

# Our Transportation Center: *Beyond 60 Years*

Hani S. Mahmassani

Presentation to the BAC  
April 21, 2016



Northwestern University  
Transportation Center

# BAC

# 2016

SPRING

**WELCOME  
& THANK YOU  
FOR BEING HERE!**

**Business Advisory Council  
SPRING MEETING**

THURS., APRIL 21, 2016 - 8:00 AM

NORTHWESTERN UNIVERSITY TRANSPORTATION CENTER  
CHAMBERS HALL - 600 FOSTER ST., EVANSTON, IL 60208

# 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:

### BAC Membership (since last meeting)

- **3** new companies (**7** new members)

### Funded Research Activity

- Active: **9 projects**      **\$2.1 M**, **5** faculty
- Submitted → 5/16: **13 proposals**      **\$8.0 M+**, **15+** faculty

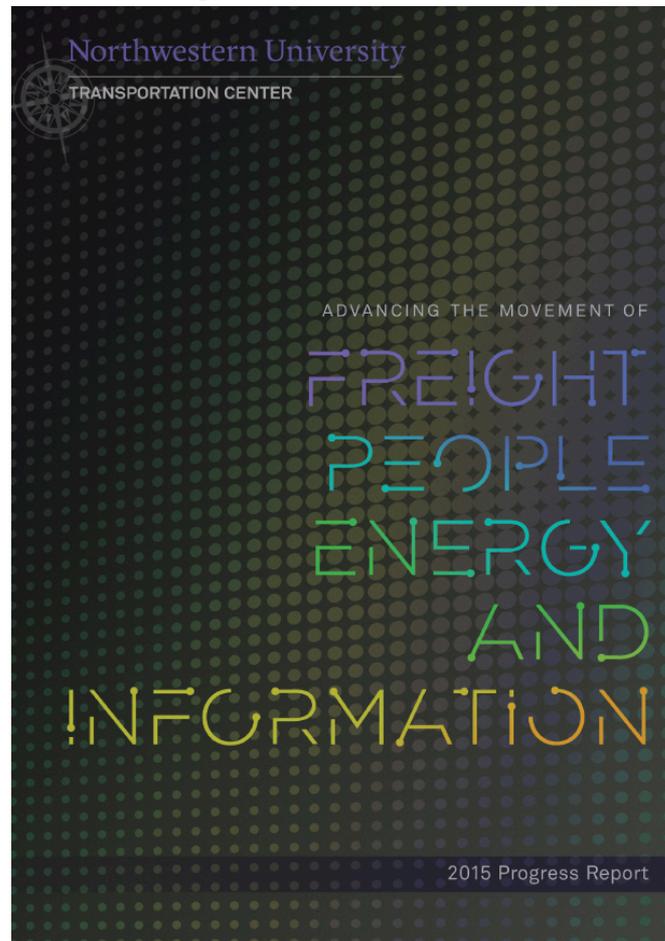
### Students

- **15** current T&L minor students
- **17** graduate students supported via research projects
- **3** supported via dissertation year fellowships
- Strong recruiting year for 2016-2017



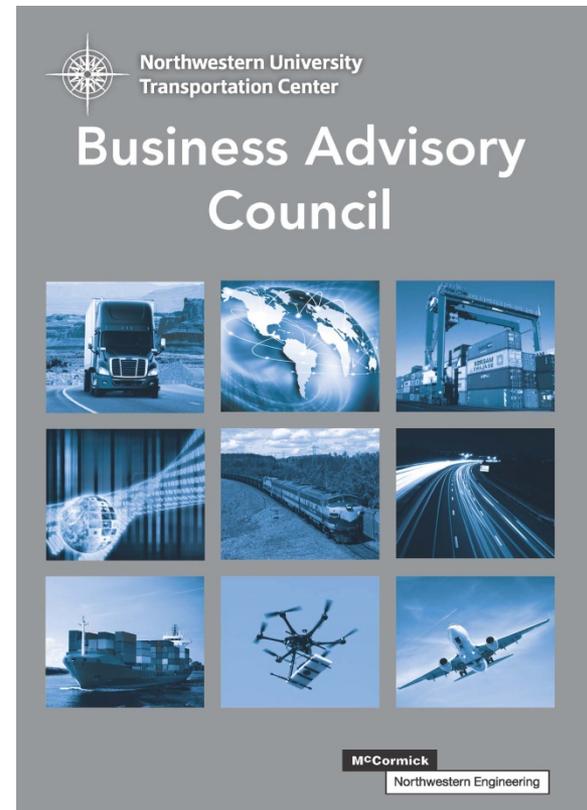


# 2015 Progress Report



# BAC: Update on Membership

- A strong year in terms of recruitment, retention of companies, events, and engagement
- Active research investigations with several BAC companies
- Actively seeking more opportunities to engage individual companies and/or consortia in research support and collaboration
- Active membership committee, several new prospects



