates Members and Research Partners

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**Automotive Analysis Division**

University of Michigan

Transportation Research Institute

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**UMTRI**

Automotive Analysis
# Automotive Analysis Division
University of Michigan
Transportation Research Institute

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UMTRI-AAD Affiliate Program

For 2010, we have re-designed our Affiliate program by focusing the funding received from our Affiliates on 3 main annual research projects that look at the current and future direction of the global automotive industry:

1. **Automotive powertrains and emissions** focused on technology and regulatory/policy forecasting through our Powertrain Strategies for the 21st Century study

2. **The role of information technology** in the automotive industry through our Automotive CIO study

3. **The globalization of the automotive industry** based on a focused, country level analysis of a developing or developed market.
Upcoming UMTRI-AAD Conferences

• **February 16, 2011 (Wednesday):** Automotive Safety: Where Have We Been and Where Are We Going?

• **April 20, 2011 (Wednesday):** Inside India: Understanding India’s Current and Future Automotive Industry.

• **July 13, 2011 (Wednesday):** Powertrain Strategies for the 21st Century. This 3rd annual conference will focus on current powertrain topics and their effects on the future of the industry.

• **September 14, 2011 (Wednesday):** The Business of IT: Transforming the Organization and the Vehicle. Our 4th annual conference on how IT innovation is changing the auto industry.

• **November 16, 2011 (Wednesday):** Inside China: Understanding the Current and Future Chinese Automotive Industry. Our 5th annual conference that brings the insight of people who truly know the Chinese auto industry.
Panelists

• **Paul Green**, Research Professor in the Driver Interface Group at the University of Michigan Transportation Research Institute and Adjunct Associate Professor of Industrial and Operations Engineering (IOE),

• **Alan Korn**, Director, Vehicle Dynamics and Control, Meritor Wabco

• **Keynote Speaker: John Maddox**, Associate Administrator for Vehicle Safety Research at the National Highway Traffic Safety Administration (NHTSA), U.S. Department of Transportation
Panelists

- **Jennifer Timian**, Chief of Recalls Management Division at the National Highway Traffic Safety Administration (NHTSA), U.S. Department of Transportation

- **Jonathan Rupp**, Assistant Research Scientist at the University of Michigan Transportation Research Institute and a Research Assistant Professor in the University of Michigan Department of Emergency Medicine

- **Kurt Fisher**, Technical Specialist, TRW Automotive
Morning Schedule

• 9am
  – Bruce Belzowski
  – Paul Green
  – Alan Korn

• 10:30am Break

• 10:45am
  – Keynote Speaker: John Maddox

• 11:30am Q&A

• Noon-1:30pm Lunch
Afternoon Schedule

• 1:30pm
  – Jennifer Timian
  – Jonathan Rupp

• 2:45pm  Break

• 2:55pm
  – Kurt Fisher

• 3:25pm  Q&A

• 4:00pm  Adjourn
Conference Questions

• What are the current human factors challenges for automakers? How do researchers measure driver distraction?

• Why do class 8 heavy truck fleets tend to introduce new safety technology before the light vehicle manufacturers?

• What are the current priorities of the government in terms of vehicle safety research?
Conference Questions

• What do recalls tell us about an auto company? Can consumers use recalls to help decide on new vehicle purchases?

• How much have vehicle safety devices reduced injuries and fatalities? How will new safety devices on vehicles reduce injuries and fatalities?
Conference Questions

- What are the challenges of being a global safety supplier?
- What future safety technologies should we expect?
- Does safety really sell vehicles?
What is UMTRI?

• University of Michigan Transportation Research Institute

• Founded in 1965 to initiate highway safety research programs

• Currently about 140 staff members with a research program of about $14 million annually.
What is UMTRI?

• Over 1,000 research projects carried out in broad areas involving accident data collection and traffic safety analysis, bioengineering, human factors, mechanical engineering, psychology, economics, and public policy.

• Numerous multidisciplinary research programs conducted with other units of the University involving specialized areas of engineering, business, medicine, and public health.
What is UMTRI?

Research groups and initiatives that cover safety topics such as:

- Driving across the lifecycle e.g. issues of younger and older drivers
- Understanding the effects of new safety technologies on drivers
- The challenges of heavy truck safety
- The effects of vehicle crashes on the human body
What is UMTRI?

Research groups and initiatives that cover safety topics such as:

- The interaction between drivers and vehicles (human factors)
- The dynamics and control of vehicles and the driving process
- Databases that cover 40 years of crash data
What is UMTRI?

Research groups and initiatives that cover transportation topics such as:

- Sustainability of transportation systems worldwide
- Future transportation systems around the world
- Intelligent transportation systems (ITS)
What is UMTRI?

Research groups and initiatives that cover the business of transportation such as:

- Providing the automotive industry and with research and analysis, information resources, and communication forums that meet the evolving needs of the international automotive industry.
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