The Universities & CMAP-Transportation: Opportunities for Partnerships

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NORTHWESTERN UNIVERSITY

The Region's Transportation Challenges

- System preservation & rehabilitation
  - The money and the will
- Congestion and capacity
  - Environment & energy impacts
  - Demand and supply options
- Cost-effective system expansion
  - Managing induced travel
- New Technology
  - Making it work for us
- Urban growth – sprawl and regentrification
  - Providing, adapting transportation
- Sustainability
  - Paying the bills
  - Pumping the gas

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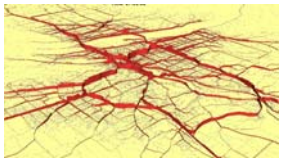
Regaining The Leadership



- Innovations
  - Technologies
  - Designs
    - Land use, transportation
    - Facilities, systems
  - Operating strategies
  - Models & tools
- Actions – putting ideas to work
  - Ideas + resources + will
  - Regional decisions for regional travel
- Partnerships and collaborations
  - Engage all the resources – universities, too

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Chicago's – Research Universities

- DePaul University
- University of Illinois at Chicago
- Illinois Institute of Technology
- The University of Chicago
- Northwestern University

- Broad community of scholars
- Fundamental and applied researchers
- Deep transportation knowledge

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What Universities Can Provide

- Information & connections
  - Libraries
  - People
  - Organizations (e.g., TRB)
- Ideas
  - Brainstorming
  - Conferences & workshops
    - *Moving the Region in a New Direction*
- Research
  - Extended efforts, products
- Education
  - Degree oriented
  - Seminars, training
- Trained People
  - Graduate, undergraduate

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What Universities Want in Return

- Access to data, problems
- Research opportunities
  - Collaborations
  - Funded projects
  - Publications
- Opportunities for students
  - Short-term – co-op jobs, internships
  - Long-term – career opportunities
- Faculty consulting

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Don't Forget About the Money

- Graduate students must eat!
- Must support the enterprise
- Some stuff is free…
- We can bring resources to the table, too
- Contracting barriers
  - Public, private school differences
    - Pricing
    - Contracting
  - Publication restrictions

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Northwestern Transportation Resources

Network simulation, demand modeling, logistics, industry behavior, policy analysis, decision analysis, energy and environmental studies, social impacts, infrastructure monitoring and management… Multi-modal, passenger & freight

- The Transportation Center
- The Infrastructure Technology Institute
- Institute for Complex Systems
- Center for Energy Efficient Transportation
- Center for the Commercialization of Transportation Technologies
- The Transportation Library
- Departments
  - Civil & Environmental Engineering
  - Industrial Engineering & Management Sciences
  - Economics
  - Sociology

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