# BAC: New Membership

## Leadership

Hub Group

Walgreens

## Sustaining

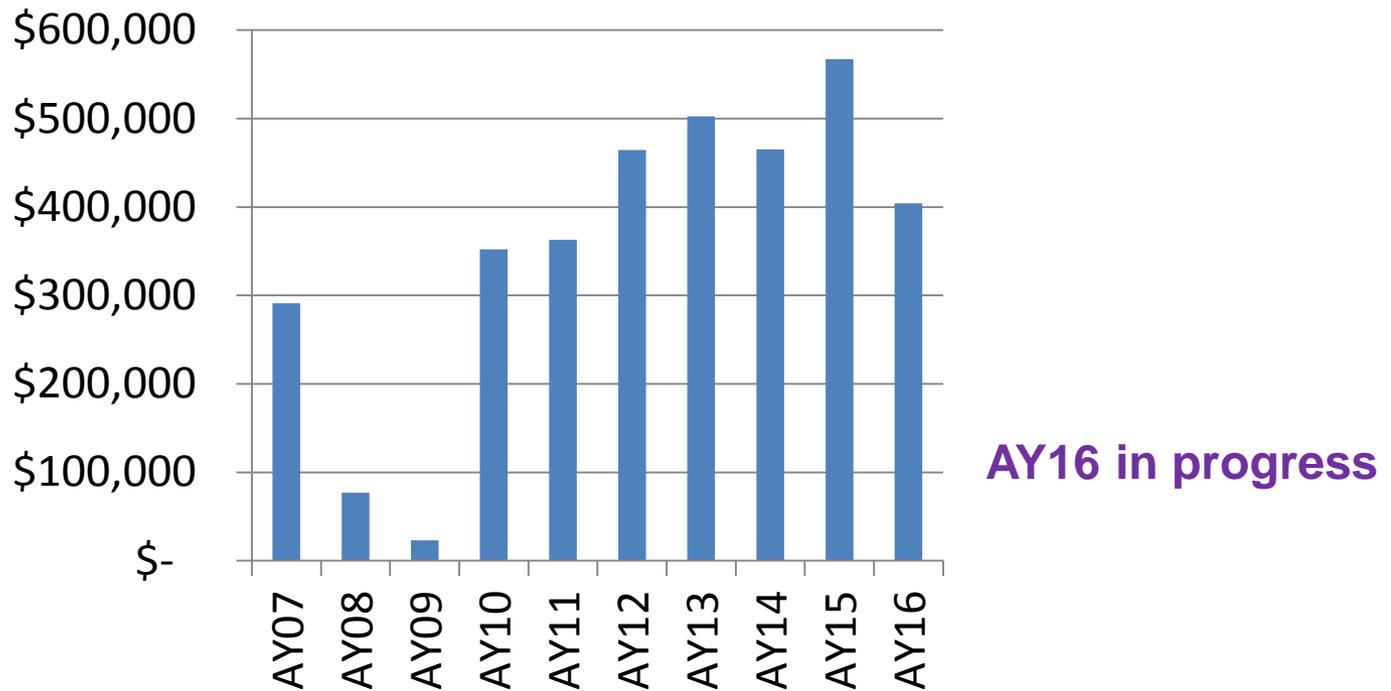
Air Canada

CVS

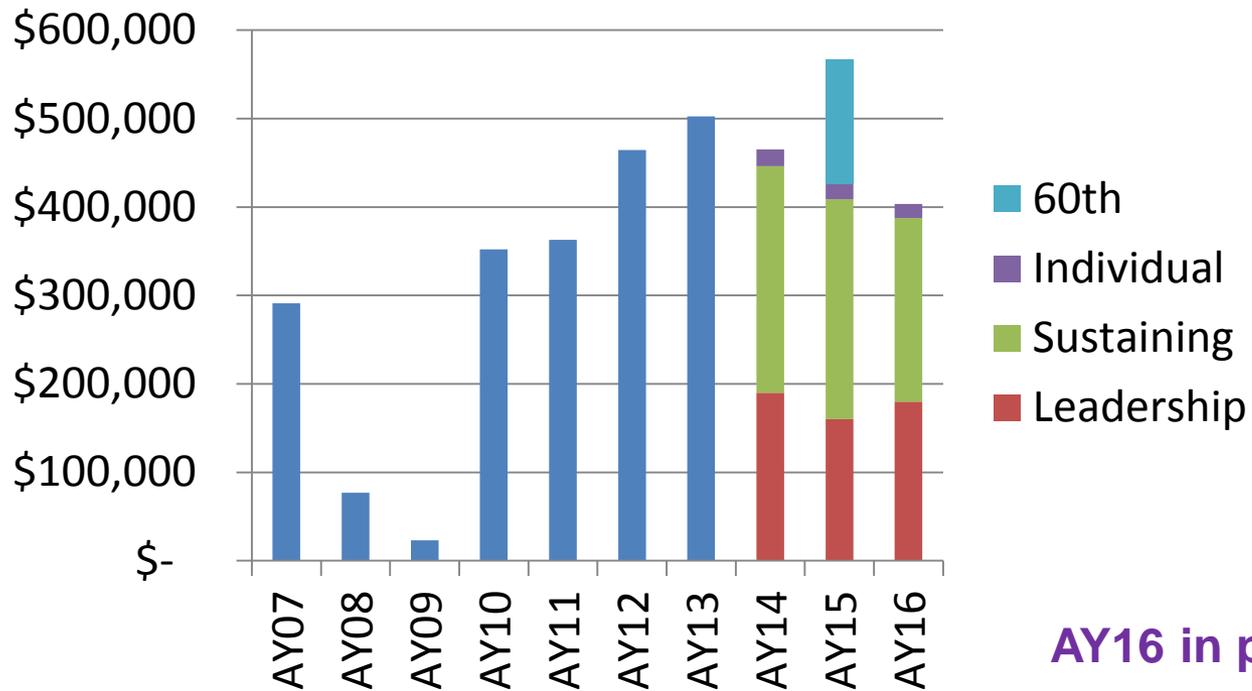
SkyTeam



# BAC Contributions: AY06 – AY15



# BAC Contributions: AY06 – AY15



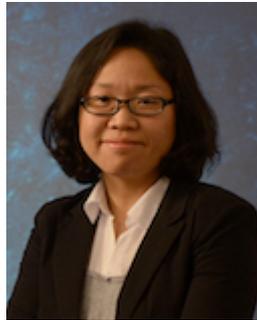
# New Faculty Affiliates



**Gad Allon**

Professor

