New Mobility Trends: The Business Models That Are Growing a Trillion Dollar Industry Cluster

“Focus on the Future”
UM Automotive Research Conferences

WELCOME!

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Automotive Futures
Affiliate Program

Affiliates, Members, and Research Partners

**IT Organizations**
- Oracle Corporation
- IBM
- HP
- Siemens-PLM

**OEMs**
- General Motors
- Toyota Tech Center
- Nissan Tech Center
- Ford Motor Company
- Chrysler LLC

**Government/NGOs**
- NREL / EPA
- NSF
- Motor Carrier
- Energy Foundation
- The Hewlett Foundation
- National Resources Defense Council
- Union of Concerned Scientists
- CALSTART
- Argonne National Labs
Automotive Futures
Affiliate Program

Affiliates Members and Research Partners

*Suppliers*
- Chevron
- Visteon
- Denso
- Dana
- Delphi
- Peterson Spring
- Continental
- TRW
- Valeo

*Suppliers*
- Michelin
- Continental
- JCI
- BorgWarner
- Yazaki
- Eaton
- BASF
- Dow
- Bosch
Automotive Futures
Affiliate Program

New Affiliates Members

Argonne National Labs
BorgWarner
Valeo
ITS America

Thank you for your support!
Automotive Futures
Current Research Programs

• Powertrains
  • 2014 Powertrain Strategies for the 21st Century Survey (Sponsor: Affiliates)
    • Survey will be sent out this month
    • Sponsorship still available

• Total Cost of Ownership: Comparing Diesel and Gas Vehicles (Bosch)
  • Based on resale value of 30K vehicles sold through Mannheim auctions in 2012 / 2013
  • Report due in early Spring
Automotive Futures
Current Research Programs

• ITS
  • Integrated Mobile Observations: Micro-level weather reporting using cell phones in MDOT vehicles (Sponsor: MDOT and FHWA)
    • Continuing data collection through October, 2015
  • Roadway Evaluation Project: Measuring road roughness via accelerometers in cell phones mounted in MDOT vehicles
    • Final report draft at MDOT
  • Deploying Safety Technologies in Commercial Vehicles
    • Familiarity and penetration currently and in the future of: Forward Collision Warning / Lane Departure Warning / Blind Spot Detection / ESC / Vehicle Communications
    • Final report in progress (Sponsor: ITS America)
Upcoming UMTRI-AF Conferences

• April 15, 2015 (Wednesday): *Inside Mexico: Understanding the Current and Future Mexican Automotive Industry.* Mexico continues to expand its automotive manufacturing footprint as the major automotive manufacturers expand their operations throughout Mexico. Our discussion will focus on this growth as well as Mexico’s lagging market for new vehicles.

• July 22, 2015 (Wednesday): *Powertrain Strategies for the 21st Century.* Our 7th annual conference provides insight into how manufacturers and suppliers are managing their resources to meet the needs of consumer while meeting government requirements.
Upcoming UMTRI-AF Conferences

• September 10, 2015 (Wednesday): *The Business of IT: How IT is Changing the Corporation and the Vehicle*  Our annual IT conference will examine the future of IT within the corporation and the vehicle.

• November 11, 2015 (Wednesday): *Inside China: Understanding China’s Current and Future Automotive Industry.*  Our 8th annual conference provides insight into the Chinese auto industry from experts in specific areas of the industry including the Chinese market, suppliers, trade, Chinese manufacturers, labor, and marketing.
Upcoming UMTRI-AF Conferences

The UM Alumni Discount

Alumni who sign up in advance for five conferences in a row receive a $250 discount
AM Presenters

• **Susan Zielinski**, Managing Director, UM-SMART, UM Transportation Research Institute

• **Kerry Duggan**, Liaison to the City of Detroit, US Department of Energy

• **Eric Wingfield**, Mobility Strategist, Ford Motor Company

• **Chris Thomas**, Founder and Partner, Fontinalis

• **Jean Redfield**, President and CEO, NEXTEnergy
AM Entrepreneurs

• **Corey Clothier**, Founder, Comet

• **Ansgar Strother**, Founder and CEO, A2B Bikeshare

• **Ody Norkin**, Vice-President, Michigan Flyer
PM Presenters

- **George Hazel**, Consultant, Scottish Smart Mobility
- **Amit Kapoor**, Indian Institute for Competitiveness and Harvard Business School
- **Komal Anand**, Project Manager for the Mobi Prize and Mobi Platform for UM-SMART
- **Paula Sorrell**, Vice-President, Entrepreneurship, Innovation, and Venture Capital, Michigan Economic Development Corporation
PM Entrepreneurs

- Jessica Robinson, Market Launch Manager, ZipCar
- Yvonne LeFave, CEO, Go Green Trikes
- Lauren Flanagan, Managing Director, BELLE Capital USA, LP, and Executive Chairman, Current Motor
- Liz Martin, Social Media Management, Zip Express
AM Schedule

9am: Bruce Belzowski / Sue Zielinski
- Kerry Dugan
- Eric Wingfield
- Chris Thomas

10:35am-10:50am: Break
AM Schedule

10:50am:
- Jean Redfield
- Corey Clothier
- Ansgar Strother
- Ody Norkin

11:35am: AM Q&A Panel

12:15pm-1:15pm: Lunch
PM Schedule

1:15pm
- George Hazel
- Amit Kapoor
- Komal Anand

2:25pm-2:40pm   Break
PM Schedule

2:40pm
- Paula Sorrell
- Jessica Robinson
- Yvonne LaFave
- Lauren Flannigan
- Liz Martin

3:30pm: PM Q&A Panel
4:15pm: Adjourn
Conference Questions

• What are local, state, and federal governments doing to support New Mobility innovation, industry, and enterprise?
• How do governments avoid picking winners and losers?
• How will New Mobility affect country competitiveness?
• What are the motivations and tipping points for large companies and governments to increase their investments in support of New Mobility?
• Which types of companies stand to gain from these changes?
Conference Questions

• What is the role of automation and connectivity in this broader landscape?
• What New Mobility business models are attractive to potential investors?
• How hard is it for small companies to scale up to meet high volume demand?
• What challenges do supporting agencies see in helping New Mobility entrants? Are their needs different from other new businesses?
Conference Questions

- What role will New Mobility play in energy sustainability?
- What types of business models will best serve New Mobility startups?
- What advantages will consumers see in their daily lives as we transition to a new mobility paradigm?
- Where are we now in the evolution of the New Mobility paradigm?
- What is missing in the discussion that can affect future growth? And reduce future risk?
Transportation Represents Nearly 10 Percent of US GDP

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, Pocket Guide to Transportation
Each Country Has Its Own Transportation Footprint

Source: IEA
If the world continues on its current path of transport development, there will be a continued growth in the light vehicle segment.
But There Are Alternatives!
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Link to Presentations Will Be Emailed This Weekend