Our Transportation Center: Effective, Active, Connected

Hani S. Mahmassani

Presentation to the BAC April 25, 2013
Strategic Vision: A Refresher

• Pre-eminent think-tank and laboratory in the world for cutting-edge research that matters on a global scale.
• Provide the premier educational program in transportation systems.
• Essential academic partner for novel, high-impact collaborative research.
• Advance state of practice industry applications through a mix of engaged application-driven research and fundamental advances.
Progress Highlights: 2012- 2013 (I)

BAC Membership (since last meeting)
- 6 new companies (5 new members)

Funded Research Activity
- Active: 25 projects $3.31 M, 9 faculty
- Submitted: 6 proposals $9.72 M, 20 faculty

Graduate Students
- 20 supported via research projects
- 4 supported via dissertation year fellowships
- $514k in support (travel, tuition, stipend, fellows, etc.)
BAC: New Sustaining Companies

AMP Americas
Jones Lang LaSalle
Neovia Logistics
Peapod
Schneider National
U.S. Bank
BAC

New Directory
ANDREW BOYLE

Appointed to – Research Advisory Committee of the American Transportation Research Institute

NORM CARLSON

Appointed to: Metra Board of Directors

ANN DRAKE

2012 Distinguished Service Award from Council of Supply Chain Management Professional
Bill Graves, ATA
2012 Executive of the Year from National Industrial Transportation League

Matt Rose
2013 Horatio Alger Award from Horatio Alger Association of Distinguished Americans

Jeff Silver
Named a 2013 TechWeek100 Honoree
BAC Contributions: FY11, FY12, FY13

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<th>GOAL</th>
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<tr>
<td>FY 11</td>
<td>$350,000</td>
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<td>FY 13</td>
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Research Competition (I)

USDOT, University Transportation Center Program

• National Transportation Center
  – up to 5 Awards, $3M /year for 2 years

• Tier I Center
  – up to 20 awards, $1.5M /year for 2 years

• Regional Center
  – up to 10 awards, $2.75M /year for 2 years
Research Competition (II)
National Transportation Center on Global Competitiveness

Partners: NUTC, USC, RPI, UIUC, TX Southern, Chicago City Colleges

• BAC Leadership

• Agency / other support
Research Competition (III)

Center for Connected Transportation Systems (Tier 1 Center)

Partners: NUTC, UIUC, UIC

• BAC Leadership
• Agency support
• Other support
Hosting International Research Conference

Chair: Prof. Ian Savage, NUTC faculty affiliate

Keynote Speaker: Charles Manski, Board of Trustees Professor of Economics at NU

Summer School: Monday-Wednesday, July 8-10, 2013

Conference: Wednesday-Friday, July 10-12, 2013

Inviting attendees and summer school students
Students: Our Core Mission (I)

• TC adds *value to student experience* through industry exposure, seminars by authorities in the field, travel funds for conferences, fellowship stipends—essential differentiator for recruiting top talent

• Many opportunities for *undergraduates* interested in transportation; increasing engagement in research, *internship* placement with *BAC companies*

• *Industry support is critical* to our mission and to making a Northwestern Education in Transportation the unique experience it is.
Students: Our Core Mission (II)
Direct Student Funding Through NUTC
Selected Outreach Activities (I)

**Sandhouse Gang** – Chaired by Norm Carlson

- **9/2012 – 12/2012**
  - The Great Railroad Revolution: The History of Trains in America
  - State of Good Repair and Beyond: Analyzing Metra's 2013 Strategic Plan
  - A New Shortline Model
  - Transportation Trends and Investment Implications

- **1/2013 – 5/2013**
  - The Enduring Legacy of the Chicago North Shore & Milwaukee Railway
  - State of Good Repair and Beyond: Analyzing Metra's 2013 Strategic Plan
  - Chicago Transportation Coordination Office (CTCO) and CREATE – A Progress Report
  - The Value in Writing Railroad History
  - Amtrak’s Relations with its Host Railroads
  - *Intermodal from Birth to Maturity (upcoming, May 7)*
Selected Outreach Activities (II)

Research Activities - Industry

- Echo Global Logistics
- US Bank
- Centerpoint
- Nokia
- Coyote Logistics

Strategic Guidance – Public Sector

- World Business Chicago Transportation & Logistics Strategy Committee
  - Shape public policies and public investments that enhance Chicago’s position in transportation and logistics through innovation
  - NUTC: Hani Mahmassani, Bret Johnson
  - BAC Members: Ann Drake, Paul Fisher
Selected Outreach Activities (III)

Executive Education

Freight Transportation and Logistics: Delivering Results in a Volatile Environment

September 9-11, 2013 (planned)
Selected Outreach Activities (IV)

International Outreach

- New National Transportation Center for Ministry of Transport, KSA: Strategic plan and design completed
- Crowd dynamics and mobility studies, Umm-Al-Qura University, KSA
- New Energy R&D City in KSA: Strategic planning exercise
- Active collaboration with TU-Delft (NL), EPFL (Lausanne, CH) and KTH-Stockholm (SW) in various areas.
- Rajawali Corporation – Jakarta, Indonesia
  - Executive Education Program launching in August 2013
  - Additional opportunities related to new 300 mile freight transportation rail line in Sumatra: infrastructure, economics, development, policy
Selected Outreach Activities (V)

Visiting Scholars in Residence

- **Dr. Jonathan Hall** – Don Searle Post-Doctoral Research Fellow in Economics, Northwestern University
- **Dr. Vera Hemmelmayr** – Institute for Transport and Logistics Management, Vienna University of Economics and Business
- **Dr. Jin Qin** – Associate Professor, Central China University
- **Dr. Ping (Shannon) Xu** – Lecturer, Shanghai Jiao Tong University
MORE HERE

2012 Progress Report
Closing Thoughts

• Considerable research opportunities and needs in the Transportation sector, and growing gap in educated workforce at many levels.

• **AT NORTHWESTERN**
  – Uniquely successful industry-engaged approach to transportation research and education

• What we do at the NUTC matters
  • BAC engagement and support critical to what we do, and how well we do it
Thank you!
BAC: New Sustaining Members Here Today

Michael Brennan
SVP & COO

James Hertwig
CEO

Kimberle Kennedy
SVP
BAC: New Sustaining Members Here Today

Paul Schneider
Director, Corporate Development

Richard Thompson
Managing Director, Supply Chain & Logistics Solutions
BAC: New Sustaining Members with Legacy Companies Here Today

Stefan Loeb
Senior Client Partner, Global Section Leader

Ogi Redzic
VP, Traffic & Automotive Cloud
BAC: Target Sectors for New Members

- Shippers with significant logistics operations
- International Carriers
- Trucking / Logistics companies
- Transportation Equipment / Systems Manufacturers
- Technology Providers