Managerial Economics and Decision Sciences, Kellogg



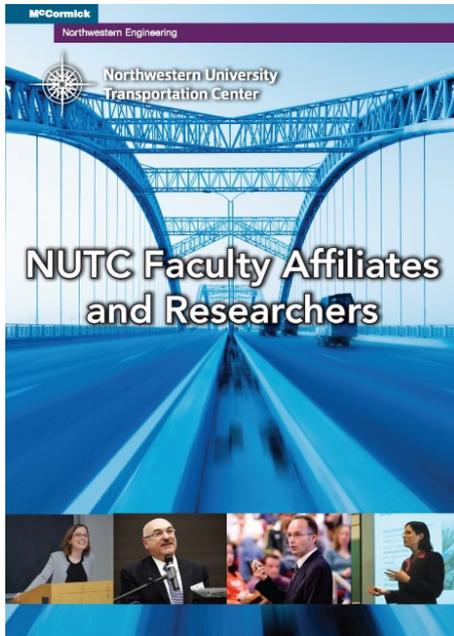
**Ying Chen**

Research Assistant Professor  
The Transportation Center



**Mohan Sawhney**

McCormick Foundation Chair of Technology;  
Clinical Professor of Marketing; Director, Center  
for Research in Technology & Innovation  
Kellogg



