

Northwestern University Transportation Center

Our Transportation Center: Keeping the Momentum

Hani S. Mahmassani

Presentation to the BAC April 23, 2009



Northwestern University Transportation Center

Growing Interest in Transportation Research at Northwestern

- 45 Faculty members affiliated with the Center; highly inter-disciplinary
- 30 Students receiving some form of support through the TC
- In 07-08, ~\$2M in program expenditures; already past this level since Oct. 08.
- Continuing growth in research proposals submitted by faculty through the TC
- Selected sponsored research projects by TC Faculty (included in package: illustrate scope and diversity)



Northwestern University Transportation Center

Growing Interest: BAC (II)

- Expansion and renewal of BAC; 10 new members in attendance at this meeting
- Greater faculty involvement in BAC company research and stronger interaction fostered by TC
- Increased level of interaction and special projects with several companies; building towards future collaborations





























































Bank of America 💝



























RAILWAY



















Built to Deliver®

















Northwestern University Transportation Center

Growing Interest: Outreach (III)

- Vigorous outreach programs:
 - Seminar series
 - Sandhouse Gang (member Joe Szabo tapped as Federal Railroad Administrator by Obama Administration)
 - Patterson Lecture
 - Lipinski Symposium (now in second year, and Sec. LaHood tentatively lined up as keynote for next Fall)
- Frequent media stories and quotes by TC faculty and researchers
 - Gellman on airline industry
 - Mahmassani on crowd dynamics (e.g. inauguration)
 - Schofer on infrastructure policy and public transit
- Linked in NUTC Group for alumni, BAC and friends

(229 members so far)





Northwestern University Transportation Center

Growing Interest (IV): On Our Campus

- Joint activities with
 - ISEN (M. Ratner and D. Dunand, co-directors)
 - Institute for Sustainable Practices (K. Gray and D. Dana, co-directors)
 - Institute for Massive Change (new; Bruce Mau Director)
- Close coordination with
 - Infrastructure Technology Institute (National DOT Center of Excellence; Joe Schofer Director)
 - Center for Commercialization of Innovative Transportation Technology (US DOT Tier II Center; Bret Johnson, Director)
- Future of Movement Institute



Northwestern University Transportation Center

Growing Interest (V): In Our Region

- CHICAGO 2016 Olympic Committee
 - TC sponsored evening workshop attended by over 40 faculty and students



- Argonne Transportation Analysis group
 - Workshop under new ISEN initiative



- Researcher seminars and visits
- Illinois Center for Transportation (UIUC)
 - Partnering in projects with IDOT
 - Closer strategic coordination





Northwestern University Transportation Center

Growing Interest (VI): In the World

- Major technical assistance program with Ministry of Higher Education in Saudi Arabia
 - Focus on mobility and service logistics in Makkah
 - Organized several workshops, international expertise
 - Collaborative research links
- GLOBAL ALLIANCES: work in progress
 - Networking at global scale w. universities, research centers, government labs and major operators
 - Through BAC
 - Extensive web of existing international collaborations



Northwestern University Transportation Center

EXECUTIVE PROGRAM

- Relaunched executive program last year through course on Pricing, customized for Panama Canal Authority
- Developed road map for new offerings, to start in the summer
- Focus: strategic issues; timeliness; high policy relevance



Northwestern University Transportation Center

NEW PROFESSIONAL MS EMPHASIS

- Developing new emphasis program area of existing professional Master of Project Management:
- Large-Scale Transportation Infrastructure
- Developing new course offering on unique challenges of large transportation projects for coming Fall (Gellman)



Northwestern University Transportation Center

WHERE WE ARE HEADING: STRATEGIC GOALS

- Pre-eminent think-tank and laboratory for cutting-edge transportation research "that matters" on a global scale
- Premier educational program in transportation systems
- Essential partner for novel, high-impact research
- Advance state of practice through mix of engaged application-driven research and fundamental advances



Northwestern University Transportation Center

GETTING THERE: TWO KEY ELEMENTS

- ENGAGE FACULTY AND STUDENTS
 - Core asset and mission
 - Intellectual stimulation, collaboration, partnering, exchange, opportunity-creation
- ENHANCE INTERACTION WITH BAC
 - Critical strategic asset, competitive differentiator
 - Essential stakeholders
 - → Add value to BAC involvement
 - Formulation of strategic research agenda; critical themes
 - Increased collaboration and research engagement
 - Executive education and special events
 - Leverage NU resources





Northwestern University Transportation Center

OUR EVOLVING BUSINESS MODEL

- Support for core TC operations and programs exclusively from private sources: BAC membership dues, donations, alumni giving, and endowment income
- Support for student stipends and research largely through sponsored research projects and grants: government and corporate; deliverable-oriented, lacks flexibility
- Increase revenue through new executive programs and technical assistance contracts
- Collaborative industry-university initiatives in major challenge areas
- Contributed funds for seed research and student fellowships