## Faculty Awards / Honors (I)



### **Zdenek Bazant**

**Elected to the Royal Society of London  
by the Royal Academy**



### **Wei Chen**

**2015 Design Automation Award**  
from the American Society of Mechanical  
Engineers (ASME)



### **J. Edward Colgate**

**Named Fellow of the National Academy of  
Inventors**

## Faculty Awards / Honors (II)



### **Noshir Contractor**

**Named Fellow of the International  
Communications Association (ICA)**



### **Richard Joseph**

**Lifetime Social Justice Award  
from Dartmouth College**



### **Amanda Stathopolous**

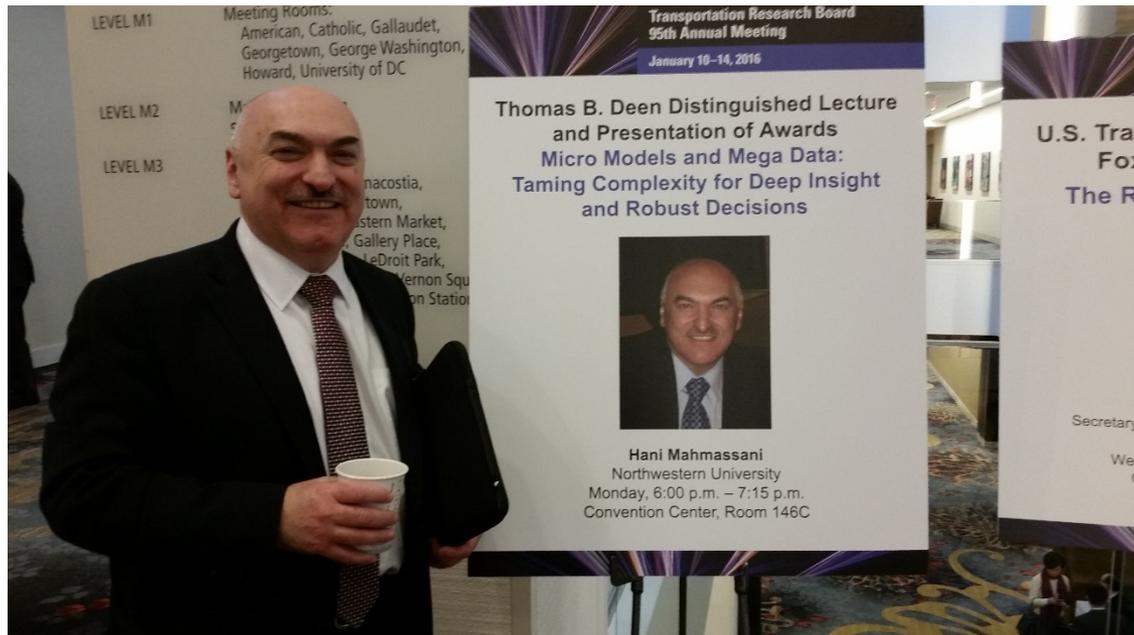
**Appointed the William A. Patterson Junior  
Professorship Chair for 2015-2018  
from the McCormick School of Engineering  
and Applied Science**

# Faculty Awards / Honors (III)

## Hani Mahmassani

**2016 Thomas B. Deen Distinguished  
Lectureship award**

from the Transportation Research Board

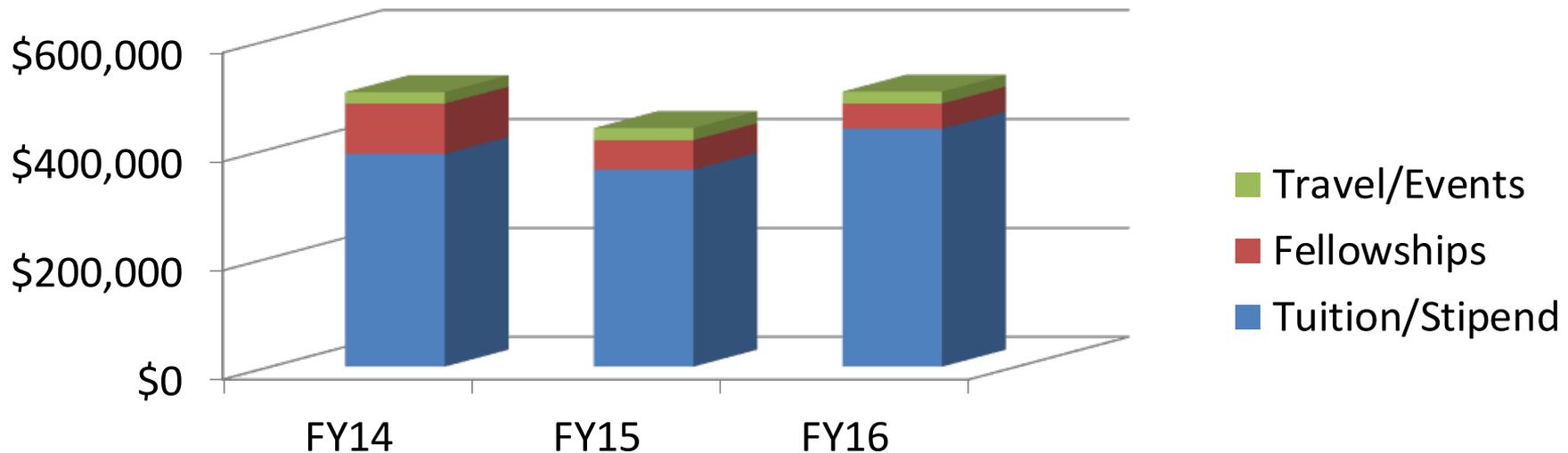


## Students: Our Core Mission (I)

- 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



Students: Ali Zockaie and Mehrnaz Ghamami



***Husband and Wife PhD graduates both earn Assistant Professor positions at Michigan State University***

# Proposed Center (I)



## ***National University Transportation on Freight Mobility and Sustainability (for Resilient Communities)***

Partners: NUTC (lead), Vanderbilt, UIUC, UC-Irvine, NYU  
U Washington, TX Southern, Cal Poly Pomona

### Mission

- 1) conduct cross-disciplinary on the mobility and fluidity of goods and related information in global and domestic supply and demand chains;
- 2) provide a networked forum where industry, academia and public agencies work together to advance knowledge;
- 3) provide and promote a unique educational experience aimed at developing the human resources necessary for a modern transportation and logistics industry.

**BAC, roles on Advisory Committee available**

# Proposed Centers (II)



## *More University Transportation Center proposals*

- 1) Tier 1, **lead** – *Preserving the Environment*
- 2) Tier 1, **lead** – *Reducing Congestion (Smart Cities, IoT)*
- 3) Tier 1, partner (Florida, lead) – *Improving mobility for people and freight*
- 4) Tier 1, partner (**UIC**, lead) - *Preserving the environment*
- 5) Tier 1, partner (U Akron, lead) – *Preserving the existing transportation system*
- 6) Regional Center, partner (**UIC**, lead) – *Improving mobility*

# Research Activities (I)

## Industry Research

- **AEM**
- **Boeing**
- **BNSF**



## Industry Teaming

- **Booz Allen Hamilton**
- **Leidos, Inc.**
- **Sejel Technologies (KSA)**
- **Various small businesses**

Booz | Allen | Hamilton  

---

delivering results that endure



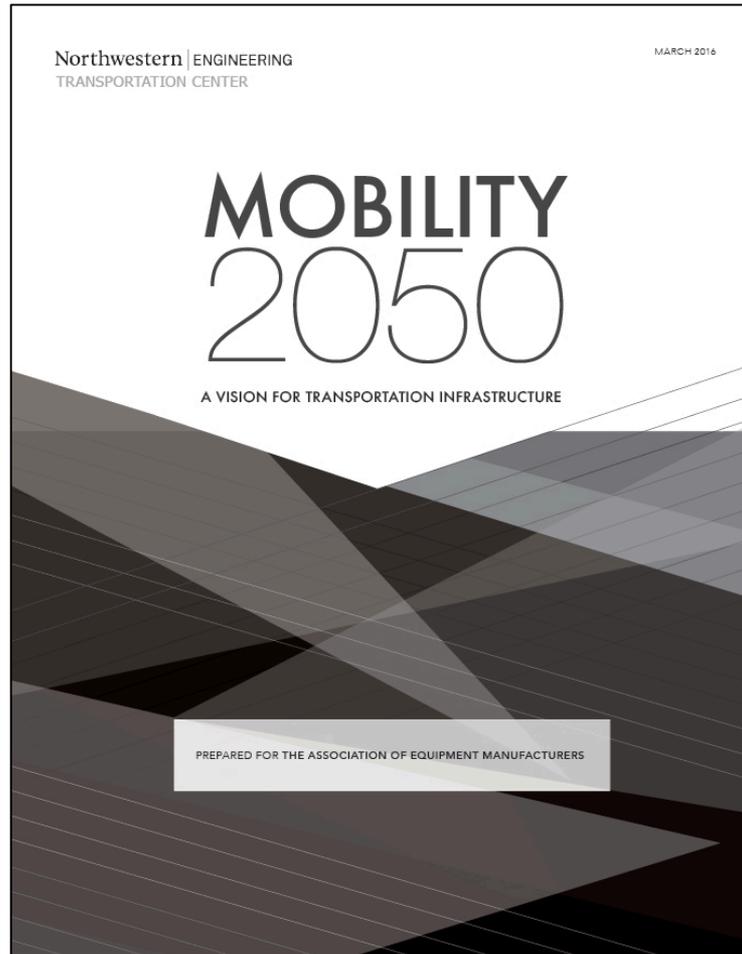
## Research Activities (II)

### Public Agencies / Federal Research

- **Argonne National Laboratory (DOE)**
- **Chicago Department of Transportation**
- **Chicagoland Metropolitan Agency for Planning**
- **Federal Highway Administration**
- **United States Department of Labor**



# Research Activities (III)

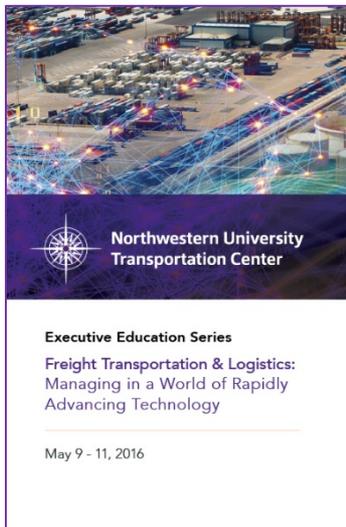


## Association of Equipment Manufacturers

- ***Mobility Report 2050***
- ***Symposium***
  - ***Mobility 2050: A Vision for Transportation Infrastructure and How We Can Get There***
  - ***Monday, May 23***

# Selected Outreach Activities (I)

## Executive Education



### Freight Transportation and Logistics *Managing in a World of Rapidly Advancing Technology* May 9 -11, 2016

- **Discounted Rates available for BAC member companies**
- Superb speaker list: CSCMP, CN, eBay, Echo Global, Ruan, Schneider, Nippon Cargo, and more... and Northwestern faculty



### Chalmers University of Technology Supply Chain Management

April 11 - 14, 2016

- Several Kellogg faculty participated in the course

# Selected Outreach Activities (II)

## Leon N. Moses Distinguished Lecture in Transportation

**Jan K. Brueckner**  
Professor, Economics  
University of  
California, Irvine



***Convenient Flight Connections vs. Airport Congestion:  
Modeling the "Rolling Hub"***

## Selected Outreach Activities (III)

- **Secretary, Illinois Department of Transportation – Randall Blankenhorn**

- The Future of Transportation in Illinois
- November, 2015



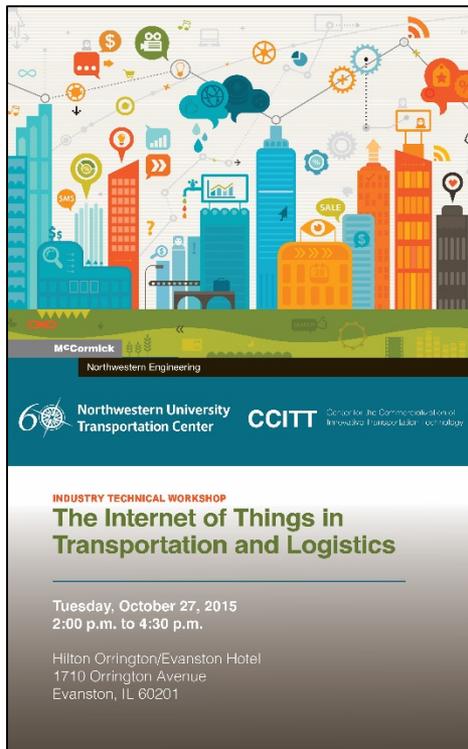
Illinois Department  
of Transportation

- **The 22<sup>nd</sup> International Symposium on Transportation and Traffic Theory**

- Hosting in Chicago, 2017



# Selected Outreach Activities (IV)



The poster features a vibrant, colorful illustration of a city skyline with various icons representing technology, logistics, and industry. The text on the poster includes:

McCormick Northwestern Engineering

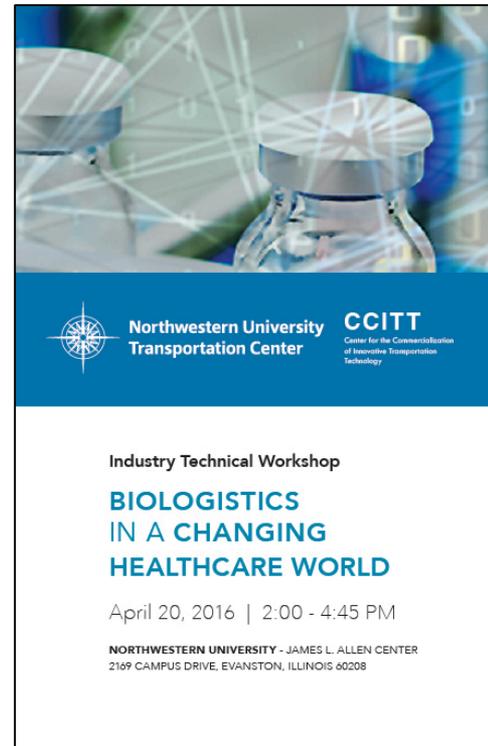
6 Northwestern University Transportation Center CCITT Center for the Commercialization of Innovative Transportation Technology

**INDUSTRY TECHNICAL WORKSHOP**  
**The Internet of Things in Transportation and Logistics**

Tuesday, October 27, 2015  
2:00 p.m. to 4:30 p.m.

Hilton Orrington/Evanston Hotel  
1710 Orrington Avenue  
Evanston, IL 60201

Fall 2015



The poster features a photograph of laboratory glassware, including a beaker and a flask, with a blue and white color scheme. The text on the poster includes:

Northwestern University Transportation Center CCITT Center for the Commercialization of Innovative Transportation Technology

**Industry Technical Workshop**  
**BIOLOGISTICS IN A CHANGING HEALTHCARE WORLD**

April 20, 2016 | 2:00 - 4:45 PM

**NORTHWESTERN UNIVERSITY - JAMES L. ALLEN CENTER**  
2169 CAMPUS DRIVE, EVANSTON, ILLINOIS 60208

Spring 2016

# Selected Outreach Activities (V)

## Sandhouse Gang (Rail)

9/2015 –4/2016

- Railway Study Association (RSA), British Railway and rail transit officers, suppliers, professionals and academics associated with the London School of Economics
- Amtrak Blue Ribbon Panel Meeting
- The Business Case for Higher Speed Freight Trains
- Railroad Renaissance: Dead or Alive?
- Metra – Building on the Successes of 2015 for the Future
- Modernizing Freight Rail Regulation—The 2015 Transportation Research Board Recommendation to Congress



# NUTC Fundraising Campaign

- **STRATEGIC RESEARCH FUND**

- Freight, Logistics & Economic Competitiveness
- Data-Driven Operations & Analytics
- Sustainable Practices
- Safety
- Urban Logistics and Smart Cities

- **ACCOMPLISHMENTS**

- October 2015 outreach mission to New York City with Paul Schneider (Greenbriar, Morgan Stanley, Scott-Macon)
- Fundraising Strategic Messaging Sessions facilitated by Coyote Logistics (Paul to share later)
- Targeted Outreach Lists Developed (dynamic)

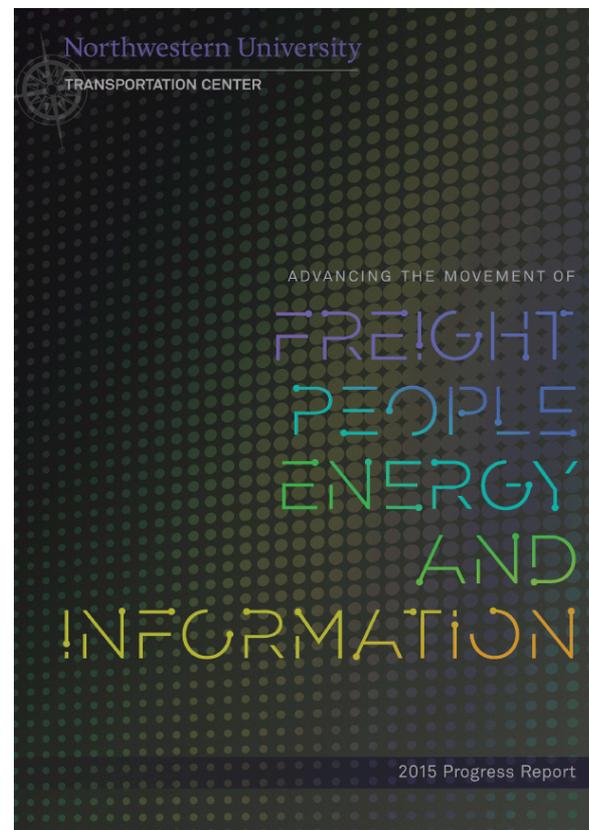
## Closing Thoughts

- NUTC brings value: to students, to faculty, to NU, and to our industry partners.
- *NUTC focused on the future*
  - Pushing the limits on logistics and supply chain operations
  - Automated and connected vehicles, trucks
  - Last mile supply chain logistics
  - Internet of Things and smart cities
- *BAC engagement and support critical to what we do, and how well we do it*



Thank you!

More here →



## BAC: New Members Here Today

### Leadership

Jim Butler

*President, American Airlines Cargo,  
American Airlines*



Mike Macyauski

*Vice President, Operations Planning  
& Engineering , FedEx Express*



## BAC: New Members Here Today

### Leadership

Dov Shenkman

*Group Vice President, Supply Chain  
Strategy, Inventory and  
Transportation, Walgreens*



Philip Yeager

*Executive Vice President, Account  
Management and Intermodal  
Operations, Hub Group*



## BAC: New Members Here Today

### Sustaining

Grace Cerocke

*Vice President, Finance, Matson*



Amos Kazzaz

*Senior Vice President, Financial  
Planning and Analysis, Air Canada*



## Guests Here Today (I)

- **Frank Bush**, Senior Consultant, Teradata
- **Ron Chomiuk**, Senior Consultant, Teradata
- **Mark Christos**, Vice President, Matson Logistics
- **John Efken**, Director, GCB Head of Commodities Sales, Bank of America Merrill Lynch
- **Marc J. Gorlin**, Founder and CEO, Roadie, Inc.
- **George Harrison**, VP Sales, North America, Eyefreight
- **Emily Herman**, Head of Intelligence, Roadie, Inc.

## Guests Here Today (II)

- **Eric Jakubowski**, Chief Commercial Officer, Anacostia Rail Holdings
- **Timothy Jones**, Timothy Jones and Associates
- **Marisa Jo (Clark) Kozachenok**, Service Executive, GE Transportation
- **Dave Menzel**, President and COO, Echo Global Logistics
- **Dennis Nicoski**, Director, Field Sales Strategy and Contracts, United States Postal Service
- **Michael Roeth**, Executive Director, North American Council for Freight Efficiency
- **Brian Wesbury**, Chief Economist, First Trust Advisors



# 60<sup>th</sup> Fundraising Committee

- Paul Schneider, Chair
  - Andrew Boyle
  - Vicki Bretthauer
  - Ben Mclean
  - Jeff Silver
- 
- Successful trip to NYC to gain insight from BAC members
  - Honing a fundraising message with support from Coyote Logistics
  - Working with NU Development for alumni and past BAC donor candidates
  - Working with NU Development and McCormick Marketing to develop fundraising materials



# Membership Committee

- Vicki Bretthauer
- Lee Clair
- Norm Carlson
- Ann Drake
- Rob Hart
- Kathleen Ross
- Justin Zubrod
  
- Several candidates identified, invitations made, invitations in progress
- Target Areas: Shippers, International Carriers, Trucking / Logistics companies, Transportation Equipment / Systems Manufacturers, Technology Providers

# Meeting Planning Committee

- Price Blackford
  - Mike Burton
  - Peeter Kivestu
  - Jean Regan
  - Rich Thompson
- 
- Meeting held in January 2016 helped identify meeting topics and some guest speakers